# Does Say-on-Pay (SoP) Affect CEO Compensation Following an M&A Deal?

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# Abstract

This study examines the effectiveness of Say on Pay (SoP) regulation as a corporate governance mechanism in the context of M&A deals. Using a large sample of U.S. firms over the 2005-2017 period, this study finds that, in the post-SoP period, overall CEO pay growth rate declines and CEO pay to acquisition performance sensitivity improves following M&A activities. This supports 'SoP governance' hypothesis, which proposes that SoP regulation will restrict CEOs self-fulfilling behaviour. In a macro-economic set-up, the introduction of SoP regulation was intended to discipline top managers by giving shareholders an opportunity to express their opinion on CEO compensation. It was therefore expected that, in the post SoP-era, CEOs will experience a lower growth in their pay package following M&A deals.

On the other hand, the relation between SOP voting approval rates and CEO compensation following M&A activities is unidirectional. Irrespective of the performance of M&A deals, it is observed that CEOs with higher shareholder voting approval experience a significant positive change in their compensation level after an M&A deal. We term this as a 'reliable CEO' hypothesis. According to the 'reliable CEO hypothesis, a very high voting percentage may legitimize CEOs action and embolden CEOs to carry out more risky ventures such as M&As. Since there is an established relation between risk and return, shareholders would like CEOs to take appropriate risks to increase firm value. A reliable CEO, who enjoys a high degree of shareholders' support, should not be penalized for taking more risky ventures that are intended to increase shareholders' wealth. Our results confirm this viewpoint.

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# Chapter 1. Introduction

A number of studies in the M&A literature have focussed on the relationship between CEO compensation and M&A deals, and find that executives get excessive payment or their post M&A pay is not related to M&A performance (Bliss and Rosen, 2001; Grinstein and Hribar, 2003; Harford and Li, 2007). For instance, Bliss and Rosen (2001) collect data from 32 banks in period from 1986 through 1995 and discover that CEO compensation increases by the ascension of target firms' size. Besides, they propose that compensation can still increase even if stock price of an acquiring bank declines. Compensation policies in U.S. public firms are not always governed by shareholders' best interest (Bebchuk et al., 2005). In order to obtain prestige, higher compensation and more managerial power, executives are prone to acquire larger companies, even though they know it is a suboptimal decision. This phenomenon implies that agency problem persists in CEOs' M&A decisions.

Grinstein and Hribar (2003) assert that although executives' compensation is positively related to their effort, it is insignificantly related to deal performance. Similarly, Hartzell et al (2004) find an inverse relation between shareholder premium and CEO benefits. They find that even in the M&A deals where shareholders' wealth decreases, managerial compensation tends to increase. In general, a number of studies provide support to managerial-power hypothesis, which means that executives get paid because they use their managerial power to transfer wealth from shareholders. This behaviour is a manifestation of agency problem.

In order to minimize agency problem, "say on pay (SoP)" law was introduced at the beginning of the 21st century in a number of European economies, and US enacted this law in 2011. According to the work of Thomas and Van der Elst (2015), SoP law empowers shareholders to evaluate executives' work by voting on executives' compensation. Under binding

SoP law, executive pay policies must be revised based on shareholder voting outcome. While advisory SoP law does not command direct changes to executive policies.

### *1.1 Motivation and incentives*

The nature of the relationship between executive compensation and acquisition performance can impact shareholders' wealth. If the relationship is insignificant or CEOs get an increased pay irrespective of M&A performance, agency problems may be severe. In other words, when the sensitivity of executives' compensation to positive acquisition performance is significant but to negative performance is insignificant, executives are more likely to make aggressive and value destroying merger decisions.

SoP law is designed to decrease excessive executive compensation and improve firm performance, and the effectiveness SoP is worth to be tested in the context of M&A decisions. Since M&As are the most significant yet risky investments for a firm, it would be interesting to see whether CEO compensation is tied to M&A activities and performance in the SoP era. Accordingly, this research study intends to examine how the introduction of SOP law and SoP voting results affect the sensitivity of executives' compensation in light of acquisition performance.

### *1.2 Main conjectures*

This study hypothesizes that SoP law and SoP voting approval rate can significantly affect the sensitivity of post-acquisition performance to executives' compensation. It should be noted that SoP law and SoP voting approval results can play different roles at macro-level (across the industry level) and micro-level (firm level). SoP law creates a general ambient in the

economy that CEO pays are more closely watched, while SoP voting provision at the firm level gives an opportunity to the shareholders to express their opinions on executives' compensation, with the intention that an executive's self-fulfilling behaviour is constrained. Irrespective of differences at the operational level, both the introduction of SoP law and SoP voting opportunity are likely to tie CEO compensation level to M&A activity and performance more closely. We term this as 'SoP governance' hypothesis. However, if most shareholders are not able to assess executives' performance and just follow the narrative of firm's top management and board, SoP law may be ineffective. It leads to a prediction that the relation between managerial incentives and corporate acquisitions does not change due to SoP law or SoP voting approval rate.

Yet, there is another possibility, based on the 'reliable CEO' hypothesis, which is more applicable at the firm level analysis. In a recent study, Fisch et al. (2017) show that although SoP is intended to give an opportunity to the shareholders to express their opinion on a CEO's compensation, the voting result is driven by shareholders' perception on CEO's recent performance. A very high voting percentage may legitimize CEOs action and embolden CEOs to carry out more risky ventures such as M&As. Since there is an established relation between risk and return, shareholders would like CEOs to take appropriate risks to increase firm value. A reliable CEO, who enjoys a high degree of shareholders' support, should not be penalized for taking more risky ventures that are intended to increase shareholders' wealth. We term this as 'reliable CEO' hypothesis. According to this hypothesis, a CEO who enjoys very high level of shareholders' confidence, will get an increase in compensation irrespective of M&A performance.

### *1.3 Summary results*

In this study, we consider all M&A activities by the S&P 1500 firms from year 2006 through 2016. Since SoP law was introduced in 2011, this sample gives us an opportunity to examine the effect of SoP law introduction on the changes in CEO compensation following M&A activities. Further, in the context of M&A deals, this sample allows us to examine the relation between SoP voting approval rate and the change in CEO compensation at the firm-level in the post SoP-era.

With respect to SoP law's impact on CEO compensation following M&A deals, we find that CEO compensation decreases following M&A deals during the post-SoP era compared to the pre-SoP era. We find similar results with respect to CEO compensation change between pre- and post-M&A year, albeit, for the incentive pay. These results support the 'SoP governance' hypothesis. With respect to SoP voting result's impact on CEO compensation following M&A deals, we find that irrespective of deal performance, CEOs that enjoy a higher level of shareholder confidence (proxied by higher voting approval rate) experience a positive change in their compensation package. This result is robust to a number of M&A activity specifications including total, positive, negative and ratio of negative M&A deals. These results support the 'reliable CEO' hypothesis.

The remainder of the study is organized as follows. Chapter 2 presents relevant literature, Chapter 3 outlines the methodology used in the study, Chapter 4 presents results and relevant discussion and Chapter 5 contains conclusion.

# Chapter 2. Literature review

## *2.1 M&A Performance and CEO Compensation*

### 2.1.1 The agency problem in acquisition

Several studies have examined the relationship between acquisition performance and CEO compensation. Bliss and Rosen (2001) used data from 32 banks in the period from 1986 through 1995 and observed that CEO compensation increases with the size of the target firms. They determined that compensation can increase even when the stock price of the acquiring bank decreases. This phenomenon implies that M&A deals are not always executed in the best interests of shareholders. As the top executives are not affected by the bad M&A outcome, it is possible that they will engage in value destroying M&A activities.

In addition, abnormal stock returns are less likely for acquirers that have more anti-takeover provisions but more likely for those that operate in more competitive industries or that insulate the positions of CEO and chairman of the board (Masulis, Wang, & Xie, 2007). The market for corporate control is a mechanism to incentivize managers to maximize shareholder value. However, managers in the firms with anti-takeover provisions are likely to be entrenched and make value-destroying acquisitions.

Grinstein and Hribar (2003) find that executive compensation is is insignificantly related to deal performance. Similarly, Hartzell et al. (2004) find an inverse relationship between shareholder premiums and CEO benefits. Coles, Daniel, & Naveen, (2006) assert that a high sensitivity of executive compensation to stock volatility could lead to low capital expenditure (low investment as percentage to PPE). Harford and Li (2007) find that even in mergers where shareholders' wealth decreases, managerial compensation tends to increase. He et al. (2008)

studied executive compensation, governance structure and firm performance, and claim that a company has a more positive financial performance when the founder has the position of CEO.

### 2.1.2 Existing methods to deal with the agency problem

To mitigate the problem of asymmetric information, boards adopt multiple methods to improve corporate governance, like enhancing board independence, granting executive shares, and setting pay-on-performance measures to incentivize executives. For example, Guo and Masulis (2015) argue that there is a positive relationship between the degree of independence of both board and nominating committees and the effectiveness of CEO monitoring and discipline. Guest (2009) also finds no evidence that executive compensation is related to acquisition performance and that CEOs receive a similar amount of increased compensation after both good and bad acquisitions.

Bebchuk et al. (2005) point out that even though executives own some stock, it is not significant enough to align executives' and shareholders' interests. They propose reforms to improve board accountability. Nevertheless, the agency problem is generally recognized to exist in corporations. Regarding the setting of pay-on-performance measures to incentivize executives, it is arguable that more incentives are always better for improving firm value. Mishra et al. (2000) assert that the relationship between firm performance and pay-performance sensitivity is generally positive

Managers tend to avoid investments in growth opportunities and to reduce their personal exposure if they are risk-averse. Therefore, it is important to keep a balance between incentives and risk sharing that underline the use of pay-performance sensitivity. In addition, Brick et al.

(2012) suggest that there is an economically and statistically significant negative relationship between pay-performance sensitivity and future stock returns.

### 2.1.3 CEO compensation and M&A deals

Bebchuk and Fried (2005) indicate that many companies use peer groups while setting compensation package, usually at or above the 50th percentile of the peer group. On the other hand, CEOs with negative relative pay standing status, which means they are paid less than their peer group, have been found to engage in acquisition activities to reduce the difference between their pay and peer group pay. One rationale behind this phenomenon is that CEOs want more compensation through their acquisition activities no matter the consequences. The other explanation for this is that CEOs tend to focus on their own interests rather than those of shareholders. The excess acquisitions they engage in are likely to create little synergy or even destroy firm value.

In companies with weaker governance mechanism, equity-based compensation encourage executives to maximize shareholders' value. Datta, Iskandar-Datta, & Raman (2001) found a positive relationship between equity-based compensation and post-acquisition stock price. Compared to their counterparts, executives with high equity-based compensation generally pay less in premiums and acquire targets with higher opportunities.

### 2.1.4 CEO overconfidence

It is well known that shareholders' benefits can be sacrificed for executives' own compensation. On the other hand, some executives make sub-optimal decisions because of their overconfidence. They generally overrate the accuracy of their judgments, which could lead to

riskier decisions in merger and acquisition activities. “As a result, they overpay for target companies, and undertake value-destroying mergers” (Malmendier et al., 2008, p20). In those cases, external financing may be used to alleviate the negative effect, so for companies in which CEOs have access to internal financing, a corporate governance mechanism is important.

Nevertheless, Malmendier and Tate (2005) argue that standard incentive measures cannot restrain overconfident CEOs’ behaviors, since overconfident CEOs do not destroy shareholders’ benefits on purpose. On the contrary, they believe their decisions could maximize corporate profits. To achieve more, overconfident executives are motivated to adjust corporate capital structure to increase their accessibility to internal financing, which may create a vicious cycle. SoP laws could be an innovative method to correct their sub-optimal decisions, as shareholders would have a legal right to control executive compensation.

### *2.2 Say on Pay (SoP) as a Governance Mechanism*

#### 2.2.1 Study of SoP in the UK

The UK is one of the first few countries that employed SoP laws. It adopted a non-binding SoP regulation in 2002. Conyon and Sadler (2010) studied the consequences of shareholder votes and changes in British CEO pay-for-performance sensitivity. They found that shareholders are unlikely to vote against a director’s remuneration report, and the possibility declines even further over time. On the other hand, CEO pay-related voting attracts more objections than non-pay-related voting. However, they found little evidence that CEO compensation programs change after voting when the total pay also included equity payments such as stock options.

Alissa (2015) investigated a sample of Financial Times Stock Exchange 350 British firms from 2002 to 2012, and reported that SoP law can improve transparency, enhance board accountability, and strengthen performance. After the introduction of SoP law, excess CEO compensation was reduced when firms performed poorly, and the probability of CEO turnover increased if shareholders were dissatisfied.

### 2.2.2 SoP proposals in the US

Using a pre-SoP regulation era sample, Burns & Minnick (2013) studied the effects of SoP proposals to predict what would happen to U.S. executive compensation after shareholder voting. They used a sample of U.S. firms that received SoP proposals from 2006 to 2008 to forecast how SoP legislation would affect firms in the future.

Their results show that although total compensation in SoP companies did not change significantly compared to non-SoP companies, compensation structure became more equity incentive oriented. Similarly, Balsam et al. (2016) found that firms reduced compensation and made it more performance-based prior to initial SoP voting (i.e. before 2011) to obtain a higher approval rating. Ertimur, Ferri, and Muslu (2009) also found that SoP is effective, especially when proxy proposals are initiated by institutional investors.

### 2.2.3 SoP approval rating

Based on a sample of 2,200 listed U.S. companies in the first year after SoP legislation, Thomas & Van der Elst (2013) found that shareholders strongly support existing pay practices in most companies, with an average approval voting rate of 91.2%; SoP proposals were voted down only in 1.6% cases in entire sample - mostly because of low pay-performance sensitivity

concerns. Later, Kimbro and Xu (2016) reported that only 14.8% (14.7%) of firms included in the Russell 3000 index obtained less than 80% support in 2011 (2012). In 2011, only 34 out of 2,235 firms garnered less than 50% support for the SoP proposal, and the number in 2012 was 60 out of 2,384 firms. These two studies indicate that most SoP voting ends with approval.

### 2.2.4 The Effectiveness of SoP

#### 2.2.4.1 SoP is effective

Existing works hold different views on the effectiveness of SoP laws. Ferri and Maber (2013) argue that SoP laws promotes better monitoring mechanisms. They found that introduction of SoP law increased the sensitivity of executive compensation to firm performance. Further, to avoid low approval rates, directors adjust corporate governance dynamically around executive compensation to comply with shareholders' and proxy advisors' opinions and their "best compensation practice" standards (Thomas & Van der Elst, 2013).

Consistent with Ferri and Maber (2013), Kimbro and Xu (2016) state that corporate governance can be more effective when shareholders have SoP voting rights. They found that excessive executive compensation could lead to shareholder dissatisfaction, and thus lower SoP approving rate, which would result in a decrease in executive compensation. Alissa (2015) also found that shareholder dissatisfaction increases with excess CEO compensation but not with an expected level of compensation, which implies that shareholders reacts rationally.

Thomas et al. (2011) examined the 2011 proxy season and found that shareholders pay attention to poor company performance and excessive CEO compensation when they vote. They also observed that many companies either changed their pay practices to avoid unfavorable voting or offered additional information to make the pay practices more plausible before the

annual meeting, at which shareholders would undertake their SoP. In addition, SoP laws decrease the growth rate of CEO compensation and reduce the differences between executives in the same company (Correa et al, 2016).

Graham, Harvey, & Puri (2013) used psychological testing to show that CEOs appear to be more risk-loving compared to general population, and that risk-tolerant CEOs are likely to make more acquisitions. This study shows that corporate financial policy influences CEOs' rational acquisition decisions since it curbs CEO's intrinsic risk-loving trait. In these circumstances, SoP could be an effective law to enhance the suppression ability of corporate financial policy.

It is a typical practice that firms use subjective criteria for bonuses for at least some top executives, which, however, leads to problems. Without SoP laws, boards have been found to support top executive compensation, since some directors are appointed by them. Apparently, subjective criteria could play a more practical role in the hands of boards who solely consider shareholder benefits (Bebchuk et al., 2005), which is the purpose of SoP laws. SoP also makes shareholders evaluate executive compensation in light of their own interests, and it provides an intuitive approach for them to show their opinions, because boards are supposed to adjust pay practices after a low approval rating.

#### 2.2.4.2 SoP is ineffective

Some researchers have questioned the effectiveness of SoP, which is designed to maximize shareholder value. For instance, when the existing pay practices are reasonable and value-maximizing for shareholders, increasing shareholder control either makes no difference to CEO compensation, because shareholders approve of current pay practices, or results in illogical

CEO compensation. The reason for this is that shareholders may not have the ability to assess CEO performance.

Before the enactment of SoP laws, Bebchuk et al. (2005) discovered that as long as corporate shareholders are convinced that executives are trying to maximize their benefits, they will not be motivated to alter corporate policies even if the policies insulate the boards from their intervention. This finding of Bebchuk et al. raises a question about shareholders's ability to make a correct judgment. In this case, SoP laws could impel shareholders to assess executive performance and make the wrong changes to compensation policies.

If many shareholders do not have the ability to assess executive compensation policies, SoP regulations may lead to suboptimal M&A decisions. Based on the analyses of corporations in the UK, Gordon (2009) claimed that shareholders tend to prefer one-size-fits-all compensation policies to evaluate executive effort, and usually, some short-term exponents can be set as a criterion. The result is that executives will try to meet requirements and ignore long-term benefits. He also proposed that SoP laws should not be mandatory but used as an opt-in law at publicly traded firms.

In agreement with Gordon, Göx. et al. (2014) argue that the unconditional enforcement of SoP votes will motivate CEO to give up risky but high-value-growing acquisitions because CEOs anticipate that they are highly likely to undertake a compensation deduction after an investment. This will create a hold-up problem that destroys shareholder value. The authors also claim that mandatory SoP impedes CEOs from making acquisitions no matter how long and how often they and shareholders interact with each other. A repeated interaction between long-term-oriented shareholders and CEOs neither improves investment efficiency nor raises shareholder value, but it does create agency costs. On the other hand, the authors mention that SoP does help

to enhance pay-performance sensitivity without diminishing firm value when firms have poor performance.

Fisch et al. (2017) conclude "the close connection between voting results and stock price and firm performance raises the risk that the say on pay vote may increase short-termism" (p. 33). They found that shareholders do not care about excess CEO compensation when firms perform well. Nevertheless, SoP laws can discipline CEOs for excess pay when firms perform badly, which compels CEOs to focus on short-term stock performance rather than firm value.

Generally, in companies where CEOs have a large influence, tend to consider their benefits rather than those of the shareholders. "While the advisory shareholder vote proposed by the Say-on-Pay Bill may benefit firms with overpaid CEOs, it is up to the board of directors to make these changes. The legislation is unlikely to affect deeply entrenched managers" (Cai & Walking, 2011, p.334). Besides, annual meetings that escalate dissatisfaction over pay have an adverse impact on firm stock prices (Cheffins & Thomas, 2001).

By employing a two-by-two experimental design, Kaplan et al. (2015) found that both social ties between the CEO and members of the executive compensation committee and CEO reputation have a crucial impact on SoP approval rating. Strong social ties undermine the support of existing executive compensation, whereas better CEO reputation could lead to a higher rating. Both external factors can affect perceptions of fairness regarding CEO compensation.

SoP inefficiency mainly comes from information asymmetry, which results in an agency problem. SoP improves pay practices when shareholders are better informed (Mangen & Magnan, 2012). However, Mangen and Magnan found that board may manipulate pay setting disclosures for a higher approval rating, which reduces the effectiveness of SoP law.

#### 2.2.4.3 SoP has mixed effectiveness

Wagner and Wenk (2017) support a mixed influence of SoP on performance-for-pay sensitivity: "When shareholders can (partially) set pay ex-post, this may distort ex-ante managerial incentives for extra-contractual firm-specific investment" (Wagner and Wenk, 2017, p.3). Consequently, there is always a trade-off between the decrease of agency problem and the increase of hold-up problem, and Wagner and Wenk suggest shareholders do not maximize their power and cede some control to directors.

Sanchez-Marin et al. (2017) present a two-sided effect of SoP laws. They assert that SoP helps dissatisfied shareholders to express their concern which leads to a more aligned compensation structure. On the other hand, many firms with overcompensated CEOs, receive high SoP voting. This legitimizes sub-optimal CEO compensation.

Consistent with above views, Cai and Walking (2011) indicate that SoP law could create value for companies with CEOs who have abnormally high compensation (usually those companies have a weak government), but it could destroy value for the other companies.

### 2.2.5 Corporate governance and the effectiveness of SoP law

Correa and Lel (2016) point out that differences in corporate governance across companies can affect the influence of SoP voting results. Using a large sample of firms from 38 countries over the period 2001–2012, they find that CEO pay declined more in companies with weaker governance after the implementation of SoP laws. These weak companies are judged by several characteristics: high excess pay, shareholder dissent, long CEO tenure, and less independent boards. SoP law and firm-level mechanisms are substitutes for each other. Furthermore, the authors claim that SoP laws would increase company value since the

managerial pay gap generally decreases after shareholder voting. Similarly, Thomas et al. (2013) conclude that the rate of growth of executive compensation decreases after SoP legislation.

According to Core, Holthausen, and Larcker (1999), excess CEO compensation is due to weak corporate governance and inferior future operations management. However, for companies with exceedingly malfunctioned governance, SoP cannot play an effective role because the boards of those companies are not independent. On the other hand, for companies that have a general degree of problematic pay practices and weak government firms in the pre-SoP period, SoP laws restrain the growth rate of CEO compensation and lessen the difference between managerial compensations more effectively (Correa et al., 2016). However, in companies with a rigorous government, CEOs were not overpaid when companies' size, returns, and other firm characters were controlled.

### 2.2.6 Say on Pay is a mechanism for shareholders to express their opinions with executive pay

Growing dispersion of ownership at large public companies is one of the main reasons for the introduction of SoP law - as an alternative monitoring mechanism for executive pay (Thomas & Van der Elst, 2013). Alissa (2015) finds that shareholders can efficiently convey their dissatisfaction with excess CEO compensation by voting. Consistent with his study, Yermack (2010) proposes that one of the main reasons for supporting shareholder democracy is that voting could save communication costs, especially in the internet age. Conyon and Sadler (2010) posit that SoP law gives an opportunity to the shareholders to voice their concern on CEO compensation.

### 2.2.7 Shareholders' preferences

Regarding shareholders' preferences and their ultimate voting behaviour, researchers have come up with two theories. One is the agency theory, where shareholders assess gains and losses symmetrically (Eisenhardt, 1989). The other is the prospect theory, which describes the opposite case where shareholders assess asymmetrically, paying much more attention to loss situations than to gain or neutral situations (Kahneman & Tversky, 1979).

Krause et al. (2014) integrated the two theories into one, where shareholders are concerned with agency problems only when the firm is in a loss position. They examine this theory through two simulations of a shareholder "say on pay" vote, and they find that although shareholders are concerned about pay-performance sensitivity, agency losses exceed larger than gains. They also propose that shareholders should consider peer group compensation when they vote.

### 2.2.8 Frequency of Say on Pay

According to the Dodd-Frank Act, public firms have a choice of frequency of Say on Pay voting: one year, two years, or three years. When shareholders trust their CEOs, they will vote for triennial. However, a low vote frequency usually results in a low management accountability, so it is less effective for triennial frequency companies to modify their pay settings than it is for annual frequency companies. (Ferri & Oesch, 2016).

### 2.2.9 Proxy advisors

Proxy advisors (PA) are invited to analyze the firm-specific problem, and their economic role has been studied. Third-party voting advisors play an important role in providing

information about executive pay settings and performance to shareholders, especially when a company's pay-performance sensitivity deviates from the average level. Many scholars support the opinion that advisors' suggestions are extraordinarily influential for SoP voting results (Thomas and Van der Elst, 2013; Balsam, Boone, Liu and Yin, 2016).

The empirical evidence suggests that "rather than identifying and promoting superior compensation practices, PAs' key economic role is processing a substantial amount of executive pay information on behalf of institutional investors, hence reducing their cost of making informed voting decisions" (Ertimur, Ferri and Oesch, 2013, p. 952). Meanwhile, McCahery et al. (2016) indicate that proxy advisors not only summarize shareholders' views but provide effective suggestions based on the information they have, thereby promoting voting in a positive way.

Researchers have found that proxy advisors destroy companies' value since stock price decreases after a compensation program change based on proxy advisors' recommendation. Proxy advisors have a considerable influence on a large block of voters who follow their recommendations. It has been found that many boards alter compensation settings before shareholder voting to avoid negative suggestions. "Outsourcing of voting to proxy advisory firms appears to have the unintended economic consequence that boards of directors are induced to make choices that decrease shareholder value" (David and Larcker, 2015, p. 203).

# Chapter 3. Methodology

### *3.1 Relevant conjectures*

Harford and Li (2007) examine the performance-for-pay sensitivity before SoP law was enacted. They found that executive compensation is insensitive to poor firm performance but sensitive to positive firm performance. CEOs are better off after acquisition, irrespective of M&A deal performance. We intend to extend this line of inquiry in the context of SoP law that was implemented in 2011.

In this study, I hypothesize that SoP law and SoP voting approval rate can significantly affect the sensitivity of post-acquisition performance to executives' compensation. It should be noted that SoP law and SoP voting approval results could play different roles at macro-level (across the industry level) and micro-level (firm level), respectively. Accordingly, as discussed in earlier, I examine two specific hypotheses: (a) 'SoP governance' hypothesis – in the context of SoP law's impact on CEO compensation, and (b) 'reliable CEO' hypothesis – in the context of SoP voting approval rates' impact on CEO compensation.

'SoP governance' hypothesis suggests that compared to pre-SoP era, CEOs compensation would decrease following M&A activities in the post-SoP era. On the other hand, according to the 'reliable CEO' hypothesis, CEOs who enjoy very high level of shareholders' confidence, will receive increased compensation irrespective of M&A performance. A very high voting percentage may legitimize CEOs action and encourage CEOs to carry out more risky yet net value generating ventures such as M&As. These highly trusted CEOs should not be penalized for pursuing more M&A deals that are intended to increase shareholders' wealth.

In light of the above arguments and in the context of SoP rule implementation, we intend to examine the following research questions in this study. We also extend the analysis with actual SoP voting percentage reported by US publicly listed firms.

### *A. Introduction of SoP regulation and M&A related CEO compensation*

***Research Question 1a:*** Does the introduction of SoP regulation affect CEO compensation following an acquisition?

***Research Question 1b:*** Does the introduction of SoP regulation affect CEO compensation following a successful (an unsuccessful) acquisition?

### *B. SoP voting percentage and M&A related CEO compensation*

***Research Question 2a:*** Does SoP voting percentage affect CEO compensation following an acquisition?

***Research Question 2b:*** Does SoP voting percentage affect CEO compensation following a successful (an unsuccessful) acquisition?

## *3.2 Sample*

The sample used in this study includes S&P 1500 firms with annual meetings between January 1, 2005 and December 31, 2016. Year 2011 is the first year that non-binding SoP regulation was legislated in U.S, and year 2016 is the last year that we can obtain information on completed voting data for involved companies. Period from year 2005 to 2011 is used as a control group for year 2011 to 2016 to examine the effect of SoP regulation. We begin with all completed U.S. mergers with announcements dates and SOP voting approval rates. SOP voting

approval rates is defined as the number of votes cast for the SOP proposal scaled by the total number of votes cast.

My sample criteria require that (1) acquiring firms must be U.S. public traded firms, while target firms do not have any limitation, and (2) firms' voting approval data have to be available in the proxy statement on Securities and Exchange Commission (SEC). I extracted M&A data from Securities Data Company's (SDC) Mergers and Acquisitions database, and then merge it with other data from CRSP files (stock prices, and returns), Compusat (accounting information), ExecuComp Database (executive compensation) and SEC (SOP voting approval rate). Specific voting approval percentages are necessary for my data analyse, and they generally vary in different firm years. We have hand-collected SoP voting data from DEF 14A fillings. After filling out incomplete data, my sample size is 13,754 firm years and includes 1,982 unique firms.

### *3.3. Empirical set-up*

In order to examine the impact on CEO compensation following an M&A deal, we employ multiple empirical methods based on the extant literature. More specifically, in light of Harford and Li (2007), we employ the following regression analysis to examine whether the subsequent year's CEO compensation of the change in CEO compensation reflects M&A performance. Since the study has a panel data set-up for the S&P 1500 sample, we employ panel data regression methodology to examine the effect of M&A activities on CEO compensation.

First, we employ the following baseline regression to see the effect of acquisition on CEO compensation. All variables are described in Appendix 1.

$$\text{CEO Pay}_{it} = \alpha_0 + \beta_1\text{Yearly Total Acquisition} + \beta_2\text{CEO Age} + \beta_3\text{CEO Tenure} + \beta_4\text{Firm Size} + \beta_5\text{Market to book value} + \beta_6\text{Long Term Debt to Asset} + \beta_7\text{Board Size} + \beta_8\text{Indipendent Board Member Ratio} + \beta_9\text{Sales Growth} + \beta_{10}\,\text{ROA} + \beta_{11}\,\sigma_{(\text{RET}it)} + e_{it} \quad (1)$$

$$\text{CEO Pay}_{it} = \alpha_0 + \beta_1\,\text{Yearly Total Positive Acquisition} + \beta_2\text{CEO Age} + \beta_3\text{CEO Tenure} + \beta_4\text{Firm Size} + \beta_5\text{Market to book value} + \beta_6\text{Long Term Debt to Asset} + \beta_7\text{Board Size} + \beta_8\text{Indipendent Board Member Ratio} + \beta_9\text{Sales Growth} + \beta_{10}\,\text{ROA} + \beta_{11}\,\sigma_{(\text{RET}it)} + e_{it} \quad (2)$$

$$\text{CEO Pay}_{it} = \alpha_0 + \beta_1\,\text{Yearly Total Negative Acquisition} + \beta_2\text{CEO Age} + \beta_3\text{CEO Tenure} + \beta_4\text{Firm Size} + \beta_5\text{Market to book value} + \beta_6\text{Long Term Debt to Asset} + \beta_7\text{Board Size} + \beta_8\text{Indipendent Board Member Ratio} + \beta_9\text{Sales Growth} + \beta_{10}\,\text{ROA} + \beta_{11}\,\sigma_{(\text{RET}it)} + e_{it} \quad (3)$$

Following Harford and Li (2007), we use different measures for CEO Pay variable (CEO $\text{Pay}_{it}$): (i) total pay, (ii) cash pay, (iii) incentive pay. Total pay is equal to the sum of cash pay and incentive pay. The main coefficients of interests for us is $\beta_1$ (as in $\beta_1$Yearly Total Acquisition), it will give us an estimation of the effect of Yearly Total Acquisition on CEO pay. Garvey and Milbourn (2004) and Harford and Li (2007) argue that CEO pay sensitivity will not be symmetric for positive and negative performance. Accordingly, we substitute variable "Yearly Total Positive Acquisition" with "positive acquisition" and "negative acquisition" separately in the regression model (see equation 2 and 3). We consider cumulative abnormal return (CAR) associated with an M&A deal to identify positive or negative acquisition. Positive (Negative) acquisition refers to an M&A deal that experience positive (negative) CAR(-2,+2) around the announcement date.

These three equations are designed to examine the impact of acquisition on CEO pay in pre-SOP period. To capture the impact of SOP, we interact the acquisition variables with the post SOP dummy variable. Post SoP dummy is an indicator variable. It takes a value of '1' for the post-2011 period

$$\text{CEO Pay}_{i(t+1)} = \alpha_0 + \beta_1\text{Post SOP Dummy} \times \text{Yearly Total Acquisition} + \beta_2\text{Post SOP Dummy} + \beta_3\text{Yearly Total Acquisition} + \beta_4\text{CEO Age} + \beta_5\text{CEO Tenure} + \beta_6\text{Firm Size} + \beta_7\text{Market to book value} + \beta_8\text{Long Term Debt to Asset} + \beta_9\text{Board Size} + \beta_{10}\text{Indipendent Board Member Ratio} + \beta_{11}\text{Sales Growth} + \beta_{12}\,\text{ROA} + \beta_{13}\,\sigma_{(RETit)} + e_{it} \quad (4)$$

$$\text{CEO Pay}_{i(t+1)} = \alpha_0 + \beta_1\text{Post SOP Dummy} \times \text{Yearly Positive Acquisition} + \beta_2\text{Post SOP Dummy} + \beta_3\text{Yearly Positive Acquisition} + \beta_4\text{CEO Age} + \beta_5\text{CEO Tenure} + \beta_6\text{Firm Size} + \beta_7\text{Market to book value} + \beta_8\text{Long Term Debt to Asset} + \beta_9\text{Board Size} + \beta_{10}\text{Indipendent Board Member Ratio} + \beta_{11}\text{Sales Growth} + \beta_{12}\,\text{ROA} + \beta_{13}\,\sigma_{(RETit)} + e_{it} \quad (5)$$

$$\text{CEO Pay}_{i(t+1)} = \alpha_0 + \beta_1\text{Post SOP Dummy} \times \text{Yearly Negative Acquisition} + \beta_2\text{Post SOP Dummy} + \beta_3\text{Yearly Negative Acquisition} + \beta_4\text{CEO Age} + \beta_5\text{CEO Tenure} + \beta_6\text{Firm Size} + \beta_7\text{Market to book value} + \beta_8\text{Long Term Debt to Asset} + \beta_9\text{Board Size} + \beta_{10}\text{Indipendent Board Member Ratio} + \beta_{11}\text{Sales Growth} + \beta_{12}\,\text{ROA} + \beta_{13}\,\sigma_{(RETit)} + e_{it} \quad (6)$$

$$\text{CEO Pay}_{it} = \alpha_0 + \beta_1\,\text{Post SOP Dummy} \times \text{Ratio of Neg. Acquisition} + \beta_2\text{Post SOP Dummy} + \beta_3\,\text{Ratio of Neg. Acquisition} + \beta_4\text{CEO Age} + \beta_5\text{CEO Tenure} + \beta_6\text{Firm Size} + \beta_7\text{Market to book value} + \beta_8\text{Long Term Debt to Asset} + \beta_9\text{Board Size} + \beta_{10}\text{Indipendent Board Member Ratio} + \beta_{11}\text{Sales Growth} + \beta_{12}\,\text{ROA} + \beta_{13}\,\sigma_{(RETit)} + e_{it} \quad (7)$$

However, one criticism with the above methodology is that it does not consider the change in CEO pay following an M&A deal.

$$\text{Delta CEO Pay}_{i(t-1 \text{ to } t+1)} = \alpha_0 + \beta_1 \text{ Post SOP Dummy} \times \text{Yearly Total Acquisition} + \beta_2 \text{Post SOP Dummy} + \beta_3 \text{ Yearly Total Acquisition} + \beta_4 \text{CEO Age} + \beta_5 \text{CEO Tenure} + \beta_6 \text{Firm Size} + \beta_7 \text{Market to book value} + \beta_8 \text{Long Term Debt to Asset} + \beta_9 \text{Board Size} + \beta_{10} \text{Indipendent Board Member Ratio} + \beta_{11} \text{Sales Growth} + \beta_{12} \text{ROA} + \beta_{13} \sigma_{(RETit)} + e_{it} \quad (8)$$

$$\text{Delta CEO Pay}_{i(t-1 \text{ to } t+1)} = \alpha_0 + \beta_1 \text{ Post SOP Dummy} \times \text{Ratio of Neg. Acquisition} + \beta_2 \text{Post SOP Dummy} + \beta_3 \text{ Ratio of Neg. Acquisition} + \beta_4 \text{CEO Age} + \beta_5 \text{CEO Tenure} + \beta_6 \text{Firm Size} + \beta_7 \text{Market to book value} + \beta_8 \text{Long Term Debt to Asset} + \beta_9 \text{Board Size} + \beta_{10} \text{Indipendent Board Member Ratio} + \beta_{11} \text{Sales Growth} + \beta_{12} \text{ROA} + \beta_{13} \sigma_{(RETit)} + e_{it} \quad (9)$$

In order to examine the effect of SoP regulation and SoP voting percentage on CEO pay change, we use change in CEO pay (i.e. Delta CEO pay) in the above regression models.

Following equations are used to address various research questions:

***Research question 1a:*** We employ Equation (4) (8)

***Research question 1b:*** We employ Equation (5) (6) (7) (9)

$$\text{Delta CEO Pay}_{it} = \alpha_0 + \beta_1 \text{ SOP Voting Approval\%} \times \text{Yearly Total Acquisition} + \beta_2 \text{ Yearly Total Acquisition} + \beta_3 \text{ SOP Voting Approval\%} + \beta_4 \text{CEO Age} + \beta_5 \text{CEO Tenure} + \beta_6 \text{Firm Size} + \beta_7 \text{Market to book value} + \beta_8 \text{Long Term Debt to Asset} + \beta_9 \text{Board Size} + \beta_{10} \text{Indipendent Board Member Ratio} + \beta_{11} \text{Sales Growth} + \beta_{12} \text{ROA} + \beta_{13} \sigma_{(RETit)} + e_{it} \quad (10)$$

$$\text{Delta CEO Pay}_{it} = \alpha_0 + \beta_1 \text{ SOP Voting Approval\%} \times \text{Yearly Negative Acquisition} + \beta_2 \text{ Yearly Negative Acquisition} + \beta_3 \text{ SOP Voting Approval\%} + \beta_4 \text{CEO Age} + \beta_5 \text{CEO Tenure} + \beta_6 \text{Firm Size} + \beta_7 \text{Market to book value} + \beta_8 \text{Long Term Debt to Asset} + \beta_9 \text{Board Size} + \beta_{10} \text{Indipendent Board Member Ratio} + \beta_{11} \text{Sales Growth} + \beta_{12} \text{ROA} + \beta_{13} \sigma_{(RETit)} + e_{it} \quad (11)$$

$$\text{Delta CEO Pay}_{it} = \alpha_0 + \beta_1 \text{ SOP Voting Approval\%} \times \text{Yearly Positive Acquisition} + \beta_2 \text{ Yearly Positive Acquisition} + \beta_3 \text{ SOP Voting Approval\%} + \beta_4 \text{CEO Age} + \beta_5 \text{CEO Tenure} + \beta_6 \text{Firm Size} + \beta_7 \text{Market to book value} + \beta_8 \text{Long Term Debt to Asset} + \beta_9 \text{Board Size} + \beta_{10} \text{Indipendent Board Member Ratio} + \beta_{11} \text{Sales Growth} + \beta_{12} \text{ROA} + \beta_{13} \sigma_{(RETit)} + e_{it} \quad (12)$$

$$\text{Delta CEO Pay}_{it} = \alpha_0 + \beta_1 \text{ SOP Voting Approval\%} \times \text{Ratio of Negative Acquisition} + \beta_2 \text{ Ratio of Negative Acquisition} + \beta_3 \text{ SOP Voting Approval\%} + \beta_4 \text{CEO Age} + \beta_5 \text{CEO Tenure} + \beta_6 \text{Firm Size} + \beta_7 \text{Market to book value} + \beta_8 \text{Long Term Debt to Asset} + \beta_9 \text{Board Size} + \beta_{10} \text{Indipendent Board Member Ratio} + \beta_{11} \text{Sales Growth} + \beta_{12} \text{ROA} + \beta_{13} \sigma_{(RETit)} + e_{it} \quad (13)$$

In the above equations, SoP_Voting% represents the shareholders percentage ‘approval’ voting. Following equations are used to address various research questions:

***Research question 2a:*** We employ equation (10)

***Research question 2b:*** We employ equation (11) (12) (13)

# Chapter 4. Empirical Results

### *4.1 Summary statistics*

Table 1 presents the descriptive statistics of the variables used in this study. From Panel A2, we find that the mean value of SoP voting approval percentage is approximately 91%. While this approval rating is quite high, there is still a significant level of variations in voting results across firms (standard deviation is approx. 10%). From Panel A2 we further find that, among the acquiring firms, on average a firm makes two acquisitions per year and majority of the acquisitions are characterized as positive acquisitions.

Table 2 presents the correlation matrix of the relevant variables. Panel A shows that Post SoP Dummy variables is significantly associated with CEO pay variables and Yearly Positive Acquisition variables. Panel B shows that SoP voting approval % is negatively associated with CEO pay variables. Furthermore, it shows a negative association with Yearly Negative Acquisitions and a positive association with Yearly Positive Acquisitions. While correlation matrix gives us some preliminary perception on the association between two variables, it ignores the effect of other covariates. Hence, we need to view these correlation coefficients with caution.

## Table 1. Summary Statistics

This table presents the summary statics of the variables used in the study. Appendix 1 includes all variable descriptions.

### Panel A. Acquisition and SoP voting variables

**A1. Include all firm-year observations**

| Variable | Obs | Mean | Std. Dev. | Min | Max |
|---|---|---|---|---|---|
| Yearly Total Acquisition | 19457 | 0.664 | 1.486 | 0 | 36 |
| Yearly Negative Acquisition | 19457 | 0.141 | 0.462 | 0 | 9 |
| Yearly Positive Acquisition | 19457 | 0.176 | 0.508 | 0 | 8 |
| Ratio of Negative Acquisition | 19457 | 0.094 | 0.278 | 0 | 1 |
| SoP Voting Approval Percentage | 4928 | 91.627 | 10.276 | 48 | 99.5 |

**A2. Include the firm-year observations with at least one acquisition**

| Variable | Obs | Mean | Std. Dev. | Min | Max |
|---|---|---|---|---|---|
| Yearly Total Acquisition | 6423 | 2.012 | 1.996 | 1 | 36 |
| Yearly Negative Acquisition | 6423 | 0.427 | 0.724 | 0 | 9 |
| Yearly Positive Acquisition | 6423 | 0.532 | 0.770 | 0 | 8 |
| Ratio of Negative Acquisition | 6423 | 0.284 | 0.425 | 0 | 1 |
| SoP Voting Approval Percentage | 1906 | 91.783 | 10.243 | 48 | 99.5 |

### Panel B. CEO Pay variables (in '000s)

| Variable | Obs | Mean | Std. Dev. | Min | Max |
|---|---|---|---|---|---|
| Incentive pay $_{(t + 1)}$ | 18620 | 4205.71 | 4684.69 | 0 | 24668.03 |
| Total Pay $_{(t + 1)}$ | 18620 | 5474.44 | 5330.46 | 192.729 | 29073.17 |
| Delta Incentive pay $_{(t-1 \text{ to } t + 1)}$ | 17739 | 438.45 | 3806.13 | -17247.02 | 18273.69 |
| Delta Total Pay $_{(t-1 \text{ to } t + 1)}$ | 17739 | 381.62 | 4142.80 | -18872.33 | 19645.62 |

### Panel C. Other firm specific variables

| Variable | Obs | Mean | Std. Dev. | Min | Max |
|---|---|---|---|---|---|
| CEO Age (in years) | 19457 | 55.706 | 7.063 | 39 | 75 |
| CEO Tenure (in years) | 19457 | 8.133 | 6.806 | 1 | 34 |
| Market value of equity (Firm Size) (in m$) | 18721 | 7662.629 | 18980.780 | 24.65 | 137446.00 |
| ln (Firm Size) | 18721 | 7.540 | 1.674 | 3.20 | 11.83 |
| Market to Book Value | 18719 | 2.761 | 3.485 | -8.98 | 22.06 |
| LT Debt to Asset | 18974 | 0.201 | 0.192 | 0 | 0.851 |
| Board Size | 15022 | 9.006 | 2.270 | 5 | 16 |
| Independent Board Member Ratio | 15022 | 0.761 | 0.153 | 0 | 1 |
| Sales Growth | 18651 | 0.100 | 0.243 | -0.489 | 1.338 |
| ROA | 19003 | 0.078 | 0.096 | -0.317 | 0.369 |
| Std. Dev of Last 5Yr Stock Return | 17831 | 0.585 | 1.006 | 0.068 | 8.143 |

## Table 2. Correlation Matrix

### Panel A. Correlation matrix with Post SoP Dummy variable (Full Sample)

Table 2 (Panel A) reports the correlation coefficients among different variables used in this study. P-values are reported in the parentheses. This correlation matrix is based on full sample.

| | Incentive pay $_{(t+1)}$ | Total Pay $_{(t+1)}$ | Delta Incentive pay $_{(t-1 \text{ to } t+1)}$ | Delta Total Pay $_{(t-1 \text{ to } t+1)}$ | Yearly Total Acquisition | Yearly Negative Acquisition | Yearly Positive Acquisition | Ratio of Negative Acquisition | Post SoP Dummy |
|---|---|---|---|---|---|---|---|---|---|
| Incentive pay $_{(t+1)}$ | 1.000 | | | | | | | | |
| Total Pay $_{(t+1)}$ | 0.970 | 1.000 | | | | | | | |
| | (0.000) | | | | | | | | |
| Delta Incentive pay $_{(t-1 \text{ to } t+1)}$ | 0.412 | 0.375 | 1.000 | | | | | | |
| | (0.000) | (0.000) | | | | | | | |
| Delta Total Pay $_{(t-1 \text{ to } t+1)}$ | 0.366 | 0.374 | 0.925 | 1.000 | | | | | |
| | (0.000) | (0.000) | (0.000) | | | | | | |
| Yearly Total Acquisition | 0.163 | 0.165 | 0.007 | -0.001 | 1.000 | | | | |
| | (0.000) | (0.000) | (0.325) | (0.855) | | | | | |
| Yearly Negative Acquisition | 0.080 | 0.083 | -0.008 | -0.009 | 0.487 | 1.000 | | | |
| | (0.000) | (0.000) | (0.314) | (0.225) | (0.000) | | | | |
| Yearly Positive Acquisition | 0.088 | 0.089 | 0.018 | 0.010 | 0.493 | 0.224 | 1.000 | | |
| | (0.000) | (0.000) | (0.018) | (0.191) | (0.000) | (0.000) | | | |
| Ratio of Negative Acquisition | 0.066 | 0.065 | -0.020 | -0.018 | 0.345 | 0.824 | 0.038 | 1.000 | |
| | (0.000) | (0.000) | (0.007) | (0.019) | (0.000) | (0.000) | (0.000) | | |
| Post SoP Dummy | 0.124 | 0.116 | 0.014 | 0.026 | 0.012 | -0.001 | 0.023 | 0.006 | 1.000 |
| | (0.000) | (0.000) | (0.072) | (0.001) | (0.094) | (0.941) | (0.002) | (0.402) | |

**Panel B. Correlation matrix with SoP voting approval percentage variable (post SoP period)**

Table 2 (Panel B) reports the correlation coefficients among different variables used in this study. P-values are reported in the parentheses. This correlation matrix is based on post SoP regulation sample (i.e. it covers post 2011 period). SoP voting approval% data is available only for the post 2011 period.

| | Incentive pay $_{(t+1)}$ | Total Pay $_{(t+1)}$ | Delta Incentive pay $_{(t-1 \text{ to } t+1)}$ | Delta Total Pay $_{(t-1 \text{ to } t+1)}$ | Yearly Total Acquisition | Yearly Negative Acquisition | Yearly Positive Acquisition | Ratio of Negative Acquisition | SoP Voting Approval% |
|---|---|---|---|---|---|---|---|---|---|
| Incentive pay $_{(t+1)}$ | 1 | | | | | | | | |
| Total Pay $_{(t+1)}$ | 0.9697 | 1 | | | | | | | |
| | (0.000) | | | | | | | | |
| Delta Incentive pay $_{(t-1 \text{ to } t+1)}$ | 0.4117 | 0.3747 | 1 | | | | | | |
| | (0.000) | (0.000) | | | | | | | |
| Delta Total Pay $_{(t-1 \text{ to } t+1)}$ | 0.3659 | 0.3737 | 0.9246 | 1 | | | | | |
| | (0.000) | (0.000) | (0.000) | | | | | | |
| Yearly Total Acquisition | 0.163 | 0.1649 | 0.0074 | -0.0014 | 1 | | | | |
| | (0.000) | (0.000) | (0.325) | (0.855) | | | | | |
| Yearly Negative Acquisition | 0.0801 | 0.0831 | -0.0076 | -0.0091 | 0.4871 | 1 | | | |
| | (0.000) | (0.000) | (0.315) | (0.225) | (0.000) | | | | |
| Yearly Positive Acquisition | 0.0884 | 0.0889 | 0.0178 | 0.0098 | 0.4927 | 0.2235 | 1 | | |
| | (0.000) | (0.000) | (0.018) | (0.191) | (0.000) | (0.000) | | | |
| Ratio of Negative Acquisition | 0.0659 | 0.0653 | -0.0201 | -0.0176 | 0.3449 | 0.8242 | 0.0377 | 1 | |
| | (0.000) | (0.000) | (0.008) | (0.019) | (0.000) | (0.000) | (0.000) | | |
| SoP Voting Approval% | -0.122 | -0.1336 | 0.0076 | 0.0198 | -0.004 | -0.0387 | 0.0354 | -0.0418 | 1 |
| | (0.000) | (0.000) | (0.594) | (0.167) | (0.779) | (0.007) | (0.013) | (0.003) | |

### *4.2 M&A activities and CEO compensation*

This sub-section first examines the relation between M&A activities and CEO compensation without considering the effect of SoP regulation or SoP voting approval results. The relevant results are presented in Table 3.

In Table 3A, we examine how CEO compensation is set after an acquisition, without distinguishing whether it is a good (positive) or bad (negative) acquisition. In this table there are two models based on panel data OLS regression. Model 1 uses CEO incentive pay as the dependent variable, while Model 2 reports the results for CEO total pay. Total pay is the sum of incentive pay, cash salary and cash bonus. All variables are described in Appendix 1.

From the table, we find that total acquisition has a significantly positive relationship on both incentive and total pay, which means that if CEOs make more acquisition in a year, they will receive more pay (both incentive pay and total pay) in the next year. This finding is consistent with Seo, Gamache, Devers and Carpenter (2015), which assert that CEOs who seek to obtain a higher compensation package would engage in more acquisition activities to escalate their compensation because the larger number of acquisitions they make, the more pay they will receive. Consistent with Harford and Li (2007) and other related studies, we include other control variables in both models to insure the robustness of the results. These include sales growth and ROA (computed as the ratio of earnings before interest and taxes to total assets) to control for firm performance, which generally has a positive relationship with executive compensation. The standard deviation of last five years stock return is employed to control for firm risk, which reveals firm's operating environment. We further control for other firm characteristics: Market to book ratio (firm's growth opportunities); CEO age and CEO tenure

(CEO status in firm); Board size and Independent board member ratio (firm's internal government mechanism) and long-term debt to asset ratio (external monitoring by creditors).

Among them, firm size, CEO tenure, long-term debt to total asset ratio and independent board member ratio have significant positive impact on both CEO incentive and total compensation, whereas ROA has a significantly negative impact.

## Table 3: Association between Number of Yearly Acquisitions and Subsequent CEO Pay

## Panel A: Number of Yearly Acquisitions and CEO Pay

This table reports panel data OLS regression results examining the association between number of yearly acquisitions and subsequent CEO pay. The dependent variable of the first model is the CEO's incentive pay for year t+1, and the dependent variable of the second model is the CEO' total pay for year t+1. Yearly total acquisition is the number of acquisitions made in a year. 'CEO age' describes CEO age at the time of the acquisition announcement. 'CEO tenure' is the length of time that the CEO has this position. 'Firm size' is measured by companies' market value. 'Market to book value' is market capitalization divided by net book value. 'LT Debt to Asset' is the long-term debt to total assets ratio. 'Board size' is the total number of directors on the board. 'Independent board member ratio' is the ratio of the number of board members who do not have a material or pecuniary relationship with company or related persons to the number of total board members. 'Sales Growth' is the difference in log sales from year t-1 to t. 'ROA' is the accounting return on assets. 'Std. Dev of Last 5Yr Stock Return' is the standard deviations of stock return, computed over the prior 5 years. The model is estimated using all S&P1500 firms over the entire sample period 2005 to 2016. Corresponding p-values from Huber-White robust standard errors are reported in brackets. * indicates significance at the 10% level, ** indicates significance at the 5% level, and *** indicates significance at the 1% level.

| | Incentive pay $_{(t+1)}$ | Total Pay $_{(t+1)}$ |
|---|---|---|
| | (1) | (2) |
| VARIABLES | Model | Model |
| Yearly Total Acquisition | 112.0577*** | 75.7780** |
| | (26.167) | (29.731) |
| CEO Age | -2.5642 | 3.6096 |
| | (7.672) | (9.287) |
| CEO Tenure | 14.4493* | 31.4667*** |
| | (7.975) | (9.741) |
| Ln (Firm Size) | 1,680.7087*** | 1,763.6297*** |
| | (44.231) | (57.561) |
| Market to Book Value | 1.5134 | 0.8096 |
| | (1.078) | (1.186) |
| LT Debt to Asset | 908.2157*** | 1,001.3784*** |
| | (277.367) | (345.708) |
| Board Size | 22.7184 | 41.3613 |
| | (24.136) | (28.889) |
| Independent Board Member Ratio | 1,135.2140*** | 1,088.5867*** |
| | (346.036) | (420.547) |
| Sales Growth | 0.1711 | -0.4757 |
| | (0.967) | (1.063) |
| ROA | -1,460.3871*** | -1,045.9673** |
| | (424.395) | (497.420) |
| Std. Dev of Last 5Yr Stock Return | -0.2826 | -0.0931 |
| | (1.019) | (1.206) |
| Constant | -9,836.3186*** | -9,765.0881*** |
| | (621.204) | (818.925) |
| Year Fixed Effect | Yes | Yes |
| Industry Fixed Effect | Yes | Yes |

| | | |
|---|---|---|
| Observations | 13,754 | 13,754 |
| Number of unique firms | 1,982 | 1,982 |
| R2 within | 0.042 | 0.041 |
| R2 between | 0.519 | 0.417 |
| R2 overall | 0.367 | 0.363 |

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.10

## Table 3: Association between Number of Yearly Acquisitions and Subsequent CEO Pay

## Panel B: Number of Yearly Positive/Negative Acquisitions and CEO Pay

This table reports panel data OLS regression results examining the association between number of yearly positive and negative acquisitions and subsequent CEO pay. Yearly total positive acquisition is the number of acquisitions with positive CAR (-2 to +2). Yearly total negative acquisition is the number of acquisitions with negative CAR (-2 to +2). The dependent variables of model (1) and (2) are the CEO's incentive pay for year t+1, and the dependent variables of model (3) and (4) are the CEO' total pay for year t+1. 'CEO age' describes CEO age at the time of the acquisition announcement. 'CEO tenure' is the length of time that the CEO has this position. 'Firm size' is measured by companies' market value. 'Market to book value' is market capitalization divided by net book value. 'LT Debt to Asset' is the long-term debt to total assets ratio. 'Board size' is the total number of directors on the board. 'Independent board member ratio' is the ratio of the number of board members who do not have a material or pecuniary relationship with company or related persons to the number of total board members. 'Sales Growth' is the difference in log sales from year t-1 to t. 'ROA' is the accounting return on assets. 'Std. Dev of Last 5Yr Stock Return' is the standard deviations of stock return, computed over the prior 5 years. The model is estimated using all S&P1500 firms over the entire sample period 2005 to 2016. Corresponding p-values from Huber-White robust standard errors are reported in brackets. * indicates significance at the 10% level, ** indicates significance at the 5% level, and *** indicates significance at the 1% level.

| | Incentive pay $_{(t+1)}$ | Total Pay $_{(t+1)}$ | Incentive pay $_{(t+1)}$ | Total Pay $_{(t+1)}$ |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| VARIABLES | Model | Model | Model | Model |
| Yearly Total Positive Acquisition | 207.7621*** | 182.8899*** | | |
| | (62.429) | (69.362) | | |
| Yearly Total Negative Acquisition | | | 5.7570 | -58.2233 |
| | | | (69.394) | (76.924) |
| CEO Age | -2.2249 | 4.0352 | -2.5932 | 3.7862 |
| | (7.677) | (9.279) | (7.682) | (9.294) |
| CEO Tenure | 14.7741* | 31.5223*** | 14.7513* | 31.4752*** |
| | (7.979) | (9.731) | (7.985) | (9.750) |
| Ln (Firm Size) | 1,696.5248*** | 1,774.5831*** | 1,708.4213*** | 1,783.0918*** |

| | | | | |
|---|---|---|---|---|
| | (43.910) | (57.104) | (43.879) | (57.234) |
| Market to Book Value | 1.5309 | 0.8224 | 1.5301 | 0.8379 |
| | (1.078) | (1.187) | (1.078) | (1.186) |
| LT Debt to Asset | 905.1283*** | 994.7117*** | 941.4292*** | 1,033.6911*** |
| | (277.661) | (345.320) | (277.788) | (346.085) |
| Board Size | 23.9444 | 42.6018 | 22.4736 | 41.4640 |
| | (24.152) | (28.870) | (24.164) | (28.910) |
| Independent Board Member Ratio | 1,151.3206*** | 1,105.1483*** | 1,129.7168*** | 1,083.1318** |
| | (346.289) | (420.171) | (346.482) | (420.898) |
| Sales Growth | 0.1608 | -0.4835 | 0.1693 | -0.4782 |
| | (0.967) | (1.064) | (0.967) | (1.063) |
| ROA | -1,459.9383*** | -1,057.0435** | -1,466.9836*** | -1,048.3328** |
| | (424.568) | (497.224) | (424.803) | (497.649) |
| Std. Dev of Last 5Yr Stock Return | -0.2745 | -0.0833 | -0.2734 | -0.0876 |
| | (1.019) | (1.206) | (1.020) | (1.207) |
| Constant | -9,970.3975*** | -9,881.2342*** | -9,973.3275*** | -9,867.6229*** |
| | (620.794) | (815.553) | (621.536) | (819.706) |
| | | | | |
| Year Fixed Effect | Yes | Yes | Yes | Yes |
| Industry Fixed Effect | Yes | Yes | Yes | Yes |
| | | | | |
| Observations | 13,754 | 13,754 | 13,754 | 13,754 |
| Number of unique firms | 1,982 | 1,982 | 1,982 | 1,982 |
| R2 within | 0.042 | 0.041 | 0.041 | 0.041 |
| R2 between | 0.518 | 0.417 | 0.517 | 0.414 |
| R2 overall | 0.366 | 0.362 | 0.365 | 0.361 |

In Table 3B, we examine how CEOs' incentive pay and total pay are set after positive and negative acquisitions. If an acquisition announcement is associated with a positive (negative) cumulative abnormal return (CAR) over a two-day period (i.e. CAR (-2 to +2)), it is designated as a positive (negative) acquisition. Based on Model 1 and Model 2 results, we find that the coefficient of yearly total positive acquisition is significant and positive, suggesting that positive acquisitions are able to augment both CEO incentive pay and total pay in the subsequent year of an M&A deal. However, we find that the coefficient of yearly total negative acquisition is not significant (Model 3 and 4). It implies that CEOs receive compensation from acquisition activities asymmetrically. They earn more for positive acquisitions but lose nothing from negative acquisitions, which is consistent with Bliss and Rosen (2001), Grinstein and Hribar (2003), Hartzell et al. (2004) and Harford and Li (2007), who argue that there is a significant level of agency problem in M&A related CEO compensation. The significances of control variables are consistent with previous regression models (Table 3A).

### *4.3 SoP regulation influence on CEO compensation*

Next, we examine the moderating effect of SoP regulation on the relation between (i) total acquisition and subsequent CEO pay, (ii) positive acquisitions and subsequent CEO pay, (iii) negative acquisitions and subsequent CEO pay. In Table 4A, we investigate the influence of SoP regulation on the association between yearly total acquisitions and subsequent CEO compensation. In order to examine the moderating effect we include an interaction effect between 'Post SoP Dummy' and 'Yearly total acquisitions' in Model 2 and 4. 'Post SoP dummy' is an indicator variable, which takes a value of '1' for the post-2011 period observations and '0' for the pre-2011 period observations.

Table 4A (Model 1 and Model 3) includes the main effect of Post SoP Dummy. In both regression models, we find a positive and significant coefficient of Post SoP Dummy – which indicates that CEO compensation increases in dollar terms in the post SoP period.[1] However, Table 4A (Model 2) shows a significantly negative coefficient on the interaction of 'Post SoP dummy' and 'yearly total acquisition'. This counters the positive baseline link between SoP dummy variable and CEO Incentive compensation, demonstrating that with the presence of SOP regulation, the positive relationship between total acquisition and CEO incentive compensation is curbed. We note that, in Model 2, the sum of the two coefficients (yearly total acquisition and post SoP dummy × yearly total acquisition) is still statistically larger than zero, indicating that even in the post-SoP era, more acquisitions are still able to induce to more incentive pay.

In Model 4, we find that the interaction of post SoP dummy and yearly total acquisition has an insignificant relationship with CEO total compensation. In summary, while we find that CEOs normally gain more compensation after acquisitions, the increasing rate of incentive pay declines significantly in the post-SoP era. This is partially consistent with Correa and Lel (2016), suggesting that SoP laws decrease the growth rate of CEO compensation and reduce the differences between executives in the same company. While we do not find a decrease in CEO pay in the post-SoP era, we observe a decline in incentive pay growth in the post M&A period.

[1] One caveat with this result is that the CEO compensation values are not adjusted for inflation or not scaled with any baseline values. Hence, the main effect results for Post SoP Dummy variable should be viewed with caution.

## Table 4: Association between Number of Yearly Acquisitions and Subsequent CEO Pay in the Pre- and Post-SoP Periods

### Panel A: Number of Yearly Acquisitions and CEO Pay

This table reports panel data OLS regression results examining the moderating effect of SoP regulation on the association between number of yearly acquisitions and subsequent CEO pay (in pre- and post-SOP periods). The dependent variables of model (1) and (2) are the CEO's incentive pay for year t+1, and the dependent variables of model (3) and (4) are the CEO' total pay for year t+1. Yearly total acquisition is the number of acquisitions that CEOs make. Post SoP dummy is an indicator variable, which takes a value of '1' for the post-2011 period observations and '0' for the pre-2011 period observations. Interaction term 'Post SOP Dummy × Yearly Total Acquisition' represents the interaction of post SOP dummy variable and yearly total acquisition variable. 'CEO age' describes CEO age at the time of the acquisition announcement. 'CEO tenure' is the length of time that the CEO has this position. 'Firm size' is measured by companies' market value. 'Market to book value' is market capitalization divided by net book value. 'LT Debt to Asset' is the long-term debt to total assets ratio. 'Board size' is the total number of directors on the board. 'Independent board member ratio' is the ratio of the number of board members who do not have a material or pecuniary relationship with company or related persons to the number of total board members. 'Sales Growth' is the difference in log sales from year t-1 to t. 'ROA' is the accounting return on assets. 'Std. Dev of Last 5Yr Stock Return' is the standard deviations of stock return, computed over the prior 5 years. The model is estimated using all S&P1500 firms over the entire sample period 2005 to 2016. Corresponding p-values from Huber-White robust standard errors are reported in brackets. * indicates significance at the 10% level, ** indicates significance at the 5% level, and *** indicates significance at the 1% level.

| | Incentive pay $_{(t+1)}$ | Incentive pay $_{(t+1)}$ | Total Pay $_{(t+1)}$ | Total Pay $_{(t+1)}$ |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| VARIABLES | Model | Model | Model | Model |
| Post SOP Dummy × Yearly Total Acquisition | | -112.5902*** | | -59.3555 |
| | | (42.771) | | (47.164) |
| Post SOP Dummy | 852.0678*** | 926.8092*** | 765.5219** | 804.2747** |
| | (325.619) | (326.793) | (359.491) | (360.881) |
| Yearly Total Acquisition | 112.0577*** | 148.0371*** | 75.7780** | 94.6568*** |
| | (26.167) | (29.515) | (29.731) | (33.277) |
| CEO Age | -2.5642 | -2.8356 | 3.6096 | 3.4467 |
| | (7.672) | (7.671) | (9.287) | (9.285) |
| CEO Tenure | 14.4493* | 14.7509* | 31.4667*** | 31.6178*** |
| | (7.975) | (7.973) | (9.741) | (9.739) |
| Ln (Firm Size) | 1,680.7087*** | 1,682.1873*** | 1,763.6297*** | 1,766.1065*** |
| | (44.231) | (44.220) | (57.561) | (57.537) |
| Market to Book Value | 1.5134 | 1.5230 | 0.8096 | 0.8144 |
| | (1.078) | (1.078) | (1.186) | (1.186) |
| LT Debt to Asset | 908.2157*** | 932.9714*** | 1,001.3784*** | 1,018.1024*** |
| | (277.367) | (277.445) | (345.708) | (345.802) |
| Board Size | 22.7184 | 22.2030 | 41.3613 | 41.2018 |
| | (24.136) | (24.130) | (28.889) | (28.883) |
| Independent Board Member Ratio | 1,135.2140*** | 1,135.7214*** | 1,088.5867*** | 1,091.8843*** |
| | (346.036) | (345.942) | (420.547) | (420.435) |
| Sales Growth | 0.1711 | 0.1680 | -0.4757 | -0.4774 |
| | (0.967) | (0.967) | (1.063) | (1.064) |
| ROA | -1,460.3871*** | -1,496.4616*** | -1,045.9673** | -1,071.5308** |
| | (424.395) | (424.508) | (497.420) | (497.666) |
| Std. Dev of Last 5Yr Stock Return | -0.2826 | -0.2786 | -0.0931 | -0.0900 |

| | | | | |
|---|---|---|---|---|
| | (1.019) | (1.018) | (1.206) | (1.206) |
| Constant | -9,836.3186*** | -9,861.7807*** | -9,765.0881*** | -9,793.4437*** |
| | (621.204) | (621.077) | (818.925) | (818.465) |
| Year Fixed Effect | Yes | Yes | Yes | Yes |
| Industry Fixed Effect | Yes | Yes | Yes | Yes |
| Observations | 13,754 | 13,754 | 13,754 | 13,754 |
| Number of unique firms | 1,982 | 1,982 | 1,982 | 1,982 |
| R2 within | 0.042 | 0.043 | 0.041 | 0.041 |
| R2 between | 0.519 | 0.519 | 0.417 | 0.417 |
| R2 overall | 0.367 | 0.367 | 0.363 | 0.363 |

## Table 4: Association between Number of Yearly Positive Acquisitions and Subsequent CEO Pay in the Pre- and Post-SOP Periods

### Panel B: Number of Yearly Positive Acquisitions and CEO Pay

This table reports panel data OLS regression results examining the moderating effect of SoP regulation on the association between number of yearly positive acquisitions and subsequent CEO pay (in pre- and post-SOP periods). The dependent variables of model (1) and (2) are the CEO's incentive pay for year t+1, and the dependent variables of model (3) and (4) are the CEO' total pay for year t+1. Yearly positive acquisition is the number of acquisitions with positive CAR (-2 to +2). Post SOP dummy is an indicator variable, which takes a value of '1' for the post-2011 period observations and '0' for the pre-2011 period observations. Interaction term Post SOP Dummy × Yearly positive Acquisition represents the interaction of post SOP dummy variable and yearly positive acquisition variable. 'CEO age' describes CEO age at the time of the acquisition announcement. 'CEO tenure' is the length of time that the CEO has this position. 'Firm size' is measured by companies' market value. 'Market to book value' is market capitalization divided by net book value. 'LT Debt to Asset' is the long-term debt to total assets ratio. 'Board size' is the total number of directors on the board. 'Independent board member ratio' is the ratio of the number of board members who do not have a material or pecuniary relationship with company or related persons to the number of total board members. 'Sales Growth' is the difference in log sales from year t-1 to t. 'ROA' is the accounting return on assets. 'Std. Dev of Last 5Yr Stock Return' is the standard deviations of stock return, computed over the prior 5 years. The model is estimated using all S&P1500 firms over the entire sample period 2005 to 2016. Corresponding p-values from Huber-White robust standard errors are reported in brackets. * indicates significance at the 10% level, ** indicates significance at the 5% level, and *** indicates significance at the 1% level.

| | Incentive pay $_{(t+1)}$ | Incentive pay $_{(t+1)}$ | Total Pay $_{(t+1)}$ | Total Pay $_{(t+1)}$ |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| VARIABLES | Model | Model | Model | Model |
| Post SOP Dummy × Yearly Positive Acquisition | | -398.2472*** | | -315.3698** |
| | | (122.591) | | (135.480) |
| Post SOP Dummy | 825.2296** | 914.3470*** | 747.3487** | 815.1943** |
| | (325.577) | (326.753) | (359.593) | (361.139) |
| Yearly Positive Acquisition | 207.7621*** | 343.0934*** | 182.8899*** | 290.3275*** |
| | (62.429) | (75.026) | (69.362) | (83.168) |
| CEO Age | -2.2249 | -2.4202 | 4.0352 | 3.8124 |
| | (7.677) | (7.668) | (9.279) | (9.264) |
| CEO Tenure | 14.7741* | 14.9320* | 31.5223*** | 31.6237*** |
| | (7.979) | (7.969) | (9.731) | (9.713) |
| Ln (Firm Size) | 1,696.5248*** | 1,699.7803*** | 1,774.5831*** | 1,783.1183*** |
| | (43.910) | (43.825) | (57.104) | (56.883) |
| Market to Book Value | 1.5309 | 1.5218 | 0.8224 | 0.8132 |
| | (1.078) | (1.078) | (1.187) | (1.188) |
| LT Debt to Asset | 905.1283*** | 927.8384*** | 994.7117*** | 1,019.9446*** |
| | (277.661) | (277.316) | (345.320) | (344.571) |
| Board Size | 23.9444 | 23.1708 | 42.6018 | 42.1476 |
| | (24.152) | (24.128) | (28.870) | (28.833) |
| Independent Board Member Ratio | 1,151.3206*** | 1,146.1750*** | 1,105.1483*** | 1,105.7624*** |
| | (346.289) | (345.866) | (420.171) | (419.435) |
| Sales Growth | 0.1608 | 0.1495 | -0.4835 | -0.4911 |
| | (0.967) | (0.967) | (1.064) | (1.065) |
| ROA | -1,459.9383*** | -1,490.2455*** | -1,057.0435** | -1,099.3727** |
| | (424.568) | (424.302) | (497.224) | (496.907) |
| Std. Dev of Last 5Yr Stock Return | -0.2745 | -0.2630 | -0.0833 | -0.0708 |

| | | | | |
|---|---|---|---|---|
| | (1.019) | (1.018) | (1.206) | (1.204) |
| Constant | -9,970.3975*** | -10,002.3872*** | -9,881.2342*** | -9,951.7099*** |
| | (620.794) | (619.583) | (815.553) | (811.779) |
| Year Fixed Effect | Yes | Yes | Yes | Yes |
| Industry Fixed Effect | Yes | Yes | Yes | Yes |
| Observations | 13,754 | 13,754 | 13,754 | 13,754 |
| Number of unique firms | 1,982 | 1,982 | 1,982 | 1,982 |
| R2 within | 0.042 | 0.043 | 0.041 | 0.041 |
| R2 between | 0.518 | 0.519 | 0.417 | 0.419 |
| R2 overall | 0.366 | 0.367 | 0.362 | 0.363 |

In Table 4B, we examine the moderating effect of SoP regulation on the association between yearly positive acquisitions and subsequent CEO compensation (Model 2 and 4). Model 1 and 2 use CEO incentive pay and Model 3 and 4 use CEO total pay as dependent variables, respectively. Model 2 and 4 include the interaction effects to examine the moderating effect of SoP regulation. The interaction effects are significantly negative in both models. It implies that in the post-SoP era, the increase in CEO compensation following positive M&A deals is diminished significantly.

In Table 4C, we examine the moderating effect of SoP regulation on the association between yearly negative acquisitions and subsequent CEO compensation (Model 2 and 4). Model 1 and 2 use CEO incentive pay and Model 3 and 4 use CEO total pay as dependent variables, respectively. We find that the interaction effects are significantly negative only in Model 2. It implies that in the post-SoP era, the increase in CEO incentive pay following negative M&A deals is diminished significantly.

The results from Table 4A, 4B and 4C indicate that in the post-SoP era, CEOs experience a lower increase in their compensation following M&A deals. These results generally support the view of 'SoP governance' hypothesis. The results also highlight that SoP governance effect is asymmetric in case of positive and negative acquisitions (Kahneman & Tversky, 1979; Krause et al. 2014).

## Table 4: Association between Number of Yearly Negative Acquisitions and Subsequent CEO Pay in Pre- and Post-SOP Periods

### Panel C: Number of Yearly Negative Acquisitions and CEO Pay

This table reports panel data OLS regression results examining the moderating effect of SoP regulation on the association between number of yearly negative acquisitions and subsequent CEO pay (in pre- and post-SOP periods). The dependent variables of model (1) and (2) are the CEO's incentive pay for year t+1, and the dependent variables of model (3) and (4) are the CEO' total pay for year t+1. Yearly negative acquisition is the number of acquisitions with negative CAR (-2 to +2). Post SOP dummy is an indicator variable, which takes a value of '1' for the post-2011 period observations and '0' for the pre-2011 period observations. Interaction term Post SOP Dummy × Yearly negative Acquisition represents the interaction of post SOP dummy variable and yearly negative acquisition variable. 'CEO age' describes CEO age at the time of the acquisition announcement. 'CEO tenure' is the length of time that the CEO has this position. 'Firm size' is measured by companies' market value. 'Market to book value' is market capitalization divided by net book value. 'LT Debt to Asset' is the long-term debt to total assets ratio. 'Board size' is the total number of directors on the board. 'Independent board member ratio' is the ratio of the number of board members who do not have a material or pecuniary relationship with company or related persons to the number of total board members. 'Sales Growth' is the difference in log sales from year t-1 to t. 'ROA' is the accounting return on assets. 'Std. Dev of Last 5Yr Stock Return' is the standard deviations of stock return, computed over the prior 5 years. The model is estimated using all S&P1500 firms over the entire sample period 2005 to 2016. Corresponding p-values from Huber-White robust standard errors are reported in brackets. * indicates significance at the 10% level, ** indicates significance at the 5% level, and *** indicates significance at the 1% level.

| | Incentive pay $_{(t+1)}$ | Incentive pay $_{(t+1)}$ | Total Pay $_{(t+1)}$ | Total Pay $_{(t+1)}$ |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| VARIABLES | Model | Model | Model | Model |
| Post SOP Dummy × Yearly Negative Acquisition | | -322.1051** | | -128.2522 |
| | | (140.862) | | (155.562) |
| Post SOP Dummy | 820.1909** | 859.7983*** | 739.5993** | 755.2562** |
| | (325.729) | (326.130) | (359.415) | (359.922) |
| Yearly Negative Acquisition | 5.7570 | 107.3816 | -58.2233 | -17.9596 |
| | (69.394) | (82.397) | (76.924) | (91.118) |
| CEO Age | -2.5932 | -2.7937 | 3.7862 | 3.6833 |
| | (7.682) | (7.681) | (9.294) | (9.295) |
| CEO Tenure | 14.7513* | 14.8674* | 31.4752*** | 31.5213*** |
| | (7.985) | (7.984) | (9.750) | (9.751) |
| Ln (Firm Size) | 1,708.4213*** | 1,707.9815*** | 1,783.0918*** | 1,783.2154*** |
| | (43.879) | (43.878) | (57.234) | (57.234) |
| Market to Book Value | 1.5301 | 1.5651 | 0.8379 | 0.8520 |
| | (1.078) | (1.078) | (1.186) | (1.186) |
| LT Debt to Asset | 941.4292*** | 957.2660*** | 1,033.6911*** | 1,040.7057*** |
| | (277.788) | (277.853) | (346.085) | (346.191) |
| Board Size | 22.4736 | 21.9240 | 41.4640 | 41.2908 |
| | (24.164) | (24.163) | (28.910) | (28.911) |
| Independent Board Member Ratio | 1,129.7168*** | 1,120.2506*** | 1,083.1318** | 1,081.5932** |
| | (346.482) | (346.472) | (420.898) | (420.906) |
| Sales Growth | 0.1693 | 0.1629 | -0.4782 | -0.4811 |
| | (0.967) | (0.967) | (1.063) | (1.063) |
| ROA | -1,466.9836*** | -1,485.0435*** | -1,048.3328** | -1,056.9482** |
| | (424.803) | (424.826) | (497.649) | (497.762) |

| | | | | |
|---|---|---|---|---|
| Std. Dev of Last 5Yr Stock Return | -0.2734 | -0.2668 | -0.0876 | -0.0843 |
| | (1.020) | (1.020) | (1.207) | (1.207) |
| Constant | -9,973.3275*** | -9,966.9331*** | -9,867.6229*** | -9,868.1245*** |
| | (621.536) | (621.512) | (819.706) | (819.705) |
| Year Fixed Effect | Yes | Yes | Yes | Yes |
| Industry Fixed Effect | Yes | Yes | Yes | Yes |
| Observations | 13,754 | 13,754 | 13,754 | 13,754 |
| Number of unique firms | 1,982 | 1,982 | 1,982 | 1,982 |
| R2 within | 0.041 | 0.042 | 0.041 | 0.041 |
| R2 between | 0.517 | 0.516 | 0.414 | 0.414 |
| R2 overall | 0.365 | 0.366 | 0.361 | 0.361 |

## Table 5: Association between Ratio of Negative Acquisitions and Subsequent CEO Pay in the Pre- and Post-SOP Periods

This table reports panel data OLS regression results examining the moderating effect of SoP regulation on the association between ratio of yearly negative acquisitions and subsequent CEO pay (in pre- and post-SOP periods). The dependent variables of model (1) and (2) are the CEO's incentive pay for year t+1, and the dependent variables of model (3) and (4) are the CEO' total pay for year t+1. Ratio of Neg. Acquisition represents the interaction of post SoP dummy variable and ratio of negative acquisition variable. Post SoP dummy is an indicator variable, which takes a value of '1' for the post-2011 period observations and '0' for the pre-2011 period observations. Interaction term Post SOP Dummy × Ratio of Neg. Association represents the interaction of post SOP dummy variable and ratio of yearly negative association variable. 'CEO age' describes CEO age at the time of the acquisition announcement. 'CEO tenure' is the length of time that the CEO has this position. 'Firm size' is measured by companies' market value. 'Market to book value' is market capitalization divided by net book value. 'LT Debt to Asset' is the long-term debt to total assets ratio. 'Board size' is the total number of directors on the board. 'Independent board member ratio' is the ratio of the number of board members who do not have a material or pecuniary relationship with company or related persons to the number of total board members. 'Sales Growth' is the difference in log sales from year t-1 to t. 'ROA' is the accounting return on assets. 'Std. Dev of Last 5Yr Stock Return' is the standard deviations of stock return, computed over the prior 5 years. The model is estimated using all S&P1500 firms over the entire sample period 2005 to 2016. Corresponding p-values from Huber-White robust standard errors are reported in brackets. * indicates significance at the 10% level, ** indicates significance at the 5% level, and *** indicates significance at the 1% level.

| | Incentive pay $_{(t+1)}$ | | | Total Pay $_{(t+1)}$ | | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| VARIABLES | Model | Model | Model | Model | Model | Model |
| Post SOP Dummy × Ratio of Neg. Acquisition | | | -93.7622 | | | -2.9231 |
| | | | (225.469) | | | (248.484) |
| Post SOP Dummy | | 813.6721** | 822.2629** | | 738.6789** | 738.7549** |
| | | (325.627) | (326.311) | | (359.342) | (360.099) |
| Ratio of Neg. Acquisition | -164.3874 | -164.3874 | -132.7575 | -179.2950 | -179.2950 | -178.3170 |
| | (110.147) | (110.147) | (133.869) | (121.698) | (121.698) | (147.835) |
| CEO Age | -2.5357 | -2.5357 | -2.5440 | 3.8562 | 3.8562 | 3.8557 |
| | (7.683) | (7.683) | (7.682) | (9.294) | (9.294) | (9.293) |
| CEO Tenure | 14.6724* | 14.6724* | 14.6880* | 31.4156*** | 31.4156*** | 31.4096*** |
| | (7.986) | (7.986) | (7.986) | (9.750) | (9.750) | (9.749) |
| Ln (Firm Size) | 1,711.419*** | 1,711.419*** | 1,711.6548*** | 1,784.072*** | 1,784.072*** | 1,784.494*** |
| | (43.855) | (43.855) | (43.848) | (57.199) | (57.199) | (57.187) |
| Market to Book Value | 1.5329 | 1.5329 | 1.5302 | 0.8266 | 0.8266 | 0.8264 |
| | (1.078) | (1.078) | (1.078) | (1.186) | (1.186) | (1.186) |
| LT Debt to Asset | 951.9472*** | 951.9472*** | 953.9866*** | 1,038.420*** | 1,038.420*** | 1,038.823*** |
| | (277.803) | (277.803) | (277.814) | (346.037) | (346.037) | (346.051) |
| Board Size | 23.1142 | 23.1142 | 23.0147 | 41.9536 | 41.9536 | 41.9627 |
| | (24.169) | (24.169) | (24.169) | (28.911) | (28.911) | (28.911) |
| Independent Board Member Ratio | 1,129.999*** | 1,129.999*** | 1,129.414*** | 1,086.864*** | 1,086.864*** | 1,087.165*** |
| | (346.527) | (346.527) | (346.509) | (420.891) | (420.891) | (420.861) |

| | | | | | | |
|---|---|---|---|---|---|---|
| Sales Growth | 0.1679 | 0.1679 | 0.1685 | -0.4788 | -0.4788 | -0.4787 |
| | (0.967) | (0.967) | (0.967) | (1.063) | (1.063) | (1.063) |
| ROA | -1,466.24*** | -1,466.24*** | -1,470.63*** | -1,045.22** | -1,045.22** | -1,046.83** |
| | (424.801) | (424.801) | (424.882) | (497.614) | (497.614) | (497.729) |
| Std. Dev of Last 5Yr Stock Return | -0.2804 | -0.2804 | -0.2788 | -0.0899 | -0.0899 | -0.0896 |
| | (1.020) | (1.020) | (1.020) | (1.207) | (1.207) | (1.207) |
| Constant | -9,992.01*** | -9,992.01*** | -9,995.72*** | -9,879.5*** | -9,879.50*** | -9,882.88*** |
| | (621.754) | (621.754) | (621.686) | (819.720) | (819.720) | (819.552) |
| Year Fixed Effect | Yes | Yes | Yes | Yes | Yes | Yes |
| Industry Fixed Effect | Yes | Yes | Yes | Yes | Yes | Yes |
| Observations | 13,754 | 13,754 | 13,754 | 13,754 | 13,754 | 13,754 |
| Number of unique firms | 1,982 | 1,982 | 1,982 | 1,982 | 1,982 | 1,982 |
| R2 within | 0.042 | 0.042 | 0.042 | 0.041 | 0.041 | 0.041 |
| R2 between | 0.517 | 0.517 | 0.517 | 0.415 | 0.415 | 0.415 |
| R2 overall | 0.365 | 0.365 | 0.365 | 0.361 | 0.361 | 0.361 |

While Table 4 results are interesting, presenting the significant moderating effect of SoP regulation on the relationship between M&A activities, there are two potential caveats. First, we have considered the effect of positive acquisition and negative acquisition separately. However, since a firm may make multiple M&A deals in a year, a CEO's pay package is likely to be determined based on the overall success rate of their M&A deals in a particular firm-year. Accordingly, we should use a relative M&A success measure (e.g. number of negative acquisition to number of total acquisitions) as the independent variable. Second, following earlier studies (e.g. Harford and Li, 2007) we use subsequent year's (with respect to the M&A year) CEO compensation as the dependent variables in Table 4 models. However, this dependent variable does not focus on the change in CEO compensation level due to M&A activities. Some of the later studies (e.g. Fu et al. 2013) use change in CEO compensation level (from t-1 to t+1 firm year) in relation to M&A studies. The change variable will incorporate within firm variation as well as cross-sectional variation in CEO compensation in the context of M&A activities. We address these issues in the subsequent analyses.

In Table 5, we address the first concern as mentioned above by examining the moderating effect of SoP regulation on the association between ratio of negative acquisitions and subsequent CEO pay. Apparently, the coefficient of the ratio of negative acquisition to total acquisition (Ratio of Neg. Acquisition) is insignificant in Model 1 and Model 4. Similarly, the coefficient of the interaction term between Post SoP Dummy and Ratio of Neg. Acquisition is also insignificant in Model 3 and Model 6. Our results imply that even in the post-SoP period, CEO compensation in the subsequent year to M&A event-year does not depend on the negative M&A deals within the overall M&A portfolio. This result casts doubt on the relevance of 'SoP governance' hypothesis.

Next, we address the second concern as mentioned above by examining the moderating effect of SoP regulation on the association between (i) number of yearly acquisitions and CEO pay change, and (ii) ratio of negative acquisitions and CEO pay change. Table 6A and Table 6B present these results, respectively. Based on Table 6A results, we find that post SoP dummy variables has a negative effect of CEO incentive pay change, which implies that CEOs experience a lower increment in incentive pay during the post SoP period. Furthermore, we find that the interaction term between 'Post SoP Dummy' and 'Yearly Total Acquisition' is negative and significant in Model 3. It indicates that in the post-SoP era, number of yearly acquisition is significantly associated with a smaller change in CEO pay. Table 6B presents a similar analysis by replacing 'Yearly Total Acquisition' with ratio of negative acquisition (Ratio of Neg. Acquisition). We find similar results as in Table 6A. It appears that in the post-SoP era, the ratio of negative acquisitions lowers the change in CEO incentive pay. These results support the prediction of 'SoP governance' hypothesis.

## Table 6: Association between Yearly Acquisitions and Subsequent Change in CEO Pay in the Pre- and Post-SOP Periods

### Panel A: Number of Yearly Acquisitions and Change in CEO Pay

This table reports the panel data OLS regression results examining the moderating effect of SoP regulation on the association between Yearly Acquisitions and subsequent change in CEO pay. The dependent variables of model (1), (2) and (3) are the change in a CEO's incentive pay from pre-announcement year to post-completion year, and the dependent variables of model (4), (5) and (6) are the change in a CEO's total pay from pre-announcement year to post-completion year. Yearly total acquisition is the number of acquisitions in a firm year. Post SOP dummy is an indicator variable, which takes a value of '1' for the post-2011 period observations and '0' for the pre-2011 period observations. Interaction term Post SOP Dummy × Yearly total Acquisition represents the interaction of post SOP dummy variable and yearly total acquisition variable. 'CEO age' describes CEO age at the time of the acquisition announcement. 'CEO tenure' is the length of time that the CEO has this position. 'Firm size' is measured by companies' market value. 'Market to book value' is market capitalization divided by net book value. 'LT Debt to Asset' is the long-term debt to total assets ratio. 'Board size' is the total number of directors on the board. 'Independent board member ratio' is the ratio of the number of board members who do not have a material or pecuniary relationship with company or related persons to the number of total board members. 'Sales Growth' is the difference in log sales from year t-1 to t. 'ROA' is the accounting return on assets. 'Std. Dev of Last 5Yr Stock Return' is the standard deviations of stock return, computed over the prior 5 years. The model is estimated using all S&P1500 firms over the entire sample period 2005 to 2016. Corresponding p-values from Huber-White robust standard errors are reported in brackets. * indicates significance at the 10% level, ** indicates significance at the 5% level, and *** indicates significance at the 1% level.

| | Delta Incentive pay $_{(t-1 \text{ to } t+1)}$ | | | Delta Total Pay $_{(t-1 \text{ to } t+1)}$ | | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| VARIABLES | Model | Model | Model | Model | Model | Model |
| Post SOP Dummy × Yearly Total Acquisition | | | -201.9072*** | | | -91.0715 |
| | | | (58.386) | | | (68.917) |
| Post SOP Dummy | | -1,025.7091** | -890.2107** | | -325.7628 | -264.4621 |
| | | (448.365) | (449.890) | | (526.328) | (528.347) |
| Yearly Total Acquisition | -5.1744 | -5.1744 | 61.8034* | -64.5554* | -64.5554* | -34.4769 |
| | (28.754) | (28.754) | (34.659) | (38.893) | (38.893) | (45.055) |
| CEO Age | -16.4582** | -16.4582** | -16.6401** | -21.4871** | -21.4871** | -21.6370** |
| | (6.798) | (6.798) | (6.795) | (10.201) | (10.201) | (10.199) |
| CEO Tenure | 1.6131 | 1.6131 | 1.9242 | 6.8628 | 6.8628 | 7.0640 |
| | (6.733) | (6.733) | (6.731) | (10.333) | (10.333) | (10.331) |
| Ln (Firm Size) | 129.6356*** | 129.6356*** | 127.9851*** | 90.2316* | 90.2316* | 90.0881* |
| | (33.943) | (33.943) | (33.932) | (53.598) | (53.598) | (53.582) |
| Market to Book Value | 1.0668 | 1.0668 | 1.0970 | -0.0541 | -0.0541 | -0.0449 |
| | (1.481) | (1.481) | (1.480) | (1.740) | (1.740) | (1.740) |
| LT Debt to Asset | 99.0910 | 99.0910 | 124.0050 | -60.8039 | -60.8039 | -45.4792 |
| | (229.553) | (229.553) | (229.572) | (353.021) | (353.021) | (353.115) |
| Board Size | -20.5843 | -20.5843 | -21.9769 | -19.5344 | -19.5344 | -20.1171 |
| | (22.047) | (22.047) | (22.042) | (32.649) | (32.649) | (32.645) |

| | | | | | | |
|---|---|---|---|---|---|---|
| Independent Board Member Ratio | -446.2856 | -446.2856 | -463.6056 | -580.9729 | -580.9729 | -585.2280 |
| | (300.647) | (300.647) | (300.565) | (455.511) | (455.511) | (455.409) |
| Sales Growth | 0.3221 | 0.3221 | -0.0430 | 0.6104 | 0.6104 | 0.3944 |
| | (7.042) | (7.042) | (7.040) | (8.541) | (8.541) | (8.541) |
| ROA | 189.3161 | 189.3161 | 164.4167 | 582.4821 | 582.4821 | 562.5394 |
| | (432.711) | (432.711) | (432.593) | (605.643) | (605.643) | (605.721) |
| Std. Dev of Last 5Yr Stock Return | 0.2068 | 0.2068 | 0.2079 | 0.3062 | 0.3062 | 0.3073 |
| | (1.068) | (1.068) | (1.068) | (1.428) | (1.428) | (1.427) |
| Constant | 1,251.4360** | 1,251.4360** | 1,239.6560** | 1,173.1749 | 1,173.1749 | 1,163.4388 |
| | (502.056) | (502.056) | (501.861) | (766.076) | (766.076) | (765.898) |
| Year Fixed Effect | Yes | Yes | Yes | Yes | Yes | Yes |
| Industry Fixed Effect | Yes | Yes | Yes | Yes | Yes | Yes |
| Observations | 13,335 | 13,335 | 13,335 | 13,335 | 13,335 | 13,335 |
| Number of unique firms | 1,971 | 1,971 | 1,971 | 1,971 | 1,971 | 1,971 |
| R2 within | 0.009 | 0.009 | 0.011 | 0.009 | 0.009 | 0.010 |
| R2 between | 0.026 | 0.026 | 0.027 | 0.026 | 0.026 | 0.026 |
| R2 overall | 0.012 | 0.012 | 0.013 | 0.012 | 0.012 | 0.012 |

## Table 6: Association between Ratio of Negative Acquisition and Subsequent Change in the CEO Pay in Pre- and Post-SOP Periods

### Panel B: Ratio of Negative Acquisitions and Change in CEO Pay

This table reports the panel data OLS regression results examining the moderating effect of SoP regulation on the association between ratio of negative acquisition and subsequent change in CEO pay. The dependent variables of model (1), (2) and (3) are the change in a CEO's incentive pay from pre-announcement year to post-completion year, and the dependent variables of model (4), (5) and (6) are the change in a CEO's total pay from pre-announcement year to post-completion year. Ratio of Neg. Acquisition is the number of negative acquisitions divided by total acquisition. Post SOP dummy is an indicator variable, which takes a value of '1' for the post-2011 period observations and '0' for the pre-2011 period observations Interaction term Post SOP Dummy × Ratio of Neg. Acquisition represents the interaction of post SOP dummy variable and Ratio of Neg. Acquisition variable. 'CEO age' describes CEO age at the time of the acquisition announcement. 'CEO tenure' is the length of time that the CEO has this position. 'Firm size' is measured by companies' market value. 'Market to book value' is market capitalization divided by net book value. 'LT Debt to Asset' is the long-term debt to total assets ratio. 'Board size' is the total number of directors on the board. 'Independent board member ratio' is the ratio of the number of board members who do not have a material or pecuniary relationship with company or related persons to the number of total board members. 'Sales Growth' is the difference in log sales from year t-1 to t. 'ROA' is the accounting return on assets. 'Std. Dev of Last 5Yr Stock Return' is the standard deviations of stock return, computed over the prior 5 years. The model is estimated using all S&P1500 firms over the entire sample period 2005 to 2016. Corresponding p-values from Huber-White robust standard errors are reported in brackets. * indicates significance at the 10% level, ** indicates significance at the 5% level, and *** indicates significance at the 1% level.

| | Delta Incentive pay (t-1 to t + 1) | | | Delta Total Pay (t-1 to t + 1) | | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| VARIABLES | Model | Model | Model | Model | Model | Model |
| Post SOP Dummy × Ratio of Neg. Acquisition | | | -603.9745* | | | -480.1709 |
| | | | (308.524) | | | (365.176) |
| Post SOP Dummy | | -1,043.9937** | -987.2118** | | -322.1115 | -277.4385 |
| | | (448.154) | (449.044) | | (526.180) | (527.265) |
| Ratio of Neg. Acquisition | -431.4465*** | -431.4465*** | -222.6843 | -413.0764** | -413.0764** | -246.7152 |
| | (148.403) | (148.403) | (182.732) | (177.986) | (177.986) | (218.368) |
| CEO Age | -16.6995** | -16.6995** | -16.7294** | -21.3312** | -21.3312** | -21.3730** |
| | (6.794) | (6.794) | (6.793) | (10.194) | (10.194) | (10.195) |
| CEO Tenure | 1.6276 | 1.6276 | 1.7890 | 6.4763 | 6.4763 | 6.5979 |
| | (6.727) | (6.727) | (6.727) | (10.324) | (10.324) | (10.326) |
| Ln (Firm Size) | 137.8761*** | 137.8761*** | 136.8476*** | 81.7141 | 81.7141 | 81.2423 |
| | (33.152) | (33.152) | (33.153) | (52.686) | (52.686) | (52.695) |
| Market to Book Value | 1.0654 | 1.0654 | 1.0586 | -0.0610 | -0.0610 | -0.0720 |
| | (1.480) | (1.480) | (1.480) | (1.740) | (1.740) | (1.740) |
| LT Debt to Asset | 113.0585 | 113.0585 | 120.2287 | -56.5341 | -56.5341 | -48.4649 |
| | (229.491) | (229.491) | (229.495) | (352.785) | (352.785) | (352.884) |
| Board Size | -19.4524 | -19.4524 | -19.8661 | -18.0840 | -18.0840 | -18.4858 |
| | (22.043) | (22.043) | (22.042) | (32.636) | (32.636) | (32.641) |
| Independent Board Member Ratio | -455.9205 | -455.9205 | -468.0391 | -584.6783 | -584.6783 | -592.4581 |
| | (300.568) | (300.568) | (300.600) | (455.249) | (455.249) | (455.338) |
| Sales Growth | 0.3523 | 0.3523 | 0.2641 | 0.4009 | 0.4009 | 0.3228 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | (7.038) | (7.038) | (7.038) | (8.538) | (8.538) | (8.538) |
| ROA | 167.4267 | 167.4267 | 156.7054 | 578.5628 | 578.5628 | 564.8866 |
| | (432.619) | (432.619) | (432.608) | (605.384) | (605.384) | (605.515) |
| Std. Dev of Last 5Yr Stock Return | 0.1806 | 0.1806 | 0.1851 | 0.2846 | 0.2846 | 0.2893 |
| | (1.068) | (1.068) | (1.068) | (1.427) | (1.427) | (1.427) |
| Constant | 1,230.9747** | 1,230.9747** | 1,227.6431** | 1,214.2856 | 1,214.2856 | 1,209.3750 |
| | (500.835) | (500.835) | (500.785) | (764.346) | (764.346) | (764.456) |
| Year Fixed Effect | Yes | Yes | Yes | Yes | Yes | Yes |
| Industry Fixed Effect | Yes | Yes | Yes | Yes | Yes | Yes |
| Observations | 13,335 | 13,335 | 13,335 | 13,335 | 13,335 | 13,335 |
| Number of unique firms | 1,971 | 1,971 | 1,971 | 1,971 | 1,971 | 1,971 |
| R2 within | 0.010 | 0.010 | 0.010 | 0.009 | 0.009 | 0.010 |
| R2 between | 0.027 | 0.027 | 0.030 | 0.029 | 0.029 | 0.029 |
| R2 overall | 0.013 | 0.013 | 0.013 | 0.012 | 0.012 | 0.012 |

### *4.4 SOP voting approval percentage and its influence on change in CEO compensation*

In this subsection we present and discuss the results that highlights the moderating effect of SoP voting approval percentage on the association between M&A activities and change in CEO pay from pre-announcement year to post-completion year. Table 7 exhibits the results of this moderating effect for (i) total yearly acquisitions and change in CEO pay, (ii) yearly negative acquisitions and change in CEO pay, and (iii) yearly positive acquisitions and change in CEO pay, in Panel A, B, and C, respectively. In all three panels, we find that the coefficients of the interaction effects (SoP Voting Approval% × Yearly total Acquisition in Panel A, SoP Voting Approval% × Yearly negative acquisition in Panel B, SoP Voting Approval% × Yearly positive acquisition in Panel C) are significantly positive. These results imply that if the CEOs with high SoP voting approval percentage undertake acquisition activities, they experience positive changes in their compensation package. This result holds irrespective of deal performance.

These results support the prediction of 'reliable CEO' hypothesis. According to the 'reliable CEO hypothesis, a very high voting percentage may legitimize CEOs action and embolden CEOs to carry out more risky ventures such as M&As. Since there is an established relation between risk and return, shareholders would like CEOs to take appropriate risks to increase firm value. Our results show that, a reliable CEO, who enjoys a high degree of shareholders' support, is not be penalized for taking more risky ventures that are intended to increase shareholders' wealth. In other words, according to 'reliable CEO' hypothesis, CEO who enjoys very high level of shareholders' confidence, will get an increase in compensation irrespective of M&A performance.[2]

[2] These results are, however, not consistent with 'SoP governance' hypothesis. According to 'SoP governance' hypothesis, good deals should be rewarded and bad deals should lead to a lower change in CEO compensation.

## Table 7: Association between Yearly Acquisitions and Subsequent Change in CEO Pay - Moderating Effect of SOP Voting Approval Percentage

### Panel A: Number of Yearly Acquisitions and Change in CEO Pay

This table reports panel data OLS regression results examining the moderating effect of SoP voting approval percentage on the association between number of yearly acquisitions and change in CEO pay (from t-1 to t+1 year, relative to M&A event). The dependent variables of model (1) and (2) are the change in a CEO's incentive pay from pre-announcement year to post-completion year, and the dependent variables of model (3) and (4) are the change in a CEO's total pay from pre-announcement year to post-completion year. Yearly total acquisition is the number of acquisitions that CEOs make. SoP Voting Approval% is defined as the number of votes cast for the SOP proposal scaled by the total number of votes cast. Interaction term SoP Voting Approval% × Yearly total Acquisition represents the interaction of SoP Voting Approval% variable and yearly total acquisition variable. 'CEO age' describes CEO age at the time of the acquisition announcement. 'CEO tenure' is the length of time that the CEO has this position. 'Firm size' is measured by companies' market value. 'Market to book value' is market capitalization divided by net book value. 'LT Debt to Asset' is the long-term debt to total assets ratio. 'Board size' is the total number of directors on the board. 'Independent board member ratio' is the ratio of the number of board members who do not have a material or pecuniary relationship with company or related persons to the number of total board members. 'Sales Growth' is the difference in log sales from year t-1 to t. 'ROA' is the accounting return on assets. 'Std. Dev of Last 5Yr Stock Return' is the standard deviations of stock return, computed over the prior 5 years. The model is estimated using all S&P1500 firms over the sample period from 2012 to 2016. Corresponding p-values from Huber-White robust standard errors are reported in brackets. * indicates significance at the 10% level, ** indicates significance at the 5% level, and *** indicates significance at the 1% level.

| | Delta Incentive pay (t-1 to t + 1) | | Delta Total Pay (t-1 to t + 1) | |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| VARIABLES | Model | Model | Model | Model |
| SOP Voting Approval% × Yearly Total Acquisition | | 25.5725*** | | 26.2069*** |
| | | (4.105) | | (4.556) |
| Yearly Total Acquisition | -98.0552** | -2,440.8948*** | -76.4759 | -2,477.6282*** |
| | (48.754) | (379.221) | (53.386) | (420.785) |
| SOP Voting Approval% | 5.5416 | -18.2964** | 4.6314 | -19.9449** |
| | (7.394) | (8.272) | (8.162) | (9.179) |
| CEO Age | -22.3723* | -21.6498* | -18.2669 | -17.6231 |
| | (12.670) | (12.513) | (13.663) | (13.600) |
| CEO Tenure | -9.2090 | -8.1141 | -4.9747 | -3.7864 |
| | (12.162) | (12.011) | (13.105) | (13.046) |
| Ln (Firm Size) | 102.1128 | 124.7712** | 128.9391* | 153.4214** |
| | (63.431) | (62.712) | (68.111) | (67.927) |
| Market to Book Value | 1.7762 | 2.3951 | 0.0286 | 0.6565 |
| | (1.715) | (1.709) | (1.929) | (1.923) |
| LT Debt to Asset | 634.1060 | 676.5496* | 383.9747 | 428.7076 |
| | (414.439) | (409.024) | (444.734) | (442.733) |
| Board Size | -49.1740 | -49.6327 | -55.8046 | -57.0859 |
| | (42.557) | (42.040) | (45.949) | (45.735) |
| Independent Board Member Ratio | -280.8371 | -322.1433 | -350.2144 | -400.0623 |
| | (567.965) | (560.809) | (611.438) | (608.655) |
| Sales Growth | -106.4099 | -90.3023 | -34.6790 | -20.9431 |
| | (113.738) | (113.034) | (127.277) | (126.708) |
| ROA | -1,553.3986 | -1,457.4434 | -958.4356 | -878.1089 |
| | (1,019.282) | (1,007.273) | (1,102.399) | (1,097.360) |
| Std. Dev of Last 5Yr Stock Return | -0.3180 | -0.4142 | 0.5764 | 0.4745 |

| | | | | |
|---|---|---|---|---|
| | (1.987) | (1.960) | (2.127) | (2.117) |
| Constant | 1,139.1194 | 3,158.4353*** | 1,072.8714 | 3,164.6826** |
| | (1,145.650) | (1,178.762) | (1,244.305) | (1,290.797) |
| Year Fixed Effect | Yes | Yes | Yes | Yes |
| Industry Fixed Effect | Yes | Yes | Yes | Yes |
| Observations | 3,452 | 3,452 | 3,452 | 3,452 |
| Number of unique firms | 1,307 | 1,307 | 1,307 | 1,307 |
| R2 within | 0.010 | 0.007 | 0.003 | 0.003 |
| R2 between | 0.015 | 0.036 | 0.021 | 0.041 |
| R2 overall | 0.013 | 0.025 | 0.010 | 0.020 |

## Table 7: Association between Yearly Negative Acquisitions and Subsequent Change in CEO Pay - Moderating Effect of SOP Voting Approval Percentage

### Panel B: Number of Yearly Negative Acquisitions and Change in CEO Pay

This table reports panel data OLS regression results examining the moderating effect of SoP voting approval percentage on the association between number of yearly negative acquisitions and change in CEO pay (from t-1 to t+1 year, relative to M&A event). The dependent variables of model (1) and (2) are the change in a CEO's incentive pay from pre-announcement year to post-completion year, and the dependent variables of model (3) and (4) are the change in a CEO's total pay from pre-announcement year to post-completion year. Yearly negative acquisition is the number of acquisitions with negative CAR (-2 to +2). SoP Voting Approval% is defined as the number of votes cast for the SoP proposal scaled by the total number of votes cast. Interaction term SoP Voting Approval% × Yearly negative acquisition represents the interaction of SOP Voting Approval% variable and yearly negative acquisition variable. 'CEO age' describes CEO age at the time of the acquisition announcement. 'CEO tenure' is the length of time that the CEO has this position. 'Firm size' is measured by companies' market value. 'Market to book value' is market capitalization divided by net book value. 'LT Debt to Asset' is the long-term debt to total assets ratio. 'Board size' is the total number of directors on the board. 'Independent board member ratio' is the ratio of the number of board members who do not have a material or pecuniary relationship with company or related persons to the number of total board members. 'Sales Growth' is the difference in log sales from year t-1 to t. 'ROA' is the accounting return on assets. 'Std. Dev of Last 5Yr Stock Return' is the standard deviations of stock return, computed over the prior 5 years. The model is estimated using all S&P1500 firms over the entire sample period 2012 to 2016. Corresponding p-values from Huber-White robust standard errors are reported in brackets. * indicates significance at the 10% level, ** indicates significance at the 5% level, and *** indicates significance at the 1% level.

| | Delta Incentive pay (t-1 to t + 1) | | Delta Total Pay (t-1 to t + 1) | |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| VARIABLES | Model | Model | Model | Model |
| SOP Voting Approval% × Yearly Negative Acquisition | | 30.6919*** | | 30.5669** |
| | | (11.299) | | (12.652) |
| Yearly Negative Acquisition | -243.0231 | -2,968.0823*** | -165.6122 | -2,880.5614** |
| | (157.511) | (1,015.355) | (174.854) | (1,137.239) |
| SOP Voting Approval% | 5.1023 | -2.4978 | 4.3483 | -3.2622 |
| | (7.407) | (7.896) | (8.177) | (8.757) |
| CEO Age | -21.9702* | -21.5254* | -17.9409 | -17.6059 |
| | (12.667) | (12.582) | (13.662) | (13.653) |
| CEO Tenure | -10.4393 | -10.4363 | -5.9214 | -5.8782 |
| | (12.150) | (12.065) | (13.094) | (13.085) |
| Ln (Firm Size) | 84.7890 | 85.1391 | 114.6913* | 115.8606* |
| | (62.391) | (61.920) | (66.965) | (66.919) |
| Market to Book Value | 1.8539 | 2.3851 | 0.0865 | 0.6253 |
| | (1.716) | (1.726) | (1.929) | (1.941) |
| LT Debt to Asset | 646.9969 | 660.2652 | 389.6804 | 404.4584 |
| | (415.180) | (412.094) | (445.672) | (445.400) |
| Board Size | -46.9453 | -48.2294 | -54.0762 | -56.0483 |
| | (42.536) | (42.259) | (45.933) | (45.908) |
| Independent Board Member Ratio | -316.9304 | -280.2848 | -370.3840 | -339.1091 |
| | (569.948) | (566.063) | (613.869) | (613.572) |
| Sales Growth | -108.2771 | -98.1226 | -36.4923 | -28.8020 |
| | (113.753) | (113.596) | (127.288) | (127.238) |
| ROA | -1,531.7057 | -1,461.0798 | -939.6486 | -883.8416 |

| | | | | |
|---|---|---|---|---|
| | (1,019.180) | (1,012.893) | (1,102.470) | (1,101.934) |
| Std. Dev of Last 5Yr Stock Return | -0.3285 | -0.3656 | 0.5712 | 0.5345 |
| | (1.987) | (1.971) | (2.127) | (2.126) |
| Constant | 1,259.1549 | 1,915.2730 | 1,157.6417 | 1,826.6301 |
| | (1,147.483) | (1,166.802) | (1,246.574) | (1,276.099) |
| Year Fixed Effect | Yes | Yes | Yes | Yes |
| Industry Fixed Effect | Yes | Yes | Yes | Yes |
| Observations | 3,452 | 3,452 | 3,452 | 3,452 |
| Number of unique firms | 1,307 | 1,307 | 1,307 | 1,307 |
| R2 within | 0.009 | 0.005 | 0.003 | 0.001 |
| R2 between | 0.015 | 0.025 | 0.021 | 0.030 |
| R2 overall | 0.012 | 0.015 | 0.010 | 0.012 |

## Table 7: Association between Yearly Positive Acquisitions and Subsequent Change in CEO Pay - Moderating Effect of SOP Voting Approval Percentage

### Panel C: Number of Yearly Positive Acquisitions and Change in CEO Pay

This table reports panel data OLS regression results examining the moderating effect of SoP voting approval percentage on the association between number of yearly negative acquisitions and change in CEO pay (from t-1 to t+1 year, relative to M&A event). The dependent variables of model (1) and (2) are the change in a CEO's incentive pay from pre-announcement year to post-completion year, and the dependent variables of model (3) and (4) are the change in a CEO's total pay from pre-announcement year to post-completion year. Yearly positive acquisition is the number of acquisitions with positive CAR (-2 to +2). SoP Voting Approval% is defined as the number of votes cast for the SoP proposal scaled by the total number of votes cast. Interaction term SoP Voting Approval% × Yearly positive acquisition represents the interaction of SoP Voting Approval% variable and yearly positive acquisition variable. 'CEO age' describes CEO age at the time of the acquisition announcement. 'CEO tenure' is the length of time that the CEO has this position. 'Firm size' is measured by companies' market value. 'Market to book value' is market capitalization divided by net book value. 'LT Debt to Asset' is the long-term debt to total assets ratio. 'Board size' is the total number of directors on the board. 'Independent board member ratio' is the ratio of the number of board members who do not have a material or pecuniary relationship with company or related persons to the number of total board members. 'Sales Growth' is the difference in log sales from year t-1 to t. 'ROA' is the accounting return on assets. 'Std. Dev of Last 5Yr Stock Return' is the standard deviations of stock return, computed over the prior 5 years. The model is estimated using all S&P1500 firms over the entire sample period 2012 to 2016. Corresponding p-values from Huber-White robust standard errors are reported in brackets. * indicates significance at the 10% level, ** indicates significance at the 5% level, and *** indicates significance at the 1% level.

| | Delta Incentive pay (t-1 to t + 1) | | Delta Total Pay (t-1 to t + 1) | |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| VARIABLES | Model | Model | Model | Model |
| SOP Voting Approval% × Yearly Positive Acquisition | | 34.2135** | | 29.4799* |
| | | (14.813) | | (16.549) |
| Yearly Total Positive Acquisition | 164.5522 | -3,006.1723** | 217.5690 | -2,514.1323 |
| | (137.346) | (1,379.471) | (152.793) | (1,541.042) |
| SOP Voting Approval% | 5.4506 | -1.2812 | 4.3595 | -1.4783 |
| | (7.400) | (7.944) | (8.167) | (8.798) |
| CEO Age | -21.8163* | -21.3336* | -17.8099 | -17.4071 |
| | (12.667) | (12.637) | (13.660) | (13.657) |
| CEO Tenure | -10.3916 | -10.5230 | -5.9529 | -6.0408 |
| | (12.149) | (12.119) | (13.092) | (13.088) |
| Ln (Firm Size) | 69.1064 | 69.0827 | 98.9306 | 99.2077 |
| | (62.513) | (62.344) | (67.091) | (67.070) |
| Market to Book Value | 1.8170 | 2.0480 | 0.0738 | 0.2702 |
| | (1.716) | (1.718) | (1.929) | (1.931) |
| LT Debt to Asset | 571.0738 | 596.0667 | 319.9658 | 341.4421 |
| | (414.835) | (413.861) | (445.201) | (445.223) |
| Board Size | -45.0125 | -45.4746 | -51.8217 | -52.3868 |
| | (42.548) | (42.446) | (45.939) | (45.926) |
| Independent Board Member Ratio | -195.5625 | -182.3275 | -262.1912 | -251.9498 |
| | (568.513) | (567.080) | (612.041) | (611.874) |
| Sales Growth | -111.1055 | -103.7336 | -39.4714 | -33.5340 |
| | (113.765) | (113.701) | (127.265) | (127.268) |

| | | | | |
|---|---|---|---|---|
| ROA | -1,459.8584 | -1,420.3780 | -864.9330 | -834.9891 |
| | (1,019.476) | (1,017.204) | (1,102.590) | (1,102.369) |
| Std. Dev of Last 5Yr Stock Return | -0.2967 | -0.3416 | 0.5921 | 0.5526 |
| | (1.986) | (1.981) | (2.127) | (2.126) |
| Constant | 1,162.4613 | 1,747.5611 | 1,095.2009 | 1,603.1020 |
| | (1,145.668) | (1,171.183) | (1,244.266) | (1,276.129) |
| Year Fixed Effect | Yes | Yes | Yes | Yes |
| Industry Fixed Effect | Yes | Yes | Yes | Yes |
| Observations | 3,452 | 3,452 | 3,452 | 3,452 |
| Number of unique firms | 1,307 | 1,307 | 1,307 | 1,307 |
| R2 within | 0.009 | 0.008 | 0.003 | 0.003 |
| R2 between | 0.016 | 0.020 | 0.022 | 0.025 |
| R2 overall | 0.012 | 0.014 | 0.010 | 0.011 |

As a robustness check we further examine the moderating effect of SoP voting approval percentage on the association between ratio of negative acquisition and change in CEO pay from pre-announcement year to post-completion year. Ratio of negative acquisition take into account both negative and positive acquisitions concurrently. The results are presented in Table 8.

The dependent variables of model (1) and (2) are the change in a CEO's incentive pay from pre-announcement year to post completion year, and the dependent variables of model (3) and (4) are the change in a CEO's total pay from pre-announcement year to post completion year. Ratio of Neg. Acquisition is the number of negative acquisitions divided by total acquisition. We include an interaction term between SoP voting approval percentage and the ratio of negative acquisition in Model 2 and Model 4 to examine the moderating effect of SoP voting approval percentage. Similar to Table 7, here we also find a significant and positive coefficient for the interaction term. These results imply that if the CEOs with high SoP voting approval percentage undertake acquisition activities, they experience a positive change in their compensation package even with an increase rate of negative M&A deals. It appears that reliable CEOs are compensated for their efforts in undertaking M&A deals, and are insulated from the consequences of bad deals.

## Table 8: Association between Ratio of Negative Acquisition and Subsequent Change in CEO Pay - Moderating Effect of SOP Voting Approval Percentage

This table reports panel data OLS regression results examining the moderating effect of SoP voting approval percentage on the association between ratio of negative acquisitions and change in CEO pay (from t-1 to t+1 year, relative to M&A event). The dependent variables of model (1) and (2) are the change in a CEO's incentive pay from pre-announcement year to post-completion year, and the dependent variables of model (3) and (4) are the change in a CEO's total pay from pre-announcement year to post-completion year. Ratio of Neg. Acquisition is the number of negative acquisitions divided by total acquisition. S0P Voting Approval% is defined as the number of votes cast for the SOP proposal scaled by the total number of votes cast Interaction term SoP Voting Approval% × Ratio of Neg. Acquisition represents the interaction of SoP Voting Approval% variable and ratio of negative acquisition variable. 'CEO age' describes CEO age at the time of the acquisition announcement. 'CEO tenure' is the length of time that the CEO has this position. 'Firm size' is measured by companies' market value. 'Market to book value' is market capitalization divided by net book value. 'LT Debt to Asset' is the long-term debt to total assets ratio. 'Board size' is the total number of directors on the board. 'Independent board member ratio' is the ratio of the number of board members who do not have a material or pecuniary relationship with company or related persons to the number of total board members. 'Sales Growth' is the difference in log sales from year t-1 to t. 'ROA' is the accounting return on assets. 'Std. Dev of Last 5Yr Stock Return' is the standard deviations of stock return, computed over the prior 5 years. The model is estimated using all S&P1500 firms over the entire sample period 2012 to 2016. Corresponding p-values from Huber-White robust standard errors are reported in brackets. * indicates significance at the 10% level, ** indicates significance at the 5% level, and *** indicates significance at the 1% level.

| | Delta Incentive pay (t-1 to t + 1) | | Delta Total Pay (t-1 to t + 1) | |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| VARIABLES | Model | Model | Model | Model |
| SOP Voting Approval% × Ratio of Negative Acquisition | | 34.2135** | | 29.4799* |
| | | (14.813) | | (16.549) |
| Ratio of Negative Acquisition | 164.5522 | -3,006.1723** | 217.5690 | -2,514.1323 |
| | (137.346) | (1,379.471) | (152.793) | (1,541.042) |
| SOP Voting Approval% | 5.4506 | -1.2812 | 4.3595 | -1.4783 |
| | (7.400) | (7.944) | (8.167) | (8.798) |
| CEO Age | -21.8163* | -21.3336* | -17.8099 | -17.4071 |
| | (12.667) | (12.637) | (13.660) | (13.657) |
| CEO Tenure | -10.3916 | -10.5230 | -5.9529 | -6.0408 |
| | (12.149) | (12.119) | (13.092) | (13.088) |
| Ln (Firm Size) | 69.1064 | 69.0827 | 98.9306 | 99.2077 |
| | (62.513) | (62.344) | (67.091) | (67.070) |
| Market to Book Value | 1.8170 | 2.0480 | 0.0738 | 0.2702 |
| | (1.716) | (1.718) | (1.929) | (1.931) |
| LT Debt to Asset | 571.0738 | 596.0667 | 319.9658 | 341.4421 |
| | (414.835) | (413.861) | (445.201) | (445.223) |
| Board Size | -45.0125 | -45.4746 | -51.8217 | -52.3868 |
| | (42.548) | (42.446) | (45.939) | (45.926) |
| Independent Board Member Ratio | -195.5625 | -182.3275 | -262.1912 | -251.9498 |
| | (568.513) | (567.080) | (612.041) | (611.874) |
| Sales Growth | -111.1055 | -103.7336 | -39.4714 | -33.5340 |
| | (113.765) | (113.701) | (127.265) | (127.268) |

| | | | | |
|---|---|---|---|---|
| ROA | -1,459.8584 | -1,420.3780 | -864.9330 | -834.9891 |
| | (1,019.476) | (1,017.204) | (1,102.590) | (1,102.369) |
| Std. Dev of Last 5Yr Stock Return | -0.2967 | -0.3416 | 0.5921 | 0.5526 |
| | (1.986) | (1.981) | (2.127) | (2.126) |
| Constant | 1,162.4613 | 1,747.5611 | 1,095.2009 | 1,603.1020 |
| | (1,145.668) | (1,171.183) | (1,244.266) | (1,276.129) |
| Year Fixed Effect | Yes | Yes | Yes | Yes |
| Industry Fixed Effect | Yes | Yes | Yes | Yes |
| Observations | 3,452 | 3,452 | 3,452 | 3,452 |
| Number of unique firms | 1,307 | 1,307 | 1,307 | 1,307 |
| R2 within | 0.009 | 0.008 | 0.003 | 0.003 |
| R2 between | 0.016 | 0.020 | 0.022 | 0.025 |
| R2 overall | 0.012 | 0.014 | 0.010 | 0.011 |

# Chapter 5. Discussion and conclusion

Previous studies report the prevalence of agency problem when CEOs engage in merger and acquisition (M&A) activities, which maximize CEO wealth but destroy shareholder value. The Dodd-Frank Act mandated firms to hold an advisory vote on CEO compensation in 2011 (known as 'Say on Pay' or SoP law), giving shareholders an approach to convey their satisfaction or dissatisfaction on CEO behaviors. Thus, Say on Pay (SoP) is intended to mitigate the agency problem - by integrating shareholders' view on top management compensation. Some studies propose that SoP is able to be a corporate government mechanism, making CEO compensation more reasonable following M&A activities. We term this as 'SoP governance' hypothesis. While the objective SoP law is to create a more rational environment to uphold shareholders' interest in the context of CEO compensation package, it does not fully account for the individual firm action. In the post-SoP period, shareholders of each firm may view CEO compensation package differently, leading to different SoP voting outcome. In fact, Fisch et al. (2017) posit that through SoP votes, shareholders essentially express their options on firm performance spearheaded by a CEO. Accordingly, we further focus on SoP voting results of each firm and examine how SoP voting approval rate moderates the relation between M&A activities and CEO compensation. We posit that this moderating effect would be governed by 'reliable CEO' hypothesis. The CEOs, who enjoy more robust support from their shareholders, are likely to undertake more risky ventures such as M&As and shareholders are likely to support an increase in CEO compensation in recognition of CEOs' efforts in these risking ventures.

Using a sample of S&P 1500 firms, we have several conclusions. First, based on the analysis with our complete sample, we find that both total acquisition and positive acquisition are positively related to CEO compensation in the year after acquisition, while negative

acquisition is insignificantly related to CEO compensation. These finding corroborate the results reported in earlier studies.

Second, we examine the above findings in light of SoP law instruction in the year of 2011. We find that SoP regulation is effective in restraining the positive relationship between total acquisition and CEO compensation, and it is able to curb both positive and negative ones. We also investigate the moderating effect of SoP regulation on the relation between M&A activities and performance on the change in CEO compensation (between t-1 and t+1 years with reference to the M&A year). Our results show that SOP regulation can curb the positive relationship between total acquisition and change of CEO compensation. These results support the views of 'SoP governance' hypothesis.

Subsequently, we focus on the impact of firm-specific SoP voting approval rate on the relation between M&A activities and change in CEO compensation. In line with 'reliable CEO' hypothesis, we find that irrespective of the performance of M&A deals, a high level of shareholder confidence (proxies by SoP voting approval rate) would have a positive influence in the growth rate of CEO compensation. It appears that 'reliable CEOs' are compensated based on their initiative and not on the outcome of their initiatives.

This study contributes to the literature on SoP regulation and executive pay. Our results complement and extend the research by Harford and Li (2007), who find that CEO compensation and overall wealth are only sensitive to positive acquisitions but not sensitive to negative acquisitions, while corporate governance restrains the sensitivity of CEO compensation to negative acquisition. Our investigation is consistent with Harford and Li (2007), suggesting that total acquisition is a significant determinant to increase CEO compensation. We extend this finding by examining the role of SoP regulation in mitigating the agency problem in the context

of M&A activities and related CEO compensation. Furthermore, to the best of our knowledge, this is the first study to document a relation between SoP voting approval rate and the change of CEO compensation. This study uses U.S. publicly listed companies (S&P1500 firms). Future research can examine a larger and cross-country sample. For instance, some small size companies or companies in other countries can be investigated to enhance the robustness of these results. Further, there is a possibility that SoP voting results are influenced by the anticipated CEO compensation change following an M&A deal – which may induce a reverse causality problem. This potential endogeneity bias can be addressed in a future study.

# Appendix 1

| variables | definition |
|---|---|
| Incentive pay $_{(t + 1)}$ | CEO's incentive pay for year t+1 |
| Delta Incentive pay $_{(t-1 \text{ to } t + 1)}$ | The change in a CEO's incentive pay from pre-announcement year to post-completion year |
| Delta Total Pay $_{(t-1 \text{ to } t + 1)}$ | The change in a CEO's total pay from pre-announcement year to post-completion year. |
| Total Pay $_{(t + 1)}$ | CEO' total pay for year t+1 |
| Yearly Total Acquisition | The number of acquisitions undertaken in a firm-year |
| Yearly Total Positive Acquisition | The number of acquisitions with positive CAR (-2 to +2) |
| Yearly Total Negative Acquisition | The number of acquisitions with negative CAR (-2 to + 2) |
| Ratio of Neg. Acquisition | The number of negative acquisitions divided by total acquisitions |
| Post SOP Dummy | An indicator variable, which takes a value of '1' for the post-2011 period observations and '0' for the pre-2011 period observations. |
| Post SOP Dummy × Yearly Total Acquisition | The interaction of post SOP dummy variable and yearly total acquisition variable |
| Post SOP Dummy × Yearly Positive Acquisition | The interaction of post SOP dummy variable and yearly positive acquisition variable |
| Post SOP Dummy × Yearly Negative Acquisition | The interaction of post SOP dummy variable and yearly negative acquisition variable |
| Post SOP Dummy × Ratio of Neg. Acquisition | The interaction of post SOP dummy variable and ratio of negative acquisition variable |
| SOP Voting Approval% | The number of votes cast for the SOP proposal scaled by the total number of votes cast |
| SOP Voting Approval% × Yearly Total Acquisition | The interaction of SOP Voting Approval% variable and yearly total acquisition variable |
| SOP Voting Approval% × Yearly Negative Acquisition | The interaction of SOP Voting Approval% variable and yearly negative acquisition variable |
| SOP Voting Approval% × Yearly Positive Acquisition | The interaction of SOP Voting Approval% variable and yearly positive acquisition variable |
| SOP Voting Approval% × Ratio of Negative Acquisition | The interaction of SOP Voting Approval% variable and ratio of negative acquisition variable |
| CEO Age | CEO age at the time of the acquisition announcement |
| CEO Tenure | The length of time that the CEO has this position |
| Ln (Firm Size) | Firm's market value |
| Market to Book Value | Market capitalization divided by net book value |
| LT Debt to Asset | The long-term debt to total assets ratio |
| Board Size | The total number of directors on the board |
| Independent Board Member Ratio | The ratio of the number of board members who do not have a material or pecuniary relationship with company or related persons to the number of total board members |
| Sales Growth | The difference in log sales from year t-1 to t |
| ROA | The accounting return on assets |
| Std. Dev of Last 5Yr Stock Return | The standard deviations of stock return computed over the prior 5 years. |

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