

## Do compensation consultants have distinct styles?

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### ABSTRACT

We hand collect compensation consultant data from proxy statements (DEF 14A) for all ExecuComp firms over the period 2006 – 2010. We investigate whether compensation consultants exhibit distinct styles in the determination of pay level and compensation structure of CEOs after accounting for their economic determinants. Our tests, which include the use of placebo samples that involve the scrambling of consultants as benchmarks, yield little evidence of compensation consultant style. We do find style-like effects for a subsample of hiring firms with weak governance mechanisms which, in turn, are largely driven by firms in this subsample that hire less reputable compensation consulting firms. In this subsample, we further find that for consultants who recommend a higher salary or higher salary percentage as a proportion of total compensation, the client firms' performance as measured by lead return on assets or Tobin's q is significantly lower. We conclude the choice of consulting firm does not matter for client firms with strong governance mechanisms (other than for certification reasons) because any hired consultant will provide advice based on the client firm's economic characteristics and environment. However, we do observe style-like effects and some resultant perverse outcomes, particularly when there is greater potential for managers to take actions in their self-interest combined with weaker incentives for consultants to provide objective advice.

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## Introduction

In this paper, we investigate whether the choice of individual compensation consultant affects the compensation level and structure of top managers. This question is important because the compensation schemes of top managers will influence their behavior and, consequently, impact firm economic outcomes (e.g., Coles, Daniel, and Naveen, 2006). Compensation consultants are typically hired by the board compensation committee to help craft compensation policies for the top managers of the corporation. Compensation consulting firms may also provide other highly lucrative services to the client firm in the form of employee benefits management, actuarial services, human resource management, etc. The extant literature on compensation consultants has largely focused on the impact of hiring compensation consultants on the pay level and structure, whether compensation consultants are influenced by cross-selling incentives and desire to secure repeat business in setting the pay level and structure, and whether higher pay level is attributable to the client firm's governance environment or due to the use of a compensation consultant.<sup>1</sup> Compensation consultants can, however, imprint their own distinct styles in fashioning compensation policies for a firm. Our unique contribution to this literature is that we examine whether individual compensation consultants matter in the setting of compensation policies after controlling for the known economic determinants of these policies.

Compensation consultants have been in the direct line of fire from academics, board members, and policy makers. For example, Bebchuk and Fried (2014) take the view that managers will influence the employment of consultants who are likely to recommend higher pay and use their advice to justify excessive compensation. Further, compensation consultants, driven by their cross-selling incentives and/or desire to obtain repeat business, design compensation plans that provide excessive pay to managers. Bebchuk and Fried (2014), thus, take the position that compensation consultants worsen, rather than alleviate, agency problems within firms. Board members also claim that compensation consultants

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<sup>1</sup> See, for example, Conyon, Peck, and Sadler (2009), Cadman, Carter, and Hillegeist (2010), Murphy and Sandino (2010, 2014), Armstrong, Itner, and Larcker (2012), Chu, Faasse, and Rau (2014), and Bettis, Bizjak, Coles, and Kalpathy (2014) for studies along these lines.

are to blame for spiraling CEO pay (*Workforce*, February 7, 2008).<sup>2</sup> Finally, the former SEC Commissioner Roel C. Campos in a speech stated, “Another significant driver of excessive CEO compensation is the use of compensation consultants.” He goes on to add, “It is extremely difficult to avoid using high comparables, and consultants can pretty much find high comparable income data to support paying a high amount to the CEO. This is the case even if the consultant reports directly to the board.” Thus, it is an open question whether individual compensation consultants: (i) have distinct styles and managers/boards hire consultants with a specific style, (ii) do not have distinct styles, but instead give compensation advice based purely on economic characteristics, and (iii) respond in a distinct manner to the incentives that arise from the governance environment of the client firm and their own self-interest. We investigate these issues in this paper.

Our sample consists of hand-collected data on compensation consultants from proxy statements over the period 2006 – 2010 for all ExecuComp firms with the exception of financial and utility firms. Our starting year is 2006 because the SEC required proxy statements filed after December 15, 2006 to disclose the identity of the compensation consultant if one is employed to provide compensation advice to the firm. From the proxy statements for each firm-year, we collect data on whether a compensation consultant is employed, the identity of the consultant, whether the consultant provides any other service to management, whether performance vesting options are used in the compensation plan, and whether the firm has a performance peer group. In addition, we collect data on the characteristics of individual consultants from their company websites. Our initial sample consists of 8,614 firm years, 2,031 distinct client firms, and 129 compensation consultant firms. For this sample, the market share of the 10 largest compensation consultants is approximately 58%. Further, there appears to be fairly high turnover in consultants (including and excluding firm-years without consultants) which we exploit in our empirical tests.

Our empirical design uses an approach similar in spirit to that used by Bertrand and Schoar (2003) and Fracassi, Petry, and Tate (2014), among others. In these tests, we examine whether compensation

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<sup>2</sup> Not taking responsibility for compensation policies is disingenuous on the part of corporate boards because the compensation committee can always disregard the advice of the consultant.

consultants exhibit distinct styles in the setting of the following components of the CEO's compensation: (i) total pay level, (ii) salary, (iii) bonus, (iv) cash (salary + bonus), (v) equity-component of total pay, (vi) salary/total pay, (vii) bonus/total pay, (viii) equity/total pay, (ix) alignment of interests (Delta) incentives, (x) risk-taking (Vega) incentives, (xi) whether performance vesting options are in place, (xii) whether there is a performance peer group in place, (xiii) inside debt, and (xiv) intra-firm tournament incentives. Each of these components of compensation is the dependent variable in the panel regression models we estimate.

For each compensation-related variable, we estimate four different panel regression models. In the primary regression model, we include a dummy variable for each compensation consultant. The base group in this regression is the no consultant group. In the second regression model, we include separate dummy variables only for each of the top 10 consultants. The base group here includes all the non-top 10 consultants and the no-consultant group. In the third regression model, we include a dummy variable for whether the client firm employs a compensation consultant or not. Finally, the fourth regression model includes no consultant dummy variables. We use the results from the last two models to primarily serve as benchmarks for the first two regression models. We control for firm and year fixed effects in all the estimated regression models, thereby accounting for time-invariant latent factors related to each firm and year.<sup>3</sup> By including firm fixed effects, identification comes from within-firm time variation in the choice of individual consultant and the compensation-related variable of interest. Further, by including year fixed effects, we attempt to ensure that any relation between the choice of an individual consultant and the compensation-related variable is not attributable to, say, some missing macroeconomic latent variables.<sup>4</sup>

For the two regression models that include individual consultant dummies, we report an F-statistic that captures the joint significance of the consultant dummy variables. Bertrand and Schoar (2003) suggest that a significant F-statistic is consistent with style effects. Given the concerns about inferences

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<sup>3</sup> These tests will, therefore, exclude any firm that either never employs a consultant or uses the same consultant over the entire sample period. As a result, the sample used in the panel regressions includes 5,476 firm-year observations and 1,162 distinct firms.

<sup>4</sup> With the exception of recent studies by Murphy and Sandino (2014) and Chu, Faasse, and Rau (2014) who use a panel dataset in their tests, the earlier studies on compensation consultants cannot exploit the time-series variation in the use of consultants because their data is typically cross-sectional in nature.

drawn from these F-tests due to possible endogenous matching between firms and consultants, we conduct placebo tests by randomly scrambling our compensation consultants 1,000 times. We re-estimate the regression models for each of the 1,000 scrambled samples to construct an empirical distribution of the F-statistic in order to assess the joint significance in the actual data (see. e.g., Wooldridge (2002), Fee, Hadlock, and Pierce (2013), and Fracassi, Petry, and Tate (2014). We ensure that the total number of consultant firm-years is the same as in the original sample in the two scrambling techniques we use in the paper. The difference between the two techniques is that in the first method we preserve, while in the second method we do not preserve, the actual sample's time-pattern of association between firms and consultants.

In order to discern whether there are individual consultant style effects, we compare for each compensation-related variable: (i) the F-statistic for the joint significant of the consultant dummies obtained for the actual data with the empirical distribution of the F-statistic from the scrambled samples, (ii) the increase in adjusted within  $r^2$  for the regression models with the individual consultant dummies in relation to the adjusted within  $r^2$  from the regression model with just a dummy for the use of a consultant and from the regression model with no consultant dummy, and (iii) ) the adjusted within  $r^2$  obtained for the actual data with the empirical distribution of the adjusted within  $r^2$  from the scrambled samples. Based on all these tests, we find very little evidence to suggest that individual compensation consultants have their own distinct styles.

The above evidence can be interpreted in two different ways. One view is that compensation consultants do not have any specific style and are perfect substitutes for each other. Consequently, the choice of compensation consultant will not matter much because the compensation advice that they give will be generally based on the economic determinants of compensation level and structure and, thus, will be quite similar. An alternative view is that compensation consultants do not have distinct styles, but will work in their own self-interest by reacting to the incentives provided by the hiring firm. We try to distinguish between these two views by replicating our analysis for subsamples of firm-year observations based on whether the hiring firm has good or bad governance mechanisms in place. In this analysis, we

use the Gompers, Ishii, and Metrick (2003) measure of corporate governance (GIM Index), where a higher value indicates more restrictions on shareholder rights. We use a GIM Index value of 10 (the median value for our sample) to demarcate good and bad governance firms.

We find style-like effects for the subsample of client firms with weak governance mechanisms, but not for the subsample in client firms with strong governance mechanisms. These results suggest that the choice of individual consultant does not matter in firms that have strong governance mechanisms. For the weak governance firms, we find that the style-like effects are largely driven by firms in this subsample that hire consultants who do not have any non-compensation related businesses. These consultants tend to be younger, smaller, and have lower market share. These consultants are more likely to be vulnerable to pressures from management because their revenues are entirely dependent on their compensation business. In this subsample, we further find that for consultants who recommend a higher salary or higher salary percentage as a proportion of total compensation, the client firms' performance as measured by lead return on assets or Tobin's  $q$  is significantly lower.

Our overall conclusion is that for client firms with strong governance mechanisms, it does not matter which compensation consulting firm they hire because they will get similar advice based on their economic characteristics and environment. These client firms may, however, decide to choose a more reputable consultant only because of the stronger certification role it plays, but they will have to pay higher fees for the services of the more reputable consultant. However, we do observe style-like effects and some resultant perverse outcomes particularly when there is greater potential for managers to take actions in their self-interest (in firms with weak governance mechanisms) combined with weaker incentives for consultants to provide objective advice (as is likely to be the case with less reputable consultants).

Our paper contributes to the literature on compensation consultants and compensation policies in several ways. First, to the best of our knowledge, our paper is the first to examine the impact of individual compensation consultants on compensation level and structure. Second, a large part of the literature in this area focuses on the cross-selling incentives of the consultants. The evidence on the impact of cross-

selling incentives on pay level is mixed. For example, Cadman, Carter, and Hillegeist (2010) and Conyon, Peck, and Sadler (2009) find little evidence that CEO pay level is higher if the consultant potentially has greater conflict of interests, whereas Murphy and Sandino (2010) that CEO pay level is higher if the consultant provides other services to the client firm. The reason for this mixed evidence we believe is that compensation consultants who have higher cross-selling incentives are also older, larger, and have greater market share. In short, they have better reputations and, thus, have incentives to give the right pay advice to protect their reputation capital particularly because of the intense scrutiny that is being paid to this issue by the financial press, politicians, policy makers, and academics. In addition, consistent with this view, we do not generally find style-like effects for more reputable consultants hired by client firms with weak governance mechanisms.

Third, exploiting the time-series variation in the use of consultants, we also find that firms that hire consultants have higher CEO pay, more equity-based compensation, smaller salary as a percentage of total pay, and more likely to have performance vesting stocks and options. Some of these results have been documented in existing studies. For example, Conyon, Peck, and Sadler (2009), Murphy and Sandino (2014), and Chu, Faasse, and Rau (2014) all find that the use of consultants is associated with higher CEO pay level. Murphy and Sandino (2014) also document that the employment of a consultant is associated with greater use of equity-based pay. Additionally, Bettis, Bizjak, Coles, and Kalpathy (2014) find that the use of consultants is associated with more complex compensation schemes like the presence of performance vesting stocks and options. Our additional contribution is that we find that these results are driven by the subsample where the client firm uses independent (unconflicted) consultants.<sup>5</sup> We, therefore, believe that it is an open question whether the higher CEO pay level upon hiring a compensation consultant is attributable to potential conflicts of interests facing consultants or just higher compensation for more talented CEOs.<sup>6</sup> Finally, our paper adds to the long literature exploring the link

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<sup>5</sup> We define a consultant to be independent (unconflicted) if the proxy statement explicitly either states that the consultant provides no service to the management or that the consultant is independent.

<sup>6</sup> Consistent with this latter viewpoint, Murphy and Sandino (2010) find that CEO pay level is higher if the consultant is employed by the board instead of the firm's management.

between corporate governance and executive compensation (e.g., Bebchuk and Fried, 2006; Bergstresser and Philippon, 2006; Garvey and Milbourn, 2006; Gabaix and Landier, 2008; Bebchuk, Cohen, and Ferrell, 2009; Morse, Nanda, and Seru, 2011).

The rest of the paper is organized as follows. Section 1 contains a description of the data and sample used in the paper. Section 2 contains details of our empirical design and tests. In Section 3, we summarize our placebo tests and interpret our overall findings. Section 4 contains some additional robustness tests. In Section 5, we examine the impact of firm governance and consultant incentives on consultant behavior and, consequently, on the economic consequences of the advice given by these consultants. We conclude the paper in Section 6.

## **1. Data and Sample Description**

### *1.1. Consultant Data*

Our sample begins with all ExecuComp firms from 2006 to 2010. We start from 2006 because it is the first year firms were required by the SEC to describe the deferred compensation plans and other detailed compensation information for top executives. We exclude utility firms (SIC 4900 – 4999) and financial firms (SIC 6000 – 6999). Next, we read the proxy statement (DEF 14A) from the SEC's EDGAR website for each firm-year in our sample. We then identify whether the firm uses a consultant to assist in the design of its executive compensation scheme. We create an indicator variables for each unique consultant, along with an indicator variable, *Consultant Dummy*, which equals one if the ExecuComp firm reports using a compensation consultant, and zero otherwise. In addition, we collect data on whether the consultant also provides non-compensation related services to the management. We define a dummy variable, *Compensation Conflict of Interest*, which takes on the value one if the proxy statement does not explicitly state that the consultant provides no service to the management or that the consultant is independent or outside, otherwise it takes the value zero. We also collect data on whether a firm uses performance-vesting options and performance peer groups in its executive compensation plan and generate the indicator variables *P-Vesting* and *P-Peer*, respectively. Our initial sample consists of 8,614 firm years, 2,031 distinct client firms, and 129 compensation consultant firms.



To give as sense for the relative use of specific compensation consultants by firms in our sample, we aggregate our data by consultant and create a measure of in-sample market share (*Consultant Market Share*) for each consultant. Specifically, we calculate the percentage of ExecuComp firms who are self-reported clients of each consulting firm using the consultant fixed-effect indicators mentioned above. We then rank the consulting firms based on aggregate ExecuComp market share and report the market shares for our overall sample and also by year in Table 1. Note that Towers Perrin and Watson & Wyatt merged on January 4<sup>th</sup>, 2010 to form Towers Watson, and this is reflected in Table 1. We note that the majority of the market share (approximately 58%) is controlled by the top ten consulting firms (eleven with the renamed Towers Watson) as no firm outside of the top ten controls more than 1% of the market.<sup>7</sup> Thus, the market is highly fragmented outside of the top 10 compensation consultants.

In Table 2, we report a transition table showing the probability of a firm retaining the same consultant in each of the future years. Panel A includes the entire sample. As such, a firm will change status if they switch consultants or if they decide to either halt or start the use of consulting firms. For example, 66% (26%) of the firms in year 2006 retain the same consultant in year 2007 (2010). Across all our sample years (year  $t$ ), 71%, 57%, 40%, and 26% of the firms, on average, employ the same consultant in year  $t+1$ ,  $t+2$ ,  $t+3$ , and  $t+4$ , respectively. In Panel B, we eliminate firms that do not hire a consultant over the entire sample period, so the transition matrix only picks up firms who switch to another consulting firm. For this sample, across all our sample years (year  $t$ ), 57%, 42%, 31%, and 19% of the firms, on average, employ the same consultant in year  $t+1$ ,  $t+2$ ,  $t+3$ , and  $t+4$ , respectively. Overall, our data shows large time-series variation in consultant identity at the firm level. This allows for the use of firm fixed effects in our later multivariate tests to exploit this time-variation in the use of specific consultants.

Finally, we check the websites of all the consulting firms in our sample and collect additional data on them. We create an indicator variable, *Consultant Public Firm*, which is equal to one if the consultant is publicly traded and zero otherwise, and *Consultant Large Firm*, which is equal to one if the

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<sup>7</sup> We use the terminology “top 10 consultant” throughout the paper, but due to the Towers Watson merger this comprises the first 11 firms in Table 11.

consulting firm employs more than 500 employees, and zero otherwise. We also collect the tenure of the consulting firm's CEO (*Consultant CEO Tenure*), the age of the consulting firm (*Consultant Firm Age*), whether the consultant has other compensation-related business (*Consultant Related Business*) and whether the consulting firm has lines of businesses other than just compensation consulting (*Consultant Unrelated Business*). We report corresponding summary statistics in Table 3, Panel A. Consistent with the evidence in Table 1, we note that most consulting firms are small and not publicly traded. They have relatively long-tenured CEOs (roughly 12 years) and on average have existed for 36 years. The majority (56.6%) also have other lines of business unrelated to compensation consulting.

### 1.2. Firm and CEO Data

In addition to consultant information, we create variables relating to CEO compensation, firm financial characteristics, and firm governance characteristics. We use data from ExecuComp, Compustat, and CRSP. All variables are winsorized at their 1% and 99% levels.

We collect data on CEO compensation for all firms in our sample from ExecuComp and proxy statements and report these statistics in Panel B of Table 3. We collect data on CEO salary, bonus, and equity-based compensation. We also report *Cash Compensation*, which is the sum of salary, bonus, and other cash compensation. We report the dollar values of all compensation variables (in thousands), along with scaling them by ExecuComp's measure of total compensation, *TDC1*. We call this variable *Pay Level*. The average CEO has almost \$2 million in cash-based compensation and \$2.7 million in equity-based compensation. We compute *Inside Debt* as the sum of the aggregate value of the CEO's pension and the deferred compensation. We also calculate the CEO's *Delta* and *Vega* for new option grants. *Delta* indicates the dollar change in the value of the CEO's grants for a 1% increase in the firm's stock price. *Vega* is the dollar change in the value of the CEO's grants for a 0.01 increase in the annualized standard deviation of stock returns. We calculate *Delta* and *Vega* using a dividend-adjusted version of the Black and Scholes model rather than using firms' self-reported post-2005 option values (e.g., Kini and Williams, 2012; Coles, Daniel, and Naveen, 2014). *Performance-vesting* and *Performance Peer* are collected from proxy statements and equal one if the firm reports using performance vesting stock or

options, and reports using performance peer groups, respectively. *Pay Gap* is the difference in *Pay Level* between the CEO and the median reported VP in ExecuComp (Kale, Reis, and Venkateswaran, 2009; Kini and Williams, 2012).

Panel C displays governance characteristics for the firm. *CEO Duality* is an indicator equal to one if the CEO is also the Chairman of the Board, and zero otherwise. *Board Size* is the number of board members reported by the firm. *Outside Director* is equal to the percentage of the board members who are not employees of the firm. All three variables are collected from Risk Metrix data and proxy statements. We note that 47% of firms have a dual CEO/Chair, around 10 board members, and that roughly 73% of their directors are outsiders. *Institutional Ownership* is the percentage of the firm's outstanding shares held by institutions. We obtain this institutional ownership from the Thompson 13F Institutional Holdings data. The average firm in our sample has 82% of their outstanding shares held by institutions.

In Panel D, we report firm characteristics. We obtain accounting data from Compustat and stock price information from CRSP. *Size* is the natural logarithm of total assets and *ROA* is earnings before depreciation interest and taxes divided by total assets. The average ROA is almost 14% over our sample period. *Return Volatility* is the annualized standard deviation of daily stock returns over the previous year. *Stock Return* is annual gross stock return over the previous year. *Book Leverage* is long term debt plus current portion of long term debt divided by total assets. *Market-to-Book* is the market value of the firm's equity plus the book value of debt divided by total assets. The mean (median) value for Book Leverage and Market-to-Book are 0.218 (0.196) and 2.475 (1.805), respectively. *Number of Segments* is the number of unique 4-digit industries a company reports in the Compustat segment tapes. The median ExecuComp firm is a focused firm (one segment) and, on average, firms in the sample report 2.5 segments.

We summarize the CEO and VP characteristics of the firm in Panel E. All variables are calculated using ExecuComp data. *CEO Age* is the age of the CEO. *CEO Tenure* is the number of years the current CEO has held the position. *CEO Turnover* is equal to one if the firm changes CEOs in the current year, zero otherwise. *Inside CEO* equals one if the current CEO was promoted internally, and zero if she was hired from outside the firm. *CFO is VP* is equal to one if the CFO is one of the five highest-paid

executives, and *Number of VPs* are the number of non-CEO executives reported by the firm. The average CEO has a tenure of 7.4 years, the CEO was promoted internally in 37% of the cases, and 65% of the firms have succession plans. About 90% of firms report a CFO as one of the five highest-paid executives and almost all firms report between 4 and 5 VPs.

## 2. Empirical Design and Results

### 2.1. Empirical design and “scramble” methodology

In this section, we describe our test design to empirically determine whether a compensation consultant advising a firm influences its compensation policies after accounting for the economic forces which prior studies suggest affect the particular compensation policy of interest. Our empirical methodology utilizes an approach similar in spirit to that used by Bertrand and Schoar (2003) and Fracassi, Petry, and Tate (2014) among others. Specifically, for each compensation-related variable, we report four different OLS regressions. In the first (and main) regression, we include a dummy variable for each consultant. The base group in this regression is the no consultant group. In the second regression, we include separate dummy variables for each of the top 10 consultants. The base group here includes all the non-top 10 consultants and the no consultant group. In the third regression, we include the *Consultant Dummy* variable. Recall that this indicator variable takes the value one if the firm employs a consultant, and zero otherwise. Finally, the fourth regression includes no consultant dummy variables. The results reported in Regressions 3 and 4 serve as benchmarks for the other two regressions.

In all the reported regressions, we control for firm and year fixed effects, thereby accounting for time-invariant latent factors related to each firm and year. For the regressions which include individual consultant dummies (Regressions 1 and 2 for each compensation-related dependent variable), we report an F-statistic that captures the joint significance of the consultant dummy variables. Bertrand and Schoar (2003) suggest that a significant F-statistic is consistent with style effects. There are, however, significant concerns about inferences from these F-tests from these types of regression specifications due to: (i) the dependent variables and the fixed effects in these regressions being highly persistent over time and (ii) the

assumption that the error terms in these regressions being normally distributed possibly being violated (See, e.g., Wooldridge, 2002; Fee, Hadlock, and Pierce (2013); and Fracassi, Petry, and Tate, 2014).

We follow Fracassi, Petry, and Tate (2004) to address the issues about inferences regarding the joint significance of fixed effects – compensation consultant fixed effects in our case – raised above. Specifically, we scramble our compensation consultants in the following two different ways to construct an empirical distribution of the F-statistic in order to assess its significance in the actual data: In the first scrambling method, we randomly assign a consultant to each firm-year, but we make sure that the total number of consultant-firm-years is the same as that in the original sample. This approach does not preserve the original sample's time-pattern of association between firms and consultants. In the second scrambling method, we again randomly assign a consultant to each firm-year and make sure the total number of consultant-firm-years is the same as in the original sample. We, however, preserve the original sample's time-pattern of associations between firms and consultants. For example, suppose Compensation Consultant 1 is employed by Firm 1 for two consecutive years. Then, when we randomly assign another consultant to Firm 1, it will also be for two consecutive years. This approach will result in a scrambled sample that reflects the time-series structure of the original sample.

In both the above scrambling approaches, we reassign consultants to firms 1,000 times. We then estimate Regression 1 (Regression 2) on each of the 1,000 scrambled samples and compute the F-statistic that tests whether the consultant fixed effects are jointly significant and also the adjusted within  $r^2$ . We compare the F-statistics obtained from the regressions on each of the 1,000 scrambled samples to that obtained from the regression on the original sample to obtain a p-value for the null hypothesis that the compensation consultant fixed effects are jointly equal to zero. In all the placebo tests reported in the paper, we report the results using the scrambling method that preserves the time-series structure of the original sample. Our inferences do not change if we use the other scrambling technique. We do not report these results for purposes of brevity.

## 2.2. Main results

In all the regressions reported in Tables 4 – 8, the dependent variable is a compensation-related variable. For the more mainstream compensation variables, the control variables in our regression models are similar to those used in Graham, Li, and Qiu (2012). In the case of *Pay Gap*, the control variables included in the related regression models are similar to those employed in Kini and Williams (2012). Finally, the control variables used in the relative performance evaluation (*RPE*) models are similar to those used in Gang, Li, and Shin (2011).

### 2.2.1. CEO cash compensation and consultant style effects

Table 4 examines consultant style effects in the setting of the cash component of the CEO's compensation – *Salary*, *Bonus*, and *Cash*, where *Cash* is equal to *Salary* plus *Bonus*. The dependent variable in the first four reported regressions is  $\ln[\text{Salary}]$ . In the first regression, we include a separate dummy variable for each of the consultants in the sample. We find that the F-statistic for joint significance of the consultant dummy variables is 252.70 (significant at the 1% level), indicating that there are significant consultant style effects in the setting of CEO salary. For reasons discussed earlier, the F-statistic can lead to incorrect inferences in a setting such as ours. As a benchmark, we compute the F-statistic for each of our 1,000 placebo regression tests for scrambled samples that maintain the time-patterns of the use of consultants by firms. We find that 63.10% of the F-statistics in the placebo tests are greater than the actual F-statistic in the reported regression. The empirical distribution of the F-statistics from these placebo tests, thus, does not allow us to infer that there are consultant style effects in the setting of CEO salary.

In the second regression, we include a consultant dummy for the consultants with the ten highest market shares; all other consultants and no consultants form the base group. The F-statistic from the actual sample is 0.978 and is insignificantly different from zero. Furthermore, we find that 38.30% of the F-statistics in the placebo tests were greater than the actual F-statistic in the reported regression. Thus, we do not find any evidence of consultant style for the top consultants either. In the third regression, we just include the *Consultant Dummy* instead of individual dummy variables for each consultant. Recall that this

variable takes the value one if the firm employs a consultant, and zero otherwise. The coefficient on *Consultant Dummy* is insignificantly different from zero. Finally, in the fourth regression, we do not include any consultant-related dummy because we use it as our “base” or “reference” regression model. We find that in this model, the adjusted within  $r^2$  is 0.0771 in comparison to 0.0769 (with the *Consultant Dummy*), 0.0819 (with the top 10 consultant dummies), and 0.0948 (with a consultant dummy for each consultant). Thus, the increase in the magnitude of the adjusted within  $r^2$  is either not present or small in comparison to the model with just the *Consultant Dummy* or without any consultant-related dummy. Thus, we do not find any evidence consistent with consultant style effects in the setting of CEO salary.

In the next four reported regressions in Table 4, the dependent variable is  $\ln[Bonus]$ . We find the F-statistic for the joint significance of all the consultant dummies is 289.90 (significant at the 1% level) in the first regression. However, the F-statistic is greater than 289.90 (obtained using the actual sample) in 80.60% of the placebo tests. Further, we find that the adjusted within  $r^2$  is 0.1770 in the model with no consultant dummy in comparison to 0.1770 (with the *Consultant Dummy*), 0.1760 (with the top 10 consultant dummies), and 0.1810 (with a consultant dummy for each consultant). Thus, we come to the conclusion that there are no consultant style effects in the setting of CEO bonus. In the last four regressions in the table, the dependent variable is  $\ln[Cash]$ , where *Cash* is the sum of *Salary* and *Bonus*. Here to, we find little evidence of consultant style effects in the setting of CEO cash compensation.

### 2.2.2. *Equity component, Inside debt, and total compensation and consultant style effects*

The three dependent variables in Table 5 are  $\ln[Equity]$ ,  $\ln[Inside Debt]$ , and  $\ln[Pay Level]$ . The structure of the table is the same as Table 4. We do not find any evidence of consultant style effects for any of the above three dependent variables. However, when the dependent variable is either  $\ln[Equity]$  or  $\ln[Pay Level]$ , the coefficient on *Consultant Dummy* is positive and significant at the 5% level. The latter result suggests that firms that employ compensation consultants tend to pay their CEOs more and has been documented extensively in the literature (See, e.g., Murphy and Sandino, 2010; Conyon, Peck, and Sadler, 2009; Cadman, Carter, and Hillegeist, 2010; and Armstrong, Ittner, and Larcker, 2012). In a recent paper, Sandino and Murphy (2014) also find that equity-based compensation tends to be higher

when a consultant is used. Recall that in Table 4, we did not find a significant relation between  $\ln[Cash]$  and *Consultant Dummy* and, thus, it appears that the higher total compensation level for CEOs of firms with consultants is being driven by a higher amount of equity compensation.

### 2.2.3. Compensation structure and consultant style effects

The three dependent variables in Table 6 are *Salary%* (*Salary/Pay Level*), *Bonus%* (*Bonus/Pay Level*), and *Equity%* (*Equity/Pay Level*). We do not generally find any evidence of consultant style effects for any of the compensation structure-related dependent variables. Two results stand out in this table. First, when the dependent variable is *Salary%*, the coefficient on *Consultant Dummy* is significantly negative at the 1% level. This result is not very surprising given that we find no relation between *Salary* and *Consultant Dummy* (Table 4) and a positive relation between *Pay Level* and *Consultant Dummy* (Table 5). Second, we do find some weak evidence of consultant style effects when the dependent variable is *Equity%* and we include individual consultant dummies only for the top 10 consultants. Specifically, the F-statistic in the 1,000 placebo tests is greater than the F-statistic in the actual sample only 6.50% of the times. Further, this result does not appear to be driven by a consultant versus no consultant effect and is, therefore, attributable to the individual styles of the top 10 consultants.

### 2.2.4. Managerial incentives and consultant style effects

In Table 7, we examine  $\ln[Pay\ Gap]$  (intra-firm tournament incentives of senior VPs),  $\ln[\Delta]$  (CEO's alignment of interest incentives with shareholders), and  $\ln[Vega]$  (CEO risk-taking incentives) and influenced by consultant styles. In this table, we do not observe any form of consultant style effects for intra-firm tournament incentives. When we include individual dummy variables for all consultants, we again do not find any consultant style effects for CEO's alignment of interest and risk-taking incentives. We, however, do find some evidence of consultant style effects when the dependent variable is either  $\ln[\Delta]$  or  $\ln[Vega]$  and we include individual consultant dummies only for the top 10 consultants. Specifically, the F-statistic in the 1,000 placebo tests is greater than the F-statistic in the actual sample only 6.00% (3.20%) of the times when the dependent variable is  $\ln[\Delta]$  ( $\ln[Vega]$ ). These two results



are not driven by a consultant versus no consultant effect, and are consequently attributable to the individual styles of the top 10 consultants.

### 2.2.5. *Performance vesting, performance peers, and RPE and consultant style effects*

Finally, Table 8 examines whether compensation consultants demonstrate specific styles in (i) the existence of performance vesting stocks and options (*P-Vesting*), (ii) the presence of explicit performance peer groups (*P-Peer*), and (iii) relative performance evaluation (*RPE*). Because both *P-Vesting* and *P-Peer* are indicator variables, we estimate linear probability models in order to allow us to include consultant fixed effects. We do not find significant consultant styles effects in the presence of performance vesting stocks and options. We, however, do find that the coefficient on *Consultant Dummy* is significantly positive at the 5% level, suggesting that the presence of a consultant makes it more likely that the CEO will have performance vesting stocks and options. We do not find any evidence of consultant styles when we examine the presence of performance peers in the regression where we include individual dummies for all consultants. We, however, discern some evidence of consultant style when we only include dummies for the top 10 consultants. Specifically, the F-statistic in the 1,000 placebo tests is greater than the F-statistic in the actual sample only 6.00% of the times when the dependent variable is *P-Peer*. Given that the *Consultant Dummy* is insignificant in the next regression, the results suggest some weak style effects among the top 10 consultants in the presence of performance peer groups.

## 3. **Summary of Actual and Placebo Tests**

In the previous section, we examine F-test and adjusted within  $r^2$  statistics to evaluate the joint significance of the consultant dummy variables and their ability to explain variance for a variety of compensation-related variables, respectively. Overall, we find little evidence to suggest that individual consultants affect compensation characteristics. In this section, we summarize the “scramble” tests described in the presentation of Tables 4 – 8 and attempt to ask the same question as before – whether individual consultants have distinct styles – with the results for all the compensation-related variables being viewed both individually and collectively.

Table 9 reports the actual  $r^2$  (F-statistic) from the corresponding tests from Tables 4 – 8. We also report the percentage of adjusted within  $r^2$  and F-statistics that were above or below the actual values after estimating each model 1,000 times with the placebo data. In Panel A, which uses the full slate of consultant fixed-effects, we see that there are no cases where the actual data are a better fit than the random data at the 90% level. Further, we note that the placebo  $r^2$  is lower than the actual  $r^2$  roughly 55% of the time, and that the placebo F-statistic is lower roughly 44% of the time. If our original test statistics are random draws from a distribution where consultants are actually randomly assigned, we should expect the percentile ranks of our test statistics to follow a uniform distribution. Thus, the evidence in Panel A of Table 9 collectively suggests that randomly assigned consultants affect compensation policies in a similar manner to the actual consultants.

In Panel B of Table 9, we repeat the same tests, but for the models that only include fixed effects for the “top ten” consultants. Here, the actual  $r^2$  (F-statistic) beats the placebo 65% (70%) of the time. We further note that the actual test statistics beat the placebo more than 90% of the time for *Equity%*, *Ln[Delta]*, and *Ln[Vega]*. However, the F-statistics for these models were not significant in the original models, indicating that the consultant fixed-effects were not jointly significant in either case. Thus, we can conclude that the actual consultants and placebo consultants did not significantly affect these compensation variables in either case.

#### **4. Robustness tests**

##### *4.1. Robustness to eliminating lagged compensation*

In our previous tests, we control for the lagged dependent variable to correct for path-dependence in CEO compensation. We note that this could weaken the observed effect of the compensation consultant fixed effect, especially if the same consultant provided compensation advice in both years or if the firm is selecting a specific consultant to match a particular compensation strategy. Thus, one potential criticism is that including the lagged compensation variable may bias against finding a compensation consultant effect. To assuage this concern, we replicate all of the tests from Tables 4 – 8 after dropping the lagged dependent variable from all specifications. The results are summarized in Table 10.

Similar to our results in Tables 4 – 8, we find that the consultant dummy variables are jointly significant in many cases. For example, when we use the full slate of consultant dummies, we find that they jointly predict all of our selected compensation variables with a p-value of less than 1%. Further, when we consider only the top ten consultants, we find that they are jointly significant at 1% when predicting the use of performance-vesting options, significant at 5% when predicting *Delta*, *Vega*, *Salary%* and *Equity%*, and at 10% when predicting  $\ln[Equity]$  and  $\ln[Cash]$ .

Overall, the evidence in Table 10 matches that from Tables 4 – 8. We find that the compensation consultants are jointly significant when we use the full slate of dummy variables, much weaker when we use the top 10 consultants, and insignificant using an indicator variable. This again leads to our earlier concern that the F-statistic is overstated in the presence of large numbers of dummy variables (Fee, Hadlock, and Pierce, 2013). As such, we return to our earlier scrambling methodology to definitively test whether individual consultants have an effect on compensation level and structure in the absence of lagged compensation variables. In the following section, we repeat our placebo tests using the models in Table 10.

#### 4.2. Robustness - Placebo tests without lagged compensation

In this section, we examine simulated consultant data for all models in Table 10. We follow the same randomization process as that in Table 9 and randomly assign consultants to firms, but preserving the same time series pattern. In Panel A, Table 11, we report the F-statistics and  $r^2$  statistics for models using all consultant dummies. As in Table 9, we do not observe any compensation variable that has both an F-statistic and  $r^2$  which beats the simulated data more than 90% of the time.

In Panel B, we use only the top ten consulting firms. When we do not control for lagged compensation, we do find that there are cases where consultants seem to differ among the top 10. Notably, for *Equity%*,  $\ln[Delta]$ ,  $\ln[Vega]$ , and *P-Vesting* we find that the actual top consultant variables might show style. Thus, if we do not control for historical compensation decisions made by the firm, we find some evidence that equity-based compensation differs among the top consultants. This is consistent with recent evidence in Bettis, Bizjak, Coles, and Kalpathy (2014) who find that compensation

consultants suggest more *complex* compensation schemes. Therefore, after ignoring time-series dependence in the firm's CEO compensation, we are able to detect some style effects for the largest compensation consultants. For the entire universe of compensation consultants, however, we find no evidence of differing styles.

## **5. Firm governance, consultant incentives, and consultant behavior**

We find very little evidence of consultant style when we examine our overall sample. In this section, we will try to understand what implications this evidence has for compensation committees in their decision to hire a specific compensation consultant. There are two possible interpretations of our evidence so far. The first view is that compensation consultants are perfect substitutes for each other. More specifically, whether the firm hires Mercer or Aon Consulting will not matter much because the CEO compensation advice that they will give will be based on the economic environment facing the firm, i.e., its technology, factors of production, product market conditions, etc., and, thus, will be quite similar. An alternative view is that compensation consultants do not have distinct styles, but instead work in their own self-interest by reacting to the incentives provided by the hiring firm. We try to distinguish between these two views by replicating the analysis that we conducted in Tables 4 – 8 for subsamples of firm-year observations based on whether the hiring firm has good or bad governance mechanisms in place. We use the Gompers, Ishii, and Metrick (2003) measure of corporate governance (GIM Index), where a higher value indicates poorer governance. We use a GIM Index value of 10 (the median value for our sample) to demarcate good and bad governance firms. The results from this analysis are provided in Table 12.

Panel A of Table 12 presents adjusted within  $r^2$  for subsamples split by whether the GIM Index is greater than or equal to 10 (poor governance) or less than 10 (good governance). The first column in each subsample reports the adjusted within  $r^2$  for regressions in which we include individual consultant dummy variables. The second column in each subsample reports the adjusted within  $r^2$  for regressions in which we include a dummy variable that equals one if the firm employed a compensation consultant, and zero otherwise. The third column in each subsample reports the adjusted within  $r^2$  for regressions in which we do not include any consultant dummy variables. All control variables are the same as those employed in

the regressions reported in Table 4 – 8 (without the governance variables) for the specific compensation variable. We focus on the adjusted within  $r^2$  because the F-statistic for joint significance of the consultant dummy variables is almost always significant for both subsamples for a given compensation variable.

A quick perusal of the numbers reported in Panel A suggests that there are style-like effects primarily in the subsample of poor governance firms (*GIM Index*  $\geq 10$ ). Specifically, for this subsample, we find that the adjusted within  $r^2$  becomes much larger with the inclusion of individual consultant dummies in the estimated regression (in contrast to either when we only include an indicator variable for the presence of a consultant or when we do not include any consultant dummy variable at all) for dependent variables *Ln[Salary]*, *Ln[Debt]*, *Ln[Bonus%]*, *P-Vesting*, and *P-Peer*. This effect is most dramatic for *Ln[Salary]* where the adjusted within  $r^2$  is 0.3200 with the inclusion of individual consultant dummy variables in contrast to either 0.0606 with the inclusion only of an indicator variable for the presence of a consultant or 0.0610 without any consultant-related dummy variable. In contrast, we only observe style-like effects for *Ln[Pay Gap]* as evidenced by a relatively large increase in adjusted within  $r^2$  (0.1050, 0.0752, and 0.0753 for all consultant dummies, indicator variable for the presence of a consultant, and no consultant-related dummy variable, respectively) in the good governance firms (*GIM Index*  $< 10$ ). Thus, we observe style-like effects mainly in the sub-sample of firms with poor governance mechanisms in place.<sup>8</sup>

In Panel B of Table 12, we present adjusted within  $r^2$  for the subsample comprised of poor governance firms (*GIM index*  $\geq 10$ ) further split by whether the compensation consultant either has or does not have other businesses unrelated to compensation consulting (*Consultant Unrelated Business*). By just splitting the sample by the *GIM Index*, we gained insight about how potential agency problems within the hiring can have a bearing on the advice given by the compensation consultants. We want to now give additional insights by seeing how the incentives of the hiring firm interact with the self-interest

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<sup>8</sup> In untabulated results, we also split the overall sample into two groups based on whether the consulting firm has (*Consultant Conflict of Interest* = 1) or does not (*Consultant Conflict of Interest* = 0) have other business relationships with the hiring firm. We find style-like effects consistently in the subsample of firms only where the consultant has potential conflicts of interest. We do not pursue this avenue of investigation further because we only have 382 firm-year observations (8.2 percent) where the consultant is potentially conflicted.

of the compensation consultant. It is, however, not clear *ex-ante* whether consultants will be driven more by short-term gains if they are or are not in other lines of business. Specifically, compensation consultants that only provide compensation-related advice are more likely to be adversely affected if they lose the business of the client firm. They, thus, have incentives to do the bidding of the client firm. On the other hand, they want to provide the correct advice to build a strong reputation in the compensation consulting business.<sup>9</sup> Similarly, a compensation consultant with other unrelated businesses may make compensation recommendations that please senior managers in the hope of either getting into or continuing with other business relationships with the client firm that are unrelated to compensation consulting. The opposite side of this argument is that they are less vulnerable to the adverse effects of losing the compensation consulting business with the hiring firm because they are also generating revenues from their other businesses. Further, they do not want to provide any compensation advice that can subsequently embroil them in a scandal as it will have negative spillover effects on their other businesses.

A quick perusal of the adjusted within  $r^2$  for the two groups suggests that there are style-like effects for most of the compensation-related variables in the observations belonging to poorly governed firms that employ consultants that do not have any other businesses apart from compensation consulting. Here too, the effect is most striking for  $\ln[\text{Salary}]$  where the adjusted within  $r^2$  is 0.4790 with the inclusion of individual consultant dummy variables in contrast to either 0.0562 with the inclusion only of an indicator variable for the presence of a consultant or 0.0553 without any consultant-related dummy variable. Thus, it appears that the style-like effects that we documented earlier for the subsample of poorly governed firms is almost entirely driven by poorly governed firms that hire compensation consultants who only provide compensation advice, i.e., who do not have any other businesses unrelated to compensation consulting.

To provide additional insight into the above results, we first examine the differences in consultant characteristics for hiring firms with strong (GIM Index < 10) and weak (GIM index  $\geq$  10) governance mechanisms in place. The results are provided in Panel A of Table 13. We find that consultants hired by

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<sup>9</sup> Consistent with the former argument, Chu, Faasse, and Rau (2014) find that client firms switching to consultants who specialize in compensation consulting and, therefore, have no cross-selling incentives pay CEOs more.

firms with weak governance mechanisms in place have significantly higher *Consultant Firm Age*, *Consultant Conflict of Interest*, *Consultant Public Firm*, and *Consultant Unrelated Business* in relation to consultants hired by firms with strong governance mechanisms in place.

In Panel B of Table 13, within the group of firms with poor governance mechanisms, we additionally examine the differences in consultant characteristics for consultants that have versus do not have other businesses unrelated to compensation consulting. Within the weak governance firms, we find that consultants that do not have other businesses unrelated to compensation consulting (*Consultant Unrelated Business* = 0) have higher *Consultant CEO Tenure*, lower *Consultant Firm Age*, lower *Consultant Market Share*, lower *Consultant Public Firm*, and higher *Consultant Related Business* in relation to consultants that have other businesses (*Consultant Unrelated Business* = 1). Given these characteristics, these consulting firms are smaller and less reputable consulting firms with more powerful CEOs and, therefore, more likely to fall prey to direct or indirect pressures applied by the firm (compensation committee and/or the human resource department). Thus, given the results in Tables 12 and 13, it appears that we see consultant style-like effects in weak governance firms ( $GIM\ Index \geq 10$ ) who employ less reputable compensation consultants (*Compensation Unrelated Business* = 0).

Finally, we follow Bertrand and Schoar (2003) to test whether there are systematic differences in firm value and performance across compensation consultants. The idea here is that the compensation policies recommended by the consultant will provide firm managers with differing incentive which, in turn, will impact corporate value and performance. We conduct this analysis only for the subsample of observations in which we did find some style-like effects. Thus, to follow up on our earlier analysis, we first restrict our attention to the subsample of firms with weak governance and then follow it up with an analysis of the subsample of firms with weak governance who employ consultants that only have compensation consulting-related business.

To conduct this analysis, we first re-estimate the regressions with consultant fixed effects reported in Tables 4 – 8 (with the exclusion of the governance variables) for each subsample. In each of these regressions, the dependent variable is a compensation-related variable. We additionally estimate

regressions with consultant fixed effects for these subsamples where the dependent variable is either the lead return on assets (*ROA*) or lead Tobin's *q*. We extract all these compensation fixed effects for each estimated regression to form a new dataset and estimate the following regressions for each compensation-related variable:

$$\begin{aligned} & \textit{Compensation fixed effect (firm performance)}_i \\ & = \alpha + \beta * \textit{Compensation fixed effect (Compensation - related variable)}_i + \varepsilon \end{aligned}$$

Since in the above regressions, the independent variable is an estimated coefficient, we estimate GLS (rather than OLS) regressions models. The weight that we use in the above regression is the inverse of the standard error on the independent variable obtained from the first step consultant fixed effect regression model for that specific compensation-related variable. The results from this analysis are reported in Table 14, with every element in the table containing the coefficient and associated t-statistic obtained from estimating the above regression model for each combination of performance measure and compensation-related variable.

The results from this analysis are reported in Table 14. We restrict the sample of observations to firms with weak governance mechanisms in Panel A. We further restrict the sample in Panel B by only considering observations for firms with weak governance mechanisms who hire consultants that only are in the compensation consulting business (*Consultant Unrelated Business* = 0). In Panel A, we find that the consultant fixed effect on lead *ROA* and lead Tobin's *q* are *only* significantly associated with the consultant fixed effect on *Ln[Salary]*. More specifically, the coefficient on the consultant fixed effect on *Ln[Salary]* is -0.1565 (significant at the 1% level) when the independent variable is Lead *ROA* and is -0.5193 (significant at the 5 % level) when the independent variable is lead Tobin's *q*. We find a weaker but similar pattern when the independent variable is the consultant fixed effect on *Salary%*. Thus, compensation consultants – employed by firms with weak governance mechanisms – who recommend a higher salary or salary percentage give incentives to CEOs that are associated with poorer future firm performance. In Panel B, we again only find a significant relation between the fixed effect on *Ln[Salary]* with the fixed effect on the two performance measures, except that these results are now stronger. The



coefficient on the fixed effect on  $\ln[\text{Salary}]$  is -0.1726 (significant at the 1% level) when the dependent variable is lead  $ROA$  and is -0.6273 (significant at the 5% level) when the dependent variable is lead Tobin's  $q$ . In addition, we find that the relation between the fixed effect on  $\text{Salary}\%$  is significantly negatively related at the 5% level to the fixed effect on both lead  $ROA$  and lead Tobin's  $q$ . It, thus, appears that the negative relation that we documented for firms with weak governance mechanisms seems to be largely driven by the confluence of potential higher agency problems with the hiring firms together with the self-interest motivations of the smaller, younger, and less reputable compensation consulting firms.

## 6. Conclusions

In this paper, we hand collect compensation consultant data from proxy statements (DEF 14A) for all ExecuComp firms over the period 2006 – 2010. We then investigate whether compensation consultants exhibit distinct styles in the determination of pay level and compensation structure of CEOs after accounting for their economic determinants. We control for firm and year fixed effects in all the estimated regression models, thereby accounting for time-invariant latent factors related to each firm and year. By including firm fixed effects, identification comes from within-firm time variation in the choice of individual consultant and the compensation-related variable of interest. Further, by including year fixed effects, we ensure that any relation between the choice of an individual consultant and the compensation-related variable is not attributable to, say, some missing macroeconomic latent variables. Our tests, which include the use of placebo samples that involve the scrambling of consultants as benchmarks, yield little evidence of compensation consultant style.

The lack of consultant style effects can be interpreted in two different ways. A plausible explanation is that compensation consultants do not have any specific style and are perfect substitutes for each other. As such, the choice of compensation consultant will not matter much because the compensation advice that they give will be generally based on the economic determinants of compensation level and structure and, thus, will be quite similar. An alternative explanation is that compensation consultants do not have distinct styles, but will work in their own self-interest by reacting

to the incentives provided by the client firm. We try to distinguish between these two views by replicating our analysis for subsamples of firm-year observations based on whether the hiring firm has good or bad governance mechanisms in place.

We do find style-like effects for a subsample of hiring firms with weak governance mechanisms which, in turn, are largely driven by firms in this subsample that hire less reputable compensation consulting firms. In this subsample, we further find that for consultants who recommend a higher salary or higher salary percentage as a proportion of total compensation, the hiring firms' performance as measured by lead return on assets or Tobin's  $q$  is significantly lower. Our overall conclusion is that for firms with strong governance mechanisms, it does not matter which compensation consulting firm they hire (other than for certification reasons) because they will get similar advice based on their economic environment. However, we do observe style-like effects and some resultant perverse outcomes particularly when there is greater potential for managers to take actions in their self-interest combined with weaker incentives for consultants to provide objective advice.

Our paper contributes to the literature on compensation consultants and compensation policies in the following ways. First, our paper is the first to examine the impact of individual compensation consultants on compensation level and structure. Second, a large part of the literature in this area focuses on the cross-selling incentives of the consultants. The existing evidence on the impact of cross-selling incentives on pay level is mixed. The reason for this mixed evidence we believe is that compensation consultants who have higher cross-selling incentives are also older, larger, and have greater market share. In short, they have better reputations and, thus, have incentives to give the right pay advice to protect their reputation capital given the attention that is being paid to this issue by the financial press, politicians, policy makers, and academics. In addition, consistent with this view, we do not generally find style-like effects for more reputable consultants hired by client firms with weak governance mechanisms.

Finally, exploiting the time-series variation in the use of consultants, we find that firms that hire consultants have higher CEO pay, more equity-based compensation, smaller salary as a percentage of total pay, and more likely to have performance vesting stocks and options. Some of these results have

been documented in existing studies that either use purely cross-sectional data or panel data. Our additional contribution is that we find that these results are driven by the subsample where the client firm uses independent (unconflicted) consultants. We, therefore, feel that it is debatable whether the higher CEO pay level upon hiring a compensation consultant is the result of potential conflicts of interests facing consultants or just higher compensation for more talented CEOs.

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**Appendix.** Construction and definition of variables

Variable Name	Source	Definition
<b>Consultant Characteristics</b>		
<i>Public Firm</i>	Company's website	Dummy variable that equals one if the consulting firm is public
<i>Large Firm</i>	Company's website	Dummy variable that equals one if the consulting firm has more than 500 employees
<i>Consultant CEO Tenure</i>	Company's website	Number of years the CEO has held the position
<i>Firm Age</i>	Company's website	Number of years since the firm's inception
<i>Other Business</i>	Company's website	Dummy variable that equals one if the consulting firm has other lines of business than compensation consulting
<b>Compensation Variables</b>		
<i>Consultant Dummy</i>	Form DEF 14-A	Dummy variable that equals one if firm hires a compensation consultant
<i>Salary</i>	ExecuComp	Item <i>SALARY</i>
<i>Bonus</i>	ExecuComp	The sum of item <i>BONUS</i> and <i>NONEQ_INCENT</i> from ExecuComp
<i>Cash</i>	ExecuComp	The sum of item <i>SALARY</i> , <i>BONUS</i> and <i>NONEQ_INCENT</i> from ExecuComp
<i>Equity</i>	ExecuComp	The sum of value of stock and option award, calculated by using the method in Coles, Daniel, and Naveen (2010)
<i>Salary/Pay Level</i>	ExecuComp	The ratio of salary to TDC1
<i>Bonus/Pay Level</i>	ExecuComp	The ratio of bonus to TDC1
<b>CEO and VP Characteristics</b>		
<i>CEO Tenure</i>	ExecuComp	Number of years the CEO has held the position
<i>CEO Turnover</i>	ExecuComp	Dummy variable equals one if a turnover occurred in the observation year
<i>Inside CEO</i>	ExecuComp	Dummy variable equals one if the CFO was listed as a top five highest paid executive in the current year.
<i>CFO is VP</i>	ExecuComp	Dummy variable equals one if the current CEO was promoted from within
<i>Succession Plan</i>	ExecuComp	Dummy variable equals one if firm lists a President and/or COO
<i>Number of VPs</i>	ExecuComp	Number of non-CEO executives a firm lists in ExecuComp.
<i>CEO Age</i>	ExecuComp	Current age of the CEO.
<i>Cash Compensation/Pay Level</i>	ExecuComp	The ratio of cash compensation to TDC1
<i>Equity /Pay Level</i>	ExecuComp	The ratio of equity compensation to TDC1
<i>Pay Level</i>	ExecuComp	Calculated separately for pre- and post-FAS 123R using the method in Coles, Daniel, and Naveen (2010) For pre-FAS 123R, TDC1= SUM(SALARY, BONUS, OTHANN, ALLOTHTOT, RSTKGRNT, option_award_calculated_value,

		LTIP) For post- FAS 123R, $TDC1 = \text{SUM}(\text{SALARY}, \text{BONUS}, \text{NONEQ\_INCENT}, \text{OTHCOMP}, \text{STOCK\_AWARDS\_FV}, \text{option\_award\_calculated\_value}, \text{DEFER\_RPT\_AS\_COMP\_TOT})$
<i>Inside debt</i>	ExecuComp	The sum of item OPTS_UNEX_EXER and item OPTS_UNEX_UNEXER from ExecuComp
<i>Delta (New grants)</i>	ExecuComp	Calculated using the method in Coles, Daniel, and Naveen (2010)
<i>Vega (New grants)</i>	ExecuComp	Calculated using the method in Coles, Daniel, and Naveen (2010)
<i>P-Vesting</i>	Form DEF-14A	Dummy variable that equals one if firm grants performance-vesting stock/option
<i>P-Peer</i>	Form DEF-14A	Dummy variable that equals one if the firm discloses the performance peer group.
<i>Pay Gap</i>	ExecuComp	Difference between the CEO's total compensation and the total compensation of the median VP
<b>Governance Characteristics</b>		
<i>CEO Duality</i>	Risk Metrix and Form DEF-14A	Dummy variable that equals one if the CEO is also the Chairman
<i>Board Size</i>	Risk Metrix and Form DEF-14A	Number of directors on the board
<i>Outside Director</i>	Risk Metrix and Form DEF-14A	Proportion of outside directors on the board
<i>Institutional Ownership</i>	Thomson Reuters 13 F	Total institutional ownership
<b>Firm Characteristics</b>		
<i>Size</i>	Compustat	The natural logarithm of total assets
<i>Tobin's Q</i>	Compustat	Market value of assets divided by book value of assets; $(AT + PRCC\_F * CSHO - CEQ - TXDB) / AT$
<i>ROA</i>	Compustat	EBITDA divided by total assets
<i>Return Volatility</i>	CRSP	Annualized standard deviation of daily CRSP stock returns
<i>Stock Return</i>	CRSP	The annual gross return stock price; $[\text{PRCC\_Ft} / \text{PRCC\_Ft-1}] - 1$
<i>Book Leverage</i>	Compustat	Long-term debt plus debt in current liabilities divided by book assets; $(DLTT + DLC) / AT$
<i>Market-to-Book</i>	Compustat	Market value of equity divided by book value of equity
<i>Number of Segments</i>	Compustat Segment Data	Number of business segments in which firm operates





Table 2. Transition table that captures the proportion of firms with the same compensation consultant over the sample period 2005 – 2009

This table provides the proportion of firms that have the same consultant in time  $t+1$ ,  $t+2$ ,  $t+3$ , and  $t+4$  relative to time  $t$ . Panel A includes firms with no consultant over the sample period. Panel B excludes firms with no consultant over the sample period.

Panel A: Include firms with no compensation consultant over the sample period				
Year	t+1	t+2	t+3	t+4
2006	0.66	0.53	0.43	0.26
2007	0.78	0.61	0.38	
2008	0.78	0.47		
2009	0.62			
Average	0.71	0.54	0.40	0.26
Panel B: Exclude firms with no compensation consultant over sample period				
Year	t+1	t+2	t+3	t+4
2006	0.51	0.41	0.33	0.19
2007	0.63	0.49	0.28	
2008	0.63	0.36		
2009	0.53			
Average	0.57	0.42	0.31	0.19

**Table 3. Summary statistics**

This table presents summary statistics for ExecuComp firms from 2006 – 2010. In order to be included in the sample, firms need to have changed their compensation consultants during the sample period (sample used in our fixed effect regressions). Panel A provides the summary statistics for each consultant. Panels B – E provide summary statistics for the firm-year observations used in our regression models. All the variables are defined in the Appendix.

Panel A: Consultant characteristics						
	Observations	Mean	25th	Median	75th	Std. Dev.
<i>Consultant Public Firm</i>	129	0.101	0.000	0.000	0.000	0.302
<i>Consultant Large Firm</i>	129	0.147	0.000	0.000	0.000	0.356
<i>Consultant CEO Tenure</i>	80	12.625	6.000	12.000	18.000	8.194
<i>Consultant Firm Age</i>	105	36.133	11.000	21.000	35.000	42.737
<i>Consultant Related Business</i>	129	0.224	0.000	0.000	0.000	0.419
<i>Consultant Unrelated Business</i>	129	0.566	0.000	1.000	1.000	0.498
Panel B: Compensation variables						
	Observations	Mean	25th	Median	75th	Std. Dev.
<i>Consultant Dummy</i>	5476	0.852	1	1	1	0.355
<i>Consultant Conflict of Interest</i>	4664	0.082	0	0	0	0.274
<i>Salary (000s)</i>	5476	774.131	520.337	735.981	972.596	334.007
<i>Bonus (000s)</i>	5476	1199.260	202.875	676.453	1500.000	1764.510
<i>Cash (000s)</i>	5476	1980.850	839.323	1376.910	2406.350	1985.120
<i>Equity (000s)</i>	5476	2736.080	343.460	1406.670	3472.990	3771.230
<i>Salary/Pay Level</i>	5468	0.287	0.138	0.223	0.368	0.213
<i>Bonus/Pay Level</i>	5468	0.236	0.093	0.217	0.343	0.183
<i>Cash /Pay Level</i>	5468	0.524	0.323	0.484	0.705	0.256
<i>Equity/Pay Level</i>	5468	0.423	0.222	0.466	0.635	0.266
<i>Pay Level (000s)</i>	5476	5014.690	1579.190	3227.560	6169.670	5461.630
<i>Inside Debt (000s)</i>	5256	4729.300	0.000	665.621	4928.490	9483.250
<i>Delta (New grant) (000s)</i>	5476	37.447	4.366	18.298	45.621	53.337
<i>Vega (New grant) (000s)</i>	5443	23.439	0.000	3.861	26.834	44.180
<i>Performance-vesting</i>	5476	0.402	0.000	0.000	1.000	0.490
<i>Performance Peer</i>	5476	0.132	0.000	0.000	0.000	0.339
<i>Pay Gap (000s)</i>	5476	3405.500	834.400	1998.150	4212.740	4220.830
Panel C: Governance characteristics						
	Observations	Mean	25th	Median	75th	Std. Dev.
<i>CEO Duality</i>	5476	0.471	0.000	0.000	1.000	0.499
<i>Board Size</i>	5472	10.116	8.000	10.000	12.000	2.890
<i>Outside Director</i>	5472	0.725	0.625	0.750	0.833	0.137
<i>Institutional Ownership</i>	5467	0.824	0.711	0.846	0.956	0.201
Panel D: Firm characteristics						
	Observations	Mean	25th	Median	75th	Std. Dev.
<i>Size</i>	5476	7.739	6.570	7.626	8.838	1.633
<i>ROA</i>	5272	0.139	0.073	0.130	0.196	0.110
<i>Return Volatility</i>	5401	0.439	0.303	0.408	0.529	0.197
<i>Stock Return</i>	5391	0.080	-0.235	0.029	0.289	0.507
<i>Book Leverage</i>	5476	0.218	0.058	0.196	0.327	0.185

<i>Market-to-Book</i>	5471	2.475	1.166	1.805	2.900	2.540
<i>Number of Segments</i>	5476	2.449	1.000	1.000	4.000	1.773

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Panel E: CEO and VP characteristics

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	Observations	Mean	25th	Median	75th	Std. Dev.
<i>CEO Age</i>	5374	55	50	55	59	6.92
<i>CEO Tenure</i>	5476	7.389	3.000	5.000	10.000	6.940
<i>CEO Turnover</i>	5476	0.089	0.000	0.000	0.000	0.285
<i>Inside CEO</i>	5476	0.370	0.000	0.000	1.000	0.483
<i>CFO is VP</i>	5476	0.901	1.000	1.000	1.000	0.299
<i>Succession Plan</i>	5476	0.648	0.000	1.000	1.000	0.478
<i>Number of VPs</i>	5476	4.461	4.000	4.000	5.000	1.097

**Table 4. Compensation consultants and cash-based CEO compensation levels**

The dependent variables are the natural logarithm of *Salary* in Columns 1 – 4, the natural logarithm of *Bonus* in Columns 5 – 8, and the natural logarithm of *Salary and Bonus (Cash)* in Columns 9 – 12. The baseline regression models have no control for consultant fixed effects and are reported in the columns labeled “None.” We use three methods to capture consultant effects. In the columns labeled “All”, we create an indicator variable for each unique consultant, and we use F-tests to evaluate the joint significance of these indicator variables. In the columns labeled “Top”, we create an indicator variable for each of the top 10 consultants, and we use F-test to evaluate the joint significance of these indicator variables. In column labeled “0/1”, we create an indicator variable *Consultant dummy* that equals one if firm reports using a compensation consultant, and zero otherwise. All the variables are defined in the Appendix. \*\*\*, \*\*, \* represent significance at the 1%, 5%, and 10% significance level, respectively.

Consultant Dummy	All	Top	0/1	None	All	Top	0/1	None	All	Top	0/1	None
Dependent Variable	Ln[Salary]	Ln[Salary]	Ln[Salary]	Ln[Salary]	Ln[Bonus]	Ln[Bonus]	Ln[Bonus]	Ln[Bonus]	Ln[Cash]	Ln[Cash]	Ln[Cash]	Ln[Cash]
<i>Lag(Dep. Variable)</i>	0.2135* (1.91)	0.1934* (1.84)	0.1990* (1.86)	0.1991* (1.86)	-0.0879*** (-4.62)	-0.0847*** (-4.50)	-0.0850*** (-4.51)	-0.0847*** (-4.48)	0.0458* (1.86)	0.0513** (2.17)	0.0532** (2.20)	0.0533** (2.20)
<i>Size</i>	0.0994*** (3.19)	0.1104*** (3.95)	0.1108*** (3.83)	0.1105*** (3.82)	0.9192*** (4.93)	0.9015*** (5.06)	0.9152*** (5.14)	0.9200*** (5.17)	0.2738*** (7.26)	0.2733*** (7.74)	0.2758*** (7.73)	0.2770*** (7.77)
<i>ROA</i>	0.3299*** (3.20)	0.3083*** (3.13)	0.3201*** (3.27)	0.3193*** (3.27)	10.7996*** (12.19)	10.6691*** (12.49)	10.7181*** (12.58)	10.7332*** (12.60)	2.2662*** (13.08)	2.2545*** (13.32)	2.2666*** (13.45)	2.2702*** (13.48)
<i>Lag(ROA)</i>	0.1759* (1.81)	0.1525* (1.69)	0.1506* (1.65)	0.1503* (1.65)	-3.0056*** (-4.58)	-3.1152*** (-4.93)	-3.1163*** (-4.92)	-3.1141*** (-4.92)	-0.6343*** (-4.93)	-0.6678*** (-5.31)	-0.6701*** (-5.31)	-0.6692*** (-5.30)
<i>Stock Return</i>	0.0040 (0.36)	0.0077 (0.72)	0.0067 (0.64)	0.0067 (0.63)	0.8458*** (8.98)	0.8243*** (8.99)	0.8200*** (8.93)	0.8208*** (8.93)	0.1717*** (9.63)	0.1727*** (10.03)	0.1714*** (9.94)	0.1716*** (9.93)
<i>Lag(Stock Return)</i>	0.0147 (1.33)	0.0137 (1.30)	0.0137 (1.31)	0.0136 (1.31)	0.6823*** (8.20)	0.6707*** (8.23)	0.6664*** (8.21)	0.6665*** (8.20)	0.1258*** (7.33)	0.1257*** (7.50)	0.1236*** (7.43)	0.1237*** (7.42)
<i>Return Volatility</i>	0.0138 (0.22)	0.0139 (0.22)	0.0217 (0.34)	0.0220 (0.35)	-0.1478 (-0.36)	-0.0613 (-0.15)	-0.0445 (-0.11)	-0.0504 (-0.13)	-0.0720 (-0.87)	-0.0803 (-1.01)	-0.0743 (-0.92)	-0.0757 (-0.94)
<i>Book Leverage</i>	-0.1093 (-1.24)	-0.1129 (-1.36)	-0.1040 (-1.25)	-0.1039 (-1.24)	-0.4611 (-0.88)	-0.4308 (-0.84)	-0.4006 (-0.79)	-0.4036 (-0.79)	-0.1406 (-1.35)	-0.1516 (-1.53)	-0.1425 (-1.44)	-0.1433 (-1.45)
<i>Market-to-Book</i>	-0.0002 (-0.05)	0.0008 (0.22)	0.0005 (0.14)	0.0005 (0.14)	-0.0331 (-1.52)	-0.0320 (-1.54)	-0.0309 (-1.50)	-0.0309 (-1.50)	-0.0069 (-1.45)	-0.0056 (-1.26)	-0.0052 (-1.17)	-0.0052 (-1.17)
<i>Ln[CEO Tenure]</i>	0.0609*** (2.81)	0.0645*** (3.07)	0.0627*** (2.98)	0.0629*** (3.01)	-0.3263*** (-3.86)	-0.3152*** (-3.80)	-0.3124*** (-3.78)	-0.3157*** (-3.81)	0.0325 (1.57)	0.0342* (1.69)	0.0344* (1.71)	0.0336* (1.67)
<i>CEO Duality</i>	0.0138 (0.52)	0.0099 (0.38)	0.0126 (0.49)	0.0126 (0.49)	0.1149 (0.94)	0.1420 (1.17)	0.1456 (1.21)	0.1465 (1.21)	0.0409 (1.46)	0.0405 (1.49)	0.0425 (1.57)	0.0427 (1.57)
<i>Board Size</i>	0.0025	0.0027	0.0030	0.0030	0.0234	0.0193	0.0207	0.0208	0.0085	0.0081	0.0083	0.0083

	(0.47)	(0.54)	(0.53)	(0.53)	(0.89)	(0.75)	(0.81)	(0.81)	(1.64)	(1.61)	(1.62)	(1.62)
<i>Outside Director</i>	0.0893	0.1041	0.1166	0.1161	0.0169	-0.0162	0.0038	0.0148	0.1007	0.0914	0.1043	0.1069
	(1.10)	(1.35)	(1.40)	(1.39)	(0.04)	(-0.04)	(0.01)	(0.03)	(1.13)	(1.05)	(1.18)	(1.21)
<i>Inst. Ownership</i>	0.0022	0.0229	0.0285	0.0281	-0.0740	-0.0818	-0.0760	-0.0679	0.0089	0.0001	0.0071	0.0089
	(0.02)	(0.22)	(0.26)	(0.26)	(-0.18)	(-0.20)	(-0.19)	(-0.17)	(0.11)	(0.00)	(0.09)	(0.11)
<i>Consultant Dummy</i>			-0.0061				0.1247				0.0290	
			(-0.37)				(1.03)				(1.22)	
Constant	4.0785***	4.0842***	4.0350***	4.0325***	-2.8429*	-2.6788*	-2.8258*	-2.7777*	4.1336***	4.1104***	4.0571***	4.0675***
	(6.19)	(6.45)	(5.85)	(5.84)	(-1.85)	(-1.84)	(-1.93)	(-1.90)	(11.71)	(12.37)	(11.72)	(11.77)
Observations	4,959	4,959	4,959	4,959	4,959	4,959	4,959	4,959	4,959	4,959	4,959	4,959
Year Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
F-stat	252.7	0.978			142.1	0.815			38.18	1.544		
Median Placebo F	386.1	0.888			289.9	0.961			307.0	1.351		
Mean Placebo F	86,508.3	0.911			90,190.6	1.020			6,832.2	1.400		
%placebo F>actual F	63.10%	38.30%			80.60%	65.40%			99.80%	32.00%		
P-value	0.0000	0.4680			0.0000	0.6350			0.0000	0.1020		
Adj. within r <sup>2</sup>	0.0948	0.0819	0.0769	0.0771	0.1810	0.1760	0.1770	0.1770	0.2000	0.1950	0.1920	0.1920

**Table 5. Compensation consultants and CEO compensation levels**

The dependent variables are the natural logarithm of the equity component of compensation (*Equity*) in Columns 1 – 4, the natural logarithm of inside debt (*Debt*) in Columns 5 – 8, and the natural logarithm of total compensation (*Pay Level*) in Columns 9 – 12. The baseline regression models have no control for consultant fixed effects and are reported in the columns labeled “None.” We use three methods to capture consultant effects. In the columns labeled “All”, we create an indicator variable for each unique consultant, and we use F-tests to evaluate the joint significance of these indicator variables. In the columns labeled “Top”, we create an indicator variable for each of the top 10 consultants, and we use F-test to evaluate the joint significance of these indicator variables. In column labeled “0/1”, we create an indicator variable *Consultant dummy* that equals one if firm reports using a compensation consultant, and zero otherwise. All the variables are defined in the Appendix. \*\*\*, \*\*, \* represent significance at the 1%, 5%, and 10% significance level, respectively.

Consultant Dummy	All	Top	0/1	None	All	Top	0/1	None	All	Top	0/1	None
Dependent variable	Ln[ <i>Equity</i> ]	Ln[ <i>Equity</i> ]	Ln[ <i>Equity</i> ]	Ln[ <i>Equity</i> ]	Ln[ <i>Inside Debt</i> ]	Ln[ <i>Inside Debt</i> ]	Ln[ <i>Inside Debt</i> ]	Ln[ <i>Inside Debt</i> ]	Ln[ <i>Pay Level</i> ]	Ln[ <i>Pay Level</i> ]	Ln[ <i>Pay Level</i> ]	Ln[ <i>Pay Level</i> ]
<i>Lag(Dep. Variable)</i>	-0.1356*** (-6.97)	-0.1272*** (-6.71)	-0.1266*** (-6.67)	-0.1257*** (-6.61)	0.2079*** (5.42)	0.2085*** (5.54)	0.2089*** (5.56)	0.2089*** (5.56)	-0.0732*** (-3.44)	-0.0664*** (-3.28)	-0.0667*** (-3.31)	-0.0655*** (-3.25)
<i>Size</i>	0.5114** (2.14)	0.4450* (1.94)	0.4568** (1.99)	0.4685** (2.04)	-0.0461 (-0.17)	-0.0065 (-0.03)	-0.0015 (-0.01)	-0.0035 (-0.01)	0.3385*** (6.75)	0.3560*** (7.35)	0.3570*** (7.33)	0.3595*** (7.36)
<i>ROA</i>	1.7927** (2.29)	1.8292** (2.32)	1.8637** (2.37)	1.9014** (2.41)	0.2086 (0.54)	0.1542 (0.42)	0.1509 (0.41)	0.1410 (0.39)	1.6460*** (7.99)	1.6319*** (8.08)	1.6465*** (8.15)	1.6551*** (8.16)
<i>Lag(ROA)</i>	-0.2418 (-0.33)	-0.1818 (-0.26)	-0.2166 (-0.30)	-0.2060 (-0.29)	0.5994 (1.06)	0.4095 (0.76)	0.4301 (0.80)	0.4226 (0.79)	-0.2430 (-1.50)	-0.2552 (-1.62)	-0.2602 (-1.64)	-0.2588 (-1.63)
<i>Stock Return</i>	-0.2225** (-2.28)	-0.2679*** (-2.69)	-0.2617*** (-2.62)	-0.2598*** (-2.60)	0.0072 (0.10)	0.0227 (0.30)	0.0232 (0.31)	0.0217 (0.29)	0.0452** (2.04)	0.0471** (2.14)	0.0470** (2.12)	0.0475** (2.14)
<i>Lag(Stock Return)</i>	-0.1018 (-1.02)	-0.1009 (-1.02)	-0.0987 (-1.00)	-0.0976 (-0.99)	0.0704 (1.05)	0.0773 (1.19)	0.0785 (1.22)	0.0770 (1.19)	0.0958*** (4.57)	0.0977*** (4.72)	0.0966*** (4.66)	0.0968*** (4.65)
<i>Return Volatility</i>	-1.7692*** (-3.51)	-1.4550*** (-2.92)	-1.5234*** (-3.08)	-1.5375*** (-3.09)	-0.4080 (-1.53)	-0.4356* (-1.73)	-0.4380* (-1.75)	-0.4312* (-1.72)	-0.2386** (-2.29)	-0.2261** (-2.15)	-0.2379** (-2.28)	-0.2414** (-2.31)
<i>Book Leverage</i>	0.6077 (1.01)	0.8038 (1.33)	0.8472 (1.41)	0.8384 (1.39)	-0.8480* (-1.94)	-1.0604** (-2.48)	-1.0517** (-2.44)	-1.0592** (-2.46)	-0.0338 (-0.25)	-0.0580 (-0.45)	-0.0439 (-0.34)	-0.0456 (-0.35)
<i>Market-to-Book</i>	0.0138 (0.62)	0.0046 (0.21)	0.0014 (0.07)	0.0014 (0.06)	-0.0043 (-0.31)	-0.0007 (-0.06)	-0.0019 (-0.15)	-0.0020 (-0.16)	0.0032 (0.51)	0.0041 (0.68)	0.0039 (0.64)	0.0039 (0.63)
<i>Ln[CEO Tenure]</i>	-0.2627** (-2.38)	-0.2544** (-2.35)	-0.2508** (-2.32)	-0.2589** (-2.38)	0.9109*** (7.59)	0.9078*** (7.69)	0.9060*** (7.69)	0.9067*** (7.68)	0.0140 (0.57)	0.0203 (0.84)	0.0199 (0.82)	0.0180 (0.74)
<i>CEO Duality</i>	-0.0907	-0.0388	-0.0420	-0.0399	0.1013	0.0988	0.1020	0.1025	0.0205	0.0177	0.0194	0.0199

	(-0.66)	(-0.28)	(-0.31)	(-0.29)	(0.85)	(0.84)	(0.87)	(0.87)	(0.67)	(0.57)	(0.63)	(0.65)
<i>Board Size</i>	-0.0047	-0.0094	-0.0121	-0.0119	0.0161	0.0112	0.0106	0.0103	0.0021	0.0046	0.0042	0.0043
	(-0.15)	(-0.32)	(-0.42)	(-0.41)	(1.08)	(0.76)	(0.71)	(0.69)	(0.36)	(0.79)	(0.72)	(0.73)
<i>Outside Director</i>	0.4787	0.5594	0.5523	0.5787	0.1673	0.0966	0.0798	0.0771	0.0742	0.1067	0.1135	0.1200
	(0.95)	(1.12)	(1.10)	(1.16)	(0.52)	(0.31)	(0.26)	(0.25)	(0.71)	(1.02)	(1.08)	(1.14)
<i>Inst. Ownership</i>	0.0837	0.0324	-0.0313	-0.0126	0.5864**	0.5425*	0.5400*	0.5207*	0.1104	0.0641	0.0562	0.0608
	(0.20)	(0.08)	(-0.08)	(-0.03)	(1.97)	(1.86)	(1.85)	(1.79)	(1.11)	(0.67)	(0.59)	(0.63)
<i>Consultant Dummy</i>			0.3000**				-0.1191				0.0717**	
			(2.01)				(-1.48)				(2.25)	
Constant	3.3482*	3.6708*	3.7221**	3.8337**	2.2757	2.1669	2.1562	2.0944	5.5254***	5.3061***	5.3166***	5.3375***
	(1.71)	(1.95)	(1.98)	(2.04)	(1.10)	(1.15)	(1.13)	(1.10)	(12.63)	(12.53)	(12.42)	(12.45)
Observations	4,959	4,959	4,959	4,959	3,866	3,866	3,866	3,866	4,959	4,959	4,959	4,959
Year Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
F-stat	110.4	1.618			438.5	0.600			950.0	1.317		
Median Placebo F	374.7	1.187			507.3	1.030			293.4	1.276		
Mean Placebo F	34825.0	1.246			731862.4	1.072			30314.0	1.341		
% placebo F>actual F	92.70%	17.60%			55.30%	94.80%			17.90%	45.50%		
P-value	0.0000	0.0807			0.0000	0.8440			0.0000	0.2030		
Adjusted within $r^2$	0.0612	0.0484	0.0470	0.0458	0.1800	0.1690	0.1700	0.1690	0.0928	0.0824	0.0823	0.0809

**Table 6. Compensation consultants and compensation structure**

The dependent variables are *Salary/Pay Level (Salary%)* in Columns 1 – 4, the *Bonus/Pay Level (Bonus%)* in Columns 5 – 8, and *Equity/Pay Level (Equity%)* in Columns 9 – 12. The baseline regression models have no control for consultant fixed effects and are reported in the columns labeled “None.” We use three methods to capture consultant effects. In the columns labeled “All”, we create an indicator variable for each unique consultant, and we use F-tests to evaluate the joint significance of these indicator variables. In the columns labeled “Top”, we create an indicator variable for each of the top 10 consultants, and we use F-test to evaluate the joint significance of these indicator variables. In column labeled “0/1”, we create an indicator variable *Consultant dummy* that equals one if firm reports using a compensation consultant, and zero otherwise. All the variables are defined in the Appendix. \*\*\*, \*\*, \* represent significance at the 1%, 5%, and 10% significance level, respectively.

Consultant Dummy	All	Top	0/1	None	All	Top	0/1	None	All	Top	0/1	None
Dependent variable	<i>Salary%</i>	<i>Salary%</i>	<i>Salary%</i>	<i>Salary%</i>	<i>Bonus%</i>	<i>Bonus%</i>	<i>Bonus%</i>	<i>Bonus%</i>	<i>Equity%</i>	<i>Equity%</i>	<i>Equity%</i>	<i>Equity%</i>
<i>Lag(Dep Variable)</i>	-0.1040*** (-4.68)	-0.0936*** (-4.31)	-0.0932*** (-4.29)	-0.0912*** (-4.16)	-0.0766*** (-4.22)	-0.0755*** (-4.22)	-0.0738*** (-4.12)	-0.0739*** (-4.13)	-0.1466*** (-8.44)	-0.1397*** (-8.29)	-0.1392*** (-8.23)	-0.1386*** (-8.19)
<i>Size</i>	-0.0669*** (-4.81)	-0.0673*** (-5.07)	-0.0673*** (-5.07)	-0.0685*** (-5.16)	0.0410*** (2.66)	0.0397*** (2.69)	0.0396*** (2.68)	0.0401*** (2.71)	0.0247 (1.15)	0.0188 (0.91)	0.0198 (0.96)	0.0204 (0.99)
<i>ROA</i>	-0.4049*** (-6.82)	-0.4078*** (-7.17)	-0.4106*** (-7.23)	-0.4142*** (-7.25)	0.6330*** (11.09)	0.6387*** (11.28)	0.6404*** (11.31)	0.6419*** (11.33)	-0.1388* (-1.93)	-0.1307* (-1.81)	-0.1271* (-1.76)	-0.1254* (-1.73)
<i>Lag(ROA)</i>	0.0882* (1.72)	0.0867* (1.74)	0.0885* (1.78)	0.0880* (1.77)	-0.1725*** (-3.53)	-0.1745*** (-3.61)	-0.1741*** (-3.57)	-0.1736*** (-3.57)	0.0718 (1.04)	0.0814 (1.22)	0.0786 (1.17)	0.0792 (1.17)
<i>Stock Return</i>	-0.0201*** (-2.89)	-0.0185*** (-2.66)	-0.0188*** (-2.70)	-0.0190*** (-2.72)	0.0682*** (10.22)	0.0673*** (10.00)	0.0669*** (9.93)	0.0670*** (9.93)	-0.0413*** (-4.65)	-0.0441*** (-4.98)	-0.0437*** (-4.93)	-0.0436*** (-4.92)
<i>Lag(Stock Return)</i>	-0.0313*** (-5.09)	-0.0312*** (-5.16)	-0.0310*** (-5.13)	-0.0310*** (-5.12)	0.0444*** (7.18)	0.0439*** (7.21)	0.0434*** (7.16)	0.0435*** (7.15)	-0.0102 (-1.21)	-0.0100 (-1.20)	-0.0098 (-1.18)	-0.0097 (-1.17)
<i>Return Volatility</i>	0.1113*** (3.65)	0.1115*** (3.80)	0.1178*** (4.04)	0.1193*** (4.10)	0.0113 (0.38)	0.0045 (0.15)	0.0063 (0.21)	0.0057 (0.19)	-0.1246*** (-2.93)	-0.1132*** (-2.75)	-0.1192*** (-2.91)	-0.1199*** (-2.93)
<i>Book Leverage</i>	-0.0206 (-0.56)	-0.0187 (-0.53)	-0.0216 (-0.61)	-0.0209 (-0.59)	-0.0348 (-0.90)	-0.0382 (-0.99)	-0.0367 (-0.95)	-0.0370 (-0.96)	0.0788 (1.42)	0.0992* (1.82)	0.1039* (1.91)	0.1035* (1.90)
<i>Market-to-Book</i>	0.0005 (0.24)	0.0006 (0.34)	0.0007 (0.36)	0.0007 (0.37)	-0.0031** (-2.07)	-0.0031** (-2.13)	-0.0028** (-1.97)	-0.0028** (-1.98)	0.0031 (1.31)	0.0027 (1.19)	0.0023 (1.03)	0.0023 (1.02)
<i>Ln[CEO Tenure]</i>	0.0171** (2.33)	0.0163** (2.22)	0.0163** (2.23)	0.0171** (2.32)	-0.0063 (-1.08)	-0.0067 (-1.14)	-0.0065 (-1.12)	-0.0069 (-1.17)	-0.0372*** (-3.91)	-0.0365*** (-3.91)	-0.0364*** (-3.89)	-0.0368*** (-3.92)
<i>CEO Duality</i>	0.0018 (0.22)	0.0003 (0.04)	0.0004 (0.05)	0.0002 (0.03)	0.0120 (1.41)	0.0130 (1.54)	0.0130 (1.56)	0.0131 (1.57)	-0.0017 (-0.14)	0.0011 (0.09)	0.0010 (0.08)	0.0010 (0.09)



<i>Board Size</i>	-0.0001 (-0.08)	-0.0006 (-0.32)	-0.0005 (-0.25)	-0.0005 (-0.27)	0.0021 (1.08)	0.0019 (1.04)	0.0020 (1.13)	0.0020 (1.13)	-0.0013 (-0.52)	-0.0014 (-0.54)	-0.0016 (-0.65)	-0.0016 (-0.65)
<i>Outside Director</i>	-0.0093 (-0.28)	-0.0151 (-0.47)	-0.0165 (-0.51)	-0.0192 (-0.60)	-0.0031 (-0.10)	-0.0097 (-0.33)	-0.0078 (-0.26)	-0.0068 (-0.23)	0.0512 (1.16)	0.0604 (1.40)	0.0596 (1.38)	0.0608 (1.41)
<i>Inst. Ownership</i>	-0.0313 (-1.00)	-0.0191 (-0.62)	-0.0161 (-0.53)	-0.0180 (-0.59)	-0.0245 (-0.89)	-0.0216 (-0.78)	-0.0201 (-0.73)	-0.0194 (-0.70)	0.0367 (0.95)	0.0315 (0.83)	0.0256 (0.68)	0.0264 (0.70)
<i>Consultant Dummy</i>			-0.0313*** (-2.99)				0.0117 (1.34)				0.0138 (1.08)	
Constant	0.9086*** (7.58)	0.9074*** (7.99)	0.9009*** (7.91)	0.8873*** (7.76)	-0.2055* (-1.65)	-0.1894 (-1.59)	-0.1960 (-1.64)	-0.1913 (-1.61)	0.3648** (2.07)	0.3942** (2.32)	0.4010** (2.35)	0.4063** (2.39)
Observations	4,949	4,949	4,949	4,949	4,949	4,949	4,949	4,949	4,949	4,949	4,949	4,949
Year Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
F-stat	714.2	2.005			506.4	1.621			160.7	1.723		
Median Placebo F	304.7	1.713			288.8	1.313			268.8	0.963		
Mean Placebo F	53280.0	1.783			424614.9	1.369			145243.9	1.022		
%placebo F>actual F	21.90%	24.70%			27.60%	24.10%			76.80%	6.50%		
P-value	0.0000	0.0209			0.0000	0.0799			0.0000	0.0569		
Adjusted within $r^2$	0.0839	0.0726	0.0711	0.0678	0.1760	0.1640	0.1620	0.1620	0.0762	0.0664	0.0640	0.0638

**Table 7. Compensation consultants and Senior VP and CEO incentives**

The dependent variables are  $\ln(\text{Pay Gap})$  in Columns 1 – 4,  $\ln(\text{Delta})$  in Columns 5 – 8, and  $\ln(\text{Vega})$  in Columns 9 – 12. The baseline regression models have no control for consultant fixed effects and are reported in the columns labeled “None.” We use three methods to capture consultant effects. In the columns labeled “All”, we create an indicator variable for each unique consultant, and we use F-tests to evaluate the joint significance of these indicator variables. In the columns labeled “Top”, we create an indicator variable for each of the top 10 consultants, and we use F-test to evaluate the joint significance of these indicator variables. In column labeled “0/1”, we create an indicator variable *Consultant dummy* that equals one if firm reports using a compensation consultant, and zero otherwise. All the variables are defined in the Appendix. \*\*\*, \*\*, \* represent significance at the 1%, 5%, and 10% significance level, respectively.

Consultant Dummy	All	Top	0/1	None	All	Top	0/1	None	All	Top	0/1	None
Dependent variable	$\ln[\text{Pay Gap}]$	$\ln[\text{Pay Gap}]$	$\ln[\text{Pay Gap}]$	$\ln[\text{Pay Gap}]$	$\ln[\text{Delta}]$	$\ln[\text{Delta}]$	$\ln[\text{Delta}]$	$\ln[\text{Delta}]$	$\ln[\text{Vega}]$	$\ln[\text{Vega}]$	$\ln[\text{Vega}]$	$\ln[\text{Vega}]$
<i>Lag(Dep. Variable)</i>	-0.1025*** (-4.75)	-0.0992*** (-4.81)	-0.0991*** (-4.80)	-0.0987*** (-4.78)	-0.1569*** (-8.38)	-0.1501*** (-8.28)	-0.1494*** (-8.22)	-0.1488*** (-8.17)	-0.0742*** (-3.49)	-0.0713*** (-3.37)	-0.0679*** (-3.18)	-0.0675*** (-3.17)
<i>Size</i>	0.3674*** (5.63)	0.3925*** (6.23)	0.3926*** (6.23)	0.3957*** (6.29)	0.3562*** (3.16)	0.3378*** (3.12)	0.3416*** (3.15)	0.3456*** (3.18)	0.1292 (1.04)	0.1589 (1.30)	0.1645 (1.35)	0.1678 (1.38)
<i>ROA</i>	1.7507*** (6.67)	1.7907*** (6.94)	1.7835*** (6.96)	1.7937*** (7.01)	1.1410*** (3.12)	1.1672*** (3.19)	1.1966*** (3.26)	1.2095*** (3.29)	0.5573 (1.33)	0.6083 (1.49)	0.6596 (1.61)	0.6702 (1.63)
<i>Lag(ROA)</i>	0.0080 (0.04)	0.0596 (0.29)	0.0572 (0.28)	0.0578 (0.28)	0.0336 (0.10)	0.0690 (0.21)	0.0424 (0.13)	0.0459 (0.14)	0.3339 (0.93)	0.4230 (1.20)	0.3773 (1.07)	0.3802 (1.07)
<i>Stock Return</i>	0.0349 (1.05)	0.0356 (1.06)	0.0355 (1.06)	0.0357 (1.06)	-0.0945** (-2.03)	-0.1096** (-2.33)	-0.1074** (-2.27)	-0.1067** (-2.26)	-0.0089 (-0.18)	-0.0028 (-0.06)	-0.0032 (-0.07)	-0.0026 (-0.05)
<i>Lag(Stock Return)</i>	0.0752** (2.34)	0.0753** (2.39)	0.0734** (2.33)	0.0732** (2.32)	0.0105 (0.23)	0.0127 (0.28)	0.0128 (0.28)	0.0132 (0.29)	0.0084 (0.17)	0.0201 (0.40)	0.0166 (0.33)	0.0168 (0.34)
<i>Return Volatility</i>	-0.3224** (-2.26)	-0.2667* (-1.90)	-0.2730* (-1.95)	-0.2789** (-1.98)	-0.8903*** (-3.91)	-0.7632*** (-3.44)	-0.8042*** (-3.65)	-0.8090*** (-3.66)	-0.4116* (-1.77)	-0.4215* (-1.88)	-0.4617** (-2.04)	-0.4657** (-2.06)
<i>Book Leverage</i>	0.1340 (0.75)	0.1308 (0.76)	0.1090 (0.64)	0.1078 (0.63)	0.1326 (0.46)	0.2224 (0.78)	0.2584 (0.91)	0.2555 (0.90)	0.0580 (0.18)	0.1286 (0.39)	0.1925 (0.58)	0.1900 (0.57)
<i>Market-to-Book</i>	0.0025 (0.27)	0.0028 (0.31)	0.0030 (0.34)	0.0028 (0.32)	0.0088 (0.77)	0.0064 (0.57)	0.0045 (0.40)	0.0045 (0.40)	-0.0011 (-0.09)	-0.0042 (-0.30)	-0.0055 (-0.37)	-0.0055 (-0.37)
<i>Ln[CEO Tenure]</i>	0.0672 (1.53)	0.0689 (1.60)	0.0679 (1.59)	0.0666 (1.55)	-0.1206** (-2.27)	-0.1167** (-2.25)	-0.1142** (-2.19)	-0.1170** (-2.24)	-0.1564*** (-2.75)	-0.1527*** (-2.76)	-0.1484*** (-2.65)	-0.1506*** (-2.69)
<i>CEO Duality</i>	-0.0016 (-0.04)	0.0013 (0.03)	0.0036 (0.09)	0.0046 (0.11)	0.0170 (0.25)	0.0326 (0.49)	0.0313 (0.47)	0.0320 (0.49)	0.0570 (0.73)	0.0511 (0.67)	0.0508 (0.66)	0.0513 (0.67)
<i>Board Size</i>	0.0004 (0.06)	0.0020 (0.25)	0.0019 (0.24)	0.0019 (0.23)	-0.0030 (-0.21)	-0.0038 (-0.27)	-0.0055 (-0.40)	-0.0055 (-0.40)	-0.0048 (-0.32)	-0.0041 (-0.28)	-0.0063 (-0.43)	-0.0063 (-0.43)

<i>Outside Director</i>	0.2421 (1.60)	0.2238 (1.48)	0.2228 (1.47)	0.2267 (1.50)	0.2264 (0.97)	0.2810 (1.22)	0.2763 (1.20)	0.2854 (1.24)	0.1385 (0.56)	0.2428 (1.01)	0.2397 (1.00)	0.2470 (1.03)
<i>Inst. Ownership</i>	0.1578 (1.12)	0.1551 (1.14)	0.1558 (1.15)	0.1615 (1.19)	0.1423 (0.72)	0.1135 (0.59)	0.0771 (0.40)	0.0836 (0.44)	0.1620 (0.74)	0.1098 (0.52)	0.0704 (0.33)	0.0757 (0.36)
<i>CEO Turnover</i>	-0.0681 (-1.17)	-0.0730 (-1.26)	-0.0754 (-1.31)	-0.0742 (-1.29)								
<i>Inside CEO</i>	0.0313 (0.67)	0.0252 (0.54)	0.0249 (0.54)	0.0254 (0.55)								
<i>CFO is VP</i>	-0.0500 (-0.77)	-0.0372 (-0.59)	-0.0354 (-0.57)	-0.0368 (-0.59)								
<i>Succession Plan</i>	-0.0115 (-0.32)	-0.0213 (-0.60)	-0.0202 (-0.57)	-0.0203 (-0.57)								
<i>Number of VPs</i>	0.0188 (1.32)	0.0183 (1.29)	0.0183 (1.30)	0.0183 (1.30)								
<i>Number of Segments</i>	-0.0149 (-0.67)	-0.0109 (-0.50)	-0.0124 (-0.56)	-0.0117 (-0.53)								
<i>Ln[Median Gap]</i>	6.8213*** (6.17)	6.7417*** (6.16)	6.6095*** (6.11)	6.6199*** (6.06)								
<i>CEO Age</i>	0.0009 (0.14)	0.0016 (0.26)	0.0013 (0.21)	0.0012 (0.19)								
<i>Consultant Dummy</i>			0.0689 (1.40)				0.1038 (1.54)				0.0837 (1.30)	
Constant	-67.3631*** (-5.78)	-66.8407*** (-5.79)	-65.4050*** (-5.72)	-65.4858*** (-5.68)	0.3825 (0.42)	0.4165 (0.47)	0.4633 (0.52)	0.5023 (0.57)	0.9187 (0.93)	0.6201 (0.64)	0.6383 (0.66)	0.6699 (0.69)
Observations	4,628	4,628	4,628	4,628	4,959	4,959	4,959	4,959	4,959	4,959	4,959	4,959
Year Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
F stat	431.1	1.157			195.6	1.783			165.7	1.833		
Median Placebo F	367.4	1.022			323.3	1.041			349.2	0.963		
Median Placebo F	3707.3	1.078			20741.4	1.100			118884.32	1.029		
% placebo F>actual F	44.00%	35.70%			73.10%	6.00%			81.90%	3.20%		
P value	0.0000	0.3100			0.0000	0.0463			0.0000	0.0388		
Adjusted within r <sup>2</sup>	0.0918	0.0826	0.0821	0.0815	0.0660	0.0565	0.0541	0.0536	0.0303	0.0180	0.0139	0.0137

**Table 8. Compensation consultants and performance vesting stocks and options, performance peers, and relative performance evaluation**

The dependent variables are *P-Vesting* in Columns 1 – 4, *P-Peer* in Columns 5 – 8, and *Ln(Pay Level)* in Columns 9 – 12. *P-Vesting* is an indicator variable that equals one if firm uses performance-vesting stocks or options, and is zero otherwise. *P-Peer* is an indicator variable that equals one if firm uses a performance peer group, and is zero otherwise. The baseline regression models have no control for consultant fixed effects and are reported in the columns labeled “None.” We use three methods to capture consultant effects. In the columns labeled “All”, we create an indicator variable for each unique consultant, and we use F-tests to evaluate the joint significance of these indicator variables. In the columns labeled “Top”, we create an indicator variable for each of the top 10 consultants, and we use F-test to evaluate the joint significance of these indicator variables. In column labeled “0/1”, we create an indicator variable *Consultant dummy* that equals one if firm reports using a compensation consultant, and zero otherwise. All the variables are defined in the Appendix. \*\*\*, \*\*, \* represent significance at the 1%, 5%, and 10% significance level, respectively.

Consultant Dummy	All	Top	0/1	None	All	Top	0/1	None	All	Top	0/1	None
Dependent variable	<i>P-Vesting</i>	<i>P-Vesting</i>	<i>P-Vesting</i>	<i>P-Vesting</i>	<i>P-Peer</i>	<i>P-Peer</i>	<i>P-Peer</i>	<i>P-Peer</i>	<i>Ln[Pay Level]</i>	<i>Ln[Pay Level]</i>	<i>Ln[Pay Level]</i>	<i>Ln[Pay Level]</i>
<i>Lag(Dep Variable)</i>	-0.0140 (-0.51)	-0.0054 (-0.20)	-0.0049 (-0.18)	-0.0048 (-0.17)	-0.0315 (-0.78)	-0.0209 (-0.51)	-0.0242 (-0.59)	-0.0242 (-0.59)				
<i>Size</i>	-0.0012 (-0.04)	0.0008 (0.03)	0.0014 (0.05)	0.0025 (0.08)	-0.0315 (-1.35)	-0.0236 (-1.06)	-0.0261 (-1.14)	-0.0262 (-1.15)	0.3596*** (7.52)	0.3610*** (7.85)	0.3572*** (7.70)	0.3590*** (7.69)
<i>ROA</i>	0.0826 (0.74)	0.0761 (0.71)	0.0842 (0.80)	0.0903 (0.85)	0.0157 (0.19)	-0.0011 (-0.01)	0.0010 (0.01)	0.0004 (0.00)				
<i>Lag(ROA)</i>	-0.1060 (-1.03)	-0.1133 (-1.15)	-0.1146 (-1.17)	-0.1107 (-1.12)	-0.1334* (-1.93)	- (-2.04)	- (-1.99)	- (-2.00)				
<i>Stock Return</i>	0.0077 (0.51)	0.0076 (0.52)	0.0070 (0.48)	0.0077 (0.53)	0.0021 (0.30)	0.0045 (0.64)	0.0040 (0.57)	0.0040 (0.56)	0.0199 (1.00)	0.0222 (1.14)	0.0235 (1.21)	0.0231 (1.19)
<i>Lag(Stock Return)</i>	0.0065 (0.42)	0.0063 (0.41)	0.0047 (0.31)	0.0057 (0.38)	0.0033 (0.35)	0.0048 (0.52)	0.0054 (0.58)	0.0053 (0.57)				
<i>Return Volatility</i>	- 0.2277*** (-2.97)	- 0.2237*** (-3.08)	- 0.2251*** (-3.11)	- 0.2300*** (-3.19)	-0.0432 (-0.86)	-0.0644 (-1.34)	-0.0634 (-1.31)	-0.0629 (-1.31)				
<i>Book Leverage</i>	0.0314 (0.31)	0.0300 (0.29)	0.0305 (0.29)	0.0334 (0.32)	-0.1105* (-1.72)	-0.1194* (-1.83)	-0.1016 (-1.58)	-0.1019 (-1.58)				
<i>Market-to-Book</i>	0.0088** (2.09)	0.0086** (2.05)	0.0083* (1.94)	0.0081* (1.91)	0.0021 (0.84)	0.0015 (0.64)	0.0010 (0.44)	0.0010 (0.44)				
<i>Ln[CEO Tenure]</i>	0.0168 (1.11)	0.0155 (1.06)	0.0146 (1.00)	0.0142 (0.97)	-0.0011 (-0.10)	-0.0016 (-0.16)	-0.0028 (-0.28)	-0.0027 (-0.27)	0.0229 (0.99)	0.0273 (1.20)	0.0274 (1.20)	0.0253 (1.10)
<i>CEO Duality</i>	-0.0208 (-1.02)	-0.0152 (-0.77)	-0.0149 (-0.75)	-0.0153 (-0.77)	-0.0015 (-0.09)	0.0008 (0.05)	0.0017 (0.10)	0.0017 (0.10)	0.0134 (0.47)	0.0158 (0.54)	0.0166 (0.58)	0.0163 (0.57)

<i>Board Size</i>	0.0007 (0.15)	-0.0001 (-0.02)	-0.0002 (-0.05)	-0.0002 (-0.05)	0.0016 (0.55)	0.0011 (0.36)	0.0010 (0.33)	0.0010 (0.33)				
<i>Outside Director</i>	0.0736 (0.85)	0.0728 (0.83)	0.0551 (0.63)	0.0555 (0.64)	0.0511 (0.88)	0.0424 (0.71)	0.0500 (0.85)	0.0500 (0.85)				
<i>Inst. Ownership</i>	-0.0348 (-0.59)	-0.0153 (-0.25)	-0.0152 (-0.25)	-0.0067 (-0.11)	-0.0457 (-1.17)	-0.0198 (-0.47)	-0.0167 (-0.40)	-0.0175 (-0.42)				
<i>Growth Opportunity.</i>									0.0803*** (3.27)	0.0721*** (3.09)	0.0683*** (2.92)	0.0690*** (2.95)
<i>Idiosyncratic Volatility</i>									-1.7959** (-2.17)	-1.6302** (-2.10)	-1.6751** (-2.17)	-1.7398** (-2.25)
<i>CEO Ownership</i>									-1.5873*** (-3.18)	-1.5290*** (-3.14)	-1.5131*** (-3.11)	-1.4855*** (-2.98)
<i>Industry Return</i>									0.0867 (1.08)	0.0875 (1.12)	0.1055 (1.36)	0.0678 (1.48)
<i>Consultant Dummy</i>			0.0560** (2.43)				-0.0053 (-0.37)				0.1330* (1.71)	
<i>Consultant*Ind. Ret</i>											-0.0460 (-0.65)	
Constant	0.3575 (1.27)	0.3314 (1.22)	0.3468 (1.28)	0.3787 (1.40)	0.4200* (2.07)	0.3544* (1.82)	0.3716* (1.88)	0.3686* (1.86)	4.9501*** (12.73)	4.9226*** (13.14)	4.9410*** (13.10)	5.0364*** (13.52)
Observations	4,024	4,024	4,024	4,024	4,024	4,024	4,024	4,024	5,394	5,394	5,394	5,394
Year Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes				
Firm Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes				
F-stat	3611	1.919			1073	1.722			3920	0.612		
Median Placebo F	511.6	1.341			792.1	1.039				0.867		
Mean Placebo F	879303.9	1.413			848697. 1	1.087						
% placebo F>actual F	10.30%	11.40%			41.70%	6.00%				77.90%		
P-value	0.0000	0.0287			0.0000	0.0570			0.0000	0.8340		
Adjusted within r <sup>2</sup>	0.0338	0.0233	0.0182	0.0162	0.0456	0.0307	0.0236	0.0238	0.0795	0.0630	0.0628	0.0607

**Table 9. Summary of placebo tests with lagged dependent variable in the regressions**

This table provides a summary of our scramble tests with the lagged dependent variable as an independent variable in the regression. This table presents the results of the placebo tests in Table 4 – 8 with randomly assigned consultants. In Panel A, we create an indicator variable for each unique consultant. In Panel B, we create an indicator variable for each of the top 10 consultants.

Panel A: Consultant dummy for each consultant												
Dependent variable	Actual adj. within $r^2$	% Placebo adj. within $r^2$ < Actual adj. within $r^2$	% Placebo adj. within $r^2$ = Actual adj. within $r^2$	% Placebo adj. within $r^2$ > Actual adj. within $r^2$	Median Placebo adj. $r^2$	Mean Placebo adj. $r^2$	Actual F-stats	% Placebo F-stats < Actual F-stats	% Placebo F-stats = Actual F-stats	% Placebo F-stats > Actual F-stats	Median Placebo F-stats	Mean Placebo F-stats
<i>Ln[Bonus]</i>	0.1810	26.40%	7.30%	66.30%	0.1830	0.1830	142.1	19.30%	0.10%	80.60%	289.9	90190.6
<i>Ln[Cash]</i>	0.2000	34.20%	7.70%	58.10%	0.2020	0.2029	38.2	0.20%	0.00%	99.80%	307.0	6832.2
<i>Ln[Equity]</i>	0.0612	83.70%	0.40%	15.90%	0.0560	0.0564	110.4	7.30%	0.00%	92.70%	374.7	34825.0
<i>Ln[Debt]</i>	0.1800	32.20%	3.60%	64.20%	0.1840	0.1852	438.5	44.70%	0.00%	55.30%	507.3	731862.4
<i>Ln[Pay Level]</i>	0.0928	64.50%	0.50%	35.00%	0.0907	0.0913	950.0	82.10%	0.00%	17.90%	293.4	30314.0
<i>Salary%</i>	0.0839	83.40%	0.60%	16.00%	0.0782	0.0786	714.2	78.10%	0.00%	21.90%	304.7	53280.0
<i>Bonus%</i>	0.1760	68.30%	8.20%	23.50%	0.1730	0.1735	506.4	72.40%	0.00%	27.60%	288.8	424614.9
<i>Equity%</i>	0.0762	84.00%	0.70%	15.30%	0.0720	0.0721	160.7	23.20%	0.00%	76.80%	268.8	145243.9
<i>Ln[Pay Gap]</i>	0.0918	72.60%	0.40%	27.00%	0.0882	0.0888	431.1	56.00%	0.00%	44.00%	367.4	3707.3
<i>Ln[Delta]</i>	0.0660	67.00%	1.40%	31.60%	0.0633	0.0637	195.6	26.90%	0.00%	73.10%	323.3	20741.4
<i>Ln[Vega]</i>	0.0303	76.90%	1.10%	22.00%	0.0257	0.0261	165.7	18.00%	0.10%	81.90%	349.2	118884.3
<i>P-Vesting</i>	0.0338	4.20%	0.30%	95.50%	0.0477	0.0478	3611.0	89.70%	0.00%	10.30%	511.6	879303.9
<i>P-Peer</i>	0.0456	11.30%	0.30%	88.40%	0.0597	0.0603	107.0	58.10%	0.20%	41.70%	792.1	848697.1

Panel B: Consultant dummy for top 10 consultants

Dependent variable	Actual adj. within $r^2$	% Placebo adj. $r^2 <$ Actual adj. $r^2$	% Placebo adj. $r^2 =$ Actual adj. $r^2$	% Placebo adj. $r^2 >$ Actual adj. $r^2$	Median Placebo adj. $r^2$	Mean Placebo adj. $r^2$	Actual F-stats	% Placebo F-stats < Actual F-stats	% Placebo F-stats = Actual F-stats	% Placebo F-stats > Actual F-stats	Median Placebo F-stats	Mean Placebo F-stats
<i>Ln[Salary]</i>	0.0819	89.30%	0.50%	10.20%	0.0788	0.0791	0.978	61.60%	0.10%	38.30%	0.888	0.911
<i>Ln[Bonus]</i>	0.1760	1.10%	26.80%	72.10%	0.1770	0.1771	0.815	34.50%	0.10%	65.40%	0.961	1.020
<i>Ln[Cash]</i>	0.1950	71.60%	16.60%	11.80%	0.1940	0.1940	1.544	68.00%	0.00%	32.00%	1.351	1.400
<i>Ln[Equity]</i>	0.0484	76.30%	2.60%	21.10%	0.0474	0.0476	1.618	82.30%	0.10%	17.60%	1.187	1.246
<i>Ln[Debt]</i>	0.1690	1.30%	12.40%	86.30%	0.1710	0.1710	0.600	5.10%	0.10%	94.80%	1.030	1.072
<i>Ln[Pay Level]</i>	0.0824	32.10%	3.90%	64.00%	0.0828	0.0830	1.317	54.30%	0.20%	45.50%	1.276	1.341
<i>Salary%</i>	0.0726	83.80%	2.10%	14.10%	0.0714	0.0716	2.005	75.20%	0.10%	24.70%	1.713	1.783
<i>Bonus%</i>	0.1640	39.10%	33.90%	27.00%	0.1640	0.1639	1.621	75.90%	0.00%	24.10%	1.313	1.369
<i>Equity%</i>	0.0664	92.70%	0.90%	6.40%	0.0644	0.0646	1.723	93.50%	0.00%	6.50%	0.963	1.022
<i>Ln[Pay Gap]</i>	0.0826	60.60%	2.90%	36.50%	0.0823	0.0824	1.157	64.20%	0.10%	35.70%	1.022	1.078
<i>Ln[Delta]</i>	0.0565	90.60%	0.80%	8.60%	0.0546	0.0548	1.783	94.00%	0.00%	6.00%	1.041	1.100
<i>Ln[Vega]</i>	0.0180	97.10%	0.60%	2.30%	0.0147	0.0149	1.833	96.80%	0.00%	3.20%	0.963	1.029
<i>P-Vesting</i>	0.0233	87.10%	0.80%	12.10%	0.0203	0.0207	1.919	88.40%	0.20%	11.40%	1.341	1.413
<i>P-Peer</i>	0.0307	86.20%	0.40%	13.40%	0.0274	0.0278	1.722	94.00%	0.00%	6.00%	1.039	1.087
<i>RPE</i>	0.0630	37.70%	3.50%	58.80%	0.0633	0.0635	0.612	22.10%	0.00%	77.90%	0.867	0.942

**Table 10. Summary of regressions without lagged dependent variables in the regressions**

This table presents the results of the tests reported in Tables 4 – 8 with randomly assigned consultants and excluding the lag dependent variables in the regressions. All variables are defined in the Appendix.

Dependent variable	Consultant Dummy	Observations	F-stat	Median Placebo F	Mean Placebo F	% placebo F > actual F	P-value	Adjusted within $r^2$
<i>Ln[Salary]</i>	All	5,098	93.18	382.8	77,334.0725	88.00%	0.000	0.0520
<i>Ln[Salary]</i>	Top	5,098	1.053	0.822	0.867	25.00%	0.397	0.0470
<i>Ln[Salary]</i>	0/1	5,098						0.0399
<i>Ln[Salary]</i>	None	5,098						0.0400
<i>Ln[Bonus]</i>	All	5,098	187.4	264.1	4,930,312.64	66.90%	0.000	0.177
<i>Ln[Bonus]</i>	Top	5,098	0.718	0.928	0.989	73.30%	0.735	0.172
<i>Ln[Bonus]</i>	0/1	5,098						0.172
<i>Ln[Bonus]</i>	None	5,098						0.172
<i>Ln[Cash]</i>	All	5,098	166.2	294.2	176,956.6	74.60%	0.000	0.202
<i>Ln[Cash]</i>	Top	5,098	1.558	1.375	1.432	32.20%	0.0980	0.196
<i>Ln[Cash]</i>	0/1	5,098						0.193
<i>Ln[Cash]</i>	None	5,098						0.193
<i>Ln[Equity]</i>	All	5,098	250.8	358.4	23,894.32	64.60%	0.000	0.0451
<i>Ln[Equity]</i>	Top	5,098	1.757	1.199	1.266	12.10%	0.0507	0.0342
<i>ln[Equity]</i>	0/1	5,098						0.0326
<i>ln[Equity]</i>	None	5,098						0.0315
<i>Ln[Inside Debt]</i>	All	4,886	558	632	10,787.78	55.70%	0.000	0.154
<i>Ln[Inside Debt]</i>	Top	4,886	1.181	0.911	0.956	3.00%	0.291	0.126
<i>Ln[Inside Debt]</i>	0/1	4,886						0.123
<i>Ln[Inside Debt]</i>	No	4,886						0.123
<i>Ln[Pay Level]</i>	All	5,098	511.8	278.3	52,528.84	27.60%	0.000	0.0910
<i>Ln[Pay Level]</i>	Top	5,098	1.473	1.261	1.331	30.50%	0.128	0.0809
<i>Ln[Pay Level]</i>	0/1	5,098						0.0806
<i>Ln[Pay Level]</i>	None	5,098						0.0791
<i>Salary%</i>	All	5,090	182.3	290.7	41,378.2	67.60%	0.000	0.0724
<i>Salary%</i>	Top	5,090	1.947	1.579	1.638	19.20%	0.0258	0.0645
<i>Salary%</i>	0/1	5,090						0.0633
<i>Salary%</i>	None	5,090						0.0603



<i>Bonus%</i>	All	5,090	68.92	270.5	12,947.82	96.90%	0.000	0.170
<i>Bonus%</i>	Top	5,090	1.343	1.257	1.305	41.10%	0.188	0.159
<i>Bonus%</i>	0/1	5,090						0.158
<i>Bonus%</i>	None	5,090						0.158
<i>Equity%</i>	All	5,090	239.0	277.3	8,616.39	56.70%	0.000	0.0535
<i>Equity%</i>	Top	5,090	1.863	1.066	1.127	5.90%	0.0350	0.0448
<i>Equity%</i>	0/1	5,090						0.0424
<i>Equity%</i>	None	5,090						0.0421
<i>Ln[Pay Gap]</i>	All	4,863	363.7	347.1	905,326.7	48.10%	0.000	0.0814
<i>Ln[Pay Gap]</i>	Top	4,863	0.992	1.092	1.1537	61.90%	0.454	0.0754
<i>Ln[Pay Gap]</i>	0/1	4,863						0.0752
<i>Ln[Pay Gap]</i>	None	4,863						0.0743
<i>Ln[Delta]</i>	All	5,098	233.4	286.7	16,901.79	60.10%	0.000	0.0414
<i>Ln[Delta]</i>	Top	5,098	2.002	1.075	1.1374	3.30%	0.0212	0.0339
<i>Ln[Delta]</i>	0/1	5,098						0.0312
<i>Ln[Delta]</i>	None	5,098						0.0308
<i>Ln[Vega]</i>	All	5,098	9284	350.9	7,300.97	3.40%	0.000	0.0247
<i>Ln[Vega]</i>	Top	5,098	1.829	0.925	0.98997	3.30%	0.0394	0.0130
<i>Ln[Vega]</i>	0/1	5,098						0.00931
<i>Ln[Vega]</i>	None	5,098						0.00923
<i>P-Vesting</i>	All	5,098	209.6	459.8	69,461.36	84.40%	0.000	0.0538
<i>P-Vesting</i>	Top	5,098	2.953	1.871	1.957	2.10%	0.000461	0.0469
<i>P-Vesting</i>	0/1	5,098						0.0427
<i>P-Vesting</i>	None	5,098						0.0392
<i>P-Peer</i>	All	5,098	542.1	979.7	86,932.48	70.50%	0.000	0.0307
<i>P-Peer</i>	Top	5,098	1.373	0.926	0.9811	15.10%	0.172	0.0228
<i>P-Peer</i>	0/1	5,098						0.0187
<i>P-Peer</i>	None	5,098						0.0189

Table 11 Summary of placebo tests without lagged dependent variables in the regressions

This table provides a summary of our scramble tests without the lagged dependent variable as an independent variable in the regression. This table presents the results of the placebo tests in Table 4 – 8 with randomly assigned consultants. In Panel A, we create an indicator variable for each unique consultant. In Panel B, we create an indicator variable for each of the top 10 consultants

Panel A: Consultant dummy for each consultant												
Dependent variable	Actual adj. within $r^2$	% Placebo adj. within $r^2 < \text{Actual adj. within } r^2$	% Placebo adj. within $r^2 = \text{Actual adj. within } r^2$	% Placebo adj. within $r^2 > \text{Actual adj. within } r^2$	Median Placebo adj. $r^2$	Mean Placebo adj. $r^2$	Actual F-stats	% Placebo F-stats < Actual F-stats	% Placebo F-stats = Actual F-stats	% Placebo F-stats > Actual F-stats	Median Placebo F-stats	Mean Placebo F-stats
<i>Ln[Salary]</i>	0.0520	46.60%	0.40%	53.00%	0.0543	0.0714	93.2	12.00%	0.00%	88.00%	382.8	77334.1
<i>Ln[Bonus]</i>	0.1770	42.30%	10.70%	47.00%	0.1770	0.1773	187.4	33.10%	0.00%	66.90%	264.1	4930312.6
<i>Ln[Cash]</i>	0.2020	42.70%	7.30%	50.00%	0.2025	0.2037	166.2	25.40%	0.00%	74.60%	294.2	176956.6
<i>Ln[Equity]</i>	0.0451	84.80%	0.50%	14.70%	0.0399	0.0401	250.8	35.30%	0.10%	64.60%	358.4	23894.3
<i>Ln[Debt]</i>	0.1540	84.60%	2.10%	13.30%	0.1420	0.1435	558.0	44.30%	0.00%	55.70%	632.0	10787.8
<i>Ln[Pay Level]</i>	0.0910	73.30%	0.10%	26.60%	0.0870	0.0877	511.8	72.40%	0.00%	27.60%	278.3	52528.8
<i>Salary%</i>	0.0724	77.60%	0.20%	22.20%	0.0683	0.0688	182.3	32.40%	0.00%	67.60%	290.7	41378.2
<i>Bonus%</i>	0.1700	72.30%	6.60%	21.10%	0.1670	0.1672	68.9	3.10%	0.00%	96.90%	270.5	12947.8
<i>Equity%</i>	0.0535	88.20%	0.70%	11.10%	0.0487	0.0486	239.0	43.30%	0.00%	56.70%	277.3	8616.4
<i>Ln[Pay Gap]</i>	0.0814	63.30%	0.60%	36.10%	0.0794	0.0800	363.7	51.80%	0.10%	48.10%	347.1	905326.7
<i>Ln[Delta]</i>	0.0414	73.90%	0.70%	25.40%	0.0383	0.0384	233.4	39.90%	0.00%	60.10%	286.7	16901.8
<i>Ln[Vega]</i>	0.0247	80.50%	0.30%	19.20%	0.0197	0.0200	9284.0	96.60%	0.00%	3.40%	350.9	7301.0
<i>P-Vesting</i>	0.0538	4.80%	0.20%	95.00%	0.0637	0.0640	209.6	15.60%	0.00%	84.40%	459.8	69461.4
<i>P-Peer</i>	0.0307	6.50%	0.10%	93.40%	0.0443	0.0448	542.1	29.50%	0.00%	70.50%	979.7	86932.5

Panel B: Consultant dummy for each of top 10 consultants

Dependent variable	Actual adj. within $r^2$	% Placebo adj. within $r^2 <$ Actual adj. within $r^2$	% Placebo adj. within $r^2 =$ Actual adj. within $r^2$	% Placebo adj. within $r^2 >$ Actual within adj. $r^2$	Median Placebo adj. $r^2$	Mean Placebo adj. $r^2$	Actual F-stats	% Placebo F-stats $<$ Actual F-stats	% Placebo F-stats $=$ Actual F-stats	%Placebo F-stats $>$ Actual F-stats	Median Placebo F-stats	Mean Placebo F-stats
<i>Ln[Salary]</i>	0.0470	92.70%	0.50%	6.90%	0.0426	0.0429	1.053	74.90%	0.10%	25.00%	0.822	0.867
<i>Ln[Bonus]</i>	0.1720	13.90%	43.90%	42.20%	0.1720	0.1724	0.718	26.40%	0.30%	73.30%	0.928	0.989
<i>Ln[Cash]</i>	0.1960	76.50%	14.80%	8.70%	0.1950	0.1947	1.558	67.80%	0.00%	32.20%	1.375	1.432
<i>Ln[Equity]</i>	0.0342	83.10%	2.00%	14.90%	0.0330	0.0331	1.757	87.90%	0.00%	12.10%	1.199	1.266
<i>Ln[Debt]</i>	0.1260	79.30%	11.30%	9.40%	0.1240	0.1244	1.181	97.00%	0.00%	3.00%	0.911	0.956
<i>Ln[Pay Level]</i>	0.0809	48.20%	4.80%	47.00%	0.0809	0.0811	1.473	69.30%	0.20%	30.50%	1.261	1.331
<i>Salary%</i>	0.0645	86.40%	1.10%	12.50%	0.0632	0.0634	1.947	80.80%	0.00%	19.20%	1.579	1.638
<i>Bonus%</i>	0.1590	20.70%	38.50%	40.80%	0.1590	0.1593	1.343	58.90%	0.00%	41.10%	1.257	1.305
<i>Equity%</i>	0.0448	92.60%	0.70%	6.70%	0.0429	0.0430	1.863	94.10%	0.00%	5.90%	1.066	1.127
<i>Ln[Pay Gap]</i>	0.0754	52.60%	4.20%	43.20%	0.0753	0.0754	0.992	38.10%	0.00%	61.90%	1.092	1.154
<i>Ln[Delta]</i>	0.0339	94.40%	0.50%	5.10%	0.0317	0.0318	2.002	96.70%	0.00%	3.30%	1.075	1.137
<i>Ln[Vega]</i>	0.0130	96.70%	0.50%	2.80%	0.0100	0.0101	1.829	96.70%	0.00%	3.30%	0.925	0.990
<i>P-Vesting</i>	0.0469	93.70%	0.40%	5.90%	0.0440	0.0442	2.953	97.80%	0.10%	2.10%	1.871	1.957
<i>P-Peer</i>	0.0228	84.40%	0.90%	14.70%	0.0207	0.0210	1.373	84.70%	0.20%	15.10%	0.926	0.981

Table 12. Adjusted within  $r^2$  for subsamples split by *GIM Index*

Panel A of the table presents adjusted within  $r^2$  for subsamples split by whether the *GIM Index* is greater than or equal to 10 (poor governance) or less than 10 (good governance). Panel B of the table presents adjusted within  $r^2$  for subsample comprised of poor governance firms (*GIM index*  $\geq 10$ ) further split by whether the compensation consultant has other businesses unrelated to compensation consulting. The first column in each subsample reports the adjusted within  $r^2$  for regressions in which we include individual consultant dummy variables. The second column in each subsample reports the adjusted within  $r^2$  for regressions in which we include a dummy variable that equals one if the firm employed a compensation consultant, and zero otherwise. The third column in each subsample reports the adjusted within  $r^2$  for regressions in which we do not include any consultant dummy variables. All control variables are the same as those employed in the regressions reported in Table 4 – 8 for the specific compensation variable.

Variable	Panel A: Sample split by <i>GIM Index</i>						Panel B: Subsample with <i>GIM Index</i> $\geq 10$ split by whether or not consultant has other businesses unrelated to compensation consulting					
	<i>GIM Index</i> $\geq 10$			<i>GIM Index</i> $< 10$			<i>GIM Index</i> $\geq 10$ and Consultant Unrelated Business = 1			<i>GIM Index</i> $\geq 10$ and Consultant Unrelated Business = 0		
	All	0/1	No	All	0/1	No	All	0/1	No	All	0/1	No
<i>Ln[Salary]</i>	0.3200	0.0606	0.0610	0.0912	0.0913	0.0915	0.1370	0.1220	0.1220	0.4790	0.0562	0.0553
<i>Ln[Bonus]</i>	0.2020	0.1890	0.1890	0.1630	0.1560	0.1560	0.1950	0.1950	0.1960	0.2580	0.2220	0.2230
<i>Ln[Cash]</i>	0.2640	0.2410	0.2410	0.1750	0.1670	0.1680	0.2410	0.2240	0.2240	0.2990	0.2760	0.2760
<i>Ln[Equity]</i>	0.0517	0.0442	0.0423	0.0532	0.0413	0.0405	0.1250	0.1190	0.1080	0.0557	0.0268	0.0271
<i>Ln[Pay Level]</i>	0.1200	0.1110	0.1100	0.0769	0.0626	0.0619	0.1680	0.1510	0.1470	0.1210	0.1170	0.1170
<i>Ln[Debt]</i>	0.1280	0.0942	0.0947	0.0540	0.0539	0.0502	0.0177	0.0180	0.0176	0.2080	0.1410	0.1420
<i>Salary%</i>	0.0861	0.0796	0.0763	0.0798	0.0637	0.0597	0.1250	0.1030	0.0925	0.1210	0.0932	0.0938
<i>Bonus%</i>	0.2020	0.1680	0.1680	0.1620	0.1540	0.1530	0.1880	0.1790	0.1790	0.2490	0.2010	0.1970
<i>Equity%</i>	0.0698	0.0551	0.0546	0.0584	0.0480	0.0481	0.1220	0.1140	0.1050	0.0757	0.0516	0.0505
<i>Ln[Delta]</i>	0.0650	0.0536	0.0534	0.0533	0.0423	0.0420	0.1440	0.1380	0.1310	0.0588	0.0381	0.0359
<i>Ln[Vega]</i>	0.0255	0.0050	0.0048	0.0262	0.0087	0.0090	0.0630	0.0245	0.0227	0.0383	0.0268	0.0279
<i>P-Vesting</i>	0.1110	0.0526	0.0530	0.0336	0.0077	0.0082	0.0332	0.0188	0.0199	0.1710	0.0846	0.0833
<i>P-Peer</i>	0.0692	0.0262	0.0191	0.0283	0.0136	0.0134	0.0687	0.0191	0.0118	0.1190	0.0308	0.0258
<i>Ln[Pay Gap]</i>	0.1180	0.1070	0.1060	0.1050	0.0752	0.0753	0.1770	0.1380	0.1340	0.1420	0.0940	0.0947

Table 13. Consultant characteristics for hiring firms with good versus bad governance

Panel A: Consultant characteristics for hiring firms with good governance (GIM Index < 10) and poor governance (GIM Index ≥ 10)							
Consultant Attribute	GIM Index ≥ 10			GIM Index < 10			p-value for difference in mean (median)
	N	Mean	Median	N	Mean	Median	
<i>Consultant CEO Tenure</i>	1227	4.4499	6.0000	1437	4.1538	5.0000	0.165 (0.009***)
<i>Consultant Firm Age</i>	1652	59.3759	69.0000	1851	48.9827	37.0000	0.000*** (0.000***)
<i>Consultant Market Share</i>	1973	0.0738	0.0791	2454	0.0799	0.0791	0.001*** (0.167)
<i>Consultant Conflict of Interest</i>	1783	0.1211	1.0000	2040	0.0647	1.0000	0.000*** (0.000***)
<i>Consultant Public Firm</i>	1690	0.4112	0.0000	1922	0.3933	0.0000	0.274 (0.274)
<i>Consultant Related Business</i>	1690	0.1976	0.0000	1922	0.2019	0.0000	0.751 (0.751)
<i>Consultant Unrelated Business</i>	1690	0.5704	1.0000	1922	0.4662	0.0000	0.000*** (0.000***)
Panel B: Consultant characteristics for hiring firms with poor governance (GIM Index ≥ 10) who hire consultants with or without other businesses							
Consultant Attribute	No other business			With other business			p-value for difference in mean (median)
	N	Mean	Median	N	Mean	Median	
<i>Consultant CEO Tenure</i>	556	5.5845	6	671	3.5097	6.0000	0.000*** (0.000***)
<i>Consultant Firm Age</i>	694	52.0821	34	958	64.6597	71.0000	0.000*** (0.000***)
<i>Consultant Market Share</i>	726	0.0452	0.041328	964	0.0751	0.0906	0.000*** (0.000***)
<i>Consultant Conflict of Interest</i>	726	0.0992	1	964	0.1473	1.0000	0.003*** (0.003***)
<i>Consultant Public Firm</i>	726	0.3871	0	964	0.4295	0.0000	0.079* (0.080*)
<i>Consultant Related Business</i>	726	0.4022	0	964	0.0436	0.0000	0.000*** (0.000***)

Table 14. Relation between consultant performance fixed effects with consultant fixed effects for each component of compensation

Each number reported in the table is the coefficient (and its associated t-statistic) from a regression in which the dependent variable is the consultant fixed effect either on ROA or Tobin's q and the independent variable is the consultant fixed effect obtained from a regression for each component of compensation that is reported in Tables 4 – 8. \*\*\*, \*\*, \* represent significance at the 1%, 5%, and 10% significance level, respectively.

Compensation Variable	Panel A: GIM Index $\geq 10$		Panel B: GIM Index $\geq 10$ and Consultant does not have other businesses	
	ROA	Tobin's Q	ROA	Tobin's Q
<i>Ln[Salary]</i>	-0.1565*** (-3.59)	-0.5193** (-2.18)	-0.1726*** (-3.47)	-0.6273** (-2.52)
<i>Ln[Bonus]</i>	0.0039 (0.94)	0.0347 (1.61)	0.0045 (0.66)	0.0427 (1.11)
<i>Ln[Cash]</i>	-0.0294 (-1.20)	-0.0150 (-0.12)	-0.0607* (-1.89)	-0.1541 (-0.79)
<i>Ln[Equity]</i>	0.0037 (0.55)	-0.0111 (-0.33)	0.0033 (0.40)	0.0091 (0.19)
<i>Ln[Pay Level]</i>	-0.0284 (-1.07)	-0.1490 (-1.11)	-0.0344 (-0.78)	0.1055 (0.43)
<i>Ln[Debt]</i>	0.0021 (0.34)	-0.0271 (-0.87)	-0.0097 (-1.40)	-0.0594 (-1.55)
<i>Salary%</i>	-0.1482* (-1.86)	-0.5363 (-1.19)	-0.2147** (-2.50)	-1.2402** (-2.30)
<i>Bonus%</i>	0.0184 (0.31)	0.4249 (1.38)	0.0095 (0.11)	0.1598 (0.30)
<i>Equity%</i>	0.0389 (0.69)	-0.1268 (-0.41)	0.0307 (0.35)	0.2249 (0.47)
<i>Ln[Delta]</i>	0.0020 (0.15)	-0.0362 (-0.56)	0.0022 (0.12)	0.0093 (0.09)
<i>Ln[Vega]</i>	-0.0011 (-0.10)	-0.0643 (-1.24)	0.0173 (1.05)	0.0130 (0.16)
<i>P-Peer</i>	-0.0064 (-0.17)	0.0188 (0.11)	-0.0019 (-0.05)	-0.1306 (-0.60)
<i>P-Vesting</i>	0.0215 (0.79)	-0.0051 (-0.04)	0.0089 (0.30)	-0.0677 (-0.40)
<i>Ln[Pay Gap]</i>	-0.0221 (-1.53)	-0.1099 (-1.46)	-0.0080 (-0.52)	0.1155 (1.07)