Voluntary Performance Disclosures in the CD&A

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This paper examines managers' use of voluntary performance disclosures to explain or justify executive pay contracts to outsiders. Prior research finds that public and shareholder approval of compensation is largely influenced by recent performance. We find that firms voluntarily include more discussion of past performance in the Compensation Discussion and Analysis (CD&A) section of the annual proxy statement when public and shareholder scrutiny is likely to be highest, i.e., when compensation levels are relatively high. This relation strengthens after the introduction of Say-on-Pay, when outside scrutiny arguably increased for all firms. We further find an association between performance disclosures in the CD&A and both higher shareholder approval of compensation plans and higher future compensation. Altogether, our findings indicate CD&A performance disclosures provide an effective way for firms to favorably influence outside impressions of executive pay contracts.

1. Introduction

This paper examines whether firms use voluntary disclosure to explain or justify their executive compensation to outside stakeholders. Executive compensation contracts are central to assessing agency problems between shareholders and managers and disclosures of the details of these contracts are highly scrutinized by outside parties. As a result, this study asks whether managers emphasize certain aspects of recent performance in their compensation disclosures in order to explain or justify pay. Specifically, we examine whether firms use voluntary performance discussions in their Compensation Discussion & Analysis (CD&A) disclosures in order to favorably affect outsiders' assessments of pay.

CD&A disclosures are a mandated item in the proxy statement. The purpose of the CD&A is to provide outsiders with specific details about compensation design and decisions; however, firms often begin the CD&A with a general discussion of past performance. These performance discussions are not made in the context of the key performance indicators that directly determine the payouts of short- or long-term incentive plans. Thus, they are outside the scope of mandatory CD&A disclosure. Voluntary performance disclosures have increased in both frequency and length since the CD&A was introduced in 2006 (see Figure 1) and often include graphs. Appendix A gives examples of CD&A disclosures that begin by highlighting recent performance outcomes.

As compensation plans grow increasingly complex, public and investor scrutiny over executive contracts remains high. Negative stakeholder attention is strongest when levels of executive pay appear relatively high; i.e., pay-for-performance appears weak. Pay-for-performance could appear weak either because pay is artificially high or because common performance measures (e.g., EPS, revenues) do not adequately reflect an executive's performance.

In either case, performance discussions in the CD&A may positively affect outside assessments of pay-for-performance and reduce costly negative stakeholder reaction to compensation choices.

In order to better understand voluntary performance disclosures, we measure the degree and tone of voluntary discussion of historical performance in the CD&A for a sample of ExecuComp firms from 2007 to 2018. In doing so, we exclude contract-driven performance discussion: e.g., performance targets. We measure performance discussion along four dimensions: 1) the proportion of voluntary performance words in the CD&A, 2) the proportion of sentences that voluntarily discuss performance in the CD&A, 3) the positive nature of the tone in the performance discussion in the CD&A, and 4) the inclusion of an image (usually a graph) in the CD&A that presents past performance. In addition, we use a principal component analysis to create a comprehensive performance disclosure measure using these four dimensions.

We expect firms that provide high levels of compensation, especially levels that seem out of line with firm performance, to provide more extensive and positively-toned voluntary performance disclosure. Such firms have a greater incentive to improve impressions of pay-for-performance. We test whether firms increase the degree and positivity of performance discussions in the CD&A when both total CEO pay and CEO pay relative to performance (i.e., excess compensation) is high.[1] Along all four dimensions and the principal component, we find that firms with high total and excess CEO compensation include more voluntary discussion of performance in their CD&A.

To verify that the relation between compensation and CD&A performance discussions are driven by attempts to justify their pay plans to outsiders, we test the relation around the

[1] Consistent with prior literature (e.g., Smith and Watts, 1992; Core, Holthausen, and Larcker, 1999; Murphy, 1999; Core, Guay, and Larcker, 2008), we measure CEO pay relative to performance, or excess compensation, as the residual from a cross-sectional model of compensation that includes, among other factors, accounting and price measures of performance.

introduction of Say-on-Pay (SOP). In 2011, dispersed owners gained a formal channel through which to voice their opinions on compensation through a non-binding shareholder vote to approve executive compensation plans. For all firms, outside scrutiny of pay contracts arguably increased with SOP. If firms use CD&A performance disclosures to explain or justify pay contracts in response to outside scrutiny, we expect an increase in this behavior after SOP, when scrutiny is highest. Consistent with our hypothesis, we find that the positive relation between both total and excess compensation levels and CD&A performance disclosures is stronger in the post-SOP period. Our findings suggest firms include performance disclosures in the CD&A either to justify or explain their executive compensation plans to outsiders.

We next examine cross-sectional variation in the disclosure-compensation relation to distinguish between two motivations for firms to include performance discussions in the CD&A. First, firms with high agency frictions may wish to *justify* their compensation in order to continue paying rents to top executives. Under this agency motivation, performance disclosures in the CD&A serve to mislead investors about pay-for-performance and maintain inefficient contracts. Alternatively, firms may wish to *explain* their compensation if common performance measures, such as stock price or accounting return, do not adequately represent the quality of executive performance. That is, firms may provide voluntary performance disclosures in earnest, to inform outside stakeholders about past performance and how it relates to compensation generally. Under this informative disclosure motivation, firms seek to avoid negative shareholder reaction in order to maintain contract efficiency rather than rents.

To test the agency motivation to justify pay, we examine whether incentives to include favorable performance disclosures are stronger when the CEO has more power. We measure CEO power according to a) whether the CEO also chairs the board of directors and b) the length of his

or her tenure as CEO. To test the informative disclosure motivation, we examine whether the incentives to explain pay are stronger in complex or uncertain information environments; specifically, we test the relation according to a) the number of business segments in the firm, b) the number of unique incentive plans paid to the CEO, and c) the number of days since the 10-K was filed (as of the proxy filing date). We find that the relation between pay and performance disclosures are stronger for firms that have more powerful CEOs who chair the board of directors and have served longer in the role. We do not find evidence that the association between compensation levels and voluntary performance varies with either of our three tests of the informative disclosure motivation.

In an additional test of the informative disclosure hypothesis, we examine the relation between compensation and performance disclosure in the Management Discussion and Analysis (MD&A) section of the annual report. If the association between compensation and performance discussion in the CD&A is driven by incentives to accurately explain pay choices, we expect to see a relation between compensation and performance disclosure in the MD&A. We do not find evidence that compensation levels are positively associated with the extent of MD&A performance disclosures. Together, our results are consistent with managers using voluntary performance disclosures in order to help powerful CEOs, rather than to better inform stakeholders about pay-for-performance.

To conclude our analysis, we provide preliminary evidence on whether voluntary performance disclosures are effective. Specifically, we examine whether performance disclosures allow firms to continue to provide high levels of compensation to CEOs. We further assess the effect of performance disclosures on outside response by directly examining whether performance disclosure in the CD&A affects 1) SOP recommendations from ISS, 2) SOP shareholder voting

outcomes, and 3) negative media coverage of executive compensation. Controlling for excess compensation in the current year, we find that firms with relatively high performance disclosures have more excess compensation in the following year. Across all three direct measures of outside response, we find that firms with high CD&A performance disclosure are less likely to receive a negative response after controlling for the respective current-year measure.

We interpret the findings on the effects of voluntary performance disclosures with caution, since we are unable to capture variation in outcomes due to exogenous performance disclosure. In order to address the inherent endogeneity of performance disclosures, we use entropy balanced comparison firms to assess the effect of performance disclosure on future compensation and stakeholder response. Consistent with our prior finding, the effect on future levels of compensation is robust to this approach and highest in the post-SOP sample period. Among our stakeholder response measures, only the effect on shareholder voting is robust to using an entropy balanced comparison sample. This latter finding implies that a subset of shareholders are swayed by voluntary performance disclosures, even if proxy advisors and journalists are not.

CEO compensation and incentives are important determinants of firm performance (e.g., Core et al., 1999) and disclosure and investor monitoring are primary governance tools (see Armstrong, Guay, and Weber, 2010). The CD&A rules afford firms considerable discretion over what information to include in order to allow outsiders to monitor pay practices. Yet, relatively little is known about the determinants or effects of CD&A disclosure choice. Unlike some other recent work (e.g., Mukhopadhyay and Shivakumar, 2019; Balsam, Boone, Liu, and Yin, 2016), we focus on information in the CD&A that is not immediately necessary to explain specific compensation plans or details. Our evidence suggests this voluntary disclosure choice is designed

to affect the efficacy of investor monitoring. Our findings also help to explain the increasing length of the CD&A disclosure since its introduction in 2006.

Our findings further underscore the importance of understanding disclosure in context. By the time the annual proxy containing the CD&A is made public, detailed performance information is already available via the annual report. CD&A performance disclosures do not necessarily provide new information, yet our evidence is that they are associated with real effects on future contracts. Given the long-term nature of most executive compensation contracts, these choices could have significant, long-term implications for future performance.

The remainder of our paper is as follows: Section 2 provides background and develops our primary hypothesis. Section 3 describes our sample and key variables. Section 4 describes our research design and results. Section 5 concludes.

2. Background and Hypothesis Development

2.1 Background: Compensation Disclosure and Say-on-Pay (SOP)

Executive compensation plans are among the most important of all public firm contracts due to their role in reducing agency frictions. Shareholders are known to actively monitor and influence compensation design (Hartzell and Starks, 2003). While large-block investors can directly influence compensation through representation on the board of directors, less influential investors influence compensation indirectly, through their decisions to maintain or dispose of their holdings. These smaller investors rely on required disclosures of compensation details in order to assess the agency costs of their investments.

Multiple times since its founding, the SEC has sought to enhance the quantity and quality of compensation disclosures in order to help shareholders assess agency frictions within the firm. In 2006, the SEC introduced the Compensation Discussion and Analysis (CD&A) disclosure

requirement in order to help investors understand the "how and why" of pay design. This disclosure primarily focuses on explaining compensation for the prior year. Beyond the mandatory elements of the CD&A required by the SEC,[2] firms may use discretion in providing additional information to aid outsiders' understanding of compensation contracts. Compensation Consultant Meridian refers to the CD&A as "the company's primary opportunity to educate shareholders about the company's commitment to paying for performance." Data supports the increased use of the CD&A, as the average length has increased from an average of 4,142 words in 2007 to 6,155 words in 2018 for firms in our sample.

Compensation disclosures are subject to a great deal of scrutiny. Every proxy season, media outlets analyze the level and composition of CEO pay. Since Say-on-Pay (SOP) was introduced as part of the Dodd-Frank Act of 2010, shareholders regularly approve executive compensation plans with non-binding, advisory votes. Professional proxy advisors also form SOP recommendations for their investor client base.[3] Empirical evidence finds that firms respond to SOP. Failed SOP proposals lead to pay packages in future years that better align with investor preferences (Ertimur et al., 2013; Ferri and Maber, 2013, Kimbro and Xu, 2016). The very fact that some firms do not align their pay with investor demands until after a failed proposal suggests that firms see the changes as costly, either to the firm (in the form of reduced performance) or to managers (in the form of reduced rents).

Research on the determinants of failed SOP proposals, both in terms of proxy recommendations and shareholder voting outcomes, finds that firms with high levels and changes

[2] Requirements for the CD&A, described in SEC rule 402(b), include a) disclosure of what the compensation program is designed to reward, b) each element of compensation, c) why each element is included, and d) how the amount of each element is determined.

[3] Non-binding, advisory Say-on-Pay voting for most public firms went into effect for annual meetings after January 5, 2011.

in compensation and poor recent operating or stock price performance are less likely to receive approval (e.g., Ertimur et al. 2013, Balsam et al., 2016). This research also finds that recommendations and voting results vary based on specific contracting practices (e.g., golden parachutes, excessive perquisites, etc.). Collectively, these results demonstrate that compensation contracts receive scrutiny after the adoption of SOP voting.

2.2 Hypothesis: CD&A Disclosures and Perceptions of Pay-for-Performance

This paper examines discretionary communication choices in compensation disclosures. Disclosure of prior performance (within the CD&A) not directly related to compensation elements is voluntary. The proxy statement containing the CD&A is typically released after several pertinent performance disclosures (e.g., the earnings announcement, conference call, or 10-K) are made.[4] As a result, any performance disclosure in the CD&A is unlikely to provide new information. However, investors have limited time and face processing costs (e.g. Hirshleifer and Teoh, 2003; Bloomfield, 2002; Blankespoor, deHaan, and Marinovic, 2020). Investors and other stakeholders may rely on performance disclosures within the CD&A to evaluate compensation and pay-for-performance, rather than seek out performance information from alternative sources.

Prior research on earnings announcements finds firms selectively disclose benchmarks in order to present performance more favorably and achieve a more desirable investor response (Schrand and Walther, 2000; Bowen, Davis, and Matsumoto, 2005; Huang, Nekrasov, and Teoh, 2018). In psychology and management, this behavior is referred to as "impression management": behavior that an individual or group directs toward outsiders in order to effect desired perceptions (Schneider, 1981; Gardner and Martinko, 1988). Given that voluntary performance disclosure

[4] The deadline for filing Proxy Statement is 120 days after the end of the fiscal year if the annual report references the Proxy Statement. This deadline is at least a month after the filing deadline for the 10-K, which is between 60 and 90 days depending on filer status. Within our sample, on average, Proxy Statements are filed 34 days after the 10-K.

within the CD&A is unlikely to provide new information to investors, this disclosure may be used instead to manage impressions. In other words, firms may provide performance information that reflects favorably on firm performance in order to justify the manager's compensation.

If CD&A performance disclosures are used to explain or justify compensation, we expect their use to increase for firms that have the greatest incentive to influence perceptions of compensation. Thus, we predict that firms with relatively high levels of compensation include more voluntary discussion of past performance in their CD&A disclosures. While firms have many disclosure outlets through which to manage perceptions of performance, we examine the CD&A because it is most relevant to the processing of firms' compensation information by outside stakeholders.

There are several reasons why we would not expect performance disclosures to be associated with the level of pay. First, performance disclosures that positively represent the firm's performance are relatively low cost. As such, all firms may include such discussions, not just those with high levels of executive compensation. Furthermore, research on 10-K filings finds much of the disclosure is redundant, sticky, and boilerplate (Brown and Tucker, 2011; Dyer, Lang, and Stice, 2017). If CD&A disclosures follow a similar pattern, we would not expect the level of performance disclosures to vary with pay. Relatedly, to the extent compensation committees rely on consultants to write the CD&A, disclosures may not reflect firm-specific preferences. Ultimately, whether voluntary performance disclosures are used specifically to justify pay to outsiders is an empirical question which we address in this paper.

3. Sample, Key Variables, and Descriptive Statistics

3.1 Sample Selection

Our sample contains ExecuComp firm-years from 2007 to 2018 (Table 1). We next rely on SEC index files to identify relevant proxy statements (DEF 14A filings), retaining only compensation firm-years for which the corresponding proxy statement is available and machine readable. We further require the CD&A section to be readily identifiable using traditional text-based parsing techniques. We review a random sample of 40 proxy statements and noted that if the filing contained a CD&A section, it contained a header containing the words "compensation, "discussion," and "analysis" and was followed by the Summary Compensation table (also preceded by a relevant header). Therefore, for each firm year in our sample, we identify text between these headers within the proxy statement as the CD&A section. If there is more than one instance, we retain the longest section (as false positives most frequently come from the table of contents). We iterate through our program until we achieve 98% accuracy in identifying CD&A sections (based on a random review of sample filings) and are thus confident in our approach. This results in 19,199 firm-years available for analysis.[5]

3.2 Key Variables

3.2.1 Performance Disclosure Measures

Our study requires a measure of performance disclosure. Specifically, we seek to identify voluntary disclosures not directly related to compensation design elements. Two of the authors independently read a random sub-sample of CD&A sections and together compiled three lists of words and phrases to identify sentences that directly relate to compensation (performance words, compensation words, and personnel identifiers). We separate the CD&A section into sentences

[5] Requiring machine-readable SEC filings could bias the sample in favor of including more sophisticated firms. Although we control for firm size, we recognize the generalizability of our findings may be limited.

using conventional text analysis procedures.[6] If the sentence (i) contains performance language, (ii) does *not* mention compensation and (iii) does *not* contain language referring to personnel, we assume it is a voluntary firm performance disclosure and consider this a "performance sentence."

We use five measures to capture the amount and qualitative aspects of voluntary disclosures in the CD&A.[7] *PerfWords* is the number of performance words from performance sentences, scaled by the total number of words in the CD&A section. We restrict the *PerfWords* count to performance sentences to ensure we do not inappropriately classify discussion of compensation-related performance measures as voluntary performance disclosure. *PerfSentences* is the number of performance sentences scaled by the number of sentences in the CD&A. To the extent managers are using these disclosures to justify their compensation (i.e. relative to performance), we expect CD&A disclosures to contain net positive tone. *Tone* is equal to positive words minus negative words (Henry, 2008), scaled by total words in the CD&A section. We also draw from existing literature that suggests graphs and images draw attention and can be used to bias the presentation of otherwise unbiased metrics to create our fourth measure (e.g., Nekrasov, Teoh and Wu, 2019; Muino and Trombetta, 2009). Specifically, *PerfImage,* is an indicator equal to one if there is an image immediately preceding or following a performance sentence.

To the extent each of these measures is a different representation of the same justification-usefulness construct, we also create a fifth variable which is the first principal component of the previous four: *PerfDisclosure* (eigenvalue = 2.52, factor loadings presented in Table 2, Panel B). As expected, this variable is positively and significantly associated with each of the input variables.

[6] There are several challenges to parsing sentences in SEC filings (Loughran and McDonald, 2016) and many studies rely on pure "bag-of-words" approaches as a result. However, because we seek to isolate performance discussion not related to compensation, we require a unit of measure greater than just a single word. Any error in sentence parsing should introduce noise to our analysis.

[7] All variables are defined in Appendix B. Relevant word lists are provided in full in Appendix C and full sample descriptive statistics are provided in Table 2, Panel A.

3.2.2 Compensation

We expect firms with compensation contracts that are more likely to attract scrutiny to justify their compensation in the CD&A. Therefore, our primary compensation measure is *TotalComp*, equal to the log of one plus total compensation for the firm's CEO from ExecuComp (TDC1). Prior work has shown that pay level increases as compensation increases in complexity (i.e. including additional types of compensation and additional performance metrics, see Murphy and Sandino, 2019). Firms with more complex contracts may voluntarily provide additional disclosure to provide context to these complexities. To ensure our *TotalComp* measure does not merely capture underlying compensation complexity, we include a measure of compensation complexity (*ComplexComp*) equal to the log of the count of the different types of compensation the CEO receives.

While we rely on *TotalComp* as our primary measure, it is possible firms may feel a greater need to justify compensation that may appear out of line from expectations given firm performance. Therefore, we also ensure our results are robust to including a measure for excess compensation in place of total compensation. Specifically, we follow prior research and create an excess compensation measure that is a residual from a cross-sectional model of the CEO's total compensation, following Core et al. (2008). Specifically, we regress log of total compensation (from ExecuComp) on the log of the CEO's tenure, log of sales in the prior year, an S&P 500 indicator, book-to-market in the prior year, returns over current and prior years, ROA for current and previous year, and SIC two-digit indicator variables by compensation year. *ExcessComp* is equal to total compensation minus the predicted value of total compensation given observed values of these measures. Higher values of *ExcessComp* suggest CEOs are receiving more total compensation than expected.

3.2.3 Other Key Control Variables

Prior research finds both compensation and firm disclosures are associated with firm performance. We therefore take several steps to control for performance throughout our analysis. Specifically, we control for firm performance, using two-digit SIC industry returns over the compensation year (*IndustryReturns*), firm-specific returns minus two-digit SIC industry returns over the compensation year (*FirmReturns*), industry-adjusted ROA (*ROA_IndAdj*) and within industry ROA quartile rank (*ROA_IndQuartile)*. We also include *ToneMDA,* the tone of the MD&A section of the annual report, to capture the extent to which underlying performance is captured in firms' disclosures more generally.

Similar to compensation complexity, firms may have both (perceived) high compensation and the need for additional performance disclosures if the firm itself is complex. We therefore include *Segments* (log of one plus the number of segments from Compustat) to control for firm complexity.[8] We also include institutional ownership and analyst following as proxies for investor attention. If the firm has high levels of investor attention, they will be more likely to justify their compensation with performance disclosures. Finally, we include the following firm characteristics shown to be associated with disclosure behavior as controls: *StdReturns* is the standard deviation of daily returns over the prior year, *MVE* is the log of the market capitalization, and *MTB* is the ratio of the market value of equity to book value of equity. Finally, we control for contemporaneous disclosure environment with the log of the number of sentences in the MD&A (*LengthMDA*).

3.3 Descriptive Statistics

[8] We include operating segments if populated, and business segments otherwise following prior research. We also confirm the results are robust to controlling for other measures of firm-level complexity (standard deviation of ROA over prior 16 quarters, intangible assets). See section 4.1 for details.

As shown in Table 2, Panel A, only 2% of CD&A sentences meet the criteria for firm performance sentences on average, while 5% of our sample firms include an image immediately preceding or following a performance sentence. On the other hand, MD&A sections of the 10-K contain roughly 19% performance sentences, which is consistent with our expectations of how managers use the different channels and serves to validate our performance sentence measure.[9]

Table 2, Panel C presents descriptive statistics split on above and below median values of *PerfDisclosure*. Consistent with our prediction, high performance disclosure firms have significantly higher total compensation and excess compensation on a univariate basis (p-value < 0.001 for both t-tests). High disclosure firms also have greater analyst following and institutional ownership, providing initial evidence that investor attention may influence the use of performance disclosures. Interestingly, three of our four firm performance measures are greater for high disclosure firms. This is inconsistent with firms using voluntary disclosure to justify compensation when performance is poor.

4. Research Design and Results

4.1 Performance Disclosures and Compensation Levels

To shed further light on the relation between the compensation contract and voluntary performance disclosure, we regress our key performance disclosure variables on *TotalComp,* our proxies for performance, complexity, investor attention, control variables, and year and industry fixed effects. Table 3 presents OLS regressions with standard errors clustered by firm. Consistent with expectations, total compensation (Panel A) is positively associated with all five measures of performance disclosure and four of the five measures are robust to including firm fixed effects. In

[9] We rely on Loughran and McDonald's 10-K corpus which does not retain html coding, thus restricting our ability to identify whether there is an image preceding or following a performance sentence in the MD&A section.

specification (5) (dependent variable = *PerfDisclosure*), the coefficient on *TotalComp* is 0.211 (t-stat=7.160). A one-standard deviation increase in total compensation is associated with a 0.2% increase in performance sentences in the CD&A (or an 11% increase for the median firm). We confirm the results are robust to using *ExcessComp* in place of *TotalComp* (see Table 3, Panel B). In addition, we report Table 3 specifications with firm fixed effects in Online Appendix Table 1, Panels A and B. Both total and excess compensation continue to be positively associated with voluntary performance disclosures, with the exception of the *PerfImage* indicator. Overall, our findings are consistent with managers using voluntary disclosure to justify or explain their compensation to CD&A users.[10,11]

4.2 Evidence from Say-On-Pay

If firms use performance disclosures to justify or explain compensation to outsiders, we expect the relation to be concentrated in situations where managers face increased investor attention or scrutiny. To this end, we rely on the Say-on-Pay regulation (SOP) to introduce variation in investor attention. Specifically, given the documented evidence of more negative voting outcomes when pay is higher, we expect the relation between performance disclosures and compensation levels to be stronger in years following the introduction of SOP.

Figure 1 provides initial evidence for this prediction. This figure plots average values of each disclosure measure by year, scaled by 2007 values for comparability. We also include the

[10] We assert the "firm" or the "manager" is responsible for drafting the CD&A disclosure. However, existing literature has documented that firms receive extensive input from compensation consultants in designing their compensation, and may receive similar input in creating the CD&A (e.g. Murphy and Sandino 2019; Cadman, Carter, and Hillegeist, 2010). To the extent firm representatives are reviewing and approving the disclosures, our predictions would continue to hold. Nonetheless, in Online Appendix Table 2 we show the results in Table 3 are robust to including compensation consultant fixed effects (including both *TotalComp* and *ExcessComp* specifications). Interestingly, using Meridian, Towers-Watson and Aon Hewitt for compensation consulting is associated with increased compensation disclosures.

[11] Following prior research, we control for firm-level complexity using *Segments*. However, we also confirm the results are robust to using intangible assets scaled by total assets and standard deviation of historical ROA as alternative measures. See Online Appendix Table 3 for tabulation of these results (also robust to *ExcessComp* specifications, untabulated).

corresponding MD&A values where appropriate (also scaled by 2007 values). While MD&A performance disclosures have stayed approximately the same or decreased over our sample period, the average values of each CD&A disclosure measure have more than doubled over the window. Consistent with expectations, we see sharp increases in each of the four performance disclosure measures around 2011 (when SOP became effective). For example, in Panel C we show the use of (net) positive tone in the CD&A almost doubled from proxy years 2010 to 2011 alone.

To provide multivariate evidence in support of this prediction, we examine whether the relation documented in Table 3 varies pre- and post- SOP implementation. Specifically, we create an indicator equal to one if the proxy year is subsequent to 2011 and zero otherwise (*SOP*)[12]. We expect the coefficient on the interaction of this variable with *TotalComp* to be positive. The results of this analysis are presented in Table 4 Panel A (with *ExcessComp* specifications presented in Panel B). Consistent with expectations, the coefficient on the interaction term is positive and significant across all five specifications in both panels. In fact, the coefficient on *ExcessComp* becomes insignificant in all specifications and becomes negative and significant in the regression of *PerfImage* on *TotalComp*. These findings further support our assertion that firms use voluntary disclosure to justify or explain compensation.[13]

4.3 Cross-sectional Tests

Firms may justify compensation using voluntary disclosure in order to continue paying rents to top executives. Alternatively, firms may use voluntary disclosure to explain compensation in relation to performance in more detail, particularly when common measures are insufficient for

[12] The SOP main effect is subsumed by year fixed effects, and we exclude the *SOP* indicator from our model accordingly.

[13] The SOP result is also robust to including firm fixed effects, compensation consultant fixed effects and alternative measures for firm complexity. These results are tabulated in Panels C and D of Online Appendix Tables 1, 2 and 3, respectively.

capturing true performance. In general, managers likely face both opportunistic incentives as well as the incentive to inform when choosing disclosures. These motivations have been shown to jointly motivate disclosure decisions (i.e. Bowen et al., 2005). In Table 5, we provide some evidence toward disentangling managers' intentions around their CD&A disclosure decisions. Specifically, we examine whether the relation between compensation and disclosure varies with proxies for (i) CEO power (suggesting the desire to continue paying high levels of compensation to top executives) and (ii) complex or uncertain information environments (suggesting an intent to explain complicated performance).

Our two proxies for CEO power are an indicator for whether the CEO also chairs the board of directors (*Duality*) and the log of one plus the number of years the CEO has worked at the firm (*Tenure*). If the voluntary disclosure is used strategically to justify paying rents, the relation between compensation and disclosure should be stronger when the firm has a more powerful CEO. In Table 5, Panel A, we regress our aggregated disclosure variable (*PerfDisclosure*) on *TotalComp, ExcessComp* and interactions of each variable with our proxies for CEO power. The disclosure-compensation relation is stronger when *Duality* = 1 for both *ExcessComp* and *TotalComp*, while only the *TotalComp* relation increases with *Tenure.* This evidence is consistent with voluntary disclosures being used to justify paying rents to powerful CEOs.

If managers use performance disclosures to better explain optimal pay-for-performance decisions, we expect the positive disclosure-compensation relation to be stronger when firm performance or compensation is complex. It is also possible that the managers are trying to reduce processing costs for outside parties: by including performance disclosures in the CD&A, users will not have to refer back to the 10-K or the earnings announcement. We proxy for these situations using existing complexity measures (*Segments* and *ComplexComp*, previously defined) and

DaysFrom10K as the number of days between the 10-K and the proxy statement. Table 5, Panel B presents the results of this analysis. Surprisingly, we do not find any evidence consistent with managers using performance disclosures to aid in understanding.[14] While the evidence in Table 5 generally supports the strategic use of voluntary disclosure in the CD&A to allow powerful CEOs to continue to earn more pay, we recognize the non-result in Panel B could be due to poor proxy or measure selection, or measurement error in our variables, and caveat our findings accordingly.

4.4 Additional Robustness and Falsification Tests

4.4.1 MD&A Analysis

If the association between compensation and performance discussion in the CD&A is driven by incentives to provide informative disclosure, we would also expect to see a similar relation between compensation and performance disclosure in the MD&A. That is, if firms' performance is difficult to understand, they may have high levels of compensation not explained by standard measures of performance (i.e. higher excess compensation) and greater need to clarify their performance through their disclosures. If this is the case, we expect to see total and excess compensation associated with performance disclosures in the MD&A section of the corresponding 10-K.

In an additional test of the informative disclosure hypothesis, we replicate Table 3 using MD&A disclosure measures. We exclude the image variable, because we rely on Loughran and McDonald's 2016 repository of clean 10-Ks and thus cannot use html coding to identify images. Based on a review of random 10-Ks, firms do not frequently include images in their MD&A validating our decision to exclude this variable for the analysis. The results are presented in Table

[14] The interaction terms are also insignificant when including firm fixed effects and examining pre- and post-SOP specifications (untabulated). We also examine characteristics of existing disclosures (i.e. length of 10-K, length of MD&A, linguistic complexity of the 10-K) and do not find any (even marginal) evidence that the compensation-disclosure relation varies with these characteristics, further supporting our inferences from Table 5.

6. Neither *TotalComp* nor *ExcessComp* is positively associated with performance disclosure in the MD&A across our specifications. In fact *TotalComp* is negatively associated with three of the four disclosure variables. Moreover, in Online Appendix Table 4, we find this relation does not vary or becomes weaker post-SOP. As expected, positive performance is generally associated with increased performance disclosure in the MD&A. The results presented in Table 6 should help to rule out disclosure- or performance-related omitted variable concerns with the primary analysis.

4.4.2 Compensation Complexity

Our paper analyzes the determinants and consequences of voluntary performance disclosure in the CD&A, i.e., disclosure that is not directly related to the compensation contract. We take several steps to ensure that our measures of performance disclosure are not simply capturing disclosure about payouts for specific elements of compensation (i.e., key performance indicators in the contract as in Mukhopadhyay and Shivakumar, 2019) or the underlying complexity of the compensation contract.[15] First, we control for compensation complexity throughout. Tables 3 and 4 show that our performance disclosure measures are not significantly related to *ComplexComp*. This helps to validate that are measures are distinct from additional disclosure due to contract complexity. To further validate *ComplexComp* as a control for these factors, we test whether *ComplexComp* is positively associated with mandatory disclosures; e.g., discussion of performance metrics used to determine incentive payouts. We re-perform the analyses in Tables 3 and 4 with compensation-related performance disclosures as the dependent variable. Specifically, *CompPerfDisc* is equal to the number of sentences with performance words *and* compensation/personnel language, scaled by total CD&A sentences.

[15] While we exclude compensation words when calculating the number of performance sentences, it is possible that complex compensation is relevant to more aspects of firm performance, thus requiring increased disclosure.

The results are presented in Table 7. Consistent with our expectations, *ComplexComp* is positively and significantly associated with mandatory, compensation-related performance disclosures. Moreover, although compensation complexity increases over time (untabulated), the relation between complex compensation and compensation-related performance disclosures does not appear to vary with investor attention (i.e. post-SOP). This is consistent with compensation-related performance disclosures being mandatory in nature, and also mechanically related to characteristics of the compensation contract (thus outside the scope of this study).

4.5 Consequences of Voluntary Performance Disclosure

While firms may include performance discussions in CD&A in an attempt to manage perceptions of compensation, whether outside perceptions can be swayed by these disclosures is a separate question. Such disclosures may not be effective for several reasons. First, performance disclosures in the CD&A do not represent new information. Much, if not all, of this information is available in the already-filed annual report. Moreover, investors respond to CD&A disclosures with SOP votes, which are decided over several weeks.[16] Unlike the earnings announcement setting, there is no profit motive to interpret and respond to this information right away. Proxy advisors also lend their expertise to analyzing compensation disclosures, mitigating the potential efficacy of the practice of impression management in compensation. Despite these factors, we expect positive performance discussions in the CD&A to be effective in allowing firms to maintain their favored pay practices. We therefore conclude our analysis by examining the consequences of voluntary performance-related CD&A disclosure.

[16] The SEC requires that the proxy statement be made available at least one month prior to the annual shareholder meeting.

4.5.1 Outcome Variables

We examine five key consequences of voluntary performance disclosures in the CD&A. First, we study future compensation (both total compensation and excess compensation). If firms are successful in their efforts to justify compensation, we expect they will continue providing high levels of compensation in the future. The values of these measures are analogous to our primary total/excess compensation measure and calculated for the subsequent year. We also examine the effect on external stakeholders to offer a plausible mechanism through which firms may continue to offer high levels of pay to their executives. First, we examine *AgainstISS*, an indicator equal to one if ISS recommends against the SOP vote and zero otherwise. We follow Ertimur et al. (2013) and measure *AgainstSOP* as the number of votes against SOP divided by total votes cast. These variables are calculated for the period subsequent to the compensation year. Finally, we examine *NegativeMedia*, or the number of negative media articles covering executive compensation (from Ravenpack) in the forty-five days after the proxy statement is released (to capture the window between the statement's release and the shareholder meeting).

4.5.2 Future Excess Compensation

We rely on the factor variable, *PerfDisclosure*, as our disclosure measure for this analysis. To account for possible measurement error in this variable, we create a variable, *PerfDiscDecile*, based on the firm's annual decile rank of *PerfDisclosure*. We control for compensation in the current year, and include all determinants and controls used in Tables 3 and 4. The future compensation results are presented in Table 8 Panel A (OLS regressions with standard errors clustered at the firm-level). The evidence is consistent with our expectations: performance disclosures are positively associated with future compensation (controlling for current year total compensation and other predictors of performance disclosures). The result continues to hold in

column (2), where we restrict the sample period to post-SOP, and in columns (3)-(4) where we include *ExcessComp* in place of *TotalComp*. The findings in Panel A are consistent with voluntary performance disclosure allowing managers to justify and continue paying high levels of compensation to executives.

4.4.2 Implications for External Parties

To shed additional light on this relation, we turn to the mechanisms through which performance disclosures affect future compensation contracts. If managers' performance disclosures allow them to provide future excess compensation the following year due to reduced investor criticism, we expect positive performance disclosures to be negatively associated with ISS against recommendations, SOP voting outcomes and negative news coverage of executive compensation. The evidence in Table 8, Panel B supports this prediction. High performance disclosure firms are less likely to receive ISS against recommendations, shareholder votes against the executive pay plan, and negative news stories. Moving up one performance disclosure decile is associated with a 0.3% decrease in the likelihood of an ISS against recommendation (or 3% for the median firm). The results are generally consistent with the voluntary disclosure serving to justify high levels of compensation for information intermediaries.

4.4.3 Entropy Balanced Consequences Analysis

While we control for the determinants of performance disclosure in the outcomes analysis (Table 8), we entropy balance the sample on excess compensation and firm performance variables in Table 9. In these specifications, our disclosure measure is an indicator equal to one if the firm's *PerfDisclosure* value is above the sample year median, and zero otherwise (*HighPerfDisc*). The comparison sample is firms with *HighPerfDisc* = 0, and compensation and performance statistically indistinguishable from treatment firms (to three moments, covariate balance tables are

provided in Online Appendix Table 5). While disclosure and (i) future total compensation, (ii) future excess compensation and (iii) SOP votes remain positively associated using the entropy balanced sample, the coefficients on ISS against votes and negative media coverage lose significance. This suggests while the investors are more likely to be swayed by the performance disclosure, the media and proxy advisors may be more likely to see through them (holding compensation and performance constant).

5. Conclusion

We find that firms include more voluntary discussion of past performance in the CD&A when compensation is high, and when it is high relative to firm performance. This result is stronger when firms face higher scrutiny and when they have a powerful CEO. We offer preliminary evidence that detailed performance disclosures are consistent with higher shareholder approval and future compensation. These findings suggest firms effectively use CD&A disclosures to manage shareholders' impressions of executive pay contracts.

Executive compensation disclosures are important in that they help investors assess agency problems in the firm. The CD&A is a relatively new mandated disclosure. Unlike previous compensation disclosure requirements, the CD&A is "principles-based" in nature and its content is largely discretionary. To our knowledge, our paper is the first to document a strategic role for voluntary disclosure in the CD&A. As a result, our findings have important implications for both preparers and users of CD&A disclosures, particularly investors.

References

Armstrong, C.S., Guay, W.R. and Weber, J.P., 2010. The role of information and financial reporting in corporate governance and debt contracting. *Journal of Accounting and Economics*, 50(2-3), pp.179-234.

Balsam, S., Boone, J., Liu, H. and Yin, J., 2016. The impact of say-on-pay on executive compensation. *Journal of Accounting and Public Policy*, *35*(2), pp.162-191.

Blankespoor, E., deHaan, E., and Marinovic, I., 2020. Disclosure Processing Costs, Investors' Information Choice, and Equity Market Outcomes: A Review. *Journal of Accounting and Economics*, Forthcoming.

Bloomfield, R.J., 2002. The "incomplete revelation hypothesis" and financial reporting. *Accounting Horizons*, 16(3), pp.233-243.

Bowen, R.M., Davis, A.K. and Matsumoto, D.A., 2005. Emphasis on pro forma versus GAAP earnings in quarterly press releases: Determinants, SEC intervention, and market reactions. *The Accounting Review*, 80(4), pp.1011-1038.

Brown, S.V. and Tucker, J.W., 2011. Large-sample evidence on firms' year-over-year MD&A modifications. Journal of Accounting Research, 49(2), pp.309-346.

Cadman, B., Carter, M.E. and Hillegeist, S., 2010. The incentives of compensation consultants and CEO pay. *Journal of Accounting and Economics*, 49(3), pp.263-280.

Core, J.E., Guay, W. and Larcker, D.F., 2008. The power of the pen and executive compensation. *Journal of Financial Economics*, 88(1), pp.1-25.

Core, J.E., Holthausen, R.W. and Larcker, D.F., 1999. Corporate governance, chief executive officer compensation, and firm performance. *Journal of Financial Economics*, 51(3), pp.371-406.

Dyer, T., Lang, M. and Stice-Lawrence, L., 2017. The evolution of 10-K textual disclosure: Evidence from Latent Dirichlet Allocation. *Journal of Accounting and Economics*, 64(2-3), pp.221-245.

Ertimur, Y., Ferri, F. and Oesch, D., 2013. Shareholder votes and proxy advisors: Evidence from say on pay. *Journal of Accounting Research*, 51(5), pp.951-996.

Ferri, F. and Maber, D.A., 2013. Say on pay votes and CEO compensation: Evidence from the UK. *Review of Finance*, 17(2), pp.527-563.

Gardner, W.L. and Martinko, M.J., 1988. Impression management in organizations. *Journal of Management*, 14(2), pp.321-338.

Hartzell, J.C. and Starks, L.T., 2003. Institutional investors and executive compensation. The *Journal of Finance*, 58(6), pp.2351-2374.

Henry, E., 2008. Are investors influenced by how earnings press releases are written?. *The Journal of Business Communication* (1973), 45(4), pp.363-407.

Hirshleifer, D. and Teoh, S.H., 2003. Limited attention, information disclosure, and financial reporting. *Journal of Accounting and Economics*, 36(1-3), pp.337-386.

Huang, X., Nekrasov, A. and Teoh, S.H., 2018. Headline salience, managerial opportunism, and over-and underreactions to earnings. *The Accounting Review*, 93(6), pp.231-255.

Kimbro, M.B. and Xu, D., 2016. Shareholders have a say in executive compensation: Evidence from say-on-pay in the United States. *Journal of Accounting and Public Policy*, *35*(1), pp.19-42.

Loughran, T. and McDonald, B., 2016. Textual analysis in accounting and finance: A survey. *Journal of Accounting Research*, 54(4), pp.1187-1230.

Muiño, F. and Trombetta, M., 2009. Does graph disclosure bias reduce the cost of equity capital?. *Accounting and Business Research*, 39(2), pp.83-102.

Mukhopadhyay, T. and Shivakumar, L., 2019. Do Compensation Disclosures Matter for SoP Voting?. Available at SSRN 2718438.

Murphy, K.J., 1999. Executive Compensation. *Handbook of Labor Economics* 3, 2485–2563.

Murphy, K.J. and Sandino, T., 2019. Compensation consultants and the level, composition and complexity of CEO pay. *The Accounting Review*.

Nekrasov, A., Teoh, S.H. and Wu, S., 2019. Visuals and Attention to Earnings News on Twitter. Available at SSRN 3447484.

Robinson, J.R., Xue, Y., and Yu, Y., 2011, Determinants of Disclosure Noncompliance and the Effect of the SEC Review: Evidence from the 2006 Mandated Compensation Disclosure Regulations, *The Accounting Review* 86-4, 1415-1444.

Schneider, D.J., 1981. Tactical self-presentations: Toward a broader conception. In Impression management theory and social psychological research (pp. 23-40). Academic Press.

Schrand, C.M. and Walther, B.R., 2000. Strategic benchmarks in earnings announcements: The selective disclosure of prior-period earnings components. *The Accounting Review*, 75(2), pp.151-177.

Smith Jr, C.W. and Watts, R.L., 1992. The Investment Opportunity Set and Corporate Financing, Dividend, and Compensation Policies. *Journal of Financial Economics,* 32, 263–292.

Appendix A
CD&A Examples

Note: The solid red box contains performance sentences captured by *PerfDisclosure*, while the dashed box contains examples of compensation-related performance disclosure (excluded from *PerfDisclosure*).

Panel A: Beazer Homes USA, Inc. (2016)

COMPENSATION DISCUSSION AND ANALYSIS

This Compensation Discussion and Analysis ("CD&A") provides a detailed description of our executive compensation objectives, practices and programs, as well as the means by which our Compensation Committee (the "Committee") determines executive compensation under those programs. The CD&A focuses on the compensation of our NEOs for fiscal year 2016, who were:

- our President and Chief Executive Officer, Allan P. Merrill;
- our Executive Vice President and Chief Financial Officer, Robert L. Salomon; and
- our Executive Vice President, General Counsel and Chief Administrative Officer, Kenneth F. Khoury.

In addition, this CD&A provides an overview of compensation programs approved by the Committee for fiscal year 2017.

Executive Summary

Fiscal Year 2016 Results

The Committee and its independent compensation consultant establish programs t
past performance and to incent future achievements that support the Company's short-t
business plans. The Committee believes that when designing such programs that it is im
financial and operational achievements of management for the previous fiscal year as well as over the long term.

Performance Disclosures (with sentences included in disclosure measures)

During fiscal year 2016, we made significant progress on virtually all key financial metrics and improved on our fiscal year 2015 performance, despite challenging conditions in several of our markets. In fiscal year 2016:

- Revenue grew to $1.82 billion, up over 12% year-over-year.
- Absorption rates remained strong at 2.7 sales per community per month for the year.
- Our average sales price ("ASP") increased to $329,400, the highest ASP for any year in our history.
- New home orders were down by about 1.1% year over year.
- Closings increased by 8.2% year over year.
- Our ASP in backlog as of the end of the fiscal year was up 4% to $340,600 from $327,600 the prior year.
- Our average active community count was 3.1% higher than the prior year.
- We reduced our outstanding debt by nearly $157 million.

For purposes of this CD&A, the terms listed below shall be defined as follows:

"Adjusted EBIT" (earnings before interest, debt extinguishment charges and taxes) equals net income (loss) before: (a) previously capitalized interest amortized to home construction and land sales expenses, capitalized interest impaired and interest expense not qualified for capitalization; (b) debt extinguishment charges; and (c) income taxes.

"Adjusted EBITDA" (earnings before interest, taxes, depreciation, amortization, debt extinguishment charges and impairments) is calculated by adding non-cash charges, including depreciation, amortization, inventory impairment and abandonment charges, goodwill impairments and joint venture impairment charges for the period to Adjusted EBIT. Adjusted EBITDA, as used in this CD&A, also excludes the following charges: (a) for our fiscal 2016, unexpected warranty costs related to Florida stucco issues (net of expected insurance recoveries) and additional insurance recoveries from a third-party insurer; and (b) for our fiscal 2015, unexpected warranty costs related to Florida stucco issues (net of expected insurance recoveries) and a litigation settlement in discontinued operations […]

Appendix A, Continued
CD&A Examples

Panel A, Continued: Beazer Homes USA, Inc. (2016)

Results for Bonus Plan EBITDA Component of the 2016 Bonus Plan

The Committee established the following 2016 Bonus Plan EBITDA targets: Threshold: $155 million; Target: $165 million; and Maximum: $185 million. The Company generated Bonus Plan EBITDA of $162.3 million, which excludes unexpected warranty costs and additional insurance recoveries from a third-party insurer. The Company's Bonus Plan EBITDA for fiscal year 2016 represented 98% of the target performance level and 105% of the threshold level of achievement necessary to earn an award. Upon the application of linear interpolation, the Earned Percentage was calculated to be 122.8% for Mr. Merrill and 86.4% for each of Messrs. Salomon and Khoury.

The table below sets forth the amount each NEO received for the Bonus Plan EBITDA component of the 2016 Bonus Plan and how this amount was calculated. The amount earned was ca[illegible] unrounded numbers.

Compensation-related performance disclosures (with sentences excluded from disclosure measures)

	Mr. Merrill			
Calculation of EBITDA Component Results				
Base Salary	$900,000		$525,000	$525,000
x % of EBITDA Component Opportunity	x 75%		x 75%	x 75%
x Earned Percentage of Base Salary	x 122.8%		x 86.4%	x 86.4%
= $ Earned and Paid for Component	$828,671		$340,133	$340,133

Operational Component of 2016 Bonus Plan

The remaining 25% of the annual bonus opportunity under the 2016 Bonus Plan was based on improvement in our customer survey scores recorded at four points during the customer experience, from early contact with the Company through warranty experience. Accordingly, each division's customer survey responses on each of four categories of customer experience were recorded and measured against a target improvement over fiscal year 2015 scores (the "Scores").

Only if threshold 2016 Bonus Plan EBITDA was achieved would our NEOs be eligible to receive an award for this operational component of the 2016 Bonus Plan. The chart below shows the threshold, target and maximum award opportunities for each NEO under the operational component of the 2016 Bonus Plan:

2016 Bonus Plan Operational Component Award Opportunities

	Threshold $ Value	Target $ Value	Maximum $ Value
Mr. Merrill	$112,500	$337,500	$675,000
Mr. Salomon	$65,625	$131,250	$262,500
Mr. Khoury	$65,625	$131,250	$262,500

Results for Operational Component of the 2016 Bonus Plan

The operational component of the 2016 Bonus Plan comprised 25% of the overall annual bonus opportunity. To achieve a target payout on this component, 87.5 % of Scores had to exceed benchmarks (or an 11.7% improvement over fiscal year 2015), and a maximum award would be achieved if 95% or more Scores exceed benchmarks (a 21.3% year over year improvement). For fiscal year 2016, 93.7% of average Scores exceeded [….]

Appendix A, Continued
CD&A Examples

Panel B: ConocoPhillips (2012)

ConocoPhillips

COMPENSATION DISCUSSION AND ANALYSIS

This Compensation Discussion and Analysis describes the material elements of the compensation of our Named Executive Officers and describes the objectives and principles underlying the Company's executive compensation programs, the compensation decisions we have recently made under those programs, and the factors we considered in making those decisions.

Executive Overview

Our Named Executive Officers for 2012 (including two who retired in 2012) were:

Name	Position
Ryan M. Lance	Chairman and CEO
James J. Mulva	Former Chairman and CEO
Jeffrey W. Sheets	EVP, Finance and CFO
Matthew J. Fox	EVP, Exploration and Production
Alan J. Hirshberg	EVP, Technology and Projects
Donald E. Wallette, Jr.	EVP, Commercial, Business Development and Corporate Planning
Willie C.W. Chiang	Former SVP, Refining, Marketing, Transportation and Commercial

Company Repositioning and Leadership Changes
The Company experienced significant transition in 2012. [….] Several other senior executives, including Messrs. Fox, Hirshberg and Wallette, took on expanded leadership roles.

Overview of Our Compensation Programs
Our executive compensation has four primary elements, as shown in the chart below:

Element	Salary	Variable Cash Incentive Program	Performance Shares	Stock Options
Purpose	Base level at compensation	Incentive to drive short-term performance	Incentive to drive long-term performance	Incentive to drive long-term performance and stock price growth
Target/Target Shares Set by	Fixed $	Fixed % of Salary	Dividend Discount Model	Black-Scholes
Form of Delivery	Cash	Cash	Shares/Cash	Options
Company/Award Unit Performance	N/A	0% to 200%	0% to 200%	
Individual Adjustment	Discretion	-50% to 50%	Discretion	

Performance Disclosures (with sentences included in disclosure measures)

How We Performed in 2012
We experienced strong financial and operating performance in 2012, both as an integrated company from January through April and as an independent E&P company from May through December.
Our long-term strategy as an independent E&P company is focused on the following key priorities that we believe will drive value for our stockholders: (1) maintaining a relentless focus on safety and execution; (2) offering a compelling dividend; (3) delivering 3 to 5 percent compound annual production growth over the next five years; (4) generating 3 to 5 percent compound annual margin growth over the next five years; and (5) focusing on improvements in returns [….]

Appendix A, Continued
CD&A Examples

Panel B, Continued: ConocoPhillips (2012)

Compensation-related performance disclosures (with sentences excluded from disclosure measures)

Corporate Performance in 2012

Our most significant 2012 achievement was execution of our strategic plan through the spinoff of the downstream business and our repositioning as an independent E&P company. Post-spin, the Committee approved the addition of independent E&P companies to our peer group and revised operational and financial metrics as appropriate for an independent E&P company, such as, adding production levels and reserve replacement targets. In determining award payouts under VCIP for 2012, the Committee considered the following quantitative and qualitative performance measures relating to the Company as a whole: This compared with VCIP corporate performance for the prior six periods ranging from 70% to 180%.

Goals and Approximate Weights		Results
~ 20% Health, Safety and Environmental ("HSE") • Total recordable rate • Lost workday rates • Process safety	→	World class safety performance, best in class employee rates
~ 20% Operations • Production • Capital & expense budget • Reserve replacement • Project milestones	→	Exceeded annual production target, significantly exceeded reserve replacement target, strong progress on capital projects and drilling programs
~ 20% Financial • Cash & Net Income Margin • ROCE • CROCE	→	Exceeded absolute metrics; relative metrics impaired by significant natural gas exposure and low North American gas prices
~ 20% Strategic Plan • Spin of downstream • Cash returned to stockholders • Asset sales	→	Completed successful spinoff of Phillips 66, completed $5.1 billion of share buybacks, asset sales program progressing on schedule
~ 20% Total Shareholder Return ("TSR")	→	1st in full year TSR relative to our performance peers ***Payout: 150%***

Award Unit Performance in 2012

The award units were subject to the following metrics:

Operating Award Units/Projects – 50% Production/Unit Cost, 25% Milestones, 10% SCI (People, Relationship, and Operational Excellence), and 15% HSE

Non-Operating Award Units/Projects – 50% Milestones, 25% Operating Award Unit Average, 10% SCI, and 15% HSE

Staff – 45% Milestones, 42.5% Award Unit Average, 10% SCI, and 5% HSE

Commercial – 65% Milestones, 20% Control Cost, 10% SCI, and 5% HSE

The Committee approved an average award unit payout of **138.8%** of target for each of our Named Executive Officers, other than Messrs. Mulva and Chiang. Award unit performance payouts for our 42 award units ranged from

Individual Performance Adjustments

Finally, the Committee considered individual adjustments for each Named Executive Officer's 2012 VCIP award based upon a subjective review of the individual's impact on the Company's financial and operational success during the year. The Committee considered the totality of the executive's performance in deciding the individual adjustments. Based on the foregoing, the Committee approved individual performance adjustments of between 0% and 20% for each of our Named Executive Officers. The individual adjustments for these officers reflect the Committee's recognition of these individuals' contributions to the strong 2012 operational performance of their respective operating or staff units [….]

Appendix B
Variable Definitions

Variable	Definition
Performance Disclosure Measures	
PerfWords	Number of performance words used in performance sentences, scaled by number of words in the CD&A.
PerfSentences	Number of performance sentences scaled by number of sentences in the CD&A.
Tone	The number of positive words minus the number of negative words (Henry, 2008) scaled by the number of words in the CD&A.
PerfImage	Indicator for whether there is an image immediately before or after a performance sentence.
PerfDisclosure	First principal component of *PerfWords*, *PerfSentences*, *Tone* and *PerfImage* (eigenvalue = 2.52, positively associated with each measure). See Table 2, Panel B for factor loadings.
Compensation Measures and Other Outcomes	
TotalComp	Log of total compensation from the ExecuComp database (TDC1).
ComplexComp	Log of one plus the count of the number of different types of compensation the executive receives including bonus, restricted stock, performance shares, other compensation, and non-equity incentive plans (from ExecuComp).
ExcessComp	Excess compensation as defined by Core, Guay and Larcker, 2008. See section 3.2 for details.
Controls and Other Key Measures	
FirmReturns	Buy-and-hold returns over prior year minus returns for two-digit SIC industry.
IndustryReturns	Buy-and-hold returns over prior year for two-digit SIC industry.
ROA_IndAdjusted	ROA for compensation year minus mean ROA for two-digit SIC industry-year.
ROA_IndQuartile	ROA quartile rank within two-digit SIC industry-year.
AnalystFollow	Log of one plus the number analysts following the firm in the compensation year.
DaysFrom10K	The number of days between the filing of the proxy statement and the 10-K.
Duality	Indicator equal to one if the CEO chairs the board of directors.
InstOwn	Percent of shares outstanding held by institutional owners at the end of the compensation year.
LengthMDA	Log of the number of sentences in the MD&A section of the corresponding 10-K.
MVE	Log of market value of equity.
MTB	Ratio of market value of equity to book value of equity.

Appendix B, Continued
Variable Definitions

Variable	Definition
Controls and Other Key Measures, Continued	
Segments	Log of one plus the number of operating segments from Compustat (or business segments if operating segments is missing).
StdReturns	Standard deviation of daily returns over compensation year.
Tenure	Log of one plus the number of years the CEO is designated as such for the firm in ExecuComp.
PerfWordsMDA	Number of performance words used in performance sentences, scaled by number of words in the MD&A.
PerfSentenceMDA	Number of performance sentences scaled by number of sentences in the MD&A.
ToneMDA	Positive words from Henry, 2008 minus negative words from Henry, 2008 scaled by total words from the MD&A section of 10-K
PerfDisclosureMDA	First principal component of *PerfWordsMDA, PerfSentencesMDA*, and *ToneMDA* (eigenvalue = 2.27, positively associated with each measure).
CompPerfDisclosure	The number of sentences with performance words and compensation/ personnel words, scaled by total CD&A sentences.
Variable	**Definition**
Variables for Outcomes Analysis	
PerfDiscDecile	Performance disclosure decile.
HighPerfDisc	Indicator = 1 if firm is above the sample median for a given year, and 0 otherwise.
AgainstISS	Indicator for whether ISS issues an against recommendation in the proxy year corresponding to the compensation year.
AgainstSOP	Number of votes against divided by number of votes cast in proxy year's say-on-pay vote corresponding to the compensation year.
NegativeMedia	Number of Ravenpack stories covering compensation topics with sentiment scores less than 50 published within 45 days following the proxy statement. Specifically, stories with topics or categories listed as “executive-compensation,” “executive-salary,” and “executive-shares-options."

Note: All continuous variables are winsorized at the 99% level.

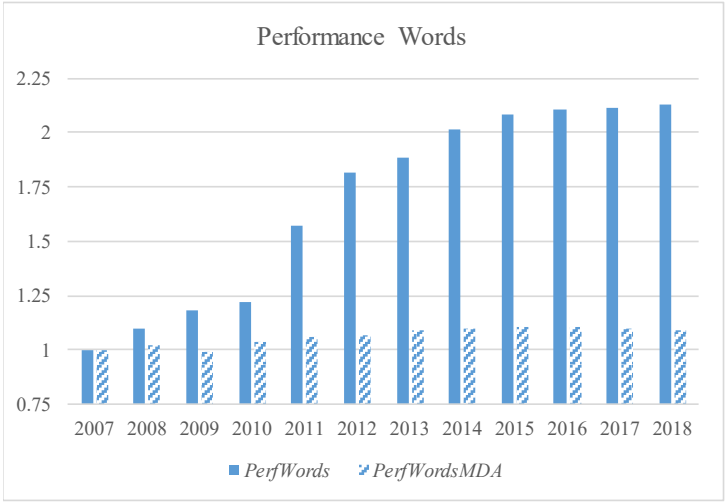
Appendix C
Word Lists

Topic	Word Lists
Perfomance	performance, performs, perform, performing, performed, revenue, revenues, sales, earnings, eps, net income, operating income, profit, loss, total shareholder returns, total stock returns, total shareholder return, total stock return, tsr, stock return, stock returns, shareholder returns, shareholder return, stockholder return, stockholder returns, roi, return on investment, return on invested capital, ebit, roic, roa, return on assets, roe, return on equity, ebitda, roic, operating results, balance sheet, margins, financial results
Compensation	compensation, pay, salary, salaries, bonus, bonuses, performance shares, performance share, psu, incentive plan, incentive, incentives, equity award, equity awards, pay-for-performance, pay for performance, target, targets, goal, goals, payout, payouts, award, awards, restricted stock, rsu, stock options, rsus, retirement plan, sharing plan, golden parachute, compensate, prorated, proration, options, vest, vested, vesting, psa, psas, rsus, sar, sars, services performed, service performed, perform services, perform service, performing services, performing service, ltip, aip, work, objective, objectives, separation, severance, table of contents, measure, merit, plan, metric, metrics, criteria, criterion, maximum, minimum, committee, psu, performance stock, award, reward
Personnel	he, him, his, she, her, hers, they, them, their, theirs, mr, miss, messrs, mrs, individual, individuals, executive, executives, trustees, neo, officer, ceo, cfo, vp, president, chairman, manager, managers, advisor, advisors, management

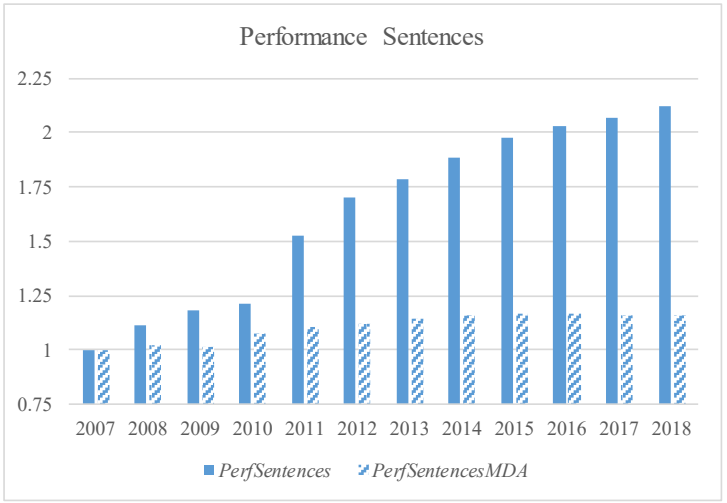
Note: These word lists were created by two authors independently reading CD&A disclosures to identify performance disclosures not directly related to compensation (e.g. voluntary disclosures). See section 3 for further detail.

Figure 1
Performance Disclosures by Proxy Year

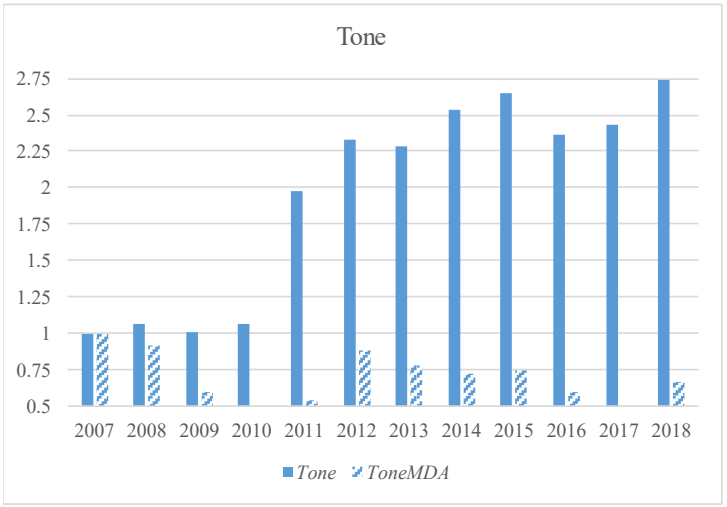
Panel A: *PerfWords* (scaled by 2007 Values)



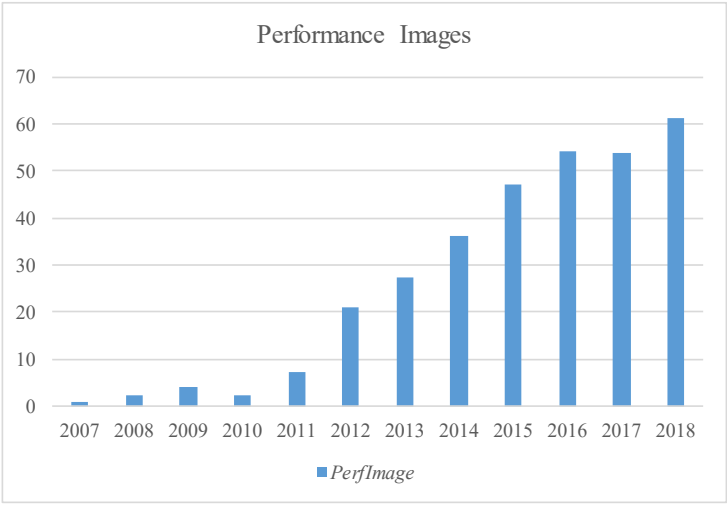
Panel B: *PerfSentences* (scaled by 2007 Values)



Panel C: *Tone* (scaled by 2007 Values)



Panel D: *PerfImage* (scaled by 2007 Values)



Note: This figure contains average CD&A (and MD&A where appropriate) measures by disclosure year, scaled by 2007 values.

Table 1
Sample Reconciliation

	Firm-Years
2007-2018 ExecuComp	26,052
Less:	
Proxy Statement not available/cannot be scraped	(2,143)
No identifiable CD&A Section	(4,710)
Primary Sample	19,199
Less:	
Insufficient data for controls (MD&A, CRSP, Compustat)	(1,527)
Final Sample for determinants analysis	17,672

Note: This table contains sample selection details. Because we require Execucomp coverage, machine readable proxy statements and easily identifiable CD&A sections, our sample likely contains larger and more sophisticated firms than the Compustat universe contains.

Table 2
Descriptive Statistics

Panel A: Full Sample

	N	Mean	P25	P50	P75
Performance Disclosure					
PerfWords	19199	0.017	0.005	0.013	0.026
PerfSentences	19199	0.021	0.007	0.018	0.031
Tone	19199	0.034	0	0.013	0.053
PerfImage	19199	0.053	0	0	0
Compensation					
TotalComp	18786	8.203	7.550	8.273	8.900
ComplexComp	19259	0.934	0	1.099	1.386
ExcessComp	17910	0.000	-0.368	0.048	0.415
Performance					
FirmReturns	19132	-0.034	-0.228	-0.041	0.153
IndustryReturns	19252	0.159	-0.046	0.138	0.286
ROA_IndAdjusted	19183	0.000	-0.022	0.002	0.039
ROA_IndQuartile	19183	1.489	1	1	2
Controls/Other					
AnalystFollow	19199	1.989	1.386	2.079	2.639
DaysFrom10K	19088	34.41	20	33	45
Duality	17395	0.474	0	0	1
InstOwn	19199	0.473	0	0.549	1
LengthMDA	18166	5.258	5.298	5.690	6.006
MTB	19034	2.807	1.284	2.037	3.389
MVE	19035	7.650	6.554	7.543	8.664
Segments	19259	1.701	1.386	1.792	2.485
StdReturns	19080	0.025	0.016	0.021	0.030
Tenure	18283	1.921	1.386	1.946	2.485
PerfWordsMDA	18166	0.220	0.167	0.230	0.289
PerfSentenceMDA	18166	0.190	0.141	0.197	0.250
ToneMDA	18166	0.234	0.000	0.164	0.396

Panel B: Principal Components Analysis

Creating *PerfDisclosure*

Variable	Factor Loading	*Eigenvalue*
PerfWords	0.589	2.52
PerfSentences	0.580	
Tone	0.486	
PerfImage	0.283	

Table 2, Continued
Descriptive Statistics

Panel C: High/Low Performance Disclosure

	PerfDisclosure < P50		*PerfDisclosure > P50*			
	Mean	**SD**	**Mean**	**SD**	**Pred?**	**Diff. (HML)**
Performance Disclosure						
PerfWords	0.005	0.005	0.029	0.017	(+)	0.024 ***
PerfSentences	0.008	0.007	0.035	0.019	(+)	0.027 ***
Tone	0.003	0.015	0.064	0.064	(+)	0.061 ***
PerfImage	0.000	0.000	0.106	0.308	(+)	0.106 ***
Compensation						
TotalComp	7.940	0.974	8.459	0.894	(+)	0.519 ***
ComplexComp	0.839	0.666	1.028	0.668		0.188 ***
ExcessComp	-0.072	0.747	0.068	0.634	(+)	0.140 ***
Performance						
FirmReturns	-0.053	0.413	-0.015	0.355		0.038 ***
IndustryReturns	0.167	0.385	0.152	0.321		-0.015 ***
ROA_IndAdjusted	-0.007	0.102	0.007	0.074		0.015 ***
ROA_IndQuartile	1.465	0.499	1.513	0.500		0.048 ***
Controls/Other						
AnalystFollow	1.877	0.874	2.101	0.891		0.224 ***
DaysFrom10K	35.04	25.64	33.78	21.16		-1.262 ***
Duality	0.459	0.498	0.490	0.500		0.032 ***
InstOwn	0.442	0.460	0.503	0.466		0.061 ***
LengthMDA	5.277	1.367	5.239	1.535		-0.038 *
MTB	2.681	3.614	2.932	4.054		0.251 ***
MVE	7.218	1.517	8.079	1.553		0.861 ***
Segments	1.693	0.873	1.719	0.966		0.026 *
StdReturns	0.028	0.014	0.022	0.011		-0.005 ***
Tenure	1.917	0.789	1.924	0.729		0.007
PerfWordsMDA	0.223	0.102	0.218	0.107		-0.005 ***
PerfSentenceMDA	0.191	0.088	0.189	0.095		-0.002
ToneMDA	0.226	0.307	0.241	0.315		0.015 ***

Note: Panel A of this table contains descriptive statistics for all key independent, dependent and control variables for the full sample. Panel B contains details behind the principal components analysis performed to create the *PerfDisclosure* variable. Panel C contains descriptive statistics partitioned on whether the firm's *PerfDisclosure* value is above or below the sample median. T-test differences from zero identified by *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. See Appendix B for variable definitions and Appendix C for corresponding word lists where relevant.

Table 3
Performance Disclosures and Compensation

Panel A: Total Compensation

DEPVAR =		*PerfWords*	*PerfSentences*	*Tone*	*PerfImage*	*PerfDisclosure*
	Pred?	(1)	(2)	(3)	(4)	(5)
Compensation						
TotalComp	(+)	0.002***	0.002***	0.006***	0.012***	0.211***
		(6.045)	(7.109)	(5.860)	(3.928)	(7.160)
ComplexComp		0.000	0.000	0.000	-0.003	0.005
		(0.137)	(0.286)	(0.503)	(-0.748)	(0.195)
Performance						
FirmReturns		-0.000	-0.001	0.006***	-0.003	0.018
		(-1.030)	(-1.469)	(5.143)	(-0.714)	(0.617)
IndustryReturns		-0.000	-0.001	0.002	-0.000	-0.011
		(-0.769)	(-1.173)	(1.510)	(-0.036)	(-0.258)
ROA_IndAdjusted		0.003	0.003	0.013**	0.012	0.335*
		(1.483)	(1.372)	(2.031)	(0.540)	(1.775)
ROA_IndQuartile		-0.001**	-0.001**	-0.001	-0.001	-0.072**
		(-2.151)	(-2.522)	(-0.463)	(-0.243)	(-1.961)
Investor Attention/Controls						
AnalystFollow		-0.000	-0.000	-0.000	0.002	-0.018
		(-0.707)	(-0.771)	(-0.444)	(0.425)	(-0.601)
InstOwn		0.001	0.001	0.002	0.006	0.070
		(1.548)	(0.974)	(1.089)	(1.033)	(1.435)
StdReturns		-0.021	-0.034	-0.083	0.360*	-1.983
		(-1.070)	(-1.489)	(-1.423)	(1.890)	(-1.155)
LengthMDA		-0.000	-0.000	-0.001**	-0.003*	-0.027**
		(-1.230)	(-1.569)	(-2.082)	(-1.698)	(-1.997)
MVE		0.001***	0.002***	0.004***	0.014***	0.148***
		(4.885)	(5.542)	(4.189)	(4.703)	(5.788)
MTB		-0.000	-0.000	0.000	-0.000	-0.004
		(-1.142)	(-1.317)	(0.890)	(-0.664)	(-0.755)
Segments		0.000	0.001	-0.000	0.009**	0.041
		(0.968)	(1.544)	(-0.163)	(2.408)	(1.240)
ToneMDA		0.109	0.097	1.716***	0.083	21.759***
		(1.368)	(1.015)	(6.737)	(0.094)	(2.912)
SIC2D FE		Y	Y	Y	Y	Y
Year FE		Y	Y	Y	Y	Y
Observations		17,672	17,672	17,672	17,672	17,672
Adjusted R-squared		0.133	0.151	0.115	0.0663	0.169

Table 3, Continued
Performance Disclosures and Compensation

Panel B: Excess Compensation

DEPVAR =		*PerfWords*	*PerfSentences*	*Tone*	*PerfImage*	*PerfDisclosure*
	Pred?	(1)	(2)	(3)	(4)	(5)
Compensation						
ExcessComp	(+)	0.001***	0.002***	0.005***	0.012***	0.155***
		(3.914)	(4.484)	(4.788)	(3.562)	(5.028)
ComplexComp		0.001	0.001	0.005*	-0.003	0.103
		(0.943)	(0.735)	(1.729)	(-0.236)	(1.119)
Performance						
FirmReturns		-0.001	-0.001**	0.005***	-0.005	-0.000
		(-1.533)	(-2.037)	(4.688)	(-1.138)	(-0.010)
IndustryReturns		-0.000	-0.001	0.002	-0.001	-0.020
		(-0.909)	(-1.225)	(1.275)	(-0.194)	(-0.440)
ROA_IndAdjusted		0.002	0.003	0.011	0.015	0.274
		(1.103)	(1.032)	(1.633)	(0.633)	(1.392)
ROA_IndQuartile		-0.001***	-0.001***	-0.001	-0.002	-0.094**
		(-2.612)	(-3.038)	(-0.919)	(-0.412)	(-2.500)
Investor Attention/Controls						
AnalystFollow		-0.000	-0.001	-0.001	0.001	-0.038
		(-1.209)	(-1.311)	(-1.021)	(0.256)	(-1.183)
InstOwn		0.001	0.001	0.002	0.004	0.066
		(1.520)	(0.942)	(0.979)	(0.735)	(1.336)
StdReturns		-0.013	-0.026	-0.051	0.463**	-1.091
		(-0.640)	(-1.111)	(-0.837)	(2.297)	(-0.605)
LengthMDA		-0.000	-0.000	-0.001*	-0.003	-0.024*
		(-1.043)	(-1.347)	(-1.914)	(-1.564)	(-1.773)
MVE		0.002***	0.003***	0.006***	0.019***	0.234***
		(9.440)	(10.138)	(7.610)	(6.905)	(10.545)
MTB		-0.000	-0.000	0.000	-0.001	-0.005
		(-1.363)	(-1.530)	(0.814)	(-0.744)	(-0.949)
Segments		0.001*	0.001**	0.000	0.011***	0.067*
		(1.668)	(2.222)	(0.229)	(2.842)	(1.943)
ToneMDA		0.083	0.076	1.741***	-0.224	20.081***
		(1.000)	(0.773)	(6.633)	(-0.245)	(2.595)
SIC2D FE		Y	Y	Y	Y	Y
Year FE		Y	Y	Y	Y	Y
Observations		16,908	16,908	16,908	16,908	16,908
Adjusted R-squared		0.129	0.148	0.114	0.0666	0.165

Note: This table contains results of tests of our prediction that the relation between performance disclosures and compensation (total in Panel A and excess in Panel B). All specifications are OLS regressions, t-stats in parentheses. Coefficients different from zero identified by *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$ (two-tailed) and standard errors clustered at the firm level. Variable definitions are presented in Appendix B.

Table 4
SOP and Performance Disclosures

Panel A: Total Compensation

DEPVAR =		*PerfWords*	*PerfSentences*	*Tone*	*PerfImage*	*PerfDisclosure*
	Pred?	(1)	(2)	(3)	(4)	(5)
Compensation						
TotalComp	(+)	0.001***	0.001***	0.003***	-0.010***	0.099***
		(3.450)	(3.812)	(3.026)	(-3.261)	(3.304)
*TotalComp*SOP*	(+)	0.002***	0.002***	0.005***	0.042***	0.220***
		(5.059)	(5.857)	(4.815)	(9.726)	(7.295)
ComplexComp		-0.000	0.000	0.000	-0.004	-0.003
		(-0.062)	(0.064)	(0.303)	(-1.206)	(-0.099)
Performance						
FirmReturns		-0.000	-0.001	0.006***	-0.003	0.015
		(-1.111)	(-1.566)	(5.078)	(-0.894)	(0.501)
IndustryReturns		-0.000	-0.001	0.003*	0.002	0.001
		(-0.584)	(-0.960)	(1.686)	(0.327)	(0.018)
ROA_IndAdjusted		0.003	0.003	0.013**	0.012	0.335*
		(1.491)	(1.380)	(2.038)	(0.549)	(1.787)
ROA_IndQuartile		-0.001**	-0.001**	-0.001	-0.001	-0.070*
		(-2.135)	(-2.506)	(-0.441)	(-0.196)	(-1.937)
Investor Attention/Controls						
AnalystFollow		-0.000	-0.000	-0.001	0.001	-0.024
		(-0.834)	(-0.916)	(-0.562)	(0.179)	(-0.780)
InstOwn		0.001	0.001	0.002	0.006	0.071
		(1.560)	(0.987)	(1.100)	(1.062)	(1.454)
StdReturns		-0.026	-0.040*	-0.099*	0.232	-2.646
		(-1.332)	(-1.781)	(-1.686)	(1.241)	(-1.547)
LengthMDA		-0.000	-0.000*	-0.001**	-0.004*	-0.029**
		(-1.329)	(-1.683)	(-2.179)	(-1.889)	(-2.143)
MVE		0.001***	0.002***	0.004***	0.013***	0.146***
		(4.852)	(5.510)	(4.137)	(4.578)	(5.748)
MTB		-0.000	-0.000	0.000	-0.001	-0.004
		(-1.218)	(-1.400)	(0.811)	(-0.822)	(-0.866)
Segments		0.000	0.001	-0.000	0.008**	0.039
		(0.929)	(1.501)	(-0.206)	(2.306)	(1.182)
ToneMDA		0.111	0.100	1.721***	0.130	22.003***
		(1.391)	(1.038)	(6.759)	(0.149)	(2.943)
SIC2D FE		Y	Y	Y	Y	Y
Year FE		Y	Y	Y	Y	Y
Observations		17,672	17,672	17,672	17,672	17,672
Adjusted R-squared		0.135	0.154	0.116	0.0749	0.173

Table 4, Continued
SOP and Performance Disclosures

Panel B: Excess Compensation

DEPVAR =		*PerfWords*	*PerfSentences*	*Tone*	*PerfImage*	*PerfDisclosure*
	Pred?	(1)	(2)	(3)	(4)	(5)
Compensation						
ExcessComp	(+)	0.000	0.000	0.001	-0.004	0.016
		(0.330)	(0.593)	(1.164)	(-1.533)	(0.559)
*ExcessComp*SOP*	(+)	0.002***	0.003***	0.007***	0.028***	0.254***
		(5.532)	(5.406)	(4.472)	(5.302)	(6.137)
ComplexComp		0.001	0.001	0.005	-0.004	0.091
		(0.835)	(0.634)	(1.627)	(-0.354)	(0.990)
Performance						
FirmReturns		-0.001	-0.001**	0.005***	-0.005	-0.001
		(-1.568)	(-2.074)	(4.673)	(-1.171)	(-0.046)
IndustryReturns		-0.000	-0.001	0.002	-0.000	-0.011
		(-0.751)	(-1.068)	(1.415)	(-0.046)	(-0.245)
ROA_IndAdjusted		0.002	0.002	0.010	0.012	0.247
		(0.980)	(0.918)	(1.527)	(0.500)	(1.250)
ROA_IndQuartile		-0.001**	-0.001***	-0.001	-0.002	-0.091**
		(-2.564)	(-2.993)	(-0.869)	(-0.357)	(-2.443)
Investor Attention/Controls						
AnalystFollow		-0.000	-0.001	-0.001	0.001	-0.041
		(-1.300)	(-1.398)	(-1.097)	(0.178)	(-1.286)
InstOwn		0.001	0.001	0.002	0.004	0.067
		(1.538)	(0.960)	(0.996)	(0.754)	(1.359)
StdReturns		-0.018	-0.031	-0.064	0.410**	-1.564
		(-0.856)	(-1.317)	(-1.040)	(2.045)	(-0.867)
LengthMDA		-0.000	-0.000	-0.001*	-0.003	-0.025*
		(-1.077)	(-1.380)	(-1.947)	(-1.596)	(-1.816)
MVE		0.002***	0.003***	0.006***	0.019***	0.234***
		(9.465)	(10.169)	(7.618)	(6.896)	(10.581)
MTB		-0.000	-0.000	0.000	-0.001	-0.005
		(-1.389)	(-1.554)	(0.793)	(-0.767)	(-0.978)
Segments		0.001*	0.001**	0.000	0.011***	0.066*
		(1.662)	(2.219)	(0.217)	(2.829)	(1.937)
ToneMDA		0.087	0.081	1.753***	-0.177	20.500***
		(1.050)	(0.817)	(6.685)	(-0.195)	(2.655)
SIC2D FE		Y	Y	Y	Y	Y
Year FE		Y	Y	Y	Y	Y
Observations		16,908	16,908	16,908	16,908	16,908
Adjusted R-squared		0.131	0.150	0.116	0.0685	0.169

Note: This table contains results of tests of our prediction that the relation between performance disclosures and excess compensation is stronger when investor scrutiny is higher (e.g. SOP, total compensation in Panel A, excess in Panel B). All specifications are OLS regressions, t-stats in parentheses. Coefficients different from zero identified by *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$ (two-tailed) and standard errors clustered at the firm level. Variable definitions are presented in Appendix B.

Table 5
Performance Disclosures and Compensation

Panel A: Proxies for CEO Power

DEPVAR =		*PerfDisclosure*			
	Pred?	(1)	(2)	(3)	(4)
Interactive Effects					
*TotalComp*Duality*	(+)	0.163***			
		(4.038)			
*ExcessComp*Duality*	(+)		0.159***		
			(2.739)		
*TotalComp*Tenure*	(+)			0.039*	
				(1.744)	
*ExcessComp*Tenure*	(+)				0.051
					(1.549)
Main Effects					
TotalComp	(+)	0.115***		0.119***	
		(3.164)		(2.622)	
Excess Comp	(+)		0.074*		0.058
			(1.956)		(0.995)
Duality		-1.220***	0.126***		
		(-3.695)	(2.919)		
Tenure				-0.264	0.052**
				(-1.445)	(2.068)
Other Controls		Y	Y	Y	Y
SIC2D FE		Y	Y	Y	Y
Year FE		Y	Y	Y	Y
Observations		16,861	16,210	16,861	16,210
Adjusted R-squared		0.173	0.168	0.167	0.165

Table 5, Continued
Performance Disclosures and Compensation

Panel B: Proxies for Incentives to Inform

DEPVAR =		*PerfDisclosure*					
	Pred?	(1)	(2)	(3)	(4)	(3)	(4)
Interactive Effects							
*TotalComp*Segments*	(+)	0.005					
		(0.202)					
*ExcessComp*Segments*	(+)		-0.005				
			(-0.173)				
*TotalComp*ComplexComp*	(+)			0.058			
				(0.721)			
*ExcessComp*ComplexComp*	(+)				-0.089		
					(-0.811)		
*TotalComp*DaysFrom10K*	(+)					0.000	
						(0.426)	
*ExcessComp*DaysFrom10K*	(+)						0.001
							(0.854)
Main Effects							
TotalComp	(+)	0.200***		0.165***		0.200***	
		(4.213)		(2.666)		(5.136)	
Excess Comp	(+)		0.166***		0.224***		0.133***
			(3.014)		(2.724)		(3.090)
Segments		0.002	0.064*	0.040	0.063*	0.037	0.061*
		(0.010)	(1.935)	(1.241)	(1.906)	(1.162)	(1.859)
ComplexComp		0.062	0.106	-0.408	0.099	0.053	0.094
		(0.697)	(1.154)	(-0.626)	(1.100)	(0.590)	(1.025)
DaysFrom10K						-0.004	-0.001
						(-0.657)	(-1.618)
Other Controls		Y	Y	Y	Y	Y	Y
SIC2D FE		Y	Y	Y	Y	Y	Y
Year FE		Y	Y	Y	Y	Y	Y
Observations		17,672	16,908	17,672	16,908	17,672	16,908
Adjusted R-squared		0.167	0.164	0.167	0.164	0.168	0.165

Note: This table contains results of our cross-sectional test (seeking to disentangle the agency/disclosure to inform hypotheses). All specifications are OLS regressions, t-stats in parentheses. Coefficients different from zero identified by *** p < 0.01, ** p < 0.05, * p < 0.1 (two-tailed) and standard errors clustered at the firm level. Variable definitions are presented in Appendix B.

Table 6
MD&A Falsification Test

Panel A: Total Compensation

DEPVAR =	*PerfWordsMDA*	*PerfSentencesMDA*	*ToneMDA*	*PerfDisclosureMDA*
	(1)	(2)	(3)	(4)
Compensation				
TotalComp	0.008	-0.004***	-0.015***	-0.086***
	(0.747)	(-3.175)	(-3.070)	(-3.809)
ComplexComp	0.025	-0.014***	-0.011	-0.220***
	(0.258)	(-2.898)	(-0.645)	(-2.869)
Performance				
FirmReturns	-0.051	0.001	0.053***	0.097***
	(-0.885)	(1.028)	(8.988)	(4.367)
IndustryReturns	-0.110	0.002	-0.021**	-0.002
	(-1.024)	(0.932)	(-2.167)	(-0.061)
ROA_IndAdjusted	0.410**	0.050***	0.501***	1.433***
	(1.980)	(4.706)	(12.956)	(8.329)
ROA_IndQuartile	0.063	0.007***	0.058***	0.189***
	(1.462)	(3.971)	(8.559)	(6.323)
Investor Attention/Controls				
AnalystFollow	0.003	0.003**	0.008	0.044*
	(0.105)	(2.159)	(1.479)	(1.861)
InstOwn	-0.007	0.005**	-0.001	0.073*
	(-0.197)	(2.210)	(-0.108)	(1.806)
StdReturns	3.256	-0.230***	-1.668***	-5.435***
	(1.274)	(-2.668)	(-5.023)	(-3.829)
LengthMDA	-0.028	0.035***	0.048***	0.560***
	(-0.633)	(43.495)	(21.088)	(42.023)
MVE	-0.039*	-0.006***	0.007*	-0.073***
	(-1.792)	(-5.308)	(1.797)	(-3.910)
MTB	-0.002	0.001***	0.006***	0.018***
	(-0.737)	(3.581)	(6.241)	(4.785)
Segments	0.013	0.005***	0.008	0.082***
	(0.574)	(2.742)	(1.388)	(3.003)
SIC2D FE	Y	Y	Y	Y
Year FE	Y	Y	Y	Y
Observations	17,672	17,672	17,672	17,672
Adjusted R-squared	0.002	0.537	0.262	0.518

Table 6, Continued
MD&A Falsification Test

Panel B: Excess Compensation

DEPVAR =	*PerfWordsMDA*	*PerfSentencesMDA*	*ToneMDA*	*PerfDisclosureMDA*
	(1)	(2)	(3)	(4)
Compensation				
ExcessComp	-0.005	-0.002	0.001	-0.035
	(-0.364)	(-1.562)	(0.195)	(-1.473)
ComplexComp	0.038	-0.015***	-0.020	-0.249***
	(0.342)	(-3.019)	(-1.150)	(-3.127)
Performance				
FirmReturns	-0.055	0.001	0.057***	0.100***
	(-0.913)	(0.953)	(9.482)	(4.403)
IndustryReturns	-0.119	0.001	-0.021**	-0.011
	(-1.037)	(0.583)	(-2.148)	(-0.323)
ROA_IndAdjusted	0.429**	0.051***	0.517***	1.478***
	(1.974)	(4.628)	(12.859)	(8.277)
ROA_IndQuartile	0.066	0.008***	0.059***	0.198***
	(1.450)	(4.124)	(8.478)	(6.425)
Investor Attention/Controls				
AnalystFollow	0.003	0.003**	0.009	0.046*
	(0.092)	(2.199)	(1.601)	(1.920)
InstOwn	-0.008	0.005*	-0.001	0.065
	(-0.213)	(1.921)	(-0.137)	(1.579)
StdReturns	3.571	-0.289***	-1.767***	-6.355***
	(1.289)	(-3.228)	(-5.185)	(-4.294)
LengthMDA	-0.030	0.035***	0.048***	0.561***
	(-0.654)	(42.928)	(20.620)	(41.418)
MVE	-0.036*	-0.008***	0.000	-0.110***
	(-1.897)	(-7.683)	(0.019)	(-6.652)
MTB	-0.002	0.001***	0.006***	0.019***
	(-0.733)	(3.812)	(5.920)	(4.813)
Segments	0.014	0.004**	0.007	0.070**
	(0.571)	(2.212)	(1.242)	(2.507)
SIC2D FE	Y	Y	Y	Y
Year FE	Y	Y	Y	Y
Observations	16,908	16,908	16,908	16,908
Adjusted R-squared	0.002	0.540	0.263	0.520

Note: This table contains results of the MD&A falsification tests. All specifications are OLS regressions, t-stats in parentheses. Coefficients different from zero identified by *** p < 0.01, ** p < 0.05, * p < 0.1 (two-tailed) and standard errors clustered at the firm level. Variable definitions are presented in Appendix B.

Table 7
Complex Compensation and Compensation-Related Disclosures

DEPVAR =	*CompPerfDisclosure*			
	(1)	(2)	(3)	(4)
Compensation				
ComplexComp	0.006***	0.005**	0.007***	0.005**
	(3.674)	(2.279)	(3.803)	(2.462)
*ComplexComp*SOP*		0.003		0.003
		(1.433)		(1.336)
TotalComp	0.008***	0.006***		
	(4.472)	(3.607)		
*TotalComp*SOP*		0.003*		
		(1.760)		
ExcessComp			0.005***	0.002
			(2.893)	(0.909)
*ExcessComp*SOP*				0.006***
				(2.755)
Performance				
FirmReturns	-0.000	-0.000	-0.001	-0.001
	(-0.015)	(-0.061)	(-0.379)	(-0.406)
IndustryReturns	-0.002	-0.002	-0.002	-0.002
	(-0.950)	(-0.891)	(-0.736)	(-0.653)
ROA_IndAdjusted	0.023*	0.023*	0.024*	0.023*
	(1.809)	(1.813)	(1.781)	(1.736)
ROA_IndQuartile	0.001	0.001	0.000	0.000
	(0.275)	(0.270)	(0.153)	(0.170)
Other Controls	Y	Y	Y	Y
SIC2D FE	Y	Y	Y	Y
Year FE	Y	Y	Y	Y
Observations	17,672	17,672	16,908	16,908
Adjusted R-squared	0.0754	0.0758	0.0735	0.0744

Note: This table contains results of the compensation-related mandatory disclosure test. All specifications are OLS regressions, t-stats in parentheses. Coefficients different from zero identified by *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$ (two-tailed) and standard errors clustered at the firm level. Variable definitions are presented in Appendix B.

Table 8
Consequences of Voluntary Performance Disclosures

Panel A: Future Compensation

DEPVAR =		*TotalComp* $_{t+1}$		*ExcessComp* $_{t+1}$	
	Pred?	(1)	(2)	(3)	(4)
Performance Disclosure					
PerfDiscDecile	(+)	0.010***	0.012***	0.006***	0.009***
		(5.683)	(5.345)	(3.471)	(3.669)
Compensation					
TotalComp	(+)	0.554***	0.569***		
		(35.655)	(27.593)		
ExcessComp	(+)			0.570***	0.499***
				(36.398)	(21.966)
ComplexComp		0.064**	0.073*	0.006	0.043
		(2.264)	(1.839)	(0.208)	(0.904)
Performance					
FirmReturns		0.052***	0.040**	-0.020	-0.019
		(3.690)	(2.129)	(-1.395)	(-0.903)
IndustryReturns		0.096***	0.044	0.055**	0.031
		(4.532)	(1.194)	(2.498)	(0.836)
ROA_IndAdjusted		-0.189***	-0.150	-0.023	0.086
		(-2.786)	(-1.565)	(-0.316)	(0.729)
ROA_IndQuartile		-0.047***	-0.046***	-0.009	0.034**
		(-4.427)	(-3.415)	(-0.826)	(2.156)
Sample		Full	Post-SOP	Full	Post-SOP
Other Controls		Y	Y	Y	Y
SIC2D FE		Y	Y	Y	Y
Year FE		Y	Y	Y	Y
Observations		17,145	9,704	16,334	9,536
Adjusted R-squared		0.684	0.670	0.416	0.348

Table 8, Continued
Consequences of Voluntary Performance Disclosures

Panel B: External Parties

DEPVAR =		*AgainstSOP*	*AgainstISS*	*NegativeMedia*
	Pred?	(1)	(2)	(3)
Performance Disclosure				
PerfDiscDecile	(-)	-0.001**	-0.003*	-0.002*
		(-2.083)	(-1.828)	(-1.725)
Prior Year Values				
$AgainstSOP_{t-1}$	(+)	0.215***		
		(8.803)		
$AgainstISS_{t-1}$	(+)		0.153***	
			(7.807)	
$NegativeMedia_{t-1}$	(+)			0.120***
				(3.484)
Compensation				
TotalComp	(+)	0.025***	0.041***	0.002
		(5.947)	(4.504)	(0.795)
Performance				
FirmReturns		-0.043***	-0.071***	-0.008
		(-7.762)	(-5.434)	(-1.550)
IndustryReturns		-0.035***	-0.049*	0.011
		(-2.931)	(-1.917)	(1.195)
ROA_IndAdjusted		-0.049	-0.113	-0.021
		(-1.395)	(-1.399)	(-0.933)
ROA_IndQuartile		-0.007	0.012	0.001
		(-1.484)	(1.183)	(0.163)
Other Controls		Y	Y	Y
SIC2D FE		Y	Y	Y
Year FE		Y	Y	Y
Observations		6,539	6,537	12,275
Adjusted R-squared		0.195	0.062	0.056

Note: This table contains the results of our tests for consequences of voluntary performance disclosures. All specifications are OLS regressions, t-stats in parentheses. Coefficients different from zero identified by *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$ (two-tailed) and standard errors clustered at the firm level. Variable definitions are presented in Appendix B.

Table 9
Consequences of Voluntary Performance Disclosures

Panel A: Future Compensation

DEPVAR =		*TotalComp* $_{t+1}$		*ExcessComp* $_{t+1}$	
	Pred?	(1)	(2)	(3)	(4)
Performance Disclosure					
PerfDiscDecile	(+)	0.031***	0.040***	0.020**	0.028**
		(3.625)	(3.627)	(2.388)	(2.570)
Compensation					
TotalComp	(+)	0.550***	0.556***		
		(39.074)	(31.132)		
ExcessComp	(+)			0.556***	0.560***
				(39.584)	(31.176)
ComplexComp		0.034	0.041	-0.004	-0.008
		(1.240)	(1.058)	(-0.150)	(-0.196)
Performance					
FirmReturns		0.055***	0.030	-0.019	-0.029
		(3.833)	(1.629)	(-1.341)	(-1.513)
IndustryReturns		0.096***	0.056	0.048**	0.044
		(4.616)	(1.508)	(2.260)	(1.175)
ROA_IndAdjusted		-0.250***	-0.281***	-0.062	-0.014
		(-3.390)	(-2.869)	(-0.782)	(-0.144)
ROA_IndQuartile		-0.039***	-0.031**	-0.001	0.004
		(-3.744)	(-2.404)	(-0.138)	(0.300)
Sample		Full	Post-SOP	Full	Post-SOP
Entropy Balanced?		Y	Y	Y	Y
Other Controls		Y	Y	Y	Y
SIC2D FE		Y	Y	Y	Y
Year FE		Y	Y	Y	Y
Observations		16,396	9,366	16,334	9,344
Adjusted R-squared		0.683	0.663	0.387	0.385

Table 9, Continued
Consequences of Voluntary Performance Disclosures

Panel B: External Parties

DEPVAR =		*AgainstSOP*	*AgainstISS*	*NegativeMedia*
	Pred?	(1)	(2)	(3)
Performance Disclosure				
PerfDiscDecile	(-)	-0.009**	-0.011	-0.007
		(-2.158)	(-1.292)	(-0.963)
Prior Year Values				
$AgainstSOP_{t-1}$	(+)	0.197***		
		(7.566)		
$AgainstISS_{t-1}$	(+)		0.142***	
			(6.792)	
$NegativeMedia_{t-1}$	(+)			0.128***
				(3.260)
Compensation				
TotalComp	(+)	0.030***	0.051***	0.001
		(7.206)	(5.053)	(0.147)
Performance				
FirmReturns		-0.052***	-0.080***	-0.012
		(-8.400)	(-5.538)	(-1.465)
IndustryReturns		-0.035***	-0.055**	0.024
		(-2.654)	(-1.986)	(1.236)
ROA_IndAdjusted		-0.074	-0.149	0.035
		(-1.631)	(-1.622)	(0.589)
ROA_IndQuartile		-0.009*	0.011	-0.005
		(-1.662)	(1.004)	(-0.725)
Entropy Balanced?		Y	Y	Y
Other Controls		Y	Y	Y
SIC2D FE		Y	Y	Y
Year FE		Y	Y	Y
Observations		6,067	6,054	8,196
Adjusted R-squared		0.201	0.062	0.068

Note: This table contains the results of our tests for consequences of voluntary performance disclosures (entropy balanced specifications). All specifications are OLS regressions, t-stats in parentheses. Coefficients different from zero identified by *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$ (two-tailed) and standard errors clustered at the firm level. Variable definitions are presented in Appendix B.

Online Appendix Table 1
Firm Fixed Effects

Panel A: Total Compensation

DEPVAR =		*PerfWords*	*PerfSentences*	*Tone*	*PerfImage*	*PerfDisclosure*
	Pred?	(1)	(2)	(3)	(4)	(5)
Compensation						
TotalComp	(+)	0.001***	0.001***	0.004***	-0.000	0.085***
		(3.077)	(2.913)	(4.348)	(-0.026)	(3.670)
ComplexComp		-0.001	-0.001	0.003	-0.003	-0.047
		(-0.968)	(-0.940)	(0.801)	(-0.187)	(-0.482)
Performance						
FirmReturns		-0.000	-0.000	0.005***	0.002	0.028
		(-0.745)	(-0.602)	(4.071)	(0.492)	(0.890)
IndustryReturns		-0.000	-0.000	0.002	0.005	-0.006
		(-0.806)	(-0.753)	(0.896)	(0.741)	(-0.137)
ROA_IndAdjusted		0.002	0.003	0.017**	0.044*	0.355**
		(1.193)	(1.288)	(2.557)	(1.653)	(2.136)
ROA_IndQuartile		-0.000	-0.000	0.001	0.003	0.007
		(-0.157)	(-0.519)	(1.090)	(0.611)	(0.229)
Investor Attention/Controls						
AnalystFollow		0.000	0.000	0.000	0.009	0.024
		(0.550)	(0.112)	(0.280)	(1.474)	(0.629)
InstOwn		-0.001	-0.001	-0.002	0.032	-0.024
		(-0.343)	(-0.511)	(-0.475)	(1.369)	(-0.180)
StdReturns		-0.012	-0.017	-0.079	0.113	-1.478
		(-0.616)	(-0.756)	(-1.272)	(0.477)	(-0.844)
LengthMDA		-0.000*	-0.000**	-0.001**	-0.002	-0.038**
		(-1.665)	(-2.019)	(-1.980)	(-0.704)	(-2.145)
MVE		0.001***	0.001**	0.004**	0.005	0.112***
		(2.707)	(2.413)	(2.565)	(0.921)	(2.885)
MTB		0.000	0.000	0.000	-0.000	0.003
		(0.589)	(0.668)	(0.544)	(-0.194)	(0.586)
Segments		-0.001	-0.001	-0.002	0.024***	-0.021
		(-1.321)	(-0.952)	(-0.971)	(3.497)	(-0.470)
ToneMDA		0.171**	0.203*	1.985***	0.310	29.651***
		(2.207)	(1.958)	(8.514)	(0.331)	(4.087)
Firm FE		Y	Y	Y	Y	Y
Year FE		Y	Y	Y	Y	Y
Observations		17,672	17,672	17,672	17,672	17,672
Adjusted R-squared		0.461	0.487	0.367	0.207	0.472

Online Appendix Table 1, Continued
Firm Fixed Effects

Panel B: Excess Compensation

DEPVAR =		*PerfWords*	*PerfSentences*	*Tone*	*PerfImage*	*PerfDisclosure*
	Pred?	(1)	(2)	(3)	(4)	(5)
Compensation						
ExcessComp	(+)	0.001**	0.001**	0.004***	0.001	0.067***
		(1.999)	(1.976)	(3.807)	(0.329)	(2.798)
ComplexComp		-0.001	-0.001	0.003	-0.004	-0.045
		(-0.879)	(-0.818)	(0.730)	(-0.253)	(-0.439)
Performance						
FirmReturns		-0.000	-0.000	0.005***	0.003	0.017
		(-1.216)	(-0.959)	(3.744)	(0.572)	(0.534)
IndustryReturns		-0.001	-0.000	0.001	0.005	-0.012
		(-0.999)	(-0.723)	(0.691)	(0.657)	(-0.278)
ROA_IndAdjusted		0.002	0.003	0.018***	0.041	0.374**
		(1.144)	(1.477)	(2.626)	(1.511)	(2.192)
ROA_IndQuartile		0.000	-0.000	0.001	0.003	0.010
		(0.057)	(-0.469)	(1.042)	(0.549)	(0.304)
Investor Attention/Controls						
AnalystFollow		-0.000	-0.000	-0.000	0.008	0.005
		(-0.045)	(-0.288)	(-0.022)	(1.231)	(0.128)
InstOwn		-0.001	-0.001	-0.003	0.034	-0.050
		(-0.551)	(-0.644)	(-0.583)	(1.335)	(-0.347)
StdReturns		-0.018	-0.023	-0.065	0.069	-1.777
		(-0.858)	(-0.978)	(-0.995)	(0.275)	(-0.968)
LengthMDA		-0.000	-0.000**	-0.001*	-0.002	-0.037**
		(-1.582)	(-2.007)	(-1.813)	(-0.505)	(-2.007)
MVE		0.002***	0.001***	0.005***	0.005	0.141***
		(3.460)	(3.058)	(3.353)	(0.832)	(3.649)
MTB		0.000	0.000	0.000	-0.000	0.004
		(0.686)	(0.754)	(0.947)	(-0.145)	(0.793)
Segments		-0.001	-0.000	-0.002	0.025***	-0.012
		(-1.058)	(-0.581)	(-1.035)	(3.485)	(-0.252)
ToneMDA		0.157**	0.185*	1.991***	0.165	28.497***
		(2.038)	(1.926)	(8.316)	(0.170)	(4.025)
Firm FE		Y	Y	Y	Y	Y
Year FE		Y	Y	Y	Y	Y
Observations		16,908	16,908	16,908	16,908	16,908
Adjusted R-squared		0.468	0.495	0.371	0.214	0.478

Online Appendix Table 1, Continued
Firm Fixed Effects

Panel C: Total Compensation and SOP

DEPVAR =		*PerfWords*	*PerfSentences*	*Tone*	*PerfImage*	*PerfDisclosure*
	Pred?	(1)	(2)	(3)	(4)	(5)
Compensation						
TotalComp	(+)	0.000	0.000	0.002**	-0.019***	0.012
		(1.049)	(0.447)	(2.149)	(-4.281)	(0.423)
*TotalComp*SOP*	(+)	0.001***	0.001***	0.003***	0.041***	0.161***
		(3.143)	(3.997)	(2.878)	(8.164)	(5.136)
ComplexComp		-0.001	-0.001	0.002	-0.008	-0.067
		(-1.090)	(-1.084)	(0.687)	(-0.536)	(-0.681)
Performance						
FirmReturns		-0.000	-0.000	0.005***	0.001	0.026
		(-0.798)	(-0.665)	(4.016)	(0.321)	(0.796)
IndustryReturns		-0.000	-0.000	0.002	0.006	-0.001
		(-0.742)	(-0.675)	(0.959)	(0.925)	(-0.026)
ROA_IndAdjusted		0.002	0.002	0.017**	0.038	0.334**
		(1.119)	(1.202)	(2.495)	(1.474)	(2.025)
ROA_IndQuartile		-0.000	-0.000	0.001	0.004	0.010
		(-0.112)	(-0.465)	(1.135)	(0.733)	(0.306)
Investor Attention/Controls						
AnalystFollow		0.000	-0.000	0.000	0.005	0.009
		(0.310)	(-0.175)	(0.054)	(0.838)	(0.234)
InstOwn		-0.000	-0.001	-0.002	0.039*	0.003
		(-0.233)	(-0.385)	(-0.353)	(1.700)	(0.021)
StdReturns		-0.016	-0.022	-0.091	-0.031	-2.043
		(-0.808)	(-0.979)	(-1.467)	(-0.135)	(-1.175)
LengthMDA		-0.000*	-0.000**	-0.001**	-0.003	-0.040**
		(-1.730)	(-2.099)	(-2.050)	(-0.878)	(-2.259)
MVE		0.001***	0.001**	0.003**	0.005	0.111***
		(2.677)	(2.379)	(2.541)	(0.859)	(2.842)
MTB		0.000	0.000	0.000	-0.000	0.002
		(0.512)	(0.583)	(0.474)	(-0.357)	(0.466)
Segments		-0.001	-0.001	-0.002	0.024***	-0.023
		(-1.347)	(-0.980)	(-0.991)	(3.466)	(-0.511)
ToneMDA		0.172**	0.205**	1.990***	0.365	29.864***
		(2.218)	(1.971)	(8.519)	(0.392)	(4.101)
Firm FE		Y	Y	Y	Y	Y
Year FE		Y	Y	Y	Y	Y
Observations		17,672	17,672	17,672	17,672	17,672
Adjusted R-squared		0.462	0.488	0.368	0.215	0.474

Online Appendix Table 1, Continued
Firm Fixed Effects

Panel D: Excess Compensation and SOP

DEPVAR =		*PerfWords*	*PerfSentences*	*Tone*	*PerfImage*	*PerfDisclosure*
	Pred?	(1)	(2)	(3)	(4)	(5)
Compensation						
ExcessComp	(+)	-0.000	-0.000	0.001	-0.012**	-0.026
		(-0.853)	(-0.937)	(0.877)	(-2.521)	(-0.803)
*ExcessComp*SOP*	(+)	0.002***	0.002***	0.005***	0.026***	0.185***
		(3.543)	(3.692)	(2.798)	(4.209)	(4.144)
ComplexComp		-0.001	-0.001	0.002	-0.005	-0.055
		(-0.958)	(-0.894)	(0.663)	(-0.344)	(-0.536)
Performance						
FirmReturns		-0.000	-0.000	0.005***	0.003	0.020
		(-1.156)	(-0.899)	(3.800)	(0.654)	(0.615)
IndustryReturns		-0.000	-0.000	0.001	0.006	-0.006
		(-0.881)	(-0.605)	(0.795)	(0.797)	(-0.125)
ROA_IndAdjusted		0.002	0.003	0.017**	0.037	0.348**
		(1.022)	(1.358)	(2.535)	(1.386)	(2.050)
ROA_IndQuartile		0.000	-0.000	0.001	0.003	0.013
		(0.135)	(-0.396)	(1.108)	(0.629)	(0.399)
Investor Attention/Controls						
AnalystFollow		-0.000	-0.000	-0.000	0.007	-0.001
		(-0.172)	(-0.410)	(-0.127)	(1.101)	(-0.025)
InstOwn		-0.001	-0.001	-0.002	0.036	-0.034
		(-0.473)	(-0.572)	(-0.501)	(1.438)	(-0.242)
StdReturns		-0.021	-0.027	-0.076	0.013	-2.171
		(-1.028)	(-1.139)	(-1.153)	(0.052)	(-1.186)
LengthMDA		-0.000	-0.000**	-0.001*	-0.002	-0.037**
		(-1.587)	(-2.013)	(-1.818)	(-0.514)	(-2.014)
MVE		0.001***	0.001***	0.004***	0.004	0.135***
		(3.334)	(2.929)	(3.243)	(0.687)	(3.496)
MTB		0.000	0.000	0.000	-0.000	0.004
		(0.693)	(0.760)	(0.949)	(-0.140)	(0.800)
Segments		-0.000	-0.000	-0.002	0.025***	-0.008
		(-0.989)	(-0.513)	(-0.976)	(3.573)	(-0.167)
ToneMDA		0.161**	0.190**	2.004***	0.236	28.991***
		(2.094)	(1.974)	(8.369)	(0.243)	(4.093)
Firm FE		Y	Y	Y	Y	Y
Year FE		Y	Y	Y	Y	Y
Observations		16,908	16,908	16,908	16,908	16,908
Adjusted R-squared		0.469	0.496	0.372	0.216	0.479

Note: All specifications are OLS regressions, t-stats in parentheses. Coefficients different from zero identified by *** p < 0.01, ** p < 0.05, * p < 0.1 (two-tailed) and standard errors clustered at the firm level. Variable definitions in Appendix B.

Online Appendix Table 2
Compensation Consultant Fixed Effects

Panel A: Total Compensation

DEPVAR =		*PerfWords*	*PerfSentences*	*Tone*	*PerfImage*	*PerfDisclosure*
	Pred?	(1)	(2)	(3)	(4)	(5)
Compensation						
TotalComp	(+)	0.002***	0.002***	0.005***	0.011***	0.195***
		(5.491)	(6.568)	(5.391)	(3.435)	(6.546)
ComplexComp		0.001	0.000	0.004	-0.003	0.054
		(0.571)	(0.014)	(1.436)	(-0.274)	(0.609)
Consultants						
FredericCook		-0.003	-0.003	-0.007	-0.033**	-0.301
		(-1.369)	(-1.158)	(-1.037)	(-2.394)	(-1.423)
PayGovernance		0.001	0.002*	0.004	0.013	0.137
		(0.652)	(1.816)	(1.138)	(0.863)	(1.429)
Meridian		0.003***	0.005***	0.004	0.013	0.283***
		(3.491)	(4.590)	(1.240)	(1.033)	(3.552)
TowersWatson		0.001**	0.002***	0.004*	0.011	0.145***
		(2.198)	(2.716)	(1.860)	(1.332)	(2.623)
PearlMeyer		0.001	0.001	0.001	0.022**	0.109
		(1.511)	(1.411)	(0.320)	(2.412)	(1.549)
Mercer		0.001*	0.001**	0.002	-0.005	0.082
		(1.746)	(2.203)	(0.986)	(-0.844)	(1.633)
SemlerBrossy		0.001	0.001	0.003	0.019	0.119
		(0.613)	(1.168)	(0.702)	(1.121)	(1.015)
Exequity		0.003**	0.004**	0.001	0.039	0.295**
		(2.290)	(2.424)	(0.278)	(1.315)	(2.132)
CompAdvisoryPartners		-0.000	0.002	0.004	0.020	0.102
		(-0.081)	(0.669)	(0.573)	(0.548)	(0.514)
AonHewitt		0.002**	0.003***	0.004	0.022	0.201**
		(2.272)	(2.689)	(1.229)	(1.430)	(2.534)
Farient		0.004	0.005	-0.001	-0.023	0.240
		(1.495)	(1.452)	(-0.117)	(-1.085)	(1.021)
HayGroup		0.000	0.001	-0.000	0.002	0.055
		(0.221)	(1.161)	(-0.002)	(0.127)	(0.547)
StevenHall		0.001	0.002	-0.001	-0.011	0.050
		(0.294)	(0.801)	(-0.187)	(-0.574)	(0.331)
Compensia		-0.001	-0.002*	-0.004	0.003	-0.135
		(-1.164)	(-1.804)	(-1.178)	(0.244)	(-1.444)
ClearBridge		0.003	0.007	0.006	0.063	0.440
		(0.910)	(1.541)	(0.579)	(0.923)	(1.311)
CompStrategies		0.001	0.001	-0.005	0.005	0.008
		(0.442)	(0.503)	(-1.406)	(0.241)	(0.063)
All Controls		Y	Y	Y	Y	Y
SIC2D FE		Y	Y	Y	Y	Y
Year FE		Y	Y	Y	Y	Y
Observations		17,672	17,672	17,672	17,672	17,672
Adjusted R-squared		0.137	0.159	0.116	0.069	0.174

Online Appendix Table 2, Continued
Compensation Consultant Fixed Effects

Panel B: Excess Compensation

DEPVAR =		*PerfWords*	*PerfSentences*	*Tone*	*PerfImage*	*PerfDisclosure*
	Pred?	(1)	(2)	(3)	(4)	(5)
Compensation						
ExcessComp	(+)	0.001***	0.002***	0.005***	0.011***	0.146***
		(3.676)	(4.159)	(4.749)	(3.314)	(4.774)
ComplexComp		0.001	0.001	0.005	-0.003	0.091
		(0.871)	(0.599)	(1.605)	(-0.272)	(1.004)
Consultants						
FredericCook		-0.004*	-0.004	-0.009	-0.035**	-0.376*
		(-1.672)	(-1.618)	(-1.373)	(-2.337)	(-1.830)
PayGovernance		0.001	0.002**	0.005	0.016	0.160
		(0.816)	(1.992)	(1.299)	(1.007)	(1.633)
Meridian		0.003***	0.005***	0.004	0.011	0.290***
		(3.490)	(4.574)	(1.300)	(0.897)	(3.527)
TowersWatson		0.001**	0.002***	0.004**	0.010	0.146**
		(2.053)	(2.650)	(2.046)	(1.166)	(2.573)
PearlMeyer		0.001	0.001	0.000	0.024**	0.093
		(1.304)	(1.198)	(0.012)	(2.510)	(1.336)
Mercer		0.001*	0.001**	0.002	-0.006	0.081
		(1.714)	(2.164)	(0.891)	(-0.857)	(1.572)
SemlerBrossy		0.001	0.002	0.004	0.020	0.142
		(0.843)	(1.378)	(0.817)	(1.151)	(1.210)
Exequity		0.004**	0.004***	0.002	0.037	0.315**
		(2.437)	(2.590)	(0.320)	(1.260)	(2.250)
CompAdvisoryPartners		-0.000	0.001	0.004	0.020	0.096
		(-0.148)	(0.605)	(0.587)	(0.537)	(0.470)
AonHewitt		0.002**	0.003***	0.004	0.024	0.212***
		(2.341)	(2.735)	(1.300)	(1.500)	(2.611)
Farient		0.004	0.004	-0.002	-0.022	0.224
		(1.409)	(1.379)	(-0.228)	(-0.997)	(0.949)
HayGroup		0.000	0.001	-0.001	0.004	0.044
		(0.128)	(1.107)	(-0.274)	(0.266)	(0.422)
StevenHall		0.001	0.002	-0.001	-0.013	0.049
		(0.318)	(0.736)	(-0.227)	(-0.593)	(0.299)
Compensia		-0.001	-0.002*	-0.005	0.000	-0.157*
		(-1.313)	(-1.875)	(-1.507)	(0.033)	(-1.652)
ClearBridge		0.004	0.007	0.006	0.063	0.469
		(1.027)	(1.636)	(0.634)	(0.927)	(1.412)
CompStrategies		0.001	0.001	-0.004	0.001	0.017
		(0.487)	(0.573)	(-1.177)	(0.055)	(0.123)
All Controls		Y	Y	Y	Y	Y
SIC2D FE		Y	Y	Y	Y	Y
Year FE		Y	Y	Y	Y	Y
Observations		16,908	16,908	16,908	16,908	16,908
Adjusted R-squared		0.134	0.157	0.116	0.0690	0.171

Online Appendix Table 2, Continued
Compensation Consultant Fixed Effects

Panel C: Total Compensation and SOP

DEPVAR =		*PerfWords*	*PerfSentences*	*Tone*	*PerfImage*	*PerfDisclosure*
	Pred?	(1)	(2)	(3)	(4)	(5)
Compensation						
TotalComp	(+)	0.001***	0.001***	0.003***	-0.010***	0.099***
		(3.308)	(3.817)	(2.932)	(-3.257)	(3.229)
*TotalComp*SOP*	(+)	0.001***	0.002***	0.005***	0.040***	0.190***
		(4.076)	(4.543)	(4.158)	(9.015)	(6.086)
ComplexComp		0.000	-0.000	0.004	-0.008	0.033
		(0.423)	(-0.141)	(1.276)	(-0.731)	(0.378)
Consultants						
*FredericCook*SOP*		-0.003	-0.004	-0.002	-0.070***	-0.331
		(-1.085)	(-1.235)	(-0.189)	(-3.494)	(-1.197)
*PayGovernance*SOP*		0.002	0.003	0.003	0.020	0.187
		(1.126)	(1.468)	(0.450)	(1.063)	(1.264)
*Meridian*SOP*		0.002	0.002	0.007	0.018	0.203*
		(1.150)	(1.543)	(1.450)	(1.037)	(1.675)
*TowersWatson*SOP*		0.000	0.001	0.000	0.020*	0.080
		(0.245)	(1.534)	(0.150)	(1.795)	(0.984)
*PearlMeyer*SOP*		0.001	0.002	0.003	0.023	0.139
		(0.952)	(1.575)	(0.714)	(1.450)	(1.438)
*Mercer*SOP*		0.001	0.000	0.003	-0.000	0.057
		(0.534)	(0.455)	(0.881)	(-0.028)	(0.640)
*SemlerBrossy*SOP*		0.002	0.001	0.007	0.044*	0.227
		(1.202)	(0.670)	(0.981)	(1.732)	(1.282)
*Exequity*SOP*		0.005**	0.007***	0.007	0.025	0.485**
		(2.207)	(3.149)	(1.063)	(0.771)	(2.450)
*CompAdvisoryPartners*SOP*		-0.001	-0.000	0.001	0.018	-0.020
		(-0.384)	(-0.130)	(0.065)	(0.372)	(-0.073)
*AonHewitt*SOP*		-0.002	-0.002	-0.013	-0.002	-0.258
		(-1.267)	(-1.004)	(-1.619)	(-0.078)	(-1.436)
*Farient*SOP*		0.004	0.005	0.006	-0.014	0.318
		(0.776)	(0.983)	(0.443)	(-0.464)	(0.792)
*HayGroup*SOP*		-0.001	0.000	-0.009	0.013	-0.085
		(-0.568)	(0.020)	(-1.539)	(0.599)	(-0.686)
*StevenHall*SOP*		0.003	0.004	0.004	-0.016	0.244
		(1.134)	(1.289)	(0.535)	(-0.494)	(1.144)
*Compensia*SOP*		-0.002	-0.002	-0.012***	-0.013	-0.241**
		(-1.379)	(-1.156)	(-2.640)	(-0.966)	(-2.024)
*ClearBridge*SOP*		0.013***	0.016***	0.017	0.090	1.182***
		(3.674)	(2.833)	(1.095)	(1.011)	(3.130)
*CompStrategies*SOP*		0.002	0.002	-0.003	0.006	0.104
		(0.765)	(0.950)	(-0.484)	(0.191)	(0.501)
Consultant Main Effects		Y	Y	Y	Y	Y
All Controls		Y	Y	Y	Y	Y
SIC2D, Year FE		Y	Y	Y	Y	Y
Observations		17,672	17,672	17,672	17,672	17,672
Adjusted R-squared		0.139	0.162	0.118	0.0769	0.178

Online Appendix Table 2, Continued
Compensation Consultant Fixed Effects

Panel D: Excess Compensation and SOP

DEPVAR =		*PerfWords*	*PerfSentences*	*Tone*	*PerfImage*	*PerfDisclosure*
	Pred?	(1)	(2)	(3)	(4)	(5)
Compensation						
ExcessComp	(+)	0.000	0.000	0.001	-0.004	0.017
		(0.298)	(0.592)	(1.246)	(-1.628)	(0.567)
*ExcessComp*SOP*	(+)	0.002***	0.002***	0.007***	0.027***	0.238***
		(5.173)	(4.904)	(4.291)	(5.066)	(5.748)
ComplexComp		0.000	-0.000	0.004	-0.008	0.033
		(0.423)	(-0.141)	(1.276)	(-0.731)	(0.378)
Consultants						
*FredericCook*SOP*		-0.003	-0.003	0.004	-0.056**	-0.207
		(-1.011)	(-0.873)	(0.323)	(-2.541)	(-0.815)
*PayGovernance*SOP*		0.002	0.003*	0.004	0.038*	0.263*
		(1.485)	(1.853)	(0.625)	(1.848)	(1.725)
*Meridian*SOP*		0.002	0.002	0.007	0.018	0.207*
		(1.142)	(1.460)	(1.569)	(1.060)	(1.669)
*TowersWatson*SOP*		0.000	0.001	0.001	0.024**	0.082
		(0.193)	(1.327)	(0.253)	(2.123)	(0.985)
*PearlMeyer*SOP*		0.001	0.002*	0.003	0.025	0.160
		(1.066)	(1.713)	(0.952)	(1.554)	(1.633)
*Mercer*SOP*		0.001	0.001	0.003	0.001	0.070
		(0.683)	(0.570)	(0.919)	(0.086)	(0.768)
*SemlerBrossy*SOP*		0.003	0.002	0.009	0.063**	0.298
		(1.499)	(0.907)	(1.180)	(2.364)	(1.641)
*Exequity*SOP*		0.005**	0.008***	0.009	0.041	0.533***
		(2.226)	(3.177)	(1.245)	(1.223)	(2.621)
*CompAdvisoryPartners*SOP*		-0.001	0.000	0.003	0.038	0.059
		(-0.224)	(0.068)	(0.267)	(0.779)	(0.210)
*AonHewitt*SOP*		-0.002	-0.002	-0.012	0.008	-0.238
		(-1.215)	(-1.020)	(-1.469)	(0.248)	(-1.300)
*Farient*SOP*		0.004	0.006	0.007	-0.002	0.365
		(0.850)	(1.038)	(0.485)	(-0.059)	(0.892)
*HayGroup*SOP*		-0.001	-0.000	-0.010*	0.016	-0.095
		(-0.582)	(-0.017)	(-1.724)	(0.679)	(-0.744)
*StevenHall*SOP*		0.004	0.005*	0.003	-0.007	0.315
		(1.226)	(1.684)	(0.395)	(-0.179)	(1.331)
*Compensia*SOP*		-0.002	-0.002	-0.013***	-0.023*	-0.269**
		(-1.348)	(-1.189)	(-2.775)	(-1.686)	(-2.139)
*ClearBridge*SOP*		0.013***	0.016***	0.019	0.114	1.231***
		(3.597)	(2.791)	(1.177)	(1.241)	(3.161)
*CompStrategies*SOP*		0.002	0.003	-0.002	0.004	0.124
		(0.777)	(1.012)	(-0.227)	(0.110)	(0.582)
Consultant Main Effects		Y	Y	Y	Y	Y
All Controls		Y	Y	Y	Y	Y
SIC2D, Year FE		Y	Y	Y	Y	Y
Observations		17,672	17,672	17,672	17,672	17,672
Adjusted R-squared		0.139	0.162	0.118	0.0769	0.178

Note: We create indicators set equal to one when the consultant is mentioned for each of the 16 most frequently occurring proxy advisors. All specifications are OLS regressions, t-stats in parentheses. Coefficients different from zero identified by *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$ (two-tailed) and standard errors clustered at the firm level. Variable definitions in Appendix B.

Online Appendix Table 3
Alternative Firm Complexity Measures

Panel A: Total Compensation and StdROA

DEPVAR =		*PerfWords*	*PerfSentences*	*Tone*	*PerfImage*	*PerfDisclosure*
	Pred?	(1)	(2)	(3)	(4)	(5)
Compensation						
TotalComp	(+)	0.002***	0.003***	0.005***	0.012***	0.210***
		(5.872)	(7.124)	(5.524)	(3.917)	(6.999)
ComplexComp		0.001	0.000	0.005	-0.003	0.058
		(0.571)	(0.047)	(1.561)	(-0.252)	(0.657)
Performance						
FirmReturns		-0.000	-0.001	0.006***	-0.004	0.014
		(-1.084)	(-1.535)	(5.000)	(-0.999)	(0.477)
IndustryReturns		-0.000	-0.001	0.002	-0.002	-0.015
		(-0.783)	(-1.228)	(1.405)	(-0.245)	(-0.355)
ROA_IndAdjusted		0.003	0.003	0.015**	0.024	0.356*
		(1.336)	(1.281)	(2.200)	(1.042)	(1.812)
ROA_IndQuartile		-0.001**	-0.001***	-0.001	-0.003	-0.077**
		(-2.178)	(-2.603)	(-0.600)	(-0.582)	(-2.093)
Investor Attention/Controls						
AnalystFollow		-0.000	-0.000	-0.000	0.001	-0.022
		(-0.812)	(-0.925)	(-0.420)	(0.265)	(-0.714)
InstOwn		0.001	0.001	0.002	0.007	0.073
		(1.584)	(1.070)	(1.071)	(1.204)	(1.504)
StdReturns		-0.020	-0.035	-0.096	0.249	-2.244
		(-1.016)	(-1.533)	(-1.616)	(1.317)	(-1.293)
LengthMDA		-0.000	-0.000	-0.001**	-0.004*	-0.027**
		(-1.215)	(-1.553)	(-2.121)	(-1.740)	(-2.007)
MVE		0.001***	0.002***	0.004***	0.015***	0.155***
		(5.052)	(5.828)	(4.377)	(5.189)	(6.087)
MTB		-0.000	-0.000	0.000	-0.001	-0.004
		(-1.205)	(-1.430)	(0.818)	(-0.922)	(-0.891)
StdROA		-0.002	-0.002	0.026	0.133**	0.270
		(-0.279)	(-0.209)	(1.139)	(2.023)	(0.398)
ToneMDA		0.109	0.098	1.733***	0.207	22.094***
		(1.368)	(1.023)	(6.844)	(0.235)	(2.963)
SIC2D FE		Y	Y	Y	Y	Y
Year FE		Y	Y	Y	Y	Y
Observations		17,672	17,672	17,672	17,672	17,672
Adjusted R-squared		0.132	0.151	0.115	0.066	0.168

Online Appendix Table 3, Continued
Alternative Firm Complexity Measures

Panel B: Total Compensation and Intangibles

DEPVAR =		*PerfWords*	*PerfSentences*	*Tone*	*PerfImage*	*PerfDisclosure*
	Pred?	(1)	(2)	(3)	(4)	(5)
Compensation						
TotalComp	(+)	0.002***	0.003***	0.005***	0.012***	0.210***
		(5.834)	(7.092)	(5.550)	(3.990)	(6.991)
ComplexComp		0.001	0.000	0.005	-0.003	0.057
		(0.582)	(0.054)	(1.527)	(-0.300)	(0.646)
Performance						
FirmReturns		-0.000	-0.001	0.006***	-0.003	0.016
		(-1.091)	(-1.549)	(5.088)	(-0.861)	(0.532)
IndustryReturns		-0.000	-0.001	0.002	-0.001	-0.013
		(-0.786)	(-1.243)	(1.521)	(-0.117)	(-0.298)
ROA_IndAdjusted		0.003	0.003	0.013**	0.012	0.335*
		(1.500)	(1.405)	(1.986)	(0.536)	(1.780)
ROA_IndQuartile		-0.001**	-0.001***	-0.001	-0.002	-0.074**
		(-2.169)	(-2.607)	(-0.439)	(-0.392)	(-2.020)
Investor Attention/Controls						
AnalystFollow		-0.000	-0.000	-0.000	0.001	-0.022
		(-0.810)	(-0.922)	(-0.441)	(0.240)	(-0.723)
InstOwn		0.001	0.001	0.002	0.006	0.073
		(1.604)	(1.082)	(1.034)	(1.147)	(1.497)
StdReturns		-0.020	-0.035	-0.078	0.329*	-2.004
		(-1.036)	(-1.566)	(-1.324)	(1.709)	(-1.165)
LengthMDA		-0.000	-0.000	-0.001**	-0.003*	-0.027**
		(-1.239)	(-1.571)	(-2.081)	(-1.685)	(-1.998)
MVE		0.001***	0.002***	0.004***	0.015***	0.154***
		(4.979)	(5.755)	(4.292)	(5.048)	(5.996)
MTB		-0.000	-0.000	0.000	-0.001	-0.004
		(-1.188)	(-1.422)	(0.913)	(-0.832)	(-0.837)
Intangibles		0.001	0.000	0.001	-0.004	0.036
		(0.512)	(0.242)	(0.113)	(-0.242)	(0.275)
ToneMDA		0.110	0.099	1.715***	0.127	21.866***
		(1.377)	(1.032)	(6.753)	(0.145)	(2.934)
SIC2D FE		Y	Y	Y	Y	Y
Year FE		Y	Y	Y	Y	Y
Observations		17,672	17,672	17,672	17,672	17,672
Adjusted R-squared		0.133	0.151	0.115	0.066	0.168

Online Appendix Table 3, Continued
Alternative Firm Complexity Measures

Panel C: Total Compensation/SOP and StdROA

DEPVAR =		*PerfWords*	*PerfSentences*	*Tone*	*PerfImage*	*PerfDisclosure*
	Pred?	(1)	(2)	(3)	(4)	(5)
Compensation						
TotalComp	(+)	0.001***	0.001***	0.003***	-0.010***	0.098***
		(3.360)	(3.867)	(2.765)	(-3.229)	(3.222)
*TotalComp*SOP*	(+)	0.002***	0.002***	0.005***	0.042***	0.220***
		(5.059)	(5.907)	(4.777)	(9.716)	(7.302)
ComplexComp		0.000	-0.000	0.004	-0.008	0.033
		(0.377)	(-0.164)	(1.365)	(-0.711)	(0.373)
Performance						
FirmReturns		-0.000	-0.001	0.005***	-0.005	0.011
		(-1.165)	(-1.631)	(4.934)	(-1.179)	(0.361)
IndustryReturns		-0.000	-0.001	0.003	0.001	-0.003
		(-0.599)	(-1.014)	(1.579)	(0.118)	(-0.080)
ROA_IndAdjusted		0.003	0.003	0.015**	0.025	0.362*
		(1.366)	(1.313)	(2.230)	(1.098)	(1.857)
ROA_IndQuartile		-0.001**	-0.001***	-0.001	-0.003	-0.076**
		(-2.163)	(-2.589)	(-0.580)	(-0.541)	(-2.072)
Investor Attention/Controls						
AnalystFollow		-0.000	-0.000	-0.001	0.000	-0.027
		(-0.938)	(-1.069)	(-0.536)	(0.022)	(-0.892)
InstOwn		0.001	0.001	0.002	0.007	0.074
		(1.596)	(1.083)	(1.083)	(1.233)	(1.523)
StdReturns		-0.026	-0.041*	-0.112*	0.115	-2.941*
		(-1.287)	(-1.841)	(-1.885)	(0.615)	(-1.701)
LengthMDA		-0.000	-0.000*	-0.001**	-0.004*	-0.029**
		(-1.316)	(-1.671)	(-2.220)	(-1.937)	(-2.157)
MVE		0.001***	0.002***	0.004***	0.015***	0.152***
		(5.008)	(5.782)	(4.314)	(5.054)	(6.031)
MTB		-0.000	-0.000	0.000	-0.001	-0.005
		(-1.285)	(-1.517)	(0.736)	(-1.088)	(-1.006)
StdROA		-0.002	-0.001	0.027	0.143**	0.322
		(-0.227)	(-0.151)	(1.197)	(2.184)	(0.477)
ToneMDA		0.111	0.101	1.739***	0.262	22.379***
		(1.394)	(1.051)	(6.870)	(0.300)	(2.999)
SIC2D FE		Y	Y	Y	Y	Y
Year FE		Y	Y	Y	Y	Y
Observations		17,672	17,672	17,672	17,672	17,672
Adjusted R-squared		0.135	0.154	0.117	0.0746	0.173

Online Appendix Table 3, Continued
Alternative Firm Complexity Measures

Panel D: Total Compensation/SOP and Intangibles

DEPVAR =		*PerfWords*	*PerfSentences*	*Tone*	*PerfImage*	*PerfDisclosure*
	Pred?	(1)	(2)	(3)	(4)	(5)
Compensation						
TotalComp	(+)	0.001***	0.001***	0.003***	-0.009***	0.098***
		(3.331)	(3.853)	(2.795)	(-3.150)	(3.221)
*TotalComp*SOP*	(+)	0.002***	0.002***	0.005***	0.042***	0.219***
		(5.040)	(5.887)	(4.765)	(9.702)	(7.285)
ComplexComp		0.000	-0.000	0.004	-0.008	0.032
		(0.387)	(-0.159)	(1.330)	(-0.763)	(0.360)
Performance						
FirmReturns		-0.000	-0.001	0.006***	-0.004	0.012
		(-1.170)	(-1.642)	(5.026)	(-1.035)	(0.420)
IndustryReturns		-0.000	-0.001	0.003*	0.002	-0.001
		(-0.599)	(-1.026)	(1.697)	(0.249)	(-0.019)
ROA_IndAdjusted		0.003	0.003	0.013**	0.012	0.336*
		(1.507)	(1.412)	(1.993)	(0.545)	(1.792)
ROA_IndQuartile		-0.001**	-0.001***	-0.001	-0.002	-0.073**
		(-2.151)	(-2.588)	(-0.415)	(-0.341)	(-1.992)
Investor Attention/Controls						
AnalystFollow		-0.000	-0.000	-0.001	-0.000	-0.027
		(-0.936)	(-1.067)	(-0.556)	(-0.005)	(-0.902)
InstOwn		0.001	0.001	0.002	0.006	0.073
		(1.613)	(1.092)	(1.042)	(1.168)	(1.511)
StdReturns		-0.026	-0.042*	-0.094	0.198	-2.682
		(-1.303)	(-1.869)	(-1.590)	(1.046)	(-1.566)
LengthMDA		-0.000	-0.000*	-0.001**	-0.004*	-0.029**
		(-1.337)	(-1.685)	(-2.176)	(-1.875)	(-2.143)
MVE		0.001***	0.002***	0.004***	0.014***	0.151***
		(4.937)	(5.711)	(4.229)	(4.915)	(5.940)
MTB		-0.000	-0.000	0.000	-0.001	-0.005
		(-1.266)	(-1.506)	(0.833)	(-0.995)	(-0.950)
Intangibles		0.001	0.000	0.000	-0.005	0.026
		(0.460)	(0.185)	(0.063)	(-0.367)	(0.202)
ToneMDA		0.112	0.101	1.721***	0.178	22.131***
		(1.401)	(1.058)	(6.777)	(0.204)	(2.968)
SIC2D FE		Y	Y	Y	Y	Y
Year FE		Y	Y	Y	Y	Y
Observations		17,672	17,672	17,672	17,672	17,672
Adjusted R-squared		0.135	0.154	0.117	0.0744	0.173

Note: *StdROA* is standard deviation of ROA over prior 16 quarters and *Intangibles* is intangible assets from Compustat scaled by total assets. All specifications are OLS regressions, t-stats in parentheses. Coefficients different from zero identified by *** p < 0.01, ** p < 0.05, * p < 0.1 (two-tailed) and standard errors clustered at the firm level. Variable definitions in Appendix B.

Online Appendix Table 4
MD&A Falsification and SOP

Panel A: Total Compensation

DEPVAR =		*PerfWordsMDA*	*PerfSentencesMDA*	*ToneMDA*	*PerfDisclosureMDA*
	Pred?	(1)	(2)	(3)	(4)
Compensation					
TotalComp	(+)	0.029	-0.004***	-0.013**	-0.083***
		(1.133)	(-2.923)	(-2.388)	(-3.587)
*TotalComp*SOP*	(+)	-0.042	-0.001	-0.004	-0.006
		(-1.280)	(-0.480)	(-0.668)	(-0.286)
ComplexComp		0.030	-0.013***	-0.011	-0.219***
		(0.309)	(-2.880)	(-0.620)	(-2.860)
Performance					
FirmReturns		-0.050	0.001	0.053***	0.097***
		(-0.875)	(1.035)	(9.000)	(4.371)
IndustryReturns		-0.112	0.002	-0.021**	-0.002
		(-1.039)	(0.916)	(-2.190)	(-0.071)
ROA_IndAdjusted		0.410**	0.050***	0.501***	1.433***
		(1.980)	(4.706)	(12.951)	(8.328)
ROA_IndQuartile		0.062	0.007***	0.058***	0.189***
		(1.460)	(3.969)	(8.554)	(6.322)
Investor Attention/Controls					
AnalystFollow		0.004	0.003**	0.008	0.044*
		(0.140)	(2.167)	(1.493)	(1.865)
InstOwn		-0.007	0.005**	-0.001	0.073*
		(-0.201)	(2.208)	(-0.110)	(1.805)
StdReturns		3.383	-0.228***	-1.657***	-5.416***
		(1.301)	(-2.641)	(-4.971)	(-3.806)
LengthMDA		-0.028	0.035***	0.048***	0.560***
		(-0.628)	(43.512)	(21.103)	(42.035)
MVE		-0.038*	-0.006***	0.007*	-0.073***
		(-1.796)	(-5.299)	(1.811)	(-3.904)
MTB		-0.002	0.001***	0.006***	0.018***
		(-0.715)	(3.587)	(6.250)	(4.788)
Segments		0.014	0.005***	0.008	0.083***
		(0.591)	(2.745)	(1.394)	(3.005)
SIC2D FE		Y	Y	Y	Y
Year FE		Y	Y	Y	Y
Observations		17,672	17,672	17,672	17,672
Adjusted R-squared		0.002	0.537	0.262	0.518

Online Appendix Table 4, Continued
MD&A Falsification and SOP

Panel B: Excess Compensation

DEPVAR =		*PerfWordsMDA*	*PerfSentencesMDA*	*ToneMDA*	*PerfDisclosureMDA*
	Pred?	(1)	(2)	(3)	(4)
Compensation					
ExcessComp	(+)	0.013	-0.002	0.006	-0.034
		(0.590)	(-1.553)	(1.012)	(-1.299)
*ExcessComp*SOP*	(+)	-0.034	0.000	-0.010	-0.001
		(-1.403)	(0.171)	(-1.280)	(-0.022)
ComplexComp		0.040	-0.015***	-0.020	-0.249***
		(0.357)	(-3.019)	(-1.122)	(-3.124)
Performance					
FirmReturns		-0.055	0.001	0.057***	0.100***
		(-0.911)	(0.952)	(9.486)	(4.403)
IndustryReturns		-0.120	0.001	-0.021**	-0.011
		(-1.046)	(0.589)	(-2.184)	(-0.324)
ROA_IndAdjusted		0.432**	0.051***	0.518***	1.478***
		(1.970)	(4.620)	(12.876)	(8.273)
ROA_IndQuartile		0.065	0.008***	0.059***	0.198***
		(1.446)	(4.124)	(8.460)	(6.421)
Investor Attention/Controls					
AnalystFollow		0.003	0.003**	0.009	0.046*
		(0.104)	(2.195)	(1.621)	(1.919)
InstOwn		-0.008	0.005*	-0.001	0.065
		(-0.217)	(1.921)	(-0.142)	(1.578)
StdReturns		3.635	-0.290***	-1.748***	-6.353***
		(1.301)	(-3.232)	(-5.118)	(-4.287)
LengthMDA		-0.030	0.035***	0.048***	0.561***
		(-0.653)	(42.929)	(20.627)	(41.418)
MVE		-0.036*	-0.008***	0.000	-0.110***
		(-1.897)	(-7.684)	(0.023)	(-6.652)
MTB		-0.002	0.001***	0.006***	0.019***
		(-0.729)	(3.812)	(5.926)	(4.813)
Segments		0.014	0.004**	0.007	0.070**
		(0.574)	(2.211)	(1.246)	(2.507)
SIC2D FE		Y	Y	Y	Y
Year FE		Y	Y	Y	Y
Observations		16,908	16,908	16,908	16,908
Adjusted R-squared		0.002	0.540	0.263	0.520

Note: MD&A variables are calculated the same way as the CD&A variables, using the MD&A section from the corresponding 10-K (instead of the CD&A). All specifications are OLS regressions, t-stats in parentheses. Coefficients different from zero identified by *** p < 0.01, ** p < 0.05, * p < 0.1 (two-tailed) and standard errors clustered at the firm level. Variable definitions in Appendix B.

Online Appendix Table 5
Entropy Balancing Tables

Panel A: Full Sample, Before Balancing

	HighPerfDisc = 1			*HighPerfDisc* = 0		
	Mean	**Variance**	**Skewness**	**Mean**	**Variance**	**Skewness**
TotalComp	8.429	0.842	-0.407	7.981	0.930	-0.204
ComplexComp	0.986	0.462	-0.412	0.919	0.427	-0.234
FirmReturns	-0.026	0.137	0.052	-0.044	0.160	0.262
IndustryReturns	0.159	0.124	1.351	0.159	0.130	1.338
ROA_IndAdjusted	0.008	0.006	-1.504	-0.007	0.010	-1.921
ROA_IndQuartile	1.516	0.250	-0.062	1.470	0.249	0.121

Panel B: Entropy Balanced Comparison Sample

	HighPerfDisc = 1			*HighPerfDisc* = 0		
	Mean	**Variance**	**Skewness**	**Mean**	**Variance**	**Skewness**
TotalComp	8.429	0.842	-0.407	8.429	0.842	-0.407
ComplexComp	0.986	0.462	-0.412	0.986	0.462	-0.412
FirmReturns	-0.026	0.137	0.052	-0.026	0.137	0.052
IndustryReturns	0.159	0.124	1.351	0.159	0.124	1.351
ROA_IndAdjusted	0.008	0.006	-1.504	0.008	0.006	-1.504
ROA_IndQuartile	1.516	0.250	-0.062	1.516	0.250	-0.062

Note: This table contains pre- and post-entropy balancing covariate balance tables for the sample used in Table 9.