

# The Effects of Governance on the Accuracy of Charitable Expenses Reported by Nonprofit Organizations\*

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## 1. Introduction

We examine the extent to which governance mechanisms affect the decision usefulness of nonprofit financial information as reported on the Internal Revenue Service Form 990 (hereafter IRS 990). Nonprofit organizations are bestowed with a variety of tax benefits such as income, property, and sales tax exemptions. In addition, donors to many types of nonprofits can reduce their taxable income by the amounts of their donations. In exchange for these substantial benefits, nonprofit organizations are accountable to the public, who are, in effect, financing these tax benefits. As part of this accountability, nonprofits are required to make their financial information available to the public via the IRS 990.<sup>1</sup>

The IRS 990 contains a large amount of financial information, yet much attention is focused on a single statistic: the ratio of charitable to total expenses. Although many metrics undoubtedly could be used to calibrate nonprofit performance, none has received as much attention from the public, donors, regulators, or researchers as the ratio of charitable to total expenses.<sup>2</sup> Given the importance of this ratio, researchers have focused on possible economic implications of reporting relatively higher ratios and have found that nonprofits with higher charitable ratios receive more donations, pay higher managerial salaries, and are less likely to lose their tax-exempt status.<sup>3</sup> Building on these results, researchers turned their attention to whether nonprofit organizations respond to incentives to overstate the charitable ratio and have documented evidence consistent with that behavior.<sup>4</sup> These accounting manipulations have the potential to mislead users of nonprofit financial data (Gordon, Khumawala, Kraut, and Meade 2007).

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1. Unlike public companies, which are required to make their audited financial statements public, there is no general audit requirement for nonprofit organizations, and thus the IRS 990 constitutes the primary publicly available nonprofit financial report (Joint Committee on Taxation 2000). The decision usefulness of IRS 990s is relevant to users such as donors, lenders, and regulators, who rely on these financial reports for decision-making purposes.
2. The IRS acknowledges the importance of this statistic by stating that “one principal use of Form 990 data on charities’ spending is to show the portion of funds that a charity spends on its charitable purpose”, and “A key potential use of data on charities’ spending is to show what portion is spent on charitable purposes” (United States General Accounting Office 2002, 2 and 8). Various charity watchdogs, such as the National Charities Information Bureau, the Better Business Bureau Wise Giving Alliance, and the American Institute of Philanthropy, as well as various news sources such as *The Wall Street Journal*, use the charitable ratio as one means of grading nonprofits.
3. See Weisbrod and Dominguez 1986; Harvey and McCrohan 1988; Posnett and Sandler 1989; Callen 1994; Khumawala and Gordon 1997; Tinkelman 1999; Okten and Weisbrod 2000; Baber, Daniel, and Roberts 2002; Yetman and Yetman 2003; Lagnando 2004; Andersen and Gevas 2006.
4. See Eldenburg and Soderstrom 1996; Roberts 2005; Jones and Roberts 2006; Krishnan, Yetman, and Yetman 2006; Keating, Parsons, and Roberts 2008; Krishnan and Yetman 2011.

The primary purpose of our paper is to advance this literature by examining the extent to which existing nonprofit governance mechanisms mitigate the tendency for nonprofits to overstate their charitable ratios. Although a substantial body of accounting literature examines the relationship between governance and reporting quality in the for-profit setting, there is little evidence on the effects of governance on nonprofit reporting despite nonprofits' significant role in the economy.<sup>5</sup> To our knowledge, only two published studies address the question, and both have important limitations that restrict the generalizability of their results.<sup>6</sup>

The primary contribution of our study is that it is the first to consider the simultaneous effects of a comprehensive set of governance mechanisms across a broad sample of all types of nonprofit organizations. In addition, our study is also the first to examine data from the newly redesigned 2008 IRS 990. As discussed in more detail later, this major redesign of the IRS 990 was focused primarily on enhancing nonprofit disclosure, including governance policies, making this new data particularly well suited to our analysis (Bailey 2009).

Our central research hypothesis is that stronger governance will result in more accurately reported charitable ratios. To estimate the effects of governance on charitable expense accuracy, we regress our governance metrics and our control variables on various measures of charitable expense accuracy using a large sample of data from 1998–2006, as well as a sample of data from the newly redesigned 2008 IRS 990.

We find that nonprofits that outsource their management functions record less accurate charitable expenses, while those with more voting board members report more accurate charitable expenses. However, the positive effect of board size diminishes as the board grows larger. Nonprofits whose financial statements are audited report more accurately, and we find some evidence that A-133 audits are more effective than standard audits. In terms of the auditor, we find some evidence that audits by larger CPA firms are associated with more accurate charitable expense reporting. Nonprofits with more donor-imposed restrictions on their assets report more accurate charitable expenses, as do organizations that have issued municipal bonds. Nonprofits engaging in taxable activities (which increases federal oversight) and located in states with stronger regulation and enforcement report more accurate charitable expenses.

Because nonprofits do not issue stock, they are not required to follow the provisions of the Securities and Exchange Commission (SEC) Acts of 1933 or 1934, nor are they required to follow the provisions of the Sarbanes-Oxley Act (SOX) of 2002. However, many nonprofits have voluntarily adopted some provisions. Using data from the newly redesigned 2008 IRS 990, we examine four specific SEC governance practices that nonprofits have adopted

5. For a review of the literature in the for-profit area, see: Shleifer and Vishny 1997; Bhagat and Black 2002; Bushman and Smith 2001; and, most recently, Larcker, Richardson, and Tuna 2007. Nonprofit organizations output roughly five percent of the annual U.S. gross domestic product and employ over one out of every eight paid workers in the United States. From 1975 to 1995, the real assets of the nonprofit sector grew by more than 300 percent, while the economy as a whole grew by 74 percent during the same period (Wing, Pollak, and Blackwood 2008; United States General Accounting Office 2002).
6. Eldenburg and Vines (2004) examine a sample of 98 Florida hospitals and find that the organizations changed the manner in which they report bad debt expenses in response to a change in hospital-specific accounting rules. Roberts (2005) examines a sample of 30 nonprofits that report "joint costs" on their IRS 990 (i.e., specific promotional items whose cost must be split between advertising and charitable purposes) and finds that after a change in accounting rules, nonprofits changed the relative amount of expenses classified as advertising. In practice "joint costs" are reported by less than four percent of all nonprofit organizations. Although these studies make important first steps in determining the relationship between governance and nonprofit financial reports, much is left unanswered. The sample limitations and small sizes in these studies, as well as their focus on one-time accounting rule changes, make it difficult to draw inferences regarding other dimensions of governance and how governance affects the broader set of nonprofit organizations.

and find that these policies are associated with more accurate charitable expense reporting on IRS 990s. Specifically, SOX sections 302 and 906 require managers to review and certify financial statements prior to filing them with the SEC. We find that nonprofits that choose to provide a copy of their IRS 990s to the board of directors for review prior to filing it with the IRS report charitable expenses more accurately. SOX also requires firms to adopt written policies regarding whistleblower protections, document destruction, and conflict of interest. We find that nonprofits that choose to adopt these provisions report more accurate charitable expenses. Additionally, Rule 10A-3 of the 1934 SEC Act requires boards of directors to be majority-independent. We find that the higher percentage of independent board members a nonprofit has, the more likely it is to report more accurate charitable expenses. Finally, the SEC Acts require firms to have an audit committee. We find that nonprofits with an audit committee are more likely to report charitable expenses more accurately.

Our results have several implications that are the first of their kind in the nonprofit setting. First, they reveal the effectiveness of the broad array of existing forms of governance in the nonprofit setting. Second, we find that the accuracy of reported charitable expenses varies in predictable ways such that users can have more confidence in the financial reports of more highly governed organizations. Third, the results provide potentially valuable information to policy makers or boards of directors seeking to enhance overall nonprofit financial reporting quality. For example, the federal government is considering imposing a universal nonprofit audit requirement, and our results suggest that imposing such a requirement would be an effective means of improving the accuracy of IRS 990s. Similarly, our results suggest that imposing some SOX provisions on nonprofits would improve the accuracy of financial reports. This finding is particularly timely as several states are considering imposing SOX provisions on their nonprofits.

In the following section, we briefly discuss the theory of the nonprofit organization as it relates to financial disclosure and governance and present our hypotheses. The third section discusses our data and is followed by our research design. The following section contains the results of our analysis, and the final section discusses the results and their policy implications.

## 2. Background, theory, and hypothesis development

### *Governance and financial reporting quality*

Most organizations, regardless of their ownership structure, face agency problems (Jensen and Meckling 1976; Fama and Jensen 1983). In publicly traded firms, the agency problem arises because managers whose interests are not necessarily identical to those of the shareholders make operating decisions. These decisions can be “real”, such as where to locate a manufacturing plant, or “paper”, such as manipulating financial reports. Research in the for-profit setting posits that certain mechanisms, referred to collectively as governance, can mitigate the inherent agency conflict between a manager and the firm’s owners (Glaeser 2003), and a large body of research generally supports that hypothesis (see citations in footnote 5).

As in the for-profit setting, control and ownership are separate in the nonprofit setting.<sup>7</sup> Managers’ own objectives may not necessarily coincide with those of the organizations and the public they serve as fiduciaries in trust, in which case an agency conflict

7. A reasonable question to ask is, to whom are nonprofits accountable? Legally, nonprofits are trusts established for the public good and as such are accountable to and collectively owned by the public they serve. The courts have defined the public as donors, customers, lenders, and other stakeholder groups at different times. Tax exemption is a separate concept from trusts as the two can be mutually exclusive. Because nonprofits are tax-exempt trusts, they also fall under the legal purview of federal and state regulators. Interested readers are directed to Hudson 2008.

arises (Shleifer and Vishny 1997). Incentives to manipulate financial reports arise from the nonprofit organization's objective function, which is to maximize the quality and/or quantity of a charitable output subject to the budget constraints of current and accumulated funds. As a first-order condition, this typically corresponds to maximizing revenues and charitable expenses and minimizing noncharitable expenses (Hansmann 1980; Rose-Ackerman 1980, 1996).<sup>8</sup>

In apparent recognition of this objective function, the IRS 990 breaks down all expenses into one of three major categories: charitable, administrative, and fundraising. The relative amount of total expenses devoted to charitable purposes is a common nonprofit performance benchmark and is positively associated with managerial salaries, donations, and retention of tax-exempt status (see citations in footnote 3). As discussed in the introduction, a growing body of research shows that nonprofits inflate the ratio of charitable to total expenses, primarily by overstating the proportions classified as fundraising or administrative (see citations in footnote 4).

The extent to which governance can mitigate inflated expense ratios is a function of the relationship between governance mechanisms and the financial reporting preparation and dissemination process. Cohen, Krishnamoorthy, and Wright (2004) suggest a corporate governance mosaic, which they describe as the interactions among the actors and institutions that affect corporate governance, and frame the theoretical relationships between their mosaic and financial reporting quality. The notion is that better governance should result in higher financial reporting quality. Actors and institutions include management, board of directors, auditors, capital providers, and regulators. We use this mosaic as a foundation for building our research hypotheses, which are presented below. It is important to note at the outset that the empirical availability of governance metrics in the nonprofit setting is significantly constrained relative to the data-rich for-profit setting. Consistent with these nonprofit data constraints, we build our hypotheses around constructs that could have a plausible link to financial reporting quality and that have empirically tractable measures.<sup>9</sup>

### ***Hypothesis development***

#### *Separation between collective ownership and control*

The primary responsibility of ensuring accurate financial reports rests with management, but the presence of agency conflicts can impede managements' ability to meet this obligation (Cohen et al. 2004). The essence of this agency conflict is that there is a separation between ownership and control. As the distance between ownership and control increases, agency problems, such as shirking and entrenchment, can also increase (Geis 2007). Although nonprofits are not owned in the traditional sense, they are trusts established for the public good collectively owned by the public, and similar agency conflicts arise from the separation of this collective ownership and control. These agency problems can negatively affect reporting quality. Based on this, our first hypothesis, in the null form, is:

**HYPOTHESIS 1.** *There is a negative association between the distance separating collective ownership and control and IRS 990 charitable expense accuracy.*

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8. This is an obvious simplification, as there may be times when a nonprofit appropriately increases administrative and/or fundraising expenses. However, in the long run, nonprofits seek to maximize the amount of resources expended on the charitable purpose.
  9. We do not form hypotheses regarding the relative strength of any of the governance constructs presented in this paper for two reasons. First, we know of no theoretical basis for ordering the relative effectiveness of these governance constructs, and thus any attempt on our part would be ad hoc and nondefensible. Second, even if one could develop a defensible ordering, empirically comparing the results would be problematic, given differing measurement issues inherent in our empirical variables.

Some nonprofit organizations utilize management companies, essentially outsourcing all managerial duties. Some research suggests that the increase in separation between ownership and control caused by using outsourced management amplifies agency risk (Cannon and Growe 2005; Geis 2007). For instance, Geis (2007) argues that outsourcing makes it more difficult to ensure that work is being performed correctly or that the appropriate amount of effort is being expended.

#### *Board of director monitoring*

Jensen (1993) describes the board of directors as the apex of the internal control system and as having the final responsibility for the effective functioning of the organization. Part of a board's duties is to monitor the financial reporting system, leading to our second hypothesis:

*HYPOTHESIS 2. There is a positive association between board of director monitoring and IRS 990 charitable expense accuracy.*

Cohen et al. (2004) discuss several characteristics of boards that could be associated with their ability to effectively monitor the financial reporting process. In particular, a board's effectiveness in monitoring managerial decisions, including financial reporting decisions, is a function of the board's independence, size, duties, and committees.

Prior research in the for-profit setting finds that independent directors are more likely to overcome the agency conflict between management and the organization, leading to more accurate financial reports (Dechow, Sloan, and Sweeney 1996; Klein 2002). Larger boards are more likely to possess specific knowledge and expertise sets, including those related to financial reporting. Consistent with this, prior research in the for-profit setting finds that larger boards are associated with less financial fraud (Chaganti, Mahajan, and Sharma 1985; Farber 2005), and research in the nonprofit setting finds similar results (Ostrower 2007). However, Jensen (1993) and Yermack (1996) suggest that very large boards can become unwieldy and disengaged and therefore less effective, a concern echoed by the IRS (Ostrower 2007).

In terms of duties, DeZoort (1997) suggests that board members perceive their financial reporting responsibilities, such as reviewing the financial statements, as a particularly important component of board oversight. Sections 302 and 906 of SOX require managers to certify that they reviewed their firms' financial statements prior to filing the statements with the SEC, and some nonprofits have voluntarily adopted a similar provision for their IRS 990s.

Finally, a board consists of committees, and the presence of an audit committee has been shown to be negatively associated with earnings management, restatements, and fraud in the for-profit setting (Dechow et al. 1996; DeZoort, Hermanson, Archambeault, and Reed 2002). Many nonprofits choose to have audit committees, even though it is not a requirement.<sup>10</sup>

#### *Audit quality*

Independent auditors review financial statements and express an opinion on whether the statements are free of material misstatement. The potential effect of an independent audit on the accuracy of financial reports arises from the auditors' ability to mitigate the agency conflict between managers and the organization (Benston 1980; Watts 1977;

10. We recognize that there are other dimensions of boards that can affect reporting quality, such as social networks or board member backgrounds, that we do not examine. Unlike in the for-profit setting where such information is available, nonprofit board member data is severely limited.



Watts and Zimmerman 1978). Audit quality refers to the probability that a given auditor will discover an error, which depends on the auditor's technical capabilities, the audit procedures employed on a given audit, and the extent of sampling (DeAngelo 1981; Watts and Zimmerman 1986). Thus, the ability of an audit to enhance financial reporting quality is a function of the quality of the audit, leading to our third hypothesis in the null form:<sup>11</sup>

**HYPOTHESIS 3.** *There is a positive association between audit quality and IRS 990 charitable expense accuracy.*

Although there is no general audit requirement for nonprofit organizations, many undergo an audit as conditions of funding, or by choice. This feature is somewhat unique to the nonprofit setting compared to the for-profit setting, where all publicly traded for-profit firms are audited.

Although most nonprofit audits use the standard Generally Accepted Auditing Standards (GAAS) audit, an enhanced form of the standard audit, an A-133 audit, also is commonly used.<sup>12</sup> These A-133 audits include all of the procedures of a standard GAAS audit, an additional procedure related to the federal funding, and a very specific analysis of an organization's internal controls that is not required under a standard audit (interested readers are directed to the United States Office of Management and Budget A-133 Compliance Supplement found at <http://www.whitehouse.gov/omb>).

With respect to audit firm quality, in the for-profit setting auditor size is a common measure of auditor quality and has been found to be positively associated with a wide variety of financial reporting quality measures (Davidson and Neu 1993; Becker, DeFond, Jambalvo, and Subramanyam 1998; among many others).<sup>13</sup> There are substantially fewer papers in the nonprofit setting, but some evidence suggests an inverse relation between auditor size and client internal control problems (Keating, Fischer, Gordon, and Greenlee 2005b; Petrovits, Shakespeare, and Shih 2011) and client compliance with reporting requirements (Krishnan and Schauer 2000).

#### *Capital provider monitoring*

Capital providers play a valuable monitoring role in that they frequently have legal rights to oversee managerial activities, and they also frequently rely on financial reports to keep track of their investments in organizations and to ensure that the organization is meeting its contractual obligations (Zhong, Gribbin, and Zheng 2007; Lee, Lev, and Yeo 2007). The monitoring role played by capital providers can enhance the quality of nonprofit financial reports, leading to our third hypothesis, in the null form:

**HYPOTHESIS 4.** *There is a positive association between capital provider monitoring and IRS 990 charitable expense accuracy.*

11. Although the IRS 990 is not the primary subject of nonprofit financial statement audits, it is reasonable to presume that, if a nonprofit is audited, the effects of an audit will spill over from the audited financial statements and have a proximate effect on the accuracy of an organization's IRS 990s as well (Wu 2006). Consistent with the spillover hypothesis, prior research finds a high correlation between audited financial statements and IRS 990s (Froelich and Knoepfle 1996; Froelich, Knoepfle, and Pollak 2000; Fischer, Gordon, and Kraut 2002).
12. The U.S. Office of Management and Budget requires an A-133 audit of all nonprofits that expend at least \$300,000 (\$100,000 prior to 1996) of federal grant monies in any given year. Nonprofits typically do not undergo both types of audits. Results of the A-133 audit fulfill all the requirements of states or other funding agencies that require audits (although a standard audit does not fulfill the A-133 requirements).
13. See Francis 2004 for a review of the vast literature on audit quality for publicly listed firms in the United States.

Large stockholders have relatively strong incentives “to collect information and monitor management, thereby avoiding the traditional free-rider problem” (Shleifer and Vishny 1997, 754). Prior research in the for-profit setting finds that the mere presence of large stockholders is associated with more accurate financial reports (DeFond and Jambalvo 1991; Dechow et al. 1996). In the nonprofit setting, donors can act as stockholders in that they provide funding in exchange for future payoffs to the nonprofit cause. Some donations are very large, and it is common for these very large donations to have restrictions as to their use.

Lenders also have incentives to monitor their investments. A lender’s ability to monitor managerial actions comes partially from the control rights they receive should the firm default (Smith and Warner 1979), as well as from the multiperiod effect of refinancing long-term debt with additional borrowing (Diamond 1984). The monitoring effect of debt varies by the type of, and in particular the duration of, the debt, with some studies in the for-profit setting finding that long-term debt is associated with more accurate financial reporting (Chung, Firth, and Kim 2005).

### *Regulatory oversight*

Regulators play an important governance role over financial reporting. Regulators have a direct effect on the financial reporting process through their role in defining and enforcing applicable laws. Additionally, regulators have an indirect effect on financial reporting through their influence on and interactions among the other corporate governance players who are more directly involved in the governance of an organization (Cohen et al. 2004). This leads us to our fifth hypothesis, in the null form:

*HYPOTHESIS 5. There is a positive association between external and internal regulatory oversight and IRS 990 charitable expense accuracy.*

In the nonprofit setting, the primary federal regulator is the IRS, and its primary regulatory tool is the audit. The IRS has the ability to assess penalties on the organization and on its officers for incomplete financial reporting and can revoke an organization’s tax-exempt status for incomplete or fraudulent reporting, providing a strong incentive to file accurate IRS 990s as audit risk rises (Internal Revenue Code section 6652(c)(1)(A), 7203, 7206, and 7207).

States also regulate nonprofits through a variety of laws and regulations (Fisman and Hubbard 2003, 2005; Desai and Yetman 2011). These state regulations and reporting requirements give state attorneys general the ability to monitor and prosecute nonprofit organizations for a variety of misdeeds, in particular financial misreporting (Reiser 2004). Although having laws on the books is one matter, the enforcement intensity of those laws is another. Strong enforcement of the laws through legal action should promote high-quality financial reporting.

In addition to externally imposed regulations, organizations are free to adopt regulatory policies voluntarily, many of which can affect financial reporting quality. In the for-profit setting, research shows that earnings management declined after the enactment of SOX (Cohen, Dey, and Lys 2008; Bartov and Cohen 2009).<sup>14</sup> However, those studies could not examine the effects of specific SOX provisions as all public companies had to adopt all SOX provisions at the same time. Although nonprofits are not required to follow

14. It is possible that the effects of SOX spread to nonprofits via a contagion effect in the periods after SOX passage in 2002. We tested to see if reporting accuracy improved in the pre- and post-2002 period. We were not able to identify improvements in reporting accuracy across 2002 as reporting accuracy has been constantly increasing over our entire sample period of 1998 to 2006 with no abnormal increase across 2002.

SOX, many nonprofits have adopted some SOX provisions, and several of these provisions are intended to make it more difficult for management to engage in and cover up financial misreporting.

### 3. Data

We use two samples in our empirical analyses. Our first sample, which we refer to as our panel sample, is constructed from the intersection of a variety of databases and spans the years 1998–2006. Our second sample, which we refer to as our 2008 sample, is from the newly redesigned 2008 IRS 990, which only recently became available and includes many additional governance-related variables over our panel sample.

#### *Panel sample*

The first database we use for the panel sample is the Internal Revenue Service Statistics of Income (SOI) file, which is made publicly available by the National Center for Charitable Statistics (NCCS) with assistance and permission from the Internal Revenue Service. The SOI is the largest publicly available nonprofit database and spans the years 1982–2006. The SOI data includes a sample of Internal Revenue Code 501(c)(3) organizations but excludes private foundations. The universe of nonprofits includes about 300,000 organizations, whereas the SOI database includes about 12,000 organizations yearly. However, due to size-weighted sampling (i.e., the inclusion of all large organizations, defined as total assets greater than \$25 million, plus a stratified random sample of smaller organizations), the database includes over 90 percent of all nonprofit assets and revenues. We exclude organizations with less than \$10,000 in expenses, as well as philanthropic, auxiliary fundraising, and related and combined return organizations.

In addition to the SOI data, we use another data set provided by the NCCS known as the “digitized” data, so named because it is created from scanned IRS 990s. The digitized data is similar to the SOI data, except it includes several additional data items from the IRS 990 that are not included in the SOI data, but it is only available from 1998–2003 (whereas the SOI data spans from 1982–2006). We also use another NCCS database called the “core” files. Essentially, these core files pick up where the digitized data leaves off (i.e., in 2004) and continue on to 2006. These three databases are publicly available for a fee and can be found at <http://www.nccs.urban.org>.

In addition to the three NCCS databases, we also use the federal audit clearinghouse database, which contains audit information for organizations that spend at least \$300,000 of federal grant monies in any given year. These organizations are required to undergo an A-133 audit (we describe the nature of these audits in more detail later). Information about these audits, such as the name of the CPA firm that conducted them, are made available by the U.S. Office of Management and Budget at their Federal Audit Clearinghouse, found on the Web at <http://harvester.census.gov/sac/>. After we merge these databases, the panel sample contains 73,107 total observations from 14,821 unique organizations from the years 1998 (the first year for which all of our variables are collectively available) to 2006 (the most recent year of data available). Not all of the 73,107 observations are used in all empirical models because of differing data screens and requirements, which are discussed below.

#### *2008 sample*

Our second sample, which we refer to as our 2008 sample, is from the newly redesigned 2008 IRS 990, which only recently became available and includes many governance-related variables. This major revision of the 990 is among the largest since the form was first designed almost a century ago. One reason for the revision was that the IRS wanted



nonprofits to provide more information about their governance policies. To that end, the new form contains an entire section called “Governance, Management, and Disclosure”, with many items motivated by the 1933 and 1934 SEC Acts, as well as SOX. This new form begins with the 2008 tax year and was required to be filed in 2009 by organizations with total assets over \$2.5 million.

Our 2008 sample is based on a custom data set of organizations earning at least \$10,000 in donations that we obtained in June 2010 directly from Guidestar, the organization that receives information from the IRS and makes it available for a fee.<sup>15</sup> We are among the first researchers to have access to this unique and valuable data, and as such our results should be particularly valuable to regulators looking to calibrate the usefulness of the newly required disclosures. We exclude philanthropic and auxiliary fundraising organizations and related and combined return organizations and then merge the data with the federal audit clearinghouse database to get CPA firm size and audit type.

#### 4. Research design

To estimate the effects of governance on charitable expense accuracy, we regress our governance metrics and our control variables on various measures of charitable expense accuracy. Our basic empirical model takes the form:

$$\begin{aligned} \text{Charitable Expense Accuracy}_{it} = & \alpha + \beta_1 \text{Outsourced Management}_i + \beta_2 \text{Independent Directors}_i \\ & + \beta_3 \text{Voting Directors}_{it} + \beta_4 \text{Voting Directors}^2_{it} \\ & + \beta_5 \text{IRS 990 Review}_i + \beta_6 \text{Audit Committee}_i \\ & + \beta_7 \text{Standard Audit}_{it} + \beta_8 \text{A-133 Audit}_{it} + \beta_9 \text{Big 5 CPA}_{it} \\ & + \beta_{10} \text{Medium CPA}_{it} + \beta_{11} \text{Small CPA}_{it} \\ & + \beta_{12} \text{Donor Restrictions}_{it} + \beta_{13} \text{Municipal Bonds}_{it} \\ & + \beta_{14} \text{Taxable Revenues}_{it} + \beta_{15} \text{State Regulation}_i \\ & + \beta_{16} \text{State Enforcement}_i + \beta_{17} \text{Written Policies}_i \\ & + \sum \delta_j \text{Controls} + \varepsilon_i \quad (1). \end{aligned}$$

We estimate two versions of (1), the first with the panel sample and the second with the 2008 sample. Each will contain somewhat different independent variables depending on data availability.

#### *Empirical measures of charitable expense accuracy*

As previously discussed, prior research has documented several means by which nonprofits inflate their charitable expenses, primarily through reducing their reported amounts of fundraising and/or administrative expenses. We construct four different dependent variables of *Charitable Expense Accuracy*, using measures of understated fundraising and administrative expenses.

#### *Dichotomous zero/nonzero fundraising expenses*

Our first dependent variable is based on Krishnan et al. 2006, who find that a surprisingly large proportion of nonprofits report exactly zero fundraising expenses when they plausibly should be reporting nonzero amounts. Underreported fundraising expenses ultimately wind up as overstated charitable expenses, improving the charitable ratio. We apply the same

15. Guidestar and the NCCS have separate contracts with the IRS. Guidestar receives the most current raw data as soon as it is available. The NCCS receives IRS processed data, which necessitates a two- to three-year lag. Because Guidestar must process its data, it charges a significantly higher fee than does the NCCS.

data screens as did Krishnan et al. 2006 as an attempt to remove observations that have plausible reasons for reporting zero fundraising expenses.<sup>16</sup> This measure of charitable expense accuracy, *Non-Zero Fundraising*, is set to one when an observation reports nonzero fundraising expenses, and zero otherwise. Thus, this measure is increasing in charitable expense accuracy.

#### *Continuous understated fundraising expenses*

In a comparison of IRS 990s and audited financial statements for a sample of nonprofits, Krishnan et al. (2006) also document that many organizations that report positive amounts for fundraising expenses actually are underreporting these expenses. Consistent with this, we develop a continuous measure of understated fundraising for our panel data. To construct this variable, we first estimate a fundraising expectations model on the subsample of nonprofits that report some amount of fundraising expense, and then we use the residuals from this model as an indicator of whether the nonprofit has underreported its fundraising expenses. We use the following prediction model, motivated by Steinberg's 1986 discussion of the theoretical link between donations and fundraising expenses:

$$\begin{aligned} \text{Fundraising Expenses}_{it-1} = & \alpha + \beta_1 \text{Private Donations}_{it} + \beta_2 \text{Feeder Donations}_{it} \\ & + \beta_3 \text{Government Grants}_{it} + \sum \delta_j \text{Industry Indicators}_{it} \\ & + \sum \gamma_k \text{Year Indicators}_{it} + \varepsilon_i \quad (2). \end{aligned}$$

*Private Donations* are from individuals, corporations, and foundations. *Feeder Donations* are from federated fundraising organizations such as the United Way. *Government Grants* are from local, state, or federal agencies. To control for industry and time effects, we include industry indicators (as defined by the National Taxonomy of Exempt Entities) and year indicators. The model fit is reasonable with an adjusted *R*-squared of 0.52. Organizations with positive residuals are reporting more fundraising expenses than the model would predict, while those with negative residuals are reporting less fundraising expenses than the model would predict. This measure of charitable expense accuracy, *Residual Fundraising*, is equal to this residual, which is increasing in charitable expense accuracy.<sup>17</sup>

#### *Dichotomous zero/nonzero administrative expenses*

Our third dependent variable represents whether a nonprofit reports zero administrative expenses when they plausibly should be reporting nonzero amounts. Prior research suggests that many nonprofits report zero administrative expenses when it seems implausible that they actually incur zero expenses (Wing et al. 2006). In addition, Steinberg (1986) argues that it is impossible to convert revenues to charitable output without at least some administrative expense. As with understated fundraising expenses, these understated administrative expenses likely wind up as overstated charitable expenses. This measure of charitable expense accuracy, *Non-Zero Administrative*, is set to one when an observation reports nonzero administrative expenses, and zero otherwise. Thus, this measure is increasing in charitable expense accuracy.

16. Those screens include removing organizations receiving less than \$10,000 in donations, philanthropic and auxiliary fundraising organizations, and related and combined return organizations.

17. Results are robust to estimating (2) with the inclusion of size, age, and commercial revenues, as well as estimating (2) by industry in place of the industry indicators.

*Continuous understated administrative expenses*

Our fourth measure of charitable expense accuracy is a continuous measure of understated administrative expenses. To construct this variable, we estimate an administrative expense expectations model on the subsample of nonprofits that report some amount of administrative expense, and then use the residuals from this model as an indicator of whether the nonprofit has underreported its administrative expenses. Again, motivated by Steinberg 1986, who discusses the theoretical link between donations and administrative expenses, we use the following model<sup>18</sup>:

$$\begin{aligned} \text{Administrative Expenses}_{it-1} = & \alpha + \beta_1 \text{Private Donations}_{it} + \beta_2 \text{Feeder Donations}_{it} \\ & + \beta_3 \text{Government Grants}_{it} + \beta_4 \text{Total Expenses}_{it} \\ & + \beta_5 \text{Total Assets}_{it} + \beta_6 \text{Total Assets}^2 + \sum \delta_j \text{Industry Indicators}_{it} \\ & + \sum \gamma_k \text{Year Indicators}_{it} + \varepsilon_i \quad (3). \end{aligned}$$

The model fit is reasonable with an *R*-squared of 0.61. Organizations with positive residuals are reporting more fundraising expenses than the model would predict, and vice versa. This measure of charitable expense accuracy (*Residual Administrative*) is equal to the residual, which is increasing in charitable expense accuracy.

*Empirical measures of nonprofit governance**Separation between collective ownership and control*

We measure the extent of separation between a nonprofit organization's collective owners and its management with an indicator variable set equal to one if the nonprofit outsources its management functions, and zero otherwise. Data used to create this variable (*Outsourced Management*) is from the new 2008 IRS 990. Consistent with our hypothesis, we expect that *Outsourced Management* will be negatively associated with *Charitable Expense Accuracy*.

*Board of director monitoring*

We use four measures of a board's ability to monitor managerial decisions. The first is director independence, where *Independent Directors* is equal to the percentage of voting directors who are independent as reported on the new 2008 IRS 990.<sup>19</sup> Consistent with our hypothesis, we expect that *Independent Directors* will be positively associated with *Charitable Expense Accuracy*. Our second measure is board size, where *Voting Directors* is equal to the number of voting board members as reported on the IRS 990 for both the panel and 2008 samples. Consistent with our hypothesis, we expect that *Voting Directors* will be positively associated with, and *Voting Directors*<sup>2</sup> will be negatively associated with, *Charitable Expense Accuracy*. Our third measure is whether or not the board was provided with copies of the IRS 990 for review prior to the form being filed with the IRS. We set *IRS 990 Review* equal to one if the nonprofit reported that they provided copies of the IRS 990 to the board before filing them with the IRS as reported on the new 2008 IRS 990, and zero otherwise. Consistent with our hypothesis, we expect that *IRS 990 Review* will be positively associated with *Charitable Expense Accuracy*. Our

18. Results are robust to estimating (2) with the inclusion of age and commercial revenues, as well as estimating (2) by industry in place of the industry indicators.

19. Instructions to the 2008 IRS 990 define an independent director as one who (a) was not compensated as an officer or other employee of the organization or of a related organization, (b) did not receive payments exceeding \$10,000 as an independent contractor, and (c) have neither the member nor any family member of the member involved in a business transaction with the organization or its key employees.

fourth and final measure of board of director monitoring ability is the presence of an audit committee. Our variable *Audit Committee* is equal to one if the nonprofit reported having an audit committee as reported on the new 2008 IRS 990, and zero otherwise. Our hypothesis predicts a positive association between *Audit Committee* and *Charitable Expense Accuracy*.

### *Audit quality*

We use three measures of audit quality. Our first measure of audit quality is whether the nonprofit underwent any type of audit. Our second measure is whether the nonprofit underwent the more detailed A-133 audit. *Standard Audit* is equal to one if the nonprofit underwent a GAAS audit (and that audit was not an A-133 audit), and zero otherwise. *A-133 Audit* is equal to one if the nonprofit underwent an A-133 audit, and zero otherwise.

We determine the nonprofits that underwent a standard GAAS audit differently for our panel sample and our 2008 sample. For our panel sample, we identify the two circumstances in which such audits would be required.<sup>20</sup> First, we identify nonprofits that underwent a state-required audit by obtaining state audit requirements (and related donation thresholds) from two sources. Current requirements can be found at <http://www.multistatefiling.org>, the website of the Multi-State Filer Project, a nonprofit organization devoted to standardizing and simplifying nonprofit state-level registration requirements. Historical requirements can be found in the Multistate Guide to Regulation and Taxation of Nonprofits, an annual guide published by the Commerce Clearing House. We are careful to apply appropriate thresholds based on the amounts of donations and year. Second, we identify which nonprofits underwent feeder organization (e.g., the United Way) required audit by considering the criteria these agencies use to require an audit. Feeder organizations typically require an audit if a certain amount of donations are provided (typically \$100,000, although it varies by feeder). Because the feeder threshold is not the same for all feeders, in the primary analysis we presume that if the nonprofit received over \$100,000 of feeder donations in any single year (the most common feeder threshold), it was required to get an audit. For our 2008 sample, we use Part XI of the newly revised IRS 990 to identify whether a nonprofit reported undergoing a financial statement audit.

We identify which nonprofits underwent an A-133 yellow book audit from the Federal Audit Clearinghouse database for both our panel and 2008 samples. Consistent with our hypotheses, we expect both *Standard Audit* and *A-133 Audit* to be positively associated with *Charitable Expense Accuracy* and also expect the coefficient for *A-133 Audit* to be significantly larger than the coefficient for *Standard Audit*.<sup>21</sup>

Our third measure of audit quality is auditor size. *Big 5 CPA* is equal to one if the organization was audited by one of the Big 5 CPA firms, and zero otherwise. *Medium CPA* is equal to one if the CPA firm is among the next 30 largest CPA firms by revenues as identified by Inside Public Accounting, and zero otherwise.<sup>22</sup> Finally, we set *Small CPA* equal to one for the remaining CPA firms. Auditor information, including firm name, is contained with the A-133 audit data for both samples. Consistent with our hypothesis, we

20. We recognize that our method of identifying audits leaves open a source of error, as it does not include nonprofits that voluntarily undergo an audit. The effect of this potential error is a bias of our results in one direction. To the extent that audits are an effective governance mechanism, this would cause our audit estimates to be biased downwards (against our hypothesis). To the extent that audits are not an effective governance mechanism, no bias should be present.

21. Research in the for-profit literature often also examines audit fees or the relationship of audit to nonaudit fees. Data on audit fees or nonaudit fees is not available for nonprofits.

22. A listing of the top 100 (by revenues) CPA firms is produced annually by the publication *Inside Public Accounting*. The most recent list can be found at [www.plattgrouppllc.com/top100\\_2008.pdf](http://www.plattgrouppllc.com/top100_2008.pdf). We used many variations of *Medium CPA*, including the next largest 20, 40, and 50, with little changes in inferences.

expect *Big 5 CPA* to have the largest effect on *Charitable Expense Accuracy*, followed by *Medium CPA* and then *Small CPA*.

### *Capital provider monitoring*

We use two measures of monitoring by capital providers by considering donors who have placed restrictions on their gifts, as well as lenders who have made long-term loans. Our variable *Donor Restrictions* is equal to the percentage of total fund balances that are restricted as reported on the IRS 990 for both samples. Although the IRS 990 does not distinguish between long- and short-term debt, it does identify municipal bond debt, which is typically long-term.<sup>23</sup> The variable *Municipal Bonds* is equal to one if the organization reported municipal bonds outstanding at the end of the year as reported on the IRS 990, and zero otherwise. Municipal bond data is available only for our panel sample. Consistent with our hypotheses, we expect that both *Donor Restrictions* and *Municipal Bonds* will be positively associated with *Charitable Expense Accuracy*.

### *Regulatory oversight*

We measure regulatory oversight in four ways. Our first regulatory variable is IRS audit probability risk, which we measure by whether the nonprofit engages in a taxable activity. IRS audit statistics (found at <http://www.irs.gov/taxstats/compliancestats>) show that on average nonprofits are audited at about the same rate as any other taxpayer (i.e., approximately one percent). However, nonprofits with taxable activities are about eight times more likely to be audited and have one of the highest audit rates for all taxpayers.<sup>24</sup> The variable *Taxable Revenue* is equal to one for both our panel and 2008 samples if a nonprofit reports earning taxable revenues on its IRS 990, and zero otherwise. Consistent with our hypothesis, we expect that *Taxable Revenue* will be positively associated with *Charitable Expense Accuracy*.

Our second and third measures of regulatory oversight are based on state level laws and their enforcement. *State Regulation* is a linear combination of 15 various nonprofit laws and regulations a state has chosen to impose on its nonprofits (Desai and Yetman 2011).<sup>25</sup> *State Enforcement* is equal to the number of court cases brought against nonprofits in a given state divided by the number of nonprofits in that state. The number of cases is from Fremont-Smith and Kosaras 2003, who conducted a study of state attorney general actions against nonprofit organizations by examining press reports from a variety of news sources across the country for the period 1995–2002 and documented the number of cases in each state. Consistent with our hypotheses, we expect that both *State Regulation* and *State Enforcement* will be positively associated with *Charitable Expense Accuracy*. We include *State Regulation* and *State Enforcement* in our panel and 2008 data analysis.

Our fourth and final measure of regulatory oversight is a measure of whether or not the nonprofit has voluntarily adopted several written policies intended to mitigate management's ability to manipulate financial reports. The new 2008 IRS 990 asks whether the

23. By issuing municipal bonds, a nonprofit grants legal authority to be financially monitored on a virtually continuous basis by lenders and intermediaries who have reputational and financial incentives to ensure that nonprofit financial reports are accurate, as the loan terms frequently are tied to the financial reports. In addition, the SEC Act of 1934 requires municipal bond borrowers to file a final official statement and annual reports with the SEC.

24. For more information about nonprofits and their taxable activities, see Yetman 2001 and Yetman and Yetman 2008.

25. Adding up metrics in this fashion is very common in governance research (La Porta, Lopez-de-Silanes, Shleifer, and Vishny 1997, 1998).



nonprofit has adopted formal written conflict of interest, whistleblower, and document destruction policies. The variable *Written Policies* is a linear combination (i.e., from zero to three) of the number of these policies a nonprofit has reported voluntarily adopting. Consistent with our hypothesis, we expect that *Written Policies* will be positively associated with *Charitable Expense Accuracy*.

### *Control variables*

We include the log of total assets (*Assets*) to control for size, although results are robust to using alternative size measures such as total revenues and total expenses, as well as unlogged amounts of total assets and the square of the assets. We also include the ratio of total donations to total revenues (*Donations Intensity*) as a measure of how much the nonprofit relies on donations as opposed to fee and investment revenues. We include age (*Age*) as a measure of reputation capital (Weisbrod and Dominguez 1986). We also include common controls used in the for-profit literature on reporting quality. Loebbecke, Eining, and Willingham (1989) and Bell, Szykowny, and Willingham (1993) show that high growth firms are more likely to manage earnings; thus, we include measures of growth equal to the average growth in donations during the sample period (*Donations Growth*). Mercer (2004) asserts that when a firm is in distress, a manager has a greater incentive to manipulate financial reports; thus, we include the ratio of current assets to current liabilities (*Current Ratio*).<sup>26</sup>

All estimations use firm-level, cluster-corrected standard errors, and we identify and remove overly influential observations using methods suggested by Belsley, Kuh, and Welch 1980.<sup>27</sup> For variations of model 3 that examine zero fundraising expenses, we require that an observation report at least \$10,000 in donations. For variations of model 3 that examine continuous measures of fundraising and administrative expenses, we require data to estimate (2) and (3) respectively.

## 5. Results

### *Descriptive statistics for panel sample*

Table 1 reports the descriptive statistics for our larger panel data set. Approximately 64 percent of the sample reports some fundraising expense and 97 percent report some administrative expense. The surprisingly large percentage of organizations that report zero fundraising expenses is consistent with prior research (Krishnan et al. 2006). For presentation purposes, our fundraising and administrative expense residuals are scaled by 1,000. There is considerable variance and skewness in the residual fundraising and administrative measures. One would expect the means of the residual values to be zero as they are residuals, but due to the removal of observations with missing regressors or overly influential effects, the means are not exactly zero.<sup>28</sup> We use logged values of the residuals (resetting negative values) in the estimation models to account for the skewness and large standard deviations.

With regard to our governance variables, the average board of directors has 24 voting members, with a median of 19. The fewest number of voting directors is zero (for the few

26. We also test the robustness of several alternative measures of financial distress as suggested by Keating, Fischer, Gordon, and Greenlee 2005a), including the ratio of total revenues to total assets, a revenue concentration index, an indicator if net income was negative in the previous two years, and an indicator for negative equity. These alternative controls for financial distress have little effect on the results when included separately or together.

27. The results are robust to estimating the model by size and industry (i.e., schools, hospitals, and charities).

28. We used the full sample, without data restrictions, to estimate the prediction models, although not all observations are available for our empirical model testing the effects of governance. In a robustness test, we limit the prediction models to our governance sample and find similar results.

TABLE 1  
Descriptive statistics for panel data

Variable	Mean	25th Percentile	Median	75th Percentile	Standard Deviation
<i>Non-Zero Fundraising</i>	0.64	0.00	1.00	1.00	0.48
<i>Residual Fundraising</i>	0.31	-3.14	-1.19	1.32	23.18
<i>Non-Zero Administrative</i>	0.97	1.00	1.00	1.00	0.17
<i>Residual Administrative</i>	4.00	-11.65	-1.89	5.61	119.23
<i>Voting Directors</i>	23.56	10.00	19.00	29.00	25.75
<i>Standard Audit</i>	0.45	0.00	0.00	1.00	0.50
<i>A-133 Audit</i>	0.24	0.00	0.00	0.00	0.43
<i>Big 5 CPA</i>	0.10	0.00	0.00	0.00	0.29
<i>Medium CPA</i>	0.04	0.00	0.00	0.00	0.19
<i>Small CPA</i>	0.11	0.00	0.00	0.00	0.31
<i>Donor Restrictions</i>	0.30	0.02	0.17	0.52	0.32
<i>Municipal Bonds</i>	0.23	0.00	0.00	0.00	0.42
<i>Taxable Revenues</i>	0.24	0.00	0.00	0.00	0.43
<i>State Regulation</i>	9.67	7.00	11.00	12.00	2.69
<i>State Enforcement</i>	0.11	0.04	0.12	0.16	0.08
<i>Assets</i>	113.30	6.30	25.80	78.90	637.20
<i>Donations Intensity</i>	0.40	0.06	0.30	0.76	0.36
<i>Age</i>	34.17	16.00	33.00	53.00	20.39
<i>Donations Growth</i>	-0.05	-0.12	-0.02	0.05	0.19
<i>Current Ratio</i>	4.23	1.35	2.70	7.47	3.54

**Notes:**

The sample includes 73,107 organization-year observations (14,821 unique organizations) from 1998 to 2006, which report at least \$10,000 in total expenses as reported on the IRS 990. Data sources are identified in the text. *Non-Zero Fundraising* is equal to one if the nonprofit reported nonzero amounts of fundraising expenses on the IRS 990, and zero otherwise. *Residual Fundraising* is the residual from a fundraising expense model for the 39,539 nonprofits that report nonzero fundraising expenses, in \$thousands. *Non-Zero Administration* is equal to one if the nonprofit reported nonzero amounts of administrative expenses on the IRS 990, and zero otherwise. *Residual Administration* is the residual from an administrative expense model for the 59,927 nonprofits that report nonzero administrative expenses, in \$thousands. *Voting Directors* is the number of voting members on the board of directors as reported on the IRS 990. *Standard Audit* is equal to one if the nonprofit is required to receive a financial statement audit based on various state laws and feeder requirements and that audit was not an A-133 audit, and zero otherwise. *A-133 Audit* is equal to one if the nonprofit received an audit under the Single Audit Act, and zero otherwise. *Big 5 CPA* is equal to 1 if the A-133 audit was conducted by one of the Big 5 Firms, and zero otherwise. *Medium CPA* is equal to 1 if the CPA firm is among the next 30 largest CPA firms by revenues as identified by Inside Public Accounting, and zero otherwise. *Small CPA* is equal to one if *A-133 Audit* is equal to one and both *Big 5 CPA* and *Medium CPA* are equal to zero, and zero otherwise. *Donor Restrictions* is the percentage of total fund balances that have a donor-imposed restriction as reported on the IRS 990. *Municipal Bonds* is equal to one if the nonprofit reported municipal bond liabilities on the IRS 990, and zero otherwise. *Taxable Revenues* is equal to one if the nonprofit reports a taxable activity on the IRS 990, and zero otherwise. *State Regulation* is a linear combination of 15 possible state-level regulatory laws from Desai and Yetman 2011. *State Enforcement* is number of court cases brought against nonprofits in a state divided by the number of nonprofits in that state times 100, from Fremont-Smith and Kosaras 2003. *Assets* are total year-end assets reported on the IRS 990 in \$millions. *Donations Intensity* is total donations scaled by total revenues from the IRS 990. *Age* is the age of the nonprofit in years. *Donations Growth* is the average year-to-year change in total donations. *Current Ratio* is the ratio of current assets to current liabilities as reported on the IRS 990.

nonprofits that outsource all of their management and directorship functions), and the largest is 1,019. An average of 24 members is high compared to for-profit boards, which typically have 12 to 15 members; but, as previously discussed, very large nonprofit boards are the result of nonprofits using their board members for multiple purposes, including to encourage giving donations and fundraising.

About 45 percent of nonprofits are required to undergo a standard GAAS financial statement audit, while roughly 24 percent are required to undergo an A-133 audit (thus, in total, about 70 percent of our sample was audited). Of the organizations that undergo an A-133 audit, 40 percent are audited by a Big 5 CPA (i.e., 0.1 / 0.24), 16 percent by medium CPA firms, and 44 percent by small CPA firms.

On average, roughly 30 percent of total fund balances have some type of donor-imposed restriction.<sup>29</sup> Roughly one in four nonprofits has municipal bonds outstanding, and the same proportion also operate a taxable activity. On average, a state has enacted 10 of the 15 possible nonprofit laws and reporting requirements, and the average state attorney general prosecutes 0.11 percent of its nonprofit organizations per year. Variance inflation factors for all variables are all under 2 (Belsley et al. 1980 suggest that values over 10 represent high multicollinearity).

Table 2 provides some univariate insights into the effects of our governance variables on the accuracy of reported charitable expenses. This table partitions our governance metrics across two of our dependent variables, zero and nonzero administrative and fundraising expenses. With few exceptions, stronger governance reduces the probability of reporting zero expenses. Our regression analysis will determine whether these univariate correlations hold up under a multivariate analysis.

### *Regression results for panel sample*

Tables 3 and 4 contain the panel sample regression results for understated fundraising and administrative expenses respectively. Results in the first two columns in Table 3 (4) are for our dichotomous fundraising (administrative) variable, which is equal to one if the nonprofit reported nonzero fundraising (administrative) expenses. Results in the second two columns are for our continuous fundraising (administrative) variable, which is equal to the residuals from a fundraising (administrative) prediction model. Results in the first and third columns use the A-133 audit indicator variable, while the second and fourth columns break out the A-133 audit into its big CPA, medium CPA, and small CPA components.

#### *Understated fundraising expenses for panel data*

With few exceptions, Table 3 provides support for our hypotheses that governance mechanisms improve the accuracy of charitable expense reporting by mitigating underreported fundraising expenses. We find that the coefficient for *Voting Directors* is positive and significant in all four models, consistent with our hypotheses that nonprofits with larger boards report more accurate fundraising expenses. This suggests that larger boards are more likely to contain financial reporting expertise and to mitigate managerial power. *Voting Directors*<sup>2</sup> is statistically significant and negative, supporting the hypothesis that although having more voting members enhances the accuracy of fundraising expenses, it does so at a decreasing rate. This result is consistent with the concerns of the IRS that boards become less effective as they grow larger.

We find that both standard GAAS audits, as well as A-133 audits, are associated with more accurate fundraising expense reporting, consistent with our hypotheses. We also find that A-133 audits are more effective than standard audits at the five percent level (using

29. Technically, these restrictions can be temporary or permanent. In robustness tests, we separated these out but found no differences in their effects on governance.

TABLE 2

Governance variable means partitioned across reported expenses for panel data

Variable	<i>Non-Zero</i> <i>Fundraising</i> = 0	<i>Non-Zero</i> <i>Fundraising</i> = 1	<i>Non-Zero</i> <i>Administrative</i> = 0	<i>Non-Zero</i> <i>Administrative</i> = 1
<i>Voting Directors</i>	17.192	27.113*	16.290	23.780*
<i>Standard Audit</i>	0.387	0.404*	0.427	0.397
<i>A-133 Audit</i>	0.173	0.278*	0.085	0.245*
<i>Big 5 CPA</i>	0.055	0.117*	0.017	0.097*
<i>Medium CPA</i>	0.022	0.046*	0.006	0.038*
<i>Small CPA</i>	0.096	0.115*	0.063	0.110*
<i>Donor Restrictions</i>	0.220	0.346*	0.308	0.301
<i>Municipal Bonds</i>	0.228	0.232*	0.106	0.234*
<i>Taxable Revenues</i>	0.236	0.246*	0.095	0.247*
<i>State Regulation</i>	9.541	9.750*	9.150	9.691*
<i>State Enforcement</i>	0.106	0.113*	0.094	0.111*
Observations	22,118	39,662	2,717	70,390

**Notes:**

The sample and variable definitions are from Table 1. The first two columns restrict the sample to organizations earning at least \$10,000 in donations as reported on the IRS 990. Although our hypotheses predict that our governance measures will be increasing in financial reporting quality, our significance tests are two-tailed. \* Difference between the means is significant at the 5 percent level (two-tailed).

an *F*-test) when the dependent variable is continuous (but not dichotomous) understated fundraising. In terms of magnitude, the probability of reporting nonzero fundraising rises by 2.5 (3.9) percent when an organization undergoes a standard (A-133) audit.

Both Big 5 and medium CPA firms are associated with more accurate fundraising expenses, but small CPA firms are not when the dependent variable is dichotomous. This finding is important, as small CPA firms conduct over one-half of all A-133 audits. The coefficient for *Big 5 CPA* is statistically larger than the coefficient for *Medium CPA* when the dependent variable is continuous, but the two coefficients are not different when the dependent variable is dichotomous. The coefficient for *Medium CPA* is statistically larger than the coefficient for *Small CPA* for both dependent variables. These results are somewhat consistent with our hypothesis that larger CPA firms will be more effective in promoting more accurate charitable expense reporting by mitigating underreported fundraising expenses.

Results for all four models in Table 3 show that the larger proportion of restricted assets a nonprofit has, the more accurate are its reported fundraising expenses, consistent with our hypothesis that donor-imposed restrictions play a governance role. Results for municipal bonds are somewhat weaker, in that the coefficient using the dichotomous dependent variable model is only marginally significant. The same is true for *Taxable Revenues*, where the coefficients are not significant when the dependent variable is dichotomous. A possible explanation for these marginal or null results is that these sources of governance are less effective or, alternatively, is due to possible measurement error inherent in our variables. Finally, *State Regulation* is positively associated with more accurate fundraising expense reporting in all four models, while *State Enforcement* shows the pattern discussed above (weaker when the dependent variable is dichotomous).

TABLE 3

The effects of governance on understated fundraising expenses for panel data

	<i>Non-Zero Fundraising</i>		<i>Residual Fundraising</i>	
	(Column 1)	(Column 2)	(Column 3)	(Column 4)
Constant	-2.469** (10.63)	-2.075** (8.96)	-24.988** (22.17)	-25.197** (21.59)
<i>Voting Directors</i>	0.037** (23.83)	0.030** (19.73)	0.068** (14.10)	0.068** (14.00)
<i>Voting Directors</i> <sup>2</sup>	-0.0004** (17.43)	-0.0004** (12.90)	-0.0008** (8.72)	-0.0008** (8.26)
<i>Standard Audit</i>	0.119** (3.09)	0.122** (3.22)	1.157** (6.13)	1.185** (6.34)
<i>A-133 Audit</i>	0.184** (3.35)		3.481** (13.15)	
<i>Big 5 CPA</i>		0.365** (4.51)		6.094** (14.76)
<i>Medium CPA</i>		0.458** (4.48)		4.689** (9.34)
<i>Small CPA</i>		0.080 (1.24)		1.234** (4.17)
<i>Donor Restrictions</i>	0.351** (5.44)	0.308** (4.84)	1.320** (4.46)	1.416** (4.85)
<i>Municipal Bonds</i>	0.087 (1.69)	0.102* (2.01)	2.205** (7.90)	1.988** (7.15)
<i>Taxable Revenues</i>	0.055 (1.16)	0.060 (1.28)	2.592** (10.46)	2.314** (9.44)
<i>State Regulation</i>	0.023** (3.12)	0.021** (2.89)	0.167** (4.86)	0.143** (4.23)
<i>State Enforcement</i>	0.526* (2.15)	0.468 (1.95)	6.043** (5.29)	5.992** (5.35)
<i>Assets</i>	0.088** (6.68)	0.075** (5.70)	0.918** (13.91)	0.818** (12.54)
<i>Donations Intensity</i>	1.305** (19.04)	1.165** (17.15)	-2.074** (6.52)	-1.997** (6.39)
<i>Age</i>	0.014** (12.85)	0.013** (11.95)	0.041** (7.57)	0.041** (7.73)
<i>Donations Growth</i>	-0.133 (1.58)	-0.138 (1.67)	0.907 (1.93)	0.877 (1.89)
<i>Current Ratio</i>	-0.004 (0.77)	-0.004 (0.68)	-0.158** (6.24)	-0.161** (6.45)
Observations	61,176	61,671	37,662	37,581
<i>R</i> <sup>2</sup>	0.20	0.18	0.33	0.34

(The table is continued on the next page.)



TABLE 3 (Continued)

**Notes:**

Variables are defined in Table 1. The first two columns restrict the sample to organizations earning at least \$10,000 in donations as reported on the IRS 990, and the last two columns restrict the sample to those observations with data available to estimate model 2. The dependent variable in the first two columns is *Non-Zero Fundraising*. The dependent variable in the third and fourth columns is *Residual Fundraising*. The models in the first two columns are logit with coefficient estimates and z-statistics (in parentheses) presented, while the models in the third and fourth columns are OLS with coefficient estimates and t-statistics (in parentheses) presented. All models contain industry as well as year effects. Standard errors are corrected for clustering within organizations using the method of White 1980, with an adjustment for repeated organizations across years. Although our hypotheses predict that our governance measures will be increasing in (with the exception of Voting Directors<sup>2</sup>, which is decreasing in) financial reporting quality, our significance tests are two-tailed. \*, \*\* represent significance levels of 5 percent and 1 percent respectively (two-tailed).

*Understated administrative expenses for panel data*

The results in Table 4 are similar to those in Table 3, but are even more consistent with our hypotheses. We find that, with the exception of donor restrictions, all forms of governance are effective in increasing the accuracy of charitable expenses by mitigating under-reported administrative expenses. With respect to audits, the coefficient for *A-133 Audit* is significantly larger than the coefficient for *Standard Audit*. With respect to CPA firm size, we find that both Big 5 and medium CPA firms are more effective than small CPA firms when the dependent variable is dichotomous. When we use a continuous measure of under-reported administrative expenses, we find full support for our hypothesis that Big 5 CPA firms are the most effective, followed by medium CPA firms, and then by small CPA firms (i.e., the coefficients are all different at the five percent level).

*Economic significance*

One way to estimate the economic joint significance of our results is to compare predicted outcomes across different values of the governance variables. A common increment used for such an analysis is one-half of a standard deviation change in all continuous independent variables and a discrete change from zero to one in all dichotomous independent variables. Using the model in the first column of Table 3, we estimate that changing the statistically significant independent variables by the amounts discussed above will increase the probability of reporting nonzero fundraising expenses by 22.4 percent. Given that 36 percent of our sample reports zero fundraising, this suggests that the probability of reporting zero fundraising expenses falls to 13.6 percent, an approximately 60 percent improvement.

Using a similar technique on the first column in Table 4, we find that the probability of reporting nonzero administrative expenses rises by 4.8 percent, which is economically large given that three percent of our sample currently reports zero administrative expenses. This suggests that the probability of reporting zero administrative expenses falls to near zero when the nonprofit is highly governed.<sup>30</sup>

30. These estimates are subject to confidence intervals.

TABLE 4

The effects of governance on understated administrative expenses for panel data

	<i>Non-Zero Administrative</i>		<i>Residual Administrative</i>	
	(Column 1)	(Column 2)	(Column 3)	(Column 4)
Constant	1.239** (2.81)	1.279** (2.88)	-32.451** (32.13)	-30.739** (33.23)
<i>Voting Directors</i>	0.026** (5.17)	0.025** (4.89)	0.053** (11.02)	0.049** (10.27)
<i>Voting Directors</i> <sup>2</sup>	-0.0003** (5.56)	-0.0003** (5.29)	-0.0007** (6.81)	-0.0006** (5.22)
<i>Standard Audit</i>	0.147* (2.05)	0.147* (2.05)	1.770** (10.14)	1.801** (10.36)
<i>A-133 Audit</i>	0.624** (4.95)		3.328** (13.46)	
<i>Big 5 CPA</i>		0.932** (3.45)		6.113** (15.00)
<i>Medium CPA</i>		1.597** (4.42)		3.216** (6.67)
<i>Small CPA</i>		0.445** (3.24)		1.807** (6.41)
<i>Donor Restrictions</i>	-0.220 (1.75)	-0.219 (1.75)	-0.282 (1.09)	-0.295 (1.15)
<i>Municipal Bonds</i>	0.378** (2.90)	0.371** (2.82)	3.791** (14.59)	3.611** (13.90)
<i>Taxable Revenues</i>	0.557** (4.48)	0.546** (4.39)	2.896** (12.37)	2.717** (11.66)
<i>State Regulation</i>	0.043** (3.04)	0.043** (3.02)	0.023 (0.73)	0.003 (0.09)
<i>State Enforcement</i>	2.638** (4.68)	2.632** (4.69)	2.652* (2.56)	2.432* (2.37)
<i>Assets</i>	0.086** (3.53)	0.084** (3.44)	1.359** (25.07)	1.287** (24.02)
<i>Donations Intensity</i>	0.117 (0.91)	0.126 (0.99)	-3.914** (15.17)	-3.761** (14.66)
<i>Age</i>	0.014** (5.46)	0.014** (5.42)	0.042** (8.44)	0.043** (8.71)
<i>Donations Growth</i>	-0.465** (3.07)	-0.466** (3.08)	-0.567 (1.80)	-0.565 (1.80)
<i>Current Ratio</i>	-0.059** (5.39)	-0.059** (5.39)	-0.132** (5.99)	-0.135** (6.17)
Observations	72,895	72,895	58,534	58,441
R <sup>2</sup>	0.11	0.11	0.30	0.31

**Notes:**

Variables are defined in Table 1. The last two columns restrict the sample to those observations with data available to estimate model 3. The dependent variable in the first two columns is *Non-Zero Administrative*. The dependent variable in the third and fourth columns is *Residual Administrative*. The models in the first two columns are logit with coefficient estimates and z-statistics (in parentheses) presented, while the models in the third and fourth columns are OLS with coefficient estimates and t-statistics (in parentheses) presented. All models contain industry as well as year effects. Standard errors are corrected for clustering within organizations using the method of White 1980, with an adjustment for repeated organizations across years. Although our hypotheses predict that our governance measures will be increasing in (with the exception of *Voting Directors*<sup>2</sup>, which is decreasing in) financial reporting quality, our significance tests are two-tailed. \*, \*\* represent significance levels of 5 percent and 1 percent respectively (two-tailed).

TABLE 5  
Descriptive statistics for 2008 sample

Variable	Mean	25th Percentile	Median	75th Percentile	Standard Deviation
<i>Non-Zero Fundraising</i>	0.67	0.00	1.00	1.00	0.47
<i>Non-Zero Administrative</i>	0.97	1.00	1.00	1.00	0.18
<i>Outsourced Management</i>	0.04	0.00	0.00	0.00	0.20
<i>Independent Directors</i>	0.89	0.93	1.00	1.00	0.26
<i>Voting Directors</i>	17.23	10.00	15.00	21.00	12.82
<i>IRS 990 Review</i>	0.79	1.00	1.00	1.00	0.41
<i>Audit Committee</i>	0.71	0.00	1.00	1.00	0.45
<i>Standard Audit</i>	0.63	0.00	1.00	1.00	0.48
<i>A-133 Audit</i>	0.15	0.00	0.00	0.00	0.36
<i>Big 5 CPA</i>	0.01	0.00	0.00	0.00	0.09
<i>Medium CPA</i>	0.03	0.00	0.00	0.00	0.16
<i>Small CPA</i>	0.11	0.00	0.00	0.00	0.32
<i>Donor Restrictions</i>	0.24	0.00	0.08	0.40	0.31
<i>Taxable Revenues</i>	0.13	0.00	0.00	0.00	0.33
<i>State Regulation</i>	8.34	7.00	9.00	10.00	2.29
<i>State Enforcement</i>	0.11	0.04	0.12	0.16	0.09
<i>Written Policies</i>	2.09	1.00	3.00	30.00	1.14
<i>Assets</i>	30.77	3.80	6.31	14.64	243.92
<i>Donations Intensity</i>	0.35	0.04	0.22	0.65	0.35
<i>Age</i>	30.70	15.00	27.00	43.00	19.22
<i>Current Ratio</i>	14.01	1.76	4.56	19.08	17.90

**Notes:**

The sample includes the 12,490 2008 organizations earning at least \$10,000 in donations as reported on the IRS 990. Data sources are identified in the text. *Outsourced Management* is equal to one if the management operations of the organization are delegated to an outside management company as reported on the IRS 990, and zero otherwise. *Independent Directors* is the percentage of voting directors that are independent as reported on the IRS 990. *IRS 990 Review* is equal one if copies of the IRS 990 are provided to the board of directors prior to filing it with the IRS as reported on the IRS 990, and zero otherwise. *Audit Committee* is equal to one if the organization had an audit committee as reported on the IRS 990, and zero otherwise. *Standard Audit* is equal to one if the organization had its financial statements audited by an independent accountant as reported on the IRS 990 and that audit was not an A-133 audit, and zero otherwise. *Written Policies* is equal to the sum of the number of written nonprofit policies intended to enhance governance as reported on the IRS 990; the variable ranges from 0 to 3 and captures three policies: a written conflict of interest policy, a written whistleblower policy, and a written document destruction policy.

***Descriptive statistics for 2008 sample***

Table 5 reports the statistics for the data from the new 2008 IRS 990s. To the best of our knowledge, we are the first researchers to use this data and thus are the first to describe the results from the new section on “Governance, Management, and Disclosure”. The mean of *Non-Zero Fundraising* is 0.67 and of *Non-Zero Administrative* is 0.97, both of which

are very close to our larger panel data set means.<sup>31</sup> Four percent of the sample outsources management functions. On average, 89 percent of the boards of directors are independent. Roughly six percent of nonprofits report having completely nonindependent directors, while over half report having completely independent directors. We find that the average nonprofit in this sample has 18 voting directors, with a median of 15, which is somewhat smaller than the 24 we found in our larger panel data. The smallest number of voting directors is zero (meaning that the nonprofit outsources all of its operations, including its board), while the largest board has over 1,000 members. One out of five nonprofits does not report giving its IRS 990s to its board prior to filing them with the IRS. Roughly 70 percent of our sample reports having an audit committee. Approximately 78 percent of our sample was audited (standard or A-133), and of these organizations roughly 70 percent has an audit committee. Unlike publicly listed for-profit firms, nonprofits are not required to have audit committees even if they are audited. Our results suggest that a large majority of nonprofits choose to have an audit committee if they are audited. Fifteen percent of the sample underwent an A-133 audit, and most of those audits (76 percent) were performed by small CPA firms. Only six percent of the observations from this 2008 database underwent an A-133 audit performed by a Big 5 (or Big 4 in 2008) auditor, while we found that Big 5 firms in the panel database performed 10 percent of A-133 audits. We talked with a few CPAs who informed us that in the years since SOX, the Big 4 CPA firms have been reducing the number of A-133 audits they perform.

On average, roughly 24 percent of total fund balances have some type of donor-imposed restriction and about 13 percent operate a taxable activity. On average, a state has enacted eight of the 15 possible nonprofit laws and reporting requirements, and the average state attorney general prosecutes 0.11 percent of its nonprofit organizations per year. Nonprofits reported adopting two of the three written SOX policies, with a median of one. We find that roughly 16 percent of the sample do not report having a written conflict of interest policy, while 35 percent do not report having either a written whistleblower or document destruction policy.

Table 6 partitions our governance variables across those that report zero and nonzero fundraising as well as administrative expenses. Focusing on the governance variables that are unique to this analysis, we see in Table 6 that, when management is not outsourced and a board is more independent, a nonprofit is more likely to report nonzero fundraising and administrative expenses. When boards are given copies of the IRS 990 prior to filing and there is a separate audit committee, the probabilities of reporting nonzero fundraising and administrative expenses are higher, consistent with our hypotheses. Finally, written SOX policies adoption also increases the probabilities that a nonprofit will report nonzero fundraising and administrative expenses.

### ***Regression results for 2008 sample***

Table 7 contains the regression results for the 2008 sample for both understated fundraising and administrative expenses. Results in the first (second) two columns are for the dichotomous fundraising (administrative) expense variable. Similar to previous results, results in the first and third columns use the A-133 audit indicator variable, while the second and fourth columns break out the A-133 audit into its big CPA, medium CPA, and small CPA components.

With few exceptions, Table 7 provides support for our hypotheses that governance mechanisms improve the accuracy of reported charitable expenses. Beginning our discussion with the variables that are unique to the 2008 data set, *Outsourced Management* is

31. Given only one year of data, it is not possible to consistently estimate continuous measures of fundraising or administrative expenses.

TABLE 6

Governance variable means partitioned across reported expenses for 2008 sample

Variable	Non-Zero Fundraising = 0	Non-Zero Fundraising = 1	Non-Zero Administrative = 0	Non-Zero Administrative = 1
<i>Outsourced Management</i>	0.07	0.03*	0.06	0.04*
<i>Independent Directors</i>	0.86	0.91*	0.85	0.89*
<i>Voting Directors</i>	13.88	20.76*	14.54	17.22*
<i>IRS 990 Review</i>	0.75	0.81*	0.68	0.79*
<i>Audit Committee</i>	0.61	0.76*	0.49	0.71*
<i>Standard Audit</i>	0.68	0.81*	0.51	0.77*
<i>A-133 Audit</i>	0.16	0.14*	0.10	0.13*
<i>Big 5 CPA</i>	0.01	0.01	0.01	0.01
<i>Medium CPA</i>	0.03	0.03	0.00	0.03*
<i>Small CPA</i>	0.12	0.11*	0.09	0.12
<i>Donor Restrictions</i>	0.17	0.28*	0.25	0.24
<i>Taxable Revenues</i>	0.11	0.13*	0.05	0.13*
<i>State Regulation</i>	8.28	8.38	7.94	8.34*
<i>State Enforcement</i>	0.11	0.11*	0.10	0.11*
<i>Written Policies</i>	1.92	2.17*	1.57	2.09*
Observations	4,147	8,343	398	12,041

**Notes:**

The sample and variable definitions are from Table 5. The last two columns restrict the sample to organizations earning at least \$10,000 in total expenses as reported on the IRS 990. Although our hypotheses predict that our governance measures will be increasing in (with the exception of *Outsourced Management*, which is decreasing in) financial reporting quality, our significance tests are two-tailed. \* Difference between the means is significant at the 5 percent level (two-tailed).

significantly negatively correlated with reporting *Non-Zero Fundraising*, consistent with our hypothesis that outsourced management will be less effective in reporting accurate charitable expenses. In terms of magnitude, we find that the probability of reporting non-zero fundraising expenses falls by 15.6 percent when the nonprofit outsources its management functions. In addition, board independence and the presence of an audit committee both are positively associated with reporting nonzero fundraising expenses, consistent with our hypotheses. We also find that giving a copy of the IRS 990 to the board to review prior to filing it with the IRS and adopting SOX written policies increase the probability of reporting both nonzero fundraising and administrative expenses. These results provide the first glimpse into the possible effects that imposing provisions of various SEC Acts have on nonprofit organizations. Overall, our analysis suggests that the provisions enacted by nonprofits thus far are effective means of improving financial reporting accuracy.

Turning to the governance variables that are common to both samples, our results generally are consistent across the two samples. We find that larger boards are associated with more accurate fundraising and administrative expense reporting, but this effect is diminishing (i.e., *Voting Directors*<sup>2</sup> is statistically negative). *Donor Restrictions*, *Taxable Revenues*, and *State Regulation* all are significantly associated with the probability of reporting both nonzero fundraising and administrative expenses, whereas *State Enforcement* is associated only with the reporting of nonzero administrative expenses.

With respect to audits, we find that both standard and A-133 audits are positively associated with nonzero fundraising and administrative expense reporting, but that the



TABLE 7

The effects of governance on nonzero fundraising and administrative expenses for 2008 sample

	<i>Non-Zero Fundraising</i>		<i>Non-Zero Administrative</i>	
Constant	-0.485 (1.38)	-0.536 (1.48)	0.675 (0.69)	0.704 (0.71)
<i>Outsourced Management</i>	-0.641** (6.34)	-0.640** (6.33)	-0.374 (1.67)	-0.386 (1.73)
<i>Independent Directors</i>	0.181* (2.26)	0.180** (2.25)	-0.024 (0.14)	-0.027 (0.16)
<i>Voting Directors</i>	0.078** (17.39)	0.078** (17.39)	0.041** (4.09)	0.041** (4.04)
<i>Voting Directors</i> <sup>2</sup>	-0.001** (13.15)	-0.001** (13.15)	-0.001** (4.86)	-0.001** (4.82)
<i>IRS 990 Review</i>	0.142** (2.72)	0.142** (2.72)	0.314** (2.66)	0.314** (2.66)
<i>Audit Committee</i>	0.168** (2.80)	0.165** (2.74)	0.119 (0.82)	0.115 (0.79)
<i>Standard Audit</i>	0.392** (5.91)	0.394** (5.93)	0.805** (5.34)	0.810** (5.37)
<i>A-133 Audit</i>	0.274** (3.31)		0.697** (3.18)	
<i>Big 5 CPA</i>		0.142 (0.63)		0.221 (0.30)
<i>Medium CPA</i>		0.269* (1.94)		
<i>Small CPA</i>		0.288** (3.25)		0.543* (2.43)
<i>Donor Restrictions</i>	0.414** (5.28)	0.414** (5.28)	-0.467** (2.75)	-0.456** (2.69)
<i>Taxable Revenues</i>	0.248** (3.57)	0.248** (3.57)	0.788** (3.12)	0.792** (3.14)
<i>State Regulation</i>	0.019* (2.12)	0.020* (2.13)	0.047* (2.24)	0.045* (2.14)
<i>State Enforcement</i>	0.173 (0.69)	0.177 (0.70)	1.546* (2.40)	1.568* (2.43)
<i>Written Policies</i>	0.163** (7.75)	0.163** (7.73)	0.104* (2.12)	0.104* (2.11)
<i>Assets</i>	-0.064** (3.03)	-0.061* (2.81)	0.060 (1.01)	0.060 (0.99)
<i>Donations Intensity</i>	1.413** (18.40)	1.414** (18.40)	-0.057 (0.34)	-0.060 (0.36)
<i>Age</i>	0.006** (4.82)	0.006** (4.83)	0.018** (5.25)	0.018** (5.24)
<i>Current Ratio</i>	-0.007** (4.84)	-0.007** (4.83)	-0.009** (3.38)	-0.009** (3.34)
Observations	12,490	12,490	12,439	12,101
R <sup>2</sup>	0.14	0.14	0.12	0.12

(The table is continued on the next page.)

TABLE 7 (Continued)

**Notes:**

Variables are defined in Table 5. The last two columns restrict the sample to organizations earning at least \$10,000 in total expenses as reported on the IRS 990. The models are logit with coefficient estimates and z-statistics (in parentheses) presented. The models contain industry effects. Although our hypotheses predict that our governance measures will be increasing in (with the exception of *Outsourced Management* and *Voting Directors*<sup>2</sup>, which are decreasing in) financial reporting quality, our significance tests are two-tailed. \*, \*\* represent significance levels of 5 percent and 1 percent respectively (two-tailed).

two are not different. Turning to auditor size, we see that medium and small CPA firms both are associated with more accurate fundraising and administrative expense reporting (the two are not statistically different), while larger CPA firms appear not to be associated with more reporting accuracy. Our CPA size results are not consistent with those of the panel data, although this likely is due to the relative composition of audits done by different size CPA firms. As previously noted, in our 2008 data Big 5 CPA firms did very few A-133 audits, and thus this variable has very low power; whereas in 2008, small CPA firms did relatively more of the audits. *Medium CPA* does not vary across our dependent variable (and thus observations audited by a medium CPA firm are dropped from the regression), as all organizations whose A-133 audit was conducted by a medium-sized CPA firm reported nonzero administrative expenses.

## 6. Discussion of results and conclusions

Nonprofit financial reports are an important source of information for many users who rely on the reports for donating, contracting, and regulating decisions. Inaccurate reports can lead to suboptimal decisions and potential misallocation of resources. We examine the effects of governance on nonprofit organization financial reporting accuracy and find that, in general, various forms of oversight and monitoring improve nonprofit financial reporting accuracy.

From a theoretical perspective, our results suggest that governance mechanisms can be effective in improving reporting accuracy, even in the nonprofit setting. This suggests a subtle similarity between nonprofit and for-profit managers with respect to the effects of enhanced oversight and monitoring. Often, the for-profit firm is portrayed as a reckless profit machine in need of strong governance, while nonprofits often are seen as benevolent organizations serving the most needy of society. Prior results suggest that both types of managers respond to incentives to manipulate their financial reports, and our results show that governance also can have a similar effect on attenuating the manipulation of financial reports. As compared with the for-profit setting, nonprofits face a wider variety of choice among control mechanisms. In many cases, for-profit firms must adopt specific governance practices (e.g., SOX), whereas nonprofits in many cases can choose their governance practices. Our results suggest that there are benefits to voluntarily adopting governance practices, although we do not also examine their potential costs.

From a policy perspective, our results provide somewhat of a roadmap for regulators and nonprofit boards seeking ways to improve the decision usefulness of nonprofit organizations' financial reports. Our results suggest that requiring a financial statement audit, particularly one that adheres to the standards of A-133, would significantly improve the accuracy of the IRS 990. Of course, such audits are costly, and we are not able to quantify the cost benefit tradeoff of any proposed requirements. In addition, we find that adopting additional state-level laws, and more frequently enforcing those laws in court, can improve

the accuracy of the IRS 990. Also, our results suggest that requiring nonprofits to adopt some provisions of the SEC Acts of 1933 and 1934 as well as some provisions of SOX would have a positive effect on reporting quality. These provisions include having various written policies, requiring an audit committee, having more independent boards of directors, and having the board review copies of the IRS 990 prior to filing it with the IRS. Finally, our results suggest that boards should not be allowed to grow very large because the accuracy of charitable expenses increases with board size, but at a decreasing rate.

Our study represents an early attempt to measure the effects of governance on nonprofit reporting accuracy and leaves many unanswered questions. Because our study is archival in nature, we are not able to test whether the governance players are substantive or merely symbolic, leaving the door open for experimental studies. We also do not examine how useful nonprofit financial reports are for donating, contracting, and regulating purposes given the current level of disclosure accuracy and monitoring. Many other unanswered questions remain, such as: What is the cost-benefit tradeoff of any enhancements in governance? Are the benefits of adopting SOX provisions worth their cost? Do stakeholders recognize reporting quality differences? To what extent do donors and other stakeholders see through nonprofit financial statement manipulation? Future research addressing these and other nonprofit reporting issues, particularly using data from the newly redesigned IRS 990, would be valuable additions to this line of research.

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