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Why Bad Things Happen to Good Organizations: The Link Between Governance and Asset Diversions in Public Charities

Erica Harris[1] · **Christine Petrovits**[2] · **Michelle H. Yetman**[3]

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Abstract In the United States, the IRS now requires charities to publicly disclose any significant asset diversion, which is the theft or unauthorized use of assets, that the charity identifies during the year. We use this new disclosure to investigate whether strong governance reduces the likelihood of a charitable asset diversion. Specifically, for a sample of 1528 charities from 2008 to 2012, we simultaneously examine eleven measures of governance that capture four broad governance constructs: board monitoring, independence of key individuals, tone at the top, and capital provider oversight. We find consistent evidence that good governance across all four constructs is negatively associated with the probability of an asset diversion. Of the eleven governance measures, our results indicate that monitoring by debt holders and government grantors, audits, and keeping managerial duties in-house are most strongly associated with lower incidence of fraud. Our results also indicate that the likelihood of a fraud is negatively associated with a board review of the Form 990, the existence of a conflict of interest policy, and the presence of restricted donations. In addition, we document that the likelihood of an asset diversion is negatively associated with program efficiency and positively associated with growth and organizational complexity.

Keywords Nonprofit · Fraud · Corporate governance · Asset diversion · Asset misappropriation · IRS Form 990

Introduction

All organizations are vulnerable to the threat of fraud. The risk of financial improprieties exists even at charities, where the mission is to do good and employees often pride themselves on their strong ethical values. About one-sixth of all major embezzlements occur in the nonprofit industry (Stephens and Flaherty 2013). Fraud losses affect not only small, local charities run by volunteers but also large, well-known charities with thousands of employees. Examples include $1.5 million of employee theft at Memorial Sloan-Kettering Cancer Center, $43 million of improper payments to grantees at The Global Fund, and a $26 million endowment write-off at New York University due to a fraudulent investment manager.

The main objective of this study is to examine whether nonprofit governance reduces the opportunity for individuals to commit asset diversions. An asset diversion is the use or conversion of charitable assets for unauthorized purposes. Practically speaking, asset diversions are a type of fraud commonly referred to as asset misappropriations. Researchers and industry experts conjecture that nonprofits are especially susceptible to asset diversions because they often rely on a culture of trust (i.e., the belief that employees and volunteers are altruistic) and do not properly invest in good governance (Archambeault et al. 2014; Greenlee et al. 2007).

✉ Michelle H. Yetman
mhyetman@ucdavis.edu

Erica Harris
erica.harris@villanova.edu

Christine Petrovits
christine.petrovits@mason.wm.edu

[1] Villanova University, Villanova, USA

[2] The College of William and Mary, Williamsburg, USA

[3] University of California, Davis, Davis, USA

While there is a substantial amount of research examining financial statement fraud, there is relatively little research examining asset diversions in the nonprofit sector. This is likely due to the fact that, historically, it has been difficult to obtain data on asset diversions. Many charities prefer to handle cases of fraud quietly because public disclosure can be costly. In addition to the direct cost of the diverted assets, disclosing a fraud may cause the charity to lose future donations or volunteers. Moreover, other charities and society at large can suffer from the spillover effects of diminished trust in the nonprofit sector as a whole (Bradley 2015).

In 2008, the Internal Revenue Service (IRS) began requiring charities in the United States to disclose publicly whether they became aware of any significant asset diversions during the year. We use this new disclosure to examine the link between assets diversions and governance, and hypothesize that stronger governance is negatively associated with the likelihood of asset diversions. Specifically, we study four nonprofit governance constructs: board monitoring, independence of key individuals, tone at the top, and capital provider oversight.

In addition to requiring the disclosure of asset diversions, the IRS also requires charities to disclose information on their governance structures. It is important to note that the IRS does not mandate that charities adopt specific governance policies, and, as a result, there is substantial variation in governance quality across the nonprofit sector. Over the past decade, state regulators and the IRS have considered various proposals to improve charity governance. These proposals have ignited a public policy debate on whether mandated governance mechanisms could be effective at curbing abuse in the nonprofit sector (Mead 2008; Fishman 2010; Alam 2011; Donnelly 2010; Brody 2012). Whether good governance deters asset diversions is an empirical question. For instance, charities may rely on trust and be more likely to override formal governance policies. In addition, boards are filled with volunteers who may not have the expertise to properly implement good governance. Furthermore, charities have a number of different governance mechanisms available; it is worth documenting which mechanisms appear effective at reducing fraud and whether these mechanisms are substitutes or complements of each other.

To test our hypothesis that governance reduces the likelihood of an asset diversion, we match each charity that experienced an asset diversion with a peer charity that did not. We then estimate a probit regression of the likelihood of an asset diversion occurring as a function of governance and other organizational characteristics. We provide consistent evidence that diversions are negatively associated with board monitoring (i.e., undergoing an audit and board review the Form 990 before it is filed). We also find that diversions are negatively associated with the independence of key individuals (i.e., a conflict of interest policy). In addition, we document that diversions are negatively associated with tone at the top (i.e., maintaining the management function inside the charity rather than outsourcing to a third party). Finally, we find capital provider oversight, as measured by the presence of government grantors, restricted donors, and/or public debt holders, is negatively associated with diversions. Overall, our results are consistent with stronger governance reducing the likelihood of asset diversions. We also find that the likelihood of a diversion is negatively associated with program efficiency and positively associated with the growth and complexity of the charity.

This study provides new insights on the extent to which a wide array of governance mechanisms are associated with a lower incidence of fraud in the nonprofit sector. These governance mechanisms include many of the IRS-recommended best practices, as well as external monitoring by donors, grantors, and lenders. In addition, this study is one of the first to examine charitable asset diversions using recent data disclosed under the new IRS reporting mandate. These data allow us to further our understanding of nonprofit fraud beyond prior research that uses survey or anecdotal data.

In the next section, we provide some background on asset diversions, review prior research, and develop our hypotheses. The third section describes our research design, followed by the presentation of our results. The final section discusses the implications of our evidence for nonprofit managers, regulators and donors, and identifies avenues for future research.

Background and Hypothesis Development

Asset Diversions

Prior literature identifies three types of fraud: (i) asset misappropriation, which refers to theft or embezzlement of an organization's assets, (ii) corruption, which refers to inappropriate influence in a business transaction for personal gain, and (iii) financial statement falsification, which refers to deliberate misreporting of financial information (Wells 2005). Asset misappropriation and corruption represent fraud perpetrated by an individual or group of individuals against the organization, whereas financial statement falsification represents fraud perpetrated by the organization against its stakeholders. These three categories are not mutually exclusive; for example, corruption can also result in asset misappropriation.

In the nonprofit sector, asset misappropriations are estimated to represent over 95 % of the fraud cases in the

nonprofit sector (Greenlee et al. 2007; Holtfreter 2008). Despite being the most common type of fraud, there is relatively little empirical research on misappropriations of charitable assets.[1] The paucity of research is primarily due to the lack of data on asset misappropriations. Many charities would prefer to deal with cases of fraud privately in order to mitigate damage to their public reputations.

In the United States, charities no longer have the option of legally concealing misappropriations from public scrutiny. Beginning in 2008, a charity must disclose whether it became aware of any significant asset diversions during the year. The IRS (2014) defines an asset diversion as "any unauthorized conversion or use of the organization's assets other than for the organization's authorized purposes, including, but not limited to, embezzlement or theft." Practically speaking, an asset diversion as defined by the IRS is equivalent to an asset misappropriation as defined by prior fraud literature.

The asset diversion disclosure is reported on Part VI of the IRS Form 990, which is the primary source of publicly available information on nonprofit organizations in the United States. The Form 990 instructions deem an asset diversion significant if the gross amount of the diversion exceeds any one of three benchmarks: 5 % of the charity's gross receipts, 5 % of the charity's total assets, or $250,000. In the disclosure, the charity must explain the nature of the diversion, the amount of loss, and any corrective actions taken. Common examples of asset diversions include theft of cash or inventory, check forgery, false expense reimbursement, and embezzlement by investment advisors. The IRS specifically notes that the charity must report all significant diversions, regardless of the perpetrator. While employees may be most frequently responsible for diversions, other possible perpetrators include board members, volunteers, independent contractors, suppliers, grantees, donors, and persons not associated with the charity other than through the diversion.

Prior Research

Prior literature on nonprofit fraud is primarily descriptive in nature. Early studies collect and summarize information from fraud cases reported in news articles (Gibelman and Gelman 2001, 2002; Fremont-Smith and Kosaras 2003; Fremont-Smith 2004). These initial studies provide interesting qualitative information on specific instances of nonprofit fraud, but due to their small samples sizes and limited scopes offer little empirical analyses. Subsequent studies examine small samples of fraud data collected from the Association of Certified Fraud Examiners (ACFE) surveys (Greenlee et al. 2007; Holtfreter 2008), as well as from news articles (Archambeault et al. 2014). These studies provide descriptive statistics on the characteristics of the frauds, providing detail on the offenses, offenders, and victims, but, with the exception of Holtfreter (2008), provide little multivariate empirical analysis.

Holtfreter (2008) examines 128 frauds from ACFE survey data from 1997 to 1998 and 2001 to 2002 in order to explore whether individual offender characteristics, organizational victim characteristics, or the type of fraud is associated with the dollar amount of the loss. Within the organizational victim characteristics, she considers four governance measures including the use of employee background checks, internal and external audits, and the existence of an anonymous hotline. Interestingly, she finds consistent evidence that the dollar amount of the fraud is positively associated with age, education, and female gender of the perpetrator and negatively associated with the size of the victim organization and the existence of an anonymous hotline. Other than the existence of an anonymous hotline, she does not find consistent evidence that governance reduces the amount of fraud loss after controlling for other determinants. This may be due to low power resulting from a small sample that includes only charities that opted to complete the ACFE survey. These charities may not represent the full cross-section of governance practices that exist in the nonprofit sector. Another reason may be due to the fact that she examines whether governance is associated with the *dollar amount* of a diversion for a sample of organizations with asset diversions. Governance may play a role in preventing an occurrence of fraud but, given a fraud took place, not be associated with the magnitude of the loss. Despite these challenges, her study provides insight on several individual factors and a couple of organizational factors that predict fraud losses.

Prior research makes important contributions, particularly in shedding light on the characteristics of fraud perpetrators in the nonprofit sector. Nevertheless, many questions remain regarding specific steps that nonprofits can take to deter fraud. Our paper extends prior research in two ways. First, we empirically examine a large portfolio of governance mechanisms that a charity can implement to reduce the likelihood of fraud. These mechanisms are explained in detail in the next section but, generally speaking, are those reported on the Form 990 that are considered best practices by the IRS (2008). Additionally, we examine whether external monitors play a governance role.

Second, we identify diversions using recently available data from the mandatory disclosures to the IRS, allowing

[1] Financial statement falsification is the least frequent type of fraud but involves the largest dollar amounts (ACFE 2014). There is a growing academic literature on earnings management in the nonprofit sector (e.g., Trussel 2003; Hager and Greenlee 2004; Leone and Van Horn 2005; Krishnan et al. 2006; Keating et al. 2008; Tinkelman 2009).

us to provide new evidence on fraud in the nonprofit sector. Prior research identifies cases of nonprofit fraud from surveys, which are voluntary in nature, and news articles, which only include cases deemed newsworthy by reporters. The IRS Form 990 data include all significant asset diversions for charities that comply with the reporting requirements. Moreover, prior research that uses the ACFE survey data focuses on occupational fraud, where the perpetrator defrauds his employing organization, whereas our Form 990 data include fraud from a broader set of perpetrators.

Hypothesis Development

The seminal work in fraud theory is the fraud triangle, which was first developed by Cressey (1950, 1953). While subsequent researchers and practitioners have refined the fraud triangle, the fundamental theory remains the same: three conditions are necessary for an individual to commit fraud. First, individuals must be subject to pressure, which serves as the motive; they must believe that they have a financial problem for which there is no legitimate solution. Second, individuals need to perceive an opportunity; they must believe that they can commit the fraud with a low risk of being caught. Third, individuals need to be able to rationalize their actions; they must be able to morally justify the fraud and convince themselves that the fraud does not conflict with their self-image. Overall, the fraud triangle suggests that pressure, combined with opportunity and rationalization, increases the likelihood of fraudulent actions.

An organization can deter fraud by preventing one of the three conditions of the fraud triangle. Pressure and rationalization are individual characteristics of the perpetrator that are difficult for researchers to observe in large sample empirical studies. Thus, in this study, we focus primarily on actions that a charity or its stakeholders can take to reduce the *opportunity* for fraud. Specifically, a charity can establish and maintain strong corporate governance, or its stakeholders can enhance monitoring, such that individuals believe that asset diversions will be prevented or detected.

We build our hypotheses around four anti-fraud governance constructs that can be plausibly linked to reduced opportunity for individuals to commit asset diversions and that have empirically tractable measures. These four constructs are board monitoring, independence of key individuals, tone at the top, and capital provider monitoring.[2] We expand on each of these constructs in the next four subsections. For each construct, we first discuss the theory leading to the hypothesis, then formally present the hypothesis, and finally discuss the specific governance mechanisms in the nonprofit sector that capture the governance construct.

Board Monitoring Hypothesis

Jensen (1993) describes the board of directors as the apex of the governance structure and as having ultimate responsibility for the effectiveness of the organization in which it serves. Board monitoring involves regular oversight to ensure the charity has sufficient resources and systems to remain accountable to its various stakeholders. Board monitoring can reduce the likelihood of asset diversions in two ways. First, periodic reviews of financial reports and mission-related activities allow boards to detect potential problems sooner. Second, monitoring typically includes assessing, and if necessary correcting, the organization's internal control system. Strong internal controls help prevent asset diversions. Our first hypothesis, in the alternative form, is:

Hypothesis 1 Board monitoring is negatively associated with the probability of an asset diversion.

Monitoring is carried out by the full board, by committees of the board, and by independent accountants hired by the board. First, the Independent Sector (2015), a coalition of organizations that has established principles for good governance and ethical practice in the nonprofit sector, recommends that the board review timely reports of the charity's financial activities. At a minimum, the full board should review the annual Form 990 before it is filed. The Form 990 includes important financial and nonfinancial information (e.g., program activities, compensation practices, fundraising efforts) and can assist board members in fulfilling their stewardship responsibilities. In its own preliminary study, the IRS found that charities where boards review the Form 990 are more likely to be in compliance with tax laws and regulations (Hall 2012).

Second, in terms of committees, having an audit committee is generally considered a best practice in the nonprofit sector (IRS 2008). Audit committees are specifically charged with identifying and managing risks. Moreover, audit committees help ensure proper financial management policies are in place. Their duties include mentoring senior staff as well as hiring, evaluating, and working with the external auditors, internal auditors, and legal counsel.

[2] We acknowledge that our governance constructs may not only reduce opportunity but could also reduce the perpetrator's ability to rationalize the fraud. For example, an ethical tone at the top could make it more difficult for the perpetrator to justify his actions. We focus on opportunity because we can hypothesize a direct link between all of our governance constructs and reduced opportunity.

Finally, a board may hire an external auditor to conduct an independent examination of a charity's financial records and internal control systems. The IRS does not require a nonprofit organization to undergo an audit, but some states and many granting agencies and donors do. External auditors provide knowledge about current financial reporting issues and anti-fraud measures and play a key role in assuring that an organization's internal control system is operating effectively. Additionally, subjecting management to the rigors of a periodic audit may instill greater discipline in the financial operations of the charity.

Independence of Key Individuals Hypothesis

An important aspect of governance is the independence of persons in positions of authority over the charity (e.g., officers, directors, and key employees; hereafter referred to as key individuals). MacDonald et al. (2002) define a conflict of interest as "a situation in which a person has a private or personal interest sufficient to appear to influence the objective exercise of his or her official duties." Independent individuals are free from such conflict of interests and are more likely to make decisions in the best interest of the charity. Lack of independence for key individuals may result in more asset diversions because these individuals can use their positions of authority to circumvent internal controls systems and to conceal their actions. Our second hypothesis, in the alternative form, is:

Hypothesis 2 Independence of key individuals is negatively associated with the probability of an asset diversion.

There are several ways a charity can improve the independence of key individuals, including adding independent board members, limiting related-party transactions, and implementing a conflict of interest policy. First, the Independent Sector (2015) suggests that a substantial majority of the board be independent because independent board members are less likely to self-deal. These board members are also free from management's control and, thus, can provide independent monitoring.[3]

Second, the IRS (2008) notes that the existence of family or business relationships between two or more key individuals of the charity can result in insider transactions that squander charitable assets. Additionally, the lack of independence in such relationships can increase the likelihood of an asset diversion through collusion across these related parties. For these reasons, related-party transactions should be closely monitored and limited as feasible.

Third, as recommended by the Independent Sector (2015), charities can implement a conflict of interest policy so that key individuals are aware of potential conflicts of interests. These policies often require individuals to disclose transactions in which they have a personal interest. The IRS argues that key individuals owe their respective charities a duty of loyalty that requires them to avoid conflicts of interest that are detrimental to the charity. For example, a volunteer board member of a charity that is employed by a potential grantee might excuse himself from the grant making decisions of the charity.

Tone at the Top Hypothesis

A strong control environment is essential in deterring fraud. Elements of the control environment include management's ethical values, operating style, and organizational structure. A charity's control environment is set by the "tone at the top," which are the words and actions of its leadership (Schwartz et al. 2005; Mahadeo 2006). This tone guides how members of the organization conduct day-to-day activities. It formally or informally creates a code of conduct and, when set appropriately, can increase workplace integrity. For example, an open door policy gives employees the opportunity to communicate with leadership and observe management's engagement in the charity's mission. Our third hypothesis, in the alternative form, is:

Hypothesis 3 An ethical tone at the top is negatively associated with the probability of an asset diversion.

There are many ways that tone at the top can be communicated within an organization. For example, establishing a whistleblower policy is one way to set a strong tone at the top. Miceli et al. (2009) highlight several benefits of having an effective whistleblower policy, including the ability for organizations to react to potential misconduct quickly. Implementing a whistleblower policy is considered a best practice by the Independent Sector (2015) because it makes employees and volunteers feel protected when reporting suspected wrongdoings and helps ensure that reports are taken seriously. Because such a policy allows and encourages employees and volunteers to confidentially report unethical behavior, it increases the likelihood of a perpetrator being caught. In fact, tips are consistently the most common method for detecting fraud (ACFE 2014). Thus, a whistleblower policy decreases the opportunity for asset diversions.

Another aspect of setting the tone at the top is leading by example. However, some charities delegate management responsibilities to external management companies or individuals. When managerial duties are outsourced, it is

[3] The IRS defines an independent director as one who meets the following criteria: (1) the director was not compensated as an officer or employee; (2) the director did not receive more than $10,000 as an independent contractor; and (3) neither the director nor a family member was involved in a transaction required to be disclosed on schedule L (transactions with interested parties).

more difficult to set a strong ethical tone at the top. First, employees and volunteers are less likely to observe management's commitment to the charity's mission when management activities are transferred to a third party outside of the organization. Second, outsourcing can result in additional agency costs (Geis 2007; Yetman and Yetman 2012).[4] Ayers and Kaplan (2005) note that external managers have the capacity to harm the hiring organization and may perceive their responsibility to the hiring organization as secondary to their own interests or the interests of their own employer. When third-party managers are used, the board can play a larger role in establishing an ethical culture. However, research shows that when the board sets the tone, employees' perceptions of ethical leadership are lower than when top management sets the tone (Ethics Resource Center 2008).

Capital Provider Oversight Hypothesis

As a part of safeguarding their investment, capital providers have an incentive to monitor the recipient charity to ensure that management is a good steward of the charity's assets. In addition, many capital providers have the legal right to oversee managerial activities and financial reports. This oversight role can help ensure that assets are protected, leading to our final hypothesis, in the alternative form:

Hypothesis 4 The presence of capital provider oversight is negatively associated with the probability of an asset diversion.

Lenders have an incentive to assess whether a charity is and can continue to meet its contractual obligations related to their debt. Lenders often have legal rights to monitor managerial actions as part of the debt contract, as well as from the process of refinancing long-term debt. Both the incentive and legal right to monitor are more common in long-term debt. In the nonprofit sector, large amounts of long-term debt generally take the form of municipal bonds and, thus, the presence of public debt indicates more oversight.

In addition to debt, nonprofits also raise philanthropic capital from grantors and donors. While these stakeholders are not protecting a traditional financial investment, they still may want to ensure their funds are used appropriately by the recipient charity. As a condition of receiving funding, government agencies often subject charities to additional oversight and reporting requirements. For example, charities that receive over $500,000 in federal funding must undergo a Single Audit, which examines internal controls over both financial reporting and compliances with applicable regulations. Likewise, private foundations and other savvy donors often monitor charities through required periodic progress reports or meetings with management.

Summary

In summary, we predict that good governance is associated with a lower likelihood of an asset diversion. Our four anti-fraud governance constructs—board monitoring, independence of key individuals, tone at the top, and capital provider oversight—are not mutually exclusive. For example, a conflict of interest policy helps ensure independence but may also help express the tone at the top. We develop four constructs, but we could classify our governance mechanisms into broader or narrower constructs. Overall, we believe we have created a reasonable framework in which to examine the effect of governance on asset diversions, but acknowledge that other sensible ways of organizing the governance mechanisms exist.

Additionally, there are reasons why our anti-fraud governance mechanisms may not decrease the likelihood of an asset diversion occurring. First, even with the existence of good governance, fraud may be easy to perpetrate in the nonprofit sector based on an atmosphere of trust (Zack 2003). For example, Malloy and Agarwal (2010) discuss the possibility that governments opt to contract with nonprofit organizations because they are perceived to be less likely to engage in opportunistic behavior. Second, the lack of business and financial expertise, the reliance on volunteer boards, the vague legal regime, and the limited resources available for financial management in nonprofit organizations may result in the ineffective implementation of governance policies. For instance, Lee and Fargher (2013) point out that the mere existence of a whistleblower policy does not assure that an actual system is in place and operating effectively. Brody (2007) describes the nonprofit legal regime as "laissez-faire" and suggests that it is inadequate in providing governance guidance to board members, many of who are amateurs. For example, while nonprofit corporate law dictates that a nonprofit is "managed by or under the direction of the board of directors," it does not dictate the functions of the board, which in turn may result in ineffective governance. Third, excessive control by founders or executive directors may allow them to bypass governance controls. Finally, there may be other factors that undermine the effectiveness of governance policies. For example, charities must consider the cost-benefit tradeoff when establishing controls and it may be too costly to completely eliminate the possibility of collusion or management override, two serious threats to fraud

[4] Although nonprofits do not have owners in the traditional sense, they are accountable to and collectively "owned" by the public they serve. Agency problems occur when there is a separation of this collective ownership and control of the nonprofit (Hansmann 1996).

deterrence (Dorminey et al. 2012). For these reasons, the effect of monitoring, independence, tone at the top, and capital provider oversight on asset diversions is an open empirical question.

Research Method

Model and Variable Definitions

Empirically evaluating whether our four governance constructs are associated with a lower likelihood of fraud is challenging because these broad constructs are not easily measured. Our approach to testing these constructs is to use various available proxies for each construct. We consider each of these proxies separately rather than collapsing them into one measure of the construct (e.g., a naïve summation or the outcome of a variable reduction technique) so that we can assess how each *specific* governance mechanism affects the likelihood of an asset diversion. We believe that this approach will result in more useful insight for regulatory and practical purposes. Specifically, we estimate the probability of an asset diversion occurring as a function of eleven governance mechanisms and other organizational characteristics using the following specification:

$$\begin{aligned} Diversion_{i,t} = {} & \beta_0 + \beta_1 Review990_{i,t} + \beta_2 AuditCommittee_{i,t} \\ & + \beta_3 Audit_{i,t} + \beta_4 BoardIndependence_{i,t} \\ & + \beta_5 NoRelations_{i,t} + \beta_6 ConflictPolicy_{i,t} \\ & + \beta_7 WhistleblowerPolicy_{i,t} + \beta_8 NoOutsource_{i,t} \\ & + \beta_9 MuniBonds_{i,t} + \beta_{10} GovGrants_{i,t} \\ & + \beta_{11} RestrictedDonations_{i,t} \\ & + \beta_{12} ProgramRatio_{i,t} + \beta_{13} Complexity_{i,t} \\ & + \beta_{14} Age_{i,t} + \beta_{15} Growth_{i,t} + \beta_{16} Size_{i,t} + \varepsilon_i \end{aligned}$$

The Appendix provides a description and source for each variable. All variables in the model, with the exception of *Age*, are reported on the charity's annual Form 990. The first eleven variables are the governance mechanisms, and with the exception of *BoardIndependence*, are indicator variables, where one represents higher quality governance. *BoardIndependence* is a continuous variable and is also increasing in higher quality governance. The dependent variable, *Diversion,* is an indicator variable set equal to one if the charity answers "yes" to the question on the Form 990, which asks if the organization became aware of a material diversion of its assets during the year. Because *Diversion* is a binary variable, we estimate a logistic regression.

It is important to note that our hypotheses relate to the *occurrence* of an asset diversion. Our empirical proxy, however, is the *disclosure* of an asset diversion. In order for a charity to answer "yes," the diversion must occur, be detected, and be properly reported. It is likely that some charities did actually experience a diversion but answered "no" because the diversion was not detected or not properly reported. For instance, Archambeault et al. (2014) examine a sample of news articles on nonprofit fraud and report that 10 % of their sample did not properly report an asset diversion when required by the IRS. Such inadequate detection or reporting of diversions will bias against finding evidence in support of our hypotheses. Specifically, we predict that good governance is *negatively* associated with the occurrence of fraud; however, we also expect that good governance is *positively* associated with fraud detection and reporting, and this expectation works against finding results that corroborate our hypotheses.

Likewise, we are unable to discern whether the governance mechanisms reported in the Form 990 and discussed below are actually used in practice. Managers could simply be "window dressing" their required disclosures and not actually implementing good governance. This potential measurement error also works against our hypotheses.

We measure board monitoring using three proxies. First, *Review990* represents general monitoring by the board and is set to one if the Form 990 is provided to their governing body before it is filed. Second, *AuditCommittee* represents specific committee monitoring of the financial reporting process and internal controls; it is set to one if the charity has an audit committee. Finally, *Audit* represents external monitoring by an independent accountant and is set to one if the charity undergoes an audit. Consistent with Hypothesis 1, we expect negative coefficients on *Review990*, *AuditCommittee*, and *Audit*.

We also measure independence of key individuals using three proxies. First, *BoardIndependence* equals the ratio of independent board members to total voting board members. Second, the absence of family or business relationships between key individuals is reflected in *NoRelations*, which is equal to one if the charity does not report any such relationships. Third, *ConflictPolicy* represents organizational awareness of the possibility of inappropriate influence and is set to one if the organization has a written conflict of interest policy. Consistent with Hypothesis 2, we expect negative coefficients on *BoardIndependence*, *NoRelations*, and *ConflictPolicy*.

Two variables serve as proxies for tone at the top. *WhistleblowerPolicy* is an indicator variable set to one if the nonprofit reports having such a policy. *NoOutsource*, which signifies that management duties are conducted inside the charity, is set to one if the organization reports that management functions are not delegated to an outside

entity.[5] Consistent with Hypothesis 3, we expect negative coefficients on *WhistleblowerPolicy* and *NoOutsource*.

We use three proxies for capital provider oversight. *MuniBonds* is an indicator variable set to one if the nonprofit reports a liability to municipal bond investors. *GovGrants* is set to one if the organization receives any funding from federal, state, or local government agencies during the year. With regard to donor monitoring, most charities in our sample receive donations, so the presence of donations will not provide variation in monitoring. Instead we assume that donors who provide restricted gifts are most interested in safeguarding their donation. Thus, we use *RestrictedDonations* as a proxy for donor monitoring and set it to one if the organization has temporarily or permanently restricted fund balances reported on the IRS 990. Consistent with Hypothesis 4, we expect negative coefficients on *MuniBonds*, *GovGrants*, and *RestrictedDonations*.

In addition to our governance variables, we include five control variables that may influence the probability of an asset diversion. *ProgramRatio* represents the percentage of a charity's budget that is spent on mission-related activities. Its serves as a proxy for rationalization; potential fraudsters may be less likely to morally justify a diversion when the organization is spending more on its charitable purpose and less on administrative costs. Thus, we expect a negative coefficient on *ProgramRatio.*

Petrovits et al. (2011) find evidence that more complex charities are more likely to experience internal control problems. Because of these control problems, more complex charities may experience more asset diversions. Following prior research, we measure *Complexity* as the number of different revenue sources reported by the charity, including donations, government grants, and/or program service revenue (i.e., tuition, ticket sales). Thus, *Complexity* takes on a value from one to three. We expect the coefficient on *Complexity* to be positive.

We include *Age* and expect younger charities to experience more diversions as they are still developing their control systems, but acknowledge that *Age* can represent many different dimensions of the charity. Likewise, growing charities are more likely to have internal control problems (Petrovits et al. 2011) and thus more opportunities for asset diversions; we measure *Growth* as an ordinal variable from 1 to 4, representing the quartiles of percentage change in total revenue for our sample. We control for industry, year, and size by creating a matched sample. However, because we cannot have a "perfect match" for size, we also include total expenses as a measure of charity size in the model. If our matching system works properly, we do not expect a significant coefficient on size.

Sample Selection and Description

Table 1 details our sample selection process. Using the asset diversion database created by *The Washington Post*, we identify 1177 instances where a U.S. tax-exempt organization indicates it became aware of an asset diversion during their Form 990 reporting year.[6] Our study focuses on public charities and, thus, we remove 302 observations that are not exempt under IRC 501(c)(3).[7] Next, we obtain machine-readable Form 990 data for each observation from GuideStar or, if the data are unavailable from GuideStar, from the National Center for Charitable Statistics. We eliminate 57 observations that do not have all of the necessary financial or governance variables available and one duplicate fraud observation.

The Form 990 instructions state that any organization that checked 'yes' for having a material asset diversion in the reporting period is required to provide additional qualitative disclosure on Schedule O that includes the following: an explanation of the nature of the diversion, the amounts involved, any corrective actions taken, and any other pertinent circumstance. We read these disclosures for every observation in our sample. Interestingly, 53 charities checked the box that they were subject to an asset diversion when in fact the disclosure on Schedule O does not describe an actual asset diversion. In most cases, these organizations incorrectly labeled the sale or transfer of a fixed asset to another charity as an asset diversion. We remove these 53 observations.

Our final sample consists of 764 charity-year observations that report an asset diversion from 2008 to 2012. Because some charities report assets diversions in multiple years, our sample represents 682 unique charities. Panels A and B of Table 2 provide the frequency of organizations in our sample by the size of their operating budgets and industry, respectively. Our sample represents a wide cross-

[5] The IRS requires a charity to disclose when it uses an external party to perform management duties normally performed by or under the direct supervision of officers, directors, or key employees. These duties include, but are not limited to, hiring, firing, and supervising personnel, planning or executing budgets or financial operations, and supervising programmatic activities or unrelated businesses. These duties do not include administrative services (such as payroll processing) that do not involve significant decision-making. Management duties also do not include investment management unless the charity conducts investment management services for others.

[6] Available at http://www.washingtonpost.com/wp-srv/special/local/nonprofit-diversions-database. *The Washington Pos*t database was created with the assistance of Guidestar and includes all assets diversions that were reported on Form 990s filed from 2008 through 2012.

[7] In the United States, there are several tax-exempt categories under IRC 501(c). Most of the organizations eliminated under this criteria are labor unions and credit unions, which qualify for tax exemption under IRC 501(c)(5) and 501(c)(14), respectively.

Table 1 Sample selection

Criteria	*n*
Tax-exempt observations with asset diversion per Washington Post database	1177
Observations that are not 501(c)(3) charities	(302)
Observations without all necessary financial and governance variables	(57)
Duplicate fraud	(1)
Observations that do not represent an actual asset diversion	(53)
Final sample of asset diversions	764

Table 2 Asset diversions

Panel A: By size of charity		
Annual budget (total expenses)	*n*	Percent
Under $250 thousand	146	19
$250 thousand–$499 thousand	117	15
$500 thousand–$999 thousand	133	18
$1 million–4.9 million	221	29
$5 million–$9.9 million	40	5
$10 million–24.9 million	39	5
$25 million or more	68	9
Total	764	100
Panel B: By type of charity		
Industry	*n*	Percent
Human services	273	36
Health	98	13
Education	95	12
Arts, culture, and humanities	72	9
Public and societal benefit	94	12
Religion	39	5
Environment	29	4
International	28	4
Hospitals	20	3
Education, higher	16	2
Total	764	100
Panel C: By time period		
Fiscal year	*n*	Percent
2008	115	15
2009	213	28
2010	189	25
2011	235	31
2012	12	1
Total	764	100

section of organizations in terms of size and mission. Panel C shows the breakdown by year from 2008 to 2012. There is a drop in the number of observations for 2012 because not all 2012 Form 990s were filed when *The Washington Post* collected data.

Reading the Schedules O for our sample provides interesting but incomplete qualitative evidence on the nature of asset diversions in the nonprofit sector. Despite the IRS requirement to provide a description of the diversion on Schedule O not all charities do, either because these charities are incorrectly preparing the Form 990 or because these charities do not have full information about the diversion. While 50 % of our sample identifies an internal perpetrator and 12 % identifies an external perpetrator, 38 % of the charities in our sample do not identify the perpetrator (untabled). In terms of the amount of the asset diversion, only 319 observations out of the 764 cases provide a dollar estimate or range of loss. The average fraud loss for these 319 observations is $1.5 million.

Because we investigate the organizational characteristics that increase the likelihood of fraud, we create a control sample of charities that did not report an asset diversion. We identify possible organizations to include in the control sample by using the IRS Statistics of Income database available from the National Center for Charitable Statistics. We remove observations that are included in our asset diversion sample and observations that do not include all of the necessary variables. Next, we match each fraud observation with one control observation based on year, industry (NTEE 12 major groups), and closest in size, measured with total expenses. We do not allow an observation to be matched with more than one fraud observation. There are 764 matched observations in our control sample.

Results

Descriptive Statistics for Fraud and Control Charities

Table 3 reports descriptive statistics on variables for both the fraud and control samples, as well as tests of differences for mean values of the variables across the two samples. These statistics demonstrate there is substantial variation in the use of governance mechanisms across the nonprofit sector (e.g., 52 % of fraud charities have an audit). Throughout our analysis, we use one-tailed *t* tests to interpret significance levels consistent with our directional

Table 3 Univariate tests of differences between fraud charities and control charities

	Fraud charities ($N = 764$)					Control charities ($N = 764$)					p value of t test (one-tailed)
	Mean	Median	SD	Q1	Q3	Mean	Median	SD	Q1	Q3	
Review990	0.733	1.000	0.443	0.000	1.000	0.801	1.000	0.399	1.000	1.000	0.001***
AuditCommittee	0.513	1.000	0.500	0.000	1.000	0.637	1.000	0.481	0.000	1.000	0.000***
Audit	0.517	1.000	0.500	0.000	1.000	0.669	1.000	0.471	0.000	1.000	0.000***
BoardIndependence	0.813	1.000	0.351	0.857	1.000	0.839	1.000	0.310	0.852	1.000	0.067*
NoRelations	0.768	1.000	0.422	1.000	1.000	0.808	1.000	0.394	1.000	1.000	0.030**
ConflictPolicy	0.656	1.000	0.475	0.000	1.000	0.764	1.000	0.425	1.000	1.000	0.000***
WhistleblowerPolicy	0.453	0.000	0.498	0.000	1.000	0.534	1.000	0.499	0.000	1.000	0.001***
NoOutsource	0.864	1.000	0.343	1.000	1.000	0.923	1.000	0.267	1.000	1.000	0.000***
MuniBonds	0.063	0.000	0.243	0.000	0.000	0.103	0.000	0.305	0.000	0.000	0.002***
GovGrants	0.458	0.000	0.499	0.000	1.000	0.330	0.000	0.470	0.000	1.000	0.000
RestrictedDonations	0.395	0.000	0.489	0.000	1.000	0.513	1.000	0.500	0.000	1.000	0.000***
Program Ratio	0.756	0.829	0.246	0.700	0.913	0.785	0.850	0.226	0.733	0.925	0.008***
Complexity	2.302	2.000	0.637	2.000	3.000	1.971	2.000	0.723	1.000	2.000	0.000***
Age	22.640	17.000	19.010	8.000	33.000	25.690	22.000	18.650	11.000	35.000	0.001***
Growth	2.542	3.000	1.098	2.000	4.000	2.445	2.000	1.141	1.000	3.000	0.046**
Size	32,279	949	146,072	345	2838	35,670	987	155,117	354	3145	0.330

All variables are defined in "Appendix." Continuous variables are winsorized at the 1st and 99th percentile. *, **, and *** represent significance levels of 1, 5, and 10 %, respectively (one-tailed)

predictions. As shown, the control observations have significantly stronger governance on average than the fraud charities for ten of the eleven governance mechanisms, which is consistent with our primary hypothesis that stronger governance reduces the likelihood of asset diversions. *GovGrants* is significantly higher for the fraud sample relative to the control sample, which is in contrast to our prediction. This highlights the need for a multivariate analysis to control for omitted correlated variables. For *GovGrants*, complexity is highly correlated with both *GovGrants* and *Diversion* (Pearson correlation coefficient of 0.78 and 0.24, respectively, both with *p* values of 0.00).

With regard to our control variables, the control charities have significantly higher program ratios on average, indicating that they report spending relatively more on their mission. Also as expected, fraud charities are more complex, younger, and have a higher growth rate than control charities. *Size*, measured with total expenses, is not different across fraud and control observations, indicating our matching process was successful in terms of matching on size.

Primary Multivariate Results

Because we use multiple mechanisms as proxies for each construct and because these mechanisms are likely correlated, we present the results for (i) reduced models that include each of the eleven governance variables separately, (ii) reduced models that include the set of variables that represent each of the four governance constructs separately, and (iii) the complete model detailed in Sect. 3.1. That is, we first establish an understanding how the each mechanism and construct affects the likelihood of an asset diversion on an individual basis and then include all of the governance mechanisms concurrently to ensure that we are not simply documenting the same governance effect with different variables. In all tests, we include the control variables—*Program Ratio, Complexity, Age, Growth, and Size*. Table 4 presents the results for steps (i) and (ii), while Table 5 presents the results for step (iii).

The results reported in columns (I)–(III) of Panel A of Table 4 show that the coefficients on *Review990, AuditCommittee*, and *Audit* are all significantly negative, consistent with Hypothesis 1. Results reported in column (IV) show that, when we include all three variables in the same model, the coefficient on *AuditCommittee* remains negative but is no longer significant (*p* value = 0.110). This is likely due to the fact *Audit* and *AuditCommittee* are highly correlated (Pearson correlation coefficient = 0.720, *p* value = 0.00).

Next, we examine the independence of key individuals. The results reported in columns (I)–(III) of Panel B show that the coefficients on *BoardIndependence*, *NoRelations*, and *ConflictPolicy* are significantly negative, providing support for Hypothesis 2. When all three variables are included in the model simultaneously, results reported in column (IV) indicate that the coefficient on *BoardIndependence* remains negative but is no longer significant (*p* value = 0.118).

Panel C of Table 4 reports results for the tone at the top analysis. The coefficients on *WhistleblowerPolicy* and *NoOutsource* are significantly negative when we include them separately and together. These results provide support for Hypothesis 3.

In Panel D, we tabulate the results for capital provider oversight and show that *MuniBonds*, *GovGrants*, and *RestrictedDonations* all yield significantly negative coefficients, suggesting that the presence of government grantors, municipal bond debt, and restricted donations are negatively associated with the likelihood of fraud. These results are consistent whether we include the mechanisms separately or in the same model and are consistent with Hypothesis 4.

Finally, we include all of the governance variables in the same model and report the result in Table 5. This is a fairly rigorous test designed to ensure that our four governance constructs are not capturing the same effect. Column (I) reports that, for board monitoring, the coefficients on *Review990* and *Audit* are significantly negative and, for independence of key individuals, the coefficient on *ConflictPolicy* is significantly negative. For tone at the top, the coefficient on *NoOutsource* is significantly negative while, for capital provider oversight, the coefficients on all three variables, *MuniBonds*, *GovGrants*, and *RestrictedDonations*, are significantly negative.

Based on the magnitude of the coefficients, capital provider oversight has the largest effect on reducing the likelihood of an asset diversion. The presence of municipal bond debt and the receipt of government grants is each associated with a 38 % lower likelihood of a diversion. Undergoing an audit and maintaining managerial duties in-house rather than outsourcing are each associated with about a 35 % lower likelihood of an asset diversion. Overall, these results suggest that board monitoring, independence, tone at the top, and capital provider monitoring reflect distinct dimensions of corporate governance in reducing the likelihood of asset diversions.

In terms of the control variables, we find consistent evidence that *ProgramRatio* is negatively associated with asset diversions, suggesting charities that have experienced a fraud spend relatively less on their mission and more on administrative and fundraising. As expected, the coefficients on both *Complexity* and *Growth* are positive, suggesting that organizational complexity and growth both increase the likelihood of a diversion, and the coefficient on *Size* is not significant because we matched on size. Our

Table 4 Determinants of asset diversion by governance construct

Panel A: Board monitoring				
Dependent variable: *Diversion*	(I) Coefficient *p* value	(II) Coefficient *p* value	(III) Coefficient *p* value	(IV) Coefficient *p* value
Constant	−0.358**	−0.477***	−0.479***	−0.325**
	0.016	0.002	0.002	0.027
Review990	−0.267***			−0.212***
	0.001			0.004
AuditCommittee		−0.413***		−0.120
		0.000		0.110
Audit			−0.495***	−0.393***
			0.000	0.000
ProgramRatio	−0.560***	−0.562***	−0.536***	−0.538***
	0.000	0.000	0.000	0.000
Complexity	0.505***	0.546***	0.555***	0.561***
	0.000	0.000	0.000	0.000
Age	−0.007***	−0.005***	−0.005***	−0.004***
	0.000	0.003	0.007	0.009
Growth	0.036	0.043*	0.045*	0.046*
	0.110	0.074	0.066	0.063
Size	0.000	0.000	0.000	0.000
	0.260	0.285	0.222	0.296
N	1528	1528	1528	1528
Pseudo R^2	0.0638	0.0749	0.0816	0.0859
Model χ^2	0.000***	0.000***	0.000***	0.000***
Panel B: Independence of key individuals				
Dependent variable: *Diversion*	(I) Coefficient *p* value	(II) Coefficient *p* value	(III) Coefficient *p* value	(IV) Coefficient *p* value
Constant	−0.405***	−0.425***	−0.362**	−0.180
	0.009	0.006	0.013	0.162
BoardIndependence	−0.217**			−0.123
	0.017			0.118
NoRelations		−0.164**		−0.152**
		0.022		0.032
ConflictPolicy			−0.374***	−0.358***
			0.000	0.000
ProgramRatio	−0.556***	−0.567***	−0.555***	−0.557***
	0.000	0.000	0.000	0.000
Complexity	0.511***	0.500***	0.521***	0.529***
	0.000	0.000	0.000	0.000
Age	−0.007***	−0.007***	−0.006***	−0.006***
	0.000	0.000	0.001	0.002
Growth	0.035	0.040*	0.035	0.037
	0.120	0.091	0.121	0.105
Size	0.000	0.000	0.000	0.000
	0.159	0.136	0.354	0.243
N	1528	1528	1528	1528
Pseudo R^2	0.0605	0.0603	0.0702	0.0727
Model χ^2	0.000***	0.000***	0.000***	0.000***

Table 4 continued

Panel C: Tone at the top				
Dependent variable: *Diversion*	(I) Coefficient *p* value	(II) Coefficient *p* value	(III) Coefficient *p* value	(IV) Coefficient *p* value
Constant	−0.502***	−0.237	−0.199	
	0.001	0.101	0.143	
WhistleblowerPolicy	−0.245***		−0.243***	
	0.000		0.000	
NoOutsource		−0.342***	−0.338***	
		0.001	0.001	
ProgramRatio	−0.546***	−0.562***	−0.546***	
	0.000	0.000	0.000	
Complexity	0.516***	0.495***	0.512***	
	0.000	0.000	0.000	
Age	−0.006***	−0.007***	−0.006***	
	0.001	0.000	0.001	
Growth	0.038	0.034	0.036	
	0.101	0.127	0.114	
Size	0.000	0.000	0.000	
	0.391	0.203	0.400	
N	1528	1528	1528	
Pseudo R^2	0.0644	0.0631	0.0690	
Model χ^2	0.000***	0.000***	0.000***	
Panel D: Capital provider oversight				
Dependent variable: *Diversion*	(I) Coefficient *p* value	(II) Coefficient *p* value	(III) Coefficient *p* value	(IV) Coefficient *p* value
Constant	−0.598***	−0.849***	−0.455***	−0.836***
	0.000	0.000	0.002	0.000
MuniBonds	−0.480***			−0.450***
	0.001			0.001
GovGrants		−0.410***		−0.436***
		0.000		0.000
RestrictedDonations			−0.324***	−0.305***
			0.000	0.000
ProgramRatio	−0.553***	−0.582***	−0.599***	−0.610***
	0.000	0.000	0.000	0.000
Complexity	0.515***	0.728***	0.517***	0.775***
	0.000	0.000	0.000	0.000
Age	−0.006***	−0.008***	–0.005***	−0.004**
	0.001	0.000	0.007	0.013
Growth	0.042*	0.035	0.029	0.034
	0.082	0.119	0.167	0.131
Size	0.000	0.000	0.000	0.000*
	0.255	0.295	0.353	0.096
N	1528	1528	1528	1528
Pseudo R^2	0.0642	0.0651	0.0683	0.0802
Model χ^2	0.000***	0.000***	0.000***	0.000***

This table presents results from estimating the likelihood of an asset diversion using a logistic regression. All variables are defined in "Appendix." Continuous variables are winsorized at the 1st and 99th percentile. *, **, and *** represent significance levels of 1, 5, and 10 %, respectively (one-tailed)

Table 5 Determinants of asset diversion with all constructs

Dependent variable: *Diversion*	(I) Coefficient *p* value	(II) Coefficient *p* value	(III) Coefficient *p* value	(IV) Coefficient *p* value
Constant	−0.138	−0.121	0.006	−0.146
	0.280	0.381	0.491	0.287
Review990	−0.191**	−0.230***	−0.241***	−0.198***
	0.010	0.004	0.003	0.009
AuditCommittee	−0.034	−0.020	−0.090	−0.058
	0.369	0.423	0.202	0.284
Audit	−0.350***	−0.426***	−0.312***	−0.325***
	0.001	0.000	0.002	0.001
BoardIndependence	−0.054	0.022	−0.073	−0.110
	0.308	0.423	0.262	0.156
NoRelations	−0.103	−0.090	−0.148**	−0.074
	0.110	0.153	0.048	0.191
ConflictPolicy	−0.193**	−0.174**	−0.142*	−0.189**
	0.019	0.038	0.077	0.022
WhistleblowerPolicy	0.015	−0.058	−0.010	−0.016
	0.430	0.259	0.458	0.427
NoOutsource	−0.342***	−0.361***	−0.411***	−0.412***
	0.001	0.001	0.001	0.000
MuniBonds	−0.379***	−0.404***	−0.398***	−0.365***
	0.004	0.003	0.003	0.006
GovGrants	−0.377***	−0.379***	−0.398***	−0.360***
	0.001	0.001	0.001	0.001
RestrictedDonations	−0.140**	−0.132***	−0.127*	−0.274***
	0.034	0.050	0.059	0.001
ProgramRatio	−0.570***	−0.594***	−0.685***	−0.496***
	0.000	0.000	0.000	0.006
Complexity	0.791***	0.820***	0.815***	0.747***
	0.000	0.000	0.000	0.000
Age	−0.002	−0.002	−0.002	−0.003
	0.128	0.148	0.165	0.102
Growth	0.043*	0.050*	0.057**	0.040*
	0.079	0.058	0.040	0.096
Size	0.000	0.000*	0.000	0.000
	0.147	0.051	0.146	0.168
FEzero				0.347*
				0.080
*FEzero * ProgramRatio*				0.132
				0.334
State fixed effects		YES		
N	1528	1496	1364	1528
Pseudo R^2	0.1064	0.1567	0.1121	0.1234
Model χ^2	0.000***	0.000***	0.000***	0.000***

This table presents results from estimating the likelihood of an asset diversion using a logistic regression. All variables are defined in "Appendix." Results in column (I) are for the primary regression model, (II) control for state fixed effects, (III) include only the first asset diversion for each unique nonprofit in the sample period, and (IV) control for possible misreporting on the financial statements. Continuous variables are winsorized at the 1st and 99th percentile. *, **, and *** represent significance levels of 1, 5, and 10 %, respectively (one-tailed)

results are robust to using total assets rather than total expense to control for size and to using a continuous variable for growth.

Robustness Analyses

In addition to IRS regulations, charities must comply with regulations in the states in which they operate. The rigor of charity regulations differs by state (Desai and Yetman 2015). It is possible that our governance factors are correlated with mandated governance policies that vary across states and that state laws and enforcement of laws affect the likelihood of an asset diversion. Consequently, our results may be driven by differences across states rather than differences in governance across organizations. To address this possibility, we include state fixed effects in our primary model. Results reported in column (II) of Table 5 show that our results are robust to the inclusion of state fixed effects.

Our primary analysis includes 153 organizations that have more than one fraud in our sample period. It is possible that including the same charity more than once in our sample could bias our standard errors downwards. To ensure that this is not driving our results, we re-estimate our primary model including only the first asset diversion in our data for each repeat charity. Column (III) of Table 5 shows that the main findings are robust to this analysis, with one notable difference. While the coefficient *NoRelations* is not significant in the full model in the primary analysis, it is significant when examining only the first diversion at each charity.[8]

Next, in column (IV) of Table 5, we include an indicator variable *FEzero*, which equals one if the charity raised funds via donations but reported zero fundraising expense. Krishnan et al. (2006) find that some charities report zero fundraising expense when they have actually engaged in fundraising in order to inflate their program efficiency ratios. Thus, *FEzero* serves as a proxy for financial statement misreporting. We include *FEzero* and interact it with *ProgramRatio* for two reasons. First, financial statement falsification may be correlated with both governance and asset diversions. Second, if charities misreport their program efficiency ratios, *ProgramRatio* measures program efficiency with error. Our results are robust to the inclusion of *FEzero.* Also, interestingly, the coefficient on *FEzero* is significantly positive, suggesting that charities with misreported financial information are more likely to experience an asset diversion.

[8] As an additional robustness test, we re-estimate our primary model including only the last asset diversion for each repeat charity. Results are qualitatively similar to our primary results with the exception of *RestrictedDonations*, which is no longer significant.

Finally, our sample period includes 2008 through 2012 and overlaps with the financial crisis. The economic downturn caused a large drop in most charities' endowments and resulted in substantially lower donations in 2008 and 2009. While we do not have any expectation of how the crisis affected the link between governance and asset diversions, it is worthwhile to study the crisis period apart from the post-crisis period. In an untabulated analysis, we examine the sensitivity of our results in the crisis period (2008–2009) separately from the other years (2010 and beyond). Using the 328 fraud firms and their matched peers in the crisis period, we find the same results as column 1 of Table 5 with one exception—the coefficient on *Audit* is negative but insignificant. Additionally, the coefficient on *NoRelations* is significantly negative in this sub-period. Using the 436 fraud firms and their matched peers in the post-crisis period, our results are also similar to the first column of Table 5 except the negative coefficient on *RestrictedDonations* is insignificant. Overall, these results indicate that the documented links between our governance mechanisms and a lower likelihood of fraud generally exist across the entire sample period.

Discussion and Conclusion

Concerns about accountability in the nonprofit sector have increased over the past decade (Grunewald 2008; Weidenbaum 2009; Dhanani and Connolly 2015). In the U.S., the IRS addressed these concerns by requiring disclosures about governance practices on the Form 990. The IRS defended these Form 990 changes by stating that charities with strong governance are more likely to obey tax laws, safeguard charitable assets, and serve their missions than charities with weak governance (IRS 2008). Critics of the changes to the Form 990, however, argued that there is no evidence supporting the effectiveness of the governance mechanisms listed on the Form 990 (Fishman 2010; Alam 2011; Donnelly 2010). This paper provides such evidence using a broad sample of charities in terms of size and mission. Namely, we find that many of the IRS-recommended best practices that a charity can choose to adopt, as well as external monitoring by donors, grantors and lenders, are associated with a lower likelihood of asset diversions.

There are two important caveats regarding our analysis. First, we show an association and do not claim that our results prove causation. Second, our evidence does not indicate that all charities should be required to adopt all governance mechanisms. We document one benefit from improved governance, but a charity should conduct a careful cost-benefit analysis when developing its governance structure. Despite these caveats, our evidence suggests several practical implications and should interest charity boards, managers, donors, and regulators.

Board members and management must recognize the importance of strong governance and become educated on how to implement governance policies effectively. Our results suggest that taking the time and providing sufficient resources to improve governance is worthwhile; in fact, nonprofit leaders ultimately serve the mission when they take steps to protect charitable assets from diversion. Not all governance policies are unduly burdensome from a cost perspective.

Our results highlight four governance mechanisms that boards should consider. First, we find that using an external auditor is negatively associated with asset diversions. As Mead (2008) points out, charities have access to pro bono professionals, which can reduce the expense of an audit. Second, we also report a negative association between having the board review the Form 990 and asset diversions. While the audit result may not be surprising, we are the first study to provide evidence consistent with the notion that having the board conduct a timely review of the charity's key financial report reduces the likelihood of fraud. This is not costly but does require diligent board members willing to take the time to read the Form 990.

Third, we report that implementing a conflict of interest policy is associated with a lower probability of asset diversion. Clear conflict of interest policies that make employees and board members aware of potential problems with related-party transactions and require them to disclose all financial interests in the charity's transactions improves transparency and decision-making. Fourth, the tone at the top result suggests that there is a higher risk of an asset diversion when a third-party manager is hired. This finding supports Bradley (2015) who argues that empowering employees is vital to reducing the incidence of fraud. When managerial duties are outsourced, the board should take steps to ensure that third parties do not misuse charitable assets. For example, a charity may opt to use a third-party payroll service rather than have an employee process payroll. This does not mean that the charity's management should abdicate all responsibility for payroll; instead, they must regularly monitor the third party to ensure payroll taxes are submitted and their charitable assets are protected. This recommendation is particularly relevant for charities that operate overseas and use local third-party management because the greater distance increases the difficulty in establishing an appropriate code of conduct.

Prior research suggests that donors value certain governance mechanisms voluntarily adopted by charities (e.g., Kitching 2009; Harris et al. 2015). Our results provide a specific reason why donors should care—good governances reduce the likelihood that their funds will be misappropriated. Moreover, donors may also want to consider the presence of external oversight. Our evidence is consistent with the notion that lenders, government grantors, and restricted donors can signal to other donors that the charity has mechanisms in place to safeguard charitable assets and reduce the likelihood of diversion. On a related note, donors also value charities that minimize administrative spending. Tinkelman and Mankaney (2007) explain that donor fixation on efficiency ratios may induce potentially suboptimal decisions by management, such as underinvestment in governance. The evidence in this study suggests that donors should not have a myopic focus on efficiency ratios to the detriment of effective governance, which protects their donations in the long run.

This study also informs the public policy debates concerning the governance disclosures from the Form 990. While the IRS does not have the authority to mandate specific *behavior* with respect to nonprofit governance, it has exercised its authority to mandate the *disclosure* of governance policies. As noted above, these mandated disclosures are controversial. Some critics are skeptical that the policies suggested by the IRS disclosures actually lead to better-governed organizations, while some proponents believe that regulators, donors, and other stakeholders benefit from the increased transparency provided by these disclosures (Brody 2012). Our evidence corroborates the IRS argument that nonprofit governance helps safeguard charitable assets. Our evidence is consistent with the notion that the IRS' disclosure approach has been effective and does not indicate a particular need for regulators to mandate specific governance behavior (like Sarbanes–Oxley) for all charities.

While our study provides some important insights into the effects of governance on asset diversions, there are remaining questions. For example, more research is needed to fully understand the comprehensive set of costs and benefits of governance in the nonprofit sector. In addition, future research can develop a better understanding of what actions a charity should take after disclosing an asset diversion (e.g., improved controls) and how stakeholders respond to any changes the charity makes in order to restore trust.

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Appendix

Variable name	Description of variable	2008 Form 990 reference
Diversion	Indicator = 1 if material diversion of assets	Part VI Section A Question 5

Variable name	Description of variable	2008 Form 990 reference
Review990	Indicator = 1 if governing body review of Form 990 pre-filing	Part VI Section A Question 10
AuditCommittee	Indicator = 1 if organization has an audit committee	Part XI Question 2c
Audit	Indicator = 1 if organization's financial statements were audited by an independent accountant	Part XI Questions 2b
BoardIndependence	Percentage of independent voting members to total board members	Part VI Section A Question 1b
NoRelations	Indicator = 1 if there is an absence of family/business relationship between key personnel	Part VI Section A Question 2
ConflictPolicy	Indicator = 1 if organization has a written conflict of interest policy	Part VI Section B Question 12a
WhistleblowerPolicy	Indicator = 1 if organization has written whistleblower policy	Part VI Section B Question 13
NoOutsource	Indicator = 1 if management function is not delegated to an outside entity	Part VI Section A Question 3
MuniBonds	Indicator = 1 if organization reports municipal bond debt	Part X Line 20
GovGrants	Indicator = 1 if organization reports revenue from government grants	Part VIII Line 1e
RestrictedDonations	Indicator = 1 if organization reports the existence of temporarily or permanently restricted net assets	Part X Line 28 or 29
ProgramRatio	Program Service Expenses/Total Expenses	Part IX Line 25, Columns A and B
Complexity	Number of revenue sources (Donations, Government Grants, Program Service Revenues) received by the organization	Part VIII Lines 1c + 1d + 1f (Donations), 1e (Government Grants), and 2 g (Program Service Revenues)
Age	Number of years since the organization filed for exempt status	IRS Business Master File
Growth	Quartile placement for % change in total revenues for sample	Part VIII Line 12
Size	Total expenses	Part I Line 18
FEzero	Indicator = 1 if an organization reports fundraising expenses equal to zero but nonzero donations revenue	Part IX Line 25, column D

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