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Executive Compensation and Regulation Imposed Governance: Evidence from the California Non-Profit Integrity Act (2004)

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ABSTRACT: This study examines the impact of the California Nonprofit Integrity Act of 2004 on CEO compensation costs in affected organizations. Contrary to the stated objective of the Act that executive compensation is "just and reasonable," we find that CEO compensation costs for affected nonprofits during the post-regulation periods have increased by about 6.3 percent when compared with a control group of comparable unaffected nonprofits. In addition, the relative increase in CEO compensation appears to come from nonprofits that have experienced greater regulatory cost increases. We do not find evidence that the Act resulted in a change in CEO pay performance sensitivity. The observed CEO pay increase is not systematically different across nonprofits that underpaid versus those that overpaid their CEOs during pre-Act periods. Overall, this paper highlights the unintended consequences of regulatory attempts to enhance governance in the not-for-profit sector.

Keywords: *executive compensation; governance; regulation; nonprofits; California Nonprofit Integrity Act of 2004.*

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I. INTRODUCTION

This paper investigates the impact of California's Nonprofit Integrity Act of 2004 on the executive compensation costs of affected nonprofit organizations. The California Nonprofit Integrity Act of 2004 (hereafter, "the Act" or "the regulation") became effective on January 1, 2005 and is closely modeled after the Sarbanes-Oxley Act (hereafter, SOX).[1] It is regarded as a pioneering piece of regulatory legislation attempting to strengthen governance mechanisms in the not-for-profit sector (Ljung 2005). The Act includes requirements for boards of directors of nonprofit organizations to approve the compensation levels of their Chief Executive Officer (CEO) and Chief Financial Officer (CFO) or treasurer and to ensure that the compensation paid is "just and reasonable."

Both the press and regulators have continuously raised concerns over excess executive compensation in nonprofits (e.g., see Gosselin and Zitner 1997; Lublin 2003; Walsh 1996). The Internal Revenue Service (IRS) introduced sanctions in Internal Revenue Code (IRC) Section 4958 to curb excess compensation in nonprofits, as a part of the Taxpayer Bill of Rights 2 (1996).[2] Further, in June 2004 the U.S. Senate Finance Committee held a hearing titled, "Charity Oversight and Reform: Keeping Bad Things from Happening to Good Charities" (U.S. Senate Finance Committee 2004). The Commissioner of the Internal Revenue Service, Mark W. Everson (2004), testified that:

> We need go no further than our daily newspapers to learn that some charities and private foundations have their own governance problems . . . We are concerned that the governing boards of tax-exempt organizations are not, in all cases, exercising sufficient diligence as they set compensation for the leadership of the organizations. There have been numerous recent reports of executives of both private foundations and public charities who are receiving unreasonably large compensation packages.

Nonprofit managers operate with less compensation oversight than their corporate counterparts. Without shareholders and with less fear of takeovers, nonprofit managers avoid some of the most important disciplining mechanisms facing private sector executives. The numerous reports in the popular press of gross governance failures and scandals in the not-for-profit sector appear consistent with this notion and provide a rationale for regulatory interventions (Ljung 2005).[3] Responding to concerns of excess executive compensation, the California Nonprofit Integrity Act of 2004 requires boards of nonprofits to review and approve CEO and CFO compensation levels as "just and reasonable." Beyond such explicit provisions, other provisions of the Act can also have executive compensation implications, as governance and managerial compensation are extensively interlinked (Hermalin 2005).

Some academics and practitioners have argued that these regulations are either ineffective, or that the costs associated with compliance exceed the intended benefits (Gilkeson 2007). Moreover, they contend that governance mechanisms exogenously imposed by regulators are inherently undesirable in the not-for-profit sector, as the most efficient methods to address agency problems evolve endogenously (Fama and Jensen 1983a, 1983b). Mulligan (2007) and Brakman-Reiser (2004) contend that nonprofit regulations inspired by the Sarbanes-Oxley Act (SOX) of 2002 are likely to be ineffective as they do not adjust for key differences between for-profit and not-for-profit sectors.

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[1] Jackson (2006) terms the Act as "California Sarbanes-Oxley clone legislation."

[2] However, the effectiveness of Section 4958 is debated (see Frumkin 2001).

[3] For example, see Lewis (2000), Harris (2002), Whoriskey and Salmon (2003), Healy (2004), Herbert (2006), McWhirter (2011), and Flaherty and Stephens (2013).

Despite the wider academic debate on the relative merits of nonprofit regulations, there is a lack of empirical research on this issue in general, and on the attempts to control executive compensation in particular. We contribute to this debate by examining the executive compensation implications of the Act. Specifically, we analyze whether the Act has affected the executive compensation levels in affected nonprofits and, if so, how these effects have occurred.

If the salary levels of affected executives were, in fact, unreasonably large and the provisions of the Act aimed at curbing them are effective, then we should observe a relative reduction in post-regulation compensation costs.[4] However, the Act could also lead to higher executive pay for several reasons. First, Hermalin (2005) demonstrates that stronger governance can lead to higher executive pay, as more diligent boards induce greater effort from the managers, for which they should be compensated. Second, as opponents of regulations point out, if the exogenously imposed governance mechanisms are inefficient and result in deadweight costs, then some of these costs are likely to take the form of higher executive compensation because executives must be compensated for the added work caused by increased regulation. Third, Nagel (2007) highlights that greater awareness of salary practices brought about by attempts to improve governance could lead to an increase in salaries of executives who are being underpaid, with no accompanying reduction in salaries of overpaid executives, thereby resulting in an overall increase in executive compensation.

Using a sample of affected California nonprofits from 2000–2010, we first analyze the pre- to post-regulation differences in CEO compensation levels. As our control sample, we use a group of similar nonprofits from states other than California. We use a difference-in-differences research design in order to minimize the likelihood that the observed effects could be due to other unrelated omitted factors. Contrary to the Act's intentions, our findings indicate that the Act has resulted in an *increase* in CEO compensation levels for the affected California nonprofits, compared to the control group. This increase is approximately 6.3 percent higher than the corresponding pre- to post-regulation change in CEO compensation of similar nonprofits in other states.

Next, we investigate probable explanations for this observation of higher post-Act CEO pay for affected nonprofits. We rule out that our finding is due to the introduction of more efficient compensation contracts that minimize agency costs in post-Act periods, because we do not find a post-Act improvement in pay performance sensitivity for affected nonprofits.[5] To the extent that the requirements of the Act led to regulatory costs, in terms of incremental reporting and administrative burdens for which the CEO should be compensated, the higher post-Act CEO compensation would be more pronounced for those nonprofits that likely faced greater regulatory costs. Using the change in accounting fees as the proxy for regulatory costs induced by the Act (Neely 2011), we find this indeed to be the case. Higher post-Act CEO compensation is primarily for those nonprofits that likely experienced greater regulatory costs due to the Act. Finally, we also examine whether higher pay is an unintended outcome of compensation benchmarking where previously underpaid CEOs experience salary increases, while salaries of previously overpaid CEOs remain relatively stable (Nagel 2007). However, we do not find the impact of the Act on executive compensation to differ statistically between entities that likely underpaid and overpaid their CEOs in the pre-Act periods. Overall, added administrative burden on the CEO emerges as the most credible explanation for the higher post-Act compensation.

In additional tests, we investigate whether the Act has had a disproportionate impact on relatively smaller nonprofits, because administrative and reporting requirements of regulations of

[4] The Act should lead to a *relative* reduction in compensation. That is, the post-Act growth rate of CEO compensation for affected nonprofits should be lower than that for unaffected nonprofits in order for the Act's provisions to meet their overall objectives.

[5] Using program ratio as the performance measure, we also examine whether the Act has led to improved performance. We fail to find any evidence that it did. We discuss this result in Section V.

this nature are argued to be especially burdensome to smaller entities (Gilkeson 2007). Consistent with this argument, we find some support indicating that the increase in post-Act CEO compensation occurred primarily in smaller affected nonprofits.

This paper makes important contributions to the literature on compensation regulation in general and compensation regulation in the not-for-profit sector in particular. While important institutional differences make it difficult to extend findings on compensation regulation in the corporate sector into nonprofit settings, the empirical results remain largely mixed even within the corporate sector.[6] Evidence on how regulatory actions affect executive compensation in the not-for-profit sector is especially scarce. In a study addressing the financial reporting quality and commercial fundraising activity implications of the Act, Neely (2011) documents that the post-Act increase in compensation of officers and directors is smaller for affected nonprofits when compared with those that are unaffected. Unlike Neely (2011), who investigates total compensation of managers and directors, we focus squarely on CEO compensation, as the provisions of Section 12586(g) of the Act that attempt to ensure that executive compensation is "just and reasonable" apply only to the CEO and CFO. We find that the CEO pay has increased more for affected nonprofits in post-Act periods. Moreover, we also investigate potential explanations for this finding and conclude that added administrative burdens are a likely cause. In this regard, this paper expands our knowledge of the efficacy of governance regulations in the not-for-profit sector. The findings of the paper could be especially important for policy makers as more states contemplate similar SOX-inspired nonprofit legislation (Mulligan 2007).

The remainder of the paper proceeds as follows: In Section II, we discuss the related literature and build our main hypothesis. Section III presents the sample selection and research design, descriptive statistics, and our main findings. In Section IV, we explore the potential explanations for our finding of higher post-Act CEO pay for affected nonprofits. Section V reports the results of some additional tests, and Section VI concludes.

II. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Whether regulation-imposed governance mechanisms lead to more desirable executive compensation practices is a contentious issue in both the corporate and the not-for-profit sectors. For instance, the evidence on the efficacy of the Internal Revenue Code Section 162(m), which aimed to improve executive compensation practices in the corporate sector by curtailing the corporate tax deductibility of nonperformance-related compensation for top executives, is largely mixed. While Perry and Zenner (2001) and Balsam and Ryan (2007) report that the provision has been somewhat successful in moderating the growth rate of executive compensation, Rose and Wolfram (2002) fail to find convincing evidence of the regulation improving pay performance sensitivity. Further, Balsam (2002) and Lublin (2003) report that there has been a substantial increase in CEO compensation subsequent to the enactment of Section 162(m). Similarly, Nagel (2007) investigates executive compensation effects of the mandated disclosure of CEO pay in 1992 and the 2004 New York Stock Exchange (NYSE) listing requirement that compensation committees be independent and fully responsible for hiring and paying the CEOs, and fails to find evidence to suggest that either regulation is successful in curtailing excess CEO pay.

It could be argued that there is a comparatively greater role for regulatory intervention in governance and executive compensation practices in the not-for-profit sector because the absence of residual claimants with strong monitoring incentives and the virtual immunity from ousters via takeovers present nonprofit managers with greater latitude to expropriate the firm's assets and engage in other forms of opportunistic behavior, such as abusive compensation practices (e.g., see

[6] We discuss these prior findings in the corporate sector in some detail in Section II.

Barringer 1992; DiLorenzo 1992; Gaul and Borowski 1993; Gosselin and Zitner 1997; Lublin 2003; Walsh 1996). That said, Fama and Jensen (1983a, 1983b) argue that absence of alienable residual claims in the not-for-profit sector is simply a natural response to avoid the donor-residual claimant agency problems that could arise in such entities. They note that due to this unique feature, nonprofits have developed some governance mechanisms that are distinctly different from those of for-profit corporations. These include self-perpetuating boards, presence of major donors on the boards of directors, and the general absence of internal agents as voting members of the board. If the agency conflicts in nonprofits can be efficiently resolved through governance mechanisms that emerge endogenously, then the regulatory imposition of governance rules would be both unnecessary and costly. The doubts raised by Mulligan (2007) and Brakman-Reiser (2004) about the potential efficacy of SOX-inspired governance reforms in the not-for-profit sector are consistent with such reasoning.

California's Nonprofit Integrity Act of 2004 is considered a watershed event in attempts to regulate governance and compensation practices in the not-for-profit sector with SOX-like legislation (Ljung 2005). The Act broadly covers two areas: (1) governance, and (2) commercial fundraising activities of nonprofit organizations. The main provisions include:

1. Requirement to prepare publicly accessible annual financial statements audited by an independent public accountant (CPA) (Government Code Section 12586(e)(1)).
2. Establishment of an audit committee that is responsible for making recommendations on the hiring and firing of auditors, negotiating auditor compensation, approving nonaudit services by the auditor, and ensuring that financial affairs of the nonprofit organization are in order (Government Code Section 12586(e)(2)).
3. Requirement that nonprofits have their governing boards or authorized board committees review and approve the compensation of the Chief Executive Officer (CEO) or President, and the compensation of the Chief Financial Officer (CFO) or treasurer, and ensure that the payment is "just and reasonable" (Government Code Section 12586(g)).
4. Numerous provisions aimed at regulating commercial fundraising activities by nonprofit organizations (Government Code Section 12599).

The Act applies to all charitable organizations, unincorporated associations, and trusts over which the State of California or the Attorney General has enforcement or supervisory powers. However, provisions 1 and 2 above apply only to those nonprofits with gross revenues exceeding $2 million. The $2 million threshold excludes grants received from governmental entities, if the nonprofit provides an accounting of how it used the grant funds. Moreover, educational institutions, religious organizations, hospitals, licensed healthcare service plans, and cemeteries are exempt from the provisions of the Act.

This study focuses on executive compensation implications of the Act. We note that despite the inconclusive evidence on the impact of regulation on compensation practices described above, there is a paucity of research examining this issue in the not-for-profit sector in general, and in the context of the Act in particular. One exception is Neely (2011), who examines whether the Act had any impact on executive compensation. However, our paper differs substantially from Neely's (2011) study of the initial impact of the Act along a number of key dimensions. While Neely (2011) examines the pre- to post-Act differences in executive compensation within his broader objective of investigating reporting quality and fundraising issues, our study is exclusively focused on the executive compensation implications of the Act. Therefore, we investigate not only whether the Act has impacted executive compensation of affected entities, but also, more importantly, potential explanations for such impact. Moreover, while Neely (2011) inspects the changes in compensation of officers, directors, etc., as reported in line 25 of Form 990, we focus our study on CEO

compensation because the provisions of Section 12586(g) of the Act that attempt to ensure executive compensation is "just and reasonable" apply only to the CEO and CFO.[7]

In a normative sense, if the executive compensation in nonprofits is indeed excessive and the compensation review requirements of the Act are effective, then we would expect the Act to temper the growth in CEO compensation of affected nonprofits, when compared with nonprofits unaffected by the Act. In other words, pre- to post-Act increases in CEO compensation levels would be smaller for affected nonprofits, *relative to* nonprofits that are unaffected by the Act. *Ceteris paribus,* such an observation will be broadly consistent with the normative notion of the Act being successful in addressing the problem of excess compensation in California nonprofits.

However, there are also reasons to believe that the provisions of the Act would not make any meaningful impact on executive compensation. For instance, one could argue that the compensation-related provisions of the Act lack the teeth to make a substantial difference, because the Act neither defines what is "just and reasonable" compensation, nor does it prescribe any penalties to boards that fail to appropriately "review and approve" executive compensation as prescribed by the Act. In addition, Bebchuk and Fried (2003) argue in the context of the corporate sector that ensuring efficient executive compensation through board monitoring is exceedingly difficult because board members have strong incentives to maintain cordial relations with management. If this characterization is accurate for the not-for-profit sector as well, then the requirement of the Act that the board "review and approve" CEO and CFO compensation may not serve as a sufficiently strong preventive measure.

Finally, it is also possible for the provisions of the Act to result in a relative *increase* in executive compensation levels. This could take place due to at least three reasons. First, Hermalin (2005) demonstrates analytically that stronger governance can lead to higher CEO pay as more diligent boards make the CEO work harder in equilibrium, so that the CEO's equilibrium utility falls, resulting in him or her demanding to be compensated for this loss of utility. Second, according to those who argue that most efficient governance mechanisms emerge endogenously (e.g., Fama and Jensen 1983a, 1983b), attempts at exogenously imposing governance mechanisms are inherently value-destroying. Under this view, existing levels of executive compensation can be seen as the most efficient equilibrium for the purpose of attracting and retaining managerial talent and minimizing agency conflicts. Added reporting and administrative burdens imposed by regulations increase the level of non-value-adding activities carried out by both the organization as a whole and its executives in particular, thereby creating deadweight costs. A third reason is the possibility that the regulation simply increases the opportunistic use of compensation benchmarking practices where salaries of CEOs who are overpaid remain unchanged, while those of CEOs who are underpaid are increased (Nagel 2007). Of the three potential reasons that may result in higher executive pay, the first cannot be viewed as an adverse outcome, as higher pay is associated with greater managerial effort. The second reason suggests a failure of the regulation in the form of an unintended negative consequence. The third reason can be viewed as an unintended consequence in that the aggregate executive compensation costs increase without an accompanying improvement in performance.

As the above discussion postulates, the impact of the California Nonprofit Integrity Act of 2004 on executive compensation levels is best determined through empirical examination. Hence, we present our main hypothesis as follows (null form):

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[7] Additionally, while Neely's (2011) sample is limited to only one year before and after the enactment of the Act, we carry out our study over a longer sample period, thus allowing us a longer time horizon to evaluate the effectiveness of the Act. Also, while Neely's (2011) analysis is primarily univariate, we employ multivariate model specifications with a comprehensive set of control variables so that the concerns over confounding effects are greatly mitigated.

H1: In comparison to a control group of nonprofits, the nonprofits affected by the California Nonprofit Integrity Act of 2004 do not experience a pre- to post-regulation difference in the level of CEO compensation.

III. SAMPLE SELECTION, RESEARCH DESIGN, DESCRIPTIVE STATISTICS, AND MAIN RESULTS

Sample Selection

We obtain the Statistics of Income (SOI) and Compensation (SOI Comp) data files from the National Center for Charitable Statistics (NCCS). We investigate how the Act has influenced the CEO compensation of affected California nonprofits in comparison to a control group of unaffected nonprofits domiciled in other states. The control group consists of nonprofits that meet the industry and size requirements of the California Nonprofit Integrity Act and, hence, would have been covered by the Act had they been domiciled in California. We exclude nonprofits domiciled in the states of Connecticut, Kansas, Maine, Massachusetts, New Hampshire, and West Virginia from the control group because these states have also enacted nonprofit governance regulations during the sample period (Mulligan 2007), following in the footsteps of California. Because both the treatment group and the control group are exposed to identical regulations at the federal level, any results we find cannot be attributed to regulatory and oversight changes at the federal level, such as the Internal Revenue Service's Intermediate Sanctions (Internal Revenue Code Section 4958) issued in January 2002.

Our sample covers the period from 2000 to 2010.[8] We remove observations from the implementation year (2004) from our analyses. We also ensure that the reporting year covered in each observation falls entirely within either pre- or post-Act periods. Firm-years that end on or before December 31, 2003 are designated as pre-Act, while those that begin on or after January 1, 2005 are designated as post-Act.

We start with an initial sample of 166,345 firm-year observations for the 2000–2010 period on the NCCS database. We delete observations from industries that are exempted from the requirements of the Act, observations with missing values for key variables, and observations from Connecticut, Kansas, Maine, Massachusetts, New Hampshire, and West Virginia, as these states enacted similar legislation following California. This leads to a loss of 91,273 firm-year observations. A further 25,907 observations are lost because they had missing values for CEO compensation. We also delete observations from organizations with gross annual receipts of less than $2 million, because certain important provisions of the Act do not apply to them. We lose 15,435 firm-year observations as a result. We ensure that a firm has at least one observation each in pre- and post-Act periods. This inclusion restriction causes us to lose 13,907 firm-year observations. The sample is further truncated at 1 percent and 99 percent of the distributions of the dependent and independent variables to mitigate the effects of possible outliers. This causes us to lose a further 991 firm-year observations. Thus, our final sample consists of 18,832 firm-year observations (5,466 unique firms), of which affected California nonprofits account for 2,205 firm-year observations (639 unique firms). The control group consists of 16,627 firm-year observations (4,827 unique firms).

Table 1 presents the industry distribution of our sample. There is a significant concentration of organizations in Human Services, which accounts for 30.1 percent and 36.5 percent of the

[8] The length of our sample period is largely consistent with those of compensation regulation studies in the corporate sector (e.g., see Balsam and Ryan 2007; Rose and Wolfram 2002). Use of a relatively long event window increases statistical power, but the likelihood of confounding events affecting the results increases. We mitigate the latter concern by using difference-in-differences specifications in all our tests.

TABLE 1

Industry Distribution by Number of Observations and Percentage

	California		Control	
Industry	**Obs.**	**%**	**Obs.**	**%**
Arts, Culture, and Humanities	341	16.0	2,118	12.7
Environment	96	4.4	461	2.8
Animal-Related	53	2.4	396	2.4
Voluntary Health Associations and Medical Disciplines	38	2.0	428	2.6
Medical Research	83	3.8	550	3.3
Employment	74	3.4	504	3.0
Food, Agriculture, and Nutrition	36	1.6	161	1.0
Housing and Shelter	252	11.4	745	4.5
Public Safety, Disaster Preparedness and Relief	4	0.2	40	0.2
Recreation and Sports	41	1.9	384	2.3
Youth Development	49	2.2	372	2.2
Human Services	682	30.1	6,063	36.5
International, Foreign Affairs, and National Security	56	2.5	711	4.3
Civil Rights, Social Action and Advocacy	8	0.4	93	0.6
Community Improvement and Capacity Building	51	2.3	501	3.0
Philanthropy, Voluntarism, and Grantmaking Foundations	216	9.8	2,171	13.1
Science and Technology	45	2.0	446	2.7
Social Science	33	1.5	126	0.8
Public and Societal Benefit	29	1.3	250	1.5
Mutual and Membership Benefit	18	0.8	107	0.6
Total	2,205	100.00	16,627	100.00

The sample consists of 501(c)(3) organizations that report to the Attorney General's office in California and the other U.S. states, *excluding* Connecticut, Kansas, Maine, Massachusetts, New Hampshire, and West Virginia. We exclude these states because they have enacted similar legislations, following in the footsteps of California. The IRS Code Section 501(c)(3) provides for an exemption from federal income tax and allows donors to these organizations to deduct their donation on their federal income tax return. To qualify for 501(c)(3) exemption, an organization must be organized to operate exclusively for one or more of the following purposes: charitable, religious, educational, scientific, literary, testing for public safety, fostering national or international amateur sports competition, and/or the prevention of cruelty to children or animals. The sample covers the period from 2000 to 2010, excluding 2004, the implementation year of the California Nonprofit Integrity Act. The sample nonprofits have data on both pre- and post-Act periods. The sample excludes nonprofits with gross receipts less than $2 million because some of the Act's provisions do not apply to them. Nonprofits classified as religious, grantmaking, health, education, or cemeteries are excluded as they are exempt from the Act.

California and control samples, respectively. Arts, Culture, and Humanities organizations and Philanthropy, Voluntarism, and Grantmaking Foundations account for approximately 12–15 percent and 10–13 percent of the observations across the groups, respectively. While we do not find substantial differences in industry distribution between treatment and control groups, we control for industry membership in all our empirical models.

Research Design

H1 tests whether the Act has had an impact on the executive compensation costs of affected nonprofits. We estimate the following model to test H1 (for firm i and year t) while clustering the standard errors at the firm and year levels (Petersen 2009):

$$LnComp_{it} = \alpha_0 + \alpha_1 Calif_i + \alpha_2 Post_t + \alpha_3 Calif_i{*}Post_t + \alpha_4 LnTA_{it} + \alpha_5 Complex_{it} + \alpha_6 Endow_{it} + \alpha_7 Donations_{it} + \alpha_8 Excess_{it} + \alpha_9 StateInc_{it} + \alpha_{10} StateGov_{it} + \alpha_{11} Program_{it} + \alpha_j Industry_i + \varepsilon_{it}. \quad (1)$$

The natural logarithm (log) of CEO compensation (*LnComp*) is the dependent variable. The SOI Comp database reports compensation paid to officers, directors, and key employees. Assuming that the CEO is the highest-paid executive, we measure CEO compensation as the sum of compensation (C020), contributions to employment benefit plans and deferred compensation (C030), and expense accounts and other allowances (C040).

Calif is an indicator variable taking the value of 1 if the organization is based in California, and 0 otherwise, while the indicator variable *Post* takes the value of 1 for years after the Act (2005–2010), and 0 otherwise (2000–2003). The variable of interest is the interaction term, *Calif* $*$ *Post,* with the estimated coefficient, α_3, indicating the pre- to post-Act difference in CEO compensation levels of affected California nonprofits, in comparison to the control group. This difference-in-differences design alleviates concerns of omitted correlated variables. A negative (positive) and significant α_3 would indicate that the Act has resulted in a relative reduction (increase) in CEO compensation of affected nonprofits.

Our regression model includes a number of control variables that are potentially associated with executive compensation. We use the log of total assets (*LnTA*) from line 59 of Form 990 to control for entity size because CEOs of larger nonprofits likely receive higher compensation (Hallock 2002). Conjecturing a positive association between organization complexity and executive compensation, we control for complexity (*Complex*), measured as the number of revenue sources (lines 1 through 11 of Form 990). We control for endowment size (*Endow*) because prior literature suggests that it is associated with CEO compensation (Core, Guay, and Verdi 2006). Endowment size is measured as the sum of cash, savings, and investment securities (line 45, column (b) + line 46, column (b) + line 54, column (b) of Form 990), deflated by total expenses from line 17 of Form 990. We control for total donations from line 1d of Form 990, scaled by total revenue from line 12 of Form 990 (*Donations*). Since size is already controlled for, we do not make a directional prediction on the sign of *Donations*. We also control for the excess of revenues over expenses (*Excess*) (line 12 of Form 990 − line 17 of Form 990). The relation between *Excess* and *LnComp* would be negative if lower levels of revenues over expenses are symptomatic of excessive executive compensation. On the other hand, a positive relation would be expected if highly paid CEOs attempt to create larger *Excess* in order to secure their future benefits or to create an impression of better expense management.

Executive compensation levels across states are likely to be affected by state-level differences in broad economic factors. We use log of per capita income of the state (*StateInc*) to control for such effects. We obtain these data from the website of the Bureau of Economic Analysis.[9] To control for differences in state level factors that could affect the governance of nonprofits independent of the Act, we employ a state level governance index (*StateGov*) based on the 17-factor index developed by Desai and Yetman (2006), who include 11 detection factors and six prosecution factors. Accordingly, *StateGov* could vary from 1 to 17 depending on the number of governance measures present in each state. We control for the program ratio (*Program*) based on Baber, Daniel, and Roberts (2002), who find that changes in executive compensation are associated with changes in the program ratio. The program ratio is measured as the ratio of program-related expenses (line 13 of Form 990) to total expenses (line 17 of Form 990). We control for industry-level differences

[9] See Report SA1-3 at: http://www.bea.gov/iTable/iTable.cfm?ReqID=70&step=1&isuri=1&acrdn=4

in CEO compensation through industry dummy variables (*Industry*) defined in terms of the National Taxonomy of Exempt Entities (NTEE1) codes.

Descriptive Statistics

Table 2 presents descriptive statistics for California (Panel A) and the control sample (Panel B), respectively. Each panel depicts descriptive statistics pertaining to the entire group, as well as separately for the pre- and post-Act subgroups. The mean (median) CEO compensation for the California and control samples are 0.253 (0.175), and 0.224 (0.165) million dollars, respectively. Untabulated analyses indicate that the mean of CEO compensation, as well as means of *Total Assets, Total Revenue, Total Expenses, Donations, Endow,* and *Excess,* are larger for California than for the control group. Higher CEO compensation for the California nonprofits is consistent with these organizations being generally larger along several dimensions. The control group exhibits a marginally higher program ratio. The two groups are not statistically different in terms of per capita income.

In untabulated tests, we also examine differences between the pre- and post-Act subgroups. *Compensation* and the other financial variables are higher in post-Act periods for both the California and control groups. In the post-Act period, mean CEO compensation increased by $99,000 for California nonprofits and $76,000 for control group nonprofits. This difference-in-differences univariate compensation is statistically significant (untabulated $p < 0.001$), indicating a greater post-Act relative CEO compensation growth for California. Next, we report the results of multivariate tests that control for potential confounding factors.

Main Results

Table 3 reports estimation results for tests of H1, where we investigate the pre- to post-Act differences in CEO compensation levels. The coefficient of interest is α_3, the coefficient on the interaction term *Calif* $*$ *Post*. It is positive and significant ($\alpha_3 = 0.063$, $p = 0.040$), indicating that the CEO salaries of affected California nonprofits have increased more post-Act than the control group. Because the dependent variable is defined as the log of CEO compensation, the *Calif* $*$ *Post* interaction can be interpreted in percentage terms (Wooldridge 2009). This indicates that the pre- to post-Act increase in the CEO compensation of affected California nonprofits is approximately 6.3 percent higher than the corresponding change in CEO compensation of similar nonprofits in other states. The relative increase is economically significant in percentage terms and, given the pre-Act mean annual compensation of approximately $253,000, translates to an increase of about $16,000. Thus, the results suggest that the Act has had an unintended consequence of raising CEO pay in affected California nonprofits, relative to the control sample.

In terms of the control variables, in Table 3, the coefficient α_1 on *Calif,* which captures the difference in CEO pay levels for California versus the control group in pre-Act periods, is not significant ($\alpha_1 = -0.013$, $p = 0.659$). This suggests that although salaries of California nonprofit CEOs were higher during the pre-Act period, as indicated in the descriptive statistics, these pre-Act differences can be explained by differences in other control variable determinants of pay. As expected, CEO pay is positively associated with size (*LnTA*) and organizational complexity (*Complex*). The relation between CEO pay and total endowment (*Endow*) and excess (*Excess*) is insignificant.[10] While there is a negative relation between compensation and donations (*Donations*), a positive association is found between per capita state income (*StateInc*) and the dependent

[10] Core et al. (2006) report a positive relation between executive compensation and excess endowment. However, in Core at al. (2006), excess endowment is measured as the residual from an expectations model where total endowment is regressed on a number of explanatory variables. Here, we simply control for the level of endowment.

TABLE 2

Descriptive Statistics

Panel A: California

	Total (n = 2,205)			Pre-Act (n = 731)			Post-Act (n = 1,474)		
Variable	**Mean**	**Median**	**S. D.**	**Mean**	**Median**	**S. D.**	**Mean**	**Median**	**S. D.**
Compensation	0.253	0.175	0.357	0.187	0.147	0.161	0.286	0.193	0.418
Total Assets	87.463	32.136	149.622	58.862	22.366	100.807	101.647	37.599	166.893
Total Revenue	41.578	12.739	98.448	30.743	10.957	63.013	46.951	13.722	111.566
Total Expenses	33.921	10.130	84.439	25.886	8.566	59.195	37.905	10.829	94.254
Program	0.811	0.845	0.140	0.807	0.847	0.148	0.813	0.842	0.136
Donations	6.906	0.000	28.284	5.575	0.000	19.810	7.566	0.000	31.642
Endow	33.714	6.210	78.044	26.495	5.259	60.394	37.294	6.853	85.248
Excess	4.073	0.485	29.300	2.369	0.348	11.973	4.928	0.540	34.867
Complex	6.272	6.000	2.307	6.508	6.000	2.340	6.125	6.000	2.274
StateInc	0.039	0.039	0.004	0.035	0.034	0.001	0.041	0.042	0.003
StateGov	14.000	14.000	—	14.000	14.000	—	14.000	14.000	—

Panel B: Control Group

	Total (n = 16,627)			Pre-Act (n = 5,192)			Post-Act (n = 11,435)		
Variable	**Mean**	**Median**	**S. D.**	**Mean**	**Median**	**S. D.**	**Mean**	**Median**	**S. D.**
Compensation	0.224	0.165	0.197	0.172	0.134	0.126	0.248	0.183	0.217
Total Assets	74.591	31.599	131.859	52.140	21.143	99.615	84.785	37.780	142.982
Total Revenue	37.749	13.233	145.206	26.554	10.305	95.200	42.832	15.032	162.671
Total Expenses	31.701	10.348	132.692	22.177	8.182	85.352	36.026	11.649	149.116
Program	0.819	0.849	0.129	0.809	0.846	0.143	0.824	0.850	0.122
Donations	6.828	0.000	75.007	4.545	0.000	35.928	7.864	0.000	87.128
Endow	30.409	6.061	72.639	25.526	5.530	63.075	32.626	6.315	76.489
Excess	2.805	0.415	32.604	1.817	0.283	18.749	3.272	0.497	37.408
Complex	6.186	6.000	2.197	6.349	6.000	2.245	6.091	6.000	2.163
StateInc	0.038	0.036	0.007	0.033	0.032	0.005	0.039	0.037	0.007
StateGov	11.327	13.000	3.025	11.291	13.000	3.037	11.355	13.000	3.015

Panels A and B of Table 2 report descriptive statistics for the California nonprofits affected by Nonprofit Integrity Act (2004) and the control group respectively. The sample is based on the observations for the period 2000–2010, excluding 2004, as defined in Table 1.

All figures, other than *Endow, Program,* and *StateGov,* are expressed in US$ million.

Variable Definitions:

Compensation = total compensation paid to the CEO, from the NCCS Statistics of Income Compensation database, calculated as the sum of compensation (C020), contributions to employment benefit plans and deferred compensation (C030), and expense accounts and other allowances (C040);

Total Assets = total assets at the end of the year, line 59 on Form 990;

Total Revenue = total revenue, line item 12 on Form 990;

Total Expenses = total expenses, line item 17 on Form 990;

Program = ratio of program related expenses to total expenses (line 13, divided by line 17 on Form 990);

Donations = total donations, line item 1d on Form 990;

Endow = average of the sum of cash, savings, and investment securities (Line 45, column (b) + Line 46, column (b) + Line 54, column (b)) deflated by total expenses (Line 17) on Form 990;

Excess = excess of revenues over expenses (Line 12 − Line 17 on Form 990;

Complexity = number of revenue sources (lines 1 through 11 on Form 990);

StateInc = per capita income of the state as reported by the Bureau of Economic Analysis; and

StateGov = state-level (pre-Act) governance index measured as the number of governance factors present, as per Desai and Yetman (2006).

TABLE 3

Tests of H1
Impact of the California Nonprofit Integrity Act of 2004 on CEO Compensation

$$LnComp_{it} = \alpha_0 + \alpha_1 Calif_i + \alpha_2 Post_t + \alpha_3 Calif_i{*}Post_t + \alpha_4 LnTA_{it} + \alpha_5 Complex_{it} + \alpha_6 Endow_{it} + \alpha_7 Donations_{it} + \alpha_8 Excess_{it} + \alpha_9 StateInc_{it} + \alpha_{10} StateGov_{it} + \alpha_{11} Program_{it} + \alpha_j Industry_i + \varepsilon_{it}.$$

		Coefficient	p-value
Intercept	α_0	1.408**	0.024
Calif	α_1	−0.013	0.659
Post	α_2	0.068	0.248
Calif ∗ *Post*	α_3	0.063**	0.040
LnTA	α_4	0.045**	0.024
Complex	α_5	0.023***	0.001
Endow	α_6	~−0.000	0.562
Donations	α_7	−0.089***	0.008
Excess	α_8	0.007	0.220
StateInc	α_9	0.470***	<0.001
StateGov	α_{10}	0.005*	0.097
Program	α_{11}	−0.974***	<0.001
Industry Controls?		Yes	
Adj. R^2		0.434	
n		18,832	

***, **, * Indicate that coefficients are statistically different from 0 at the 1 percent, 5 percent, and 10 percent levels, respectively (two-tailed tests).

The sample is based on the observations for the period 2000–2010, excluding 2004, as defined in Table 1. Industry controls are employed through dummy variables defined in terms of one character National Taxonomy of Exempt Entities (NTEE1) Codes. ~+ (~−) indicate coefficients that are positive (negative), but approximate to 0 when rounded to three decimal places.

Variable Definitions:

LnComp = log of total compensation paid to the CEO. CEO compensation is from the NCCS Statistics of Income Compensation database, calculated as the sum of compensation (C020), contributions to employment benefit plans and deferred compensation (C030), and expense accounts and other allowances (C040);

Calif = a dummy variable that takes a value of 1 if the observation is from California, and 0 otherwise;

Post = a dummy variable that takes a value of 1 for years on or after 2004, and 0 otherwise;

LnTA = log of total assets at the end of the year. Total assets are from line 59 on Form 990;

Complex = number of revenue sources for the organization, based on lines 1 through 11 on Form 990;

Endow = average of the sum of cash, savings, and investment securities (Line 45, column (b) + Line 46, column (b) + Line 54, column (b)) deflated by total expenses (Line 17 on Form 990);

Donations = total donations, line item 1d on Form 990, scaled by total revenue (line 12 on Form 990);

Excess = natural logarithm of the excess of revenues over expenses, Line 12 − Line 17 on Form 990;

StateInc = log of per capita income of the state, as reported by the Bureau of Economic Analysis;

StateGov = state-level (pre-Act) governance index measured as the number of governance factors present, as per Desai and Yetman (2006); and

Program = ratio of program-related expenses to total expenses (line 13 divided by line 17 on Form 990).

variable, indicating that CEOs of higher-income states are paid more. The association between state-level governance (*StateGov*) and compensation is positive, consistent with a positive association between executive compensation and more demanding governance regimes. Finally, we observe a negative relation between CEO pay and program ratio (*Program*). While somewhat surprising, this relation is consistent with the findings of Core (2002) in the corporate sector, where

relation between pay and accounting performance turns negative when the two variables are measured as levels.

IV. INVESTIGATION OF CAUSES BEHIND THE OBSERVED CHANGE IN POST-ACT CEO COMPENSATION

Results reported in the previous section indicate that the Act has resulted in relatively higher post-Act CEO compensation for affected California nonprofits. As briefly mentioned before, the post-Act compensation could be higher due to:

1. Stronger governance mechanisms introduced by the Act, resulting in more efficient compensation contracts where the CEO is induced to work harder and improve productive output, for which she or he is compensated with higher pay.
2. Deadweight regulatory costs as a result of more onerous reporting and administrative burdens of the Act.
3. Increased use of benchmarking practices in post-Act periods, resulting in previously underpaid executives receiving higher pay, without an accompanying decrease in pay for previously overpaid employees.

In this section, we investigate each of these explanations in detail to ascertain potential reasons behind the observed higher pay. Such an investigation is crucial for a comprehensive understanding of the executive compensation implications of the Act.

Impact of the California Nonprofit Integrity Act of 2004 on Pay Performance Sensitivity

While higher post-Act CEO pay may initially appear inconsistent with regulators' objective of making compensation more "just and reasonable," it could be argued that this outcome is, in fact, a result of more efficient compensation contracts induced by the Act.[11] The provision of the Act that requires the board to closely monitor CEO and CFO pay, and other provisions aimed at improving governance, may improve the process of determining executive pay (such as closer scrutiny by directors and the compensation committee, use of formal benchmarking, etc.) and strengthen the link between pay and performance, even though the total pay increases in terms of the dollar amount. In fact, Hermalin (2005) argues that executive pay may increase under a regime of improved governance, as managers are incentivized to work harder. An obvious way to achieve such incentive alignment would be to better align manager pay with organizational performance (Hölmstrom 1979). As long as the increased managerial effort leads to higher output for the firm, the resulting higher executive compensation may not be viewed as a negative outcome. Therefore, we investigate whether the Act has improved the relationship between executive compensation and firm performance (pay performance sensitivity).[12]

In the corporate sector, pay performance sensitivity is broadly measured as the relation between executive pay and a performance measure (see Murphy 1999, Equation (3)) with performance measures typically including either market returns or accounting measures (Lambert and Larcker 1987; Murphy 1985).[13] Program ratio, which captures the proportion of total expenses spent on

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[11] Here, as in the corporate sector literature, "efficient" compensation contracts are defined as compensation arrangements that minimize agency costs (Core, Guay, and Larcker 2003). Generally speaking, a stronger link between managerial compensation and output is associated with lower agency costs. (For instance, agency conflicts are fully eliminated in the extreme case of the owner-manager, where the entire output belongs to the manager.)

[12] In additional tests, we also investigate the impact of the Act on performance itself. See Section V.

[13] Jensen and Murphy (1990) define pay performance sensitivity as the dollar change in CEOs' wealth associated with a dollar change in the wealth of shareholders. We do not employ this definition as nonprofits are not traded in capital markets.

program-related activities, is the most widely used performance measure in the not-for-profit sector (Baber et al. 2002). Prominent charity-rating organizations, such as the American Institute of Philanthropy's Charity Watch and Charity Navigator, use the program ratio as a primary input in their rating processes.[14] Therefore, we measure pay performance sensitivity as the relation between executive compensation and the program ratio (Baber et al. 2002; Krishnan, M. Yetman, and R. Yetman 2006).[15] Accordingly, we augment Model (1) by interacting the program ratio variable (*Program*) with dummy variables of *Post* and *Calif*:[16]

$$\begin{aligned} LnComp_{it} = {} & \beta_0 + \beta_1 Calif_i + \beta_2 Post_t + \beta_3 Calif_i{*}Post_t + \beta_4 LnTA_{it} + \beta_5 Complex_{it} \\ & + \beta_6 Endow_{it} + \beta_7 Donations_{it} + \beta_8 Excess_{it} + \beta_9 StateInc_{it} + \beta_{10} StateGov_{it} \\ & + \beta_{11} Program_{it} + \beta_{12} Program_{it}{*}Calif_i + \beta_{13} Program_{it}{*}Post_t \\ & + \beta_{14} Program_{it}{*}Calif_i{*}Post_t + \beta_j Industry_i + \varepsilon_{it}. \end{aligned} \tag{2}$$

The coefficient of interest is that of the three-way interaction term *Program* ∗ *Calif* ∗ *Post* (β_{14}). A positive and significant coefficient β_{14} would indicate that the CEO pay performance sensitivity has increased post-Act, suggesting compensation arrangements that are more closely aligned with organizational performance.

While Model (2) is a direct modification of Model (1), which was used in testing our main hypothesis, Core (2002) argues that pay performance sensitivity models are better specified when both compensation and performance are measured as change variables (see, also, Baber et al. 2002). Therefore, we also employ an additional regression specification where *LnComp* and *Program* (along with relevant interaction terms) are replaced by Δ*LnComp* and Δ*Program,* respectively.

The results for Model (2) are reported in Column 1 of Table 4. The coefficient of interest is β_{14} on the three-way interaction term *Program* ∗ *Calif* ∗ *Post*. We find that β_{14} is not statistically significant ($\beta_{14} = 0.356$, $p = 0.192$). Hence, we do not find empirical evidence to support the notion that higher post-Act CEO pay is due to the Act invoking more efficient compensation contracts. We also note that while the coefficient on the interaction term *Calif* ∗ *Post* (β_3) is not significant in Column 1 of Table 4, the combined coefficient of *Calif* ∗ *Post* and *Program* ∗ *Calif* ∗ *Post* ($\beta_3 + \beta_{14}$) is positive and highly significant (untabulated, $\beta_3 + \beta_{14} = 0.130$, $p = 0.007$). Thus, for the average California program ratio of 81.1 percent, these coefficient estimates imply a relative post-Act pay increase of 6.3 percent, consistent with the previous inferences with respect to H1 from Model (1).[17]

The results from the alternate specification, where CEO compensation and program ratio are defined as change variables, are reported in Column 2 of Table 4 and they lead to very similar inferences. The coefficient on the three-way interaction term Δ*Program* ∗ *Calif* ∗ *Post* remains insignificant ($\beta_{14} = 0.412$, $p = 0.239$) and fails to support the notion of the Act improving pay performance sensitivity of affected nonprofits.

Impact of the California Nonprofit Integrity Act of 2004 on Executive Compensation due to Costs of Regulation

It is possible that the administrative burdens of the Act have increased the workload of the CEO in domains that are not directly related to entities' productive output (charitable activities). For

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[14] For further details on rating methodologies of Charity Guide and Charity Navigator, respectively, see: http://www.charitywatch.org/criteria.html/ and http://www.charitynavigator.org/index.cfm?bay=content.view&cpid=1284

[15] Baber et al. (2002) dissect program spending into a program ratio component and a revenue component. For parsimony, we include program ratio as the only performance measure. Incorporating revenue and the related interaction terms into the regression model does not alter our inferences.

[16] Although we measure pay performance sensitivity as the contemporaneous relation between performance and pay, use of lagged performance does not alter our inferences with respect to H2.

[17] $\beta_3 + 0.811 * \beta_{14} = -0.226 + 0.811 * 0.356 = 0.063$.

TABLE 4

Impact of the California Nonprofit Integrity Act of 2004 on Pay Performance Sensitivity

$$
\begin{aligned}
LnComp_{it}/\Delta LnComp_{it} = {} & \beta_0 + \beta_1 Calif_i + \beta_2 Post_t + \beta_3 Calif_i{*}Post_t + \beta_4 LnTA_{it} + \beta_5 Complex_{it} \\
& + \beta_6 Endow_{it} + \beta_7 Donations_{it} + \beta_8 Excess_{it} + \beta_9 StateInc_{it} \\
& + \beta_{10} StateGov_{it} + \beta_{11} Program_{it}/\Delta Program_{it} \\
& + \beta_{12} Program_{it}{*}Calif_i/\Delta Program_{it}{*}Calif_i \\
& + \beta_{13} Program_{it}{*}Post_t/\Delta Program_{it}{*}Post_t \\
& + \beta_{14} Program_{it}{*}Calif_i{*}Post_t/\Delta Program_{it}{*}Calif_i{*}Post_t \\
& + \beta_j Industry_i + \varepsilon_{it}.
\end{aligned}
$$

		Dependent Variable			
		LnComp		*ΔLnComp*	
Variable		**Coefficient**	**p-value**	**Coefficient**	**p-value**
Intercept	β_0	1.312**	0.038	−0.601**	0.016
Calif	β_1	0.185	0.297	0.001	0.965
Post	β_2	0.248*	0.091	0.033	0.209
Calif ∗ Post	β_3	−0.226	0.219	−0.004	0.856
LnTA	β_4	0.0445**	0.024	∼−0.000	0.998
Complex	β_5	0.023***	0.001	−0.003	0.126
Endow	β_6	∼−0.000	0.550	∼−0.000**	0.026
Donations	β_7	−0.088***	0.009	−0.021	0.190
Excess	β_8	0.007	0.213	0.006**	0.028
StateInc	β_9	0.468***	<0.001	0.045**	0.039
StateGov	β_{10}	0.005	0.101	∼−0.000	0.632
Program	β_{11}	−0.839***	<0.001		
Program ∗ Calif	β_{12}	−0.244	0.244		
Program ∗ Post	β_{13}	−0.221*	0.098		
Program ∗ Calif ∗ Post	β_{14}	0.356	0.192		
Δ*Program*	β_{11}			0.042***	<0.001
Δ*Program ∗ Calif*	β_{12}			−0.240	0.379
Δ*Program ∗ Post*	β_{13}			0.044	0.592
Δ*Program ∗ Calif ∗ Post*	β_{14}			0.412	0.239
Industry Controls?		Yes		Yes	
Adj. R^2		0.435		0.008	
n		18,832		11,997	

***, **, * Indicate that coefficients are statistically different from 0 at the 1 percent, 5 percent, and 10 percent levels, respectively (two-tailed tests).

The sample is based on the observations for the period 2000–2010, excluding 2004, as defined in Table 1. Δ refers to change variables. Industry controls are employed through dummy variables defined in terms of one-character National Taxonomy of Exempt Entities (NTEE1) Codes. ∼+ (∼−) indicate coefficients that are positive (negative), but approximate to 0 when rounded to three decimal places.

All variables are defined in Table 3.

instance, stricter financial reporting requirements (Sections 12586(e)1 and 12586(e)2) and stricter contracting requirements with respect to fundraising activities (Section 12599(i)) likely increase the CEO's job responsibilities, even though these activities are not directly related to the nonprofit's charitable output. To the extent that the CEO needs to be compensated for the added administrative workload, it could explain the higher post-Act CEO compensation observed in Section III.

To test this conjecture, we need to distinguish between nonprofits that face high versus low regulation costs. We do so by using accounting fees as a key observable cost component that was directly impacted by the Act. Neely (2011) reports a significant increase in accounting fees for affected California nonprofits for the year that immediately follows the Act's implementation. Accordingly, we use the percentage increase in accounting fees from the year before to the year after the implementation of the Act to capture the Act's regulatory costs. Based on the median of the percentage in accounting fee change, we split the sample into two groups termed *High_Cost* and *Low_Cost,* where *High_Cost* (*Low_Cost*) represents nonprofits with higher (lower) than median changes in accounting fees. We then rerun Model (1) for each group separately. A larger positive coefficient on the interaction term *Calif* ∗ *Post* (α_3) for the *High_Cost* group, when compared with that of the *Low_Cost* group, would provide evidence consistent with our regulatory costs conjecture.

These results are reported in Table 5 and are consistent with our assertion. The first (second) column of Table 5 reports results for the *High_Cost* (*Low_Cost*) group. The coefficient on *Calif* ∗ *Post* (α_3) is positive and significant for *High_Cost* group ($\alpha_3^{High\_Cost} = 0.090$, p = 0.017), but is statistically insignificant for *Low_Cost* group ($\alpha_3^{Low\_Cost} = -0.012$, p = 0.451). Thus, it appears that the higher post-Act CEO pay is confined only to affected firms that likely faced higher regulatory costs. Moreover, the coefficient $\alpha_3^{High\_Cost}$ is significantly larger than the coefficient $\alpha_3^{Low\_Cost}$ (p-value = 0.081). These results suggest that burdensome cost of regulation may be a credible explanation for the increased post-Act CEO compensation detected in tests of H1.

Impact of the California Nonprofit Integrity Act of 2004 on Previously Underpaid Executives

While the Act mandates the boards to ensure that the CEO and CFO salaries are "just and reasonable," it does not postulate any guidelines to determine what qualifies as just and reasonable. It is possible that the Act might induce directors to simply seek the services of compensation consultants and/or introduce compensation benchmarking practices merely to justify existing compensation levels. A number of studies document this behavior in the corporate sector (for example, see Bebchuk and Fried 2003; Faulkender and Yang 2010; Wade, Porac, and Pollock 1997). As argued by Nagel (2007), these benchmarking exercises could highlight the instances where executives appear to be underpaid, and may pave the way for pay hikes within this subset of firms. In contrast, pay reductions when executives are overpaid are less likely, as attempts to do so are frequently met with stiff resistance by managers, and strategies such as selective choice of peer group benchmarks can be used to justify existing pay levels. Hence, the aggregate effect of benchmarking will be an increase in executive compensation. Consistent with this notion, Nagel (2007) finds that CEO pay for a given level of performance in the corporate sector has increased since the introduction of detailed pay surveys in the 1980s, and that the proportion of CEOs who are persistently underpaid has decreased. On the other hand, the proportion of CEOs who are overpaid has not changed.

Accordingly, we investigate whether the higher post-Act CEO compensation observed in tests of H1 is due to pay levels increasing for CEOs who are previously underpaid, while those of previously overpaid CEOs remain relatively unchanged. To do so, we follow the corporate sector literature and estimate the expected level of CEO compensation as a linear function of a number of explanatory variables (Core, Guay, and Larcker 2008) by regressing the log of the last pre-Act year's CEO compensation on *LnTA, Complex, Endow, Donations, Excess, Program, StateInc, StateGov,* and industry fixed effects. We run separate regressions for the California and control group nonprofits, and identify nonprofits with below (above) median residuals from this model as likely to be underpaying (overpaying) their CEOs in pre-Act periods.[18] We then run Model (1) on

[18] Median and standard deviation of the residual for California (control group) are 0.039 and 0.479 (0.056 and 0.633), respectively. The means are zero by construction.

TABLE 5

Impact of the California Nonprofit Integrity Act of 2004 on Executive Compensation due to Costs of Regulation

$$LnComp_{it} = \alpha_0 + \alpha_1 Calif_i + \alpha_2 Post_t + \alpha_3 Calif_i{*}Post_t + \alpha_4 LnTA_{it} + \alpha_5 Complex_{it} + \alpha_6 Endow_{it} + \alpha_7 Donations_{it} + \alpha_8 Excess_{it} + \alpha_9 StateInc_{it} + \alpha_{10} StateGov_{it} + \alpha_{11} Program_{it} + \alpha_j Industry_i + \varepsilon_{it}.$$

		High_Cost		*Low_Cost*	
Variable		**Coefficient**	**p-value**	**Coefficient**	**p-value**
Intercept	α_0	2.879***	0.006	1.331	0.167
Calif	α_1	−0.031	0.579	0.030	0.401
Post	α_2	0.061	0.263	0.085*	0.065
Calif ∗ Post	α_3	0.090**	0.017	−0.012	0.451
LnTA	α_4	0.037*	0.069	0.056**	0.016
Complex	α_5	0.021**	0.022	0.021**	0.944
Endow	α_6	~−0.000*	0.051	−0.049***	0.030
Donations	α_7	−0.111*	0.019	−0.121**	0.027
Excess	α_8	0.016**	0.023	0.009	0.294
StateInc	α_9	0.324***	0.002	0.500***	<0.001
StateGov	α_{10}	−0.006	0.249	0.014***	0.005
Program	α_{11}	−1.126	<0.001	−0.764***	<0.001
Industry Controls?		Yes		Yes	
Adj. R^2		0.475		0.431	
n		6,223		6,999	

p-value of test on: $\hat{\alpha}_3^{High\_Cost} > \hat{\alpha}_3^{Low\_Cost} = 0.081$

***, **, * Indicate that coefficients are statistically different from 0 at the 1 percent, 5 percent, and 10 percent levels, respectively (two-tailed tests).

The sample is based on the observations for the period 2000–2010, excluding 2004, as defined in Table 1. Observations are separated into *High_Cost* and *Low_Cost* based on the percentage increase in accounting fees from the year before to the year after the implementation of the Act. Industry controls are employed through dummy variables defined in terms of one-character National Taxonomy of Exempt Entities (NTEE1) Codes. ~+ (~−) indicate coefficients that are positive (negative), but approximate to 0 when rounded to three decimal places.

All variables are defined in Table 3.

the *Underpaid* and *Overpaid* groups separately. If our assertion that the Act has resulted in larger pay increases for CEOs who were previously underpaid is correct, then the coefficient on the interaction term *Calif ∗ Post* (α_3) should be greater for the *Underpaid* group in comparison to the *Overpaid* group.

The results for these tests are reported in Table 6. The first column of Table 6 reports results for the *Underpaid* group, while the second column reports those for the *Overpaid* group. We observe that α_3, the coefficient of interest on the interaction term *Calif ∗ Post,* is positive, but not significant, for both the *Underpaid* and *Overpaid* groups ($\alpha_3^{Underpaid} = 0.039$, p = 0.239; $\alpha_3^{Overpaid} = 0.026$, p = 0.243). Moreover, we fail to find that the coefficient $\alpha_3^{Underpaid}$ is significantly larger than the coefficient $\alpha_3^{Overpaid}$ (p = 0.781). Thus, we do not find any evidence to indicate that the Act has had a disproportionate impact on affected nonprofits whose CEOs were likely to have been underpaid during pre-Act periods. In other words, the previously observed higher post-Act CEO salaries seem

TABLE 6

Impact of the California Nonprofit Integrity Act of 2004 on Previously Underpaid Executives

$$LnComp_{it} = \alpha_0 + \alpha_1 Calif_i + \alpha_2 Post_t + \alpha_3 Calif_i{*}Post_t + \alpha_4 LnTA_{it} + \alpha_5 Complex_{it} + \alpha_6 Endow_{it} + \alpha_7 Donations_{it} + \alpha_8 Excess_{it} + \alpha_9 StateInc_{it} + \alpha_{10} StateGov_{it} + \alpha_{11} Program_{it} + \alpha_j Industry_i + \varepsilon_{it}.$$

		Underpaid		*Overpaid*	
Variable		**Coefficient**	**p-value**	**Coefficient**	**p-value**
Intercept	α_0	1.112	0.258	1.521***	0.008
Calif	α_1	0.038	0.263	0.005	0.840
Post	α_2	0.205***	<0.001	−0.015	0.710
Calif ∗ *Post*	α_3	0.039	0.239	0.026	0.243
LnTA	α_4	−0.007	0.758	0.080***	<0.001
Complex	α_5	0.050	<0.001	−0.016	<0.001
Endow	α_6	~−0.000	0.761	~0.000	0.943
Donations	α_7	−0.049	0.399	−0.088***	0.007
Excess	α_8	−0.004	0.576	0.008	0.110
StateInc	α_9	0.535***	<0.001	0.477***	<0.001
StateGov	α_{10}	0.007	0.191	0.009***	0.001
Program	α_{11}	−1.007***	<0.001	−0.999***	<0.001
Industry Controls?		Yes		Yes	
Adj. R^2		0.400		0.660	
n		6,985		8,753	

p-value of test on: $\hat{\alpha}_3^{Underpaid} > \hat{\alpha}_3^{Overpaid} = 0.781$

*** Indicates that coefficients are statistically different from 0 at the 1 percent level (two-tailed tests).
The sample is based on the observations for the period 2000–2010, excluding 2004, as defined in Table 1. Observations are separated into *Underpaid* and *Overpaid* groups based on whether the residuals from the model $LnComp_i = \gamma_0 + \gamma_1 LnTA_i + \gamma_2 Complex_i + \gamma_3 Endow_i + \gamma_4 Donations_i + \gamma_5 StateInc_i + \gamma_6 StateGov_i + \gamma_7 Program_i + \gamma j Industry_i + \varepsilon_i$, run separately for California and control group nonprofits for the year immediately preceding the implementation of the California Nonprofit Integrity Act, are below or above the cross-sectional medians. Industry controls are employed through dummy variables defined in terms of one-character National Taxonomy of Exempt Entities (NTEE1) Codes. ~+ (~−) indicate coefficients that are positive (negative), but approximate to 0 when rounded to three decimal places. All variables are defined in Table 3.

to be an across-the-board phenomenon for both previously underpaid and overpaid California executives.[19]

It is also interesting to note in Table 6 that the coefficient on *Post* (α_2) is positive and significant for the *Underpaid* group ($\alpha_2^{Underpaid} = 0.205$, $p < 0.001$), but statistically insignificant for the *Overpaid* group ($\alpha_2^{Overpaid} = -0.015$, $p = 0.710$). This finding lends support to Nagel's (2007) argument that salaries of underpaid CEOs are adjusted upward without an accompanying downward adjustment to overpaid CEOs' salaries. It appears that the Act has not changed this general phenomenon.

Taken together, the evidence reported in Section IV indicates added regulatory costs to be the most credible explanation for higher post-Act CEO pay in affected nonprofits.

[19] Note that the coefficient on *Calif* ∗ *Post* is statistically insignificant for both groups. This is likely due to lack of power. As reported in Table 3, the coefficient is positive and significant when the two subsamples are combined.

V. ADDITIONAL TESTS

This section discusses the results of a number of additional tests we have conducted with the objective of gaining further insights and ruling out alternative explanations.

Impact of the California Nonprofit Integrity Act of 2004 on Large versus Small Nonprofits

The Act in its entirety is applicable to nonprofits with gross revenues exceeding $2 million. While these are relatively large organizations in the broader context of the not-for-profit sector, there is substantial cross-sectional variation among affected nonprofits in terms of size.[20]

The overall impact of the Act and its executive compensation implications are likely to be more pronounced for relatively smaller nonprofits. The operating practices of larger nonprofits are more likely to have been aligned with the key provisions of the Act since the pre-Act period. For instance, larger entities are more likely to have submitted audited financial statements prior to the Act, as audited financial statements are required for securing large government grants (of over $500,000) and are usually demanded by other large donors. Ostrower and Bobowick (2006) and Vermeer, Raghunandan, and Forgione (2006) report that larger nonprofits are more likely to have audit committees. Moreover, practices such as peer group benchmarking are more likely to have already been in place for larger nonprofits. Accordingly, Gilkeson (2007) argues that administrative and reporting burdens of regulations of this nature are especially costly for smaller nonprofits. Therefore, we expect the effect of the Act in terms of higher CEO pay to be stronger for affected nonprofits that are relatively smaller.

We test this conjecture by separating our sample into two groups of *Small* and *Large* entities based on median revenue, and rerunning Model (1) for each group separately. We predict the coefficient on the interaction term *Calif* $*$ *Post* (α_3) to be greater for the *Small* group when compared with that for the *Large* group. These results are reported in Table 7, with the first (second) column reporting results for the *Small* (*Large*) nonprofits. The results provide some, albeit weak, support for our conjecture. Consistent with our argument, we find the coefficient on the interaction term *Calif* $*$ *Post* (α_3) to be statistically significant for the *Small* group, but not the *Large* group ($\alpha_3^{Small} = 0.064$, p $= 0.069$; $\alpha_3^{Large} = 0.053$, p $= 0.143$). However, while the estimated coefficient α_3^{Small} is larger than the estimated coefficient α_3^{Large}, this difference is not statistically significant (p-value $= 0.832$).

Impact of the California Nonprofit Integrity Act of 2004 on Program Ratio

While the results reported in Section IV appear to rule out higher post-Act pay performance sensitivity as an explanation for higher pay observed in results of H1, it could be argued that the governance improvements introduced by the Act have improved the performance levels of affected nonprofits while keeping the pay performance sensitivities relatively unchanged, and that the higher executive compensation is likely a reward for this improved performance. We test this alternative explanation by regressing the program ratio on dummy variables *Calif, Post,* and the interaction term *Calif* $*$ *Post*. We use *LnTA, Complex, Endow, Donations, Excess, StateInc,* and *StateGov* as control variables, along with industry fixed effects. If the Act led to a performance improvement in affected nonprofits, then the coefficient on the interaction term *Calif* $*$ *Post* is expected to be positive and significant. However, our results (untabulated) indicate that this coefficient is not statistically significant (coefficient magnitude $= 0.001$, p-value $= 0.924$). Hence, higher post-Act performance levels do not appear to be a credible explanation for our H1 results.

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[20] For instance, untabulated descriptive statistics indicate that the total asset size of the 10th percentile of affected nonprofits is US$5.2 million, while that of the 90th percentile is as much as US$170 million. Note that these numbers have been obtained after outliers have been removed from the sample.

TABLE 7

Impact of the California Nonprofit Integrity Act of 2004 on Large versus Small Nonprofits

$$LnComp_{it} = \alpha_0 + \alpha_1 Calif_i + \alpha_2 Post_t + \alpha_3 Calif_i{*}Post_t + \alpha_4 LnTA_{it} + \alpha_5 Complex_{it} + \alpha_6 Endow_{it} + \alpha_7 Donations_{it} + \alpha_8 Excess_{it} + \alpha_9 StateInc_{it} + \alpha_{10} StateGov_{it} + \alpha_{11} Program_{it} + \alpha_j Industry_i + \varepsilon_{it}.$$

		Small		*Large*	
Variable		**Coefficient**	**p-value**	**Coefficient**	**p-value**
Intercept	α_0	1.065	0.111	2.800***	0.002
Calif	α_1	−0.032	0.300	0.0008	0.865
Post	α_2	0.018	0.681	0.139**	0.029
Calif ∗ *Post*	α_3	0.064*	0.069	0.053	0.143
LnTA	α_4	0.037***	<0.001	0.035***	<0.001
Complex	α_5	0.020***	0.002	0.029***	0.002
Endow	α_6	~0.000	0.504	~0.000	0.341
Donations	α_7	−0.094***	0.003	−0.110	0.103
Excess	α_8	0.016***	0.003	0.005	0.502
StateInc	α_9	0.518***	<0.001	0.427***	<0.001
StateGov	α_{10}	0.001	0.819	0.011**	0.023
Program	α_{11}	−0.945***	<0.001	−1.030***	<0.001
Industry Controls?		Yes		Yes	
Adj. R^2		0.329		0.367	
n		9,418		9,414	

p-value of test on: $\hat{\alpha}_3^{Small} > \hat{\alpha}_3^{Large} = 0.832$

***, **, * Indicate that coefficients are statistically different from 0 at the 1 percent, 5 percent, and 10 percent levels, respectively (two-tailed tests).
The sample is based on the observations for the period 2000–2010, excluding 2004, as defined in Table 1. Observations are separated into *Small* and *Large* groups based on revenue. Industry controls are employed through dummy variables defined in terms of one-character National Taxonomy of Exempt Entities (NTEE1) Codes. ~+ (~−) indicate coefficients that are positive (negative), but approximate to 0 when rounded to three decimal places.
All variables are defined in Table 3.

Improved Reporting of CEO Compensation as a Potential Confound

Prior research suggests that nonprofit managers use their reporting discretion to generate more desirable financial outcomes (e.g., see Jones and Roberts 2006; Krishnan et al. 2006). As some key provisions of the Act, such as mandating of audited financial statements and establishment of audit committees, were directly aimed at improving the integrity of nonprofits' financial reports, it could be argued that the observation of higher post-Act CEO salaries for affected entities is merely due to these being more accurately reported as a result of the Act. To rule out this possibility, we test whether the compensation reporting quality has improved post-Act by following Neely's (2011) approach. Specifically, we compare the incidence of discrepancies between the compensation of officers as reported on line 25 of Form 990, and the detailed disclosures on Schedule V of Form 990 during pre- and post-Act periods. As in Neely (2011), we do not find a significant reduction in these discrepancies following the enactment of the Act. This suggests that our main finding is unlikely to be an artifact of improved financial reporting quality in post-Act periods.

Higher CEO Turnover as a Potential Confound

To the extent that new CEOs tend to get paid more than their predecessors, it is possible that the observed phenomenon of higher post-Act CEO salaries in affected nonprofits is due to higher turnover rates than in the control group.[21] In order to address this concern, we have manually collected the CEO names from the NCCS digitized database and Form 990s for our entire California sample and isolated the cases where the CEO has changed. If the concern is that new CEOs get paid more, then removing these cases from the California sample should bias against our findings. However, our results remain unchanged when we do so, suggesting that they are not driven by higher CEO turnover rates in California.

VI. CONCLUSION

In this paper, we assess whether and how California's Nonprofit Integrity Act of 2004 has influenced the executive compensation costs of affected charitable organizations. Given the general concerns raised by regulators over the potentially excessive executive compensation in nonprofits and the specific requirement of the Act aimed at ensuring that executive compensations are "just and reasonable," it is reasonable to argue that regulators intended the Act to have a moderating effect on executive compensation. However, our findings indicate that this has not been the case. When compared with a control group of similar nonprofits from other states in the U.S., we find that for affected firms, the level of CEO pay has increased. Moreover, we do not find the Act to have resulted in an increase in CEO pay performance sensitivity. Consistent with the notion that the regulation has increased the workload of the CEO in areas not directly related to charitable activities of the entity, we find the CEO compensation impact of the Act to be greater for nonprofits that likely faced higher regulatory costs. The reported increase in CEO compensation seems to be across the board and not confined to entities where CEOs were likely underpaid in pre-Act periods. In additional tests, we also find some evidence that higher post-Act CEO pay is primarily attributed to smaller affected nonprofits, suggesting that the impact of the Act was mainly felt by relatively smaller entities, as larger nonprofits were likely to have been already following many of the Act's recommendations.

We believe our findings have broad implications for informing the policy debate on the relative merits of regulating governance in the not-for-profit sector, as a number of other states have either adopted similar regulations or are contemplating doing so (Mead 2008). Moreover, our findings are also consistent with some concerns raised in the corporate sector that attempts to regulate executive compensation can lead to unintended consequences (Cohen, Dey, and Lys 2008; Romano 2005).

However, we would like to add the following caveats to our findings. First, our findings should not be interpreted as a comprehensive repudiation of the efficacy of the Act. Our study is focused on a specific facet of the Act that we believe will be of interest to researchers, as well as practitioners and policy makers. However, in our opinion, the extant body of literature is not sufficient to make broad claims on the overall efficacy of this piece of legislation.

Second, while our findings can be interpreted as having broader implications for the debate on governance regulation in both the not-for-profit and corporate sectors, we caution against over-generalizations, as specific institutional and environmental settings can either moderate or intensify the effects uncovered in this paper. We leave further investigation of these aspects to future researchers.

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[21] We thank an anonymous referee for pointing this out.

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