

# SHAREHOLDERS HAVE A SAY ON EXECUTIVE COMPENSATION: EVIDENCE FROM SAY-ON-PAY IN THE UNITED STATES

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We examine the 2011 and 2012 shareholder votes after the 2011 SEC regulation requiring a non-binding general shareholder approval of executive compensation—“say-on-pay” (SOP) in accordance with the Dodd-Frank Act of 2010. This study contributes to the literature in three ways. **First, our results show that SOP approval firms have:** higher ROA, higher returns, lower institutional ownership, lower CEO compensation, lower volatility, and better accounting quality. Second, different from shareholder activism 14a-8 studies and SOP in the United Kingdom, US-SOP votes are sensitive to high total and abnormal CEO compensation, return volatility, low accounting quality and poor financial performance. Finally, Boards react to non-binding SOP rejection by reducing the level of CEO compensation thus suggesting that SOP general shareholder voting rights could be an effective mechanism of corporate governance.

**Keywords:** Say on Pay; Corporate Governance; Executive Compensation; Dodd-Frank; shareholder activism; voting rights; abnormal accruals.

**JEL Classification Codes:** G38, K22, M41, M52

# **SHAREHOLDERS HAVE A SAY ON EXECUTIVE COMPENSATION: EVIDENCE FROM SAY-ON-PAY IN THE UNITED STATES**

## **ABSTRACT**

We examine the 2011 and 2012 shareholder votes after the 2011 SEC regulation requiring a non-binding general shareholder approval of executive compensation—“say-on-pay” (SOP). Our results show that SOP approval firms have: higher ROA, higher returns, lower institutional ownership, lower CEO compensation, lower volatility, and better accounting quality. Second, different from shareholder activism 14a-8 studies and SOP in the United Kingdom, US-SOP votes are sensitive to total and abnormal CEO compensation, return volatility, accounting quality and financial performance. Third, Boards react to non-binding SOP rejection votes by reducing the level of CEO compensation. Finally changes in SOP votes are determined by changes in compensation and returns.

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# **Shareholders have a say on executive compensation: Evidence from say-on-pay in the United States**

## **1. Introduction**

In July of 2010, Section 951 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank) was signed into law requiring all public companies to give their shareholders the opportunity to cast a “non-binding” advisory vote to approve or disapprove the compensation of the 5 highest paid executives at least once every 3-years. The Securities and Exchange Commission (SEC) implemented “say-on-pay” (SOP) on January of 2011, and since then, shareholders in the United States (US) have “had their say” on executive compensation packages for two years: 2011 and 2012. To date, the SOP shareholders’ votes overwhelmingly approved the executive compensation proposals by a majority of vote (greater than 50 percent) giving broad support to management pay packages (Cotter et al., 2012). Only 1.2 percent of the Russell 3000 failed to obtain more than 50 percent approval in 2011 and 2.5 percent failed in 2012. However, even though most firms obtained significant shareholder support there was still some level of shareholder disapproval of executive pay and in 2011 and 2012 and 10.3 and 11.07 percent of firms respectively received more than 25 percent SOP “rejection” of executive compensation packages.

This paper investigates the results of the first two years -2011 and 2012- of shareholders’ votes related to the 2011 SEC mandated non-binding SOP. Specifically, our study investigates if shareholders were able to identify - and “voted down”- excessive or abnormal compensation? What factors determined SOP votes in 2011 and 2012? Does a mandated but non-binding shareholder vote convey relevant information to the Board? Do Boards react to shareholders’

non-binding SOP votes? What is the role of institutional investors in SOP outcomes? Are shareholder-voting patterns different in 2011 and 2012? Are the determinants of previous shareholder proposal studies under 14a-8 similar to the general shareholder SOP votes? How are the determinants and effects of US SOP different than in the United Kingdom (UK) SOP? What determines changes in SOP vote?

There is abundant literature that attempts to identify shareholder “sentiment” on executive compensation by examining shareholder proposals or “requests” to Boards under the SEC’s Shareholder Proposal Rule 14a-8. (See Johnson and Shackell, 1997; Thomas and Martin, 1999; Cai and Walkling, 2011; Ertimur, Ferri and Muslu, 2011; Ertimur, Ferri and Muslu, 2012). This provision allows shareholders to submit proposals or requests for inclusion in the proxy material and for subsequent presentation at the annual general meeting. In the event that such issues are properly presented at the annual general meeting, they will be voted on. Studies of 14a-8 proposals during different time periods found conflicting results. Johnson and Shackell (1997) and Thomas and Martin (1999) found small support for shareholder proposals requesting shareholder vote on executive compensation and no effect of these on executive pay. On the other hand, Ertimur et al, (2012), examined 274 proposals during a 10 year period between 1997 and 2007 that requested a general shareholder vote on executive compensation<sup>1</sup> and found that these were effective in targeting firms with “excessive” CEO pay.

Regulation that mandated non-binding SOP in other countries has also provided some evidence of the determinants and effects of SOP. Ferri and Maber (2012) studied the market reaction to the announcement of the legislation mandating non-binding SOP in the UK in 2002

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<sup>1</sup> Most of these proposals failed and shareholders never voted on executive compensation. On average these 14a-8 proposals received 39 percent approval.

and found some evidence to suggest that firms changed the structure of the compensation contracts increasing pay and performance sensitivity in firms with high SOP dissent vote.

A very recent study investigated the influence of proxy advisors in SOP voting outcomes and concluded that among the firms that had a “reject” recommendation from proxy advisors SOP rejection votes were higher for firms with: lower abnormal returns and higher total CEO pay (See Ertimur et al., 2013). Ertimur et al (2013) also finds that among the 269 firms (from the Russell 3000) with a “reject” recommendation from ISS in 2011, 55 percent of them report a compensation change in the 2012 proxy statement.

We recognize the effect that proxy advisors might have in voting outcomes. However we find that it is hard to disentangle the effect of proxy advisor recommendations on SOP votes. For example, among the S&P 1500, Institutional Shareholder Services (ISS) and Glass Lewis (GL) recommendations were quite different: ISS issued “against” recommendations for 11.3 percent of firms and GL for 21.7 percent. Also, among firms with an “against” recommendation from at least one proxy advisor, ISS and GL agree only 17.9 percent of the time (See Ertimur et al., 2013).

Our study is predicated on the assumption that SOP voting patterns in the US will be different than what Ferri and Maber (2011) document in the UK setting during 2003 and 2004. First, even though in both UK and US, SOP is non-binding, shareholder rights are more restrictive in the US as compared to the UK, which directly affects the balance of power between shareholders and the Board; and could in turn alter the effect of SOP<sup>2</sup> (See Hill, 2010). Second, the time period in which Ferri and Maber (2011) examine SOP votes in UK (2003-2004), is significantly different from the period of our study in the US (2011-2012), when there is a

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<sup>2</sup> US corporate law is different than in other common law jurisdictions. UK shareholders have a greater ability to alter the articles of association and company charter and more power of removing and electing directors.

general public perception of unjustified excessive executive compensation. Finally, as a result of the financial scandals and in particular the option-backdating scandals of 2006-2007 that preceded SOP in the US, there is an increase in shareholder activism and engagement that could have an effect on general shareholders' voting patterns (See Bebchuk, Cramers and Peyer, 2011).

Previous shareholder proposal studies that examine various “compensation related” requests (Ertimur et al. 2011; Ertimur et al, 2012) under 14a-8 offer valuable theoretical arguments of factors which might explain shareholders' views about executive compensation. However, our paper examines a fundamentally different issue. First, previous 14a-8 studies, investigate a variety of shareholder proposals that include request for: changes in pay-design, changes in compensation committee structure, for caps in CEO pay, demands to link executive pay to social criteria, demands for shareholder vote on compensation, etc. Unlike these 14a-8 papers, our study examines a specific issue: Why shareholders approve or reject the compensation of the 5 top paid executives and how the Board reacts to this vote. Furthermore, shareholder proposals cannot proxy for general shareholder voting outcomes. In particular, there is evidence that a disproportionate number of proposals under 14a-8 are submitted by a few individuals. Gillan and Starks, 2000 find that during 1987-1994 individual investors or “activists” account for more than 60 percent of all corporate governance proposals.<sup>3</sup> (See also Marens, 2012; Gillan and Starks, 2007). Second, shareholder proposals are voluntary and SOP is mandatory thus our study examines a different issue in a different setting.

In order to capture US-SOP voting patterns, we investigate all SOP votes in the Russell 3000 for two years and therefore include firms and industries previously unexamined by Ertimur et al.

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<sup>3</sup> Two shareholders “activists”: the Gilbert brothers and Evelyn Davis accounted for more than 37 percent of all proposals during this period (22 percent and 15 percent respectively).

(2013)<sup>4</sup>. In particular, we expand their sample, and include firms which had no proxy advisor reports by ISS and GL, firms that voted in October, November and December of 2011, as well as all firms that voted in 2012 and not in 2011. We test Cai and Walkling's (2011) predictions and ask whether SOP shareholder votes benefited firms with "questionable compensation practices" and "unfairly hurt good firms". In particular, we look at firms that failed the SOP vote in 2011 (less than < 50 percent approval), but that subsequently "passed" in 2012, in order to examine if Boards react to the failing vote by reducing the level of compensation, and shareholders responded to this reduction by approving SOP in 2012. We also look at the effect of 2011 SOP votes on the subsequent growth of executive compensation in 2012 to test if "non-binding" shareholder votes matter. Hence, this paper examines if shareholders were able to vote rationally by considering: firm performance, governance structure, firm risk, earnings quality and the appropriateness of executive pay within the framework of looking at abnormal executive compensation as well as total compensation and the effect of this vote.

Some of our results confirm Ertimur et al. (2011), and Ertimur et al. (2013) predictions from shareholder proposals and proxy advisors targeted firms' characteristics. Similar to Ertimur et al. 2013, initial assessment of SOP early votes in the US, we find statistically significant results that show that SOP reject votes are associated with firms that have: lower ROA, lower returns, and higher CEO total compensation. However, we also find that SOP rejection votes are associated with firms that have higher returns volatility, higher abnormal (and excessive) CEO compensation and worse earnings quality. Additionally we find evidence to suggest that firms react to SOP rejection votes in 2011 by subsequently reducing the level of executive compensation growth in 2012. Interestingly, we find that changes in SOP vote are determined by changes in abnormal compensation levels, changes in stock returns, changes in returns' volatility

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<sup>4</sup> Ertimur et al. 2013, examined SOP votes during 2011 in order to evaluate the influence of proxy advisors.

and changes in size as measured by market capitalization, but changes in SOP vote are *not* determined by performance as measured in changes in ROA or firm size. Our results also provide some evidence that even though firms with higher level of institutional investors tend to have higher level of rejection votes in 2011, this effect is much less (and not significant) in 2012. Our results show that the effect of institutional ownership is less in 2012 than in 2011, suggesting that as shareholders learn and become more informed regarding SOP, the influence of institutional investors and thus proxy advisors' diminishes.

Finally the results of SOP in the US provide a different picture than what Ferri and Maber (2011) observed in the UK. Different from our results, Ferri and Maber (2011) find that UK SOP in 2003-2004 has only a moderating effect on the level of CEO compensation which is conditional upon poor performance. In this study, we find statistically significant results linking SOP with firm returns, performance, risk and earnings quality. More importantly, SOP rejection votes in the US are determined by excessive or abnormal compensation and subsequently SOP rejection votes have an effect on future executive compensation. These different results and statistical significance, to what Ferri and Maber (2012) found in UK, could be due to the distinct corporate governance settings in which the SOP votes occurred – both in country and time. We conjecture that firms in UK reacted to the legislation in anticipation to the vote which occurred in a “shareholder empowered” setting. In contrast, in the “less empowered shareholders” US setting, firms did not react to the legislation, but waited to the SOP vote.

We recognize that critics of a mandated SOP point out that even though SOP rejection occurs in poor performing firms with high pay levels; this in itself does not necessarily provide evidence of the benefits of general shareholder voting rights, since - it could be argued - high pay and poor performance does not necessarily imply poor governance or inefficient compensation

contracts. Furthermore, critics of SOP argue that the fact that Boards could lower the level of pay in response to a negative SOP, does not in itself imply SOP efficiency since the compensation could have been set at an optimal level, but the Board could have lowered the pay level in response to the costs imposed on firms by this negative vote (e.g., due to negative publicity). We try to examine this issue by not only testing if shareholders' SOP votes – and changes in SOP votes- reflect shareholders' reaction to raw or total compensation and financial performance, but we also examine shareholders' ability to evaluate various measures of excessive or “abnormal” executive compensation.

Our paper contributes to the literature in three ways. First, we find evidence that shareholder SOP votes are sensitive to firm risk, abnormal CEO compensation, accounting quality and financial performance. Second, we find that Boards react to non-binding SOP rejection votes by subsequently reducing the level of abnormal or excessive compensation. Finally, we find that changes in SOP votes are fundamentally affected by changes in excessive (abnormal) compensation and returns; but changes in SOP votes are not sensitive to changes accounting performance (ROA). Our results present evidence to suggest that shareholder voting rights -even when non-binding- could be an effective mechanism of corporate governance that addresses the potential problem of incomplete contracts and management rent extraction.

The first two years of SOP votes in the United States show a great degree of shareholder sophistication in recognizing the monitoring and reward tools that need to coexist between owners and firm managers. Furthermore, our results strongly suggest that shareholders are “doing their homework” and are carefully discerning and identifying relevant issues that should be linked to executive compensation. Regardless of the fact that some shareholders' votes are

probably influenced by proxy advisory recommendations (See Ertimur et al. 2013), our results show that shareholders are voting down excessive compensation packages of firms with low returns, high return volatility and low accounting quality. Most importantly, boards are responding to this message.

The rest of the paper is organized as follows. Section 2 examines the background on Dodd-Frank's Say-on-Pay. Section 3 reviews the literature and develops the hypothesis theoretical arguments. Section 4 describes our research design, provides definitions of key variables and discusses the methodology. Section 5 presents the empirical results and Section 6 concludes.

## **2. Background**

### *2.1. Say on pay*

On Jan. 25, 2011, the SEC voted 3 to 2 to implement the Say-on-Pay (SOP) requirements of Section 951 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank), which the President Obama signed into law in July 2010. SOP asks shareholders to vote for approval on the compensation of the “named executive officers”<sup>5</sup> – the CEO, the Chief Financial Officer, and at least three other most highly compensated executives. SOP requires US listed firms that are subject to proxy rules to hold non-binding shareholder votes on executive pay packages at least once every three years, beginning in 2011. The SEC exempted “small issuers” or firms with less than \$75 million in outstanding shares of this requirement until 2013.

Say-on-Pay is not new. Shareholders' approval has been required for equity-based compensation plans in the United States since 2003 (SEC Release No. 34-48108). The United Kingdom Directors' Remuneration Report (DRR) regulations of 2002 gave shareholders a

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<sup>5</sup> “Named” are those executives mentioned in the company's proxy compensation tables.

mandatory yearly non-binding vote on boardroom pay for public companies since 2003. Similarly in 2005, Sweden and Australia both adopted requirements for non-binding shareholder votes on compensation reports. Binding shareholder approval of the executive compensation is required in: the Netherlands since 2004, Sweden since 2006 and in Norway since 2007. Inspired by the European corporate governance reforms, US Congress legislation attempts<sup>6</sup>, concerns related to lucrative compensation, severance packages and option backdating scandals, in 2006, the American Federation of State, County, and Municipal Employees (“AFSCME”) filed the first shareholder-sponsored proposal for a non-binding referendum on executive compensation. Of the 136 shareholder-sponsored SOP proposals during the period of 2006-2008, only 15 received a majority shareholder approval (Cai and Walkling, 2011). During this period management generally opposed the shareholder-sponsored SOP proposals alleging that shareholder input on pay would diminish the effectiveness of the board’s role. Most firms ignored these shareholder-sponsored SOP proposals with the exception of firms like: Aflac, Verizon, Blockbuster, Occidental Petroleum, Intel, Hewlett-Packard, MBIA, Motorola, and Ingersoll Rand that by 2006 were voluntarily holding advisory say-on-pay votes (Cotter et al., 2010 and 2012). More recently, the American Recovery and Reinvestment Act (“economic stimulus bill”) passed by Congress, and signed by President Obama on Feb. 17, 2009, required every company receiving government assistance under the Troubled Assets Relief Program (TARP) to obtain advisory (non-binding) shareholder approval of the company’s executive compensation program as long

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<sup>6</sup> Sponsored by Rep Barney Frank in 2006 the “Shareholder Vote on Executive Compensation Act” passed in the US House of Representatives by a wide margin of 269 to 134, but the companion bill never left committee in the Senate, where it was sponsored by then Sen. Barack Obama.

as they had outstanding TARP debts<sup>7</sup>. The 280 financial firms that received TARP funds held SOP votes during the 2010 proxy the season and thereafter.

Before and during Dodd-Frank's legislative process, SOP had numerous opponents and proponents, many of which testified in Congress. To a great extent the debate on SOP has evolved within the context of a larger debate surrounding three questions. First: Should shareholders vote on issues which pertain to the Board of Directors? Second: Should regulators mandate a general shareholder vote on executive compensation? Third: Would a "non-binding" shareholder vote have any effect on executive compensation?

Opponents of SOP predicted that: shareholders were unable to discern and properly evaluate compensation plans (Gordon, 2009). According to this view, this board alignment that ensures that managers' actions are beneficial to shareholders is reflected in properly designed executive compensation contracts that are based on shareholder maximizing incentive structures. This opposition was fundamentally based on the notion that Boards essentially do their job by properly aligning their interests to those of shareholders; and in particular Boards are better determining executive compensation because they have private information. Another argument that has surfaced against SOP noted that union pension funds and institutional investor activism

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<sup>7</sup> In October 2008, the Treasury Department announced restrictions on executive compensation and guidelines on corporate governance practices for firms receiving funding from programs developed by the U.S. Treasury under EESA. These standards applied to the CEO, the CFO, and the next 3 most highly compensated executive officers. The restrictions generally involved limits on the tax deductibility of executive compensation, on the level of compensation and golden parachute payments, and restrictions on executive incentive compensation. In January and February of 2009, the Treasury Department announced separate executive compensation guidelines for firms participating in TARP, introducing a cap on executive compensation levels, stricter restrictions on golden parachutes and incentive compensation, and additional compensation restrictions for firms receiving "exceptional assistance." The restrictions included prohibitions on bonuses, retention payments, and other incentive compensation, except for restricted stock in amounts less than one-third of annual compensation and vesting could occur only after TARP funds were repaid. These restrictions included: a \$500,000 compensation cap for all senior executives, no bonus for top 25 executives, a bonus claw-back provision and a yearly non-binding say-on-pay vote.

could be led by “political agendas” instead of the fund’s benefit and could be -at best- value neutral or value destroying (see Larcker and Tanyan 2012; Bainbridge 2011).

On the other hand, the need for shareholders to “have a say” on executive compensation, evolved from the premise that - at times - Boards interests’ are not aligned with shareholders’ interests and results in excessive executive compensation. Specifically, demands for SOP came after two decades of fraud and financial scandals which generated greater general awareness and shareholder activism demanding more transparency and better corporate governance. In particular, the option backdating scandals of 2006 and 2007 increased concerns about Boards’ ability to properly create compensation contracts aligned with minority and majority shareholders’ interests (See Bebchuk, Cramers and Peyer, 2011 and Ertimur et al., 2011). Thus, the need for SOP came from the perception that Boards were not properly representing the interests of all shareholders and that therefore shareholders needed to actively participate in the process of determining executive compensation. Proponents of SOP argued that: general shareholder voting had the potential of enhancing transparency, governance and accountability that would in turn lead to greater efficiency and social responsiveness (Bebchuk, Friedman and Friedman, 2007); shareholders could be able to discern poorly designed pay packages and - if needed - would ask for advisory recommendations; and SOP would create a stronger relationship between pay and performance (Bebchuk et. al., 2007; Ferri and Maber, 2012). To this effect, there is abundant literature that suggests that compensation practices could lead to rent extraction (Jensen and Meckling, 1976; Allen and Winton, 1995). Within this framework, Aghion and Bolton (1992) and Hart (2001) provide a theoretical framework to suggest that if voting rights are informed by observable financial measures, shareholders’ votes should effectively address the problem of incomplete contracts.

In testimony to the House of Representatives, Kaplan (2012) predicted that a mandatory SOP vote would create unnecessary costs and few benefits since boards adequately monitor CEO's without the need for SOP. Kaplan stated that a legislated SOP requirement would mandate a vote for companies that "do not have a problem" and "...potentially subject these boards and companies to increased pressure from interest groups that they do not incur today" and that shareholders' input on pay would diminish the effectiveness of the Board's role (Kaplan, 2007; Gordon, 2009). Bainbridge (2008) stated that SOP would "shift power from boards of directors -not to shareholders- but to advisory firms". Opponents also asserted that: if say-on-pay had the potential of being beneficial, then boards could freely adopt it, without the need for legislation. Additionally, they argued, say-on-pay initiatives had the potential of being divisive or driven by special interests (Kaplan 2007; Deane 2007). The assumption behind the opposition to say-on-pay was based on the premise that pay practices of most companies were designed efficiently and that allowing shareholder votes on executive compensation could distract boards and management as well as reduce the effectiveness of the board. (See Deane 2007). Similarly, Larcker et al. (2011) cautioned that if boards of directors were already adequately compensating managers, regulating SOP could empower large block-holders to influence firm policy into less efficient compensation contracts and loss of talent.

On the other hand, proponents of Dodd-Frank SOP provisions anticipated more transparency, better governance and accountability that would lead to greater efficiency and enhanced social responsiveness. Proponents argued that mandatory SOP could even have the potential of helping overcome the "psychological barriers" and conflicts of interest of Board members by effectively empowering them to negotiate pay packages more effectively on behalf of shareholders, since - under current director elector system- it is often management, and not

shareholders, who decide board composition (See Shivdasani and Yermack 1999; Bebchuk 2003). This argument is consistent with Core et al. (1999) who find that less effective boards are associated with higher CEO compensation and lower operating and stock performance. In addition, many studies find evidence that board design, as well as director incentives and actions are sometimes imperfectly aligned with shareholders' interests.

The Dodd-Frank SOP provisions require a "non-binding" shareholder vote to approve the previous year executive compensation disclosed in a firm's proxy statement (which is filed before the firms' annual shareholders' meeting). Most firms have a December 31<sup>st</sup>, January 30<sup>th</sup> and March 31<sup>st</sup> year-end, so the proxy season usually occurs in April, May and June and annual meetings occur throughout late summer and early fall. Proxy statements includes a compensation report that details the pay of the five most highly paid executives and requires a compensation discussion and analysis (CD&A), which provides a narrative discourse and a tabular display of all material compensation aspects. In the CD&A the firm explains the objectives of pay, the elements to be rewarded, the individual pay components and the reasons for choosing them, the determination of each component's amount, and the extent to which each component fits into the overall pay objectives and affects other components. The shareholders' vote is "up or down" as to the overall compensation package and not to specific elements of the compensation. While companies are not bound by the shareholders' "advisory" votes, the law requires issuers to disclose the vote results in Form 8-K within four business days after the shareholders' meeting. In addition, the firm must report, in the following year's CD&A whether and how the Board has considered the vote results in their compensation policies and decisions by disclosing in their CD&A: "whether, and, if so, how the registrant has considered the results of the most recent shareholder advisory vote on executive compensation in determining compensation policies and,

if so, how that consideration has affected the registrant's executive compensation decisions and policies.”

The Dodd-Frank law also requires companies to hold advisory votes at least once every six years to allow shareholders to say how frequently they want to hold the say on pay votes—once a year, every other year or once every three years.<sup>8</sup>

### **3. Previous literature and hypothesis development**

#### *3.1 Say on pay: Mandated general shareholder voting*

The debate on SOP has been framed in the context of the larger debate on the effectiveness and desirability of shareholder voting in general. Arguments against a mandated SOP are based on the premise that if boards are effectively monitoring and compensating managers in a way that maximizes shareholder wealth, regulating executive compensation or increasing shareholder control over the proxy process will not affect executive compensation (because investors recognize that they are already value-maximizing) but could result on creating less efficient compensation contracts (See Core et al. ,2003).

Two studies examined the market reaction to the events surrounding the initial legislation process that eventually led to the passage of Dodd-Frank. These event studies found a positive market reaction during the legislative process in firms that had excessive executive compensation and low pay-for-performance sensitivity, thus providing evidence of market pricing the anticipated benefits of SOP monitoring (Cai and Walking, 2011; Larcker et al., 2011 ). Different from Cai and Walkling, 2011, Larcker et al., 2011) interpreted this market reaction as evidence consistent with a value-maximizing view of pay practices for firms with extreme levels of

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<sup>8</sup> Shareholders are able to cast a non-binding vote on how often the Say-on-Pay vote should occur: once a year, once every two years, or once every three years. Shareholders may also choose to abstain on the frequency vote.

compensation because shareholders anticipated that regulation of executive pay would: result in less efficient contracts and could ultimately potentially decrease the supply of high-quality executives. Larcker et al. (2011) also cautioned that SOP (proxy access regulation) could allow shareholders with more than 1 percent of the vote and shareholder coalitions to “use the proxy access regulation to manipulate the governance process to make themselves better off at the expense of other shareholders” and thus conclude that voluntary proxy access, instead of government mandated, is the most value maximizing alternative. Cai and Walking (2011) cautioned that the experience of shareholder-sponsored “voluntary” say on pay proposals during 2006-2008 provided evidence of shareholder activism that did not effectively targeted firms with “excessive” compensation problems; but rather, “unfairly” targeted large firms with CEO’s that were not overpaid. Cai and Walking (2011) conclude by questioning the effectiveness of a mandatory SOP since it “might benefit firms with questionable compensation practices but (unfairly) hurt firms targeted by special interests”.

On the other hand, proponents to SOP reasoned that: the results of mandated SOP in UK were positive and that mandatory SOP had a positive impact on corporate governance increasing the sensitivity of pay for performance (Coates, 2009). Bebchuk (2005) argued that in order to restore accountability and place our corporate governance system on solid foundations, shareholders should have appropriate voting mechanisms in order to make boards accountable and if they are displeased with the action of their elected representatives, as owners, they should have the powers of corporate democracy. SOP could enhance transparency, governance and accountability that would in turn lead to greater efficiency and social responsiveness (Bebchuk et al. 2007); shareholders would be able to discern poorly design pay packages and - if needed - would ask for advisory recommendations and SOP would create a stronger relationship between pay and performance (Bebchuk et. al., 2007; Ferri and Maber, 2012)

### *3.12 SOP in the UK*

Ferri and Maber (2012) examined the effect of the 2002 say on pay regulation in the UK during the 2003 and 2004 proxy seasons and do not find a relationship between SOP votes, compensation levels and firm performance. Ferri and Maber (2012) only find some evidence to suggest that firms with high SOP dissent (more than 20% dissent) changed the “structure” of the executive compensation contracts (reduction of notice period for severance, and in performance based vesting conditions) and increased their pay-performance. However, they do not find any significant differences in performance (returns, ROA or ROE), size, valuation (market to-book), leverage or governance between firms with high and low dissent in SOP votes.

### *3.2 Say-on-pay: Can shareholders evaluate the appropriateness of executive compensation?*

Most on the research that tries to evaluate shareholders’ ability to effectively identify excessive compensation or link compensation to firm performance has examined shareholder proposals resolutions in general<sup>9</sup>.

Johnson and Shackell (1997) and Thomas and Martin (1999) analyzed compensation related proposals submitted under SEC Rule 14a-8 using data from the early 1990s, and find they had no impact on CEO pay. Even though Thomas and Martin (1999) found that shareholder proposals requesting review of executive pay practices targeted relatively poor-performing firms with high levels of pay; these proposals generally received lower levels of voting support than other types of shareholder proposals seeking corporate governance reforms.

Ertimur et al., (2011) studied a sample of 14a-8 compensation “related”<sup>10</sup> proposals between 1997 and 2007 and found that the 258 proposals that were sponsored by institutional

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<sup>9</sup> SEC's Shareholder Proposal Rule 14a-8 allows shareholders to submit issues for inclusion in the proxy material and for subsequent presentation at the annual general meeting.

proponents calling for greater link between pay and performance received on average 24 percent of shareholders' approval and resulted in a subsequent reduction in CEO pay. They note the potential ability of advisory say on pay votes to capture the quality of CEO pay practices, contrary to claims that shareholders lack the required specific knowledge or the incentives to acquire it (Bainbridge 2008). Ertimur et al. (2011) note: "shareholders have judiciously used their voting power" "stronger voting support for compensation-related proposals in firms with excess CEO pay suggests that advisory say on pay votes can capture the quality of CEO pay."

In a more recent paper, Ertimur et al. (2013) examined the determinants of proxy advisors recommendations and their influence on SOP by examining a sample of firms which had SOP votes between January 2011 and November 2011 and also had a corresponding advisory reports issued by proxy advisory firms<sup>11</sup>. Ertimur et al. (2013) and Larcker et al. (2012) find some evidence to suggest that proxy advisors had significant influence on the SOP voting outcomes and that SOP voting dissent during part of 2011 was determined by low abnormal returns during the three day window surrounding the proxy advisor report, low return on assets (ROA), high percentage of institutional ownership, high market value of equity and high CEO total pay. Based on the examination of disclosures in proxy statements, Ertimur et al., (2013), found some evidence to suggest that firms that received an "against" recommendation by ISS in 2011 had a higher probability of changing their compensation contracts, however they do not examine if this change was due to the SOP vote or to the ISS recommendation.

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<sup>10</sup> Ertimur et al. (2011) examined 1,198 proposals during the period 1997-2008. These proposals were related to compensation issues and included matters concerning: pay-setting process, pay-design, compensation disclosures, golden parachutes, independence of compensation committee, link to pay and social criteria, pay philosophy, CEO pay caps, etc.

<sup>11</sup> Ertimur et al. (2012) examined the effect of the reports issued by Institutional Shareholder Services (ISS) and Glass Lewis & Co. (GL), on SOP votes.

In terms of the effectiveness of non-binding shareholder voting, Levit and Malenko (2011) analytically show that non-binding shareholder votes to generally fail to convey shareholder preferences and, thus have a limited advisory role.

If shareholders evaluate the level of executive compensation they will be able to identify excessive compensation. Thus, SOP votes will reject (approve) excessive (average) levels of executive compensation

If shareholders adequately link pay to performance they will approve (reject) compensation packages of firms that have: better (lower) financial performance and higher (lower) market returns and low (high) abnormal or excessive executive compensation.

### *3.3 Say-on-pay rejection votes and subsequent effect on executive compensation*

Mangen and Magnan (2012) debated if SOP had the ability of “fixing” executive pay. On the one hand, they argued that SOP encouraged directors to look out more for shareholders and had the potential of enriching boards’ information environment by mitigating directors’ information deficiencies. On the other hand, Mangen and Magnan (2012) cautioned that SOP could create two problems. First, SOP might lead to compensation that benefited shareholders but not stakeholders (like in the case of debt holders); and second, boards could “manage” compensation disclosures to ensure SOP approval.

Thomas and Martin (1999) found that in the instances when shareholder pay review proposals received a high level of support, targeted firms significantly reduced the rate of increase of executive compensation over the two year period following the proposal. Ertimur et al. (2012) also found that firms with high executive pay were targeted by activists in 14a-8 proposals, and these received higher shareholder support and thus firms had higher probability of reducing CEO “excessive” pay.

Ferri and Maber (2012) examined the impact of SOP in the United Kingdom and found that companies that received negative votes on their pay practices, reacted affirmatively by removing a controversial CEO or aligning pay with performance and the market reacted positively to this firm response, thus suggesting that SOP was a value creating-mechanism.

Thus, if a high number of shareholders reject the executive compensation package in an SOP vote, the board will react by reducing the level of executive compensation in the year subsequent to this vote.

### *3.4. Effects of shareholder activism and institutional investors on SOP*

Jensen (1993) argues that investors with a larger stake have stronger incentives to undertake monitoring activities since the increased return from monitoring is sufficient to cover the associated monitoring costs. McCahery, Sautner and Starks (2011) find that corporate governance is important to institutional investors, and that many of them engage in shareholder activism (see also Aggarwal, Saffi and Sturgess 2012). Hartzell and Starks (2003) show that large institutional investor ownership is positively related to pay-for-performance sensitivity and negatively related to the level of executive compensation.

There is evidence to suggest reputational and spillover effects of SOP votes. Firms who ignore majority vote proposals are singled out in CalPERS Focus List (CalPERS 2007), receive lower ratings from governance services, such as The Corporate Library, and attract negative press coverage. For example, after the 2007 proxy season, the Council for Institutional Investors, a nonprofit association of pension funds with combined assets exceeding \$3 trillion, sent a series of letters to all firms in which shareholder proposals received a majority vote urging their implementation (Riskmetrics 2008). Del Guercio and Hawkins (1999) report some indirect anecdotal proof of spillover effects (e.g., interviews with top CalPERS officials stating that non-

targeted firms pay attention to CalPERS' interactions with target firms). Previous research suggests that managers try to avoid scrutiny of their compensation packages. Firms paying larger amounts of compensation to their executives are more likely to (i) lobby against more explicit forms of disclosure of executive pay (Dechow, Hutton and Sloan 1996; Hill, Shelton and Stevens (2002), (ii) disavow (Blacconiere, Frederickson, Johnson and Lewis 2011) and manage downward the option expense disclosed (Aboody and Kasznik 2008) or recognized (Johnston, 2006) under SFAS 123, and (iii) have poorer voluntary disclosure of compensation practices in the proxy statements (Laksmana, 2008).

Recent events support the assumption that proxy-advisory firms like might influence institutional investors SOP votes. In 2012 ISS recommended against 14 percent of SOPs and shareholders support was 30 percent lower for firms with a negative ISS recommendation. CALSTRS voted against SOP in 23 percent of the cases (See Semler-Brossy's, 2012 Say on pay results, 2012)

Thus we expect that the level of institutional shareholders will affect the SOP voting outcomes. Firms with higher (lower) levels of institutional shareholders will have higher (lower) probability of receiving rejection SOP votes.

### *3.5. Say on pay and earnings quality*

The literature on accounting quality and earnings management has developed over a longer time period than that related to executive pay. However, the most common motive for earnings management is attributed to management's desire to maximize their own wealth at the expense of shareholders through the use of opportunistic accounting choice decisions that manage earnings in order to influence their pay (Healy, 1985; DeAngelo, 1988; McNichols and Wilson, 1988). Specifically, annual bonuses and stock options are often directly or indirectly

related to some form of “earnings” or earnings deflated by assets or equity (Bloedorn and Chingos, 1991; Ittner, Larcker and Ragan 1997). These same accounting based measures can also impact the total number of stock options to be granted in any given year. And to the extent that accounting performance is linked to firm value, the value of the options subsequent to issuance will be correlated with accounting results. Thus, we expect that shareholders will evaluate the quality of earnings and firms with low quality earnings will have a higher probability of receiving SOP reject votes.

#### **4. Data and research design**

The objective of this paper is to empirically examine SOP voting patterns in the United States during 2011 and 2012. Specifically, we investigate the factors associated with SOP voting outcomes and empirically test whether SOP votes adequately link pay to performance and are thus influenced by: market returns, return volatility and firm performance. We also examine if shareholders evaluate the level of executive compensation and if they are able to identify excessive compensation. We also test if shareholders are “able to discern the differences in compensation plans” discriminating between equity and cash compensation. Additionally, we investigate the role of institutional investors and accounting quality in SOP voting outcomes. Finally, we study SOP consequences and effects by examining if firms respond or change executive compensation after shareholders reject the compensation package by a majority of votes and if the growth of executive compensation is influenced by SOP voting patterns.

##### *4.1. Say on Pay Data in the US*

Our sample includes all the SOP votes during 2011 and 2012 from firms in the Russell 3000. Firms with less than \$75 million market capitalization were not required to request approval of

their executive compensation from shareholders through SOP in 2011 and 2012. Also, some firms obtained approval from shareholders regarding SOP frequency that established SOP votes every two or three years and therefore votes might not have happened in 2011 or 2012. Therefore, our sample was reduced to 2235 firms with SOP votes in 2011 and 2384 firms with SOP votes in 2012. Table 1 presents a summary of SOP voting results. In both years most firms had their compensation package approved by shareholders and 14.8 percent of firms obtain less than 80 percent support. In 2011, 34 firms “failed” to obtain more than 50 percent approval and in 2012, 60 firms failed the SOP vote. Firms in chemical, utilities and retail sectors received the most support with an average of and 89 percent and 90 percent of the approval votes in 2011 and 2012 respectively. Firms in the Energy sector realized the least support receiving 71 percent and 80 percent in 2011 and 2012 respectively. Our original sample of firms was reduced by firm year data availability. We are left with 1308 firms in 2011 and 1438 in 2012 after merging SOP voting data with the Center for Research in Security Prices (CRSP), Compustat and ExecuComp.

#### *4.2. Characteristics of “targeted” firms > 20% rejection vote*

We examined the characteristics of firms that obtained more than 20 percent rejection SOP votes in 2011 and in 2012. We called them “targeted” firms. We investigated the following characteristics of “targeted” firms: size (the natural log of market value of equity), capital structure, performance, returns, governance, compensation and accounting quality measures and compared them with “non-targeted” firms (firms that received more than 80 percent approval). Table 2 shows that in comparison with the “non-targeted” firms from Russell 3000, firms that “fail” in SOP votes have statistically significant lower returns in the 12-months period before the SOP vote (*Ret12*), lower market-adjusted returns (*MktAdjRets*), lower return on assets (*ROA*) and lower return on equity (*ROE*) in both 2011 and 2012. Targeted firms with high dissent rejecting

SOP also have a higher percentage of institutional ownership (*InstOwn* %) consistent with the prediction that institutional shareholders exert better governance and monitoring functions (see Hartzell and Starks, 2003; Janakiraman et al., 2010).

In order to examine the effect of executive compensation on SOP voting outcomes, we follow previous literature and examine only the compensation of the CEO even though SOP votes refer to the approval of the compensation of the CEO as well as the 4 highest paid executives. Total compensation, is computed as the sum of salary, bonus, other annual compensation, total value of restricted stock granted, total value of stock options granted (using Black-Scholes), long-term incentive payouts, and all other compensation. Following Cai and Walkling (2011), we calculate abnormal CEO compensation as the 6-year average of residuals from compensation regressions using all ExecuComp companies six years prior to SOP vote. We find statistically significant differences in the total and abnormal compensation measures. The total compensation (*TotalComp*) mean of “targeted” firms was significantly larger: \$9.00 million in comparison with \$5.63 million for the firms that had high SOP approval in 2011 and \$10.54 million versus \$5.88 million in 2012. Cash compensation (*CashComp*), equity compensation (*EquityComp*), percent change of total compensation, abnormal cash compensation (*AbnCashComp*), abnormal equity compensation (*AbnEquityComp*) and abnormal total compensation (*AbnTotalComp*) all are significantly larger in firms that failed the SOP vote for both years. The results show some evidence of higher abnormal accruals (*AbnAccr*) in firms that failed the SOP votes in 2012 and 2011 respectively.

#### *4.3.Determinants of SOP voting outcomes*

To provide evidence of the determinants of SOP approval, we investigate the effect of returns, risk, accounting performance, stock market returns, total compensation, abnormal compensation, changes in compensation, and measures of earnings quality.

##### *4.3.1. Control variables*

We control for size (*LnMVE*), market-to-book ratio (*MB*), leverage (*Lev*), and year fixed industry effects (*FF12*). The Log of the market value of equity (*LnMVE*) is calculated as the average market capitalization over the last 12 months prior to the shareholders' meeting dates.

##### *4.3.2. Say on Pay and risk*

We control and examine risk effects by including the examining the effects of returns volatility for each firm during the period preceding the SOP vote. The returns volatility (*RetVol*) for each firm year is calculated as the standard deviation of stock returns over the last 12 months prior to the shareholders' meeting dates.

##### *4.3.3 Say on pay and insider ownership*

We include the percentage of CEO ownership (*CEO Own%*) as a proxy for board and governance structure. Jensen and Meckling (1976) argue that insider ownership reduces agency costs as managerial interests will be aligned with shareholder interests (See Jensen & Murphy, 1990). This argument predicts that CEO ownership could lead to strategic decisions that reduce firm risk and result in goal realignment (Connelly et al., 2010). On the other hand, another stream of literature argues that CEO's with significant equity could have too much power due to their position and to their large voting rights (Lewellyn and Muller-Kahle, 2012) that could create entrenchment problems that decrease the level and effectiveness of board monitoring (Stulz, 1988; Morck, Shleifer and Vishny 1988; McConnell & Servaes, 1990). More recently,

Muller-Kahle (2012) finds some evidence that when CEO's have a dominant ownership stake, firm monitoring is diminished and firm performance suffers. We therefore do not have any prediction as to the sign of the coefficient of this variable.

#### *4.3.4 Say on pay and Institutional Ownership*

We include a variable to capture the percentage of institutional ownership (*InstOwn%*). We expect an inverse relationship between the percentage of institutional ownership and the percentage of shareholders approving SOP. Theory suggests that because of their large financial stake, institutional investors provide an important monitoring role (see Jensen, 1993; McCahery et al., 2011; Aggarwal et al., 2012). Hartzell and Starks (2003) show that large institutional investor ownership is positively related to pay-for-performance sensitivity and negatively related to the level of executive compensation therefore providing some evidence that more (less) institutional investor ownership could lead to a higher percentage of SOP rejections (approval) votes.

#### *4.3.5 Say on pay and firm performance*

We examine the effects of firm performance on SOP votes by including measures of stock returns and profitability. Stock returns are measured by the lagged 12-month stock returns before the SOP vote (*Ret12*.) Financial performance is measured by return on assets (*ROA*)<sup>12</sup>.

#### *4.4. Regression models*

Our dependent variable is the % of approval SOP votes (*PassSOP %*), calculated as the number of approval votes divided by the total of rejection plus approval votes. We don't include abstention votes in our calculation, since some firms treat "abstention" votes as

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<sup>12</sup> We don't include ROE since this measure is highly correlated with ROA. In unreported regressions we find that both ROE and ROA have similar coefficients and significance levels.

“rejection” votes and other do not. Our calculation is conservative and thus provides robustness to the results.

We estimate the following regression model for each year: 2011 and 2012. We also combine both years and use a year dummy control. To examine the effect of stock returns and performance, we then include the lagged 12-month stock returns before the SOP vote (*Ret12*) as well as return on assets (*ROA*) and estimate the following model for years 2011, 2012 and combined.

$$PassSOP \%_{it} = \alpha + \beta_{1i} Log MVE + \beta_{2i} MB_{it} + \beta_{3i} Lev_{it} + \beta_{4i} RetVol_{it} + \beta_{5i} CEOOwn\% + \beta_{6i} InstOwn + \beta_{5i} FF12 + \beta_{6i} Ret12 + \beta_{5i} ROA + \epsilon_i \quad (1)$$

#### 4.5. Compensation and SOP votes

Following previous literature, we examine *only* the total compensation of the CEO (*TotalComp*) which is computed as the sum of salary, bonus, other annual, total value of restricted stock granted, total value of stock options granted (using Black-Scholes), long-term incentive payouts, and all other compensation. We also disaggregate total compensation into its components: cash and equity. The cash compensation (*CashComp*) is the CEO’s cash compensation (salary and bonus) and the equity compensation (*EquityComp*) is the equity-based compensation (stock options and restricted stocks). Even though SOP votes refer to the approval of the compensation of the CEO as well as the 4 highest paid executives, we use the CEO compensation as proxy for the compensation of the 5 highest paid executives.

We examine the total compensation of the CEO and its components - cash and equity - as well as the abnormal CEO compensation. Following Cai and Walking (2011), Abnormal CEO compensation is calculated by estimating the coefficients of executive compensation regressions

using all ExecuComp companies 6 years prior to the SOP votes as our bench-mark. We then use the expected compensation or benchmark to calculate the residuals for the 3-years prior to the SOP vote and average these residuals.

The following models examine the effect total compensation (*TotalComp*), cash compensation (*CashComp*) and Equity compensation (*EquityComp*). We also examine the abnormal total, cash and equity compensations separately for years 2011 and 2012.

$$\begin{aligned}
 PassSOP \%_{it} = & \alpha + \beta_{1i} Log MVE + \beta_{2i} MB_{it} + \beta_{3i} Lev_{it} + \beta_{4i} RetVol_{it} + \beta_{5i} CEOOwn\% + \\
 & \beta_{6i} InstOwn + \beta_{7i} FF12 + \beta_{8i} Ret12 + \beta_{9i} ROA + + \beta_{10i} Ret12 + \\
 & \beta_{11i} TotalComp + \epsilon_i
 \end{aligned} \tag{2}$$

$$\begin{aligned}
 PassSOP \%_{it} = & \alpha + \beta_{1i} Log MVE + \beta_{2i} MB_{it} + \beta_{3i} Lev_{it} + \beta_{4i} RetVol_{it} + \beta_{5i} CEOOwn\% + \\
 & \beta_{6i} InstOwn + \beta_{7i} FF12 + \beta_{8i} Ret12 + \beta_{9i} ROA + + \beta_{10i} Ret12 + \\
 & \beta_{12i} CashComp + \beta_{13i} EquityComp
 \end{aligned} \tag{3}$$

$$\begin{aligned}
 PassSOP \%_{it} = & \alpha + \beta_{1i} Log MVE + \beta_{2i} MB_{it} + \beta_{3i} Lev_{it} + \beta_{4i} RetVol_{it} + \beta_{5i} CEOOwn\% + \\
 & \beta_{6i} InstOwn + \beta_{7i} FF12 + \beta_{8i} Ret12 + \beta_{9i} ROA + + \beta_{10i} Ret12 + \\
 & \beta_{11i} Abn TotalComp + \epsilon_i
 \end{aligned} \tag{4}$$

$$\begin{aligned}
 PassSOP \%_{it} = & \alpha + \beta_{1i} Log MVE + \beta_{2i} MB_{it} + \beta_{3i} Lev_{it} + \beta_{4i} RetVol_{it} + \beta_{5i} CEOOwn\% + \\
 & \beta_{6i} InstOwn + \beta_{7i} FF12 + \beta_{8i} Ret12 + \beta_{9i} ROA + + \beta_{10i} Ret12 + \\
 & \beta_{11i} Abn CashComp + \beta_{12i} Abn EquityComp + \epsilon_i
 \end{aligned} \tag{5}$$

To add robustness to our results, we test regression (5) using two additional measures of excess CEO compensation as per Core et al. 2007. We include excess total compensation as well as excess total payout. Total payout is a measure of compensation that captures option exercise proceeds as opposed to option grant value and is computed as the sum of salary, bonus, long-term incentive plan payouts, value of restricted stock grants, proceeds from options exercised during the year, and any other annual pay. We measure excess compensation as actual compensation minus expected compensation. Our benchmark model for expected compensation follows prior research in this area (e.g., Smith and Watts, 1992; Core, Holthausen and Larcker, 1999; and Murphy, 1999), and is obtained by regressing the natural logarithm of compensation where compensation  $Ln(Compensation)$  is total compensation or total payout on proxies for economic determinants of CEO compensation, such as firm size, growth opportunities, stock return, accounting return, and industry controls. We estimate the following model using ordinary least squares:

$$LnComp_{it} = \alpha + \beta_{1i} Ln(Tenure)_{it} + \beta_{2i} Ln(Sales)_{it-1} + \beta_{3i} S\&P500_{it-1} + \beta_{4i} BM_{it-1} + \beta_{5i} RET_{it} + \beta_{6i} RET_{it-1} + \beta_{6i} AgeDum + \epsilon_i \quad (6)$$

We calculate the residual of the total compensation  $ResComp$  and the payout  $ResPayout$  by estimating the expected compensation  $ExpComp$  and subtracting it from the actual compensation  $Comp$ . We also calculate the percentage of residual compensation  $\%ResComp$ .

$$ResComp_{it} = Comp_{it} - ExpComp_{it} \quad (7)$$

$$\%ResComp_{it} = LnComp_{it} - LnExpComp_{it} \quad (8)$$

#### 4.6. Earnings Quality

In examining the relation between SOP votes and earnings quality, we consider the relationship between CEO compensation and accounting based performance measures, and evaluate the impact of differential accounting quality. For both the contemporaneous and historical attributes of each of the earnings based accounting performance measures, we examine several proxies of “accounting quality.” These accounting quality proxies are employed with their corresponding earnings based performance measures to help explain the relation between SOP votes, pay and performance. The tests permit an examination of hypotheses to determine whether quality measures are related to CEO pay, and whether quality of the earnings data underpinning the performance measures are detected in SOP vote results.

##### 4.6.1 Accrual quality

We calculate the accrual quality (*AccQ*) as per Francis, LaFond, Olsson and Schipper (2005). Accrual quality is the standard deviation of residuals from a regression with annual accruals (ACC) as the dependent variable and estimated with data during the past ten fiscal years prior to SOP votes. Annual ACC is the change of total current assets (ACT), minus change of cash (CHE), minus change of total current liabilities (LCT), minus change of debt in current liabilities (DLC), minus change of deferred taxes (TXDB), minus depreciations (DP), and then divided by average total assets (AT) at the beginning and end of the fiscal year. The explanatory variables of the regression model include lagged, current, and future annual operating cash flows (OANCFY), property, plant, and equipment (PPEGTQ), and annual change in sales (SALE). All variables are scaled by average total assets (AT) at the beginning and end of the fiscal year.

Following Larcker et al (2007) we calculate abnormal accruals (*AbnAccr*) as the residual from the following regression model for the same 2-digit SIC firms:

$$TotAccr = \alpha + \beta_1(\Delta Sales - \Delta REC) + \beta_2 PPE + \beta_3 BM + \beta_4 CFO + \varepsilon. \quad (9)$$

In this model, Total accruals (*TotAccr*) is the difference between Compustat reported operating cash flows (OANCF) and discontinued operations reclassified as part of operating cash flows (XIDOP) and income before extraordinary items (IBC).  $\Delta Sales$  is the change in sales (SALE) for the year.  $\Delta REC$  is the change in receivables reported on the statement of cash flows (RECCH) for the year. *PPE* is the gross amount of property, plant and equipment (PPEGT). *CFO* is the operating cash flows (OANCF). All variables used in the abnormal accrual model (except *BM*) are scaled by average total assets using assets from the start and end of the fiscal year.

We estimate the following model with each of the above mentioned earnings quality measures respectively for years 2011 and 2012 and include both *AccrQ* and *AbnAccr* for combined sample.

$$\begin{aligned} PassSOP \%_{it} = & \alpha + \beta_{1i} Log MVE + \beta_{2i} MB_{it} + \beta_{3i} Lev_{it} + \beta_{4i} RetVol_{it} + \beta_{5i} CEOOwn\% + \\ & \beta_{6i} InstOwn + \beta_{7i} FF12 + \beta_{8i} Ret12 + \beta_{9i} ROA + \beta_{10i} Ret12 + \\ & \beta_{11i} TotalComp + \beta_{12i} CashComp + \beta_{13i} EquityComp + \beta_{14i} AccrQ + \\ & \beta_{15i} AbnAccr + \varepsilon_i \end{aligned} \quad (10)$$

#### 4.7 Impact of SOP in future executive compensation

We test if the Board reacts to SOP rejection votes by reducing the level of executive compensation in the year subsequent to this vote. Although it could be argued, that high pay and poor firm performance do not necessarily imply poor governance or inefficient compensation contracts the Board could lower the pay level after a high SOP rejection vote, in response to the costs imposed on firms (e.g., due to negative publicity). We test for these changes by examining the association between SOP dissent in 2011 and changes in percentages of CEO pay growth in 2012. The dependent variable is the % change in total compensation growth from year 2011 to 2012. The primary variable of interest is the percentage of say-on-pay (SOP) rejection or disapproval votes (*FailSOP* %) during the fiscal year 2011 divided by the sum of approval plus dissent SOP votes. We control for industry-adjusted returns, industry adjusted ROA, Sales, abnormal compensation and CEO entrenchment.  $\ln(SALES)$  is the natural logarithm of firm sales for 2012. *IndAdjRET* is the cumulative returns over the 12 months prior to the shareholders' meeting dates, less the return for the median firm in that firm's two-digit SIC code for the year. Industry-adjusted Return on Asset *IndAdjROA* is income before extraordinary items divided by average total assets for the year, less the ROA for the median firm in that firm's two-digit SIC code for the same year. We include two measures of excess CEO compensation: residual of total compensation *ResComp* and residual payout *ResPayout*. as per equations (8) and (9).

Finally, we test if 2012 votes change as a result of changes in the determinants of SOP votes as well as excessive compensation. In particular we want to examine what determines the change in SOP vote.

$$\begin{aligned}
\Delta PassSOP \%_{it} = & \alpha + \beta_{1i} \Delta Log MVE + \beta_{2i} \Delta MB_{it} + \beta_{3i} \Delta Lev_{it} + \beta_{4i} \Delta RetVol_{it} + \\
& \beta_{5i} \Delta CEOOwn\% + \beta_{6i} \Delta InstOwn + \beta_{7i} FF12 + \beta_{8i} \Delta Ret12 + \beta_{9i} \Delta ROA + \\
& \beta_{10i} \Delta Ret12 + \beta_{11i} \Delta ResComp + \beta_{12i} \%ResComp + \epsilon_i
\end{aligned} \tag{11}$$

## 5. OLS regression results

Table 3 shows the results of regressing SOP approval vote on firm characteristics and performance. All coefficients of interest are significant. As expected, the percent of approval (reject) SOP votes is associated with higher (lower) growth opportunity (market-book ratio); lower (higher) return volatility, and lower (higher) institutional ownership. As predicted by Cai and Walkling (2011), large firms tend to have more failing votes. In 2011 the CEO ownership variable is positive and significant, suggesting that higher CEO ownership is associated with higher probability of approving the SOP vote. However we find no significance in 2012.

The results in Table 3 show a very strong and statistically significant relationship between returns, performance and SOP votes. The probability of approving the SOP is higher (lower) for firms that have higher (lower) returns and ROA.

Table 4 confirms the negative relationship between executive compensation levels and the probability of shareholders approving the SOP vote. All the compensation variables are statistically significant. Higher (lower) levels of total compensation, equity compensation, cash compensation are associated with lower (higher) approval SOP votes. The results offer strong evidence to suggest that shareholders are indeed not only focusing on performance and returns to cast an approval vote, but they are also sending a clear message of disapproval to larger compensation packages. The results show a slight stronger sensitivity to equity compensation

than cash compensation. This implies that shareholders react more to large equity compensation than to cash compensation.

The results presented in Table 5 confirm the impact of abnormal or excessive compensation in the SOP voting results. The coefficients of both abnormal equity and abnormal cash compensation are statistically significant. In addition, the coefficient of total compensation continues to be very significant and it is larger and has higher statistical significance than the abnormal compensation coefficients, suggesting that shareholders are more sensitive to the level of compensation rather than just to the relative level of compensation or abnormal compensation. We also include the measure of excessive compensation by calculating the residual of total compensation *ResComp* and the residual of total payout *ResPayout* as calculated in equations (7), (8) and (9). The results confirm previous results using the abnormal compensation variables. However, interestingly, all regressions have a slightly larger r-square in 2012 as compared to 2011. Also, the variable for institutional ownership is not significant in 2012, thus suggesting that the % of institutional ownership does not affect the voting outcomes as much in 2012 as it does in 2011. A possible explanation for these results could be attributed to shareholders having more experience with SOP (See Bebchuck, Cohen and Wang 2013).

We examine earnings quality by using accrual quality (*AccrQ*) and abnormal accruals (*AbnAccr*) variables that capture the level of accounting quality in Table 6. The results show both variables with the predicted sign, and abnormal accruals with a statistically significant coefficient. The results suggest that the probability of getting shareholder approval increases (decreases) with better (worse) earnings quality. All the variables of interest remain significant with the exception of ROA. The results from Table 6 might not necessarily mean that shareholders are diagnosing and identifying earnings management and consequently penalizing

firms by voting to reject the executive compensation package. But rather, it could imply that firms might be using earnings management to increase their compensation and shareholders are rejecting this excessive compensation. In order to investigate this further, we examine the firms “failed” the SOP vote in 2011 and later “passed” the SOP vote in 2012 to see if earnings management might have played a role in this different outcome. Table 7 does not show any statistical difference between these two years that would suggest earnings manipulation in 2012.

Table 7 illustrates the fact that the percentage of change in compensation levels decreases significantly in 2012 in firms that failed their SOP votes in 2011, but subsequently passed the SOP vote in 2012. In 2011 firms that failed the SOP vote – obtaining less than 50 percent approval – reduced their executive compensation growth level substantially and consequently got an approval vote. In these firms executive compensation was growing at 116 percent rate in 2011; but this rate was reduced to 7 percent in 2012. This statistically significant result suggests that companies that “fail” their SOP vote in 2011 affirmatively react to this vote by reducing the level of increase of their executive compensation and subsequently pass SOP.

We confirm that the level of growth in compensation levels in 2012 is sensitive to the percentage of dissent or fail votes. The results in Table 8 show that the level of growth in CEO compensation is inversely related to the level of fail or reject SOP votes. These results suggest that firm Boards react to the negative SOP votes in 2011 by reducing the level of growth of executive compensation in 2012. Table 9 examines the % of change in residuals or excessive compensation, and the results confirm a reduction in excessive compensation for 2012 as a result of the % of rejection votes in 2011 SOP votes. It is interesting to note that the industry adjusted ROA is inversely correlated to the change in total compensation. That is, when ROA increases there is *reduction* in compensation. Table 9 shows that SOP votes are the most significant

determinant of changes in excessive compensation; higher percentage of rejection votes in 2011 less excessive compensation. Table 10 provides evidence of how reductions in excessive compensation, result on an improvement in the % of SOP approval votes. Again, as in Table 5 we see that changes in institutional ownership are not significantly associated to changes in SOP votes. Interestingly, Table 10 also shows that ROE does *not* determine changes in SOP vote. As in Table 9, the ROA coefficient is also negative suggesting that SOP votes are sensitive to compensation levels and returns and not to financial performance. Table 10 also shows that excessive cash payouts are not significantly associated to changes in SOP votes. Rather, shareholders fundamentally react to excessive total compensation as calculated in the proxy statements.

As mentioned earlier we used a conservative measure of shareholder percentage of approval votes ( $PassSOP \% = \# \text{ of approval} / \# (\text{approval} + \text{rejection})$ ). Firms in this sample use various way of calculating SOP approval. Some firms treat an abstention as a rejection while others do not consider abstentions in their calculations. It could be argued that the fact that SOP votes are non-binding an advisory in nature could imply that those shareholders that abstained from voting (and not exercised the proxy alternative) could have been in fact rejection votes that didn't approve the compensation package. In unreported results, adding the vote abstentions as rejections strengthens our results.

## **6. Conclusion**

This paper examines the regulation introduced in 2011 by the SEC in accordance with the Dodd-Frank Act requiring an advisory - non-binding - shareholder vote on executive remuneration also known as say-on-pay. We try to assess the effectiveness of SOP by

examining: If shareholders were able to identify - and “voted down”- excessive or abnormal compensation? What factors determined SOP votes in 2011 and 2012? Does a mandated but non-binding shareholder vote convey relevant information to the Board? Do Boards react to shareholders’ non-binding SOP votes? What is the role of institutional investors in SOP outcomes? Were shareholder-voting patterns different in 2011 and 2012? Are the determinants of previous shareholder proposal studies under 14a-8 similar to those of mandated general shareholder SOP votes? Are the determinants and effects of US SOP different than in the UK?

Our study answers these questions by providing empirical evidence of the first two years of Say-on-pay in the United States. Our results provide evidence in support SOP and shareholder voting rights in general. In particular we find that shareholders effectively identify firms with excessive and abnormal levels of CEO pay. Our results also confirm previous predictions from shareholder proposal studies and finds that SOP approval (reject) votes are associated with firms that have: higher (lower) ROA, higher (lower) returns, lower (higher) institutional ownership and lower (higher) CEO total compensation. However, we also find that approval (reject) votes are associated with firms that have: lower (higher) volatility, lower (higher) abnormal compensation and lower (higher) abnormal accruals. Additionally, we also find that Boards react to the level of SOP rejection votes in by changing both CEO pay as well as the level of abnormal compensation in 2012. The results provide some evidence to infer that the effect of the percentage of institutional investors is less in 2012 than in 2011. This study contributes to the literature in three ways. First, we find evidence that shareholder SOP votes are sensitive not only to excessive compensation, but also SOP votes are sensitive to firm risk, abnormal CEO compensation, accounting quality and financial performance. Second, we find that Boards react to the non-binding SOP rejection votes by subsequently reducing the level of abnormal or excessive

compensation. Third, our results present evidence to suggest that shareholder voting rights -even when non-binding- could be an effective mechanism of corporate governance.

Shareholders were able to effectively identify abnormal compensation and voted down firms with “excessive” CEO pay. In fact changes in SOP votes were determined by changes in levels of excessive compensation and changes in returns. Changes in votes were not determined by changes in ROA. We also find some evidence to suggest that the effect of the level institutional investors is less in 2012 than in 2011. Different from 14a-8 proposal studies we don’t find that firm size and leverage to be determinants of shareholder voting patterns.

In 2003 and 2004 voting results in the UK SOP do not show an association between voting outcomes, firm performance and executive compensation. On the other hand, our results show a statistically significant relationship between SOP votes, returns and executive compensation.

The first two years of SOP votes in the United States show that shareholder non-binding voting rights -even if just advisory in nature- are an important an effective tool in evaluating excessive executive compensation. The SOP votes during 2011 and 2012 show a great degree of shareholder sophistication and Board responsiveness to shareholders’ say on pay. The first two years of the mandated non-binding shareholder voting on executive compensation provide evidence of the monitoring and reward mechanisms that need to coexist between owners and firm managers.

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## Appendix A: Variable Definitions

**Size ( $LnMVE$ ):** Natural log of the market value of equity computed as the average market capitalization of a firm during the past fiscal year. The data are from CRSP.

**Market-to-book ratio ( $MB$ ):** market capitalization (from CRSP) during a fiscal divided by lagged the book value of equity (CEQ, from Compustat).

**Leverage: ( $LEV$ )** the long term debt (DLTT) divided by the book value of equity (CEQ). The data are from Compustat.

**RetVol:** the standard deviations of stock returns over the last 12 months prior to the shareholders' meeting dates. The data are from CRSP.

**Ret12:** the cumulative stock returns over the last 12 months prior to the shareholders' meeting dates. The data are from CRSP.

**Ret12\_Market Adjusted ( $MktAdjRets$ ):** the cumulative stock returns in excess of CRSP VW Index return over the last 12 months prior to the shareholders' meeting dates. The data are from CRSP.

**Return on assets ( $ROA$ ):** operating income (OIADP) for a fiscal year divided by the total asset (AT) at the beginning of the fiscal year.

**Return on Equity ( $ROE$ ):** operating income (OIADP) for a fiscal year divided by the total common equity (CEQ) at the beginning of the fiscal year.

**CEO Ownership ( $CEOOwn\%$ ):** percentage of CEO ownership market capitalization during a fiscal year divided by the book value of equity (CEQ, from Compustat) at the beginning of the fiscal year. The data are from ExecuComp.

**Institutional Ownership ( $InstOwn$ ):** percentage of shares owned by financial institutions divided by the total shares outstanding at the end of each quarter.

**Total Compensation ( $TotComp$ ):** CEO's total compensation comprised of the following: Salary, Bonus, Other Annual, Total Value of Restricted Stock Granted, Total Value of Stock Options Granted (using Black-Scholes), Long-Term Incentive Payouts, and All Other Total. The data are from ExecuComp.

**Total Payout:** Total Payout, computed as the sum of salary, bonus, long-term incentive plan payouts, value of restricted stock grants, proceeds from options exercised during the year, and any other annual pay

**Abnormal CEO compensation ( $AbnTotComp$ ,  $AbnCASHComp$  and  $AbnEquityComp$ ):** the residuals from 3 years of estimated compensation regressions. The coefficients are estimated using data during the past 6 years. The dependent variables of the three compensation

regressions are CEO's cash compensation (salary and bonus), equity-based compensation (stock options and restricted stocks), and total compensation (including option grants). The common independent variables for all three regressions are three-year stock returns, the log of the market value of equity, Fama and French 12 industry classifications, leverage, and calendar year fixed effects. Additionally, we include ROA in the cash compensation regression, the book-to-market ratio in the equity-based compensation regression, and both variables in the total compensation regression as independent variables. Since compensation variables are highly skewed, we use the natural logarithm of the three compensation measures in the regressions. We calculate the coefficients of the compensation regressions for 6 years. We use these coefficients to calculate abnormal compensation and we average three years of residuals, including the year of the SOP vote. (See Cai & Walkling, 2011)

**Accrual quality (*AccrQ*):** the standard deviation of residuals from a regression with annual accruals ACC as the dependent variable and estimated using data over past ten fiscal years. Annual ACC is change of total current assets (ACT), minus change of cash (CHE), minus change of total current liabilities (LCL), minus change of debt in current liabilities (DLC), minus change of deferred taxes (TXDB), minus depreciations (DP), and then divided by average total assets (AT) at the beginning and end of the fiscal year. The explanatory variables of the regression model include lagged, current, and future annual operating cash flows (OANCF), property, plant, and equipment (PPEGT), and annual change in sales (SALE). All variables are scaled by average total assets (AT) at the beginning and end of the fiscal year.

**Excess Compensation (*ResComp*):** actual compensation minus expected compensation. Our benchmark model for expected compensation follows prior research in this area (e.g., Smith and Watts, 1992; Core, Holthausen and Larcker, 1999; and Murphy, 1999), and is obtained by regressing the natural logarithm of compensation where compensation  $\ln(\text{Compensation})$  is Total Compensation or Total Payout on proxies for economic determinants of CEO compensation, such as firm size, growth opportunities, stock return, accounting return, and industry controls.

**Abnormal Accrual (*AbnAccr*):** the residual from the following regression model for the same 2-digit SIC firms:  $TA = \alpha + \beta_1(\Delta Sales - \Delta REC) + \beta_2 PPE + \beta_3 BM + \beta_4 CFO + \varepsilon$ .  $TA$  is the difference between Compustat reported operating cash flows (OANCF) and discontinued operations reclassified as part of operating cash flows (XIDOP) and income before extraordinary items (IBC).  $\Delta Sales$  is the change in sales (SALE) for the year.  $\Delta REC$  is the change in receivables reported on the statement of cash flows (RECCH) for the year.  $PPE$  is the gross amount of property, plant and equipment (PPEGT).  $CFO$  is the operating cash flows (OANCF). All variables used in the abnormal accrual model (except  $BM$ ) are scaled by average total assets using assets from the start and end of the fiscal year.

**Percentage of SOP approval votes:** *PassSOP* % percentage of say-on-pay (SOP) approval votes during a fiscal year divided by the sum of approval plus dissent SOP votes. We don't include abstention votes in the total SOP votes (denominator).

$PassSOP\% = \#approval / (\#approval + \#rejection)$

**Table 1****Russell 3000 Firms SOP Voting Results**

This table provides a description of total number of firms within each rejecting vote percentage for Fama-French 12 industries. The sample includes all SOP votes during 2011 and 2012 from firms in the Russell 3000. Rejecting vote percentage is defined as the ratio of rejecting votes over the total of approval and rejecting votes on executive compensations.

	% of SOP reject votes								
Industry	>50%	>25%	>20%	>10%	>5%	>2%	0-2%	Total	>20%
2011									
Consumer Non-Durables	0	9	13	13	39	64	20	84	15.5%
Consumer Durables	1	2	4	4	16	31	15	46	8.7%
Manufacturing	4	29	42	42	127	177	46	223	18.8%
Energy	5	22	33	33	67	91	23	114	28.9%
Chemicals and Allied Products	0	4	5	5	23	38	13	51	9.8%
Business Equipment	4	27	41	41	144	221	86	307	13.4%
Telephone and Television Transmission	3	5	7	7	30	43	21	64	10.9%
Utilities	2	7	8	8	55	84	3	87	9.2%
Shops Wholesale, Retail, and Some Services	2	16	23	23	81	133	64	197	11.7%
Healthcare, Medical Equipment, and Drugs	0	20	32	32	106	163	64	227	14.1%
Finance	6	49	70	70	249	420	119	539	13.0%
Other*	7	40	53	53	147	220	76	296	17.9%
Total	34	230	331	331	1084	1685	550	2235	14.8%
2012									
Consumer Non-Durables	4	8	12	12	38	70	25	95	12.6%
Consumer Durables	2	8	10	10	26	48	6	54	18.5%
Manufacturing	5	26	33	33	98	176	58	234	14.1%
Energy	4	15	21	21	51	86	18	104	20.2%
Chemicals and Allied Products	0	3	3	3	26	46	16	62	4.8%
Business Equipment	8	46	67	67	173	289	101	390	17.2%
Telephone and Television Transmission	0	5	8	8	29	39	15	54	14.8%
Utilities	1	7	8	8	40	66	8	74	10.8%
Shops Wholesale, Retail, and Some Services	6	19	26	26	68	131	88	219	11.9%
Healthcare, Medical Equipment, and Drugs	10	36	49	49	126	184	52	236	20.8%
Finance	14	55	69	69	207	381	152	533	12.9%
Other*	6	36	44	44	138	231	98	329	13.4%
Total	60	264	350	350	1020	1747	637	2384	14.7%

\* Other: - Mines, Construction, Building Materials, Transportation, Hotels, Business Services, Entertainment

**Table 2**  
**Comparisons of “Targeted Firms” and other Russell 3000 firms**

This table provides a comparison of firm characteristics, accounting and market performance, governance, compensation and earnings quality between firms with over 20% rejection votes, “Targeted” firms and other firms. The sample includes 1332 firms in 2011 and 1336 firms in 2012 that have data available from Russell 3000 SOP voting data, CRSP, Compustat, 13F Disclosure and ExecuComp databases. Panel A is for Year 2011 and Panel B for year 2012. See the Appendix for the descriptions of all variables.

**Panel A: Year 2011**

	Means		Medians		Analysis of Differences	
	"Targeted" Reject >20 %	Other Russell 3000 firms	"Targeted" Reject >20 %	Other Russell 3000 firms	<u>p-values</u>	
					T-test	Wilcoxon
<u>Firm Characteristics</u>						
<i>Ln(TA)</i>	8.26	8.02	7.94	7.91	0.062	0.124
<i>LN(MVE)</i>	14.75	14.58	14.51	14.43	0.150	0.273
<i>MB</i>	2.03	2.55	1.57	1.76	0.010	0.022
<i>Leverage</i>	0.75	0.98	0.44	0.37	0.253	0.293
<i>Ln(Sales)</i>	6.63	5.94	7.25	6.92	<.0001	<.0001
<u>Accounting Performance and Stock Returns</u>						
<i>Ret12 (%)</i>	14.73	30.84	9.30	23.40	<.0001	<.0001
<i>Mkt Adj Rets (%)</i>	-0.23	0.96	-0.15	0.72	<.0001	<.0001
<i>ROA</i>	0.10	0.13	0.09	0.11	<.0001	<.0001
<i>ROE</i>	0.26	0.32	0.20	0.24	0.081	<.0001
<u>Governance</u>						
<i>CEO Own(%)</i>	1.47	1.59	0.34	0.29	0.713	0.203
<i>Inst Own(%)</i>	80.85	77.86	84.11	81.42	0.030	0.039
<u>Compensation</u>						
<i>TotalComp(in millions)</i>	9.00	5.63	6.59	3.86	<.0001	<.0001
<i>CashComp</i>	1.38	1.00	0.95	0.82	<.0001	<.0001
<i>EquityComp</i>	4.81	2.88	3.43	1.77	<.0001	<.0001
<i>% ΔComp</i>	87.87	50.78	34.11	22.32	0.033	0.015
<i>AbnCashComp</i>	0.21	-0.08	0.13	-0.01	<.0001	<.0001
<i>AbnEquityComp</i>	0.28	-0.05	0.33	0.05	<.0001	<.0001
<i>AbnTotalComp</i>	0.28	-0.06	0.28	0.05	<.0001	<.0001
<u>Accounting quality</u>						
<i>AccrQ</i>	0.04	0.05	0.03	0.04	0.275	0.591
<i>AbnAccr</i>	0.00	-0.02	-0.01	-0.01	<.0001	0.014

**Table 2 (cont.)**  
**Comparisons of “Targeted Firms” and other Russell 3000 firms (cont.)**

**Panel B: Year 2012**

	Means		Medians		Analysis of Differences	
	"Targeted" Reject >20%	Other Russell 3000 firms	"Targeted" Reject >20%	Other Russell 3000 firms	<u>p-values</u>	
					t-test	Wilcoxon
<u>Firm Characteristics</u>						
<i>Ln(TA)</i>	8.13	8.03	7.86	7.95	0.45	0.49
<i>LN(MVE)</i>	14.74	14.72	14.54	14.58	0.86	0.97
<i>MB</i>	2.84	3.58	1.83	1.96	0.24	0.21
<i>Leverage</i>	2.00	1.02	0.41	0.38	0.43	0.26
<i>Ln(Sales)</i>	6.61	6.24	7.22	7.07	0.11	0.21
<u>Accounting Performance and Stock Returns</u>						
<i>Ret12 (%)</i>	-7.75	7.03	-8.26	5.69	<.0001	<.0001
<i>Mkt Adj Rets (%)</i>	-1.54	-0.07	-1.02	0.09	<.0001	<.0001
<i>ROA</i>	0.09	0.12	0.09	0.11	<.0001	<.0001
<i>ROE</i>	0.23	0.29	0.19	0.23	0.01	<.0001
<u>Governance</u>						
<i>CEO Own(%)</i>	1.29	1.40	0.41	0.32	0.58	0.01
<i>Inst Own(%)</i>	83.10	79.53	84.58	83.01	0.06	0.07
<u>Compensation</u>						
<i>TotalComp</i> ((in millions)	10.54	5.88	7.04	4.29	<.0001	<.0001
<i>CashComp</i>	1.53	0.96	0.96	0.82	<.0001	<.0001
<i>EquityComp</i>	6.52	3.05	4.06	2.01	<.0001	<.0001
<i>% ΔComp</i>	54.02	33.37	10.77	7.31	0.19	0.01
<i>AbnCashComp</i>	0.17	-0.07	0.17	-0.02	0.01	<.0001
<i>AbnEquityComp</i>	0.43	-0.07	0.45	0.02	<.0001	<.0001
<i>AbnTotalComp</i>	0.39	-0.08	0.40	0.05	<.0001	<.0001
<u>Accounting quality</u>						
<i>AccrQ</i>	0.04	0.05	0.03	0.04	0.04	0.09
<i>AbnAccr</i>	0.00	-0.01	0.00	-0.01	0.11	0.13

**Table 3**  
**SOP Votes, Firm Characteristics and Performance**

This table reports the OLS regression results of firms' approval SOP votes (*PassSOP* %) on firms' characteristics and their accounting and stock market performance. The regression is executed separately for years 2011, 2012 and both years combined. *PassSOP* % is defined the ratio of approval votes over the total of approval and rejection votes on Executive Compensations. Firm characteristics include firm size (*ln(MVE)*), growth opportunity (*MB*), Leverage, Return Volatilities over the past 12 months (*Ret Vol*), % of firms' equity held by CEO (*CEO Own* %) and percentage of firms' equity owned by institutional investors (*Inst Own* %). Firms' performance is measured as Return on Assets (*ROA*) and stock market returns over the past 12 months (*Ret12*). The sample includes firm that have data available from Russell 3000 SOP voting data, CRSP, Compustat, 13F and ExecuComp databases. See the Appendix for the descriptions of all variables. T-stats are reported in parentheses.

**Dependent Variable % of Approval votes**

	Predicted	2011	2012	Both	2011	2012	Both
Intercept		111.79 (24.71)	106.07 (20.87)	108.43 (31.82)	112.92 (22.23)	112.18 (20.33)	111.59 (29.64)
<i>LN(MVE)</i>	neg	-1.05 (-4.00)	-0.70 (-2.43)	-0.84 (-4.29)	-1.25 (-4.19)	-1.21 (-3.79)	-1.18 (-5.37)
<i>MB</i>	pos	0.45 (3.01)	0.42 (3.12)	0.43 (4.36)	0.17 (1.01)	0.29 (2.11)	0.27 (2.58)
<i>Leverage</i>	neg	-0.02 (-0.27)	-0.07 (-1.39)	-0.06 (-1.49)	-0.02 (-0.30)	-0.04 (-0.84)	-0.03 (-0.66)
<i>RET VOL</i>	neg	-36.70 (-4.33)	-43.25 (-4.47)	-39.03 (-6.08)	-54.40 (-5.56)	-41.02 (-3.92)	-47.02 (-6.64)
<i>CEO Own</i>	?	0.05 (0.61)	0.03 (0.26)	0.04 (0.67)	0.02 (0.22)	0.02 (0.16)	0.01 (0.21)
<i>Inst Own</i> %	neg	-5.77 (-3.44)	-3.84 (-2.09)	-4.87 (-3.91)	-3.53 (-1.89)	-3.62 (-1.82)	-3.68 (-2.69)
<i>Ret 12</i>	pos				0.06 (6.56)	0.08 (5.80)	0.06 (7.73)
<i>ROA</i>	pos				10.27 (2.47)	13.06 (2.85)	13.21 (4.31)
Industry Dummies		yes	yes	yes	yes	yes	yes
Year dummy				yes			yes
N		1308	1438	2746	1045	1186	2231
Adj. R <sup>2</sup>		0.05	0.03	0.04	0.10	0.09	0.08

**Table 4**  
**SOP Votes and CEO Compensations**

This table reports the OLS regression results of approval SOP votes (*PassSOP* %) on firms' executive compensations that include cash, equity and total compensations respectively. The regression is executed separately for years 2011, 2012 and both years combined. *PassSOP* % is defined the ratio of approval votes over the sum of approval and rejection votes on Executive Compensations. Firms' characteristics and performance are also included as control variables. Firm characteristics include firm size (*ln(MVE)*), growth opportunity (*MB*), *Leverage*, Return Volatilities over the past 12 months (*Ret Vol*), % of firms' equity held by CEO (*CEO Own* %) and percentage of firms' equity owned by institutional investors (*Inst Own* %). Firms' performance is measured as Return on Assets (*ROA*) and stock market returns over the past 12 months (*Ret12*). The sample includes all firms that have data available from Russell 3000 SOP voting data, CRSP, Compustat, 13F and ExecuComp databases. See the Appendix for the descriptions of all variables. T-stats are reported in parentheses.

Dependent Variable % of Approval votes							
		Predicted	2011	2012		Both Years	
Intercept		121.28 (23.98)	118.25 (22.12)	117.45 (21.68)	110.70 (19.31)	118.26 (31.80)	112.74 (28.72)
<i>LN(MVE)</i>	neg	0.16 (0.49)	-0.49 (-1.54)	0.38 (1.04)	-0.43 (-1.26)	0.30 (1.20)	-0.43 (-1.84)
<i>MB*100</i>	pos	0.15 (0.89)	0.14 (0.86)	0.27 (1.97)	0.28 (2.05)	0.25 (2.41)	0.25 (2.42)
<i>Leverage</i>	neg	0.04 (0.63)	0.04 (0.52)	-0.05 (-1.07)	-0.04 (-0.79)	-0.03 (-0.71)	-0.02 (-0.52)
<i>RET VOL</i>	neg	-51.09 (-5.37)	-51.05 (-5.30)	-33.70 (-3.29)	-36.56 (-3.53)	-41.37 (-5.97)	-43.01 (-6.14)
<i>CEO Own</i>	?	-0.04 (-0.52)	-0.09 (-1.13)	-0.15 (-1.43)	-0.13 (-1.23)	-0.09 (-1.38)	-0.11 (-1.73)
<i>Inst Own</i>	neg	-4.18 (-2.30)	-3.92 (-2.14)	-2.40 (-1.24)	-2.90 (-1.48)	-3.28 (-2.46)	-3.41 (-2.53)
<i>Ret12*100</i>	pos	0.06 (7.05)	0.06 (6.41)	0.08 (6.08)	0.08 (5.90)	0.06 (8.29)	0.06 (7.88)
<i>ROA</i>	pos	5.84 (1.43)	6.39 (1.55)	8.80 (1.95)	10.54 (2.32)	8.95 (2.97)	10.25 (3.38)
<i>Total Comp</i>	neg	-3.42 (-7.93)		-3.58 (-8.10)		-3.45 (-11.16)	
<i>Cash Comp</i>	neg		-1.46 (-3.56)		-0.52 (-1.44)		-0.84 (-3.12)
<i>Equity Comp</i>	neg		-0.85 (-4.74)		-0.99 (-5.31)		-0.93 (-7.13)
Industry Dummies		yes	yes	yes	yes	yes	yes
Year dummy						yes	Yes
N		1043	1045	1184	1186	2227	2231
Adj. R <sup>2</sup>		0.13	0.15	0.13	0.13	0.11	0.13

**Table 5**  
**SOP Votes and Abnormal CEO Compensation**

This table reports the OLS regression analysis results of approval SOP votes (*PassSOP* %) on firms' executive abnormal compensations that include abnormal cash (*Abn CashComp*), abnormal equity (*Abn EquityComp*) and abnormal total compensations (*Abn TotalComp*) respectively. The regression is executed separately for years 2011, 2012 and both years combined. *PassSOP* % is defined the ratio of approval votes over the sum of approval and rejection votes on Executive Compensations. Firms' characteristics, performance and total CEO compensations are also included as control variables. Firm characteristics include firm size ( $\ln(MVE)$ ), growth opportunity (*MB*), Leverage, Return Volatility over the past 12 months (*RetVol*), % of firms' equity held by CEO (*CEO Own* %) and percentage of firms' equity owned by institutional investors (*Inst Own* %). Firms' performance is measured as Return on Assets (*ROA*) and stock market returns over the past 12 months (*Ret12*). The sample includes all firms that have data available from Russell 3000 SOP voting data, CRSP, Compustat, 13F and ExecuComp databases. See the Appendix for the descriptions of all variables. T-stats are reported in parentheses.

Dependent Variable % of Approval votes							
	Predicted	2011	2012	2011	2012	Both	
Intercept		131.46 (15.81)	126.88 (14.44)	90.57 (8.98)	82.52 (6.65)	129.89 (21.23)	88.29 (10.99)
<i>LN(MVE)</i>	neg	1.87 (2.84)	4.90 (6.03)	-0.72 (-1.22)	-0.02 (-0.03)	3.21 (6.14)	-0.41 (-0.88)
<i>MB*100</i>	pos	0.13 (0.65)	-0.05 (-0.25)	0.21 (0.71)	0.34 (1.00)	0.07 (0.49)	0.33 (1.50)
<i>LEV*100</i>	neg	0.08 (1.16)	0.14 (1.07)	0.08 (0.24)	-0.14 (-0.51)	0.10 (1.45)	-0.08 (-0.40)
<i>RET VOL</i>	neg	-53.66 (-4.16)	-6.44 (-0.43)	-18.30 (-0.97)	-16.90 (-0.78)	-35.26 (-3.60)	-17.01 (-1.19)
<i>CEO Own</i>	?	0.02 (0.11)	-0.08 (-0.35)	0.27 (1.19)	-0.14 (-0.40)	-0.03 (-0.25)	0.11 (0.53)
<i>Inst Own</i> %	neg	-5.90 (-2.40)	-4.02 (-1.53)	0.67 (0.20)	-4.16 (-1.12)	-5.78 (-3.19)	-2.91 (-1.16)
<i>Ret 12 *100</i>	pos	0.06 (5.09)	0.11 (5.47)	0.10 (5.17)	0.10 (3.24)	0.06 (6.75)	0.10 (6.41)
<i>ROA</i>	pos	5.53 (1.04)	16.47 (2.21)	-2.83 (-0.36)	6.77 (0.54)	12.49 (2.79)	-0.50 (-0.07)
<i>Total Comp</i>	neg	-7.53 (-6.02)	-13.04 (-9.05)			-9.96 (-10.44)	
<i>Abn TotalComp</i>	neg	-0.74 (-1.34)	-1.34 (-2.16)			-1.11 (-2.62)	
<i>Abn CashComp</i>	neg			-1.23 (-2.09)	-3.18 (-4.07)		-2.22 (-4.56)
<i>Abn EquityComp</i>	neg			-2.87 (-3.85)	-2.95 (-3.41)		-2.90 (-5.07)
Industry Control		yes	yes	yes	yes	yes	yes
Year Dummy						yes	yes
N		591	674	351	390	1265	741
Adj. R <sup>2</sup>		0.19	0.25	0.17	0.13	0.20	0.15

**Table 5 (Cont.)**  
**SOP Votes and Excessive CEO Compensation**

This table reports the OLS regression analysis results of approval SOP votes (*PassSOP* %) on firms' executive abnormal compensations that include excessive payout *ResPayout* and excessive total compensation *ResComp* respectively as calculated in regressions (7), (8) and (9). The regression is executed separately for years 2011 and 2012. *PassSOP* % is defined the ratio of approval votes over the sum of approval and rejection votes on Executive Compensations. Firms' characteristics, performance and total CEO compensations are also included as control variables. Firm characteristics include firm size (*Ln(MVE)*), growth opportunity (*MB*), Leverage, Return Volatility over the past 12 months (*RetVol*), % of firms' equity held by CEO (*CEO Own* %) and percentage of firms' equity owned by institutional investors (*Inst Own* %). Firms' performance is measured as Return on Assets (*ROA*) and stock market returns over the past 12 months (*Ret12*). The sample includes all firms that have data available from Russell 3000 SOP voting data, CRSP, Compustat, 13F and ExecuComp databases. See the Appendix for the descriptions of all variables. T-stats are reported in parentheses

**Dependent Variable: % of Approval votes**

	Predicted	2011	2012	2011	2012	2011	2012
<i>LN(MVE)</i>	neg	-0.94 (-3.03)	-0.84 (-2.48)	-1.19 (-3.90)	-0.99 (-2.97)	-0.73 (-2.45)	-0.25 (-0.78)
<i>MB</i>	pos	0.19 (1.09)	0.22 (1.54)	0.19 (1.11)	0.23 (1.59)	0.14 (0.80)	0.19 (1.41)
<i>LEV</i>	neg	-0.01 (-0.20)	-0.04 (-0.87)	-0.02 (-0.25)	-0.05 (-1.13)	-0.02 (-0.30)	-0.07 (-1.53)
<i>RET VOL</i>	neg	-57.78 (-5.76)	-45.48 (-4.34)	-57.37 (-5.72)	-43.82 (-4.18)	-56.70 (-5.86)	-35.96 (-3.61)
<i>CEO Own</i>	?	0.03 (0.42)	0.05 (0.49)	-0.01 (-0.09)	0.02 (0.15)	0.02 (0.24)	0.17 (1.68)
<i>Inst Own</i> %	neg	-3.35 (-1.65)	-2.07 (-1.00)	-2.96 (-1.45)	-1.07 (-0.52)	-4.24 (-2.15)	-1.22 (-0.62)
<i>Ret 12</i>	pos	0.07 (7.16)	0.09 (6.42)	0.07 (7.13)	0.09 (6.48)	0.07 (7.43)	0.09 (6.45)
<i>ROA</i>	pos	10.71 (2.46)	17.23 (3.33)	9.41 (2.16)	14.66 (2.83)	10.30 (2.45)	15.68 (3.20)
<i>ResPayout</i> (*10 <sup>4</sup> )	neg	-3.07 (-5.76)	-3.21 (-6.30)	-1.45 (-1.45)	-0.52 (-0.52)	-2.15 (-2.15)	-0.62 (-0.62)
<i>%ResPayout</i>	neg			-2.00 (-5.65)	-3.11 (-6.82)		
<i>ResComp</i> (*10 <sup>4</sup> )	neg					-8.68 (-10.17)	-10.84 (-13.11)
Industry Control		yes	yes	yes	yes	yes	yes
N		984	1132	983	1132	984	1132
Adj. R <sup>2</sup>		0.1248	0.1295	0.1235	0.1344	0.1825	0.2192

**Table 6**  
**SOP Votes and Earnings Quality**

This table reports the OLS regression analysis results of approval SOP votes (*PassSOP* %) on firms' earnings quality that include the R\_Square and the average residual from the modified Jones' accrual regression model, the accrual quality (*AccrQ*) and abnormal accruals (*AbnAccr*) respectively. The regression is executed separately for years 2011, 2012 and both years combined. Firms' characteristics, performance and total CEO compensations are also included as control variables. Firm characteristics include firm size (*ln(MVE)*), growth opportunity (*MB*), Leverage, Return Volatilities over the past 12 months (*Ret Vol*), % of firms' equity held by CEO (*CEO Own* %) and percentage of firms' equity owned by institutional investors (*Inst Own* %). Firms' performance is measured as Return on Assets (*ROA*) and stock market returns over the past 12 months (*Ret12*). The sample includes all firms that have data available from Russell 3000 SOP voting data, CRSP, Compustat, 13F and ExecuComp databases. See the Appendix for the descriptions of all variables. T-stats are reported in parentheses.

Dependent Variable % of Approval votes

		Predicted	2011	2012	Both Years
Intercept		120.99 (22.89)	118.14 (21.03)	116.77 (20.9)    114 (19.36)	115.31 (27.02)
<i>LN(MVE)</i>	neg	-0.14 (-0.40)	-0.07 (-0.20)	-0.33 (-0.87)	-0.34 (-0.85)
<i>MB</i>	pos	0.20 (1.17)	0.21 (1.25)	0.24 (1.71)	0.26 (1.88)
<i>LEV</i>	neg	-0.03 (-0.42)	-0.05 (-0.76)	-0.05 (-0.99)	-0.05 (-1.05)
<i>RET VOL</i>	neg	-57.13 (-5.86)	-45.32 (-4.41)	-39.41 (-3.74)	-27.30 (-2.47)
<i>CEO Own</i>	?	-0.07 (-0.84)	-0.04 (-0.53)	-0.17 (-1.66)	-0.12 (-1.17)
<i>Inst Own</i>	neg	-3.48 (-1.86)	-3.11 (-1.53)	-1.49 (-0.75)	-2.56 (-1.24)
<i>Ret 12</i>	pos	0.06 (6.88)	0.07 (6.88)	0.08 (5.94)	0.09 (6.14)
<i>ROA</i>	pos	5.00 (1.20)	1.94 (0.45)	8.88 (1.94)	6.08 (1.29)
<i>Total Comp</i>	neg	-3.36 (-7.72)	-3.19 (-7.26)	-3.53 (-7.92)	-3.27 (-7.23)
<i>AccrQ</i>	pos	7.94 (0.81)		21.63 (1.99)	14.09 (1.82)
<i>AbnAccr</i>	neg		-13.62 (-2.36)		-15.85 (-2.48)
Industry Control		Yes	Yes	Yes	Yes
Year Dummy					Yes
N		993	863	1146	997
Adj. R <sup>2</sup>		0.15	0.15	0.14	0.14

**Table 7**  
**Comparisons of Firms “Failed” in 2011 and “Passed” in 2012**

This table provides a comparison of firm characteristics, financial and market performance, governance, compensation and earnings quality between firms that failed SOP vote in 2011 with over 20% rejection rate and passed in 2012. The sample includes firms that have data available from Russell 3000 SOP voting data, CRSP, Compustat, 13F and ExecuComp databases. See the Appendix for the descriptions of all variables.

	Means		Medians		Analysis of Differences	
	2011	2012	2011	2012	<u>p-values</u>	
					t-test	Wilcoxon
<u>Firm Characteristics</u>						
<i>Ln(TA)</i>	8.269	8.315	7.981	8.071	0.852	0.800
<i>LN(MVE)</i>	14.695	14.823	14.275	14.492	0.520	0.444
<i>MB</i>	1.830	2.733	1.538	1.697	0.164	0.068
<i>Leverage</i>	0.746	1.089	0.403	0.425	0.216	0.559
<i>Ln(Sales)</i>	6.312	6.387	7.199	7.227	0.882	0.739
<u>Accounting Performance and Stock Returns</u>						
<i>Ret12 (%)</i>	17.484	3.119	10.947	3.528	0.008	0.028
<i>Mkt Adj Rets (%)</i>	-0.116	-0.373	-0.097	-0.188	0.441	0.807
<i>ROA</i>	0.095	0.092	0.091	0.093	0.776	0.823
<i>ROE</i>	0.277	0.245	0.208	0.197	0.564	0.858
<u>Governance</u>						
<i>CEO Own(%)</i>	1.462	1.414	0.312	0.379	0.941	0.615
<i>Inst Own(%)</i>	79.912	83.042	83.947	85.380	0.080	0.235
<u>Compensation</u>						
<i>TotalComp '000s</i>	7.924	7.746	6.074	5.719	0.822	0.600
<i>CashComp</i>	1.244	1.190	0.880	0.865	0.697	0.995
<i>EquityComp</i>	4.447	3.924	3.307	2.685	0.299	0.330
<i>% ΔComp</i>	116.851	7.012	42.979	0.758	<0.001	<0.001
<i>AbnCashComp</i>	0.051	0.086	0.019	0.062	0.588	0.547
<i>AbnEquityComp</i>	0.162	0.181	0.242	0.252	0.835	0.888
<i>AbnTotalComp</i>	0.141	0.152	0.199	0.205	0.857	0.915
<u>Accounting quality</u>						
<i>AccrQ</i>	0.043	0.045	0.032	0.034	0.671	0.794
<i>AbnAccr</i>	0.001	-0.006	-0.010	-0.008	0.482	0.453

**Table 8**  
**Analysis of Changes in CEO compensation in 2012 following SOP vote in 2011**

This table presents the results of pooled cross-sectional OLS regressions (a logit regression) where the dependent variable is the % change in total compensation growth from year 2011 to 2012. The primary variable of interest is the percentage of say-on-pay (SOP) rejection or disapproval votes during the fiscal year 2011 divided by the sum of approval plus dissent SOP votes *RejSOP %*. Industry-adjusted *IndAdjRets* is the cumulative returns over the 12 months prior to the shareholders' meeting dates, less the return for the median firm in that firm's two-digit SIC code for the year. Industry-adjusted Return on Asset *IndAdjROA* is income before extraordinary items divided by average total assets for the year, less the ROA for the median firm in that firm's two-digit SIC code for the same year *Ln(SALES)* is the natural logarithm of firm sales for 2012. *AgeDum* is equal to 1 if the CEO is 65 years or older or zero otherwise. Our sample consists of all firms with available data from Russell 3000, CRSP, Compustat, 13F and ExecuComp databases. See the Appendix for the descriptions of all variables. T-stats are reported in parentheses.

Dependent variable: **% change in total compensation from year 2011 to 2012**

		Predicted			
Intercept		0.050 (0.603)	0.066 (0.642)		
<i>Ln(SALES)</i>	pos	0.009 (0.812)	0.001 (0.041)	0.014 (4.906)	0.006 (1.234)
<i>IndAdjRET</i>	pos	0.002 (4.062)	0.003 (4.544)	0.002 (4.045)	0.003 (4.475)
<i>IndAdjROA</i>	pos	0.011 (0.059)	-0.162 (-0.685)	0.016 (0.083)	-0.150 (-0.636)
<i>%RejectSOP2011</i>	neg	-0.004 (-2.696)	-0.003 (-1.752)	-0.004 (-2.708)	-0.003 (-1.775)
<i>Abn TotalComp</i>	neg		-0.013 (-0.683)		-0.019 (-1.018)
<i>CEO AgeDum</i>	?			0.055 (1.101)	0.109 (1.893)
Industry Dummies		yes	yes	yes	yes
N		907	520	907	520
Adj. R <sup>2</sup>		0.030	0.044	0.055	0.058

**Table 9**  
**Analysis of Changes in Excess Pay in 2012 following the SOP 2011 vote**

This table presents the results of pooled cross-sectional OLS regressions (a logit regression) where the dependent variable is the change in compensation from year 2011 to 2012. The primary independent variable of interest is the SOP vote in 2011. The sample for the compensation change analysis consists of observations for all *ExecuComp* CEOs from fiscal years 1993 to 2010 where the CEO has compensation data for year 2011 and year 2012 pay.

Total Compensation (*TotComp*) is salary, bonus, long-term incentive plan payouts, value of restricted stock grants, value of options granted during the year and any other annual pay for the CEO in year. Total Payout is salary, bonus, long-term incentive plan payouts, value of restricted stock grants, the proceeds from options exercised during the year, and any other annual pay for the CEO in year *t*. The compensation regression variables are: Sales, CEO tenure, Book to market, industry adjusted returns, returns and ROA for both years *t* and *t*-1 and industry controls. %Residual (Total Comp) and %Residual (Total Payout) are the residual for each compensation variable computed using equation (9). For Total Comp and Total Payout, the Change in %Residual(*X*) variable is computed as %Residual(*X*<sub>*t*+2</sub>) - %Residual(*X*<sub>*t*</sub>). Industry-adjusted RET<sub>*t*+1</sub> is the firm's return for the year *t*+1, less the return for the median firm in that firm's two-digit SIC code for the year. Industry-adjusted ROA<sub>*t*+1</sub> is income before extraordinary items divided by average total assets for the year *t*+1, less the ROA for the median firm in that firm's two-digit SIC code for the year. Log (Sales<sub>*t*+1</sub>) is the natural logarithm of firm sales. CEO is 64 or older *t*+1 is equal to one if the CEO is 64 or older, and zero otherwise. Following Smith & Watts, 1992; Core, Holthausen and Larcker, 1999 and Murphy, 1999.

Dependent variable: % change (payout and total) 2011 to 2012

	Predicted	change in % residual payout	change in % residual total compensation
<i>Ln(SALES)</i>	pos	0.0005 (0.1115)	0.0060 (2.2701)
<i>IndAdjRET</i>	pos	0.0011 (1.2160)	0.0005 (0.8659)
<i>IndAdjROA</i>	pos	-0.9063 (-2.7201)	-0.5451 (-2.9394)
<i>%RejectSOP 2011</i>	neg	-0.0042 (-1.9133)	-0.0069 (-5.5026)
<i>ResPayout (*10<sup>4</sup>)</i>	pos	0.2886 (9.0111)	
<i>ResTotal (*10<sup>4</sup>)</i>	pos		0.4258 (11.0429)
Industry Dummies		yes	yes
N		874	874
Adj. R <sup>2</sup>		0.030	0.044

**Table 10**  
**Analysis of Changes in SOP votes in 2012**

This table reports the OLS regression analysis results of changes in approval SOP votes (*PassSOP* %) on firms' executive excessive compensations that include excessive payout *ResPayout* and excessive total compensation *ResComp* respectively as calculated in regressions (7), (8) and (9). *PassSOP* % is defined the ratio of approval votes over the sum of approval and rejection votes on Executive Compensations. Firms' characteristics, performance and total CEO compensations are also included as control variables. Firm characteristics include firm size (*Ln(MVE)*), growth opportunity (*MB*), Leverage, Return Volatility over the past 12 months (*RetVol*), % of firms' equity held by CEO (CEO Own %) and percentage of firms' equity owned by institutional investors (*Inst Own* %). Firms' performance is measured as Return on Assets (*ROA*) and stock market returns over the past 12 months (*Ret12*). The sample includes all firms that have data available from Russell 3000 SOP voting data, CRSP, Compustat, 13F and ExecuComp databases. See the Appendix for the descriptions of all variables. T-stats are reported in parentheses

Dependent variable: % change SOP approval vote from 2011 to 2012				
Changes in:	2012			
$\Delta \text{LN}(\text{MVE})$	6.75 (2.84)	6.96 (2.94)	7.83 (3.37)	7.62 (3.27)
$\Delta \text{MB}$	0.22 (0.78)	0.22 (0.75)	0.16 (0.58)	0.19 (0.67)
$\Delta \text{LEV}$	0.04 (0.44)	0.04 (0.43)	0.02 (0.30)	0.03 (0.41)
$\Delta \text{RET VOL}$	-45.98 (-3.16)	-46.14 (-3.17)	-46.13 (-3.23)	-43.91 (-3.06)
$\Delta \text{CEO Own}$	-0.14 (-0.19)	-0.09 (-0.12)	-0.06 (-0.09)	-0.15 (-0.22)
$\Delta \text{Inst Own \%}$	-1.35 (-0.38)	-1.65 (-0.46)	-2.24 (-0.64)	-1.89 (-0.54)
$\Delta \text{Ret 12}$	0.02 (2.28)	0.02 (2.34)	0.02 (2.34)	0.02 (2.26)
$\Delta \text{ROA}$	-8.82 (-0.91)	-9.13 (-0.94)	-7.93 (-0.83)	-9.57 (-1.00)
$\Delta \text{ResPayout}(*10^4)$	4.18 (0.69)			
$\Delta \% \text{ResPayout}$		-0.65 (-1.01)		
$\Delta \text{ResComp}(*10^4)$			-8.24 (-5.82)	
$\Delta \% \text{ResComp}$				-6.05 (-5.49)
N	848	847	848	847
Adj. R <sup>2</sup>	0.0161	0.0168	0.0537	0.0498