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# How do Shareholders Use Their Say-on-Pay Votes in the United States? Evidence from 2011 and 2012

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*Claremont McKenna*

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**CLAREMONT McKENNA COLLEGE**

**HOW DO SHAREHOLDERS USE THEIR SAY-ON-PAY VOTES IN THE  
UNITED STATES?  
EVIDENCE FROM 2011 AND 2012**

SUBMITTED TO

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AND

DEAN GREGORY HESS

BY

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FOR

SENIOR THESIS

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## **Abstract**

This paper examines shareholder disapproval of CEO compensation as expressed through their advisory vote on executive compensation (say-on-pay) as required by Section 951 of the Dodd-Frank Wall Street Reform and Consumer Protection Act. Using a sample of 884 votes by S&P 500 firms in 2011 and 2012, I find that higher CEO salary, a weak link between pay and performance, and higher dilution from stock option grants are associated with lower say-on-pay approval. In addition, I find evidence that shareholders are sophisticated in their examination of CEO compensation by voting against excess compensation over what is deserved due to performance and other determining factors.

## **1. Introduction**

Executive compensation has been a focal point for shareholder activism across the world in the last decade and has recently come under the legislative microscope in the United States. Following a 2006 SEC rule requiring increased compensation disclosure in “plain English”, the role of shareholders in compensation decisions has been growing. More recently, the Dodd-Frank Wall Street Reform and Consumer Protection Act was signed into law in 2010, and as required by Section 951, all companies with a public float of over \$75 million must provide their shareholders with an advisory vote on executive compensation (hereafter referred to as say-on-pay). While the votes are non-binding, past research has suggested that boards react strongly to shareholder discontent and strive to avoid a negative vote (Ferri and Maber, 2011). As smaller firms begin their advisory votes this proxy season, this paper empirically examines which components of executive pay packages shareholders voted against in the first two full years of say-on-pay votes in the United States.

This study contributes to the literature on say-on-pay in several important ways. Most significantly, this paper and contemporaneous work by Kimbro and Xu (2013) are the first to examine the determinants of shareholder voting on say-on-pay in the United States. There is existing literature on similar say-on-pay practices across the world, specifically in the U.K. where a non-binding vote has been mandatory since 2002, but the literature is nonexistent in the U.S. Secondly, this study examines aspects of CEO compensation that have recently received extensive media coverage, such as golden

parachutes, but have been largely ignored by the literature. In addition, I test the proposition used by many say-on-pay opponents that shareholders vote sensationally against high levels of compensation and do not take a sophisticated approach to examining overall pay packages. The results of this paper are significant to corporate boards by providing useful information about which aspects of compensation packages are most concerning to shareholders.

This paper does not attempt to weigh in on the value creation proposition of say-on-pay legislation. Previous studies have examined the market reaction to the introduction of the legislation in the United Kingdom and the United States with mixed results (Cai and Walking, 2011; and Larcker et al 2011). In addition, the literature has examined the market response to shareholder support in compensation proposals, but the literature on what shareholders actually dissent to in compensation packages is sparse in the United Kingdom and is nonexistent in the United States. Previous studies have examined the response to a high negative vote in the U.K. and have shown that the board reacts with more shareholder-friendly compensation in future years (Carter and Zamora, 2009). Unfortunately, with only two years of say-on-pay votes in the United States, there is not enough data to perform a thorough analysis of the board's reaction to say-on-pay votes here. To illustrate the timing issue, imagine the say-on-pay votes held at Company X's 2011 Annual Meeting in regards to the 2010 compensation that is published in their 2011 proxy statement. By the time the Annual Meeting is held in the middle of the fiscal year, much of the 2011 compensation has already been determined and a new compensation package cannot be fully implemented in the remainder of the year. As a result, it will be impossible to see the full response by the board without several years of



compensation data following the first vote. The only question this paper attempts to answer is what aspects of CEO compensation do shareholders disapprove of and vote against in say-on-pay votes.

There is extensive literature surrounding the concept of agency theory. In public corporations, the shareholders (principals) possess the ownership rights of the firm and are separate from the management of the business (agents). This separation creates a potential conflict between the interests of the principals and the agents. Theory suggests that through the use of performance-based bonuses, stock options, restricted shares, and other long-term compensation, the incentives of the CEO can be aligned with those of the shareholders to maximize firm value. In practice, however, managers often attempt to maximize their own utility and, in doing so, create agency costs. Jensen and Murphy (1990) find that the correlation between CEO wealth and shareholder wealth is small and has decreased significantly in the last 50 years. They hypothesize that political forces act to misalign the incentives between principals and agents. Corporate governance is designed to limit agency costs to the firm with the Board of Directors acting as a monitoring device for managers. Through the use of outside directors, it acts to control the self-interests of management. Nevertheless, as evidenced by recent option-backdating scandals, there are often conflicts of interest even within an independent board that limit its effectiveness in minimizing agency costs. As a result of these conflicts, shareholder votes on executive compensation have become an important supervisory instrument to oversee the decisions of the compensation committee.

This paper examines the 884 say-on-pay votes held by S&P 500 firms in the 2011 and 2012 proxy seasons regarding the compensation packages for 2010 and 2011,

respectively. Although the votes can pertain to the compensation package for all of the Named Executive Officers (the Chief Executive Officer, Chief Financial Officer, and the other three highest paid executives), CEO compensation has been the main focus of shareholder discontent. Therefore, this paper continues the trend of the previous literature by focusing exclusively on the compensation of the CEO. I find that shareholder disapproval is associated with CEOs that have higher salary, higher dilution from stock options, a poor link between pay and performance, and both a high level and high percent of excess total compensation. The evidence is consistent with the hypothesis that shareholders take a sophisticated approach to analyzing CEO compensation and are effectively exercising their right to have a voice in the compensation discussion.

The rest of the paper is organized as follows. In Section 2, I discuss the history of say-on-pay regulations throughout the world and the development of the rule in the United States. Then, in Section 3, I introduce the role of proxy advisory services followed by an examination of the literature in Section 4. This is followed by a description of my hypotheses and empirical methodology in Section 5. Section 6 describes my data which is followed by the results and conclusions in Sections 7 and 8.

## **2. History of Say-on-Pay**

There has been controversy over excess executive compensation for decades, but the first sign of any country adopting a compensation voting requirement was in 1999 when the former U.K. Secretary of State for Trade and Industry indicated that such a rule was being discussed. In the next several years, before a vote was mandatory, many firms voluntarily put their compensation up to a shareholder vote. Shareholder support was

high; Hodgson (2009) notes that only 14 companies in the FTSE 100 received more than 2.5% votes against and the highest level of shareholder opposition was only 10%. Despite the low dissent, in August 2002, the Director's Remuneration Report (DRR) was introduced by the U.K. government requiring public boards of directors to publish a remuneration report annually and to submit it to a non-binding shareholder vote.

During the first full proxy season with mandatory remuneration voting, the first evidence of strong shareholder concern over pay surfaced when GlaxoSmithKline (GSK) received a failing vote of 50.72% against. Although the vote is non-binding, the result received worldwide press coverage and an immediate response from the board. In the case of GSK, shareholders objected to a high severance arrangement with CEO Jean-Pierre Garnier and the board responded by requesting an independent review by its compensation consultants. In its annual report from the same year GSK outlined the steps it was taking to respond to shareholder discontent:

During 2003 the [Compensation] Committee reviewed and developed the remuneration policy to align Executive remuneration with the interests of shareholders... The remuneration policy...was finalized after undertaking an extensive consultation process with shareholders and institutional bodies during the course of 2003. During the year the Chairman of GlaxoSmithKline and the Chairman of the Committee met shareholders, representing nearly half of GlaxoSmithKline's share capital...as a result [the Committee] has instigated a major shift in the way GlaxoSmithKline sets the remuneration of its most senior executives. (GlaxoSmithKline, 2003)

When the pay plan was finalized, the severance was drastically reduced and other components of the plan were better aligned with peer compensation. These actions demonstrate the effectiveness of the vote and significance it has on the firm's practices (Conyon, 2010). In the decade since the DRR requirement in the U.K., the practice has spread throughout Europe and the Pacific with Belgium, France, Germany, Netherlands, and Switzerland all practicing some form of non-binding say-on-pay (Chasan, 2013).

While the current vote in the United States is non-binding, some have argued that the vote should have a binding effect on the board. Australia presents a case study on a binding vote requirement. The country has required an advisory vote since 2005, but in 2011 adopted a binding "two-strike" rule that requires the board to stand for re-election within 90 days if 25% or more of shareholders vote against compensation plans two years in a row. This rule is one of the strictest and might be an effective way of targeting the responsible directors, but Ekwegh (2012) argues that in practice, the vote is effectively non-binding because shareholders are unlikely to vote against the report for the second year in a row due to the costly signaling effect of removing the board. He argues that binding remuneration votes do more harm than good.

Demand for shareholder approval of executive compensation in the United States has been steadily growing since the mid 2000's with bills calling for mandatory votes appearing in Congress on several occasions. The most notable are Representative Barney Frank's Protection Against Executive Compensation Abuse Act in 2005 and Senator Charles Schumer's Shareholder Bill of Rights Act in 2009. Both of these acts called for a mandatory shareholder vote on executive compensation. While neither was enacted, they raised discussion on the issue and paved the way for future resolutions. During this time,

shareholders began voicing their concerns through proxy proposals. Under rule 14a-8 of the Securities Exchange Act of 1934, shareholders of a certain size<sup>1</sup> have the right to publish a proposal in the firm's annual proxy statement. Unless the company could convince the activist to withdraw the proposal or remove it for violating certain conditions, the proposal would be distributed to all shareholders and voted on at the company's annual meeting. For years, the SEC disallowed proposals related to executive compensation because it concerned the company's "ordinary business operations<sup>2</sup>," but in October 1992 the SEC made broad changes to its proxy rules to allow more effective shareholder oversight and to reduce the separation of firm ownership and management. The new rules increased compensation reporting requirements and began allowing shareholder proposals under 14a-8 related to executive compensation. Binding votes were still a violation of the rules, so these proposals generally resulted in non-binding vote by shareholders. The first proposal calling for an advisory vote on executive compensation appeared in 2006. Research from Georgeson shows that among S&P 1500 companies, there was an average of 57 proposals each year between 2007 and 2010. Support was low for these proposals, however, with only a few companies actually holding a say-on-pay vote. In 2008, Aflac was the first company to hold a vote, with ten more firms following suit the same year, some voluntarily and some in response to majority supported shareholder proposals.

In 2009, as part of the American Recovery and Reinvestment Act, all entities that received financial assistance under the Troubled Asset Relief Program were required to

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<sup>1</sup> To be eligible, the shareholder must have continuously held at least \$2,000 or 1% of the company's shares for at least one year by the date the proposal is submitted

<sup>2</sup> In violation of rule Rule 14a-8(i)(7)

hold an advisory shareholder vote to approve executive compensation. This meant that close to 400 companies, mostly banks and other financial institutions, were required to hold a say-on-pay vote in the coming proxy season. Despite the financial crisis and widespread shareholder concern, however, support for executive pay packages remained very high even for Wall Street's biggest banks where public discontent was apparent with nationwide protest.

The first company to fail a say-on-pay vote in the U.S. was Motorola Inc. when it received support from only 46% of the votes cast in its 2010 proxy. Although a negative say-on-pay vote is not explicitly directed toward any particular aspect of a compensation plan, in the case of Motorola Inc. the shareholders were expressing concern with a large package for CEO Sanjay Jha in 2008 and his proposed stake in the company's planned split into Motorola Mobility and Motorola Solutions. Two other companies, Occidental Petroleum and KeyCorp, failed their vote the same year, but most firms received resounding majority support, averaging over 87% in favor.

President Obama signed the Dodd-Frank Wall Street Reform and Consumer Protection Act in July 2010. In January 2011, the SEC voted to adopt Section 951 of the Act requiring all companies with a public float of over \$75 million to provide their shareholders with an advisory vote on executive compensation at least once every three years beginning with any annual meeting taking place on or after January 21, 2011. The vote is pertains to all compensation data published in the company's annual proxy statement. In addition, each company holding a say-on-pay vote is also required once every six years to hold a vote on the frequency of its say-on-pay votes: either every one, two, or three years.

### 3. Role of Proxy Advisors

Proxy advisory services play a significant role in the outcome of say-on-pay votes. Institutions own the vast majority of publicly traded shares in the United States and they often do not have the resources or the interest to evaluate all matters put up to a shareholder vote. As a result, they often turn to proxy advisory firms, the two most prominent being Institutional Shareholder Services (ISS) and Glass, Lewis & Co., for voting recommendations. This gives these firms significant influence on the result of all proxy votes. For example, in the 2012 proxy season, ISS recommended shareholders vote against 14% of the companies it evaluated. Shareholder support was 30% lower at companies that received a negative evaluation. The same research shows that on average, firms receiving a ‘for’ recommendation from ISS had a 94% approval from shareholders while firms receiving an ‘against’ recommendation had only 64% say-on-pay approval<sup>3</sup>.

ISS follows a set of guidelines when evaluating compensation packages. ISS policy recommends voting against compensation packages where there is a misalignment between pay and performance, when the company maintains problematic pay practices, and/or when there is poor communication between the board and shareholders (ISS, 2013). Problematic pay practices include options backdating, incentives tied to excessive risk-taking, and non-performance-based compensation components. Firms are evaluated on a case-by-case basis which means that during the peak of proxy season, ISS has several months to review and evaluate thousands of firms and provide voting recommendations to its clients.

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<sup>3</sup> Data from Semler Brossy Consulting Group 2012 Say-on-pay Results: Year-End Report

There is a lot of controversy surrounding the role of proxy advisory services because they operate as largely unregulated entities. Considering the amount of influence they possess, it is likely that they will fall under increasing scrutiny in the coming years. There is an apparent conflict of interest created by the relationships between proxy advisory services and certain investors. Proxy advisory firms claim to be acting in the best interest of all shareholders, but unpublished relationships with certain groups that would benefit unfairly from a recommendation one way or the other pose a conflict of interest and a risk to the rest of the firm's clients. In addition, some proxy advisory services do not publish their voting guidelines, and the ones that do, like ISS, are vague and subjective. Many firms are dissatisfied with the large role proxy advisory services play in the voting process and are calling for the SEC to regulate these entities<sup>4</sup>.

While proxy advisor recommendations would be an interesting variable to examine, the data is not available for this study. Several interesting extensions would be to test for abnormal stock returns surrounding the release of a negative recommendation or a voting result inconsistent with the advisor's recommendation.

#### **4. Literature Review**

There is extensive literature surrounding compensation related shareholder proposals in the U.S. Thomas and Martin (1999) examine 168 proposals received by 145 different firms between 1993 and 1997 to determine characteristics of firms targeted for shareholder compensation proposals. They create a control group by matching each target firm with comparably sized firms in the same industry. They find a statistically

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<sup>4</sup> See letter from FedEx to the SEC calling for increased regulation: <http://www.sec.gov/comments/s7-14-10/s71410-157.pdf>



significant difference between the CEO salary of target firms and control firms while the difference in other forms of compensation is not significantly different than zero. Target firms also significantly underperform the S&P 500 return over the three and five year periods prior to the voting year which is consistent with their hypothesis that underperforming firms are targeted.

Emitur, Ferri, and Muslu (2010) examine a sample of 1,341 activism related events (1,198 shareholder proposals and 143 vote-no campaigns<sup>5</sup>) related to executive compensation between 1997 and 2007 in an extension of the work done by Thomas and Martin. Using a similar technique of pairing each target firm with a control group, they find that firms with greater CEO pay, both cash and equity, are significantly more likely to be targeted by shareholders with a compensation related proxy proposal. Furthermore, they attempt to examine the “sophistication” and “sensationalism” used by activist shareholders in targeting firms by breaking down total CEO pay into predicted pay and residual pay. They find a significant coefficient on residual pay demonstrating that activists employ a sophisticated approach in selecting firms to target as well as a significant coefficient on predicted pay as an indicator of sensationalism. Their results indicate that activists generally target companies with high CEO pay and do not discriminate as to the breakdown of the compensation or the overall compensation philosophy of the firm.

In this paper, I add to the literature by examining a sample of mandatory votes and their outcomes rather than the probability of being targeted by a proposal. Emitur et

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<sup>5</sup> Vote-no campaigns target specific board nominees and withhold votes in their election to express dissatisfaction with corporate governance. Ertimur et al. examine vote-no campaigns that specifically mention executive pay as a motivation.

al. (2010) and Thomas et al. (1999) only take into account the likelihood of being targeted and do not consider how the voting outcome is affected by the compensation package. In addition, they only examine several aspects of pay, specifically cash compensation and equity grants, while ignoring potential areas of shareholder discontent such as pay for performance link, potential dilution, and excess change of control payments.

A second avenue for shareholder participation in compensation decisions is in binding votes on management-sponsored stock-based compensation proposals. In an examination of 1,729 proposals between 1992 and 2003, Morgan, Poulsen, and Wolf (2006) find that dilutive plans with negative voting recommendations from a proxy advisor receive lower voting results. In addition, they find evidence that the ratio of total CEO compensation to firm assets is negatively correlated with voting outcomes on future stock-based compensation proposals.

Say-on-pay votes differ in several significant ways from votes on equity-based compensation plan proposals. First, say-on-pay votes are in regards to the overall compensation published in the company's proxy filings. This allows shareholders to vote against the overall philosophy of the compensation committee rather than a specific plan. Secondly, in contrast to the binding nature of votes on management sponsored equity compensation plans, say-on-pay votes are non-binding which allows shareholders to express their discontent freely without worrying about the possibility of direct strategic consequences.

Other studies of compensation related proposals examine the stock market reaction to management-sponsored proposals. Morgan and Poulsen (2001) examine a

sample from 1992 to 1995 and find that stock option proposals significantly increase shareholder wealth, especially when the plans exclusively target executives or top management. Martin and Thomas (2005) examine management-sponsored proposals for stock option plans in the 1998 proxy season. They note a dramatic increase in the use of large stock option grants leading to a possible shift in the market's perception of dilutive plans. Consistent with their hypothesis that the market will react negatively to high levels of potential dilution, they find that executive-only proposals with higher dilution result in a significantly negative cumulative abnormal return in the 3-day period surrounding the proxy date. Furthermore, they find significant evidence that the board responded to a high negative vote by reducing executive pay in the following year.

The previous research on compensation related proposals, sponsored both by shareholders and management, has yielded mixed results for several reasons. First, shareholder sponsored proposals suffer from a self-selection bias. Each firm has its own shareholders, so research that attempts to determine what aspects of compensation make a firm more likely to be targeted by a proposal cannot control for the individual preferences of the shareholder sponsoring the proposal. My study examines votes in an environment that mandates say-on-pay votes which allows for a more robust and uniform sample. Second, previous studies have taken their samples from years with conflicting regulations surrounding compensation disclosure and voting rules. While they have attempted to control for the changing environment, my study benefits from consistent say-on-pay legislation.

Other prior research has attempted to glean shareholder support for compensation packages from director elections. Cai, Garner, and Walking (2009) find evidence that

high abnormal CEO compensation leads to significantly fewer votes for members of the compensation committee. However, there are numerous factors other than compensation that shareholders consider when electing directors, so my examination of say-on-pay votes, which are directly correlated to compensation, will give a clearer picture of what shareholders disapprove of in compensation packages.

More directly related to my research is the literature on say-on-pay in the United Kingdom where advisory votes have been mandatory since 2002. Balachandran, Ferri, and Maber (2007) examine the changes in CEO pay before and after the vote became mandatory. They find that instead of penalizing all CEOs, as some critics of the legislation argue, the legislation was effective in increasing the sensitivity of CEO compensation to negative operating performance, effectively reducing “rewards for failure”. In a thorough analysis of the value creation proposition of say-on-pay, Ferri and Maber (2011) analyze the market reaction in the U.K. to the announcement of say-on-pay legislation as well as the response of the board to high voting dissent. They find a positive market reaction to the legislation for firms with poor pay practices such as weak penalties for poor performance. In addition, they find that firms do indeed respond to high dissent by changing pay packages and removing controversial provisions. This is consistent with their hypothesis that U.K. investors focus on the composition of pay packages rather than simply how much CEOs are paid.

In perhaps the most similar paper to mine, Carter and Zamora (2009) examine the determinants of voting outcomes in say-on-pay votes using a sample of U.K. firms from 2002-2006. They find evidence that negative votes are positively correlated with higher salary, higher dilution, and a weak link between pay and performance measured by

annual bonus. In addition, similarly to Ferri and Maber (2011), they find evidence that boards react to high dissent. Specifically, they find that high negative votes lead to smaller increases in salary and dilution and an improved link between pay and performance. While a significant contribution to the literature, their study examines the relation between voting outcomes and only the three aspects of compensation mentioned above. My study extends the work done by Carter and Zamora (2009) to the United States as well as adds a number of other compensation variables and attempts to control for excess compensation by separating pay into predicted and residual.

In simultaneous work, Kimbro and Xu (2013) examine factors determining say-on-pay vote results in Russell 3000 companies through annual cross sectional regressions. Consistent with my results, they find that both poor performing firms and firms with high abnormal CEO compensation receive lower say-on-pay approval. In addition, they examine accounting quality and find that firms with high abnormal accruals receive lower say-on-pay approval. They do not examine dilution or the link between pay and performance. While using differing empirical techniques, our results are consistent, indicating the robustness of our conclusions.

Several studies have examined the market reaction surrounding the passage of the Say-on-pay Bill by the House of Representatives on April 20, 2007. Cai and Walking (2011) find evidence that firms with high excess CEO compensation and weak governance have a significant positive share price reaction to the legislation. Although the passage of the bill was not a surprise, the market's reaction could possibly be explained by the unexpected 2-1 margin by which it passed. Larcker, Ormazabal, and Taylor (2011) examine a large set of governance related legislative decisions including

the passage of the Say-on-pay Bill, and, using slightly different methodology, find no significant market reaction surrounding the date.

A recent paper by Beckerman (2012) tested for cumulative abnormal returns for the 103 firms receiving a failed say-on-pay vote in 2011 and the first half of 2012. He tested returns over event windows of two, four, and ten days surrounding the annual meeting date and found that the average cumulative abnormal return of the 103 firms that failed is not statistically different than zero in any of the event windows. His study indicates that as a group, there is no systematic market response on the date of a failed say-on-pay vote. However, it is likely that shareholder-unfriendly compensation packages are already priced in by the market before the vote occurs and no new information is provided by the vote itself. Future studies on this topic could examine individual firms that failed the vote to test for abnormal returns surrounding votes that would be considered a surprise by the market.

## 5. Hypothesis and Empirical Methodology

To test which components of compensation shareholders vote against in their say-on-pay votes, I specify the following panel OLS regression:

$$sop\_result_{it} = \alpha_0 + \beta_1 comp_{it} + \beta_2 performance_{it} + \beta_3 size_{it} + \varepsilon_{it} \quad (1)$$

where *comp* consists of my compensation variables of interest and *performance* and *size* are controls. Due to the multiple observations for each firm, the residuals are likely to suffer from autocorrelation. While still unbiased, this would result in inaccurate standard

errors. In order to reduce the effects of autocorrelation, I compute standard errors clustered by firm.

The first compensation component I examine is salary. Salaries are generally predetermined in the CEO's employment contract and benchmarked against peer firms. Unlike other aspects of compensation, salaries are not sensitive to performance. Shareholders may disapprove of an executive receiving a large salary because it does nothing to motivate the CEO to work hard or align his interests with the shareholders. I expect shareholders to disapprove of high salaries and there to be a significant and negative relationship between the natural log of CEO salary and voting results. I expect this relationship to be especially pronounced when comparing salary relative to the industry mean, which could indicate a flawed peer group selection by the compensation committee.

The second component I analyze is the CEO's annual cash bonus. Bonuses are generally determined on a yearly basis and tied to certain accounting measures determined by the compensation committee. Accounting for nearly 20% of total compensation, performance based cash bonuses are a significant part of CEO pay. Proxy rules distinguish between two types of cash bonuses in the Summary Compensation Table—"bonus" and "non-equity incentive plan compensation". The latter is the award clearly outlined in the executive's compensation plan and is directly tied to accounting and performance metrics. The former type of bonus, listed simply as "bonus" in the Summary Compensation Table, is a discretionary bonus that is not directly tied to any standards that had been previously communicated to the CEO. I attempt to see if shareholders disapprove of discretionary bonuses by creating a binary variable equal to 1

if the firm awarded its CEO with a discretionary bonus during the year. Discretionary bonuses are infrequently used in my sample with only 17% of CEO-years receiving a discretionary bonus and only accounting for around 3% of total compensation.

Cash bonuses are used to link pay with performance for a CEO. If shareholders observe a weak link between the two, I expect them to express their disapproval with a negative vote. To determine the pay-for-performance implicit in a CEO's bonus, I follow methodology similar to that of Carter and Zamora (2006) and compute the difference between the CEO's actual bonus and his predicted bonus:

$$excess\_bonus_{it} = cashbonus_{it} - predicted\_bonus_{it} \quad (2)$$

Predicted bonus is determined for each CEO-year from a cross-sectional regression each year of bonus regressed on economic determinants of bonus and industry binomial variables:

$$cashbonus_i = \alpha + \beta x_i + \varepsilon \quad (3)$$

where  $x_i$  consists of return on assets and shareholder return to control for performance, the natural log of revenue to control for size, the natural log of the CEO's tenure, and industry controls.

To test the pay-for-performance link, I create two binary variables: one for the highest and one for the lowest quartile of difference between actual and predicted bonus. I expect shareholders to vote against the top quartile (weakest pay-for-performance link),



resulting in a significant and negative relationship between that binary variable and votes for say-on-pay.

Dilution stemming from stock option grants is the third component of pay I analyze. Option awards are granted as a form of risky long-term compensation designed to motivate CEO effort and align their interests with the shareholders. As previously discussed, past research has shown that shareholders disapprove of plans with high potential dilution. Dilution is measured by dividing the number of options granted by the total shares outstanding at the end of the year. The greater number of shares granted, the higher the potential dilution to shareholders. I expect shareholders to vote against plans with high dilution, resulting in a significant and negative relationship between dilution and vote results.

In order to allow for the possibility that shareholders disapprove of compensation relative to the industry rather than strictly in absolute compensation levels, I adjust the following variables: adjusted salary is the log of CEO salary minus the mean for the industry, adjusted high and low bonus are determined in the same manner as before except each industry has its quartiles determined independently for each year, and finally adjusted dilution is measured as dilution less the mean for the industry. Industries are classified using the ten sectors of the Global Industry Classification Standard<sup>6</sup>.

In addition, I examine the impact of CEO golden parachute arrangements on the say-on-pay vote. A golden parachute, or change of control payment, is triggered when the CEO loses control of the company through a merger or other transaction. These types of packages are often considered “rewards for failure” because a poor performing CEO

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<sup>6</sup>The ten sectors are as follows: energy, materials, industrials, consumer discretionary, consumer staples, health care, financials, information technology, telecommunication services, and utilities.

could still be rewarded with handsome compensation in a merger. Golden parachutes are often very large contracts—in some cases they are valued in the hundreds of millions. While the SEC mandates a separate “say on golden parachute” vote when they ask shareholders to vote on a merger, it is possible that shareholders disapprove of excessive golden parachutes and factor that into their say-on-pay vote. While there are a number of aspects of a golden parachute that shareholders can disapprove of, such as single-trigger payments or providing tax gross-ups, I examine shareholders’ discontent of excess overall packages which includes cash severance, continuation of benefits, accelerated vesting of equity awards, and the executive’s retirement plan. I examine the shareholder reaction to an excess severance package by creating a binary variable equal to 1 if the CEO’s golden parachute payment is greater than 3 times his total compensation in that year. If shareholders disapprove of excess golden parachutes as a “reward for failure” and cannot wait for a specific vote to express their disapproval, I expect there to be a significant negative relationship between the binary variable indicating an excess parachute and the say-on-pay vote.

I also examine whether shareholders are “sensational” or “sophisticated” in their voting on pay packages in line with the work done by Emitur, Ferri, and Muslu (2010). I separate total pay into predicted and excess total pay, using a similar methodology as with bonus, as seen in Eq. (4) and Eq. (5):

$$excess\_total_{it} = total_{it} - predicted\_total_{it} \quad (4)$$

$$total_i = \alpha + \beta x_i + \varepsilon \quad (5)$$

where  $x_i$  consists of the same controls used in Eq. (3) with the addition of the book-to-market ratio to control for investment opportunities. In addition, I calculate the percent of excessive compensation by taking the difference between the natural log of the actual total and the natural log of predicted total as in Eq. (6):

$$percent\_excess_{it} = \ln(total_{it}) - \ln(predicted_{it}) \quad (6)$$

I expect shareholders to not react sensationally to high levels of deserved CEO pay and thus for there to be no significant relationship between predicted pay and vote results. Instead, I expect a significant negative relationship between excess pay as an indicator of shareholder sophistication.

## 6. Data Description

CEO compensation data was collected from the ExecuComp database via the Wharton Research Data Service (WRDS) and supplemented with company proxy filings. Advisory Vote on Executive Compensation data was collected from the 2011 and 2012 Georgeson Annual Corporate Governance Reviews which included all firms that held their annual meetings in the first six months of the year. The remaining votes were hand collected from company filings<sup>7</sup>. All control data was collected from Compustat with missing values gathered from company filings. Return data was gathered from CRSP. Financial statements were obtained through the EDGAR database.

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<sup>7</sup> All firms are required to publish an 8-K with the results of all proxy votes within four business days following the Annual Meeting

The 2011 sample began with the 500 firms comprising the S&P 500 index at the end of the calendar year. Six of the firms held their 2011 annual meeting prior to the January 20 implementation of the say-on-pay requirement and 45 firms had CEO changes during the year. These were excluded from the sample leaving 449 firms in 2011. The 2012 sample began with the 500 firms in the S&P 500 index at the end of 2012. Of these, 38 did not hold a say-on-pay vote in 2012 because their shareholders elected to hold the vote either every two or every three years. Twenty seven firms had CEO changes mid-year leaving 435 firms in the 2012 sample. Data from the two years were combined to give the total sample of 884 full CEO-years representing 495 distinct firms.

The say-on-pay vote result is calculated as the total number of votes “for” divided by the total number of votes cast, including abstentions. This is consistent with the methodology used by most firms when evaluating their voting results. The average result for say-on-pay votes held at the 2011 annual meeting was 88.5% ‘for’ with a range between 38.8% in the case of Stanley Black & Decker and 100%, obtained by several companies. The 2012 votes averaged slightly less at 87.9%, ranging from a low of 19.9% at Chesapeake Energy to 100% at the Washington Post Company.

There is a large range in the compensation data demonstrating the differing philosophies employed by compensation committees. Panel A of Table 1 shows the top ten highest earning CEO-years. At the low extreme of CEO compensation is Kosta Kartotis, CEO of Fossil Inc. since October 2000, who has refused all forms of compensation since 2005. At the other end of the compensation spectrum is David Simon, CEO of Simon Property Group Inc. since 1998, whose total compensation amounted to \$137.2 million in 2011. He received an annual salary of \$1.2 million, a

performance bonus of \$4 million, and a one-time retention grant with a fair value of close to \$120 million. Not surprisingly, the firm's shareholders voiced their disapproval through their say-on-pay vote with only 25.7% of votes approving the plan. Panel B of Table 1 shows the compensation of CEOs receiving the ten lowest say-on-pay results in the sample.

The control variables in the sample have a large range similar to that of the variables of interest. CEO tenure, calculated by subtracting the end of the corresponding fiscal year from the date the executive became the CEO divided by 365 days, ranges from 1 year for CEOs who gained the title at the beginning of the year to 49 years in the case of Leslie Wexner, CEO of Limited Brands Inc since 1963. Firm size, measured by total revenue ranges from the smallest company Alexion Pharmaceuticals with \$541 million in revenue in 2010 to Exxon Mobil with \$486 billion in 2011. Return on assets, calculated by dividing net income by total assets, ranges from -27.3% by Dean Foods in 2011 to 37.1% by Lorillard, Inc. in 2011. Finally, the annual shareholder return for the year correlated to the compensation is included as the final control. The return sample ranges from -66% for Alpha Natural Resources in 2011 to 219% for Netflix in 2010.

Table 2 provides statistics on the control variables: Panel A displays the range and Panel B provides a correlation matrix. Table 3 shows the medians for selected variables grouped by their voting result. In addition, it shows the results of a Wilcoxon Rank-Sum test indicating that there is a significant difference ( $p < 0.01$ ) in the distribution of salary, stock awards, option awards, other compensation, total compensation, golden parachutes, dilution, and tenure between firms receiving above and below 70% say-on-pay approval.

## 7. Empirical Results and Discussion

Table 4 reports the results of my analysis of the determinants of shareholder support for CEO compensation plans through their say-on-pay votes. Column (1) displays the relation between *sop\_result*—the number of votes ‘for’ scaled by the total number of votes cast—and the five compensation components discussed previously (salary, weak pay-for-performance link, dilution, excess change of control payment, and high golden parachute) while controlling for size, performance, and firm fixed effects. There is a significant negative relationship between voting results and three of the compensation components: *ln\_salary* and *dilution* ( $p < 0.01$ ) and *hi\_bonus* ( $p < 0.05$ ). Although the results on *ln\_salary* and *hi\_bonus* are statistically significant, they are not economically significant. The results show that a fifty percent increase in salary from \$1.1 million, the average salary in the sample, to \$1.65 million results in only a roughly 1 percentage point decrease in say-on-pay results while holding the other variables constant. In addition, the existence of *hi\_bonus* results in a decrease of 4.8 percentage points in vote results. The economic significance of dilution, however, is large: holding the other variables constant, an increase in dilution of one percentage point (note that the maximum dilution in the sample is just over 2%) results in a decrease in say-on-pay approval of roughly 27 percentage points. The results indicate that shareholders disapprove of higher CEO salaries, higher dilution from stock options, and a poor link between bonus and performance resulting in a high bonus payout. Interestingly, the coefficient on *lo\_bonus* is not significant, indicating that shareholders do not take into account a weak link between pay and performance when it results in a low bonus package. This result is interesting because it appears that shareholders do not disapprove of a CEO not being

properly rewarded in cash for good performance. In addition, Column (1) analyzes the impact of a discretionary bonus and a high golden parachute agreement in the compensation package. The results show that there is no significant relationship between *discretionary\_binary* and the voting result. While this is contrary to the assumption that shareholders disapprove of discretionary bonuses because they are not tied to any specific performance criteria, it is possible that there are too few firms awarding discretionary bonuses and they are generally low in value so the results aren't significant. Similarly, there is no significance shown on the coefficient on *hi\_golden*. This is not surprising given the SEC rule of a mandatory vote on golden parachutes specifically in a proposed merger or other transaction requiring approval. It is an indication that shareholders vote with sophistication and do not vote emotionally on high severance agreements.

One possible concern with the interpretation of Column (1) is that the control variables *roa* and *ln\_revt* are also included in the cross sectional regressions used to determine *hi\_bonus* and *lo\_bonus* in Eq. (3). Therefore, it is possible that when included in Column (1), the correlation between those variables could present a problem of multicollinearity. To alleviate this potential concern, Column (2) shows that the inferences in Column (1) are robust to removing the control variables *roa* and *ln\_revt*. While the explanatory power of the model is slightly reduced, the coefficients and the significance of the variables of interest remain largely unchanged.

Column (3) displays similar results when examining industry adjusted compensation figures. After adjusting *ln\_salary* to be equal to the natural log of the firm minus the mean for the industry, there is still a significant negative relationship ( $p < 0.01$ ) between it and say-on-pay results. Similarly, the coefficient on *adjdilution* and *hi\_bonus*

are still significant and negative ( $p < 0.01$  and  $p < 0.05$ , respectively). The economic significance of the coefficients is similar to what it was before adjusting for industry. Column (4) shows that the results in Column (3) are robust to removing the control variables for the same reason as explained above in regards to Column (2). The results in Column (1) and Column (3) suggest that shareholders vote against higher salaries, dilutive stock option awards, and CEO receiving bonuses that are greater than what they deserve based on performance both relative to the entire sample and to the industry.

Table 5 examines shareholders' response to high excess pay versus high predicted pay in an attempt to determine if shareholders vote sensationally or with sophistication. Column (1) shows a significant negative relationship ( $p < 0.01$ ) between *excess\_total* and *sop\_result* and no significance on *predicted\_total* indicating that shareholders are sophisticated and make adjustments for an expected level of pay instead of reacting sensationally to high levels of pay that can be justified by performance. The results indicate that while holding predicted total compensation constant, an increase of ten million dollars of excess compensation results in a decrease of nearly 7 percentage points in the firm's say-on-pay vote.

Column (2) explores the impact of the percentage of excess pay. The results show a significant ( $p < 0.01$ ) and negative correlation between both excess total and percent excess total. The significance of *percent\_excess* indicates that shareholders find not only the level of excess compensation to be significant, but also the degree by which it differs from actual compensation. The effect is economically significant as well: holding the level of excess total constant, an increase in its relative size by ten percentage points leads to a decrease of 24 percentage points in the voting result. To illustrate, take an



example from the sample. The CEOs of Autodesk and Pfizer both made about \$9.3 million in excess compensation in 2011; however, given the differences in dollar amounts of actual compensation, this corresponds to 92% excess for the Autodesk CEO and only 45% for Pfizer's. Not surprisingly, Autodesk received only 53.6% say-on-pay approval while Pfizer received 95.8% approval. The results in Column (2) indicate that shareholders are sophisticated enough to recognize this difference and to penalize CEOs that receive a high percentage of excess compensation with a negative vote.

## **8. Conclusion**

In an empirical analysis of the first two years of say-on-pay regulation in the United States, this paper finds that shareholders vote against CEO compensation plans with high salary, poor link between pay and performance, high dilution, and high excess CEO compensation. This paper finds evidence of a high level of shareholder sophistication in evaluating CEO compensation packages such that shareholders are effectively voting against plans with poor links between compensation and performance as well as a high percentage of excess compensation. The results demonstrate the importance of say-on-pay in the United States and contribute to the evidence that shareholders use the tool responsibly and do not punish well performing CEOs.

These results are especially important to corporate boards that now have empirical evidence as to what elements of compensation packages are the most disturbing to shareholders. Armed with this data, they will be better able to design compensation packages without the potential distraction and bad signal of a negative say-on-pay result. This paper contributes to the literature on executive compensation and shareholder votes

in the United States as the first paper to empirically examine the determinants of shareholder support in the first two years of say-on-pay, and paves the way for future research on how corporate boards respond to negative votes.

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## Appendix

Table 1

Panel A: Highest paid CEOs by total as reported in the Summary Compensation Table

Company	Year	CEO Last Name	Salary	Bonus	Stock Awards	Option Awards	Non-Equity Incentive	Pension Change	Other Compensation	Total	SOP Result
SPG	2012	Simon	1,211,538	4,000,000	131,939,768	-	-	-	15,239	137,166,545	25.7%
ORCL	2012	Ellison	1	-	-	90,693,400	3,918,633	-	1,548,632	96,160,696	40.9%
VIAB	2011	Dauman	2,625,000	-	41,833,309	28,620,000	11,250,000	45,793	141,206	84,515,308	86.5%
ORCL	2011	Ellison	1	-	-	62,668,200	13,341,994	-	1,549,625	77,559,820	66.4%
OXY	2011	Irani	1,191,667	1,400,000	40,250,000	-	31,575,000	-	1,690,343	76,107,010	90.3%
CBS	2011	Moonves	3,513,462	27,500,000	7,999,982	14,868,000	-	869,854	2,977,722	57,729,020	86.8%
ANF	2012	Jeffries	1,500,000	-	-	43,201,893	1,188,000	1,460,398	719,182	48,069,473	23.6%
MCK	2011	Hammergren	1,664,615	-	12,185,796	7,370,750	9,860,400	14,072,640	511,951	45,666,152	69.7%
DISCA	2011	Zaslav	2,000,000	-	20,333,632	15,412,996	4,410,000	-	432,668	42,589,296	81.3%
MCK	2012	Hammergren	1,680,000	-	8,601,530	6,133,206	12,827,520	10,075,558	362,508	39,680,322	62.0%

Panel B: CEOs receiving the lowest say-on-pay vote results

Company	Year	CEO Last Name	Salary	Bonus	Stock Awards	Option Awards	Non-Equity Incentive	Pension Change	Other Compensation	Total	SOP Result
CHK	2012	McClendon	975,000	1,951,000	13,627,556	-	-	-	1,314,520	17,868,076	19.9%
ANF	2012	Jeffries	1,500,000	-	-	43,201,893	1,188,000	1,460,398	719,182	48,069,473	23.6%
NBR	2012	Isenberg	1,250,000	15,595,000	-	-	-	35,502	2,616,363	19,496,865	25.0%
SPG	2012	Simon	1,211,538	4,000,000	131,939,768	-	-	-	15,239	137,166,545	25.7%
CBE	2012	Hachigian	1,266,667	-	10,078,354	4,822,121	3,800,000	11,994	1,149,536	21,128,672	28.9%
BIG	2012	Fishman	1,400,000	-	10,280,000	-	-	-	244,662	11,924,662	31.2%
PBI	2012	Martin	975,000	-	1,187,500	1,187,500	4,463,160	1,354,880	62,758	9,230,798	34.8%
BBY	2012	Dunn	1,121,154	-	3,632,679	2,265,594	-	-	55,532	7,074,959	38.2%
SWK	2011	Lundgren	1,208,433	-	25,347,725	1,255,500	4,342,800	159,663	416,138	32,730,259	38.8%
ORCL	2012	Ellison	1	-	-	90,693,400	3,918,663	-	1,548,632	96,160,696	40.9%

Panel A lists the ten CEOs with the greatest total compensation as reported to the SEC in the Summary Compensation Table.

Panel B lists the CEOs of firms receiving the ten lowest results in their say-on-pay votes.

Table 2  
Panel A: Range of control variables

	<b>Mean</b>	<b>Standard Dev.</b>	<b>Minimum</b>	<b>Maximum</b>
Return on Assets	6.79%	6.01%	-27.38%	37.10%
Total Revenue	\$19,491	\$38,813	\$540	\$486,429
CEO Tenure	7.56	6.20	1	49.03
Book-to-Market	0.515	0.423	-0.630	5.144
Stock Return	14.59%	28.78%	-65.97%	218.93%

Panel B: Correlation matrix of control variables

	Return on Assets	Total Revenue	CEO Tenure	Book-to-Market	Stock Return
Return on Assets	1.0000				
Total Revenue	-0.0128	1.0000			
CEO Tenure	0.0464	-0.0487	1.0000		
Book-to-Market	-0.3568	0.0746	-0.0556	1.0000	
Stock Return	0.2303	-0.0421	0.0611	-0.2794	1.0000

The above tables provide summary statistics on key control variables. Return on Assets is calculated by dividing net income by average total assets. Total revenue is reported in thousands of dollars. CEO tenure is the number of years the CEO has held the position. Book-to-Market is calculated by dividing the book value of the firm by its market value at the end of its fiscal year. Stock returns are the 12-month total shareholder return for the fiscal year.

Table 3  
Medians of selected variables grouped by vote result

	All Votes	High Votes	Medium Votes	Failing Votes	Wilcoxon z-score
Salary	1,020,400	1,003,846	1,137,702	1,210,000	3.122***
Bonus	0	0	0	0	1.859*
Stock Awards	3,171,823	3,077,778	4,971,604	3,632,679	4.557***
Option Awards	1,642,105	1,587,495	2,976,323	2,265,594	4.295***
Non-Equity Incentive	1,746,889	1,746,777	2,050,000	857,290	0.672
Pension Change	134,205	130,600	630,830	11,994	1.726*
Other Comp	151,554	143,277	264,732	416,138	3.752***
Total	9,785,822	9,474,954	13,838,679	16,369,535	7.057***
Golden Parachute	20,380,666	20,091,855	25,728,696	43,297,320	2.993***
CEO Tenure	6	6	4	7	2.576***
Option Dilution	0.04%	0.04%	0.05%	0.08%	2.428**
Stock Return	13.7%	15.0%	-0.7%	-6.1%	-4.972***
N	884	789	76	19	

This table presents the median of selected compensation and control variables according to the voting outcome defined as follows: All Votes is all votes in the sample, High Votes are votes above 70% 'for', Medium Votes are votes between 50% and 70% 'for', and Failing Votes are votes receiving less than 50% 'for'. The farthest right column presents the z-score for a two-sample Wilcoxon rank-sum test between high votes and all other votes (medium and failing) for each variable of interest. \*\*\*, \*\*, and \* indicate significance at 1, 5, and 10 percent, respectively. Compensation data is as reported in the Summary Compensation Table in each firm's annual Proxy Statement. CEO Tenure is defined as the number of years the CEO has held his current position. Option Dilution is the number of stock options granted to the CEO in the year scaled by total shares outstanding at the end of the year. Stock return is the annual stock return of the firm in the year of the compensation.

Table 4  
Regression results of percentage votes for say-on-pay on compensation data and controls

Independent Variable	Say-on-pay Result			
	(1)	(2)	(3)	(4)
ln_salary	-0.0276*** (0.0049)	-0.0266*** (0.005)		
hi_bonus	-0.0482** (0.0216)	-0.0522** (0.0213)		
lo_bonus	0.0402 (0.0251)	0.0405 (0.026)		
dilution	-27.160*** (5.671)	-26.29*** (5.371)		
discretionary_binary	0.0163 (0.0265)	0.0210 (0.0258)		
hi_golden	-0.0134 (0.0214)	-0.0093 (0.0214)		
adjln_salary			-0.0248*** (0.0056)	-0.0237*** (0.0057)
adjdilution			-23.04*** (5.579)	-22.35*** (5.566)
adjhi_bonus			-0.0414** (0.0209)	-0.0443** (0.0207)
adjlo_bonus			0.0370 (0.0250)	0.0415 (0.0267)
roa	0.450** (0.225)		0.443* (0.227)	
ln_revt	-0.0258 (0.0436)		-0.0236 (0.0444)	
Constant	1.294*** (0.398)	1.080*** (0.0374)	1.066*** (0.402)	0.881*** (0.0088)
R-squared	0.083	0.069	0.073	0.060
Number of clusters	495	495	495	

The sample consists of 884 say-on-pay vote results regressed on CEO-year compensation observations from fiscal year 2010 and 2011. The columns present panel regressions where the dependent variable is the percentage votes “for” the advisory vote on executive compensation scaled by the total number of votes cast including abstentions. The independent variables are the natural log of CEO salary (ln\_salary), binary variables indicating the CEO’s bonus is in the highest or lowest quartile of actual bonus less expected bonus (hi\_bonus and lo\_bonus, respectively), the level of dilution resulting from CEO stock option awards measured as options granted scaled by shares outstanding (dilution), a binary variable if the CEO received a discretionary bonus (discretionary\_binary), natural log of salary less the mean for the industry (adjln\_salary), the same binary variables indicating high or low excess bonus but adjusted for the industry mean (adjhi\_bonus and adjlo\_bonus, respectively), return on assets measured as net income scaled by total assets (roa), and the natural log of total revenue (ln\_revt). Compensation amounts are in thousands of dollars. Firm fixed effects are included in each regression, but not shown. T-statistics are presented in parenthesis below coefficients and calculated based on clustering by firm (495 clusters). \*\*\*, \*\*, and \* indicate significance at 1, 5, and 10 percent, respectively.



Table 5  
 Regression results of percentage votes for say-on-pay on the breakdown of total compensation

Independent Variable	Say-on-pay Result	
	(1)	(2)
predicted_total	-0.00148 (0.00270)	
excess_total	-0.00693*** (0.000816)	-0.00578*** (0.000801)
percent_excess		-0.0244*** (0.00478)
Constant	0.914*** (0.0252)	0.897*** (0.00219)
R-squared	0.132	0.151
Number of clusters	495	495

This table presents results of panel regressions where the dependent variable is the percentage votes “for” the advisory vote on executive compensation scaled by the total number of votes cast including abstentions. The independent variables are the predicted total CEO compensation (predicted\_total) which is determined through annual cross sectional regressions with total compensation as the dependent variable and economic determinants of pay as the independent variables as described in Eq. (5). Excess compensation (excess\_total) is calculated as the difference between actual total compensation as reported in the Summary Compensation Table and predicted total as described in Eq. (4). Predicted total and excess total are in millions of dollars. Percent excess total compensation (percent\_excess) is calculated as the difference in the natural logs of total and predicted as described in Eq. (6). Firm fixed effects are included in each regression, but not shown. T-statistics are presented in parenthesis below coefficients and calculated based on clustering by firm (495 clusters). \*\*\*, \*\*, and \* indicate significance at 1, 5, and 10 percent, respectively.