# Executive compensation, financial performance and say on pay votes

**Xiaoli Yuan**
Elizabeth City State University, North Carolina, USA

**Wenguang Lin**
Western Connecticut State University, Connecticut, USA

**Ebere A. Oriaku**
Elizabeth City State University, North Carolina, USA

**Keywords**
Financial Characteristics; Corporate Governance; Executive Compensation; Say on Pay.

**Abstract**

*The Dodd–Frank Wall Street Reform and Consumer Protection Act of 2010 was passed as a response to the late-2000s recession. A shareholder opt-in executive pay vote was introduced as a solution to the managerial power problem. We examine the results of this recommended solution and prove its viability. We find that there is a stronger association between high CEO pay and low say-on-pay vote support for firms with negative financial performance. We also find the market-to-book ratio is significantly lower for companies that failed say-on-pay votes. Furthermore, regulated industries such as financial services are more likely receive unfavourable say-on-pay votes. We document an increase in the sensitivity of CEO pay to poor performance. Overall, these finds are consistent with calls for less "rewards for failure" that led to the Dodd–Frank Wall Street Reform and Consumer Protection Act.*

## 1 Introduction

Responding to criticism and anger over excessive pay at Wall Street firms that have bailed out by the federal government, the Obama administration used legislation as main vehicle fixing oversize compensation by mandating the ability of shareholders to have a voice on executive compensation, or Say on Pay (SOP or say-on-pay, here after). In 2009, the say-on-pay was required for Troubled Asset Relief Program (TARP, here after) recipients by the American Recovery and Reinvestment Act of 2009. However, The Dodd–Frank Wall Street Reform and Consumer Protection Act of 2010 imposed the say-on-pay on most publicly traded companies. The Dodd-Frank Act also requires reporting by all public companies on CEO to median employee pay ratios and other compensation data. Prior to the legislation, Obama administration limited executive pay to $500,000 for bailed-out firms in 2009.

Although, the first attempt to provide shareholders with the opportunity to influence executive compensation was made in the United States in 2006. The UK was the first nation in mandating that shareholders be allowed a non-binding, or advisory vote on pay. Then, SOP has been mandated by few EU countries. In the UK, section 439 of the Companies Act mandates a vote on director pay at the yearly accounts meeting. Directors are expected to disclose their remuneration package in a "Remuneration Report" (section 420). Failure to do this leads to fines. Based on a large sample of UK firms over the period from 2000 to 2005, Ferri and Maber (2009) investigated non-binding or advisory vote on pay in the UK and found no evidence of a change in the level and growth rate of CEO compensation after the adoption of say on pay. In contrast, Alissa (2009) finds evidence that shareholders use the vote to convey their dissatisfaction with excessive executive compensation practices, i.e. SOP is associated with a reduction in excess compensation and greater CEO turnover. So while the impact of SOP in the UK is unclear, there is little research on the impact of SOP in the US.

This paper examines the results of SOP votes and proves its viability in the United States. Specifically, we look at financial characteristics of firms with less than 50% support on say-on-pay

votes. This study makes several contributions. Primarily, my results show that there is a stronger association between high CEO pay and low say-on-pay vote support for firms with negative financial performance. Moreover, firms are not statistically more likely to receive against votes if they forfeited tax deductions under Section 162(m). One implication of our results is that the tax provision alone such as section 162(m) could not effectively fix outsize fat cat pay.

This paper in Section 2 develops hypothesis. Section 3 discusses our research design. Section 4 provides our empirical results and Section 5 is our conclusions. All the research articles cited are relegated to the Reference.

## 2 Hypothesis Development

Prior studies suggest that executive compensations are often determined under suboptimal bargaining conditions and, thus, do not reflect shareholders' best interests (e.g., Jensen and Murphy 1990; Khurana 2007; Bebchuk and Fried 2004). In a written testimony submitted before the committee on financial services united states house of representatives hearing on empowering shareholders on executive compensation, Bebchuk (2007) argues SOP, as reflected and formalized in an advisory vote on the remuneration report, will alter those conditions in a way that is conducive to "arms-length" bargaining, resulting in more efficient executive compensation contracting. Regardless of the reasons in setting outsize executive pay, failed results for SOP votes suggest the board of executives' interests do not necessarily align with shareholders' interest. While the say on pay vote is officially non-binding, White and Patrick (2007) provide empirical evidence suggesting many shareholders, corporations and their executives take the vote very seriously.

Prior studies on compensation and company performance have shed a light on how shareholders measure excess compensation, or how they identify a firm which pays excessive compensation (Core et al. 1999 and Crystal 1991). Considering assertions that executive compensation is excessive, we expect that the percentage of shareholders voting against executive compensation will increase with its perceived excessive compensation. Our first hypothesis is:

*H1: The likelihood of failing SOP votes is positively associated with total executive compensation.*

In addition to excessive compensation studies, Bebchuk and Fried (2004) provided empirical evidence that executive compensation is not related to performance. If shareholders feel that compensation is not been performance based, i.e., that executives have not deserved their compensation, they are more likely to vote to reject. It leads to our second hypothesis:

*H2: The likelihood of failing SOP votes is associated with negative performance based compensation.*

## 3 Research Design

The primary focus of this research is to examine the effect of the Dodd-Frank Act on named executive officers in those firms affected and potentially affected by this legislation. The Say on Pay influences the extent to which firms are affected. The sample consists of Russell 3000 firms from publicly traded companies per Proxy Monitor database during the period of 2011 to present, from which we also collect data of say-on-pay votes. To carry out this study, we focus on the firms with less than 50% support on say-on-pay votes.

We use compensation data from ExecuComp for the analysis. Total executive compensation consists of all seven components reported in the proxy statement, including salary, bonus, stock awards, option awards, non-equity incentive plan compensation, all other annual compensation, and total. We retrieve other financial data from either Compustat databases or SEC filings. The initial sample consists of all ExecuComp firms with non-zero CEO compensation for 2010 and 2011 or a total of 3,307 firm observations.

To gain insight into financial characteristics associated with receiving failed SOP votes, we model the likelihood of failed SOP votes in binary logistic regression with the dependent variable, Failed, which is 1 if receiving failed SOP votes and 0 otherwise. We control for characteristics associated with compensation; Control variables include the natural log of assets as a proxy for

size (LAssets); larger firms tend to have larger compensation packages. We include the natural logarithm of net income (LNI) as a measure of firm performance. As in the prior literature (e.g., Healy et al. 1987), we define the natural logarithm of net income to be zero if net income is negative. Performance can directly influence the SOP votes. That is, the negative performance, the more likely companies receive failed SOP votes. Alternatively, the better performance, the less likely shareholders will criticize executives for large amount of compensation.

Crystal 1991 asserts that the percentage of shareholders voting against executive compensation will increase with its perceived excessive compensation. Because we don't know how they identify a firm which pays excessive compensation, we measure excessiveness by the level of total CEO compensation (LogTC). As elaborated by Joskow et al (1996), political constraints on executive compensation in regulated industries are undeniable. They found that larger, more politically sensitive firms were more likely under scrutiny when their CEOs were overpaid. We thus include indicator of regulated industries (RegSIC, two-digit SIC codes 60-67 or 40-49) as independent variables.

We include a variety of other explanatory variables as well. We expect that shareholders will be more likely to vote to approve when market value is high measured by market to book value ratio. Consequently, we expect negative coefficients on Market2Book. We also include leverage associated with CEO compensation plans with the expectation that the lesser the leverage, the more likely shareholders will vote against SOP.
Our formal model is:

$$Failed_{it} = a_0 + a_1 LogTC_{it} + a_2 Leverage_{it} + a_3 Market\text{-}to\text{-}Book_{it} + a_4 LogAssets_{it} + a_5 LogNI_{it} + a_6 RegSIC_{it} + \varepsilon_{it}$$

*Where:*
*Dependent variable is equal to one if receiving failed SOP votes and 0 otherwise.*
*LogTC= natural log of total compensation as reported in SEC filings.*
*Leverage= debt-to-equity ratio.*
*Market-to-book=market value of firm / book value of firm.*
*LogAssets= natural log of total assets.*
*LogNI= natural log of net income.*
*RegSIC= an indicator variable equal to one for regulated industries with two-digit SIC codes either 60-67 or 40-49.*

## 4 Research Results

### *4.1 Descriptive Statistics*

The recognized proxy season of required SOP advisory votes for most U.S. public companies ended on June 30. The first proxy season sees voting results at 2,292 companies from the Russell 3000 that held their annual meetings between January 21 and June 30, 2011. Overall, shareholders voted strongly in favor of current standards for executive pay; approximately 73 percent of companies passed their say-on-pay votes with over 90 percent approval, 19 percent of companies passed their say-on-pay votes with 70-90 percent approval, 6 percent of companies passed their say-on-pay votes with 50-70 percent approval, while only 37 firms (or 2%) failed a vote in the first recognized proxy season ended on June 30.

The second proxy season sees voting results at 1,907 companies from the Russell 3000 that held their annual meetings between January 21 and June 30, 2012. Most companies continue to pass Say on Pay in the same pattern in 2012: approximately 72% companies passed with over 90 percent approval, 19 percent of companies passed their say-on-pay votes with 70-90 percent approval, 6 percent of companies passed their say-on-pay votes with 50-70 percent approval, while only 51 firms (or 3%) failed a vote in the second recognized proxy season ended on June 30.

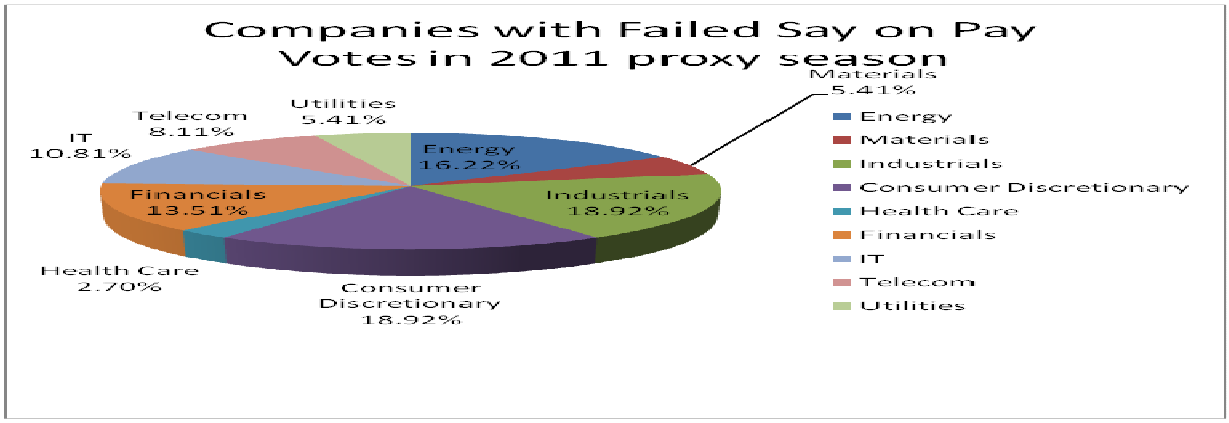
Overall, most companies continue to pass Say on Pay with uniform high support from shareholders across industries. Meanwhile, all the Russell 3000 companies that failed say-on-pay in 2011 have passed so far this year only few exceptions. The frequency distribution for companies with failed SOP votes suggests companies in utilities industry group have the least SOP

failure percentage, 5.41% in 2012, and 1.96% in 2011. Meanwhile, the industry groups with the highest failure percentage are consumer discretionary and industrials in 2011 (18.92%) vs. health care in 2012 (25.49%).

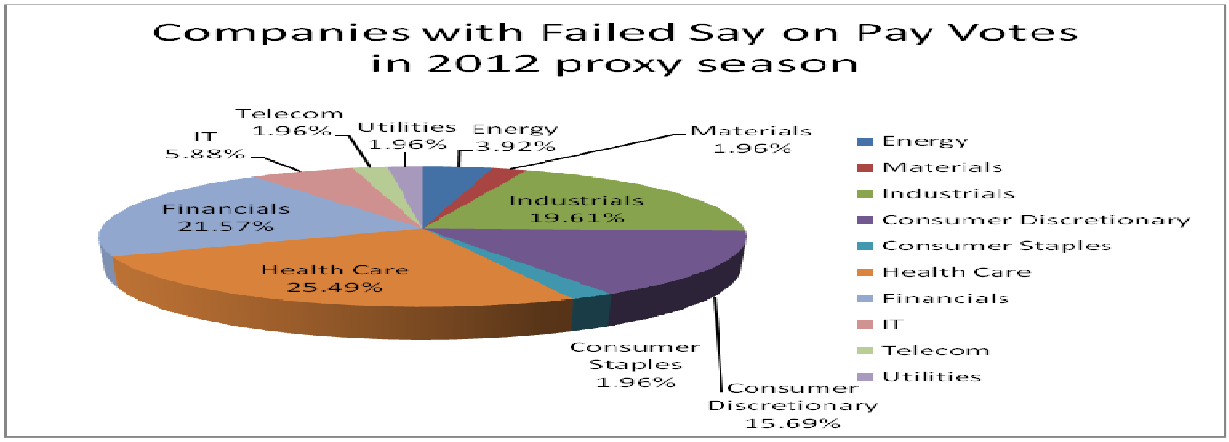
For descriptive purposes our industry distribution of companies with failed say-on-pay rates is listed in the table 1 (panel A for 2011 and panel B for 2012).

Table 1 Failed Sample Distribution by Industry

*Panel A:*




*Panel B:*




The untabulated analysis confirms that health care companies have received proportionally less support than other industries. However, consumer staple and financial companies have received the most support. One possible explanation for financial companies felt the pressure to criticize large payouts is that they reached out to their investors about the financial results, made significant changes to their compensation agreements, and increased their vote percentages this year after eliminating executive tax gross-ups. For example, Citi Group significantly decreased their vote percentages to 93% and 45%, this year after high value and discretionary nature of long-term retention awards granted to the $1 CEO during a period of continued poor stock performance.

Table 2 panel A presents descriptive statistics about executive compensations of firms who failed SOP votes in either 2011 or 2012. For instance, median value of salaries is 782,253.00; median value of total annual compensation is 5,393,806.00. Meanwhile, panel B presents descriptive statistics about executive compensations of other firms who passed SOP votes in either 2011 or 2012. The median value of salaries is 621,069.50; median value of total annual compensation is 3,110,200.50. Both are significantly lower than same values about executive compensations of firms who failed SOP votes in either 2011 or 2012.

Table 2 Statistics about executive compensations of firms

*Panel A: firms who failed SOP votes in either 2011 or 2012*

| | | Bonus | Salary | Total Compensation (Salary + Bonus + Other Annual + Restricted Stock Grants + LTIP Payouts + All Other | Total Compensation - Stock/Options Valued Using Grant Date Fair Value | Total Compensation - Stock Valued at time of vesting/ Options Valued at Time of Exercise | Total Compensation - As Reported in SEC Filings |
|---|---|---|---|---|---|---|---|
| N | Valid | 67 | 67 | 67 | 67 | 67 | 67 |
| | Missing | 0 | 0 | 0 | 0 | 0 | 0 |
| Mean | | 768.73922 | 802.86978 | 9055.83667 | 9399.10652 | 7615.76904 | 9560.81618 |
| Median | | .00000 | 782.25300 | 4624.41400 | 5235.77800 | 4080.64500 | 5393.80600 |
| Percentiles | 25 | .00000 | 528.73100 | 1567.13700 | 2141.80200 | 1367.79900 | 2172.67700 |
| | 50 | .00000 | 782.25300 | 4624.41400 | 5235.77800 | 4080.64500 | 5393.80600 |
| | 75 | 191.70000 | 997.75000 | 6897.42900 | 9230.79800 | 7652.58900 | 9230.79800 |

*Panel B: firms who passed SOP votes in either 2011 or 2012*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| N | Valid | 3240 | 3240 | 3213 | 3213 | 3213 | 3240 |
| | Missing | 0 | 0 | 27 | 27 | 27 | 0 |
| Mean | | 199.66872 | 700.78931 | 5647.24251 | 5123.09423 | 6065.18984 | 5171.73770 |
| Median | | .00000 | 621.06950 | 2999.98400 | 3079.69200 | 3119.59100 | 3110.20050 |
| Percentiles | 25 | .00000 | 400.00000 | 1333.13800 | 1342.69450 | 1344.79450 | 1368.57675 |
| | 50 | .00000 | 621.06950 | 2999.98400 | 3079.69200 | 3119.59100 | 3110.20050 |
| | 75 | .00000 | 940.00000 | 6701.37450 | 6630.06250 | 7148.13950 | 6699.68625 |

Table 3 panel A provides descriptive statistics and panel B provides correlations for the variables in the logistical regression model. Of interest, we see that the numbers for natural log of total compensation and net income are substantial; LogTC with median value of 3.5, and LogNI with median value of 2.1. We also observe across the pooled sample that leverage ratio is above one and market-to-book ratio is below one, median value of 113.82 percent versus 90.47 percent. It may suggest that sample firms opt for a blend of both equity and debt financing to meet their needs when expanding a business. The correlation matrix in panel B indicates that there is significant correlation amongst the independent variables in logistical regression model. However, multicollinearity is not a problem in the model.

Table 3 Summary statistics

*Panel A: Descriptive Statistics*

| | | LogTC | Leverage | Market2book | LogAssets | LogNI |
|---|---|---|---|---|---|---|
| N | Valid | 3307 | 3290 | 3130 | 3306 | 2924 |
| | Missing | 0 | 17 | 177 | 1 | 383 |
| Mean | | 3.4650 | 1.8236 | 1.2262 | 3.4533 | 2.1392 |
| Median | | 3.4976 | 1.1382 | .9047 | 3.4026 | 2.1004 |
| Std. Deviation | | .56609 | 22.76686 | 1.12860 | .73265 | .73250 |
| Percentiles | 25 | 3.1394 | .5640 | .5032 | 2.9103 | 1.6498 |
| | 50 | 3.4976 | 1.1382 | .9047 | 3.4026 | 2.1004 |
| | 75 | 3.8275 | 2.2722 | 1.5698 | 3.9181 | 2.5958 |

*Panel B: Correlation Matrix*

| | | Constant | LogTC | Leverage | Market2book | LogAssets | LogNI | RegSIC |
|---|---|---|---|---|---|---|---|---|
| Step 1 | Constant | 1.000 | -.571 | -.007 | -.355 | -.447 | .533 | -.313 |
| | LogTC | -.571 | 1.000 | -.035 | -.086 | -.399 | -.134 | -.214 |
| | Leverage | -.007 | -.035 | 1.000 | -.031 | .033 | .006 | .070 |
| | Market2book | -.355 | -.086 | -.031 | 1.000 | .472 | -.394 | -.039 |
| | LogAssets | -.447 | -.399 | .033 | .472 | 1.000 | -.695 | .372 |
| | LogNI | .533 | -.134 | .006 | -.394 | -.695 | 1.000 | -.191 |
| | RegSIC | -.313 | -.214 | .070 | -.039 | .372 | -.191 | 1.000 |

### *4.2 Regression Results*

Table 4 presents the results from estimating model using a logistical regression. The model is statistically significant because the p-value is less than .000 with percentage of overall correct predictions of 98.4. These are pseudo R-squares, Cox & Snell R Square (.009) and Nagelkerke R Square (.058). Because binary logistic regression does not have an equivalent to the R-squared that is found in OLS regression, we suggest interpreting this statistic with great caution. We see model fit is acceptable $\chi^2$ (8) = 9.175, p = .328. However, the p-value is greater than cutoff (generally 0.05), which indicates our model has a good fit. Similarly, of the six variables examined, one (LogTC) is significant at one percent or less (two tailed test), one (LogNI) is significant at five percent or less (two tailed test) and two more (LNI and RegSic) are significant at ten percent. As we expected, LogTC is positive and significant, indicating that when a firm reports larger amounts of CEO compensation, it is more likely to receive unfavorable SOP votes. In contrast, LogNI is negative and significant, indicating that performance is negatively associated with the likelihood of receiving failed SOP votes. Consistent with political constraint hypotheses as elaborated by Joskow et al (1996), RegSic is positive and significant. It suggests that larger, more politically sensitive firms were more likely to receive unfavorable votes, indicating scrutiny from shareholders as well governments when their CEOs were overpaid. Not surprisingly, Market2book ratio is negative and marginally significant, indicating that shareholders are more like to vote against SOP when shareholder value is shrinking. Somewhat surprisingly, LogAssests is negative and insignificant, indicating that larger firms are not statistically more likely to receive against votes. Leverage is negative and insignificant; indicating that, after controlling for the other factors in the model, a firm that has more debt financing is less likely to receive unfavorable SOP votes.

Table 4 Variables in the Logistic Regression Model

| | | B | S.E. | Wald | df | Sig. | Exp(B) |
|---|---|---|---|---|---|---|---|
| Step 1(a) | LogTC | 1.655 | .504 | 10.780 | 1 | .001*** | 5.235 |
| | Leverage | -.003 | .003 | 1.059 | 1 | .303 | .997 |
| | Market2book | -.411 | .241 | 2.913 | 1 | .088* | .663 |
| | LogAssets | -.217 | .500 | .189 | 1 | .664 | .805 |
| | LogNI | -.691 | .364 | 3.604 | 1 | .058** | .501 |
| | RegSIC | .803 | .496 | 2.614 | 1 | .106* | 2.231 |
| | Constant | -8.053 | 1.663 | 23.437 | 1 | .000 | .000 |

*a Variable(s) entered on step 1: LogTC, Leverage, Market2book, LogAssets, LogNI, RegSIC.*
** significant at ten percent or less (two tailed test)*
*** significant at five percent or less (two tailed test)*
**** significant at one percent or less (two tailed test)*
*Observations are winsorized at two standard deviations.*

*Omnibus Tests of Model Coefficients*

| | | Chi-square | df | Sig. |
|---|---|---|---|---|
| Step 1 | Step | 24.430 | 6 | .000 |
| | Block | 24.430 | 6 | .000 |
| | Model | 24.430 | 6 | .000 |

*Model Summary*

| Step | -2 Log likelihood | Cox & Snell R Square | Nagelkerke R Square |
|---|---|---|---|
| 1 | 426.950(a) | .009 | .058 |

*a Estimation terminated at iteration number 8 because parameter estimates changed by less than .001.*

*Hosmer and Lemeshow Test*

| Step | Chi-square | df | Sig. |
|---|---|---|---|
| 1 | 9.175 | 8 | .328 |

*Classification Table(a)*

| | Observed | | Predicted | | |
|---|---|---|---|---|---|
| | | | Total | | Percentage Correct |
| | | | 0 | 1 | 0 |
| Step 1 | Total | 0 | 2712 | 0 | 100.0 |
| | | 1 | 44 | 0 | .0 |
| | Overall Percentage | | | | 98.4 |

*a The cut value is .500*

### *4.3 Sensitivity Test*

The most drastic executive compensation measure contained in the Dodd–Frank act is amended Internal Revenue Code section 162(m) with respect to companies that accept bailout funds. In 1993, the Congress enacted the rules of one million dollars of executive pay cap to the Internal Revenue Code section 162(m). Basically, Section 162(m) of the internal revenue code provides that annual compensation (other than performance-based compensation) over $1

million is not deductible if paid to a "covered employee" (such as CEO and the next four highest compensated officers) of a publicly-held corporation. The Dodd-Frank Act is aligned with the objectives of Section 162(m). The previous studies documented a strong tax incentive for companies to shift as much executive compensation as possible into the performance-based bonuses that have been the subject of so much abuse. In the sensitivity test, the "Affected" variable is added to the logistic regression model to investigate shareholders' reaction to firm willingness to forfeit tax deductions under Section 162(m). The "Affected" variable is an indicator equal to one for total cash compensation is above one million cap by IRC Section162 (m). Table 5 provides regression results regarding to the "Affected" variable. Somewhat surprisingly, the "Affected" variable is positive and insignificant, indicating that firms are not statistically more likely to receive against votes if they forfeited tax deductions under Section 162(m). However, LogTC and LogNI present qualitatively the same results as previous regression model. LogTC is still positive and significant, indicating that when a firm reports larger amounts of CEO compensation, it is more likely to receive unfavorable SOP votes. In contrast, LogNI is still negative and significant, indicating that performance is negatively associated with the likelihood of receiving failed SOP votes.

Table 5 Sensitivity Test of IRC Section 162 (m): the million-dollar cap

*Panel A: Variables in the Logistic Regression Model*

| | | *B* | *S.E.* | *Wald* | *df* | *Sig.* | *Exp(B)* |
|---|---|---|---|---|---|---|---|
| *Step 1(a)* | *LogTC* | 1.764 | .514 | 11.781 | 1 | .001*** | 5.834 |
| | *Leverage* | -.003 | .003 | 1.189 | 1 | .276 | .997 |
| | *Market2book* | -.300 | .242 | 1.533 | 1 | .216 | .741 |
| | *LogAssets* | .032 | .520 | .004 | 1 | .951 | 1.033 |
| | *LogNI* | -.650 | .366 | 3.158 | 1 | .076* | .522 |
| | *RegSIC* | .811 | .498 | 2.656 | 1 | .103* | 2.251 |
| | *Affected* | .720 | .467 | 2.380 | 1 | .123 | 2.054 |
| | *Constant* | -9.704 | 1.975 | 24.142 | 1 | .000 | .000 |

*a Variable(s) entered on step 1: LogTC, Leverage, Market2book, LogAssets, LogNI, RegSIC, Affected.*
*The "Affected" variable is an indicator equal to one for total cash compensation is above one million cap by IRC Section162 (m)*

*Panel B: Variables in the Logistic Regression Model*

| | | *B* | *S.E.* | *Wald* | *df* | *Sig.* | *Exp(B)* |
|---|---|---|---|---|---|---|---|
| *Step 1(a)* | *LogTC* | 1.090 | .589 | 3.422 | 1 | .064 | 2.975 |
| | *Leverage* | -.003 | .003 | .989 | 1 | .320 | .997 |
| | *Market2book* | -.362 | .287 | 1.587 | 1 | .208 | .697 |
| | *LogAssets* | .170 | .629 | .073 | 1 | .787 | 1.186 |
| | *LogNI* | -.593 | .475 | 1.558 | 1 | .212 | .553 |
| | *RegSIC(1)* | 1.155 | .610 | 3.585 | 1 | .058 | 3.174 |
| | *Constant* | -8.025 | 2.204 | 13.256 | 1 | .000 | .000 |

*a Variable(s) entered on step 1: LogTC, Leverage, Market2book, LogAssets, LogNI, RegSIC.*
*Selected cases with a market capitalization of $75 million or above.*
*Selected cases with a market capitalization of $75 million or above.*

## 5 Conclusion

The recent controversy over the bailout of the Wall Street firms has renewed interest in strengthened regulatory controls over executive compensation. Since 2011, shareholders in the United States have been given the opportunity, through the Dodd–Frank Wall Street Reform and Consumer Protection Act of 2010, to cast a non-binding advisory vote at the Annual Meeting of Shareholders on executives' compensation. The purpose of this study is to investigate the impact of say-on-pay votes on executive compensation. We accomplish this by investigating whether shareholders consider CEO's total compensation when they vote; and (2) whether performance based compensations are associated with shareholders' satisfaction. We find that the least favorable vote is associated with negative financial performance and high CEO pay. Both of our hypotheses are supported by binary logistic regression model.

Positive and significant association between total compensation measured by natural log of total compensation and shareholders' satisfaction measured by failed SOP indicates when a firm reports larger amounts of CEO compensation, it is more likely to receive unfavorable SOP votes. In contrast, association between performance measured by natural log of net income and shareholders' satisfaction is negative and significant, indicating that performance is negatively associated with the likelihood of receiving failed SOP votes. Consistent with political constraint hypotheses as elaborated by Joskow et al (1996), we find that larger, more politically sensitive firms were more likely to receive unfavorable votes, indicating scrutiny from shareholders as well governments when their CEOs were overpaid. Not surprisingly, Market-to-book ratio is negative and marginally significant, indicating that shareholders are more like to vote against SOP when shareholder value is shrinking. Somewhat surprisingly, the variable of size proxy is negative and insignificant, indicating that larger firms are not statistically more likely to receive against votes.

The previous studies suggested that the million-dollar cap provisions ultimately may do little to address the problems of executive compensation. Many companies could easily shift as much executive compensation as possible into the performance-based bonuses during the term of the contract. Not surprisingly, our sensitivity test results are consistent with their findings. The variable of Affected is positive and insignificant, indicating that firms are not statistically more likely to receive against votes if they forfeited tax deductions under Section 162(m). One implication of our results is that the tax provision alone such as section 162(m) could not effectively fix outsize fat cat pay.

Taking close look at say-on-pay data of 2011 and 2012, we found most Russell 3000 companies continue to pass Say on Pay in both years with high shareholder support. 2%-3% in the Russell 3000 have failed. However, the Securities and Exchange Commission exempted smaller companies with less than $75 million in publicly traded stock from holding these votes until 2013. There are two caveats from the standpoint of this setting that should be considered. First, our sample firms include mainly companies with a market capitalization $75 million or above in publicly traded stock, the results should be interpreted with caution to small companies. Second, because of data limitations, it remains to be investigated whether these shareholder-driven efforts such as say-on-pay in the Dodd-Frank Act will be long-run success. Our data years are short because mandatory SOP started since 2011. Although, our regression model is statistically significant with percentage of overall correct predictions of 98.4, our pseudo R-squares can be increased significantly after more observations are available for years after 2012 and firms with a market capitalization less than $75 million.

## References

Alissa, W. 2009. Boards' response to shareholders' dissatisfaction: The case of shareholders' say on pay in the UK, Working paper, Penn State University.

Balsam, S. and J. Yin. 2005. Explaining firm willingness to forfeit tax deductions under Internal Revenue Code Section 162(m): The million-dollar cap. Journal of Accounting and Public Policy 24, 300-324.

Balsam, S. and J. Yin. 2012. The Impact of Say-on-Pay on Executive Compensation, Working paper, University of Texas at San Antonio.

Bebchuk, L. and J. Fried. 2004. Pay without Performance: The Unfulfilled Promise of Executive Compensation. Cambridge, MA: Harvard University Press.

Bebchuk, L. 2007. "Written Testimony Submitted Before the Committee on Financial Services United States House of Representatives Hearing on Empowering Shareholders on Executive Compensation." March 8.

Bryan, Stephen and LeeSeok Hwang. 1997. CEO compensation in a regulatory environment: An analysis of the electric utility industry. Journal of Accounting, Auditing and Finance 12 (Summer), 223-255.

Core, J., R. Holthausen, and D. Larcker. 1999. Corporate governance, chief executive officer compensation, and firm performance. Journal of Financial Economics 51: 371-406.

Crystal, G. 1991. In search of excess: The overcompensation of the American executive, New York: W.W. Norton & Company.

Ferri, F. and D. Maber. 2009. Say on Pay Votes and CEO Compensation: Evidence from the UK, Working paper, New York University.

Healy, Paul M., Sok-Hyon Kang, and Krishna. G. Palepu. 1987. The effect of accounting procedure changes on CEO's cash salary and bonus compensation. Journal of Accounting and Economics 9 (April), 7-34.

Jensen, M. and K. Murphy. "Performance Pay and Top-Management Incentives." Journal of Political Economy, 1990, 98(2), 225-264.

Joskow, Paul, Nancy Rose and Andrea Shepard. 1993. Regulatory constraints on CEO compensation. Brookings Papers on Eocnomics Activity: Microeconomics, 1-58.

Joskow, Paul, Nancy Rose and Catherine Wolfram. 1996. Political constraints on executive compensation: Evidence from the electric utility industry. RAND Journal of Economics 27 (Spring), 165-182.

Khurana, C. "Industry product market competition and managerial incentives." Journal of Accounting and Economics, 2007, 43(2-3), 275-297.

White, E. and A. O. Patrick. 2007. Publication image shareholders push for vote on executive pay. Wall Street Journal Feb 26: B.1.

---

***Authors and submission details***

***Xiaoli Yuan***
*Elizabeth City State University, North Carolina, USA*

***Wenguang Lin***
*Western Connecticut State University, Connecticut, USA*

***Ebere A. Oriaku***
*Elizabeth City State University, North Carolina, USA*
*Email: XYUAN@ecsu.edu (Corresponding author)*

First submission: 21st January 2017
Revised submission: 12th February 2017
Paper accepted: 28th February 2017