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## Donor and Grantor Reactions to CEO Compensation in Nonprofit Organizations

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## Donor and Grantor Reactions to CEO Compensation in Nonprofit Organizations

Donor and Grantor Reactions to CEO Compensation in Nonprofit Organizations

A dissertation submitted in partial fulfillment  
of the requirements for the degree of  
Doctor of Philosophy in Business Administration

by

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## **ABSTRACT**

Nonprofit organizations often rely on donations and grants to accomplish their mission. This study examines whether nonprofit organizations with high CEO compensation receive less in donor and grantor support compared to nonprofit organizations with lower CEO compensation. I find strong evidence that both donors and grantors give less to organizations that spend a larger percentage of total expenses on total CEO compensation. I also find that the reactions of donors and grantors differ based on the type of CEO compensation. While donors and grantors react to CEO base compensation, grantors also react to other CEO compensation and nontaxable benefits.

In additional tests, I find strong evidence that the negative reaction of donors and grantors is stronger when organizations have more sophisticated donors and grantors. I also find that the relation between future contributions and CEO compensation is stronger in organizations that are more reliant on contributions as a source of revenue. I do not find any evidence that the reporting of CEO compensation expense as program related, management, or fundraising has any effect on how donors and grantors respond to the percentage of expenses spent on CEO compensation. I also do not find that the CEO serving on the board of directors changes how donors and grantors respond to CEO compensation. Overall, my results suggest high compensation to CEOs of nonprofit organizations can have adverse consequences to an organization through reduced funding from donors and grantors.

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## 1. INTRODUCTION

Executive compensation can be a controversial issue for stakeholders of nonprofit organizations. Many donors and grantors contend that Chief Executive Officer (CEO) compensation is too high at some nonprofit organizations (e.g., Perry 2010, Green 2012, Charity Navigator 2013). This often stems from the belief that the resources spent on high compensation are funneled away from activities directly related to the organization's mission. Others believe that CEOs should not be highly compensated because they work for a *nonprofit* organization (e.g., Gose 2012a, Parker 2013). In this study, I examine whether CEO compensation affects the donations and grants a nonprofit receives. If donors and grantors are sensitive to the amount of compensation that nonprofit organizations pay their CEOs, I predict that organizations that spend a higher percentage of their expenses on CEO compensation will receive less in donations and grants compared to nonprofit organizations that spend a lower percentage.<sup>1</sup> Additionally, I expect the response to be conditional on the type of CEO compensation so I also examine whether donors and grantors respond to the type and amount of compensation paid to the CEO, such as bonuses or deferred compensation.<sup>2</sup>

Most donors and grantors contribute funds to nonprofit organizations to provide resources to further the mission of the organization. However, because of agency costs, donors and grantors lack confidence that the organization will use their funds for the purported mission (Jensen and Meckling 1976, Hansmann 1980, Fama and Jensen 1983). Top management can expropriate donations and grants for personal use through excessive salaries and perquisite

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<sup>1</sup> I examine the reaction of donors and grantors jointly and separately. I use the level of future donation income to examine donor reaction and the level of future grant income to examine grantor reaction. I use the level of total contributions – the combination of donations, grants, and indirect donations – to examine donor and grantor reaction jointly.

<sup>2</sup> Specifically, I examine CEO base compensation, incentive compensation, other compensation, deferred compensation, and nontaxable benefits. I define these in Section 2.



consumption (Manne 1999, Krishnan et al. 2006). High profile scandals reported in the media provide examples of how this expropriation occurs.<sup>3</sup> Consider for example, the two founders of The Young Adult Institute Network, a New York nonprofit organization operated to help the developmentally disabled. They each earned close to one million dollars a year, drove luxury automobiles financed by the organization, and had the organization pay their children's college tuition and over \$50,000 in living expenses for one year for one child (Buettner 2011). This controversy led the governor of New York to limit the amount of state funds that can be used to pay nonprofit salaries (Gose 2012a). This example shows how serious a concern the agency problem can be for donors and grantors and is consistent with prior research arguing that agency problems can be more severe in nonprofit organizations (Fama and Jensen 1983, Manne 1999).

The primary source of disclosure about nonprofit organizations is the Internal Revenue Service (IRS) Form 990. The IRS requires most organizations that are exempt from paying federal income tax to file Form 990, an information return, with the IRS every year. Donors and grantors have access to these returns because organizations must make them publicly available and GuideStar, a charity watch organization, makes them available on their website.<sup>4</sup> In 2008, the IRS implemented new disclosure rules that increased and improved the reporting of executive compensation information on the Form 990. The change in regulation requires nonprofit organizations to report details about executive compensation not previously available, including a breakdown of total compensation by type for each executive (Panepento and Kean

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<sup>3</sup> For examples of some high profile scandals involving nonprofit organizations, see Williams et al. (2005) (American University), Perry (2007) (The Smithsonian Institution), Frazier (2009) (United Way of Central Carolinas), and Buettner (2011) (The Young Adult Institute Network), among others.

<sup>4</sup> Donors and grantors can view these completed Form 990s for free at [www.guidestar.org](http://www.guidestar.org).

2008). I exploit the compensation information reported on the revised Form 990 to test my research questions.

It is possible that donors and grantors may not respond to CEO compensation levels. The median donation by an individual per charity is small and these individuals may not feel like the size of their donation warrants extensive research of the nonprofit organization (Mulligan 2007). Additionally, some donors and grantors may feel that high CEO compensation is necessary to attract and retain high quality executives who are able to run large, complex nonprofit organizations (Perry 2010, Parker 2013). Finally, some donors have internal motivations to give such as personal ties or the “warm glow” they feel from giving (Hansmann 1980, Andreoni 1990, Gordon and Khumawala 1999). However, given that prior studies have found that donations are sensitive to the disclosure of material weaknesses and governance quality (Petrovits et al. 2011, Harris et al. 2014), it is reasonable to expect that donors and grantors react to CEO compensation, a topic that receives significantly more media attention.

To address my research questions, I construct a sample of 501(c)(3) organizations from 2008 and 2009.<sup>5</sup> I choose these years to take advantage of the compensation information now available on the revised Form 990 to test several of my hypotheses. Since I am interested in the level of donations and grants made to an organization the year after the disclosure of CEO compensation details, for an organization to remain in my sample, it must have donation and grant information available for 2009 and 2010. Additionally, future contributions, donations, and grants must be at least one thousand dollars. After eliminating organizations that are not required to disclose detailed compensation plan information and observations with missing data,

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<sup>5</sup> I focus on 501(c)(3) organizations because these public charities receive tax deductible donations by donors. I construct my sample using information from 2008 through 2010 Form 990s, available on the IRS’s website.

the final sample contains 8,610 observations when future contributions is the dependent variable and 8,174 (5,182) observations for tests involving donations (grants) as the dependent variable.

I find strong evidence that future contributions are lower for organizations that spend a higher percentage of total expenses on total CEO compensation. When I examine the two major components of future contributions – future donations and grants – I find that both are negatively related to the percentage of total expenses spent on CEO compensation. These results indicate that both donors and grantors are sensitive to the size of CEO compensation in relation to total expenses of the organization. To better understand the implications of this result, consider two organizations that pay their CEOs \$500,000 in total compensation. The organization whose CEO compensation is 2% of total expenses would receive less in contributions than the organization whose CEO compensation is 1% of total expenses, all else being equal. These results indicate that both donors and grantors penalize organizations with high CEO compensation relative to total expenses by providing lower levels of funding.

In additional tests, I examine how donors and grantors react to the specific types of CEO compensation. I decompose total CEO compensation into base compensation, incentive compensation, other compensation, deferred compensation, and nontaxable benefits. Base compensation includes salary while incentive compensation includes bonuses and other contingent payments. Other compensation includes all other taxable compensation that must be included on the CEO's W-2.<sup>6</sup> I find that future contributions are negatively related to the percentage of total expenses spent on CEO base compensation, other compensation, and

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<sup>6</sup> Examples of payments included in this category are: severance payments, tax gross-ups paid, vacation or sick leave cashed out, forgiveness of loan debt or interest, employee deferrals to 401(k) or 403(b) plans, taxable housing provided by the employer, employer-provided automobile, and expenses paid on behalf of the executive such as personal legal services, personal financial services, and social club dues. The types of CEO compensation are discussed in more detail in Section 2.

nontaxable benefits. When I drill down to the donor level, I find that future donations are negatively related to the percentage of total expenses spent on CEO base compensation. These results indicate that donors penalize organizations that spend a high percentage of their expenses on the CEO's base compensation. Grantors appear to be influenced by more types of CEO compensation than donors. I find that future grants are negatively related to the percentage of expenses spent on base compensation, other compensation, and nontaxable benefits for the CEO. The results indicate that grantors reduce grant awards, especially in response to high levels of base compensation, other compensation, and nontaxable benefits.

Given the results of my main tests, I examine several instances where the reaction of donors and grantors may be even stronger. Using the presence of, and level of, restricted net assets to proxy for donor and grantor sophistication, I find strong evidence that the negative reaction of donors and grantors is stronger when organizations have more sophisticated donors and grantors. I also find that the relation between future contributions and CEO compensation is stronger in organizations that are more reliant on contributions as a source of revenue. I do not find any evidence that the reporting of CEO compensation expense as program, management, or fundraising has any effect on how donors and grantors respond to the percentage of expenses spent on CEO compensation. I also do not find that the CEO serving on the board of directors changes how donors and grantors respond to CEO compensation.

In robustness tests, I create a measure of industry adjusted CEO compensation. To control for the possibility that the percentage of expenses spent on CEO compensation is related to the type of nonprofit organization, I calculate the median ratio of CEO compensation scaled by total expenses for each nonprofit industry per year. I subtract the industry median for each observation to calculate the industry adjusted CEO compensation ratio. I find consistent results

for total CEO compensation – future contributions, donations, and grants are negatively related to industry adjusted total CEO compensation scaled by total expenses. I also find that donors and grantors are sensitive to the same types of CEO compensation.

This study has several implications for nonprofit organizations, donors, grantors, lawmakers, and regulators. First, we know that many stakeholders feel that the compensation of nonprofit executives is high. Charity Navigator (2013), in its most recent nonprofit CEO compensation study, recognized this sentiment and wrote “[w]e know that many donors continue to be concerned by what they believe to be excessive charity CEO pay.” To the best of my knowledge, there is only one other study examining whether CEO compensation affects donor and grantor behavior across the broad spectrum of nonprofit organizations.<sup>7</sup> These results should be of interest to boards of directors of nonprofit organizations as they weigh the potential consequences to an organization when setting and negotiating CEO compensation and its specific characteristics.

While researchers have studied how executive compensation disclosure affects stakeholders of for-profit firms, we do not know how stakeholders use compensation disclosures in nonprofit firms. We know from research in the for-profit literature that CEO compensation disclosure affects stakeholder behavior. DeFusco et al. (1990) find that shareholders react positively and bondholders react negatively to the disclosure of CEO compensation that aligns CEO’s incentives to shareholders. Similarly, Wei and Yermack (2011) find that shareholders react negatively and bondholders react positively to the disclosure of CEO compensation that aligns CEO’s incentives to bondholders. My study adds to the findings of this research by

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<sup>7</sup> In a related study, Balsam and Harris (2014) find that donors and grantors do not react to the level of CEO compensation disclosed on Form 990. Their measure of compensation is unscaled and they use a different model which may explain the difference in results.

showing that donors and grantors, important stakeholders of nonprofit firms, also react to the disclosure of nonprofit executive compensation.

Most papers that examine donor and grantor reactions to expenditures in nonprofit organizations have focused on the reported allocation of total expenses – either total program related, total administrative, or total fundraising expenses (e.g. Weisbrod and Dominguez 1986, Posnett and Sandler 1989, Tinkelman and Mankaney 2007). They frequently find that donations and grants are sensitive to the amount of expenses spent in each of these categories. Given this outcome, researchers also find evidence that nonprofit organizations manipulate the reporting of these amounts to reflect more favorably on the organization (Krishnan et al. 2006, Tinkelman and Mankaney 2007). Building on these previous studies, I go a step further and examine a specific type of expense that donors and grantors may be sensitive to, something previous studies have generally not done. Examining CEO compensation expense has the added benefit that the reported amount should be relatively free of manipulation, avoiding a concern of the previous studies examining reported expenses.<sup>8</sup>

In a related paper, Balsam and Harris (2014) examine how donors respond to media coverage of and the Form 990 disclosure of CEO compensation in nonprofit organizations.<sup>9</sup> They find that the percentage change in donations from  $t-1$  to  $t+1$  is negatively related to media coverage of CEO compensation in  $t$  but not related to the level of CEO compensation disclosed in the Form 990 in  $t$ . They do find that the percentage change in donations is negatively related to the level of CEO compensation when an organization has more sophisticated donors. My

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<sup>8</sup> Reporting requirements for the revised Form 990 require that the portion of the CEO's compensation reported on the Form 990 that is taxable must match the Form W-2 that is filed with the government every year, insuring more accurate reporting on the Form 990.

<sup>9</sup> This is the only other paper I am aware of that examines donor reaction to CEO compensation across a wide range of nonprofit organization types.

study differs from theirs in several ways. First, I use the level of future donations instead of changes in donations between two years. This, plus other model choices, helps me achieve more explanatory power with a higher adjusted  $R^2$  value. Second, I use the percentage of expenses spent on CEO compensation instead of an unscaled measure of CEO compensation. This provides a CEO compensation amount that is more useful to donors and grantors to evaluate and compare against other nonprofit organizations. Finally, in all of my tests, I examine how different circumstances may effect both donors *and* grantors, both separately and combined.

In the next section, I review the prior literature on nonprofit donor and grantor behavior and develop my hypotheses. In Section 3, I discuss my sample selection and research design. I present descriptive statistics and my empirical analysis in Section 4 and conclude in Section 5.

## **2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT**

### *Prior Literature*

The size of the nonprofit sector is substantial. The Urban Institute estimates that there were approximately 1.58 million nonprofit organizations registered with the IRS in 2011, representing a 21.5 percent increase in nonprofit organizations since 2001 (Pettijohn 2013). The nonprofit sector has a significant impact on the overall economy of the United States (U.S.), contributing \$836.9 billion or 5.6 percent of gross domestic product to the economy in 2011 (Pettijohn 2013). Charitable contributions, which are a primary interest of this study, were \$316.23 billion in 2012 (Giving USA Foundation 2013).

With billions in contributions given to nonprofit organizations every year, it is important to understand the agency problems that exist in these organizations (Jensen and Meckling 1976, Fama and Jensen 1983). Agency problems arise because donors and grantors lack assurance that

top management will not expropriate their contributions for personal use (Hansmann 1980, Krishnan et al. 2006). Expropriation can occur through excessive salaries and perquisite consumption, pursuing personal goals that are not related to the organization's mission, and slacking on professional duties – all activities that consume funds that could instead be used to further the organization's mission (Manne 1999, Krishnan et al. 2006). Core et al. (2006) find evidence consistent with this theory. They examine what happens in nonprofit organizations that hold excess cash. They find that excess cash is negatively related to future program related expenditures but positively related to future CEO compensation. Their findings suggest that excess cash is more likely to be spent on CEO compensation than spent on expenses that are directly related to furthering the organization's mission.

Numerous examples of the agency problem in nonprofit organizations also appear in the media. Consider for example, the two founders of The Young Adult Institute Network, a nonprofit organization operated to help the developmentally disabled in New York. The founders both earned close to one million dollars each year in compensation, drove luxury automobiles paid for by the organization, and had the organization pay their children's college tuition and over \$50,000 in living expenses for one year for one child (Buettner 2011). This scandal, as well as others, highlights how executives can expropriate resources from the nonprofit organizations they lead for personal use.<sup>10</sup>

Agency problems can be more severe for nonprofit organizations (Fama and Jensen 1983, Manne 1999). In for-profit firms, residual claimants (common shareholders) benefit directly from monitoring management, which in turn reduces agency costs (Jensen and Meckling 1976). Nonprofit organizations lack residual claimants, making it unclear who fulfills the monitoring

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<sup>10</sup> For additional examples, see Williams et al. (2005), Perry (2007), and Frazier (2009) among others.



role over these organizations (Core et al. 2006).<sup>11</sup> Ultimately, the enforcement of nonprofit organizations resides with the IRS or state attorney generals, but their enforcement activities have historically been limited, often because of resource constraints (Hansmann 1980, Manne 1999, Mulligan 2007, Strom 2011). Donors and grantors have the incentive to provide some monitoring to ensure that their contributions are used to further the mission of the organization. However, “because monitoring costs are internalized by the monitors, and because they do not realize corresponding gains simply by making nonprofits more efficient...,” the incentive for donors and grantors to monitor nonprofit organization is greatly weakened (Manne 1999). Furthermore, the incentive of donors and grantors is further weakened because they have limited legal rights against the nonprofit organization if they feel the organization is not using donated funds appropriately (Hansmann 1980, Manne 1999).

Since monitoring is so costly, donors and grantors have the incentive to view the prior operating performance of the organization and its governance structure and policies before they make funding decisions. While this may not guarantee that their funds will be used appropriately, past behavior may be an indication of how the organization will operate and use its resources in the future. Numerous empirical studies document that donors do respond to an organization’s past behavior before deciding to donate (e.g., Weisbrod and Dominguez 1986, Posnett and Sandler 1989, Petrovits et al. 2011, Harris et al. 2014). One of the most common performance indicators that donors and grantors use is the program expense ratio – the percentage of total expenses that an organization spends on activities related to its mission. Research finds that organizations with higher program service ratios receive more in donations

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<sup>11</sup> By definition, nonprofit organizations are distinguished from for-profit organizations in that they are prohibited from paying out profits to any individual who has control over the organization (i.e. they have no residual claimants) (Hansmann 1980).

and grants (Weisbrod and Dominguez 1986, Posnett and Sandler 1989, Buchheit and Parsons 2006, Harris et al. 2014). Similarly, organizations with a high administrative expense ratio – the percentage of total expenses that an organization spends on running the organization and overhead – have lower donations (Greenlee and Brown 1999, Tinkelman and Mankaney 2007).<sup>12</sup> Both of these measures attempt to capture the efficiency in which an organization uses its resources and charity watchdog organizations often use these measures to rate nonprofit organizations.<sup>13</sup> To the extent that CEO compensation represents a large portion of total expense for the organization, donors and grantors may interpret it as evidence of low organizational efficiency and high agency costs.

Researchers have confirmed that donors and grantors also consider other characteristics of organizations before they decide to contribute or grant funds to an organization. Harris et al. (2014) find that both donations and grants are higher for organizations with better overall governance.<sup>14</sup> Kitching (2009) finds that donations are higher for organizations with higher quality auditors and that donors are more sensitive to high quality accounting information. Other researchers have also examined how donors respond to the quality of information reported by an organization. Tinkelman and Mankaney (2007) find that donors have a more negative reaction to the administrative expense ratio when administrative expenses are more likely to be accurate.

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<sup>12</sup> Because donors respond to these ratios, organizations have incentives to manipulate the reported numbers. Consistent with this motivation, Krishnan et al. (2006) find evidence organizations report manipulated numbers. However, the likelihood of inappropriate reporting can be reduced by the use of an outside accountant (Krishnan et al. 2006, Keating et al. 2008) and through better overall governance (Yetman and Yetman 2012).

<sup>13</sup> Examples of how two watchdog organizations use the program service ratio to evaluate nonprofit organizations can be found on the Better Business Bureau's Wise Giving Alliance website (<http://www.bbb.org/us/standards-for-charity-accountability/>) and Charity Navigator's website (<http://www.charitynavigator.org/index.cfm?bay=content.view&cpid=35>).

<sup>14</sup> My main results are unchanged if I control for governance factors similar to Harris et al. (2014).

Similarly, Yetman and Yetman (2013) find that donors respond less favorably to high program service ratios when there is evidence that these program service ratios are inflated. Donors and grantors reduce their funding to organizations that have weak internal controls over financial reporting that can lead to lower information quality (Petrovits et al. 2011).

Anecdotal evidence suggests that lawmakers, donors, and grantors are deeply interested in understanding the implications of nonprofit CEO compensation (e.g., Spector 2009, Wilhelm and Williams 2009, Perry 2010, Gose 2012a). Recently, the U.S. House of Representatives proposed legislation that would monetarily penalize nonprofit organizations that pay any employee over one million dollars in compensation (Daniels 2014). Similarly, many states have passed or proposed laws limiting the amount of compensation nonprofit executives can earn if the nonprofit receives state funds (Gose 2012a). Intense scrutiny by Congress and the media has led some boards to change how they compensate their executives and has caused some executives to forego collecting compensation which had already been awarded (Perry 2010, Gose 2012b). Some lawmakers question the need of grants or additional funding for organizations that can afford to pay their executives half-million dollar or higher salaries (DeMint 2011). These examples highlight the concern that many nonprofit stakeholders have regarding nonprofit CEO compensation and the steps taken by some stakeholders to limit CEO compensation in nonprofit organizations.

### *CEO Compensation*

We know that for many stakeholders, high CEO compensation in nonprofit organizations is a concern. When donors and grantors observe that nonprofit organizations spend a high percentage of expenses on CEO compensation, this may indicate increased agency problems within the organization. Given the potential agency costs related to high compensation and the

desire for donors and grantors to have their funding used to further the mission of the organization, I predict that donors and grantors will penalize those organizations with the highest CEO compensation. Specifically, I hypothesize, stated in the alternative form:

H1: Nonprofit organizations that spend a higher percentage of their expenses on CEO compensation will receive less in contributions compared to nonprofit organizations that spend less.

### *Types of CEO Compensation*

It is possible that donor and grantor reactions are conditional on the type of compensation the CEO receives. Total CEO compensation is comprised of base compensation, incentive compensation, other reportable compensation, deferred benefits, and nontaxable compensation. The Form 990 instructions detail how nonprofit organizations should report CEO compensation under each of these types of compensation (IRS 2008b). Base compensation is the yearly salary of the CEO, while incentive compensation includes signing bonuses or bonuses and payments made for reaching set targets. Other reportable compensation includes severance payments, tax gross-ups paid, vacation or sick leave cashed out, forgiveness of loan debt or interest, employee deferrals to 401(k) or 403(b) plans, taxable housing payments, employer-provided automobile, and expenses paid on behalf of the executive such as personal legal services, personal financial services, and social club dues. Deferred compensation includes deferrals made to a retirement or deferred compensation plan. Nontaxable benefits are the benefits a CEO receives that are not taxable under the Internal Revenue Code, such as health insurance, life insurance, and dependent care assistance.

Donors may react strongly to higher levels of incentive compensation if they feel like nonprofit organizations use ineffective bonus structures that do not reward the right behavior or if they feel like nonprofit organizations should not use bonuses at all to compensate CEOs

(Hancock 2013). Donors may respond negatively to high levels of other compensation – a component that includes many different types of compensation including taxable perquisites (some types seen as more excessive) – as high amounts in this category may mean less transparency and higher agency costs. Yermack (2006) finds that shareholders of for-profit firms react negatively to the disclosure of specific perquisites for the CEO. Because of the possibility of different reactions to different types of CEO compensation, I also test how donors and grantors react to each type of compensation. Specifically, I hypothesize, stated in the alternative form:

H2: Donors and grantors react negatively to higher amounts of different types of CEO compensation compared to lower amounts of the same type of CEO compensation.

#### *Donor and Grantor Sophistication*

In for-profit firms, sophisticated investors provide an important role in mitigating agency costs related to executive compensation. Both Core et al. (1999) and Hartzell and Starks (2003) find that CEO compensation is negatively related to measures of investor sophistication.<sup>15</sup> While nonprofits do not have owners, they can have sophisticated donors and grantors. Yetman and Yetman (2013) define sophisticated donors are those that have both the incentive to spend the resources to evaluate the nonprofit and the ability to do so. These are donors and grantors with larger contributions that are more likely to exert more effort evaluating a nonprofit before they decide to donate (Tinkelman 1998, Gordon and Khumawala 1999). Yetman and Yetman (2013) find evidence of this monitoring when they find that donations are lower in organizations with poor accounting quality when organizations have sophisticated donors.

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<sup>15</sup> Core et al. (1999) find that the presence of a blockholder having at least 5% ownership in the firm reduces CEO compensation. Hartzell and Starks (2003) find that CEO compensation is negatively related to the level of institutional ownership of a firm.

If donors and grantors give less to organizations that spend a higher percentage of expenses on CEO compensation, I expect them to give even less when they have the incentive to evaluate the nonprofit more closely. Specifically, I hypothesize, stated in the alternative form:

H3: When sophisticated donors and grantors are present, nonprofit organizations that spend a higher percentage of their expenses on CEO compensation will receive even less in contributions compared to nonprofit organizations that spend less.

Similar to Yetman and Yetman (2013), I use the presence of restricted net assets as a proxy for donor and grantor sophistication. Donations and grants with restrictions placed on them indicate larger contributions and more monitoring and attention paid by donors and grantors.

#### *CEO on the Board*

Fama and Jensen (1983) suggest that independent boards are more important in nonprofit organizations because nonprofits lack the takeover threat and monitoring by residual claimants that exist in for-profit firms. In both for-profit and nonprofit firms, it is common for the CEO to serve on the board of directors, reducing board independence. While the CEO may bring invaluable insight and knowledge in this role, the CEO serving on the board can increase agency costs (Fama and Jensen 1983, Jensen 1993, Brickley et al. 2010). In for-profit firms, researchers find evidence of this in higher compensation and increased entrenchment when the CEO serves as chairman of the board of directors (e.g. Core et al. 1999, Cyert et al. 2002, Goyal and Park 2002, Grinstein and Hribar 2004). There has been limited research on CEO board membership and agency problems in nonprofit firms likely due to data limitations. One study that overcomes this limitation uses a unique sample of nonprofit hospitals and finds that CEOs that are a voting member of the board have higher compensation than other CEOs (Brickley et al. 2010). When the CEO serves on the board of directors and the organization spends a higher percentage of its expenses on CEO compensation, donors and grantors may perceive this as increased agency

problems within the organization and decide to not give or give less to the organization.

Specifically, I hypothesize, stated in the alternative form:

H4: When the CEO is on the board of directors, nonprofit organizations that spend a higher percentage of their expenses on CEO compensation will receive even less in contributions compared to nonprofit organizations that spend less.

#### *Source of Revenue*

Some nonprofit organizations earn the majority of their revenue by providing services. To sustain or grow the revenue in these organizations, the nonprofit needs to provide valuable program services. The recipients of these services may not be concerned about agency costs in the organization as long as they feel they are getting value for their fees paid. Other nonprofit organizations are more reliant on donations and grants to fulfill their charitable mission. Since donors and grantors are not generally recipients of the program services, they are not able to directly evaluate the value of those programs. Instead they have to rely on the information the nonprofit organization provides about the organization and its activities (Gordon and Khumawala 1999). If they review this information and find evidence of agency problems in the organization, they may choose not to give or to give less to the organization. If donors and grantors give less to organizations that spend a higher percentage of expenses on CEO compensation, I expect this relation to be higher in organizations that are more dependent on donations and grants. Specifically, I hypothesize, stated in the alternative:

H5: When more reliant on contributions, nonprofit organizations that spend a higher percentage of their expenses on CEO compensation will receive even less in contributions compared to nonprofit organizations that spend less.

An organization that is reliant on contributions as a source of revenue may be more grant revenue dependent or it may be more donation dependent. It is possible that the source of contribution revenue may have an effect on the level of monitoring and evaluation of the

organization and hence how the CEO's compensation is viewed. Nonprofit organizations that receive grants often have to submit a proposal along with the Form 990 and other supplemental information which may lead to more evaluation and monitoring of the organization (Mulligan 2007). However, there is some evidence that grantors may not actually evaluate and use the information that is provided to them (Gronbjerg 1991, Froelich 1999). Nonprofit organizations that are reliant on donations as a source of revenue may or may not be evaluated thoroughly by donors. Many donations are small and donors may lack the motivation or incentive to research the nonprofit organizations (Mulligan 2007). Still, when organizations are dependent on contributions and donations are a major source of those contributions, donations are more likely to be large in size, which can motivate donors to incur the research costs needed to evaluate the organization. Therefore, it is an empirical question whether the relation between total future contributions and CEO compensation is affected by whether the organization is more dependent on grant or donation revenue. Specifically, I hypothesize, stated in the alternative:

H6: Organizations with more grant revenue than donation revenue react to the percentage of expenses spent on CEO compensation differently than organizations with more donation revenue than grant revenue.

#### *CEO Salary Allocation*

Traditionally, the program service ratio has been used by stakeholders to evaluate the efficiency and performance of nonprofit organizations. Generally, the greater the amount of total expenses spent on program related activities, the better stakeholders view the firm because those expenses are furthering the mission of the organization. As part of their expense reporting, nonprofit organizations report the amount of officer compensation that is related to program related activities, management activities, and fundraising activities. Donors and grantors that are sensitive to a higher percentage of expenses spent on CEO compensation may be less so if some



of the CEO's compensation relates to time spent on program related activities. Stated another way, any negative relation between future funding and CEO compensation may be more negative when all CEO compensation is considered overhead (i.e. allocated to management and fundraising). Specifically, I hypothesize, stated in the alternative:

H7: When the CEO's entire compensation is spent on management and fundraising activities, nonprofit organizations that spend a higher percentage of their expenses on CEO compensation will receive even less in contributions compared to nonprofit organization that spend less.

### *Form 990*

One of the primary ways that nonprofit organizations disclose information about their organizations is through the IRS Form 990. Form 990 is an informational tax return that many nonprofit organizations must file every year with the IRS.<sup>16</sup> The Form 990 reports information about the organization's activities, finances, compensation, and governance for the year. Unlike other tax returns filed with the IRS, nonprofit organizations must make their completed Form 990 available for public inspection. GuideStar, a charity watchdog organization, makes all nonprofit organizations' Form 990s available on its website.

In 2008, the IRS made significant changes in nonprofit disclosure regulations and completed a major overhaul of the Form 990 with the goals of "enhancing transparency, promoting tax compliance, and minimizing burden on the filing organization" (IRS 2008a). The reporting of executive compensation on the Form 990 was one of the areas that underwent major changes.<sup>17</sup>

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<sup>16</sup> There are some organizations that are exempt from filing the Form 990. These include, but are not limited to, many small nonprofit organizations, religious organizations, and certain organizations related to the government. While these organizations may be exempt from filing the Form 990, they may have other, less detailed filing requirements with the IRS (IRS 2008b).

<sup>17</sup> One of the problems for donors and grantors interested in executive compensation is that they have historically not had much access to detailed, accurate information about executive

The revised Form 990 includes a separate Schedule J that organizations must complete if they have any executives earning over \$150,000 in total compensation. On Schedule J, organizations answer questions about specific types of fringe benefits executives receive and policies regarding reimbursement of those expenses.<sup>18</sup> Organizations also disclose their process for establishing the CEO's compensation. Specifically, organizations must disclose if they used 1) a compensation committee, 2) an independent compensation consultant, 3) the Form 990 of other organizations, 4) a written employment contract, 5) a compensation survey or study, and 6) approval by the board or compensation committee when establishing the CEO's compensation. While none of these are specifically required, these actions can help establish that the CEO's compensation is reasonable (IRS 2008b). Organizations also must disclose whether any listed executive received severance payments or compensation contingent on the revenue or net earnings of the organization or related organization.

On Part 2 of Schedule J, organizations now provide a detailed breakdown of executive compensation. For each listed executive, organizations report their base compensation, bonus and incentive compensation, other reportable compensation, deferred compensation, and

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compensation. Prior to 2008, organizations completing Form 990 were required to report some compensation related information about current officers, directors, trustees, and key employees but they frequently provided incorrect or incomplete information (Strom 2007). In 2004, the IRS began an executive compensation compliance project and reported the results in 2007 (IRS 2007). The IRS found significant reporting issues related to executive compensation, resulting in over 30 percent of nonprofits involved in the project filing amended Form 990s and 15 percent to be selected for IRS examinations. The IRS found "significant reporting errors and omissions" related to compensation reporting and found that organizations were confused by the Form 990 instructions.

<sup>18</sup> Specifically, the fringe benefit categories listed on Schedule J are: 1) first-class or charter travel, 2) travel for companions, 3) tax indemnification and gross-up payments, 4) discretionary spending account, 5) housing allowance or residence for personal use, 6) payments for business use of personal residence, 7) health or social club dues or initiation fees, and 8) personal services.

nontaxable benefits.<sup>19</sup> The instructions for the revised Form 990 include much more detail and a table showing how to report almost 70 different types of compensation an executive may receive. All organizations must now report this compensation on a calendar year basis. I use the information disclosed in Schedule J and elsewhere on the revised Form 990 to test my hypotheses. A copy of Schedule J is included in Appendix A for reference.

### **3. SAMPLE AND RESEARCH DESIGN**

#### *Sample and Data Sources*

To construct my sample, I access Form 990 data from the microdata files on the IRS's Statistics of Income Tax Stats website.<sup>20</sup> Because several of my hypotheses can only be answered with information disclosed on the revised Form 990, my sample begins with all 501(c)(3) organizations reported in the database for 2008 and 2009 (29,767 initial observations). I eliminate 11,219 organizations that do not file Schedule J, the source detailed compensation information including the amount of the different types of compensation.<sup>21</sup>

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<sup>19</sup> The sum of base compensation, bonus and incentive compensation, and other reportable compensation must equal the amounts reported on the executive's Form W-2 or 1099 for the year. This should improve the accuracy of the compensation reported, as well as help the IRS enforce compliance with Form 990 reporting.

<sup>20</sup> The data is available at the following website: <http://www.irs.gov/uac/SOI-Tax-Stats-Charities-and-Other-Tax-Exempt-Organizations-Statistics>. The IRS database does not contain Form 990 information for every nonprofit but is instead a size-weighted sample of 501(c)(3)-501(c)(9) organizations. Per the IRS website "[s]ampling rates ranged from 1 percent for small-asset classes to 100 percent for large-asset classes." I use both the Form 990 Main Data File and the Form 990 Compensation Data File for my analysis.

<sup>21</sup> One potential limitation of this study is that it uses information that organizations disclose on Schedule J. Organizations generally must file Schedule J if they have any executive paid over \$150,000. Because of this, the findings in this study may not be generalizable to smaller organizations with executives paid less than the \$150,000 threshold. However, it is possible that these smaller organizations are less likely to get large donations and grants so donors and grantors have a lower incentive to process the information available in the Form 990.

The IRS 990 Compensation Data File includes a record of all individuals listed in the Form 990 that receive compensation from the organization during the year. However, it does not identify any of these records with individual names or titles. Following methodology similar to Sedatole et al. (2013), I assume that the highest compensated *officer* of the organization is the CEO.<sup>22</sup> Additionally, to avoid labeling the wrong individual as CEO when a related organization may pay all or part of the CEO's compensation, I eliminate organizations that have any officer compensated by a related organization. Because of these limitations, I cannot reasonably determine the CEO for 8,199 organizations. I lose 17 observations where no compensation is reported for the CEO or one of the types of CEO compensation is negative and 175 observations for missing control variables. I eliminate 1,547 observations from the total contributions sample because I am unable to determine the level of contributions in  $t+1$  or contributions in  $t+1$  are less than one thousand dollars. My final sample to test the combined reaction of donors and grantors consists of 8,610 observations. For tests related to donor (grantor) behavior, I eliminate 1,983 (4,975) observation where I cannot determine the level of donations (grants) in  $t+1$  or donations (grants) are less than one thousand dollars. The final sample for donation (grant) level tests consists of 8,174 (5,182) observations. Panel A in Table 1 provides a summary of my sample selection.

Panel B in Table 1 provides the sample distribution by National Taxonomy of Exempt Entities (NTEE) category (or industry).<sup>23</sup> For all three samples, the distribution of observations across NTEE categories is roughly equal. Approximately one-third of each sample consists of

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<sup>22</sup> Organizations indicate the position of each individual listed on Form 990 in Part VII, box (C). Per the Form 990 instructions, organizations should mark the "top management official" of an organization as an "officer" of the organization.

<sup>23</sup> The IRS and other entities use NTEE codes to classify nonprofit organizations. More information on NTEE codes can be found at <http://nccs.urban.org/classification/NTEE.cfm>.

education-related nonprofit organizations. Another one-third of observations are from nonprofit organizations engaged in health-related activities. The remaining portion of each sample is mostly comprised of organizations with a human service, a public or societal benefit, or an arts and culture mission. In all of the models used to test my hypotheses, I include industry fixed effects.

**[Insert Table 1 Here]**

### *CEO Compensation*

H1 states that nonprofit organizations that spend a higher percentage of expenses on CEO compensation will receive less in contributions compared to nonprofit organizations that spend a lower percentage of expenses on CEO compensation. To test this hypothesis, I estimate the following ordinary least square (OLS) model, based on the donation demand model developed by Weisbrod and Dominguez (1986):

$$\begin{aligned} \ln FutureTotalContributions_i = & \alpha_1 + \alpha_2 CEOTotalComp/TE_i + \alpha_3 ProgramExpRatio_i \\ & + \alpha_4 \ln FundraisingExp_i + \alpha_5 \ln Age_i + \alpha_6 \ln TotalAssets_i + \alpha_7 \ln GovtGrants_i \\ & + \alpha_8 \ln ProgramServRev_i + \alpha_9 \ln FederatedCampaigns_i + \alpha_{10} \ln Donations_i \\ & + \alpha_d IndustryDummies_i + \epsilon. \end{aligned} \quad (1)$$

I use the level of future contributions (*LnFutureTotalContributions*) as the dependent variable to test how all donors and grantors together respond to disclosed CEO compensation information. Contributions include amounts received in direct donations, indirect donations (discussed in more detail in the additional tests subsection), and grants. To test donor and grantor reaction separately, I replace future total contributions with its largest components. To test how donors respond to disclosed CEO compensation information, I use future donations (*LnFutureDonations*) as the dependent variable. Alternatively, to test how grantors respond to disclosed CEO compensation information, I use future grants (*LnFutureGovtGrants*) as the dependent variable. I use the natural log of all three variables to account for the skewness in the

data. All dependent variables are measured in  $t+1$  to capture how donors and grantors respond to the information disclosed in  $t$ .

The independent variable of interest is the amount of CEO compensation. For my main test, I use total CEO compensation scaled by total expenses as my variable of interest. This ratio gives the percentage of expenses that an organization spends on total CEO compensation. Using this measure, as opposed to the level of CEO compensation, gives context to the size of the CEO's compensation relative to the other expenses of the organization. This measure is more informative to donors and grantors than just the size of CEO compensation alone. If donors and grantors punish organizations with high levels of CEO compensation, I expect  $\alpha_2$  to be negative and significant.

I control for the program service ratio, *ProgramExpRatio*, expecting  $\alpha_3$  to be positive and significant. Numerous empirical studies have shown that as the percentage of expenses spent on program related expenses increases, donors and grantors respond with higher contributions (e.g., Weisbrod and Dominguez 1986, Posnett and Sandler 1989, Buchheit and Parsons 2006, Harris et al. 2014).<sup>24</sup> I control for the amount an organization spends on fundraising costs, *LnFundraisingExp*, as prior studies show that donations increase in response to fundraising efforts by the organization (Weisbrod and Dominguez 1986). I control for organization age, *LnAge*, without a directional prediction. On one hand, there may be less risk of agency costs to donors and grantors to give to older, more established organizations. On the other hand, young nonprofit organizations just starting out may be more heavily dependent on donations and grants to get their activities started. I control for organization size, *LnTotalAssets*, expecting larger organizations to receive more donations and grants (Weisbrod and Dominguez 1986). Previous

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<sup>24</sup> Many of these studies use the inverse of the program expense ratio. I follow Harris et al. (2014) and use the program expense ratio directly for ease of interpretation.

studies suggest that other sources of revenue may affect future donations and grants. Some studies suggest a crowding out effect – that donors and grantors will feel that the organization does not need additional funds if its needs are being met through other revenue sources (Posnett and Sandler 1989). Other studies suggest a crowding in effect – that donors and grantors will see that the organization is doing well in collecting other revenue and monitoring costs will be shared (Okten and Weisbrod 2000). For both dependent variables, I control for the major sources of revenue – government grants (*LnGovtGrants*), program service revenue (*LnProgramServRev*), federated campaign contributions (*LnFederatedCampaigns*), and general donations (*LnDonations*) received in year  $t$  (Petrovits et al. 2011).<sup>25</sup> Detailed variable definitions appear in Appendix B. For this model and all others in this study, I cluster observations by organization and calculate standard errors robust to heteroscedasticity.

#### *Types of CEO Compensation*

I also hypothesize that donors and grantors may respond differently to the different types of CEO compensation (H2). To test this hypothesis, I modify Equation 1 to include each type of CEO compensation and estimate the following OLS model:

$$\begin{aligned} \text{LnFutureTotalContributions}_i = & \beta_1 + \beta_2 \text{CEOBBaseComp}/\text{TE}_i + \beta_3 \text{CEOIncentiveComp}/\text{TE}_i \\ & + \beta_4 \text{CEOOtherComp}/\text{TE}_i + \beta_5 \text{CEODEferredComp}/\text{TE}_i \\ & + \beta_6 \text{CEONontaxableBenefits}/\text{TE}_i + \beta_7 \text{ProgramExpRatio}_i + \beta_8 \text{LnFundraisingExp}_i \\ & + \beta_9 \text{LnAge}_i + \beta_{10} \text{LnTotalAssets}_i + \beta_{11} \text{LnGovtGrants}_i + \beta_{12} \text{LnProgramServRev}_i \\ & + \beta_{13} \text{LnFederatedCampaigns}_i + \beta_{14} \text{LnDonations}_i + \beta_d \text{IndustryDummies}_i + \varepsilon. \quad (2) \end{aligned}$$

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<sup>25</sup> Program service revenue is revenue earned by the organization while carrying out its exempt purpose. Federated campaign contributions are indirect public contributions that come from federated fundraising agencies (e.g., the United Way). Federated fundraising agencies are fundraising organizations that conduct fundraising campaigns and “allocate part of the net proceeds to each participating organization on the basis of the donors’ individual designations and other factors” (IRS 2008b). In additional tests, I also test to see if federated campaign contributions are sensitive to CEO compensation.

I include the five types of CEO compensation reported on Form 990 scaled by total expenses – CEO base compensation ( $CEOBaseComp/TE$ ), CEO incentive compensation ( $CEOIncentiveComp/TE$ ), other CEO compensation ( $CEOOtherComp/TE$ ), CEO deferred compensation ( $CEODerferredComp/TE$ ), and CEO nontaxable benefits ( $CEONontaxableBenefits/TE$ ). These variables allow me to test whether donors and grantors are sensitive to CEO compensation types in relation to total organization expenses. If donors and grantors respond negatively to large amounts of a specific type of CEO compensation, I expect that type's coefficient to be negative and significant. All control variables are the same as Equation 1 with the same directional predictions. Appendix B provides detailed variable definitions.

#### *Donor and Grantor Sophistication*

H3 states that when organizations have sophisticated donors and grantors, the negative relation between contributions and CEO compensation will be even stronger (i.e. more negative). Following Yetman and Yetman (2013), I use the presence of restricted net assets as a proxy for donor and grantor sophistication. Nonprofit organizations that have restricted net assets or higher levels of restricted net assets are more likely to have donors and grantors that are providing closer monitoring and oversight that may be more likely to pay attention to the compensation information disclosed by the organization. I test this hypothesis by modifying Equation 1 to include an interaction.

$$\begin{aligned}
 LnFutureTotalContributions_i = & \gamma_1 + \gamma_2 CEOTotalComp/TE_i + \gamma_3 HaveRestrictedNA_i \\
 & + \gamma_4 CEOTotalComp/TE_i * HaveRestrictedNA_i + \gamma_5 ProgramExpRatio_i \\
 & + \gamma_6 LnFundraisingExp_i + \gamma_7 LnAge_i + \gamma_8 LnTotalAssets_i + \gamma_9 LnGovtGrants_i \\
 & + \gamma_{10} LnProgramServRev_i + \gamma_{11} LnFederatedCampaigns_i + \gamma_{12} LnDonations_i \\
 & + \gamma_d IndustryDummies_i + \varepsilon.
 \end{aligned} \tag{3}$$



I interact CEO compensation with a dummy variable equal to one if the nonprofit organization has restricted net assets (*HaveRestrictedNA*). I also use another measure of donor sophistication, whether the organization has restricted net assets over the median (*RestirctedNAOverMed*), to test H3, and replace *HaveRestrictedNA* in the model. If more sophisticated donors and grantors react more negatively to CEO compensation, I expect  $\gamma_4$  to be negative and significant. All control variables are the same as Equation 1 with the same directional predictions. Appendix B provides detailed variable definitions.

#### *CEO on the Board*

H4 states that when the CEO serves on the board of directors in a nonprofit organization, the negative relation between contributions and CEO compensation will be even stronger. When the CEO serves on the board and has high compensation, donors and grantors may observe this as a sign of increased agency problems in the organization. To test this hypothesis, I modify Equation 1 to include an interaction.

$$\begin{aligned} \text{LnFutureTotalContributions}_i = & \delta_1 + \delta_2 \text{CEOTotalComp}/\text{TE}_i + \delta_3 \text{CEOsDirector}_i \\ & + \delta_4 \text{CEOTotalComp}/\text{TE}_i * \text{CEOsDirector}_i + \delta_5 \text{ProgramExpRatio}_i \\ & + \delta_6 \text{LnFundraisingExp}_i + \delta_7 \text{LnAge}_i + \delta_8 \text{LnTotalAssets}_i + \delta_9 \text{LnGovtGrants}_i \\ & + \delta_{10} \text{LnProgramServRev}_i + \delta_{11} \text{LnFederatedCampaigns}_i + \delta_{12} \text{LnDonations}_i \\ & + \delta_{13} \text{IndustryDummies}_i + \epsilon. \end{aligned} \quad (4)$$

I create a dummy variable equal to one if the CEO is on the board of directors (*CEOsDirector*).

I obtain this information from the revised Form 990, where nonprofit organizations disclose whether their officers are also directors. I interact *CEOsDirector* with scaled CEO compensation expense. If donors and grantors react more strongly to CEO compensation when the CEO serves on the board, I expect  $\delta_4$  to be negative and significant. All control variables are the same as Equation 1 with the same directional predictions. Appendix B provides detailed variable definitions.

### *Source of Revenue*

H5 states that when organizations are more reliant on contributions as a source of revenue, the negative relation between contributions and CEO compensation will be even stronger. Donors and grantors are not generally the direct recipients of the program services provided by the organization so they have to rely on disclosed information to evaluate the organization and high CEO compensation may signal greater agency problems within the organization. To test this hypothesis, I modify Equation 1 to include an interaction.

$$\begin{aligned} \ln FutureTotalContributions_i = & \varphi_1 + \varphi_2 CEOTotalComp/TE_i + \varphi_3 Contri>25\%_i \\ & + \varphi_4 CEOTotalComp/TE_i * Contri>25\%_i + \varphi_5 ProgramExpRatio_i \\ & + \varphi_6 \ln FundraisingExp_i + \varphi_7 \ln Age_i + \varphi_8 \ln TotalAssets_i + \varphi_9 \ln GovtGrants_i \\ & + \varphi_{10} \ln ProgramServRev_i + \varphi_{11} \ln FederatedCampaigns_i + \varphi_{12} \ln Donations_i \\ & + \varphi_d IndustryDummies_i + \varepsilon. \end{aligned} \quad (5)$$

To determine how reliant an organization is on donations and grants, I sum the total donations, grants, and program service revenue the organization receives.<sup>26</sup> I then calculate what percentage of this revenue comes from donations and grants. I create a dummy variable equal to one if this ratio is greater than 25% (*Contri>25%*). I create similar dummy variables if this ratio is greater than 50% (*Contri>50%*) or greater than 75% (*Contri>75%*). I interact *Contri>25%* with scaled CEO compensation expense. If the relation between future donations and grants and CEO compensation is more negative when the organization is more reliant on donations and grants, I expect  $\varphi_4$  to be negative and significant. In further tests, I replace *Contri>25%* with *Contri>50%* and *Contri>75%* and rerun the model to test the relation for organizations that are more dependent on donations and grants. All control variables are the same as Equation 1 with the same directional predictions. Appendix B provides detailed variable definitions.

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<sup>26</sup> For my purposes, I do not use total revenue as the denominator. During my sample period, several organizations had significant investment losses, making their total revenue negative and making any percentage of total revenue hard to interpret.

H6 states that the relation between contributions and CEO compensation may be affected by whether the organization is more dependent on grant revenue over donations. The incentive to evaluate the organization may differ between these two contribution sources. To test this hypothesis, I modify Equation 1 to include an interaction.

$$\begin{aligned} \ln FutureTotalContributions_i = & \lambda_1 + \lambda_2 CEOTotalComp/TE_i + \lambda_3 Grants > Donations_i \\ & + \lambda_4 CEOTotalComp/TE_i * Grants > Donations_i + \lambda_5 ProgramExpRatio_i \\ & + \lambda_6 \ln FundraisingExp_i + \lambda_7 \ln Age_i + \lambda_8 \ln TotalAssets_i + \lambda_9 \ln GovtGrants_i \\ & + \lambda_{10} \ln ProgramServRev_i + \lambda_{11} \ln FederatedCampaigns_i + \lambda_{12} \ln Donations_i \\ & + \lambda_d IndustryDummies_i + \varepsilon. \end{aligned} \quad (6)$$

*Grants > Donations* is a dummy variable equal to one if grants exceed donations in time  $t$ . If the source of contribution revenue has an effect on the relation between future contributions and CEO compensation, I expect  $\lambda_4$  to be significant. All control variables are the same as Equation 1 with the same directional predictions. Appendix B provides detailed variable definitions.

#### *CEO Salary Allocation*

H7 states that when none of the CEO's compensation is allocated to program related activities, the negative relation between contributions and CEO compensation will be even stronger. Expenses spent on program related activities are generally viewed by stakeholders of the nonprofit as more efficient use of organization funds than high expenses spent on management or fundraising. To test this hypothesis, I modify Equation 1 to include an interaction.

$$\begin{aligned} \ln FutureTotalContributions_i = & \psi_1 + \psi_2 CEOTotalComp/TE_i \\ & + \psi_3 OfficerCompAllM\&F_i + \psi_4 CEOTotalComp/TE_i * OfficerCompAllM\&F_i \\ & + \psi_5 ProgramExpRatio_i + \psi_6 \ln FundraisingExp_i + \psi_7 \ln Age_i + \psi_8 \ln TotalAssets_i \\ & + \psi_9 \ln GovtGrants_i + \psi_{10} \ln ProgramServRev_i + \psi_{11} \ln FederatedCampaigns_i \\ & + \psi_{12} \ln Donations_i + \psi_d IndustryDummies_i + \varepsilon. \end{aligned} \quad (7)$$

It is not possible from Form 990 disclosures to tell exactly how CEO compensation is allocated on the Statement of Functional Expenses (Part IX) in all cases. Instead, nonprofit organizations

disclose the allocation of total officer compensation in which CEO compensation is included. However, when an organization allocates all officer compensation to management or fundraising, stakeholders can observe that all of the CEO's compensation is allocated to management or fundraising as well and that none is allocated to program related expenses. I create a dummy variable equal to one when this is the case and interact it with scaled CEO compensation expense. If donors and grantors react more strongly to the amount of expenses spent on CEO compensation when it is all allocated to management or fundraising expenses, I expect  $\psi_4$  to be negative and significant. All control variables are the same as Equation 1 with the same directional predictions. Appendix B provides detailed variable definitions.

## 4. RESULTS

### *Descriptive Statistics*

Table 2 presents the descriptive statistics for the sample. Although I use the log of many variables for my tests, I report the unlogged values for easier interpretation. Additionally, although I use CEO compensation scaled by total expenses for my tests, I report the level of CEO compensation for informational purposes. The mean (median) of future total contributions is \$18,371,291 (\$3,828,687). Examining the two major components of total contributions, the mean (median) of future donations is \$10,318,240 (\$2,250,526) and the mean (median) of future grants is \$11,600,569 (\$1,287,967). The mean (median) of CEO total compensation is \$422,242 (\$303,972). The standard deviation of CEO total compensation is \$373,953, indicating that CEO compensation in the sample varies considerably. When total CEO compensation is scaled by total expenses, the mean (median) total CEO compensation is 1.55% (.84%) of total expenses. When examining the types of CEO compensation, the average CEO earns a base salary of

\$287,467. The mean amount of incentive compensation is \$32,680 but a majority of the CEOs in the sample do not receive any incentive compensation. The mean amount of other compensation is \$37,023 while the average CEO receives \$34,321 in deferred compensation and \$19,910 in nontaxable benefits. Nonprofit organizations in my sample spend 82.37% of expenses on program related expenses on average. Approximately 34% of the observations have CEOs that serve on the board of directors. The average log of total assets is 18.2431 which equates to approximately \$213 million in assets. The smallest observation in my sample has just over \$1.25 million in assets (not tabulated). Because my sample excludes small nonprofit organizations and organizations that are required to file Schedule J, my results are applicable only to larger nonprofit organizations.

**[Insert Table 2 Here]**

#### *Schedule J Descriptives*

Because the information disclosed on Schedule J is new to most nonprofit stakeholders, I provide some descriptive statistics based on my sample in Table 3. Not surprisingly, almost all of my observations provide their CEO a base salary (99.8%). Approximately one-third of my observations (34.1%) provide incentive compensation to their CEO. Approximately half receive other compensation (51.2%). Over two-thirds of the CEOs receive deferred compensation (70.8%) and almost ninety percent receive some nontaxable benefits (88.5%).

Organizations also report what method(s) they use to establish the compensation of the CEO. Almost all require approval of the board of directors or the compensation committee (91.9%). The majority of observations use a compensation survey or study (75.9%), compensation committee (64.1%), and/or a written employment contract (52.9%). The use of a compensation consultant (37.7%) or Form 990 of a related organization (31.7%) is not common.

On average, 3.5 methods are used when establishing the CEO's compensation with a majority of observations using four methods. Interestingly, a few observations (3.9%) use none of the reported methods to establish the CEO's compensation while 8.7% use all six methods.

Finally, as incentive compensation is used in some of my tests, I report the statistics for the use of non-fixed, contingent compensation. 3.9% of observations report awarding compensation to top employees based on the revenue earned by the organization or a related organization. A few more observations (4.9%) award compensation contingent on the net earnings of the organization or related organization. Finally, 10.3% of observations report using some other type of non-fixed payment. All of this information was previously unavailable to stakeholders before the revision of the Form 990.

**[Insert Table 3 Here]**

### *Correlations*

Table 4 presents the Pearson correlation coefficients for the dependent and independent variables of interest. All independent variables are negatively correlated with the log of future total contributions (*LnFutureTotalContributions*), log of future donations (*LnFutureDonations*), and the log of future grants (*LnFutureGrants*). These results are consistent with H1 and H2.

**[Insert Table 4 Here]**

### *CEO Compensation*

H1 predicts that nonprofit organizations that spend a higher percentage of expenses on CEO compensation will have less in contributions compared to nonprofit organizations that spend less. Table 5 presents the results from regressing the log of future contributions, the log of future donations, and the log of future grants on total CEO compensation and control variables. Column 1 reports the results when using the log of future total contributions

(*LnFutureTotalContributions*) as the dependent variable. The coefficient on *CEOTotalComp/TE* is negative and highly significant, suggesting that future contributions are lower for nonprofit organizations that spend a greater percentage of their total expenses on CEO compensation. This result provides support for H1.

The control variables included in Equation 1 are all significant in explaining future contributions. Consistent with predictions, future contributions are positively related to the amount of expenses spend on program related activities, the amount spent on fundraising efforts, the size of the organization, and prior donations. Future contributions are also positively related to prior government grants and indirect contributions from federated campaigns. In contrast, future contributions are negatively related to the age of the organization and the amount it receives in program service revenue.

Examining the largest components of future contributions separately, Column 2 reports the results when using the log of future donations (*LnFutureDonations*) as the dependent variable. The coefficient on *CEOTotalComp/TE* is negative and highly significant. Nonprofit organizations with higher CEO compensation as a percentage of total expenses have lower future donations. Column 3 reports the results when using the log of future grants (*LnFutureGrants*) as the dependent variable. Again, the coefficient on *CEOTotalComp/TE* is negative and highly significant. These results show that nonprofit organizations with a higher percentage of total expenses spent on CEO compensation also have lower future grants. The results reported in Columns 1, 2, and 3 provide strong, consistent support for H1. The results show that donors and grantors react to CEO compensation levels and that organizations with a higher percentage of expenses spent on CEO compensation receive less in future funding compared to organizations with a lower percentage of expenses spent on CEO compensation.

**[Insert Table 5 Here]**

*Types of CEO Compensation*

H2 predicts that donors and grantors will react negatively to the different types of CEO compensation. Table 6 presents the results from regressing the log of future total contributions, the log of future donations, and the log of future grants on the types of CEO compensation and controls. Column 1 reports the results when using the log of future total contributions (*LnFutureTotalContributions*) as the dependent variable. The coefficients on *CEOBaseComp/TE*, *CEOOtherComp/TE*, and *CEONontaxableBenefits/TE* are negative and significant. This indicates that future contributions are sensitive to amounts spent on CEO base compensation, other compensation, and nontaxable benefits.

Examining the main components of future contributions, I find that donors and grantors differ in their reactions to the types of CEO compensation. Column 2 reports the results when using the log of future donations (*LnFutureDonations*) as the dependent variable. Column 2 shows that out of the independent variables of interest, only the coefficient on *CEOBaseComp/TE* is negative and significant. Donors react negatively when organizations spend a higher percentage of total expenses on CEO base compensation. Column 3 reports the results when using the log of future grants (*LnFutureGrants*) as the dependent variable. Column 3 shows that the coefficients on *CEOBaseComp/TE*, *CEOOtherComp/TE*, and *CEONontaxableBenefits/TE* are all negative and significant. Grantors react negatively when organizations spend a higher percentage of total expenses on CEO base compensation, other compensation, and nontaxable benefits.

While both donors and grantors react negatively to the ratio of *total* CEO compensation to total expenses, their reactions to the types of compensation are different. Donors react only to



the base compensation of CEOs. Grantors react to base compensation plus other compensation and nontaxable benefits. One explanation for this is that donors do not pay attention to the types of CEO compensation but instead focus only on total CEO compensation. Table 4 shows that the correlation between total CEO compensation scaled by total expenses is very highly correlated with CEO base compensation scaled by total expenses (.967). Because of this, it is possible that CEO base compensation acts as a proxy for total CEO compensation for the donations regression. In contrast, grantors appear to pay attention to the types of CEO compensation and are particularly sensitive to high levels of base compensation, other compensation, and nontaxable benefits and penalize organizations with higher amount of these with lower grants. Because grants are often applied for by organizations, grantors may pay more careful attention to CEO compensation disclosures as part of that application process.

**[Insert Table 6 Here]**

#### *Donor and Grantor Sophistication*

H3 predicts that the negative relation between contributions and CEO compensation will be even stronger when an organization has sophisticated donors and grantors. Table 7 presents the results from regressing the log of future total contributions, the log of future donations, and the log of future grants on total CEO compensation, a measure of donor and grantor sophistication, their interaction, and control variables. *HaveRestrictedNA* is a dummy variable equal to one if the organization has temporary or permanently restricted net assets. In contrast, *RestrictedNAOverMed* is a dummy variable that captures not only if a nonprofit organization has restricted net assets but also whether the percentage of their net assets classified as restricted is large compared to the sample.

Columns 1 and 2 report the results when using the log of future total contributions (*LnFutureTotalContributions*) as the dependent variable. In Column 1, the coefficient on the interaction, *CEOTotalComp/TE\*HaveRestrictedNA*, is negative and significant. Similarly, in Column 2, the coefficient on the interaction, *CEOTotalComp/TE\*RestrictedNAOverMed*, is negative and significant. These results indicate that the negative reaction of donors and grantors to the amount spent on CEO compensation is even stronger (i.e. more negative) in organizations with sophisticated donors and grantors.

When I split future contributions into its major components, I find consistent results that donor and grantor sophistication matters. Columns 3 and 4 report the results when using the log of future donations (*LnFutureDonations*) as the dependent variable. The coefficient on *CEOTotalComp/TE* is not significant in either column but the coefficient on the interaction in both columns is negative and significant. This indicates for donors at least, the reaction to CEO compensation only occurs in organizations with sophisticated donors. This may occur because donors that place restrictions on their donations engage in more monitoring of the organization and may be more likely to pay attention to CEO compensation levels where smaller donors would not have the same incentive.

Columns 5 and 6 report the results when using the log of future grants (*LnFutureGrants*) as the dependent variable. The interaction is negative and significant in both columns. Again, I find support for H3. The negative relation between future grants and CEO compensation is stronger in the presence of sophisticated donors and grantors. *CEOTotalComp/TE* is not significant in column 5 but is negative and significant in column 6. This result indicates that grants are sensitive to CEO compensation in organizations with any amount of restricted net assets, not just those with higher levels.

**[Insert Table 7 Here]**

#### *CEO on the Board*

H4 predicts that the negative relation between contributions and CEO compensation will be even stronger when the CEO serves on the board of directors. Table 8 presents the results of Equation 4. Column 1 reports the results from using *LnFutureTotalDonations* as the dependent variable. Column 2 reports the results from using *LnFutureDonations* as the dependent variable and Column 3 reports the results from using *LnFutureGrants*. Using any of the three dependent variables, I do not find significance on the interaction between CEO compensation and the dummy variable for whether the CEO serves on the board of directors. The coefficient on *CEOTotalComp/TE* is negative and significant in all three columns. These results suggest that it does not matter if the CEO is on the board. The negative reaction by donors and grants to CEO compensation is not any stronger when the CEO is a director.

One possible explanation for these results is that just serving on the board is not an indication of agency costs. It may be that an increased role on the board of directors such as serving as chairman is what may signal increased agency costs. In the for-profit literature, serving as the chairman of the board is the measure used to capture the CEO's influence on the board (e.g. Core et al. 1999, Cyert et al. 2002, Goyal and Park 2002, Grinstein and Hribar 2004). Unfortunately, data limitations prevent me from testing this alternative explanation with my sample.

**[Insert Table 8 Here]**

#### *Source of Revenue*

H5 predicts that the negative relation between contributions and CEO compensation will be even stronger when the organization is reliant on contributions as a source of revenue. Table

9, Panel A presents the results of Equation 5. Columns 1 through 3 report the results from using *LnFutureTotalDonations* as the dependent variable. The interaction between *CEOTotalComp/TE* and each dummy variable for the percentage of revenue that comes from contributions is negative and highly significant across all three columns. Donors and grantors have a stronger negative reaction to CEO compensation when 75%, 50%, and even 25% of the organization's revenue comes from contributions. These results provide support for H5.

Columns 4 through 6 report the results when *LnFutureDonations* is the dependent variable and Columns 7 through 9 report the results when using *LnFutureGrants*. These results are consistent with the results reported for total contributions. Both donations and grants are separately more sensitive to CEO compensation in organizations that are more reliant on contributions as a source of revenue. This is true for organizations where a majority of revenue comes from contributions as well as organizations where only 25% of revenue comes from contributions.

Given the results reported in Panel A, where the interactions between *CEOTotalComp/TE* and 25%, 50%, and 75% reliant on contributions are all significant, I examine whether there is a difference in reaction to CEO compensation between these levels. I begin by creating new dummy variables. *ContriBetween25-50%* is equal to one for observations where contributions account for 25 to 49% of revenue.<sup>27</sup> Similarly, *ContriBetween50-75%* is equal to one for observations where contributions account for 50 to 74% of total revenue and *ContriBetween75-100%* is equal to one for observations where contributions account for 75% or greater of total revenue. Modifying Equation 5, I include all three dummy variables and interact each one with *CEOTotalComp/TE*. The results are reported in Table 9, Panel B. Column 1 reports the results

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<sup>27</sup> Similar to the percentage of revenue calculation used for Panel A, the denominator for these calculations excludes investment income and other revenue.

when using future contributions (*LnFutureTotalContributions*) as the dependent variable and shows that the coefficients on all three interactions are negative and highly significant which is consistent with the results reported in Panel A. Because the variables are now all in the same model, I can test the differences between contribution reliance. An F-test comparing  $CEOTotalComp/TE * ContriBetween25-50\%$  and  $CEOTotalComp/TE * ContriBetween50-75\%$  is statistically significant (p-value .052). The same is true when comparing  $CEOTotalComp/TE * ContriBetween25-50\%$  and  $CEOTotalComp/TE * Contri > 75\%$  (p-value .063). However, the difference between  $CEOTotalComp/TE * ContriBetween50-75\%$  and  $CEOTotalComp/TE * Contri > 75\%$  is not statistically significant. These results show a stronger negative reaction to CEO compensation for nonprofit organizations that receive a majority of their revenue (greater than 50%) in the form of contributions compared to organizations where contributions account for 25 to 50% of revenue. This result provides further support for H5.

Column 2 reports the result from using future donations (*LnFutureDonations*) as the dependent variable and Column 3 reports the results using future grants (*LnFutureGrants*). All of the interactions are negative and statistically significant in both columns, consistent with the results reported in Panel A. F-tests examining the differences between interactions are generally not significant however. The difference in results as compared to Column 1 may be due to using total contributions as a percentage of revenue to create dummy variables instead of using donations or grants as a percentage of revenue for these separate regressions.

H6 predicts that the relation between future contributions and the percentage of expenses spent on CEO compensation is affected by the reliance on grants and donations as a source of contributions. The results of estimating Equation 6 are reported in Table 9, Panel C. I estimate Equation 6 for four separate samples. Column 1 reports results for observations with less than

25% of revenue from contributions in  $t$ . These are nonprofit organizations least reliant on contributions as a source of revenue. Observations included in Column 2 (Column 3) have between 25-49% (50-74%) of revenue from contributions in  $t$ . Finally, Column 4 reports results for the organizations most reliant on contributions as a source of revenue, those with 75% or greater revenue from contributions in  $t$ . In all columns, the dependent variable is future total contributions ( $LnFutureTotalContributions$ ). The interaction,  $CEOTotalComp/TE*Grants>Donations$ , is only significant in Column 4. These results indicate that for organizations most reliant on contributions as a source of revenue (i.e. with a reliance greater or equal to 75%), the negative reaction to the percentage of expenses spent on CEO compensation is stronger (i.e. more negative) when an organization is more reliant on grants versus donations. This result provides some support for H6 for organizations heavily reliant on contributions.

**[Insert Table 9 Here]**

*CEO Salary Allocation*

H7 predicts that donor and grantor reaction to CEO compensation will be more negative if none of the CEO's compensation is allocated to program related expenses. Table 10 presents the results of Equation 7. Columns 1 and 2 report the results from using future total contributions ( $LnFutureTotalContributions$ ) as the dependent variable. Columns 3 and 4 report the results from using future donations ( $LnFutureDonations$ ) as the dependent variable and Columns 5 and 6 report the results using future grants ( $LnFutureGrants$ ). Columns 1, 3, and 5 report results excluding the interaction term while Columns 2, 4, and 6 include the interaction. Across Columns 2, 4, and 6, the coefficient on the interaction,  $CEOTotalComp/TE*OfficerCompAllM\&F$ , is not significant. These results indicate that donor

and grantor reaction to CEO compensation is not affected by how CEO compensation is allocated on the 990, results that do not support H7.

I report the results without the interaction term in Columns 1, 3, and 5 to show donor and grantor reaction when organizations allocate all officer compensation to management and general. Across all three columns, I find a significant, negative coefficient on *OfficerCompAllM&F*. These results indicate that nonprofit organizations with officers that have none of their compensation allocated towards program related activities receive less in contributions, donations, and grants. While this is not directly related to H7, these results are indirectly related in that they show donors and grantors seem to care about the overall allocation of officer compensation expense.

**[Insert Table 10 Here]**

#### *Robustness Tests*

To help assure that my results are not due to systematic patterns in grants and donations and the percentage of expenses spent on CEO compensation across nonprofit industry types, I calculate a measure of industry adjusted CEO compensation. To do this, I calculate the median total CEO compensation scaled by total expenses per industry-year. I then calculate the industry adjusted CEO compensation (*IndAdjCEOTotalComp/TE*) by subtracting the median industry-year ratio from each observation. I do a similar calculation for the types of CEO compensation. I re-estimate Equations 1 and 2 using this industry adjusted measure. The results are reported in Table 11.

Columns 1 and 2 report the results using the log of total future contributions (*LnFutureTotalContributions*) as the dependent variable. Columns 3 and 4 report the results using the log of future donations (*LnFutureDonations*) as the dependent variable. Columns 5

and 6 report the results using the log of future grants (*LnFutureGrants*) as the dependent variable. Columns 1, 3, and 5 report the results of Equation 1 and Columns 2, 4, and 6 report the results of Equation 2. Future contributions, future donations, and future grants are negatively related to industry adjusted total CEO compensation scaled by total expenses. Future donations are negatively related to industry adjusted scaled CEO base compensation scaled by total expenses and future grants are negatively related to industry adjusted scaled CEO base compensation, other compensation, and nontaxable benefits. The results are consistent with those reported in Tables 5 and 6.

**[Insert Table 11 Here]**

#### *Additional Tests*

Besides funding from donors and grantors, some nonprofit organizations receive indirect public support through donations from federated agencies. This amount is included in total contributions.<sup>28</sup> These federated agencies are fundraising organizations that raise money through fundraising campaigns specifically to distribute to other organizations. The United Way is an example of this type of organization. To determine if federated campaign income is sensitive to CEO compensation, I re-estimate Equations 1 and 2 using the log of future federated campaign income (*LnFutureFederatedCampaign*) as the dependent variable. Some funds raised during a federated campaign may be designated by the donor while other funds raised may be distributed at the discretion of the federated agency so the monitoring role related to this type of funding is unclear.

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<sup>28</sup> I do not report the results of federated campaigns along with my main tests because compared to donations and grants, relatively few organizations receive indirect donations from federated agencies.



Table 12 reports the results from regressing future federated campaign income on CEO compensation variables and controls.<sup>29</sup> The results are not similar to the results found when using future donations or future grants as the dependent variable. Future federated campaign income is not negatively related to the ratio of total CEO compensation to total expenses (Column 1). Examining the reaction to types of compensation (Column 2), future federated campaign income is only negatively related to scaled CEO incentive compensation. Federated agencies appear to penalize nonprofit organizations with less funding if they spend a higher percentage of expenses on incentive compensation for the CEO.

**[Insert Table 12 Here]**

## **5. CONCLUSION**

This study examines whether nonprofit organizations that spend a higher percentage of expenses on CEO compensation receive less in donations and grants compared to nonprofit organizations that spend a lower percentage. Given the potential agency problems in nonprofit organizations, I predict that donors and grantors will penalize organizations that spend a high percentage of expenses on CEO compensation. My results provide support for this hypothesis and suggest that donations and grants are lower for organizations that spend a higher percentage of total expenses on CEO compensation. Future contributions, donations, and grants are all negatively related to the percentage of expenses spent on CEO compensation.

In additional tests, I examine how donors and grantors respond to the types of CEO compensation. I find that donors and grantors give less to organizations that spend a high

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<sup>29</sup> The sample size drops considerably because I limit my sample to organizations that report at least one thousand dollars of federated campaign income and not all nonprofit organizations receive this type of funding.

percentage of expenses on the CEO's base compensation. Grantors also react negatively to the percentage of expenses spent on other CEO compensation and nontaxable benefits. These results indicate that grantors are more sensitive to different types of CEO compensation than donors.

Given the results of my main tests, I examine situations where the reaction of donors and grantors may be even stronger. Using the presence of and level of restricted net assets to proxy for donor and grantor sophistication, I find strong evidence that the negative reaction of donors and grantors is stronger when organizations have more sophisticated donors and grantors. I also find that the relation between future contributions and CEO compensation is stronger in organizations that are more reliant on contributions as a source of revenue. I do not find any evidence that the reporting of CEO compensation expense as program related, management, or fundraising has any effect on how donors and grantors respond to the percentage of expenses spent on CEO compensation. I also do not find that the CEO serving on the board of directors changes how donors and grantors respond to CEO compensation.

This study does not attempt to determine if the compensation earned by CEOs of nonprofit organizations is reasonable or not. Instead, given the amount that nonprofit organizations spend on CEO compensation, whether reasonable or unreasonable, I examine how donors and grantors react to this amount. I find consistent evidence that contributions are negatively affected by CEO compensation. The results of this study suggest that boards of directors of nonprofit organizations, especially those that rely heavily on donations and grants to accomplish their mission, should carefully consider the potential consequences to an organization when setting and negotiating CEO compensation and its specific characteristics. While numerous articles suggest that nonprofit stakeholders are concerned about the level of

CEO compensation in nonprofit organizations, the results of this study find empirical evidence that stakeholders react to this concern through lower levels of contributions.

## REFERENCES

- Andreoni, J. 1990. Impure altruism and donations to public goods: A theory of warm-glow giving. *The Economic Journal* 100: 464-477.
- Brickley, J. A., R. L. Van Horn, and G. J. Wedig. 2010. Board composition and nonprofit conduct: Evidence from hospitals. *Journal of Economic Behavior & Organization* 76: 196-208.
- Buchheit, S. and L. M. Parsons. 2006. An experimental investigation of accounting information's influence on the individual giving process. *Journal of Accounting and Public Policy* 25: 666-686.
- Buettner, R. 2011. Reaping millions in nonprofit care for disabled. *The New York Times* Available at: [http://www.nytimes.com/2011/08/02/nyregion/for-executives-at-group-homes-generous-pay-and-little-oversight.html?\\_r=0](http://www.nytimes.com/2011/08/02/nyregion/for-executives-at-group-homes-generous-pay-and-little-oversight.html?_r=0).
- Charity Navigator. 2013. 2013 CEO compensation study. Charity Navigator. Available at: [http://www.charitynavigator.org/\\_\\_asset\\_\\_/studies/2013\\_CEO\\_Compensation\\_Study\\_Final.pdf](http://www.charitynavigator.org/__asset__/studies/2013_CEO_Compensation_Study_Final.pdf).
- Core, J. E., W. R. Guay, and R. S. Verdi. 2006. Agency problems of excess endowment holdings in not-for-profit firms. *Journal of Accounting and Economics* 41: 307-333.
- Core, J. E., R. W. Holthausen, and D. F. Larcker. 1999. Corporate governance, chief executive officer compensation, and firm performance. *Journal of Financial Economics* 51: 371-406.
- Cyert, R. M., S. Kang, and P. Kumar. 2002. Corporate governance, takeovers, and top-management compensation: Theory and evidence. *Management Science* 48: 453-469.
- Daniels, A. 2014. House tax plan would penalize nonprofits that pay high salaries. *Chronicle of Philanthropy*. Available at: <http://philanthropy.com/article/House-Tax-Plan-Would-Penalize/145039/>.
- DeFusco, R. A., R. R. Johnson, and T. S. Zorn. 1990. The effect of executive stock option plans on stockholders and bondholders. *The Journal of Finance* 45: 617-627.

- DeMint, Jim. 2011. Public broadcasting should go private; If these outfits can afford to pay lavish salaries to their heads, they don't need taxpayer help. *Wall Street Journal*  
Available at: [www.wsj.com](http://www.wsj.com).
- IRS. 2007. Report on exempt organizations executive compensation compliance project—Parts I and II. IRS. Available at: [http://www.irs.gov/pub/irs-tege/exec.\\_comp.\\_final.pdf](http://www.irs.gov/pub/irs-tege/exec._comp._final.pdf).
- IRS. 2008a. Background paper: Summary of form 990 redesign process. IRS. Available at: [http://www.irs.gov/pub/irs-tege/summary\\_form\\_990\\_redesign\\_process.pdf](http://www.irs.gov/pub/irs-tege/summary_form_990_redesign_process.pdf).
- IRS. 2008b. Instructions for form 990, return of organization exempt from income tax. IRS. Available at: <http://www.irs.gov/pub/irs-prior/i990--2008.pdf>.
- Fama, E. F. and M. C. Jensen. 1983. Separation of ownership and control. *Journal of Law and Economics* 26: 301-325.
- Frazier, E. 2009. Controversy deepens over a former United Way chief's pension deal. *Chronicle of Philanthropy* 21: 28.
- Froelich, K. A. 1999. Diversification of revenue strategies: Evolving resource dependence in nonprofit organizations. *Nonprofit and Voluntary Sector Quarterly* 28: 246-268.
- Giving USA Foundation. 2013. Giving USA 2013 Report Highlights. Giving USA Foundation. Available at: <http://store.givingusareports.org/Giving-USA-2013-Report-Highlights-P98.aspx>.
- Gordon, T. P. and S. B. Khumawala. 1999. The demand for not-for-profit financial statements: A model of individual giving. *Journal of Accounting Literature* 18: 31-56.
- Gose, B. 2012a. An increasing number of states consider steps to limit pay for nonprofit leaders. *Chronicle of Philanthropy* 24: 7-8.
- Gose, B. 2012b. Some boards are changing the way they pay their CEO to avoid unwelcome scrutiny. *Chronicle of Philanthropy* 24: 26.
- Goyal, V. K. and C. W. Park. 2002. Board leadership structure and CEO turnover. *Journal of Corporate Finance* 8: 49-66.

- Green, J. 2012. Nonprofit CEO pay topping \$1 million rises with scrutiny. *Bloomberg*. Available at: <http://www.bloomberg.com/news/2012-09-17/nonprofit-ceo-pay-topping-1-million-rises-with-scrutiny.html>.
- Greenlee, J. S. and K. L. Brown. 1999. The impact of accounting information on contributions to charitable organizations. *Research in Accounting Regulation* 13: 111-125.
- Grinstein, Y. and P. Hribar. 2004. CEO compensation and incentives: Evidence from M&A bonuses. *Journal of Financial Economics* 73: 119-143.
- Gronbjerg, K. A. 1991. Managing grants and contracts: The case of four nonprofit social service organizations. *Nonprofit and Voluntary Sector Quarterly* 20: 5-24.
- Hancock, J. 2013. Senate critic of nonprofit hospitals blasts CEO bonuses. *St. Louis Post-Dispatch*. Available at: [http://www.stltoday.com/business/local/senate-critic-of-nonprofit-hospitals-blasts-ceo-bonuses/article\\_0fcba5cd-2a0f-55ca-84a6-1fb37b012b15.html](http://www.stltoday.com/business/local/senate-critic-of-nonprofit-hospitals-blasts-ceo-bonuses/article_0fcba5cd-2a0f-55ca-84a6-1fb37b012b15.html).
- Hansmann, H. B. 1980. The role of nonprofit enterprise. *The Yale Law Journal* 89: 835-901.
- Harris, E., C. Petrovits, and M. H. Yetman. 2014. The effect of nonprofit governance on donations: Evidence from the revised form 990. Working paper, Rutgers University-Camden, George Washington University, and the University of California at Davis.
- Hartzell, J. C. and L. T. Starks. 2003. Institutional investors and executive compensation. *The Journal of Finance* 58: 2351-2374.
- Jensen, M. C. and W. H. Meckling. 1976. Theory of the firm: Managerial behavior, agency costs, and capital structure. *Journal of Financial Economics* 3: 305-360.
- Jensen, M. C., 1993. The modern industrial revolution, exit, and the failure of internal control systems. *Journal of Finance* 48: 831-880.
- Keating, E. K., L. M. Parsons, and A. A. Roberts. 2008. Misreporting fundraising: How do nonprofit organizations account for telemarketing campaigns? *The Accounting Review* 83: 417-446.
- Kitching, K. 2009. Audit value and charitable organizations. *Journal of Accounting and Public Policy* 28: 510-524.

- Krishnan, R., M. H. Yetman, and R. J. Yetman. 2006. Expense misreporting in nonprofit organizations. *The Accounting Review* 81: 399-420.
- Manne, G. A. 1999. Agency costs and the oversight of charitable organizations. *Wisconsin Law Review* 227: 230-252.
- Mulligan, L. N. 2007. What's good for the goose is not good for the gander: Sarbanes-Oxley-style nonprofit reforms. *Michigan Law Review* 105: 1981-2009.
- Okten, C. and B. A. Weisbrod. 2000. Determinants of donations in private nonprofit markets. *Journal of Public Economics* 75: 255-272.
- Panepento, P. and S. Kean. 2008. IRS issues instructions for new charity tax form. *Chronicle of Philanthropy* 20: 35.
- Parker, T. 2013. Is a one million dollar nonprofit CEO salary as bad as it sounds? Investopedia.com Available at: <http://www.investopedia.com/financial-edge/0113/is-a-one-million-dollar-nonprofit-ceo-salary-as-bad-as-it-sounds.aspx>.
- Perry, S. 2007. Smithsonian takes steps to clean up governance after a scathing review. *Chronicle of Philanthropy* 19: 38.
- Perry, S. 2010. Senators question executive salary and other perks at youth charity. *Chronicle of Philanthropy* 22: 21.
- Petrovits, C., C. Shakespeare, and A. Shih. 2011. The causes and consequences of internal control problems in nonprofit organizations. *The Accounting Review* 86: 325-357.
- Pettijohn, S. L. 2013. The nonprofit sector in brief: Public charities, giving, and volunteering, 2013. Urban Institute. Available at: <http://www.urban.org/UploadedPDF/412923-The-Nonprofit-Sector-in-Brief.pdf>.
- Posnett, J. and T. Sandler. 1989. Demand for charity donations in private non-profit markets: The case of the U.K. *Journal of Public Economics* 40: 187-200.
- Sedatole, K. L., A. Swaney, M. H. Yetman, and R. J. Yetman. 2013. Accounting-based performance metrics and executive compensation in nonprofit organizations. Working paper, Michigan State University and the University of California at Davis.

- Spector, M. 2009. IRS probes nonprofit pay practices. *Wall Street Journal* Available at: [www.wsj.com](http://www.wsj.com).
- Strom, S. 2007. I.R.S. finds tax errors in reports of nonprofits. *The New York Times*. Available at: [http://www.nytimes.com/2007/03/01/washington/01charity.html?\\_r=0](http://www.nytimes.com/2007/03/01/washington/01charity.html?_r=0).
- Strom, S. 2011. Congress questions the IRS about delays in its oversight of nonprofit hospitals. *The New York Times*. Available at: [http://www.nytimes.com/2011/11/01/business/congress-asks-irs-about-oversight-of-nonprofit-hospitals.html?\\_r=0](http://www.nytimes.com/2011/11/01/business/congress-asks-irs-about-oversight-of-nonprofit-hospitals.html?_r=0).
- Tinkelman, D. 1998. Differences in sensitivity of financial statement users to joint cost allocations: The case of nonprofit organizations. *Journal of Accounting, Auditing, and Finance* 13: 377-393.
- Tinkelman, D. and K. Mankaney. 2007. When is administrative efficiency associated with charitable donations? *Nonprofit and Voluntary Sector Quarterly* 36: 41-64.
- Wei, C. and D. Yermack. 2011. Investor reactions to CEOs' inside debt incentives. *Review of Financial Studies* 24: 3813-3840.
- Weisbrod, B. A. and N. D. Dominguez. 1986. Demand for collective goods in private nonprofit markets: Can fundraising expenditures help overcome free-rider behavior? *Journal of Public Economics* 30: 83-95.
- Wilhelm, I. and G. Williams. 2009. Salary under scrutiny. *Chronicle of Philanthropy* 21: 12.
- Williams, G., P. Fain, and E. Schwinn. 2005. American University faces scrutiny over president's pay, spending. *Chronicle of Philanthropy* 17: 32-33.
- Yermack, D. 2006. Flights of fancy: Corporate jets, CEO perquisites, and inferior shareholder returns. *Journal of Financial Economics* 80: 211-242.
- Yetman, M. H. and R. J. Yetman. 2012. The effects of governance on the accuracy of charitable expenses reported by nonprofit organizations. *Contemporary Accounting Review* 29: 738-767.
- Yetman, M. H. and R. J. Yetman. 2013. Do donors discount low quality accounting information? *The Accounting Review*, forthcoming.



**APPENDIX A**  
**2008 Form 990, Schedule J**  
**Page 1**

**SCHEDULE J**  
**(Form 990)**

Department of the Treasury  
Internal Revenue Service

**Compensation Information**

For certain Officers, Directors, Trustees, Key Employees, and Highest  
Compensated Employees

▶ **Attach to Form 990. To be completed by organizations  
that answered "Yes" to Form 990, Part IV, line 23.**

OMB No. 1545-0047

**2008**

**Open to Public  
Inspection**

Name of the organization

Employer identification number

**Part I Questions Regarding Compensation**

	Yes	No
<b>1a</b> Check the appropriate box(es) if the organization provided any of the following to or for a person listed in Form 990, Part VII, Section A, line 1a. Complete Part III to provide any relevant information regarding these items. <div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <input type="checkbox"/> First-class or charter travel  <input type="checkbox"/> Travel for companions  <input type="checkbox"/> Tax indemnification and gross-up payments  <input type="checkbox"/> Discretionary spending account </div> <div style="width: 48%;"> <input type="checkbox"/> Housing allowance or residence for personal use  <input type="checkbox"/> Payments for business use of personal residence  <input type="checkbox"/> Health or social club dues or initiation fees  <input type="checkbox"/> Personal services (e.g., maid, chauffeur, chef) </div> </div>		
<b>b</b> If line 1a is checked, did the organization follow a written policy regarding payment or reimbursement or provision of all of the expenses described above? If "No," complete Part III to explain	<b>1b</b>	
<b>2</b> Did the organization require substantiation prior to reimbursing or allowing expenses incurred by all officers, directors, trustees, and the CEO/Executive Director, regarding the items checked in line 1a?	<b>2</b>	
<b>3</b> Indicate which, if any, of the following the organization uses to establish the compensation of the organization's CEO/Executive Director. Check all that apply. <div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <input type="checkbox"/> Compensation committee  <input type="checkbox"/> Independent compensation consultant  <input type="checkbox"/> Form 990 of other organizations </div> <div style="width: 48%;"> <input type="checkbox"/> Written employment contract  <input type="checkbox"/> Compensation survey or study  <input type="checkbox"/> Approval by the board or compensation committee </div> </div>		
<b>4</b> During the year, did any person listed in Form 990, Part VII, Section A, line 1a:		
<b>a</b> Receive a severance payment or change of control payment?	<b>4a</b>	
<b>b</b> Participate in, or receive payment from, a supplemental nonqualified retirement plan?	<b>4b</b>	
<b>c</b> Participate in, or receive payment from, an equity-based compensation arrangement?	<b>4c</b>	
If "Yes" to any of lines 4a-c, list the persons and provide the applicable amounts for each item in Part III.		
<b>Only 501(c)(3) and 501(c)(4) organizations must complete lines 5-8.</b>		
<b>5</b> For persons listed in Form 990, Part VII, Section A, line 1a, did the organization pay or accrue any compensation contingent on the revenues of:		
<b>a</b> The organization?	<b>5a</b>	
<b>b</b> Any related organization?	<b>5b</b>	
If "Yes" to line 5a or 5b, describe in Part III.		
<b>6</b> For persons listed in Form 990, Part VII, Section A, line 1a, did the organization pay or accrue any compensation contingent on the net earnings of:		
<b>a</b> The organization?	<b>6a</b>	
<b>b</b> Any related organization?	<b>6b</b>	
If "Yes" to line 6a or 6b, describe in Part III.		
<b>7</b> For persons listed in Form 990, Part VII, Section A, line 1a, did the organization provide any non-fixed payments not described in lines 5 and 6? If "Yes," describe in Part III	<b>7</b>	
<b>8</b> Were any amounts reported in Form 990, Part VII, paid or accrued pursuant to a contract that was subject to the initial contract exception described in Regs. section 53.4958-4(a)(3)? If "Yes," describe in Part III	<b>8</b>	

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**Note.** The sum of columns (B)(i)–(iii) must equal the applicable column (D) or column (E) amounts on Form 990, Part VII, line 1a.

[illegible]

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## APPENDIX B

### Variable Definitions

LnFutureTotalContributions	Natural log of (1 + total donations + total government grants + total federated campaigns). From Form 990, Part VIII, Line 1f, 1e, and 1a.
LnFutureDonations	Natural log of (1 + total donations). From Form 990, Part VIII, Line 1f.
LnFutureGovtGrants	Natural log of (1 + government grants). From Form 990, Part VIII, Line 1e.
LnFutureFederatedCampaign	Natural log of (1 + federated campaigns). From Form 990, Part VIII, Line 1a.
CEOTotalComp/TE	Total CEO compensation scaled by total expenses. Total CEO compensation from Form 990, Schedule J, Part II, Column E. Total expenses from Form 990, Part IX, Column A, Line 25.
CEOBaseComp/TE	Total CEO base compensation scaled by total expenses. Total CEO base compensation from Form 990, Schedule J, Part II, Column B(i). Total expenses from Form 990, Part IX, Column A, Line 25.
CEOIncentiveComp/TE	Total CEO incentive compensation scaled by total expenses. Total CEO incentive compensation from Form 990, Schedule J, Part II, Column B(ii). Total expenses from Form 990, Part IX, Column A, Line 25.
CEOOtherComp/TE	Total CEO other compensation scaled by total expenses. Total CEO other compensation from Form 990, Schedule J, Part II, Column B(iii). Total expenses from Form 990, Part IX, Column A, Line 25.
CEODerferredComp/TE	Total CEO deferred compensation scaled by total expenses. Total CEO deferred compensation from Form 990, Schedule J, Part II, Column C. Total expenses from Form 990, Part IX, Column A, Line 25.
CEONontaxableBenefits/TE	Total CEO nontaxable benefits scaled by total expenses. Total CEO nontaxable benefits from Form 990, Schedule J, Part II, Column D. Total expenses from Form 990, Part IX, Column A, Line 25.
ProgramExpRatio	Total program service expenses scaled by total expenses. Total program expenses from Form 990, Part IX, Column B, Line 25. Total expenses from Form 990, Part IX, Column A, Line 25.
LnFundraisingExp	Natural log of (1 + total fundraising expenses). From Form 990, Part IX, Column D, Line 25.

LnAge	Natural log of (1 + the organization's age). From Form 990, Block L.
LnTotalAssets	Natural log of (1 + total assets). From Form 990, Part X, Column B, Line 16.
LnGovtGrants	Natural log of (1 + government grants). From Form 990, Part VIII, Line 1e.
LnProgramServRev	Natural log of (1 + program service revenue). From Form 990, Part VIII, Column A, Line 2g.
LnFederatedCampaigns	Natural log of (1 + federated campaigns). From Form 990, Part VIII, Line 1a.
LnDonations	Natural log of (1 + total donations). From Form 990, Part VIII, Line 1f.
HaveRestrictedNA	Dummy variable equal to 1 if Form 990, Part X Line 28 or 29 indicates the organization has temporarily or permanently restricted net assets, 0 otherwise.
RestrictedNAOverMed	Dummy variable equal to 1 if the organization has temporarily or permanently restricted net assets greater than the sample median, 0 otherwise.
CEOsDirector	Dummy variable equal to 1 if Form 990, Part VII, Section A indicates the CEO is a director on the board, 0 otherwise.
Contri>25%	Dummy variable equal to 1 if the organization receives more than 25% of its total contributions (Form 990, Part VIII, Line 1h) and program service revenue (Form 990, Part VIII, Line 2g) are in total contributions, 0 otherwise.
Contri>50%	Dummy variable equal to 1 if the organization receives more than 50% of its total contributions (Form 990, Part VIII, Line 1h) and program service revenue (Form 990, Part VIII, Line 2g) in total contributions, 0 otherwise.
Contri>75%	Dummy variable equal to 1 if the organization receives more than 75% of its total contributions (Form 990, Part VIII, Line 1h) and program service revenue (Form 990, Part VIII, Line 2g) in total contributions, 0 otherwise.
ContriBetween25-50%	Dummy variable equal to 1 if the organization receives 25% or greater but less than 50% of its total contributions (Form 990, Part VIII, Line 1h) and program service revenue (Form 990, Part VIII, Line 2g) in total contributions, 0 otherwise.
ContriBetween50-75%	Dummy variable equal to 1 if the organization receives 50% or greater but less than 75% of its total contributions (Form 990, Part VIII, Line 1h) and program service revenue (Form 990, Part VIII, Line 2g) in total contributions, 0 otherwise.

ContriBetween75-100%	Dummy variable equal to 1 if the organization receives 75% or greater of its total contributions (Form 990, Part VIII, Line 1h) and program service revenue (Form 990, Part VIII, Line 2g) in total contributions, 0 otherwise.
Grants>Donations	Dummy variable equal to 1 if grant revenue (Form 990, Part VIII, Line 1e) is greater than donation revenue (Form 990, Part VIII, Line 1f).
OfficerCompAllM&F	Dummy variable equal to 1 if Form 990, Part IX indicates that none of the compensation of current officers, directors, trustees, and key employees is allocated to program service expenses, 0 otherwise.
IndAdjCEOTotalComp/TE	CEOTotalComp/TE minus the median CEOTotalComp/TE calculated for each industry and year.
IndAdjCEOBaseComp/TE	CEOBaseComp/TE minus the median CEOBaseComp/TE calculated for each industry and year.
IndAdjCEOIncentiveComp/TE	CEOIncentiveComp/TE minus the median CEOIncentiveComp/TE calculated for each industry and year.
IndAdjCEOOtherComp/TE	CEOOtherComp/TE minus the median CEOOtherComp/TE calculated for each industry and year.
IndAdjCEODerferredComp/TE	CEODerferredComp/TE minus the median CEODerferredComp/TE calculated for each industry and year.
IndAdjCEONontaxableBenefits/TE	CEONontaxableBenefits/TE minus the median CEONontaxableBenefits/TE calculated for each industry and year.

Note: Unless indicated, all references are to the 2008 and 2009 Form 990.

**TABLE 1**  
**Sample Selection**

	Total Contributions	Donations	Grants
<b>Panel A: Sample Reconciliation</b>			
All 2008 & 2009 501(c)(3) organizations in IRS microdata file	29,767	29,767	29,767
Less observations:			
Where schedule J is not filed	(11,219)	(11,219)	(11,219)
Where the CEO could not reasonably be determined	(8,199)	(8,199)	(8,199)
Where zero or negative CEO compensation is reported	(17)	(17)	(17)
Missing control variables	(175)	(175)	(175)
Where dependent variable is missing or less than \$1,000	(1,547)	(1,983)	(4,975)
Final sample	8,610	8,174	5,182
<b>Panel B: Distribution by NTEE Category</b>			
Arts, Culture, and Humanities	602	597	470
Education	2,639	2,608	1691
Environment and Animals	211	207	144
Foreign Affairs	187	181	124
Health	2,715	2,419	1710
Human Services	1,463	1,423	698
Mutual/Membership Benefit	2	2	2
Public, Societal Benefit	727	673	342
Religion Related	64	64	1
Total	8,610	8,174	5,182

**TABLE 2**  
**Descriptive Statistics**

<b>Variable</b>	<b>N</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>Median</b>
FutureTotalContributions	8,610	18,371,291	46,466,587	3,828,687
FutureDonations	8,174	10,318,240	23,354,118	2,250,526
FutureGovtGrants	5,182	11,600,569	31,445,562	1,287,967
FutureFederatedCampaign	915	460,164	583,103	144,984
CEOTotalComp	8,610	422,242	373,953	303,972
CEOBaseComp	8,610	287,467	158,763	242,248
CEOIncentiveComp	8,610	32,680	84,548	0
CEOOtherComp	8,610	37,023	117,803	516
CEODerferredComp	8,610	34,321	73,194	12,837
CEONontaxableBenefits	8,610	19,910	21,635	14,116
CEOTotalComp/TE	8,610	0.0155	0.0220	0.0084
CEOBaseComp/TE	8,610	0.0121	0.0173	0.0064
CEOIncentiveComp/TE	8,610	0.0006	0.0019	0.0000
CEOOtherComp/TE	8,610	0.0006	0.0018	0.0000
CEODerferredComp/TE	8,610	0.0008	0.0018	0.0002
CEONontaxableBenefits/TE	8,610	0.0009	0.0016	0.0003
ProgramExpRatio	8,610	0.8237	0.1035	0.8423
LnFundraisingExp	8,610	9.6939	6.1722	12.8982
LnAge	8,610	3.9213	0.8234	4.0254
LnTotalAssets	8,610	18.2431	1.3577	18.2045
LnGovtGrants	8,610	8.3215	7.1315	11.8544

LnProgramServRev	8,610	15.1784	5.3311	16.8500
LnFederatedCampaigns	8,610	1.2586	3.6895	0.0000
LnDonations	8,610	13.4409	4.0890	14.4909
CEOsDirector	8,610	0.3434	0.4749	0.0000

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Definitions of the variables reported in this table are provided in Appendix B.

All continuous variables are winsorized at 1% and 99% to mitigate the influence of outliers.



**TABLE 3**  
**Schedule J Descriptives**

**PANEL A: Occurrence of types of CEO Compensation**

Types of Compensation	% of observations reporting a CEO with a value > 0
CEOBBaseComp	99.8%
CEOIncentiveComp	34.1%
CEOOtherComp	51.2%
CEODeferredComp	70.8%
CEONontaxableBenefits	88.5%

**PANEL B: Method Used for Establishing the Compensation of the CEO**

Method Used	% of observations
Compensation committee	64.1%
Independent compensation consultant	37.7%
Form 990 of other organizations	31.7%
Written employment contract	52.9%
Compensation survey or study	75.9%
Approval by the board or compensation committee	91.9%

# of Methods Used	% of observations
0	3.9%
1	7.6%
2	12.6%
3	21.4%
4	24.5%
5	21.4%
6	8.7%

Average # of Methods Used	3.54
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**PANEL C: Occurrence of Contingent Compensation in Organization**

Executive received compensation contingent on revenues of organization or related organization	3.9%
Executive received compensation contingent on net earnings of organization or related organization	4.9%
Executive received other non-fixed payment	10.3%

**TABLE 4**  
**Pearson Correlations**

	1	2	3	4	5	6	7	8	9
1 LnFutureTotalContributions	1.0000								
2 LnFutureDonations	0.5645 0.0000	1.0000							
3 LnFutureGovtGrants	0.4271 0.0000	0.1779 0.0000	1.0000						
4 CEOTotalComp/TE	-0.1670 0.0000	-0.1243 0.0000	-0.1824 0.0000	1.0000					
5 CEOBaseComp/TE	-0.1656 0.0000	-0.1245 0.0000	-0.1836 0.0000	0.9665 0.0000	1.0000				
6 CEOIncentiveComp/TE	-0.0880 0.0000	-0.0780 0.0000	-0.0592 0.0000	0.3495 0.0000	0.2417 0.0000	1.0000			
7 CEOOtherComp/TE	-0.0499 0.0000	-0.0321 0.0037	-0.0550 0.0001	0.2851 0.0000	0.1538 0.0000	0.1431 0.0000	1.0000		
8 CEODerferredComp/TE	-0.0706 0.0000	-0.0347 0.0017	-0.0982 0.0000	0.4938 0.0000	0.4031 0.0000	0.2133 0.0000	0.1786 0.0000	1.0000	
9 CEONontaxableBenefits/TE	-0.1110 0.0000	-0.0635 0.0000	-0.1380 0.0000	0.6190 0.0000	0.8934 0.0000	0.1387 0.0000	0.0521 0.0000	0.2863 0.0000	1.0000

**TABLE 5**  
**Donor and Grantor Reaction to CEO Compensation**

		<i>Dependent Variable</i>					
		<b>LnFuture TotalContributions</b>		<b>LnFutureDonations</b>		<b>LnFutureGrants</b>	
	Predicted Sign	(1)		(2)		(3)	
Intercept	?	6.965 (0.000)	***	3.486 (0.000)	***	5.003 (0.000)	***
CEOTotalComp/TE	-	-8.727 (0.000)	***	-4.336 (0.000)	***	-8.587 (0.000)	***
ProgramExpRatio	+	0.443 (0.021)	**	0.125 (0.262)		1.028 (0.001)	***
LnFundraisingExp	+	0.080 (0.000)	***	0.096 (0.000)	***	-0.001 (0.562)	
LnAge	?	-0.101 (0.000)	***	-0.006 (0.799)		-0.283 (0.000)	***
LnTotalAssets	+	0.326 (0.000)	***	0.348 (0.000)	***	0.302 (0.000)	***
LnGovtGrants	?	0.115 (0.000)	***	0.013 (0.000)	***	0.316 (0.000)	***
LnProgramServRev	?	-0.089 (0.000)	***	-0.055 (0.000)	***	-0.041 (0.000)	***
LnFederatedCampaigns	?	0.047 (0.000)	***	0.038 (0.000)	***	0.003 (0.682)	
LnDonations	+	0.133 (0.000)	***	0.324 (0.000)	***	0.006 (0.254)	

Industry Dummies	YES	YES	YES
Year Dummies	YES	YES	YES
Number of observations	8,610	8,174	5,182
Adjusted R <sup>2</sup>	0.594	0.696	0.461

I estimate each model using OLS. \*, \*\*, \*\*\* represent statistical significance at the 10 percent, 5 percent, and 1 percent levels, respectively. Robust p-values (in parentheses) are based on standard errors adjusted for clustering at organization-level. P-values are one-tailed for coefficients with a directional prediction and two-tailed for those without a directional prediction. Industries dummies are included by NTEE category. All continuous variables have been winsorized at the 1% and 99% level. See Appendix B for a detailed definition of variables.

**TABLE 6**  
**Donor and Grantor Reaction to Types of CEO Compensation**

		<i>Dependent Variable</i>					
		<b>LnFuture TotalContributions</b>		<b>LnFutureDonations</b>		<b>LnFutureGrants</b>	
	Predicted Sign	(1)		(2)		(3)	
Intercept	?	7.183 (0.000)	***	3.587 (0.000)	***	5.171 (0.000)	***
CEOBBaseComp/TE	-	-10.233 (0.000)	***	-4.891 (0.001)	***	-8.285 (0.001)	***
CEOIncentiveComp/TE	-	-8.816 (0.185)		-10.564 (0.112)		-4.315 (0.394)	
CEOOtherComp/TE	-	-15.331 (0.074)	*	-10.523 (0.151)		-26.505 (0.047)	**
CEODDeferredComp/TE	-	-3.755 (0.356)		-4.192 (0.318)		-16.520 (0.196)	
CEONontaxableBenefits/TE	-	-17.669 (0.091)	*	-6.251 (0.304)		-36.023 (0.084)	*
ProgramExpRatio	+	0.389 (0.037)	**	0.089 (0.327)		0.990 (0.001)	***
LnFundraisingExp	+	0.080 (0.000)	***	0.096 (0.000)	***	-0.001 (0.557)	
LnAge	?	-0.102 (0.000)	***	-0.008 (0.745)		-0.283 (0.000)	***
LnTotalAssets	+	0.320 (0.000)	***	0.346 (0.000)	***	0.297 (0.000)	***

LnGovtGrants	?	0.115 (0.000)	***	0.013 (0.000)	***	0.315 (0.000)	***
LnProgramServRev	?	-0.090 (0.000)	***	-0.056 (0.000)	***	-0.042 (0.000)	***
LnFederatedCampaigns	?	0.047 (0.000)	***	0.038 (0.000)	***	0.003 (0.709)	
LnDonations	+	0.133 (0.000)	***	0.324 (0.000)	***	0.006 (0.250)	
Industry Dummies		YES		YES		YES	
Year Dummies		YES		YES		YES	
Number of observations		8,610		8,174		5,182	
Adjusted R <sup>2</sup>		0.594		0.696		0.462	

63 I estimate each model using OLS. \*, \*\*, \*\*\* represent statistical significance at the 10 percent, 5 percent, and 1 percent levels, respectively. Robust p-values (in parentheses) are based on standard errors adjusted for clustering at organization-level. P-values are one-tailed for coefficients with a directional prediction and two-tailed for those without a directional prediction. Industries dummies are included by NTEE category. All continuous variables have been winsorized at the 1% and 99% level. See Appendix B for a detailed definition of variables.

**TABLE 7**  
**The Effect of Sophistication on Donor and Grantor Reaction to CEO Compensation**

		<i>Dependent Variable</i>											
		<b>LnFuture TotalContributions</b>				<b>LnFutureDonations</b>				<b>LnFutureGrants</b>			
	Predicted Sign	(1)		(2)		(3)		(4)		(5)		(6)	
Intercept	?	6.894	***	6.932	***	3.359	***	3.486	***	5.068	***	4.975	***
		(0.000)		(0.000)		(0.000)		(0.000)		(0.000)		(0.000)	
CEOTotalComp/TE	-	-4.855	**	-6.158	***	-0.760		-1.406		-1.933		-4.654	**
		(0.031)		(0.000)		(0.372)		(0.149)		(0.264)		(0.026)	
HaveRestrictedNA	+	0.126				0.292	***			-0.164			
		(0.103)				(0.000)				(0.905)			
CEOTotalComp/TE*HaveRestrictedNA	-	-4.577	**			-4.387	**			-9.123	***		
		(0.046)				(0.038)				(0.006)			
RestrictedNAOverMed	+			0.514	***			0.610	***			0.252	***
				(0.000)				(0.000)				(0.001)	
CEOTotalComp/TE*RestrictedNAOverMed	-			-5.711	***			-6.819	***			-8.276	***
				(0.001)				(0.000)				(0.009)	
ProgramExpRatio	+	0.447	**	0.487	**	0.178		0.195		0.926	***	0.988	***
		(0.021)		(0.013)		(0.187)		(0.162)		(0.002)		(0.001)	
LnFundraisingExp	+	0.081	***	0.076	***	0.095	***	0.092	***	0.003		-0.002	
		(0.000)		(0.000)		(0.000)		(0.000)		(0.310)		(0.598)	
LnAge	?	-0.096	***	-0.122	***	-0.018		-0.042	*	-0.251	***	-0.278	***
		(0.001)		(0.000)		(0.467)		(0.081)		(0.000)		(0.000)	
LnTotalAssets	+	0.316	***	0.313	***	0.345	***	0.343	***	0.292	***	0.291	***
		(0.000)		(0.000)		(0.000)		(0.000)		(0.000)		(0.000)	

LnGovtGrants	?	0.113 (0.000)	***	0.111 (0.000)	***	0.013 (0.000)	***	0.011 (0.000)	***	0.318 (0.000)	***	0.317 (0.000)	***
LnProgramServRev	?	-0.089 (0.000)	***	-0.085 (0.000)	***	-0.055 (0.000)	***	-0.051 (0.000)	***	-0.045 (0.000)	***	-0.043 (0.000)	***
LnFederatedCampaigns	?	0.047 (0.000)	***	0.045 (0.000)	***	0.038 (0.000)	***	0.036 (0.000)	***	0.004 (0.627)		0.001 (0.855)	
LnDonations	+	0.141 (0.000)	***	0.134 (0.000)	***	0.320 (0.000)	***	0.310 (0.000)	***	0.020 (0.012)	**	0.013 (0.079)	*
<i>Joint Test of Interaction</i>													
<i>CEOTotalComp/TE + Interaction</i>		<i>(0.000)</i>		<i>(0.000)</i>		<i>(0.000)</i>		<i>(0.000)</i>		<i>(0.000)</i>		<i>(0.000)</i>	
Industry Dummies		YES		YES		YES		YES		YES		YES	
Year Dummies		YES		YES		YES		YES		YES		YES	
Number of observations		8,446		8,446		8,039		8,039		5,084		5,084	
Adjusted R <sup>2</sup>		0.601		0.606		0.698		0.705		0.468		0.467	

I estimate each model using OLS. \*, \*\*, \*\*\* represent statistical significance at the 10 percent, 5 percent, and 1 percent levels, respectively. Robust p-values (in parentheses) are based on standard errors adjusted for clustering at organization-level. P-values are one-tailed for coefficients with a directional prediction and two-tailed for those without a directional prediction. Industries dummies are included by NTEE category. All continuous variables have been winsorized at the 1% and 99% level. See Appendix B for a detailed definition of variables.



**TABLE 8**  
**The Effect of CEO Board Membership on Donor and Grantor Reaction to CEO Compensation**

		<i>Dependent Variable</i>					
		<b>LnFuture TotalContributions</b>		<b>LnFutureDonations</b>		<b>LnFutureGrants</b>	
	Predicted Sign	(1)		(2)		(3)	
Intercept	?	6.909 (0.000)	***	3.521 (0.000)	***	4.995 (0.000)	***
CEOTotalComp/TE	-	-8.262 (0.000)	***	-4.155 (0.000)	***	-9.024 (0.000)	***
CEOsDirector	?	-0.037 (0.449)		0.051 (0.223)		-0.022 (0.750)	
CEOTotalComp/TE*CEOsDirector	-	-0.893 (0.299)		-0.676 (0.321)		1.388 (0.662)	
ProgramExpRatio	+	0.445 (0.020)	**	0.125 (0.262)		1.027 (0.001)	***
LnFundraisingExp	+	0.080 (0.000)	***	0.096 (0.000)	***	-0.001 (0.565)	
LnAge	?	-0.102 (0.000)	***	-0.006 (0.817)		-0.283 (0.000)	***
LnTotalAssets	+	0.329 (0.000)	***	0.346 (0.000)	***	0.302 (0.000)	***
LnGovtGrants	?	0.116 (0.000)	***	0.013 (0.000)	***	0.316 (0.000)	***
LnProgramServRev	?	-0.089 (0.000)	***	-0.056 (0.000)	***	-0.041 (0.000)	***

LnFederatedCampaigns	?	0.047 (0.000)	***	0.038 (0.000)	***	0.003 (0.682)
LnDonations	+	0.133 (0.000)	***	0.324 (0.000)	***	0.006 (0.252)
Industry Dummies		YES		YES		YES
Year Dummies		YES		YES		YES
Number of observations		8,610		8,174		5,182
Adjusted R <sup>2</sup>		0.594		0.696		0.461

I estimate each model using OLS. \*, \*\*, \*\*\* represent statistical significance at the 10 percent, 5 percent, and 1 percent levels, respectively. Robust p-values (in parentheses) are based on standard errors adjusted for clustering at organization-level. P-values are one-tailed for coefficients with a directional prediction and two-tailed for those without a directional prediction. Industries dummies are included by NTEE category. All continuous variables have been winsorized at the 1% and 99% level. See Appendix B for a detailed definition of variables.

TABLE 9  
The Effect of Reliance on Contributions on Donor and Grantor Reaction to CEO Compensation

Panel A: Reliance on Contributions

	Pred. Sign	LnFutureTotalContributions						Dependent Variable LnFutureDonations						LnFutureGrants					
		(1)		(2)		(3)		(4)		(5)		(6)		(7)		(8)		(9)	
Intercept	?	4.548	***	4.782	***	5.533	***	2.361	***	2.518	***	2.802	***	2.848	***	3.095	***	3.930	***
		(0.000)		(0.000)		(0.000)		(0.000)		(0.000)		(0.000)		(0.000)		(0.000)		(0.000)	
CEOTotalComp/TE	-	-3.593	**	0.154		-0.533		-0.903		-1.104		-0.934		-3.384		-2.054		-4.581	**
		(0.043)		(0.535)		(0.361)		(0.319)		(0.241)		(0.240)		(0.250)		(0.253)		(0.037)	
Contri>25%	+	1.827	***					0.925	***					1.494	***				
		(0.000)						(0.000)						(0.000)					
CEOTotalComp/TE *Contri>25%	-	-10.554	***					-6.801	***					-10.237	**				
		(0.000)						(0.000)						(0.023)					
Contri>50%	+			1.820	***					0.882	***					1.476	***		
				(0.000)						(0.000)						(0.000)			
CEOTotalComp/TE *Contri>50%	-			-14.976	***					-6.232	***					-11.623	***		
				(0.000)						(0.000)						(0.001)			
Contri>75%	+					1.715	***					0.900	***					1.310	***
						(0.000)						(0.000)						(0.000)	
CEOTotalComp/TE *Contri>75%	-					-14.433	***					-6.536	***					-7.820	**
						(0.000)						(0.000)						(0.013)	
ProgramExpRatio	+	0.731	***	0.654	***	0.513	***	0.270	*	0.235		0.170		1.366	***	1.327	***	1.170	***
		(0.000)		(0.001)		(0.008)		(0.083)		(0.114)		(0.190)		(0.000)		(0.000)		(0.000)	

LnFundraisingExp	+	0.068	***	0.071	***	0.074	***	0.091	***	0.092	***	0.093	***	-0.007		-0.006		-0.004	
		(0.000)		(0.000)		(0.000)		(0.000)		(0.000)		(0.000)		(0.870)		(0.829)		(0.704)	
LnAge	?	-0.027		-0.028		-0.047	*	0.028		0.027		0.021		-0.205	***	-0.215	***	-0.238	***
		(0.289)		(0.273)		(0.077)		(0.228)		(0.256)		(0.372)		(0.000)		(0.000)		(0.000)	
LnTotalAssets	+	0.343	***	0.328	***	0.312	***	0.358	***	0.347	***	0.337	***	0.329	***	0.309	***	0.285	***
		(0.000)		(0.000)		(0.000)		(0.000)		(0.000)		(0.000)		(0.000)		(0.000)		(0.000)	
LnGovtGrants	?	0.096	***	0.102	***	0.108	***	0.005	**	0.007	***	0.010	***	0.279	***	0.290	***	0.301	***
		(0.000)		(0.000)		(0.000)		(0.039)		(0.003)		(0.000)		(0.000)		(0.000)		(0.000)	
LnProgramServRev	?	-0.027	***	-0.018	***	-0.016	***	-0.025	***	-0.020	***	-0.015	***	0.003		0.016	*	0.020	**

I estimate each model using OLS. \*, \*\*, \*\*\* represent statistical significance at the 10 percent, 5 percent, and 1 percent levels, respectively. Robust p-values (in parentheses) are based on standard errors adjusted for clustering at organization-level. P-values are one-tailed for coefficients with a directional prediction and two-tailed for those without a directional prediction. Industries dummies are included by NTEE category. All continuous variables have been winsorized at the 1% and 99% level. See Appendix B for a detailed definition of variables.

**Panel B: Comparing Reliance on Contributions**

*Dependent Variable*

	Predicted Sign	LnFuture					
		TotalContributions		LnFutureDonations		LnFutureGrants	
		(1)		(2)		(3)	
Intercept	?	4.173	***	2.175	***	2.432	***
		(0.000)		(0.000)		(0.000)	
CEOTotalComp/TE	-	-2.296		-0.266		-1.571	
		(0.141)		(0.445)		(0.376)	
ContriBetween25-50%	+	1.431	***	0.817	***	1.203	***
		(0.000)		(0.000)		(0.000)	
CEOTotalComp/TE*ContriBetween25-50%	-	-7.651	***	-10.508	***	-13.048	**
		(0.002)		(0.000)		(0.014)	
ContriBetween50-75%	+	1.873	***	0.855	***	1.696	***
		(0.000)		(0.000)		(0.000)	
CEOTotalComp/TE*ContriBetween50-75%	-	-13.892	***	-6.867	***	-19.860	***
		(0.000)		(0.006)		(0.000)	
ContriBetween75-100%	+	2.418	***	1.260	***	2.062	***
		(0.000)		(0.000)		(0.000)	
CEOTotalComp/TE*ContriBetween75-100%	-	-12.034	***	-6.911	***	-9.935	**
		(0.000)		(0.000)		(0.034)	
ProgramExpRatio	+	0.768	***	0.311	*	1.467	***
		(0.000)		(0.054)		(0.000)	
LnFundraisingExp	+	0.066	***	0.090	***	-0.008	
		(0.000)		(0.000)		(0.915)	
LnAge	?	-0.010		0.036		-0.187	***
		(0.696)		(0.120)		(0.000)	

LnTotalAssets	+	0.327 (0.000)	***	0.347 (0.000)	***	0.310 (0.000)	***
LnGovtGrants	?	0.094 (0.000)	***	0.004 (0.105)		0.275 (0.000)	***
LnProgramServRev	?	0.005 (0.349)		-0.005 (0.267)		0.038 (0.000)	***
LnFederatedCampaigns	?	0.030 (0.000)	***	0.029 (0.000)	***	-0.006 (0.453)	
LnDonations	+	0.100 (0.000)	***	0.298 (0.000)	***	-0.017 (0.980)	
<i>Joint Test of Interaction</i>							
<i>CEOTotalComp/TE</i>							
+ <i>CEOTotalComp/TE*ContriBetween25-50%</i>		(0.000)		(0.000)		(0.000)	
+ <i>CEOTotalComp/TE*ContriBetween50-75%</i>		(0.000)		(0.001)		(0.000)	
+ <i>CEOTotalComp/TE*ContriBetween75-100%</i>		(0.000)		(0.000)		(0.000)	
<i>Test of Differences in Interaction Terms (2-tailed)</i>							
<i>ContriBetween25-50% and 50-75%</i>		(0.052)		(0.220)		(0.159)	
<i>ContriBetween25-50% and 75-100%</i>		(0.063)		(0.141)		(0.494)	
<i>ContriBetween50-75% and 75-100%</i>		(0.533)		(0.985)		(0.015)	
Industry Dummies		YES		YES		YES	
Year Dummies		YES		YES		YES	
Number of observations		8,605		8,170		5,181	
Adjusted R <sup>2</sup>		0.667		0.714		0.515	

I estimate each model using OLS. \*, \*\*, \*\*\* represent statistical significance at the 10 percent, 5 percent, and 1 percent levels, respectively. Robust p-values (in parentheses) are based on standard errors adjusted for clustering at organization-level. P-values are one-tailed for coefficients with a directional prediction and two-tailed for those without a directional prediction. Industries dummies

are included by NTEE category. All continuous variables have been winsorized at the 1% and 99% level. See Appendix B for a detailed definition of variables.

**Panel C: Comparing Donor and Grantor Reaction based on Reliance on Contributions**

		<i>Dependent Variable</i>							
		<b>LnFutureTotalContributions</b>							
	Predicted Sign	(1)		(2)		(3)		(4)	
Intercept	?	1.568 (0.015)	**	1.095 (0.045)	**	2.115 (0.012)	**	7.497 (0.000)	***
CEOTotalComp/TE	-	9.505 (0.967)		-0.441 (0.431)		-7.669 (0.000)	***	-15.649 (0.000)	***
Grants>Donations	?	0.282 (0.000)	***	0.231 (0.007)	***	-0.013 (0.926)		0.744 (0.000)	***
CEOTotalComp/TE*Grants>Donations	?	-0.891 (0.887)		1.052 (0.718)		2.528 (0.453)		-16.706 (0.006)	***
ProgramExpRatio	+	0.173 (0.314)		-0.243 (0.711)		0.630 (0.105)		1.291 (0.000)	***
LnFundraisingExp	+	0.042 (0.000)	***	0.024 (0.010)	***	0.009 (0.231)		-0.005 (0.721)	
LnAge	?	0.008 (0.845)		-0.093 (0.090)	*	-0.036 (0.523)		-0.191 (0.000)	***
LnTotalAssets	+	0.327 (0.000)	***	0.108 (0.010)	***	0.106 (0.010)	***	0.352 (0.000)	***
LnGovtGrants	?	0.079 (0.000)	***	0.053 (0.002)	***	0.087 (0.000)	***	0.069 (0.000)	***
LnProgramServRev	?	0.231 (0.000)	***	0.719 (0.000)	***	0.620 (0.000)	***	-0.002 (0.751)	
LnFederatedCampaigns	?	0.036 (0.000)	***	0.010 (0.154)		-0.010 (0.426)		0.015 (0.019)	**
LnDonations	+	0.134 (0.000)	***	0.032 (0.011)	**	0.045 (0.056)	*	0.100 (0.000)	***



Industry Dummies	YES	YES	YES	YES
Year Dummies	YES	YES	YES	YES
Number of observations	2,646	531	426	1,158
Adjusted R <sup>2</sup>	0.629	0.816	0.774	0.609

Column 1 reports results for observations with less than 25% of revenue from contributions in  $t$ . Column 2 reports results for observations with 25-49% of revenue from contributions in  $t$ . Column 3 reports results for observations with 50-74% of revenue from contributions in  $t$ . Finally, Column 4 reports results for observations with 75% or greater revenue from contributions in  $t$ . I estimate each model using OLS. \*, \*\*, \*\*\* represent statistical significance at the 10 percent, 5 percent, and 1 percent levels, respectively. Robust p-values (in parentheses) are based on standard errors adjusted for clustering at organization-level. P-values are one-tailed for coefficients with a directional prediction and two-tailed for those without a directional prediction. Industries dummies are included by NTEE category. All continuous variables have been winsorized at the 1% and 99% level. See Appendix B for a detailed definition of variables.

TABLE 10  
The Effect of Expense Allocation on Donor and Grantor Reaction to CEO Compensation

		<i>Dependent Variable</i>											
		LnFutureTotalContributions				LnFutureDonations				LnFutureGrants			
Predicted Sign		(1)		(2)		(3)		(4)		(5)		(6)	
Intercept	?	7.206	***	7.168	***	3.701	***	3.628	***	5.288	***	5.260	***
		(0.000)		(0.000)		(0.000)		(0.000)		(0.000)		(0.000)	
CEOTotalComp/TE	-	-10.168	***	-10.572	***	-6.080	***	-7.019	***	-9.980	***	-10.228	***
		(0.000)		(0.000)		(0.000)		(0.000)		(0.000)		(0.000)	
OfficerCompAllM&F	-	-0.218	***	-0.259	***	-0.222	***	-0.312	***	-0.192	***	-0.217	***
		(0.000)		(0.000)		(0.000)		(0.000)		(0.000)		(0.006)	
CEOTotalComp/TE*OfficerCompAllM&F	-			3.405				7.400				2.647	
				(0.929)				(1.000)				(0.662)	
ProgramExpRatio	+	0.345	*	0.389	**	-0.028		0.059		0.874	*	0.896	***
		(0.064)		(0.044)		(0.555)		(0.386)		(0.064)		(0.003)	
LnFundraisingExp	+	0.079	***	0.079	***	0.096	***	0.096	***	-0.002	***	-0.002	
		(0.000)		(0.000)		(0.000)		(0.000)		(0.000)		(0.609)	
LnAge	?	-0.100	***	-0.100	***	-0.002		-0.002		-0.280	***	-0.280	***
		(0.000)		(0.000)		(0.946)		(0.930)		(0.000)		(0.000)	
LnTotalAssets	+	0.323	***	0.324	***	0.344	***	0.346	***	0.297	***	0.298	***
		(0.000)		(0.000)		(0.000)		(0.000)		(0.000)		(0.000)	
LnGovtGrants	?	0.114	***	0.114	***	0.012	***	0.012	***	0.316	***	0.316	***
		(0.000)		(0.000)		(0.000)		(0.000)		(0.000)		(0.000)	
LnProgramServRev	?	-0.088	***	-0.088	***	-0.055	***	-0.054	***	-0.041	***	-0.040	***
		(0.000)		(0.000)		(0.000)		(0.000)		(0.000)		(0.000)	
LnFederatedCampaigns	?	0.046	***	0.046	***	0.035	***	0.035	***	0.004	***	0.004	
		(0.000)		(0.000)		(0.000)		(0.000)		(0.000)		(0.604)	

LnDonations	+	0.131 (0.000)	***	0.131 (0.000)	***	0.326 (0.000)	***	0.325 (0.000)	***	0.002 (0.000)	***	0.002 (0.397)
Industry Dummies		YES		YES		YES		YES		YES		YES
Year Dummies		YES		YES		YES		YES		YES		YES
Number of observations		8,329		8,329		7,908		7,908		5,045		5,045
Adjusted R <sup>2</sup>		0.595		0.595		0.702		0.703		0.463		0.463

I estimate each model using OLS. \*, \*\*, \*\*\* represent statistical significance at the 10 percent, 5 percent, and 1 percent levels, respectively. Robust p-values (in parentheses) are based on standard errors adjusted for clustering at organization-level. P-values are one-tailed for coefficients with a directional prediction and two-tailed for those without a directional prediction. Industries dummies are included by NTEE category. All continuous variables have been winsorized at the 1% and 99% level. See Appendix B for a detailed definition of variables.

TABLE 11  
Donor and Grantor Reaction to Industry Adjusted CEO Compensation

		<i>Dependent Variable</i>											
		DV = LnFutureDonations				DV = LnFutureDonations				DV = LnFutureGrants			
Predicted Sign		(1)		(2)		(3)		(4)		(5)		(6)	
Intercept	?	6.768	***	6.968	***	3.390	***	3.488	***	4.809	***	4.973	***
		(0.000)		(0.000)		(0.000)		(0.000)		(0.000)		(0.000)	
IndAdjCEOTotalComp/TE	-	-8.617	***			-4.296	***			-8.465	***		
		(0.000)				(0.000)				(0.000)			
IndAdjCEOBaseComp/TE	-			-9.976	***			-4.788	***			-7.835	***
				(0.000)				(0.001)				(0.002)	
IndAdjCEOIncentiveComp/TE	-			-9.184				-10.614				-5.020	
				(0.175)				(0.110)				(0.377)	
IndAdjCEOOtherComp/TE	-			-15.330	*			-10.466				-26.760	**
				(0.074)				(0.152)				(0.045)	
IndAdjCEODerferredComp/TE	-			-4.179				-4.292				-17.616	
				(0.340)				(0.314)				(0.180)	
IndAdjCEONontaxableBenefits/TE	-			-18.020	*			-6.532				-37.781	*
				(0.085)				(0.295)				(0.075)	
ProgramExpRatio	+	0.448	**	0.395	**	0.127		0.092		1.034	***	1.000	***
		(0.019)		(0.034)		(0.259)		(0.321)		(0.000)		(0.001)	
LnFundraisingExp	+	0.080	***	0.080	***	0.096	***	0.096	***	-0.001		-0.001	
		(0.000)		(0.000)		(0.000)		(0.000)		(0.565)		(0.560)	
LnAge	?	-0.101	***	-0.102	***	-0.006		-0.008		-0.283	***	-0.282	***
		(0.000)		(0.000)		(0.800)		(0.749)		(0.000)		(0.000)	
LnTotalAssets	+	0.327	***	0.321	***	0.349	***	0.347	***	0.303	***	0.298	***
		(0.000)		(0.000)		(0.000)		(0.000)		(0.000)		(0.000)	

LnGovtGrants	?	0.115 (0.000)	***	0.115 (0.000)	***	0.013 (0.000)	***	0.013 (0.000)	***	0.316 (0.000)	***	0.315 (0.000)	***
LnProgramServRev	?	-0.089 (0.000)	***	-0.090 (0.000)	***	-0.055 (0.000)	***	-0.056 (0.000)	***	-0.041 (0.000)	***	-0.041 (0.000)	***
LnFederatedCampaigns	?	0.047 (0.000)	***	0.047 (0.000)	***	0.038 (0.000)	***	0.038 (0.000)	***	0.003 (0.676)		0.003 (0.701)	
LnDonations	+	0.133 (0.000)	***	0.133 (0.000)	***	0.324 (0.000)	***	0.324 (0.000)	***	0.006 (0.253)		0.006 (0.247)	
Industry Dummies		YES		YES		YES		YES		YES		YES	
Year Dummies		YES		YES		YES		YES		YES		YES	
Number of observations		8,610		8,610		8,174		8,174		5,182		5,182	
Adjusted R <sup>2</sup>		0.594		0.594		0.696		0.696		0.461		0.462	

78 I estimate each model using OLS. \*, \*\*, \*\*\* represent statistical significance at the 10 percent, 5 percent, and 1 percent levels, respectively. Robust p-values (in parentheses) are based on standard errors adjusted for clustering at organization-level. P-values are one-tailed for coefficients with a directional prediction and two-tailed for those without a directional prediction. Industries dummies are included by NTEE category. All continuous variables have been winsorized at the 1% and 99% level. See Appendix B for a detailed definition of variables.

**TABLE 12**  
**The Effect of CEO Compensation on Future Federated Campaign Income**

	Predicted Sign	<i>Dependent Variable</i> <b>LnFutureFederatedCampaign</b>			
		(1)		(2)	
Intercept	?	5.175 (0.000)	***	5.215 (0.000)	***
CEOTotalComp/TE	-	-1.255 (0.406)			
CEOBaseComp/TE	-			4.904 (0.727)	
CEOIncentiveComp/TE	-			-76.700 (0.016)	**
CEOOtherComp/TE	-			26.350 (0.778)	
CEODerferredComp/TE	-			-35.587 (0.223)	
CEONontaxableBenefits/TE	-			-45.334 (0.268)	
ProgramExpRatio	+	0.116 (0.444)		0.048 (0.477)	
LnFundraisingExp	+	0.071 (0.000)	***	0.070 (0.000)	***
LnAge	?	0.150 (0.122)		0.145 (0.133)	
LnTotalAssets	+	0.203 (0.001)	***	0.210 (0.001)	***
LnGovtGrants	?	-0.006 (0.536)		-0.007 (0.470)	
LnProgramServRev	?	-0.037 (0.003)	***	-0.039 (0.002)	***
LnFederatedCampaigns	?	0.204 (0.000)	***	0.202 (0.000)	***
LnDonations	+	-0.049 (0.989)		-0.048 (0.986)	

Industry Dummies	YES	YES
Year Dummies	YES	YES
Number of observations	915	915
Adjusted R <sup>2</sup>	0.321	0.323

I estimate each model using OLS. \*, \*\*, \*\*\* represent statistical significance at the 10 percent, 5 percent, and 1 percent levels, respectively. Robust p-values (in parentheses) are based on standard errors adjusted for clustering at organization-level. P-values are one-tailed for coefficients with a directional prediction and two-tailed for those without a directional prediction. Industries dummies are included by NTEE category. All continuous variables have been winsorized at the 1% and 99% level. See Appendix B for a detailed definition of variables.