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

S. Dhole, S.B. Khumawala, S. Mishra, and T.
Ranasinghe

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

Sandip Dhole  
Indian School of Business  
Hyderabad, India  
Email: Sandip_Dhole@isb.edu

Saleha B. Khumawala  
C. T. Bauer College of Business  
University of Houston  
Houston, TX. U.S.A.  
Email: saleha@uh.edu

Sagarika Mishra  
School of Accounting, Economics and Finance  
Deakin University  
Burwood, Australia.  
Email: mishra@deakin.edu.au

Tharindra Ranasinghe  
C. T. Bauer College of Business  
University of Houston  
Houston, TX. U.S.A.  
Email: tsranas2@mail.uh.edu

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Abstract

This study focuses on the impact of the California Non-Profit Integrity Act (2004) on executive compensation costs in affected nonprofit organizations. We find that, for affected organizations, executive compensation costs during post-regulation periods have gone up in comparison to control groups of comparable nonprofits that are not affected by the Act. Moreover, we find a relative deterioration in pay performance sensitivity for affected nonprofits. We do not find evidence to suggest that the observed increase in compensation is more pronounced for executives who were likely underpaid during the pre-Act period. Our findings thus raise questions with respect to the efficacy of the provisions of the Act aimed at ensuring that executive compensation is “just and reasonable” and draw attention to some unintended and costly consequences of regulatory attempts at improving governance.

Keywords: Executive compensation, Governance, Regulation, Nonprofits, California Non-Profit Integrity Act (2004)
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1. Introduction

This paper investigates the impact of California’s Non-profit Integrity Act (2004) on the executive compensation costs of affected nonprofits. The California Non-profit Integrity Act (2004) (also referred to as “the Act” and “the regulation” in the remainder of this paper), which became effective January 1st, 2005 is closely modeled after the Sarbanes-Oxley Act (hereafter, SOX) and is regarded as a pioneering piece of legislation in regulatory attempts to strengthen governance mechanisms in the not-for-profit sector (Ljung, 2005). Among its provisions, the Act requires qualifying California charities to file audited financial statements with the Attorney General’s office and establish an audit committee. The Act also requires boards of directors of nonprofit organizations to approve the compensations of its Chief Executive Officer (CEO) and Chief Financial Officer (CFO) or treasurer and ensure that the compensation paid is “just and reasonable.” Finally, the Act regulates the interaction between the charitable organization and commercial fundraisers.

Regulator-driven attempts at improving governance in the not-for-profit sector are contentious issues. The absence of the residual-claimants with strong incentives to monitor managerial behavior, as well as virtual immunity from ouster via takeovers, make managers of nonprofits more susceptible to self-serving behavior. The continuous highlighting of gross governance failures and scandals in the not-for-profit sector in the popular press appears consistent with this notion and provides strong rationale for regulatory interventions (Ljung, 2005).

1 Jackson (2006) terms the act as “California Sarbanes-Oxley clone legislation”.

2 For example, see, Lewis (2000), Harris (2002), Whoriskey and Salmon (2003), Healy (2004), Herbert (2006), and McWhirter (2011).
2005). However, some academics and practitioners oppose such interventions on the grounds that these regulations are either ineffective, or that the costs exceed their intended benefits. At a fundamental level, some argue that governance mechanisms exogenously imposed by regulators are inherently undesirable, as the most efficient methods to address agency problems evolve endogenously (Fama and Jensen, 1983a; 1983b). In specific references to SOX-inspired nonprofit governance regulations such as the California’s Act, Mulligan (2007) and Brakman-Reiser (2004) contend that they will not be effective as they fail to recognize the important differences between the for-profit and not-for-profit sectors in terms of goals and institutional setup. Commenting on California’s Act, Gilkeson (2007) echoes the concerns raised by nonprofit executives and argues against the necessity of the Act by pointing out that the benefits that would accrue to society as a result of this legislation would not justify the additional costs of compliance.

In this paper, we examine the executive compensation implications of the Act. Both the popular press and regulators continue to raise concerns over excess executive compensation in nonprofits (e.g., see, Barringer, 1992; DiLorenzo, 1992; Gaul and Borowski, 1993; Gosselin and Zitner, 1997; Lublin, 2003; Walsh, 1996). In a regulatory attempt to address the issue the Internal Revenue Service (IRS) introduced intermediate sanctions (Internal Revenue Code Section 4958) with the objective of curbing excess compensation practices of nonprofits, as a part of the Taxpayer Bill of Rights 2 (1996). Nonetheless, issues relating to excess compensation took center stage again at the June 2004 hearings of the United States Senate Finance Committee held under the title, “Charity Oversight and Reform: Keeping Bad Things From Happening to Good Charities”. For example, the Commissioner of Internal Revenue Service, Mark W. Everson, testified that:

3 However, the effectiveness of Section 4958 is debated (see, Frumkin, 2001).
“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.”

The provision of the California Non-profit Integrity Act (2004) that not-for-profit boards must review and approve the CEO and CFO compensation and ensure that it is “just and reasonable” is clearly aimed at addressing these concerns of excess executive compensation. Beyond such explicit provisions, even the broader regulatory attempts at improving nonprofit governance (i.e. other provisions of the Act) can have executive compensation implications as governance and managerial compensation are intricately interlinked (Hermalin, 2005). Despite the wider academic debate on the relative merits of nonprofit regulations, there is a clear paucity of empirical research on this issue in general, and on the attempts to control executive compensation in particular. With respect to the effectiveness of the California’s Non-Profit Integrity Act, Neely (2011) presents some initial evidence using one year of data from either side of the Act’s implementation. He fails to find evidence of the Act resulting in a discernable change in reporting practices or commercial fund raising activities of the affected organizations.

If the salaries of affected executives were, in fact, unreasonably large and the provisions of the Act aimed at curbing them are effective, we should observe a post-regulation reduction of these compensation costs. However, the Act could lead to higher executive pay for at least three reasons. First, Hermalin (2005) demonstrates that stronger governance can lead to higher

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5Neely (2011) does not find the Act to impact executive compensation either. However, he uses a broad definition of executive compensation that includes executives other than the CEO and CFO despite the explicit compensation related provisions of the Act applying only to the CEO and the CFO.
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 inherently problematic and result in deadweight costs, some of it is likely to get expressed in the form of higher executive compensation because executives need to be compensated for added work load due to (non-value adding) increased reporting and administrative burdens. Third, Nagel (2007) points out that greater awareness of salary practices brought about by attempts to improve governance can increase the salaries of apparently underpaid executives. In contrast, the reduction of salaries for overpaid executives will be sparse as such attempts encounter strong managerial resistance and even the higher salaries can be justified by carefully selected benchmarks. Hence, the aggregate effect is an overall increase in executive compensation. In line with this argument, Nagel (2007) finds that the proportion of CEOs who are persistently underpaid has decreased since the introduction of detailed pay surveys in the 1980s, while the proportion of CEOs who are overpaid has remained unchanged.

Using a sample of California nonprofit firms which are impacted by the Act during the six year period surrounding the adoption of the Act, we first analyze the pre- to post-regulation differences in CEO compensation. As our control samples, we use two groups of similar nonprofits. The first control group consists of nonprofits that are domiciled in the state of Ohio, which prior research indicates as being quite similar to California in terms of the pre-Act governance environment (Desai and Yetman, 2006). As an alternative control, we also use a broader sample consisting of nonprofits from the states other than California.6 We use a

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6 We exclude Connecticut, Kansas, Maine, Massachusetts, New Hampshire, and West Virginia from our broader control sample, since these states have enacted similar legislations, following in the footsteps of California.
difference-in-differences approach in our research design in order to allay the concern that the observed effects could be due to other unrelated omitted factors.

We find that, contrary to its broad intentions, the Act has resulted in an increase in CEO compensation for affected California nonprofits, when compared with both the control groups. In terms of economic significance, the post-Act change in CEO pay of affected California nonprofits is approximately nine percent higher than that of their counterparts in other states.

However, caution needs to be exercised in interpreting the above results as evidence of the Act being ineffective, since higher CEO pay can also indicate that the governance improvements introduced by the Act has made the CEO work harder (Hermalin, 2005). Therefore, we next examine this possibility by investigating whether the Act has resulted in changes in the CEO pay performance sensitivity. If the Act has indeed resulted in improved governance, along with the process of determining executive compensation, we would expect the pay performance sensitivity to go up for the affected California nonprofits in post-Act periods. On the other hand, the opposite would be true if the higher executive compensation costs are symptomatic of the regulation’s deadweight costs. To assess the Act’s impact on pay performance sensitivity, we use the widely accepted nonprofit performance indicator of program ratio to measure performance. Our results indicate a pre- to post-Act deterioration of pay performance sensitivity for affected nonprofits, suggesting that the increase in CEO compensation is unlikely to be due to higher post-Act productivity brought about by stronger governance.

Finally, we test Nagel’s (2007) theory by testing whether the proportion of affected California CEOs who are perceived as underpaid in the pre-Act period, went down following the

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7 In robustness tests, we also use annual revenue, annual donations, and the ratio of annual donations to revenue as alternative measures of performance.
regulation, when compared with the proportion of underpaid CEOs who are unaffected by the Act. We determine over or underpayment based on whether a given CEO’s compensation lies above or below the industry and size decile adjusted median of the annual cross sectional distribution. We do not find statistical support to substantiate Nagel’s (2007) theory. However, since optimal pay levels are not directly observable, we cannot rule out the possibility that this absence of support is due to misspecification of our model determining under and over payment.

In further tests, we also find that the post-Act increase in CEO pay is mainly attributed to smaller affected nonprofits. This finding is consistent with the argument that larger nonprofits were following the Act’s recommendations to begin with, and hence the Act affected relatively smaller nonprofits disproportionately. We carry out a number of robustness tests to further substantiate our main findings. These tests indicate that our results are unlikely to be confounded by improved reporting quality or higher CEO turnover of affected nonprofits. Moreover, they are robust to the use of a narrower event window and alternative model specifications.

Overall, our results indicate that not only did the Act’s provisions aimed at limiting excessive executive compensation not meet the desired objectives, but on the contrary, the greater regulatory scrutiny and reporting burden introduced by the Act has, in fact, led to further increases in executive compensation. Our findings thus raise questions as to whether regulation enforced changes in governance can bring about desired results in the not-for-profit sector. As a number of other states have already passed SOX inspired not-for-profit reforms and further more are contemplating in doing so (Mulligan, 2007), our study has important policy implications in informing the broader debate on the efficacy of governance regulations in the not-for-profit sector.
The rest of the paper is organized as follows. Section 2 provides a brief literature review along with the institutional background of the Act and develops our hypotheses; Section 3 describes the data, sample selection and research design; Section 4 presents the empirical results and Section 5 concludes.

2. Literature Review and Hypothesis Development

2.1 Institutional Background – The California Non-Profit Integrity Act (2004)

In the wake of the numerous scandals and governance failures in the not-for-profit sector and the euphoria surrounding the enactment of SOX, the state of California enacted the Non-Profit Integrity Act in 2004. The Act, which aims to strengthen governance measures involving nonprofit organizations, was signed into law by Governor Schwarzenegger on September 29, 2004, and became effective on January 1, 2005. The Act broadly covers two areas: governance and 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 non-audit 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 not-for-profits must have their governing board or authorized board committee review and approve the compensation of the Chief Executive Officer (CEO) or President, and the compensation of the Chief Financial Officer (CFO) or treasurer, to ensure that the payment is “just and reasonable” [Government Code section 12586(g)].

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8 See footnote 2 for some examples.

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 with gross revenues exceeding two million dollars. The two million dollar threshold excludes grants received from governmental entities, if the nonprofit must provide an accounting of how it used the grant funds. Moreover, educational institutions, religious organizations, hospitals, licensed health care service plans, and cemeteries are exempt from the provisions of the Act.

In this paper, we focus on the executive compensation implications of the Act and investigate whether the Act was effective in mitigating excess compensation problems and ensuring that compensation is “just and reasonable.”

2.2 Evidence on Attempts to Regulate Executive Compensation in the Corporate Sector

Under the “optimal contracting approach,” as advanced in classical agency theory, executive compensation arrangements are argued to emerge as a remedy to agency problems between the managers and owners (see, Murphy, 1999 for a review). In contrast, the “managerial power approach” argues that executive compensation practices fail to address agency problems as (manager’s) “bargaining with the board is in fact far from arm’s length (and) market forces are not sufficiently strong and fine-tuned to eliminate substantial deviations from optimal contracting” (Bebchuk et al., 2002, p. 755-756). While executive compensation is seen as a solution for agency issues under the “optimal contracting approach,” the “managerial power approach” argues executive compensation practices to be an outcome of governance structure.

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9 Also see, Bebchuk and Fried (2003)
As discussed by Bebchuk and Fried (2003), a number of features in executive compensation contracts that appear at odds with the “optimal contracting” theory are presented as evidence of empirical validation of the “managerial power” argument. These include evidence of pay hikes associated with profit increases that are unrelated to managerial effort (Blanchard et al., 1994; Bertrand and Mullainathan, 2001), failure of options contracts to filter out gains that are unrelated to managerial effort (Levinsohn, 2001), and the almost universal practice of granting at-the-money (as opposed to out-of-the-money) options (Hall, 1999). Moreover, consistent with the notion that weak governance leads to excessive executive compensation, a number of studies direct to a negative relationship between CEO pay and corporate governance (e.g., see, Bertrand and Mullainathan, 2001; Borokhovich et al., 1997; Core et al., 1999; Cyert et al., 2002; Hartzell and Starks, 2003). While the link between executive compensation and corporate governance appears to be well established, the evidence on the ability of exogenous, regulator imposed governance mechanisms to address the problem of excess compensation remains mixed.

In an attempt to rein in the continuing rise in executive compensation that has been widely seen as excessive by the public, and to enhance the alignment between performance and pay, the Internal Revenue Code Section 162(m) was introduced as a part of the Omnibus Budget Reconciliation Act of 1993. The above provision disallows the corporate tax deductibility of nonperformance related compensation over one million dollars for the five highest paid corporate executives. The sizeable body of literature on the efficacy of the Section 162(m) rule has produced mixed results. For example, Perry and Zenner (2001) report that the growth rate of executive compensation for firms that are most affected by the regulation has slowed in post-regulation years while the pay performance sensitivity has improved. Balsam and Ryan (2007)
show that, for affected firms, the increase in salary associated with hiring of a new CEO has moderated, following the enactment of the regulation. On the other hand, Balsam (2002) and Lublin (2003) report that, contrary to legislator expectations, there has been a substantial increase in CEO compensation subsequent to the enactment of Section 162(m). Moreover, Rose and Wolfram (2002) fail to find convincing evidence of the regulation improving pay performance sensitivity. Others that question the overall effectiveness of Section 162(m) in curbing excessive executive compensation include Balsam and Ryan (1996) and Balsam and Yin (2005).

SOX is another important regulation that has potential implications for executive compensation in the corporate sector. While changes to governance practices and alterations to corporate risk taking that results from SOX are likely to have indirect, yet important executive compensation implications, Section 402a of the Act also directly affects executive compensation practices by prohibiting the corporations from arranging or extending credit to executive officers or directors. Romano (2005) criticizes this provision, arguing that, “...it appears to prohibit standard compensation practices (that are) thought to be uncontroversial...” (p. 1538). Romano (2005) asserts that SOX provisions that aim to regulate executive compensation are inherently problematic as investors would have to increase another component of a manager’s pay package to make up the loss in utility. Also, this is likely to be costlier as the now-restricted compensation option would not have been present in the first place, if it was not relatively more efficient. While a number of studies document the benefits of SOX in terms of improving the governance environment and the quality of financial statements (Bartov and Cohen, 2008; Cohen et al., 2008a, 2010; Lobo and Zhou, 2006, etc.), it is unclear whether it had a beneficial effect on executive compensation. Cohen et al. (2008b) find that the additional liability imposed by SOX
on corporate executives has altered the compensation mix away from incentive compensation and towards fixed salary and that SOX has reduced the level of risk-taking by corporate executives on behalf of their firms.

Nagel (2007) fails to find evidence that the mandated disclosure of CEO pay in 1992, or the 2004 New York Stock Exchange (NYSE) listing requirement that compensation committees be independent and fully responsible for hiring and paying the CEO’s compensation consultants were successful in curtailing excess CEO pay. This lack of consistent evidence supportive of the relationship between regulation induced corporate governance and improvements in executive compensation practices heighten the notion that efficient governance practices as well as compensation arrangements emerge endogenously through value maximizing contracts between a firm’s stakeholders and attempts to impose them exogenously is value destroying as they force the alteration of endogenously emerged efficient equilibriums.

2.3 Governance and Executive Compensation in the Not-for-Profit Sector

While the evidence on whether regulator mandated governance mechanisms are effective in addressing excess compensation problems in the corporate sector is mixed, similar studies on the not-for-profit sector are almost nonexistent. The absence of residual claimants makes the not-for-profit sector distinctively different from the corporate sector. The absence of intense monitoring by a residual-claimant and the virtual immunity from ousters via takeovers potentially present nonprofit managers with greater latitude to expropriate the firm’s assets and engage in other forms of opportunistic behavior. This provides a strong rationale for greater regulatory oversight in the not-for-profit sector.
On the other hand, Fama and Jensen (1983a, 1983b) argue that the absence of alienable residual claims in the not-for-profit sector is a natural response to avoid the donor-residual claimant agency problems that could arise in such entities. In other words, when a part of an organization’s net cash flow is from resources provided by donors, the presence of parties with a residual claim on net cash flows makes it difficult to assure donors that they are protected from expropriation by residual claimants. Fama and Jensen (1983a) note that in response to the unique nature of their agency conflicts, nonprofits have adopted board structures with some noticeable differences from those of for-profit corporations. These include self-perpetuating boards, presence of major donors as board members, and the general absence of internal agents as voting members of the board. If this latter view is true, regulatory imposition of governance rules on nonprofits can be viewed as an unnecessary and costly intervention.

While there is some empirical evidence indicating that stronger governance in the not-for-profit sector could lead to desirable outcomes and the reverse could be true when governance is weak (e.g., see, Core et al., 2006; Yetman and Yetman, 2011), whether stronger governance can be effectively imposed by an outside regulator is greatly debated. For example, commenting on the SOX inspired nonprofit governance reforms Mulligan (2007) contends that they will be of little value in the effort to improve ethical nonprofit board governance. He argues that this failure stems mainly from the inappropriate application of a stockholder-based normative perspective in the nonprofit sector. In a similar vein, Brakman-Reiser (2004) points out that many of the governance regulations in the not-for-profit sector suffer from a heavy financial accountability bias and while such a focus could be appropriate for business organizations that operate with a profit motive, it will do little to improve mission and organizational accountability of nonprofits.
Accordingly, governance in the not-for-profit sector in general and attempts to regulate the same in particular are contentious areas that provide rich research opportunities. While a number of studies explore issues related to governance in the not-for-profit sector and nonprofit boards (e.g., see, Bradshaw et al., 1992; Callen and Falk 1993; Callen et al., 2003; Olson 2000; Vermeer et al., 2006), there is a clear dearth of empirical research that explores how nonprofits are affected by governance regulations. California’s Non-profit Integrity Act presents the researcher with unique opportunities in this regard. In this respect, Neely (2011) reports preliminary evidence that this Act did not have a significant impact in improving reporting practices and commercial fund raising activities of affected organizations.

Aside from the broader governance issues, the importance of executive compensation in the not-for-profit sector is evidenced through continuous concerns raised by regulators in recent times over possible executive compensation abuses. For example, issues relating to abuses in executive compensation have been raised several times during the Senate hearings on June 22nd, 2004 and the subsequently released staff discussion paper (commonly known as the “Grassley White Paper”) presents a number of proposals aimed at curbing such abuses (United States Senate Finance Committee 2004). Therefore, whether and how the Act has altered executive compensation in affected California nonprofits is an interesting research question that can potentially influence an ongoing policy debate.

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10 These proposals include annual, in advance approval of executive compensation by the board, public disclosure of compensation arrangements with justifications, and ensuring that compensation consultants are independent and hired by and report to the board.
2.4 Hypothesis Development

2.4.1 H1: The Impact of California Non-Profit Integrity Act (2004) on Executive Compensation

Despite the fact that the Act has incorporated specific provisions aimed at curbing excessive executive compensation, extant research that investigates the impact of the Act (or any other nonprofit regulation for that matter) on this aspect is scarce. Neely (2011), presents some initial evidence on this matter. He finds that while executive compensation for affected California nonprofits went up from pre- to post-regulation periods, the increase is smaller in comparison to a control group of nonprofits domiciled in states other than California. However, this initial evidence needs further investigation for at least three reasons. First, Neely’s (2011) sample is limited to only one year before and after the enactment of the Act and hence may not have captured its full impact. Second, his analysis is primarily univariate in nature and therefore the possibility of confounding factors cannot be ruled out. Third, Neely (2011) inspects the changes in compensation of officers, directors, etc. as reported in line 25 of Form 990. However, the provisions of section 12586(g) of the Act that attempt to ensure executive compensation is “just and reasonable” applies only to the CEO and CFO.

We believe that the executive compensation implications of the Act are multifaceted. In a normative sense, if the executive compensation in nonprofits is indeed excessive and compensation review requirements of the Act are effective, we should observe a relative decrease in executive compensation, following the enactment of the Act. Ceteris paribus,

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11 Discussing the limitations of his study and avenues for future research, Neely (2011) comments that, “…this study is limited to one year of post-data. Future research examining the benefits of the NIA over a longer post-period time frame can more precisely measure the benefits and costs that accrue to organizations subject to the provisions of the Non-profit Integrity Act” (p.123-124).
observing such a decrease will be broadly consistent with the 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 the Act would not make a meaningful impact on executive compensation. For instance, one could argue that the compensation related provisions of the Act lack the regulatory power to make a substantial difference. Moreover, Bebchuk and Fried (2003) argue that ensuring efficient executive compensation through board monitoring is exceedingly difficult in the corporate sector, as board members have strong incentives to maintain cordial relations with the management. If this characterization is descriptive of the not-for-profit sector as well, the requirement of the Act that the board “review and approve” CEO and CFO compensation may not amount to anything substantive.

Finally, it is also possible for the provisions of the Act to result in an increase in executive compensation. This could take place for 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, which results in him 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, in terms of attracting and retaining managerial talent and minimizing agency conflicts. Unwarranted regulatory scrutiny can potentially increase compensation costs as agents alter the composition of compensation packages to exclude elements that are viewed negatively by regulators and replace these with more costly alternatives.
(Romano, 2005). Moreover, added reporting and administrative burdens imposed by the regulation can increase the (non-value adding) work load of the executives, for which they need to be compensated. A third reason, is the possibility that it leads to an outcome where salaries of CEOs who are overpaid remain unchanged while those of CEOs who are underpaid goes up due to the underpayments becoming more apparent in post-regulation periods. We discuss this aspect in detail in Section 2.3.3.

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. That said, the second reason directs to a failure of the regulation in the form of an unintended negative consequence. The third reason can also be broadly viewed as an unintended consequence in the sense that aggregate executive compensation costs go up without an accompanying improvement in performance.

As the above discussion postulates, the impact of the California Non-Profit Integrity Act (2004) on executive compensation can only be determined through empirical examination. Hence, our first hypothesis is formally stated as follows (null form):

\[ H1: \text{In comparison to a control group, the nonprofits affected by the California Non-Profit Integrity Act (2004) do not experience a post-regulation change in executive compensation.} \]

### 2.4.2 H2: The Impact of California Non-Profit Integrity Act (2004) on Pay Performance Sensitivity

While an investigation of H1 will provide aggregate evidence with respect to the impact of the Act on executive compensation, that alone is insufficient to determine whether the efficiency of executive pay has gone up or down as a result of the Act’s provisions. In order to
arrive at such conclusions with respect to the efficiency of executive compensation, it becomes imperative that potential changes in the relationship between pay and performance are examined as well.

The provision of the Act that the board closely monitor CEO and CFO pay, as well as other provisions aimed at improving governance, may strengthen the process of determining executive pay, even though the total pay in terms of the dollar amount is not reduced. Moreover, as postulated by Hermalin (2005), the executive pay may, in fact, go up as a result of managers working harder under a regime of improved governance. As the increased managerial effort leads to higher output for the firm, the ensuing higher executive compensation may not be viewed in a negative light.

If the regulatory pressures force the boards to cut back on executive pay in an arbitrary manner, without due consideration to incentive effects, the regulation would lead to an outcome where executive pay goes down, but so will managerial effort and firm performance. Lower executive pay achieved at the cost of lower managerial effort and poorer firm performance cannot be presented as evidence of the Act achieving its objective of “just and reasonable” executive pay. Moreover, if the Act is to result in higher executive pay due to additional reporting and administrative burdens that are non-value adding, then this higher pay will be associated with a lowering of pay performance sensitivity.

Therefore, in order to facilitate a more complete understanding of whether and how the Act has affected the efficiency of executive compensation contracts, we propose to investigate whether the Act has altered the relationship between executive compensation and firm performance (pay performance sensitivity), as our next hypothesis. We state our second hypothesis as follows (null form):
**H2:** The California Non-Profit Integrity Act (2004) did not have an impact on the pay performance sensitivity of affected nonprofits.

### 2.4.3 H3: The Impact of California Non-Profit Integrity Act (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 as to how to determine this. Therefore, while the provisions of the Act are likely to draw greater board attention to executive compensation, it is unclear whether this heightened attention ultimately leads to more efficient compensation practices or the mere justification of existing compensation levels. Moreover, closer board attention may highlight the instances where executives appear as being underpaid, and might, pave the way for pay hikes within a subset of the firms.

The literature on executive compensation in the corporate sector suggests that arrangements such as the use of compensation consultants and practices such as benchmarking may be used to justify rather than to optimize executive pay (Bebchuk and Fried 2003). Consistent with this notion, Wade et al., (1997) find that companies that pay their CEOs large base salaries are more likely to justify them by citing the use of compensation consultants. Faulkender and Yang (2010) find that firms selectively chose highly paid peer groups in order to justify their CEO compensation.

Nagel (2007) argues that greater awareness brought about by compensation consultants, improved pay surveys, and increased focus on corporate governance can in fact increase executive pay in the aggregate. Such equilibrium emerges as the increased awareness highlights the instances where underpayment is apparent and the board can relatively easily justify pay hikes under these circumstances. Boards may also correct what they perceive to be, but may not
in fact be underpayment. In contrast, greater awareness of the board will not correct overpayment as attempts to do so are met with stiff resistance by managers and strategies such as selective choice of peer group benchmarks can be used to justify existing pay levels. Consistent with this notion, Nagel (2007) finds that CEO pay for a given level of performance 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.

If the above behavior is descriptive of California nonprofits affected by the Act as well, we would expect the proportion of affected California CEOs who can be perceived as underpaid in the pre-Act period to go down, in comparison with the proportion of underpaid CEOs in nonprofits that are not affected by the Act. Accordingly, we state our third hypothesis in the following manner (alternative form):

\[ H3: \text{The proportion of underpaid CEOs from the affected California nonprofits has gone down from pre- to post-regulation when compared with the proportion of underpaid CEOs from unaffected nonprofits.} \]

We discuss our data and empirical methodology in the next section.

3. Data, Sample Selection, and Research Design

3.1 Data and Sample Selection

We obtain the bulk of the financial data required for the empirical analysis from the National Center for Charitable Statistics (NCCS) core and Statistics of Income (SOI) data files. The core data file, however, does not provide detailed breakdowns of many line items necessary
for our analysis. In order to obtain those, we also use the NCCS digitized database, which runs from 1998-2003 and manually collect individual Form 990s for years after 2003.\(^{12}\)

We investigate how the Act has impacted the CEO compensation of affected California nonprofits in comparison to two control groups that are not directly affected by the Act. The ideal control group for this purpose should be a group of nonprofits that are similar to those in California and operate under similar pre-Act regulatory environment, but did not experience the effect of the regulation under consideration. As our first control group, we use nonprofits of similar industries and size thresholds domiciled in the state of Ohio. The choice of Ohio nonprofits as a control group is motivated by Desai and Yetman (2006). Recognizing that the governance environment facing nonprofits differ considerably across states, Desai and Yetman (2006) construct a comprehensive state-level governance environment index comprising 17 factors.\(^{13}\) Their analysis indicates that Ohio and California are quite similar in terms of the pre-Act governance environment, differing only on 2 of the 17 dimensions. In order to mitigate potential concerns stemming from relying on nonprofits from a single state to act as the control, we also use a broader control group of nonprofits from all other states, excluding those that have also enacted similar nonprofit governance regulations during the sample period (we term this, the “broader control group”).\(^{14}\) While we do not advance one control group as being superior to the other, generating robust results with both will enhance the credibility of our findings.\(^{15}\)

\(^{12}\) We require the individual Form 990 forms to obtain the name of the CEO, where disclosed and also to obtain data on CEO compensation when it is not available from NCCS. The CEO names are needed for our robustness tests on CEO turnover. We discuss these tests in Section 4.3.3.

\(^{13}\) These 17 factors are aggregated into a detection index (11 factors), and prosecution index (6 factors). See, Table 1 of Desai and Yetman (2006) for a detailed description.

\(^{14}\) The states thus excluded are Connecticut, Kansas, Maine, Massachusetts, New Hampshire, and West Virginia (Mulligan, 2007).

\(^{15}\) Note that the treatment group as well as the two control groups are exposed to identical regulations at the federal level. Therefore, our choice of control groups ensure that 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 Section Code 4958) issued in January 2002.
Our sample covers the period from 2002 to 2007 and consists of the nonprofits (IRS code section 501(c)(3) firms) with data on the NCCS digitized database, NCCS Core database, and individual Form 990s. At the outset, we ensure that the reporting year covered in each observation falls entirely on either pre- or post-Act periods. Firm years that end on or before December 31, 2004 are designated as pre-Act while those that begin after that date are designated as post-Act. We only focus on nonprofits with data available in both pre and post-regulation periods. As indicated in Table 1, we delete observations from organizations with gross annual receipts of less than two million dollars as some important provisions of the Act do not apply to them. We also delete the observations from industries that are exempted from the requirements of the Act and observations with missing values for key variables. The sample is truncated at one percent and 99 percent to mitigate the effects of outliers.

Our final sample of affected California nonprofits consists of 1,011 firm-year observations (294 firms). The Ohio and broader control groups consist of 368 and 8,955 firm-year observations (107 and 2,802 firms) respectively. Given the differences in population between California and Ohio, the relatively fewer number of observations from the Ohio control group is not surprising.16

Table 2 presents the industry distribution of our sample. As the Table shows, our sample covers a wide range of industries that are covered by the Act. There is a significant concentration of organizations in Human Services – Multipurpose and Other accounting for 37.84 percent, 45.21 and 41.38 percent of the California, Ohio and the broader control samples respectively.

16 According to 2010 census of US Census Bureau, total population of California and Ohio were 37,253,956 and 11,536,504 respectively. (http://2010.census.gov/2010census/data/apportionment-pop-text.php)
Arts, Culture, and Humanities also account for around 10 percent of observations across the groups. More importantly, we do not find substantial differences in industry distribution between the treatment and control groups.

3.2 Research Design

In order to overcome the concerns of omitted correlated variables, we employ differences-in-difference designs in testing all our hypotheses. As noted earlier, we test the pre-to post-Act differences in our variables of interest for the affected nonprofits against two control groups consisting of nonprofits of same industries: I) The control group consisting of nonprofits of the State of Ohio, which prior research indicate to be quite similar to California in terms of pre-Act governance environment (Desai and Yetman, 2006). II) The broader control group consisting of nonprofits from all non-California states that have not adopted SOX inspired governance regulations. We employ standard errors that are clustered on firms.

In hypothesis H1 we propose to test whether the Act has had an impact on the executive compensation costs of affected nonprofits. Hypothesis H2 investigates the Act’s effect on pay performance sensitivity. We estimate the following model to test hypotheses H1 and H2:

\[
\ln{\text{Comp}}_{it} = \beta_0 + \beta_1 \text{Califi} + \beta_2 \text{Post}_t + \beta_3 \text{Califi} \times \text{Post}_t \\
+ \beta_4 \ln{T_A}_{it} + \beta_5 \text{Complex}_{it} + \beta_6 \text{Endow}_{it} + \beta_7 \text{StateInc}_{it} + \beta_8 \text{Donation}_{it} \\
+ \beta_9 \text{Program}_{it} + \beta_{10} \text{Program}_{it} \times \text{Califi} + \beta_{11} \text{Program}_{it} \times \text{Post}_t \\
+ \beta_{12} \text{Program}_{it} \times \text{Califi} \times \text{Post}_t + \beta_j \text{Industry}_{i} + \epsilon_{it} \ldots \ldots (1)
\]

where, for firm \( i \), and year \( t \):

\[
\ln{\text{Comp}} = \text{Log of CEO compensation}
\]
Calif = An indicator variable taking the value of 1 if the organization is based in California and affected by the Act, and zero otherwise

Post = An indicator variable taking the value of 1 for years after the Act (2005-2007) and zero otherwise (2002-2004)

LnTA = Log of total assets at the end of the year

Complex = Organizational complexity, measured in terms of the number of revenue sources

Endow = Endowment size

StateInc = Log of per capita income of the state

Donation = Total donations

Program = Program ratio

Industry = dummy variables for industry defined in terms of two digit National Taxonomy of Exempt Entities (NTEE) Codes

Our dependent variable is the log of CEO compensation. By investigating the CEO compensation, we are focusing on the compensation of an executive who came under the direct purview of the pay related provisions of the Act. Given that the NCCS digitized database stops in 2003, we obtain data on executive compensation from the NCCS Statistics of Income (SOI) database for our full sample. The SOI database reports compensation paid to the top five executives. Assuming that the CEO is the highest paid executive, we measure CEO compensation as the sum of compensation (S001 (a)), contributions to employee benefit plans and deferred compensation (S002 (a)) and expense account and other allowances (S003 (a)).

With respect to hypothesis H1, our variable of interest is the interaction term, Calif*Post, the coefficient of which (β3) indicates the pre- to post-Act difference in CEO compensation of affected California nonprofits in comparison to the respective control group. A negative and
significant $\beta_3$ indicates that the Act has resulted in a relative reduction in CEO compensation of affected nonprofits. A positive and significant $\beta_3$, however, implies the opposite.

Our regression specification includes a number of control variables that are potentially associated with executive compensation. We use the log of total assets (line 59 of the Form 990) ($\text{LnTA}$) to control for size as CEOs of larger nonprofits are likely to receive higher compensation (Hallock, 2002).\textsuperscript{17} Conjecturing a positive association between organization complexity and executive compensation, we control for complexity ($\text{Complex}$), measured as the number of revenue sources (lines 1 through 11 of the Form 990). We control for endowment size ($\text{Endow}$) as prior literature indicates this to be associated with CEO compensation (Core et al., 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 the Form 990) deflated by total expenses (line 17 of the Form 990). Executive compensation levels across states are likely affected by state-level differences in broad economic factors. We employ log of per capita income of the state ($\text{StateInc}$) to control for such effects. We obtain this data from the website of the Bureau of Economic Analysis.\textsuperscript{18} We also control for total donations ($\text{Donation}$), (line 1d of the Form 990) as prior research indicates this to be positively associated with executive pay (Hallock, 2002; Core et al., 2006).\textsuperscript{19} We control for the program ratio ($\text{Program}$) as Baber et al. (2002) find a positive association between changes in executive compensation and program ratio. Program ratio is measured as the ratio of program-related expenses (line 13 of the Form 990) to total expenses (line 17 of the Form 990). We control for industry-level differences in CEO compensation through industry dummy variables ($\text{Industry}$) defined in terms of two digit NTEE codes.

\textsuperscript{17} Our results remain unchanged when we use revenue as the control for size.
\textsuperscript{18} http://www.bea.gov/iTable/iTable.cfm?ReqID=70&step=1&isuri=1&acrdn=4
\textsuperscript{19} Results are not sensitive when we define this variable as the donations as a percentage of total revenue.
The hypothesis H2 investigates whether the Act has impacted the pay performance sensitivity of affected nonprofits. We test this through the coefficient of the three-way interaction term \( \text{Program} \times \text{Calif} \times \text{Post} \) \((\beta_{12})\). Program ratio is the most widely used performance measure in the not-for-profit sector (Baber et al., 2002). The coefficient \( \beta_{12} \) indicates whether the association between program ratio and CEO compensation has strengthened or weakened in post-Act periods for affected nonprofits when compared to the control group. A positive (negative) coefficient of \( \beta_{12} \) denotes an improvement (deterioration) of pay performance sensitivity following the enactment of the Act.

The hypothesis H3 examines whether the Act has led to reduction in the proportion of affected California CEOs perceived as underpaid when compared with underpaid CEOs of unaffected nonprofits. We estimate the following logistic regression model to test hypothesis H3:

\[
\begin{align*}
\text{Prob}(\text{Underpaid} = 1) &= \gamma_0 + \gamma_1 \text{Calif}_t + \gamma_2 \text{Post}_t + \gamma_3 \text{Calif}_t \times \text{Post}_t \\
&+ \gamma_4 \text{LnTA}_{i,t} + \gamma_5 \text{Complex}_{i,t} + \gamma_6 \text{Endow}_{i,t} + \gamma_7 \text{StateInc}_{i,t} + \gamma_8 \text{Donation}_{i,t} \\
&+ \gamma_9 \text{Program}_{i,t} + \gamma_j \text{Industry}_{i,t} + \epsilon_{it} \ldots \ldots . (2)
\end{align*}
\]

\( \text{Underpaid} \) is a dummy variable which takes the value of one if the total compensation of the executive lies below the industry and size decile adjusted median of the annual cross sectional distribution and zero otherwise. All other variables are defined earlier. If, as predicted in H3, the Act has resulted in a reduction in the proportion of underpaid California CEOs, then the instances of a CEO compensation being identified as “underpaid” should be lower for affected nonprofits in the post-Act periods. Accordingly, observing a negative and significant coefficient for the interaction term \( \text{Calif} \times \text{Post} \) \((\gamma_3)\) would be consistent with the hypothesis H3.
4. Empirical Results

4.1 Descriptive Statistics

Table 3 presents descriptive statistics for our sample. As the Act is fully enforced on nonprofits with over two million dollars in annual gross revenue excluding grants, our sample consists of relatively large organizations. The Table presents descriptive statistics separately for California (Column 1), Ohio (Column 2) and the broader control group of organizations mentioned above (Column 3). Untabulated analyses indicate that the California sample does not differ significantly from the Ohio sample in terms of assets even though California nonprofits are larger in terms of revenue, total expenses, and non-program expenses.\(^{20}\) The mean (median) CEO compensation for the California, Ohio and broader control samples are 0.13 (0.11), 0.11 (0.09), and 0.13 (0.10) million dollars respectively. These differences are not statistically significant, suggesting that the average compensation paid to CEOs of the three groups is quite comparable. The descriptive statistics also indicate that our test group (California) and control groups (Ohio and the broader control sample) are generally comparable in terms of financial indicators.

Insert Table 3 here

4.2 Empirical Results

Table 4 reports estimation results for Model (1) where we test the Act’s impact on the CEO compensation and pay performance sensitivity (hypotheses H1 and H2). Column 1 of Table 4 reports results with Ohio nonprofits as the control group, while Column 2 reports results against the broader control sample. The results are very similar across both the panels.

\(^{20}\) However, the California sample is significantly different from the broader control sample in terms of total assets.
With respect to hypothesis H1, where we investigate the pre- to post-Act differences in CEO compensation, the coefficient of interest is that of the interaction term Calif*Post ($\beta_3$). We find the $\beta_3$ to be positive and significant in both columns (Column 1 of Table 4, $\beta_3 = 0.090$, $p = 0.048$; Column 2 of Table 4, $\beta_3 = 0.094$, $p = 0.001$) indicating that the CEO salaries of affected California nonprofits went up post-Act when compared with the control groups. Since the dependent variable is defined as the log of CEO compensation, the variable of interest (which is a binary variable) can be interpreted in percentage terms (Wooldridge, 2009). This indicates that the pre- to post-Act difference in affected California CEO compensation is approximately nine percent higher than that of their counterparts in other states. The relative increase is economically significant in percentage terms and given the pre-Act mean annual compensation of approximately 130,000 dollars, this translates to a relative increase of about 12,000 dollars. It is also worth noting that the coefficient of Post ($\beta_2$), which captures the pre- to post-Act difference of CEO pay for the control groups, is negative and significant in both columns (Column 1 of Table 4, $\beta_2 = -0.109$, $p = 0.006$; Column 2 of Table 4, $\beta_2 = -0.086$, $p < 0.001$). Hence it appears that, when controlled for other determinants of CEO pay, the salaries for the control group declined in the post-Act period, but the CEOs of California nonprofits did not experience such a reduction, which in turn means that, relatively speaking, their salaries went up in post-Act periods.\footnote{It needs to be emphasized that the negative and significant $\beta_2$ does not imply a reduction of CEO pay in \textit{absolute terms} for the control groups. In fact, from pre-Pre to post-Act period, the mean (median) CEO pay has gone up from $107,353 ($93,248) to 109,916 ($96,423) and from $121,841 ($97,089) to $133,221 ($104,472) for Ohio and broader control group respectively.}

As argued in Section 2, a mere increase in post-Act executive compensation cannot be interpreted as a failure of the Act’s intent, if the increase is accompanied by superior performance. We test this in hypothesis H2, in terms of pay performance sensitivity. The
coefficient of the three-way interaction term *Program*×*Calif*×*Post* ($\beta_{12}$) is the coefficient of interest. $\beta_{12}$ is negative and highly significant in both Column 1 and Column 2 of Table 4 ($p < 0.001$), suggesting that the association between CEO compensation and performance has weakened for affected nonprofits from pre- to post-Act when compared with the control groups. This shows that the increase in CEO pay uncovered in hypothesis H1 cannot be attributed to superior post-Act performance. In fact, the above evidence is consistent with the notion that the higher post-Act compensation is a constituent of the deadweight costs of the Act. Observing the related two-way interaction terms, we note that the coefficient of *Program*×*Calif* ($\beta_{10}$) is positive and significant, indicating that the pre-Act pay performance sensitivity of California nonprofits is higher than that of the control groups.\(^{22}\) The coefficient of *Program*×*Post* ($\beta_{11}$) is positive and significant, indicating a pre- to post-Act improvement in pay performance sensitivity to nonprofits in control groups – an improvement that does not extend to entities affected by the Act.

Turning the attention to control variables, as expected, we find a positive association between size (LnTA) and CEO pay. The association between CEO compensation and organizational complexity (Complex) is insignificant. A negative relationship is detected between CEO pay and total endowment (Endow).\(^{23}\) As expected, a positive association is found between per capita state income (StateInc) and the dependent variable, indicating that CEOs of higher income states are paid more. Finally, the association between total donations (Donation) and CEO pay is positive as expected.

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\(^{22}\) In contrast, the coefficient of *Program* ($\beta_9$) is statistically insignificant and hence we cannot establish a significant relationship between CEO pay and performance for the nonprofits in the control group during the pre-Act periods.

\(^{23}\) This is in contraction to the findings of Core et al. (2006). However, we note that the variable of interest in Core et al. (2006) is excess endowment whereas our control variable captures the total endowment.
Taken together, the results presented in Table 4 indicate that nonprofits not affected by the Act have experienced relative reductions in CEO pay and increases in the efficiency of pay in post-Act periods, but the affected California nonprofits failed to realize such gains. Hence, these results cast doubts as to whether the Act was able to achieve its objectives with respect to “just and reasonable” executive compensation.

Hypothesis H3 tests whether the proportion of underpaid CEOs has decreased for affected nonprofits post-Act, when compared with those who are underpaid in the control groups. The estimation results of Model (2), which tests this hypothesis, are presented in Table 5. As in the previous table, Column 1 reports results with Ohio nonprofits as the control group, while Column 2 reports results against the broader control sample.

Recall, that the dependent variable $\text{Prob(Underpaid}=1)$ takes the value of one if the CEO compensation is below the annual cross sectional median, after adjusting for industry and size. The coefficient of interest is that of $\text{Calif} \times \text{Post} (\gamma_3)$. In both Column 1, and Column 2 of Table 5, we find $\gamma_3$ to be statistically insignificant (Column 1 of Table 5, $\gamma_3 = 0.152$, $p = 0.632$; Column 2 of Table 5, $\gamma_3 = -0.044$, $p = 0.775$). Therefore, our results do not support the theory advanced by Nagel (2007) that increased attention to executive pay results in disproportionate increases in salaries of executives who are perceived as underpaid. However, it is worthwhile noting that model misspecification could be an alternative explanation for our failure to find support for Nagel’s (2007) theory. Optimal pay is empirically unobservable and our approach in separating out under and overpaid CEOs may not be sufficiently strong in capturing the underlying construct. In terms of control variables, $\text{LnTA} (\gamma_4)$, $\text{Endow} (\gamma_6)$, and $\text{Donation} (\gamma_8)$ are significant in both columns 1 and 2. $\text{Program} (\gamma_9)$ is significant only in Column 2, where the broader control group is used.
4.3 Additional Tests

This section discusses the results of a number of additional tests we have conducted (all untabulated) in order to gain further insights on the matter and to rule out alternative explanations and the influence of confounding factors.

4.3.1 Impact on Larger Vs. Smaller Affected Nonprofits

The Act in its entirety was applicable to nonprofits with gross revenues exceeding two million dollars. 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. For instance, untabulated descriptive statistics indicate that the total asset size of the tenth percentile of affected nonprofits is USD 1.1 mn, while that of the ninetieth percentile is as much as USD 41.72 mn.

There are reasons to believe that the overall impact of the Act and its executive compensation implications are likely more pronounced for relatively smaller nonprofits due to at least two reasons. First, the operating practices of larger nonprofits are more likely to have been aligned with the key provisions the Act at the outset. 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 five hundred thousand dollars) and are usually demanded by other large donors. Ostrower and Bobowick (2006) as well as Vermeer et al. (2006) report that larger nonprofits are more likely to have audit committees. Hence, to the extent that the observed increases in CEO salaries are due to added administrative and reporting burdens, we would expect the impact to be muted for larger nonprofits. Second, practices such as
peer group benchmarking are more likely already in place for larger nonprofits. Larger nonprofits are likely more worried about existing attempts to curb excess executive compensation in the not-for-profit sector such as the Internal Revenue Service (IRS) Intermediate Sanctions (Internal Revenue Code 4958), as executives of larger entities tend to draw larger salaries and consequently attract closer IRS scrutiny. Thus, the larger nonprofits are more likely to already employ rationalization procedures such as benchmarking of executive pay. If so, further ratcheting up due to benchmarking, pay surveys and other rationalization procedures would be less likely for them.

We test this conjecture by investigating the pre- to post-Act differences in CEO pay after partitioning the sample into small and large affected nonprofits by the cross sectional median of total assets. In line with our expectation, we find that the post-Act increase in CEO pay is primarily attributed to smaller affected nonprofits. This finding, which indicates that the compensation effects are primarily felt by the nonprofits that are most likely affected by the Act, further enhances our confidence that the observed results are indeed attributable to the Act as opposed some other unobserved California specific factor.

### 4.3.2 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. That
is if, in pre-Act periods, CEOs underreported their total compensation by reporting certain components of the compensation under other cost items and the better reporting procedures brought about by the Act limited such practices, then one would observe higher reported CEO compensation in post-Act periods even though there was no actual increase in CEO pay.

If the above is true, while reported CEO pay increases post-Act, the overall cost structure of the firm will remain unchanged. We test this possibility by examining the excess of revenue over expenses (scaled by revenue) in pre- and post-Act periods. We term this variable as Excess. A relatively unchanged Excess from pre- to post-Act is consistent with the notion of observed increases in CEO pay being due to better reporting in post-Act periods. Alternatively, if Excess deteriorates in the post-Act period in comparison to control groups, it becomes more likely that higher reported executive compensation cannot be attributed to better reporting and is probably caused by a real (as opposed to reported) increase in executive compensation costs. Our analysis indicates that when compared to both control groups, Excess has indeed gone down from pre- to post-Act for affected California nonprofits. This result suggests that our main findings are unlikely due to improved financial reporting quality in post-Act periods.

### 4.3.3 Higher CEO Turnover as a Potential Confound

To the extent that new nonprofit 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 them having higher turnover rates than the control groups. 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

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24 We thank an anonymous referee for pointing this out.
sample should bias against our findings. However, all our results remain unchanged when we do so, suggesting they are not driven by higher CEO turnover rates in California.

### 4.3.4 Results with a Narrower Event Window

Our choice of a somewhat longer window to analyze the pre- to post-Act differences in CEO compensations is partially driven by Neely’s (2011) call to examine “… *the benefits (of the Act) over a longer post-period time frame (as it) can more precisely measure the benefits and costs that accrue to organizations subject to the provisions of the Non-profit Integrity Act*” (pp.123-124). In contrast to ours, Neely’s (2011) sample is limited to only one year before and after the enactment of the Act. Nonetheless, given that our finding of higher post-Act CEO salaries for affected nonprofits contrasts with Neely (2011) who failed to find such an effect when compared with the control group, we rerun our analysis with the sample period of Neely (2011). Our results continue to hold when we use this restricted sample, suggesting that the differences between ours and Neely’s (2011) results are more likely due to us using the CEO salary as the primary measure whereas Neely’s (2011) choice of executive compensation measure incorporates salaries of other officers and directors who did not come under the purview of the Act.

### 4.3.5 Alternative Measures of Performance

In our tests of H2, where we investigated whether the Act has impacted the pay performance sensitivity of affected nonprofits, we employed the program ratio as our measure of performance. As Baber et al. (2002) find CEO salaries to be related to revenue raised as well, we use annual revenue as an alternative performance measure. We also use total donations and the
percentage of total revenue from donations as additional measures of performance. We find our inferences with respect to hypothesis H2 to be insensitive to the choice of performance measure.

4.3.6 Alternative Model Specification for Hypothesis H3

The purpose of the hypothesis H3 is to test whether the Act has given rise to a disproportionate increase in compensation of affected CEOs who are perceived as underpaid. Model (2) investigated this issue by testing whether the proportion of seemingly underpaid CEOs have gone down for affected California nonprofits post-Act, when compared with those of the control groups. Another approach to examine this question is to partition affected nonprofits as underpaid and overpaid during the pre-Act period and investigate whether the post-Act increase in compensation is greater for the former group. As a robustness test, we implement this approach where we define an affected nonprofit as underpaying (overpaying) the CEO during pre-Act period if the industry and size decile adjusted CEO compensation during the year that immediately precedes the Act is below (above) the distribution median. Consistent with our earlier results, we fail to find larger post-Act increases in compensation for affected CEOs labeled as being underpaid pre-Act.

5. Conclusion

In this paper we assess whether and how California’s Non-profit Integrity Act (2004) impacted the executive compensation costs of affected charitable organizations. Given the general concerns aired 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 clear that regulators had expected the Act to have
a moderating effect on and/or improve the efficiency of executive compensation. Our findings, however, indicate that the Act has been ineffective in meeting these intentions. When compared with control groups of similar nonprofits from the state of Ohio as well as other states in the US, we find that, for affected firms, not only the CEO pay has gone up, but also the pay performance sensitivity has deteriorated.

When combined with Neely’s (2011) failure to find that the Act has resulted in improvements in reporting quality or commercial fund raising activities, our findings raise concerns with respect to the efficacy of the Act. We believe our findings to have broader 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 to do 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 et al., 2008b; Romano 2005).

However, we would like to add the following caveats to our results. First, our findings – even when interpreted in conjunction with Neely (2011) – 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 which we believe to 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 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.
References


### Tables

#### Table 1: Sample Selection

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<thead>
<tr>
<th>Details</th>
<th>California</th>
<th>Observations</th>
<th>Ohio</th>
<th>Observations</th>
<th>Broader Control</th>
<th>Observations</th>
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<tr>
<td>Initial sample of 501 (c) (3) organizations</td>
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<td>54,393</td>
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<td>Less: Gross receipts less than USD 2mn</td>
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<tr>
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<td>1,011</td>
<td>107</td>
<td>368</td>
<td>2,802</td>
<td>8,955</td>
</tr>
</tbody>
</table>

1) The initial sample consists of all 501 (c) (3) organizations that report to the Attorney General’s office in California, Ohio respectively and the other 50 states, excluding Connecticut, Kansas, Maine, Massachusetts, New Hampshire, and West Virginia from our broader control sample, since these states 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 is based on all organizations for which there are data on the NCCS digitized database (1998-2003), the NCCS Core database (2002-2007) and the NCCS Statistics of Income (SOI) database (2003-2007). The sample covers the 6 year period from 2002 to 2007, excluding 2004. The following additional criterion was imposed in generating the initial sample: (i) Each observation falls entirely on either pre- or post-Act periods. (ii) The nonprofits have data on both pre- and post-Act periods.

2) Government grants and contract income are removed from the calculation of gross receipts.

3) Exempted industries include those that are classified as religious, grant making, health, education or cemeteries.
Table 2: Industry Distribution (Percentage)

<table>
<thead>
<tr>
<th>Industry</th>
<th>California</th>
<th>Ohio</th>
<th>Broader Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts, Culture, and Humanities</td>
<td>10.67</td>
<td>10.60</td>
<td>9.82</td>
</tr>
<tr>
<td>Environmental Quality, Protection, and Beautification</td>
<td>2.47</td>
<td>1.14</td>
<td>1.95</td>
</tr>
<tr>
<td>Animal-Related</td>
<td>2.17</td>
<td>1.18</td>
<td>1.60</td>
</tr>
<tr>
<td>Diseases, Disorders, Medical Disciplines</td>
<td>3.54</td>
<td>3.11</td>
<td>3.69</td>
</tr>
<tr>
<td>Mental Health, Crisis Intervention</td>
<td>2.07</td>
<td>0.67</td>
<td>1.44</td>
</tr>
<tr>
<td>Crime, Legal Related</td>
<td>3.16</td>
<td>2.02</td>
<td>3.06</td>
</tr>
<tr>
<td>Employment, Job related</td>
<td>5.29</td>
<td>5.55</td>
<td>5.01</td>
</tr>
<tr>
<td>Food, Agriculture, and Nutrition</td>
<td>2.28</td>
<td>1.85</td>
<td>1.77</td>
</tr>
<tr>
<td>Housing, Shelter</td>
<td>8.42</td>
<td>8.03</td>
<td>6.03</td>
</tr>
<tr>
<td>Public Safety, Disaster Preparedness, and Relief</td>
<td>0.21</td>
<td>0.17</td>
<td>0.31</td>
</tr>
<tr>
<td>Recreation, Sports, Leisure, Athletics</td>
<td>2.13</td>
<td>1.18</td>
<td>2.60</td>
</tr>
<tr>
<td>Youth Development</td>
<td>4.65</td>
<td>2.94</td>
<td>3.54</td>
</tr>
<tr>
<td>Human Services - Multipurpose and Other</td>
<td>37.84</td>
<td>45.21</td>
<td>41.38</td>
</tr>
<tr>
<td>International, Foreign Affairs, and National Security</td>
<td>2.86</td>
<td>0.55</td>
<td>3.02</td>
</tr>
<tr>
<td>Civil Rights, Social Action and Advocacy</td>
<td>0.69</td>
<td>0.21</td>
<td>0.84</td>
</tr>
<tr>
<td>Community Improvement, Capacity Building</td>
<td>3.27</td>
<td>6.69</td>
<td>4.99</td>
</tr>
<tr>
<td>Philanthropy, Voluntarism, and Grant making Foundations</td>
<td>5.50</td>
<td>8.03</td>
<td>5.57</td>
</tr>
<tr>
<td>Science and Technology, Research Institutes, Services</td>
<td>1.27</td>
<td>0.46</td>
<td>1.56</td>
</tr>
<tr>
<td>Social Science Research Institutes, Services</td>
<td>0.22</td>
<td>0.00</td>
<td>0.40</td>
</tr>
<tr>
<td>Public Society Benefit - Multipurpose and Other</td>
<td>1.27</td>
<td>0.42</td>
<td>1.41</td>
</tr>
<tr>
<td></td>
<td>100.00</td>
<td>100.00</td>
<td>100.00</td>
</tr>
</tbody>
</table>
Table 3: Descriptive Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>California</th>
<th>Ohio Control</th>
<th>Broader Control</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Median</td>
<td>S. D.</td>
</tr>
<tr>
<td>Compensation</td>
<td>0.132</td>
<td>0.107</td>
<td>0.088</td>
</tr>
<tr>
<td>Total Assets</td>
<td>20.900</td>
<td>5.786</td>
<td>52.400</td>
</tr>
<tr>
<td>Program Ratio</td>
<td>0.799</td>
<td>0.814</td>
<td>0.132</td>
</tr>
<tr>
<td>Donations</td>
<td>5.022</td>
<td>2.278</td>
<td>9.021</td>
</tr>
<tr>
<td>Complexity</td>
<td>2.144</td>
<td>2.000</td>
<td>1.089</td>
</tr>
<tr>
<td>Mean Endowment</td>
<td>0.770</td>
<td>0.244</td>
<td>1.604</td>
</tr>
<tr>
<td>Per Capita Income</td>
<td>0.037</td>
<td>0.037</td>
<td>0.003</td>
</tr>
</tbody>
</table>

1) The sample is based on the sample for the period 2002-2007, defined in Table 1.
2) The variables are defined as follows: **Compensation** = Total compensation paid to the CEO, from the NCCS Statistics of Income database, calculated as the sum of S001: Compensation (a), S002: Contributions to employee benefit plans (a), and S003: Expense accounts and other allowances (a); **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** = The ratio of program related expenses to total expenses (line 13, divided by line 17 of the Form 990); **Donations**: Total donations, line item 1d of the form 990; **Complexity**: The number of revenue sources for the organization, based on lines 1 through 11 of the Form 990; **Mean Endowment**: The 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) of the Form 990; **Per Capita**: Per capita income of the State as reported by the Bureau of Economic Analysis. All figures, other than the ratios have been expressed in $ mn.
Table 4: Tests of Hypotheses H1 and H2

Model (1):

\[ \ln(Co) = \beta_0 + \beta_1 \text{Calif}_t + \beta_2 \text{Post}_t + \beta_3 \text{Calif}_t \times \text{Post}_t + \beta_4 \ln(TA)_t + \beta_5 \text{Complex}_t + \beta_6 \text{Endow}_t \]
\[ + \beta_7 \text{StateInc}_t + \beta_8 \text{Donation}_t + \beta_9 \text{Program}_t + \beta_{10} \text{Program}_t \times \text{Calif}_t + \beta_{11} \text{Program}_t \times \text{Post}_t + \beta_{12} \text{Program}_t \times \text{Calif}_t \times \text{Post}_t + \beta_j \text{Industry}_t + \varepsilon_{it} \]

<table>
<thead>
<tr>
<th></th>
<th>Cincinnati</th>
<th>p-value</th>
<th>Coefficient</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>( \hat{\beta}_0 )</td>
<td>3.588</td>
<td>0.224</td>
<td>4.072***</td>
</tr>
<tr>
<td>Calif</td>
<td>( \hat{\beta}_1 )</td>
<td>-0.045</td>
<td>0.451</td>
<td>-0.044**</td>
</tr>
<tr>
<td>Post</td>
<td>( \hat{\beta}_2 )</td>
<td>-0.109***</td>
<td>0.006</td>
<td>-0.086***</td>
</tr>
<tr>
<td>Calif*Post</td>
<td>( \hat{\beta}_3 )</td>
<td>0.090**</td>
<td>0.048</td>
<td>0.094***</td>
</tr>
<tr>
<td>LnTA</td>
<td>( \hat{\beta}_4 )</td>
<td>0.127***</td>
<td>&lt;0.001</td>
<td>0.139***</td>
</tr>
<tr>
<td>Complex</td>
<td>( \hat{\beta}_5 )</td>
<td>-0.009</td>
<td>0.396</td>
<td>0.013</td>
</tr>
<tr>
<td>Endow</td>
<td>( \hat{\beta}_6 )</td>
<td>-0.025**</td>
<td>0.011</td>
<td>-0.029***</td>
</tr>
<tr>
<td>Stateinc</td>
<td>( \hat{\beta}_7 )</td>
<td>0.556*</td>
<td>0.053</td>
<td>0.487***</td>
</tr>
<tr>
<td>Donation</td>
<td>( \hat{\beta}_8 )</td>
<td>0.009***</td>
<td>&lt;0.001</td>
<td>0.007***</td>
</tr>
<tr>
<td>Program</td>
<td>( \hat{\beta}_9 )</td>
<td>-0.033</td>
<td>0.883</td>
<td>-0.083</td>
</tr>
<tr>
<td>Program*Calif</td>
<td>( \hat{\beta}_{10} )</td>
<td>~+0.000***</td>
<td>0.004</td>
<td>~+0.000***</td>
</tr>
<tr>
<td>Program*Post</td>
<td>( \hat{\beta}_{11} )</td>
<td>~+0.000***</td>
<td>&lt;0.001</td>
<td>~+0.000***</td>
</tr>
<tr>
<td>Program<em>Calif</em>Post</td>
<td>( \hat{\beta}_{12} )</td>
<td>~+0.000***</td>
<td>0.001</td>
<td>~+0.000***</td>
</tr>
</tbody>
</table>

Industry Controls? Yes Yes
Adj. R² 37.12% 36.26%
N 1,379 9,966

1) The sample is based on the sample for the period 2002-2007, defined in Table 1.
2) Variable definitions:\n\textbf{	extit{LnComp}} = Log of total compensation paid to the CEO. CEO compensation is from the NCCS Statistics of Income database, calculated as the sum of S001: Compensation (a), S002: Contributions to employee benefit plans (a), and S003: Expense accounts and other allowances (a); \textbf{	extit{Post}} = A dummy variable that takes of value 1 for year on or after 2004 and zero otherwise; \textbf{	extit{Calif}} = A dummy variable that takes a value 1 if the observation is from California and zero otherwise; \textbf{	extit{LnTA}} = Log of total assets at the end of the year. Total assets are from the line 59 of Form 990; \textbf{	extit{Complex}} = The number of revenue sources for the organization, based on lines 1 through 11 of the Form 990; \textbf{	extit{Endow}} = The 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) of the Form 990; \textbf{	extit{StateInc}} = Log of per capita income of the State as reported by the Bureau of Economic Analysis; \textbf{	extit{Donation}} = Total donations, line item 1d form 990; \textbf{	extit{Program}} = The ratio of program related expenses to total expenses (line 13, divided by line 17 of the Form 990).

3) Industry controls are employed through dummy variables defined in terms of two digit National Taxonomy of Exempt Entities (NTEE) Codes

4) ***, **, and * indicate whether the coefficients are statistically different from zero at 1%, 5%, and 10% respectively (two-tailed tests).

5) ~+ (~-) indicate coefficients that are positive (negative), but approximates to zero when rounded to three decimal places.
Table 5: Tests of Hypothesis H3

Model (2):

\[
Probs(\text{underpaid} = 1) = \gamma_0 + \gamma_1 Cali_f + \gamma_2 Post + \gamma_3 Cali_f \ast Post + \gamma_4 LnTA_{it} + \gamma_5 Complex_{it} \\
+ \gamma_6 Endow_{it} + \gamma_7 StateInc_{it} + \gamma_8 Donation_{it} + \gamma_9 Program_{it} + \gamma_j Industry_{i} \\
+ \varepsilon_{it}
\]

<table>
<thead>
<tr>
<th></th>
<th>Ohio Control</th>
<th></th>
<th>Broader Control</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coefficient</td>
<td>p-value</td>
<td>Coefficient</td>
<td>p-value</td>
</tr>
<tr>
<td>Intercept</td>
<td>(\hat{\gamma}_0)</td>
<td>10.556</td>
<td>0.620</td>
<td>32.103***</td>
</tr>
<tr>
<td>Calif</td>
<td>(\hat{\gamma}_1)</td>
<td>-0.276</td>
<td>0.426</td>
<td>-0.188*</td>
</tr>
<tr>
<td>Post</td>
<td>(\hat{\gamma}_2)</td>
<td>-0.015</td>
<td>0.962</td>
<td>0.341***</td>
</tr>
<tr>
<td>Calif*Post</td>
<td>(\hat{\gamma}_3)</td>
<td>0.152</td>
<td>0.632</td>
<td>-0.044</td>
</tr>
<tr>
<td>LnTA</td>
<td>(\hat{\gamma}_4)</td>
<td>-0.682***</td>
<td>&lt;0.001</td>
<td>-0.736***</td>
</tr>
<tr>
<td>Complex</td>
<td>(\hat{\gamma}_5)</td>
<td>0.024</td>
<td>0.606</td>
<td>0.023</td>
</tr>
<tr>
<td>Endow</td>
<td>(\hat{\gamma}_6)</td>
<td>0.203***</td>
<td>&lt;0.001</td>
<td>0.234***</td>
</tr>
<tr>
<td>StateInc</td>
<td>(\hat{\gamma}_7)</td>
<td>0.102</td>
<td>0.961</td>
<td>-1.896***</td>
</tr>
<tr>
<td>Donation</td>
<td>(\hat{\gamma}_8)</td>
<td>-0.011*</td>
<td>0.055</td>
<td>-0.017***</td>
</tr>
<tr>
<td>Program</td>
<td>(\hat{\gamma}_9)</td>
<td>0.812</td>
<td>0.410</td>
<td>2.761***</td>
</tr>
</tbody>
</table>

Industry Controls?  Yes  Yes
Pseudo R²           11.34%  14.69%
N                   1,379   9,966

1) The sample is based on the sample for the period 2002-2007, defined in Table 1.
2) Variable definitions: Underpaid = A dummy variable which takes the value of one if the total compensation of the executive lies below the industry and size decile adjusted median of the annual cross sectional distribution and zero otherwise; All other variables are defined in Table 4.
3) Industry controls are employed through dummy variables defined in terms of two digit National Taxonomy of Exempt Entities (NTEE) Codes.
4) ***, **, and * indicate whether the coefficients are statistically different from zero at 1%, 5%, and 10% respectively (two-tailed tests).