Advances in Accounting 39 (2017) 21–31

Contents lists available at ScienceDirect

Advances in Accounting

journal homepage: www.elsevier.com/locate/adiac

Societal trust and the economic behavior of nonprofit organizations

Robert Felix*, Greg Gaynor, Mikhail Pevzner, Jan L. Williams

University of Baltimore, Merrick School of Business, United States

ARTICLE INFO

Keywords:
Trust
Nonprofit organizations
Opportunistic spending
Administrative expenses

JEL classification:
L30
M40
M4

ABSTRACT

This study explores the impact of societal trust on the economic behavior of nonprofit organizations. Although prior studies reveal that trust has a positive impact on the economic behavior of for-profit firms, the institutional differences between the two organization types make it unclear whether trust plays a similar role in nonprofits. Our results show that nonprofits operating in higher trust areas are more likely to overspend on administrative expenses. This positive relationship between trust and overspending is primarily driven by service organizations, as opposed to public charities. Moreover, within service organizations, we find that the positive trust-administrative overspending association is most prevalent in situations of weaker monitoring or governance. Additional tests show trust has a similar impact on excess compensation and abnormal accruals in service organizations. Overall, our findings suggest that trust may provide opportunities for nonprofit managers, particularly in service-oriented organizations, to engage in opportunistic behavior that may be exacerbated by weaker forms of oversight.

Why are non-profits so vulnerable? In a word, trust. These organizations are often based on the charity, faith and goodwill of fellow citizens. The organizations strive to create and protect a culture of trust that is oftentimes lacking at for-profit companies, and therefore don't always have the formal set of internal controls in place to guard against fraud that might otherwise be expected.[1]

1. Introduction

Societal generalized trust (hereafter "trust") can serve as a key tool to reduce financial frictions and agency problems. Trust between agents can enhance successful relational exchanges (Morgan & Hunt, 1994). To that end, prior research finds that higher trust is associated with an array of positive outcomes, such as higher levels of earnings quality and greater credibility of earnings news (Pevzner, Xie, & Xin, 2015; Wei & Zhang, 2015) as well as lower levels of corporate misconduct (Dong, Han, Ke, & Chan, 2016). However, an underlying assumption is that trust is usually accompanied by enforcement mechanisms, which are discussed below in further detail (Knechel, Mintchik, Pevzner, & Velury, 2017; Robinson & Robinson, 2015). In the nonprofit setting, enforcement mechanisms are generally weaker than those in the for-profit environment. Therefore, institutional differences between the for-profit and nonprofit settings make it unclear ex-ante whether trust would have a similar impact on nonprofits. Accordingly, we examine the impact of trust on nonprofit managerial opportunism in an attempt to shed light on the role of trust on managerial behavior in the nonprofit setting.

Societal trust can be expected to play a more positive exchange-enhancing role in "repeated game" long-term relationships between agents and principals (Garbarino & Johnson, 1999). In the for-profit setting, shareholders, as residual claimants, have an incentive to monitor and discipline managers for violating trust. Consequently, for-profit managers understand that exploiting trust can lead to long-term consequences of lower stock prices and/or reduced employment (Fama & Jensen, 1983a,b). Thus, shareholders can use the stock market as a disciplining mechanism. In the for-profit setting, external enforcement mechanisms, such as the Securities and Exchange Commission (SEC) and active class-action shareholder litigation, are extra layers of discipline that enforce the principal-agent trust. Therefore, in the for-profit environment, disciplining mechanisms accompany the direct-monitoring relationship between principal and agent.

In the nonprofit environment, the principals are the donors and, unlike shareholders, they are not residual claimants (Desai & Yetman, 2015). Donors are commonly inspired to give because of the "warm glow" surrounding a nonprofit's mission (Andreoni, 1990; Becker, 1974). Since donors do not attempt to preserve their own wealth, their incentives for monitoring nonprofit managers (agents) are generally

* Corresponding author at: 1420 North Charles Street, Baltimore, MD 21201, United States.
E-mail addresses: rfelix@ubalt.edu (R. Felix), ggaynor@ubalt.edu (G. Gaynor), mpevzner@ubalt.edu (M. Pevzner), jwilliams@ubalt.edu (J.L. Williams).

[1] "Preventing Fraud: Tips for Nonprofit Organizations," Cbiz.com, https://www.cbiz.com/insights-resources/details/articleid/1484/preventing-fraud-tips-for-nonprofit-organizations-article (September 20, 2012).

http://dx.doi.org/10.1016/j.adiac.2017.09.003
Received 24 April 2017; Received in revised form 12 September 2017; Accepted 13 September 2017
Available online 28 September 2017
0882-6110/

weaker than those of shareholders. In addition, stringent enforcement mechanisms such as the SEC and shareholder litigation, as well as an equivalent market disciplining mechanism, are largely absent in the nonprofit setting. This relative lack of nonprofit monitoring and enforcement may mean that, compared to their for-profit counterparts, nonprofit managers have less incentive to respect the trust relationship.

Using 93,117 observations of nonprofit entities from the National Center for Charitable Statistics (NCCS) database for the period between 1986 and 2012, we examine the effect of trust on the likelihood of overspending on administrative expenses. Overspending on administrative expenses indicates inefficient resource allocation (Baber, Daniel, & Roberts, 2002; Trussel and Parsons, 2007), which can suggest managerial opportunism. We measure trust as the percentage of people in a given U.S. geographic region who consider themselves to be trusting, according to surveys conducted by the World Values Survey.[2]

Our primary result reveals that nonprofits operating in higher trust areas are *more* likely to overspend on administrative expenses, suggesting that managerial opportunism can prevail in response to high trust. In other words, the institutional make-up of nonprofits enables managers to overspend on administrative expenses in the presence of higher trust. Our main result concerns the average effect among nonprofits. However, nonprofits differ in their mission, operation, and relationship with donors. Accordingly, our results vary by nonprofit type. Though there are a wide variety of nonprofits (Yetman & Yetman, 2012a), a broad distinction can be made based upon whether the donor receives a service from the nonprofit (Hansmann, 1980).

Using this distinction, we examine the effect of trust on two nonprofit categories: service organizations and public charities. Consistent with Kitching, Roberts, and Smith (2012), our public charities category excludes art and culture nonprofits, religious organizations, and nonprofits in the education or medical field. These excluded organizations, where donors receive a service or benefit from the nonprofit, are categorized as service organizations. Donors to service organizations are likely to be actively involved with the nonprofit on a regular basis, which can "build trust and obviate the need for a formal feedback mechanism" (Gordon & Khumawala, 1999, p.48). In such case, these donors resemble consumers. As long as donors are satisfied with their service from the nonprofit, they may be less inclined to monitor (Gordon & Khumawala, 1999). Thus, while donors may trust the service organizations, they also may have less incentive to properly monitor those nonprofits, thereby creating a situation where trust could be exploited.

In public charities, which make up the remaining nonprofit entities, the donor does not receive the service. This creates a clear distinction between donor and service recipient (Balsam & Harris, 2014). Compared with donors to service organizations, donors to public charities are likely to be more reliant on formal mechanisms, such as financial information, to ensure that their donations are properly expended. We find that the association between trust and overspending is driven by service organizations, as opposed to public charities. This is consistent with the view that trust can be exploited in service organizations because of the lack of proper monitoring.

Service organizations appear to overspend on administrative expenses in the presence of higher trust due to a relative lack of monitoring by their donors. As such, we perform additional testing to determine whether the presence of other potential monitoring mechanisms has an impact on this behavior. In the additional cross-sectional tests, we find that service organizations are most likely to overspend on administrative expenses in the presence of high trust when there is *weaker* governance, *less* external monitoring, *less* competition, or *lower* information quality. Overall, we suggest that weaker forms of oversight help enable opportunistic behavior when there is high trust.

In additional analysis, we find that trust is positively associated with abnormal accruals and excess compensation in service organizations. This is consistent with the results of Balsam and Harris (2014), who suggest that service organization donors are less likely to react negatively to the excessive compensation of service organization executives. Overall, this provides support for our main finding of managerial opportunism in the presence of higher trust, which is contrary to what has been observed in "for profit" literature (Hilary & Huang, 2015). Our results are robust to alternate definitions for service organizations and public charities as well as to an industry - adjusted calculation of the trust variable. We also find that the trust-overspending association for service organizations is present only for education and religious organizations.

Our study advances the literature by exploring the association between trust and the economic behavior of managers in the nonprofit sector. To the best of our knowledge, this is the first study to examine and provide an important understanding of the impact of societal trust in the nonprofit sector. By documenting that trust is associated with overspending on administrative expenses, our study suggests that trust plays a different role in the nonprofit setting than in the for-profit environment. Moreover, our study also reveals that trust does not affect all nonprofits in the same way. Specifically, we document that service organizations are more likely to behave opportunistically in high-trust environments than are public charities. Although we attribute this to the potentially different principal-agent relationship in these two nonprofit types, we also note there is variation even among the service organizations. To that end, education and religious institutions were the service organizations most likely to overspend in the presence of high trust. Furthermore, we document that weaker oversight is associated with opportunistic behavior in the presence of higher trust. This suggests that increased monitoring may help reduce a nonprofit's likelihood of overspending when trust is high (Robinson & Robinson, 2015).

Our paper proceeds as follows. Section 2 provides hypothesis development. In Section 3, we describe our research design and sample. Section 4 describes our empirical results and Section 5 concludes with a discussion of our results and future research opportunities.

2. Hypothesis development

Recent research has emphasized the potential benefits of trust in for-profit capital markets. The broad theme of this research is that higher societal trust is associated with lower levels of transaction and agency costs. Higher-trust societies experience stronger economic growth and GDP (Zak & Knack, 2001; Knack and Keifer, 1997), experience lower levels of corruption (Aghion, Algan, Cahuc, & Shleifer, 2010), and have lower levels of earnings management and more credible reported earnings (Nanda & Wysocki, 2013; Pevzner et al., 2015). In addition, higher-trust societies have more efficient trading and more intensive levels of cross-border merger and acquisition activity (Ahern, Daminelli, & Fracassi, 2015) as well as a higher perceived value of financial audits (Knechel et al., 2017).

Although the empirical evidence suggests trust has positive effects on firms' economic behavior in the for-profit environment, it is unclear whether this applies to nonprofits, specifically as it relates to managerial behavior. On the one hand, it is reasonable to suggest that nonprofit managers have incentive to preserve donors' trust just as for-profit managers have reasons to sustain the trust of investors. Because nonprofits rely upon donations, nonprofit managers must work to build trust by faithfully fulfilling their mission and maximizing the welfare of their recipients, instead of maximizing profits (Krishnan, Yetman, & Yetman, 2006). On the other hand, however, institutional differences between the for-profit and nonprofit settings may mean that the benefits for nonprofit managers of violating trust through activities, such as overspending, may outweigh the costs.

In the for-profit setting, investors (principals) are residual claimants and, thus, have a strong incentive to monitor and discipline managers (agents) for violating trust. For-profit managers who exploit trust can be expected to face the long-term consequences of lower stock prices and/

[2] More details on this survey are provided in Section 3.3.

or reduced employment (Fama & Jensen, 1983a,b). Additionally, the stock market acts as a disciplining mechanism on for-profit managers who violate trust.

In the nonprofit setting, agency problems may be less effectively remedied due to weaker enforcement and monitoring mechanisms (Krishnan et al., 2006). Donors, as the principals, typically contribute to nonprofits because of the praise, respect and recognition received in doing so (Andreoni, 1990; Becker, 1974), as opposed to seeking a purely monetary return on their investment as do for-profit investors. Thus, donors may not feel the need to closely monitor management's use of their contribution, thereby producing an environment more conducive to opportunistic managerial behavior in the form of overspending. In addition, donors do not have their own version of a for-profit stock market to use as a disciplining mechanism.

Besides being subject to relatively less monitoring by principals, nonprofit managers also face a less stringent regulatory environment than do their for-profit counterparts (Lloyd and De las Casas, 2006). Since nonprofits do not issue stock to the public, they do not fall under the purview of the SEC, the Sarbanes-Oxley Act (SOX) or the Public Companies Accounting Oversight Board (Archambeault, Webber, & Greenlee, 2015; Neely, 2011).[3] Nonprofits are required to report financial information on Form 990 to the Internal Revenue Service (IRS),[4] and can be subject to penalties for IRS violations (Grunewald, 2008). However, such abuses do not always result in prosecutions. Altogether, the relative lack of external discipline and monitoring mechanisms in the nonprofit setting suggests that nonprofit managers, compared with for-profit managers, may face less severe repercussions for violating the trust of their principals (donors) by acting opportunistically (Atuahene-Gima & Li, 2002). Accordingly, we suggest that, on average, higher societal trust is associated with more opportunistic behavior by nonprofit managers. This leads us to the following hypothesis:

H1. Societal trust is positively associated with opportunistic behavior by nonprofit managers.

If H1 is true, the question arises as to whether such opportunistic behavior would be prevalent among all nonprofits. To explore this, we classify nonprofits as either service organizations or public charities (Hansmann, 1980). For service organizations, the donor is also the ultimate beneficiary of goods or services. However, for public charities, this is not the case.

Donors to service organizations are likely to be actively involved with the nonprofit on a regular basis. This 'closeness' to nonprofits can build relationships and trust which mitigates the need for formal financial mechanisms (Gordon & Khumawala, 1999). Thus, these donors may be less inclined to monitor if they are satisfied with their service from the nonprofit. In that sense, donors to service organizations resemble consumers since "consumers do not ask for financial statements" before their purchase (Gordon & Khumawala, 1999, p.49). Consistent with this view, Balsam and Harris (2014) find that donors of service organizations are less likely to react negatively to disclosures of excessive executive compensation. Thus, while donors may trust the service organizations, they also may have lower incentive to properly monitor these nonprofits, thereby potentially creating a situation where trust could be exploited.

If managers of service organizations expect to be monitored less, they may be more likely to engage in opportunistic behavior. Robinson and Robinson (2015) suggest that enforcement, monitoring, and trust are complements. In other words, if trust is *unaccompanied* by monitoring and/or enforcement, it eventually leads to violations of trust. Because a service-type nonprofit may be characterized by an especially low level of donor oversight, there may exist an especially high level of managerial opportunism in the presence of trust. This leads us to the following hypothesis:

H2. The positive association between societal trust and opportunistic behavior is driven by service organizations.

3. Empirical design

3.1. Sample selection

We compile nonprofit data from the Statistics of Income (SOI) file made available by the National Center for Charitable Statistics (NCCS) for the years 1986–2012. The SOI data are based on Form 990 that nonprofit organizations file with the IRS. These include all organizations with total assets of at least $10 million for years before 2000 and at least $30 million in assets for years 2000 and after. The data also include a stratified sample of smaller organizations. The SOI database captures over 90% of all nonprofit revenues in a given year (Yetman & Yetman, 2012b).

We present our sample selection process in Table 1. As indicated, we start with 336,821 nonprofit-year observations then remove observations with less than $1000 of total expenses, total revenue, total assets, or total program expense (Yetman & Yetman, 2013). Because nonprofits that report little to no advertising or administrative costs may be either close to being defunct or misreporting that activity (Kitching et al., 2012), we remove observations with less than $1000 of total fundraising or administrative expense. We then eliminate observations where the sum of fundraising, administrative, and program expenses do not equal total expenses since this may indicate that Form 990 has been improperly completed (Kitching et al., 2012). Our final sample yields 93,117 nonprofit-year observations.

We define service organizations as nonprofits where the donor receives the service of the nonprofit and public charities as those where the donor does not receive the service. Our service organizations include art and culture nonprofits, religious organizations, and nonprofits in the education or medical field. The remaining entities are classified as public charities (Kitching et al., 2012). Thus, the main distinction between these two nonprofit types is whether the donor is the service recipient (Balsam & Harris, 2014). As noted in Table 1, our final sample consists of 57,478 service organizations and 35,639 public charities. The service organizations consist of 53.7% of medical and 26.0% of educational nonprofits while public charities consist of 59.9% of human services and 24.8% of public and societal benefit nonprofits.

3.2. Measure of excess spending

Our proxy for nonprofit opportunistic spending is administrative expenses. We focus on this expense because it can signal that management is diverting resources away from the nonprofit's core mission and toward their own personal benefit. Consistent with this view, prior studies have found that donors consider administrative expenses when contributing to the nonprofit and that administrative expenses are negatively correlated with contributions (Tinkelman & Mankaney, 2007). Because total administrative expenses can be a function of several entity characteristics, we follow Yetman and Yetman (2012b) and compute excess administrative expenses using the following model[5]:

[3] Grunewald (2008) reports that some nonprofits voluntarily committed to observing some provisions of SOX. Blodgett and Melconian (2012) document that several states adopted statutes similar to SOX with respect to nonprofits; however, there is variability in terms of how these statutes are applied.

[4] Nonprofits with gross receipts greater than or equal to $200,000 or total assets greater than or equal to $500,000 at the end of the tax year are required to file Form 990. Since our sample is based on information from Form 990, all nonprofits in our sample would be subject to any Form 990-related enforcement.

[5] All model variable definitions are included in Appendix A.

Table 1
Sample selection.

1986–2012 SOI nonprofit observations		336,821
Less: Observations with total expense, total revenue, total administrative expense		
total fundraising expense, total program expense, total assets, or total compensation is under $1000		(199,68)
Less: Observations where fundraising, administrative and program expenses		(9803)
expenses do not equal total expenses		
Less: Observations missing computed variables		(34,218)
		93,117
Service organizations	Observations	%
Arts, culture and humanities	10,053	17.5
Education	14,972	26.0
Medical	30,841	53.7
Religious organizations	1612	2.8
Total service organizations	*57,478*	*100*
Public charities	Observations	%
Environment	3639	10.2
Human services	21,332	59.9
International	1824	5.1
Public and societal benefit	8844	24.8
Total public charities	*35,639*	*100*

$$Admin_{i,t} = \beta_0 + \beta_1\, Direct\ Donations_{i,t} + \beta_2\, Feeder\ Donations_{i,t} + \beta_3\, Govt\ Grants_{i,t} + \beta_4 Total\ Expenses_{i,t} + \beta_5 Total\ Assets_{i,t} + \beta_6\, (Total\ Assets)^2_{i,t} + \beta_7 Year\ FE_{i,t} + \beta_8\, Industry\ FE_{i,t} + \varepsilon_{i,t} \quad (1)$$

We use *Total Assets*^{2} to control for the possibility of a non-linear association between size and administrative expenses. The model also includes year and time fixed effects. The residual from this regression represents the difference between the actual and predicted administrative expenses. If the residual is positive, then the nonprofit "overspent" on administrative expenses compared to what would be expected of that nonprofit. Thus, as later discussed for Model 2, we code *Over Spend Admin* equal to 1 if the nonprofit's residual is positive, and 0 otherwise.

3.3. Measure of trust

Trust, our variable of interest, is computed based on survey data available from the World Values Survey.[6] This survey, started in 1981, is conducted by a global network of social scientists with a stated purpose of helping scientists and policy makers understand changes in the beliefs, values, and motivations of people throughout the world (World Values Survey website, 2016). Data regarding trust are collected by the survey approximately every 6–8 years. Specifically, the survey asks respondents the following question: *Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?*

The responses are organized by nine geographic regions in the United States.[7] The *Trust* variable yields the percentage of people in different regions of the United States who consider themselves to be trusting. This trust variable is a commonly accepted basis for measuring generalized trust in the literature (e.g. Knechel et al., 2017; Pevzner et al., 2015). Prior literature suggests that there is relative stability of trust levels over extended periods of time (Knechel et al., 2017; Bjørnskov, 2007). Accordingly, we use the latest survey applicable to our sample (Wave 5), which covers the period 2005–2009.[8,9] Consistent with the methodology of the World Values Survey, we provide trust data on the regional level.

3.4. Empirical design

We estimate the regression model below to test our hypothesis, which examines the association between trust and opportunistic behavior.

$$Over\ Spend\ Admin_{i,t} = \beta_0 + \beta_1\, Trust_{i,t} + \beta_2\, Donation\ Intensity_{i,t} + \beta_3\, Donation\ Growth_{i,t} + \beta_4 Total\ Assets_{i,t-1} + \beta_5 Total\ Rev_{i,t-1} + \beta_6\, Small\ Size_{i,t-1} + \beta_7\, Leverage_{i,t} + \beta_8\, Prof\ Acct_{i,t} + \beta_9 State\ Prosecution_{i,t} + \beta_{10} Fin\ Need_{i,t-1} + \beta_{11} GDP_{i,t} + \beta_{12} GDP\ Growth_{i,t} + \beta_{13} Non\ Profit\ Density_{i,t} + \beta_{14} Time\ Trend_{i,t} + \varepsilon_{i,t} \quad (2)$$

Over Spend Admin and *Trust* are as defined above. Our coefficient of interest is β_1. If *Trust* mitigates opportunistic spending, then β_1 would be negative; however, if *Trust* exacerbates such behavior, β_1 would be positive. Consistent with our hypothesis, we predict that β_1 will be positive and significant.

This study controls for several nonprofit organizational characteristics that prior literature finds to be associated with expense misreporting. Specifically, we include *Donation Intensity* to control for a nonprofit's reliance on donations and *Donation Growth* to control for the notion that high-growth entities are more likely to misreport administrative expenses (Yetman & Yetman, 2012b). We control for entity size by including *Total Assets* and *Total Rev*. To help control for differences associated with nonprofit size, we set *Small Size* equal to 1 if the nonprofit has total assets under one million dollars in the current year (Yetman & Yetman, 2013), and '0' otherwise.[10] We include *Leverage* to control for the potential effects of creditor monitoring (Keating, Parsons, & Roberts, 2008). Less financially stable nonprofits may misreport their administrative expenses to appear in better financial condition (Krishnan et al., 2006). Thus, to help control for the financial position of the nonprofit, we include *Fin Need*. We also control for the level of financial expertise. We determined whether nonprofits paid accounting expenses from information obtained from line 11c of the functional expense statement. *Prof Acct* is coded 1 if the nonprofit indicated it paid for external accounting services, and 0 otherwise.

Since our *Trust* variable is measured at the regional level, states within the same region are assigned the same *Trust* value. As such, we control for state-level differences. *State Prosecution* is an index developed in Desai and Yetman (2015) to capture the relative strength of a state's prosecution activity against nonprofits. We expect *State Prosecution* to be negatively associated with *Over Spend Admin*. We also control for *GDP* and *GDP Growth* of each state since trust can be correlated with economic factors (Bjornskov, 2007).

We also consider potential competition among nonprofits. Nonprofits that face a more competitive environment for donations

[6] According to the World Values Survey (WVS) website the survey "seeks to use the most rigorous, high-quality research designs in each country. The WVS consists of nationally representative surveys conducted in almost 100 countries, containing almost 90% of the world's population, using a common questionnaire. The WVS is the largest non-commercial, cross-national, time series investigation of human beliefs and values ever executed. According to the WVS, it is the only academic study covering the full range of global variations, from very poor to very rich countries, in all of the world's major cultural zones." (http://www.worldvaluessurvey.org/wvs.jsp).

[7] Appendix B lists the states within each of the nine regions.

[8] The survey includes 1249 U.S. respondents. The breakdown by region is as follows: New England: 6.4%, Mid-Atlantic: 17.3%, South Atlantic: 16.6%, East South Central: 7.3%, West South Central: 9.5%, East North Central: 13.4%, West North Central: 6.5%, Rocky Mountain: 7.9%, Pacific: 15.1%.

[9] Wave 6 covers the period of time ending 2014, which is beyond our sample period.

[10] Our results are unchanged if we set *Small Size* equal to 1 if the nonprofit has under $1 million in total revenue.

Table 2
Descriptive statistics.

Region	Trust	Over Spend Admin	Donation intensity	Donation growth	Assets	Total Rev	Small size	Leverage	Prof Acct	State Pros	Fin need	GDP	GDP growth	NP density
Panel A: univariate statistics by region														
All observations	0.395	0.522	0.269	1.421	16.834	16.000	0.068	0.274	0.748	4.692	0.657	12.622	0.046	2.728
East North Central	0.389	0.509	0.248	1.301	16.931	16.070	0.061	0.277	0.768	0.721	0.721	12.691	0.039	2.464
East South Central	0.231	0.526	0.301	0.987	16.682	15.788	0.065	0.238	0.699	4.636	0.763	11.834	0.044	1.669
Mid-Atlantic	0.389	0.506	0.248	0.986	16.983	16.206	0.062	0.295	0.792	5.000	0.377	13.274	0.043	4.276
New England	0.425	0.510	0.210	1.427	17.040	16.171	0.048	0.275	0.786	4.334	0.728	11.851	0.043	2.799
Rocky Mountain	0.439	0.506	0.248	0.986	16.983	16.206	0.062	0.295	0.792	5.000	0.377	13.274	0.043	4.491
South Atlantic	0.385	0.539	0.297	2.580	16.814	15.931	0.063	0.268	0.729	4.228	0.733	12.329	0.049	2.794
West North Central	0.407	0.490	0.270	1.469	16.794	15.957	0.073	0.257	0.725	4.410	0.744	11.690	0.047	1.949
West South Central	0.381	0.524	0.310	1.116	16.752	15.846	0.082	0.223	0.710	4.557	0.745	12.945	0.055	1.656
Pacific	0.389	0.509	0.248	1.301	16.931	16.070	0.061	0.270	0.768	4.727	0.721	12.697	0.039	2.464

	Trust	Over spend Admin	Donation Intensity	Assets	Leverage	Prof Acct	State Pros.	Fin Needs	GDP
Panel B: correlations									
Over Spend Admin	**0.008*** **								
Donation intensity	− 0.017***	− 0.071***							
Assets	− 0.007**	− 0.129***	− 0.167***						
Leverage	0.032***	0.007**	− 0.179***	0.058***					
Prof Acct	0.009***	− 0.019***	− 0.070***	0.117***	0.028***				
State Pros.	0.094***	− 0.009***	− 0.004	0.008**	0.035***	0.010***			
Fin needs	0.000	− 0.003	0.004	0.016***	− 0.023***	− 0.002	− 0.001		
GDP	0.103***	0.180***	− 0.046***	0.061***	0.045***	0.035***	0.651***	− 0.005	
Non profit density	0.002	− 0.041***	0.021***	0.056***	− 0.007***	0.020***	0.035***	0.005	− 0.01***

This table provides descriptive statistics. Panel A displays univariate statistics and Panel B provides correlations of selected variables. All variables defined in the Appendix.

could choose to spend their resources differently (Saxton, Neely, & Guo, 2014). Thus, we include *Non Profit Density*, defined as the number of nonprofits within a given year and zip code.[11] *Time Trend* is included to account for the changes in nonprofit reporting through time (Krishnan et al., 2006). Our model includes industry fixed effects, which is based on the single digit national taxonomy of exempt entities (NTEE), and standard errors calculated using the Huber-White robust method (White, 1982).

4. Empirical results

4.1. Summary statistics

Table 2, Panel A, displays descriptive statistics by each of the nine regions used for the trust data. As indicated, the national mean for *Trust* is 0.395. *Trust* is reported highest in the Rocky Mountain region (0.439) and lowest in the East South Central region (0.231). The mean of *Over Spend Admin* is 0.522, suggesting that over half the sample nonprofits are likely to spend more on administrative expenses than would be expected. The mean of *Over Spend Admin* is relatively even among the regions, with the highest mean in the South Atlantic region (0.539) and the lowest in the West North Central region (0.490). About 7% of our sample is *Small Size*. Seventy-five percent of nonprofits report a *Prof Acct*, with Mid-Atlantic and Rocky Mountain nonprofits having the highest percentage (0.79) and East South Central nonprofits having the lowest percentage (0.70).

Panel B of Table 2 presents Pearson correlations of the main variables. *Over Spend Admin* has a positive correlation with *Trust,* providing some initial support for our hypothesis. As expected, nonprofit size and the presence of *Prof Acct* and *State Prosecution* are negatively associated with *Over Spend Admin*. In the next section, we test the association in the multivariate context by controlling for economic factors that could also impact administrative expenses.

4.2. Main results

Table 3 displays the results of Model (2). In column 1, which includes all observations, the coefficient on *Trust* is positive and significant at the 1% level ($\beta = 0.54$, z-stat = 2.99). This supports H1 that nonprofits operating in higher-trust areas are *more* likely to overspend on administrative expenses and suggests that nonprofit managers are more opportunistic in the presence of high trust.

While *Trust* is positively associated with *Over Spend Admin* on average, we next examine whether the effect is constant across entity types. In column 2, we present Model (2) only for the service organizations and note that *Trust* has a significantly positive coefficient ($\beta = 0.69$, z-stat = 3.18). However, in column 3, which presents only the results for public charities, *Trust* has a statistically insignificant coefficient (z-stat = − 0.45). We also note that an F-test confirms that service organizations and public charities have significantly different *Trust* coefficients ($p = 0.047$). Altogether, this evidence supports H2 and suggests that service organizations drive the overall association between *Trust* and *Over Spend Admin*. In other words, the service organizations that operate in high-trust areas are the nonprofits that are more likely to overspend on administrative expenses.[12]

Our result is consistent with Balsam and Harris (2014), who note that donors of service organizations are usually directly involved with the organization because they are also the service recipients and, thus, can directly observe the nonprofit's operations. As a result, these donors

[11] Our results are similar if we define this variable at the state or regional level.

[12] In untabulated results, we drop observations that have affiliates reported on their Form 990 and note that the results of Table 3 are unchanged.

Table 3
Effect of Trust on Admin Expenses.

Variables	All Nonprofits	Service Org.	Public charities
Dependent variable: Over Spend Admin			
Trust	**0.542*****	**0.688*****	− 0.158
	(2.998)	(3.184)	(− 0.446)
Donation intensity	− 0.007	− 0.029	0.244***
	(− 0.400)	(− 1.085)	(5.270)
Donation growth	0.000	0.000	− 0.001
	(0.735)	(1.042)	(− 1.566)
$Assets_{t-1}$	− 0.207***	− 0.175***	− 0.270***
	(− 22.881)	(− 15.176)	(− 16.232)
Total Rev_{t-1}	− 0.082***	− 0.036***	− 0.277***
	(− 8.419)	(− 2.981)	(− 13.569)
Small size	− 0.863***	− 0.656***	− 1.503***
	(− 24.996)	(− 14.243)	(− 24.467)
Leverage	0.324***	0.503***	0.595***
	(10.178)	(8.363)	(10.202)
Prof Acct	− 0.121***	− 0.080***	− 0.260***
	(− 7.481)	(− 3.973)	(− 8.853)
State prosecution index	− 0.041***	− 0.035**	− 0.055**
	(− 3.106)	(− 2.152)	(− 2.286)
Fin $needs_{t-1}$	− 0.000	0.156***	− 0.000
	(− 0.697)	(3.644)	(− 0.280)
GDP	0.049***	0.080***	0.007
	(4.416)	(5.815)	(0.363)
GDP growth%	− 4.037***	− 2.879***	− 8.393***
	(− 12.452)	(− 7.484)	(− 13.158)
Non profit density	0.019***	0.021***	0.014**
	(8.910)	(7.440)	(2.278)
Time trend	0.191***	0.143***	0.320***
	(103.350)	(70.280)	(69.877)
Industry FE	Yes	Yes	Yes
Constant	1.343***	0.141	4.808***
	(8.861)	(0.771)	(7.065)
Observations	93,117	57,478	35,639
Pseudo R-squared	0.221	0.146	0.398

This table presents the results of Model (2). The dependent is ***Over Spend Admin***. *Trust* is based on a questionnaire administered by the World Values Survey for the period 2005–2009. All other variables are defined in Appendix A. Industry fixed effects (NTEE) are included and robust standard errors are calculated. *,**,*** represent significance at the 10%, 5% and 1% level, respectively.

may rely on their observation, instead of financial information, for their monitoring. However, because observation may not be the most effective means of monitoring, managers of service organizations may be better able to opportunistically spend without raising objections from donors. Altogether, our findings suggest that not all nonprofits have the same principal-agent relationship and that the nature of this relationship in service organizations makes overspending in the presence of high trust more likely.

We note that *Total Assets* and *Total Rev.* have a negative coefficient in all three columns. This suggests that larger nonprofits are less likely to have excess administrative expenses. Additionally, the *Small Size* coefficient is negative in all three columns, consistent with the view that these relatively small entities (under $1 million assets) may not have the excess resources to overspend. As expected, the negative *Prof Acct* coefficients for all three columns suggest that external accountants can mitigate overspending. In addition, *State Prosecution* is also negative in all three specifications, consistent with the view that nonprofits are less likely to overspend when there is a higher likelihood of being prosecuted for misdeeds. We also note that the Pseudo R^2 for all observations in column 1 is 22% and the area under the ROC curve is 0.82. In column 2 (3), for service organizations (public charities), the Pseudo R^2 is 15% (40%) and the area under the ROC curve is 0.90 (0.77).

In an unreported test, we examine the association of *Trust* on the likelihood of overspending on two specific types of administrative expense, travel and conferences, which could have a greater propensity for abuse. We sum up these two expense items and calculate the likelihood of overspending on these line items by using Model 1 to determine if there is a positive residual. This is the same procedure we used to calculate the main administrative overspending variable. We find that for service organizations, trust is positively associated with the likelihood of overspending on travel and conferences with a coefficient significant at the 1% level. This result provides additional support for our findings by demonstrating a type of expense that can be a target of overspending in response to high trust.

Overall, our findings in this section support our two hypotheses by revealing both that nonprofits operating in higher trust areas are *more* likely to overspend on administrative expenses and that this behavior is concentrated among service organizations. Accordingly, we report that, on average, trust is associated with opportunistic behavior in nonprofits, a result that contrasts overall with the for-profit literature. This is likely due to the relative lack of external enforcement in the nonprofit setting that is needed to accompany trust. Moreover, we show that nonprofit opportunistic behavior is most prevalent in the service organizations—a subset of nonprofits that may be subject to an especially low level of monitoring by donors.

4.3. Cross sectional analysis

Thus far, our evidence suggests that service organizations are the nonprofits where opportunistic behavior is most likely to occur. Although these organizations generally lack a high level of oversight from their donors, we perform additional testing to determine how other potential oversight mechanisms affect opportunism in the presence of higher trust. To that end, we examine the effect that external and internal monitoring conditions and information quality have on the association between *Trust* and *Over Spend Admin* in service organizations.[13]

The first mediating variable we examine is the competitive environment of the nonprofit. Nonprofits in competitive environments compete for donations (Saxton et al., 2014). Because administrative expenses are negatively correlated with donations (Tinkelman & Mankaney, 2007), it follows that nonprofits would try to be more efficient in highly competitive areas. Indeed, evidence from the for-profit literature suggests that competition acts as an external incentive to maximize efficiency (Giroud & Mueller, 2010). Thus, if competition is an appropriate external "disciplining" mechanism, it could deter managers from exploiting trust and causing donations to flow to a competing nonprofit. We measure competition using *Non Profit Density*.

The second area we examine is reporting quality. Significant changes were made to Form 990 in 2008, now requiring nonprofits to submit more detailed information pertaining to financial data and governance (Feng, Ling, Neely, & Roberts, 2014). Accordingly, in the latter years of our sample (2008–2012), donors enjoy a richer information environment in which to analyze nonprofits (Yetman & Yetman, 2013). High information quality could signal to managers that donors can more thoroughly monitor them, thereby making managers less inclined to violate trust.

Next, we examine the external monitoring of nonprofits based upon three mechanisms. The first external mechanism is whether the nonprofit had an external financial audit and/or a federal single audit (A-133 audit). Second, we measure donor sophistication by whether the nonprofit has restricted donations. Sophisticated donors are more likely to attach restrictions to their donations, which in turn could limit the ability of the nonprofit to misappropriate funds (Yetman & Yetman, 2013). Third, we consider whether the nonprofit has issued a bond, since the terms of these bonds can act as a restraint on management (Yetman & Yetman, 2012b). We count how many external monitoring mechanisms exist for each nonprofit and then label that variable *External Monitoring*. Due to data availability, *External Monitoring* is available only between the years of 2008 and 2012. If trust needs to be

[13] Our cross-sectional results are similar if we use the entire sample.

Table 4
Cross section tests - service organizations.

Variables	Local competition		Years		Ext. Monitoring		Governance	
	Below median	Above median	After 2008	Before 2008	Below median	Above median	Below median	Above median
Dependent variable: Over Spend Admin								
Trust	**0.874*****	0.345	0.353	**0.984*****	**5.496*****	0.559	**3.313****	0.161
	(3.388)	(0.847)	(0.461)	(4.149)	(2.904)	(0.507)	(2.573)	(0.126)
Controls included	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Constant	− 0.456**	1.536***	25.523***	− 1.849***	47.651***	14.579***	16.148***	28.996***
	(− 1.963)	(5.012)	(14.882)	(− 9.049)	(8.873)	(6.827)	(7.222)	(8.746)
Observations	35,912	21,566	8029	49,449	2785	2471	2857	2378
Pseudo R-squared	0.150	0.143	0.451	0.136	0.684	0.234	0.420	0.415

This table presents the cross sectional results of Model (2). The sample is split at the median of each cross sectional variable and the model is run twice, once for the sample above and below the median. The dependent is ***Over Spend Admin***. *Trust* is based on a questionnaire administered by the World Values Survey for the period 2005–2009. All other variables are defined in Appendix A. Industry fixed effects (NTEE) are included and robust standard errors are calculated. *,**,*** represent significance at the 10%, 5% and 1% level, respectively.

accompanied by external monitoring (Robinson & Robinson, 2015), then the opportunistic behavior we document should vary by the level of external monitoring available.

The fourth cross-sectional variable we examine is the internal governance of the nonprofit. We consider five internal governance features as in Yetman and Yetman (2012b). First, we calculate the number of board members (board size) since a larger board may increase monitoring ability. We transform board size into a binary variable by splitting the sample at the median of board size and then labeling nonprofits above the median as *Large Boards*. Second, we consider the percentage of independent directors on a board, since ample literature suggests independent directors are more likely to be active monitors. Again, we split the sample at the median of the percentage of independent directors and then label nonprofits above the median as *Highly Indep. Board*.

The remaining internal governance features we examine are the inclusion of an audit committee, the performance of a formal board review of Form 990, and the outsourcing of management. An audit committee and board review suggests the board takes an active role in monitoring the entity, while outsourced management would likely be independent and less interested in opportunistic behavior. We calculate *Governance* by adding together the five binary governance variables. Again, we note that *Governance* is available only for years 2008 through 2012.

Accordingly, we have four cross-sectional variables of interest: local competition (measured by *Non Profit Density*), information quality (measured by the time period), *External Monitoring* and *Governance*. For all of these variables, except information quality, we split the sample at the median of the mitigating variable. We then run Model (2) twice, once each for the subsample above and below the median, to determine whether the positive association between *Trust* and *Over Spend Admin* is affected by these variables.

Table 4 displays the results of these tests. Our results reveal that *Trust* is positively associated with *Over Spend Admin* when there is weaker monitoring. Specifically, *Trust* has a positive and statistically significant coefficient in the subsamples with *less* competition, *weaker* internal governance, or *weaker* external monitoring. Moreover, we find that *Trust* has a positive and significant coefficient in the pre-2008 subsample, but has an insignificant coefficient in the 2008–2012 subsample. The overall insignificance of *Trust* in the post-2008 years suggests that, on average, increased information quality with the new Form 990 increased monitoring and, thus, reduced the likelihood of overspending. However, the external monitoring and governance tests are restricted to the 2008–2012 period, so even in the latter years of the sample, trust is associated with overspending in circumstances of weaker oversight.

Overall, the findings of this table suggest that service organizations are likely to overspend on administrative expenses in the presence of high trust when less monitoring exists and/or when there is lower information quality. Accordingly, we interpret this to mean that when there is less oversight and/or less quality information to enable oversight, service organizations are more likely to opportunistically spend in reaction to higher trust.[14]

4.4. Alternative measures

Thus far, we have shown that *Trust* is positively associated with *Over Spend Admin* and presume that a positive residual from Model (1) suggests managerial opportunism through overspending. However, Yetman and Yetman (2012b) suggest that a positive residual can be a sign of "over-reporting" administrative expenses and an indication of expense inaccuracy. Therefore, in this section, we use alternative measures to examine the association of trust and varying dimensions of managerial opportunism.

If nonprofit managers are behaving opportunistically in the presence of high trust, it is reasonable to suggest that executives may receive abnormally high compensation. By using nonprofits' disclosures of total compensation of directors and officers obtained from line 5 of the functional expense statement, we compute industry-adjusted compensation as the nonprofit's compensation less the median compensation of the nonprofit's industry for the year and size decile. This approach follows that of Gaver and Im (2013). We code *Over Spend Compensation* equal to 1 if adjusted compensation is positive and 0 otherwise. Thus, *Over Spend Compensation* captures the likelihood a nonprofit is paying its key employees more than do its industry and size peers in a given year.[15]

Second, we set *Abnormal Accruals* equal to 1 if the probability of program ratio manipulation is higher than the median value, and 0 otherwise (Yetman & Yetman, 2013).[16] Accordingly, if managers are behaving opportunistically in the presence of higher trust, one likely outcome would be the manipulation of the program ratio – defined as program expenses divided by total expenses. Third, we examine the likelihood

[14] We conduct an *F*-test to compare the *Trust* level in both subsamples of the mitigating variable. The *F*-test suggests that *Trust* is significantly different between high and low external monitoring ($p < 0.0.00$), and between high and low governance ($p = 0.08$). The F-test suggests *Trust* does not meaningfully vary between the competition subsamples ($p = 0.91$) or the partition based on years for the new Form 990 ($p = 0.43$).

[15] We acknowledge a limitation of this approach in that we cannot quantify the number of employees reported by each nonprofit under the compensation line item. Our results are unchanged if we use the compensation of the top five officers as the dependent variable.

[16] We calculate Abnormal Accruals following Trussel (2003) as $1/[1 + e^{(-Z)}]$, where Z equals: − 2.807 − 0.702 * Margin − 1.360 * DefExp + 0.030*Growth + 0.938*DepProg − 2.375 * DefRev + 1.326 * ProgCh. Margin is (total revenues-total expenses)/total revenues. DefExp is (prepaid expenses + other assets)/total assets. Growth is percentage change in total revenues between year t and t − 1. DepProg is (depreciation)/(depreciation + total fixed assets). DefRev (deferred revenues/total assets). ProgCh is the percentage change in program ratio between year t and t − 1.

Table 5
Effect of Trust on Alternate variables.

Variables	Service organizations			Public charities		
	Over spend	Abnormal	Over spend	Over spend	Abnormal	Over spend
	FR	Accruals	Compensation	FR	Accruals	Compensation
Trust	**4.609*****	**1.035*****	**0.666*****	**− 1.387*****	**1.050****	**− 1.264*****
	(15.967)	(2.672)	(2.741)	(− 4.653)	(2.373)	(− 3.657)
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Controls included	Yes	Yes	Yes	Yes	Yes	Yes
Constant	− 12.034***	6.127***	− 5.307***	− 1.740**	4.589***	− 14.099***
	(− 45.186)	(18.791)	(− 26.417)	(− 2.241)	(6.601)	(− 19.656)
Observations	57,408	57,428	57,478	35,639	35,639	35,639
Pseudo R-squared	0.109	0.193	0.100	0.105	0.179	0.081

This table presents the results of Model (2), but with alternate dependent variables, which are described in the text. *Trust* is based on a questionnaire administered by the World Values Survey for the period 2005–2009. Columns 1–3 (4–6) are run on nonprofits that are Service Organizations (Public Charities). Dependent variables are described in the text. All other variables are defined in Appendix A. Industry fixed effects (NTEE) are included and robust standard errors are calculated. *,**,*** represent significance at the 10%, 5% and 1% level, respectively.

to overspend on fundraising expenses. We follow Yetman and Yetman (2013) to model fundraising expenses. We code *Over Spend FR* equal to 1 if the residual from the expectation regression is positive, and 0 otherwise.[17]

We estimate Model (2) with each of these three alternate variables as the dependent variable. We run this analysis separately for service organizations and for public charities. Table 5 presents the results. For service organizations, *Trust* has a positive and significant coefficient across all three alternate variables. That is, service organizations are more likely to overpay their employees, manage their program ratio, and overspend on fundraising when they operate in a high trust region. In comparison, *Trust* has a significantly negative coefficient for public charities with respect to overspending on fundraising and excess pay, and a significantly positive coefficient for *Abnormal Accruals*.

Altogether, for public charities, the findings suggest that *Trust* may act as a deterrent against opportunistic behavior, but the evidence also indicates that *Trust* may be associated with misreporting in these entities. For service organizations, the results of these tests support our hypothesis that societal trust is positively associated with opportunistic behavior by nonprofit managers.

4.5. Sensitivity analysis

We perform sensitivity analysis to test the robustness of our results. While our *Trust* variable is the commonly accepted basis for measuring generalized trust in the literature, it has one fixed value for each nonprofit throughout the entire sample. To help compensate for this, we create variation in the measurement of trust by calculating *Industry Adjusted Trust*, which is calculated as the difference, in a given year, between a nonprofit's trust value and the median trust value of the nonprofit's industry. Although *Trust* is constant for nonprofits and is measured at the regional level, the industry's median trust value would typically differ from that of an individual nonprofit because nonprofits in any industry tend to operate nationwide. In addition, the median value for industry trust could change year to year as nonprofits join or exit an industry. We re-estimate Model (2) using *Industry Adjusted Trust* as the independent variable only for the subset where *Industry Adjusted Trust* is not equal to zero. That is, we include only those observations where the nonprofit's trust value is different than its industry median. Thus, if *Industry Adjusted Trust* is positive (negative), it indicates that the nonprofit operates in a higher (lower) trust region than other nonprofits doing similar work.

As displayed in Table 3, we estimate this regression for the pooled sample and then for service organizations and public charities individually. We note that in column 1 of Table 6, *Industry Adjusted Trust* is significantly positive for all observations, consistent with our main findings. In column 2, *Industry Adjusted Trust* has a significantly positive coefficient for service organizations, but has a statistically insignificant coefficient for public charities. Thus, this test provides further support for our hypothesis that trust is positively associated with opportunistic behavior by nonprofit managers and it also provides further evidence that service organizations drive the relation.

Additionally, we employ a different classification of service organizations and public charities. In our main tests, we categorized nonprofits based on their mission. However, nonprofits in certain industries may be less sensitive to efficiency ratios or may naturally have a greater need for administrative costs. Therefore, as a robustness check, we recalculate our classification based on a nonprofit's actual performance. Following Balsam and Harris (2014), we compute the ratio of program revenue to total revenue for each nonprofit. Those entities whose ratio is above the sample median are labeled as service organizations and those entities whose ratio below the median are labeled public charities. We follow this convention since nonprofits that generate more of their total revenue from program revenue are more likely providing a service to donors, whereas public charities rely more on contributions. We re-estimate Model (2) for these two subsamples. As indicated in column 4 of Table 6, we find that *Trust* has a positive and significant coefficient in the service organizations subsample but is insignificant in the public charities subsample. Overall, this supports our finding that trust is positively associated with opportunistic behavior by service organization managers and suggests our results are robust to an alternate classification of nonprofits.

An implicit assumption in our industry classification between service organizations and public charities is that all nonprofits in a category behave similarly. As a further examination, we decompose the service organization category into its main industry classifications (arts, culture and humanities industry, medical, education, or religious organizations), and estimate Model (2) by each of these service industries. In untabulated results, we find that *Trust* is positively associated with the likelihood to overspend on administrative expenses for nonprofits in the education industry as well as for religious organizations, but has a statistically insignificant coefficient for the medical and art-related industries.[18] When we perform a similar analysis by industry type for public charities, our untabulated results show *Trust* has a statistically insignificant coefficient for each public charity industry. Overall, these results provide evidence consistent with the results of

[17] We use follow Yetman and Yetman (2013) and model fundraising expense as follows: $Fundraising\ Expense_{i,t} = \beta_0 + \beta_1\ Direct\ Donations_{i,t} + \beta_2\ Govt\ Grants_{i,t} + \beta_3\ Indirect\ Donations_{i,t} + \beta_4 Total\ \ Assets_{i,t} + \beta_5 Total\ \ Rev_{i,t} + \beta_6\ \ Age_{i,t} + \beta_7\ \ Leverage_{i,t} + \beta_8 Year\ FE_{i,t} + \beta_9 Industry\ FE_{i,t} + \varepsilon_{i,t}$.

[18] We note that *Trust* does not impact *Over Spend Admin* when education and medical-related nonprofits are eliminated from the Service Organization subsample.

Table 6
Sensitivity.

Variables	All	Service	Public	Service org	Public charities
	Observations	Organization	Charities	(Alternate)	(Alternate)
Dependent variable: Over Spend Admin					
Ind Adjusted Trust	**0.516*****	**0.751*****	− 0.343		
	(2.817)	(3.425)	(− 0.956)		
Trust				0.738***	0.396
				(3.059)	(1.317)
Donation intensity	− 0.038*	− 0.073**	0.234***		
	(− 1.875)	(− 2.440)	(4.261)	− 0.033	0.426***
Donation growth	0.000**	0.000**	− 0.000	(− 0.732)	(10.021)
	(1.963)	(2.042)	(− 0.624)	0.000	− 0.000
$Assets_{t-1}$	− 0.156***	− 0.125***	− 0.209***	(1.031)	(− 0.390)
	(− 16.226)	(− 10.319)	(− 11.653)	− 0.126***	− 0.210***
Total Rev_{t-1}	− 0.155***	− 0.107***	− 0.374***	(− 9.244)	(− 15.310)
	(− 14.846)	(− 8.516)	(− 16.679)	− 0.006	− 0.386***
Small size	− 0.839***	− 0.630***	− 1.510***	(− 0.407)	(− 22.478)
	(− 21.789)	(− 12.370)	(− 21.632)	− 0.476***	− 1.485***
Leverage	0.447***	0.561***	0.618***	(− 8.333)	(− 27.014)
	(9.078)	(9.006)	(9.171)	0.399***	0.643***
Prof Acct	− 0.130***	− 0.102***	− 0.235***	(5.325)	(10.036)
	(− 7.336)	(− 4.595)	(− 7.250)	− 0.094***	− 0.244***
State prosecution index	− 0.039***	− 0.038**	− 0.046*	(− 4.192)	(− 9.444)
	(− 2.657)	(− 2.133)	(− 1.696)	− 0.055***	− 0.053***
Fin $Needs_{t-1}$	0.061*	0.094**	0.062***	(− 3.020)	(− 2.579)
	(1.733)	(2.297)	(2.696)	0.158**	− 0.000
GDP	0.059***	0.086***	0.016	(2.489)	(− 0.552)
	(4.911)	(5.841)	(0.717)	0.091***	0.024
GDP growth%	− 3.571***	− 3.188***	− 6.577***	(5.924)	(1.369)
	(− 10.055)	(− 7.590)	(− 9.394)	− 2.883***	− 6.776***
Non profit density	0.021***	0.024***	0.014**	(− 6.823)	(− 12.360)
	(8.023)	(6.159)	(1.992)	0.021***	0.025***
Time trend	0.196***	0.148***	0.327***	(5.673)	(5.947)
	(93.173)	(64.669)	(61.031)	0.116***	0.338***
Industry FE	Yes	Yes	Yes	(55.103)	(75.745)
Constant	1.564***	0.623***	4.539***	− 0.643***	4.094***
	(9.957)	(3.382)	(6.911)	(− 2.999)	(15.737)
Observations	76,123	47,492	28,578	46,781	46,336
Pseudo R-squared	0.230	0.157	0.403	0.117	0.417

In this table *Industry Adjusted Trust* is the difference between *Trust* and the median *Trust* value of that nonprofit's industry. In columns 3 and 4, Service Organization and Public Charities are calculated in an alternate manner as described in the text. The dependent is ***Over Spend Admin***. *Trust* is based on a questionnaire administered by the World Values Survey for the period 2005–2009. All other variables are defined in Appendix A. Industry fixed effects (NTEE) are included and robust standard errors are calculated. *,**,*** represent significance at the 10%, 5% and 1% level, respectively.

our prior tests. Namely, we find support for H1 primarily in service organizations and, therefore, find evidence to support H2.

Moreover, in untabulated results, we also find our results are robust if we alter *Over Spend Admin* to equal 1 only if the nonprofit's positive residual is above the median of all positive residuals, and 0 otherwise.

4.6. Limitations

Our study is subject to limitations in connection with our trust data. The World Values Survey provides a useful dataset on trust levels in the U.S. However, the methodology of the survey yields data that precludes finer analysis. Specifically, the trust measure is based on large geographic regions, thus presuming that trust is similar within these regions. In addition, the survey is conducted periodically, so our trust measure is based on one survey and held constant throughout the sample period. Consistent with prior trust literature, we assume a relative stability in trust levels over time.[19] As mentioned in Section 4.5, we try to address these concerns by creating a transformed version of the trust variable that creates variation with respect to time and geographic region. However, to the extent that this test cannot fully control for the limitations of the trust variable, our results could be impacted by these underlying assumptions.

We also note two other caveats to our study related to our measurement of administrative overspending. We presume that the residual of excessive administrative expenses represents overspending. Although we find that trust is also associated with abnormal accruals in Table 6, an alternate interpretation of the main findings in Table 3 could be that trust is associated with "higher-quality" reporting. Second, a nonprofit's manager would presumably have a similar trust level as the region in which the firm operates. Although we assume nonprofit managers are not inhibited by their region's trust level, we acknowledge that trust could also preclude inappropriate behavior on a personal level.

5. Conclusion

Our paper explores the impact of generalized societal trust on opportunistic behavior of nonprofit organizations. Evidence from the for-profit literature suggests that the level of generalized trust enhances the credibility of financial information and is associated with lower levels of managerial opportunism (Pevzner et al., 2015). However, the significant differences that exist between the for-profit and nonprofit environments make it unclear whether trust plays a similar role for nonprofits. We hypothesize that, given the relative lack of external monitoring and

[19] We confirm that our main results are unchanged when trust survey data from other time periods are included. However, even with the addition of those surveys, we must assume that trust is stable over the multi-year period for which each survey covers.

enforcement of nonprofits, trust is associated with greater opportunism on the part of nonprofit managers. Consistent with this view, we find a positive relation between trust and overspending on administrative expenses, driven primarily by the behavior of service organization nonprofits as opposed to public charities. While our results point to a difference between these two nonprofit types, we also find differences among service organizations. Specifically, we find that the trust-overspending association for service organizations is present only for education and religious organizations. Additional tests reveal that trust has a similar impact on excess compensation and abnormal accruals in service organizations. We further show that such overspending in the presence of trust is most prevalent when there is weaker overall oversight.

Overall, our results support the notion and anecdotal evidence that, absent effective enforcement mechanisms, trust can be exploited (Knechel et al., 2017; Robinson & Robinson, 2015). While our study focuses on the role of trust in the nonprofit environment, our results help inform the much broader discussion of the role that trust plays in economic behavior and how its potential benefits can be realized. In addition to potentially assisting nonprofit donors make better-informed decisions, our findings can help federal and state organizations implement laws and regulations designed to improve financial reporting in the nonprofit sector.

Data availability

Data are available from commercial and non-commercial sources identified in the text.

Acknowledgements

Mikhail Pevzner gratefully acknowledges the assistance of EY Chair in Accounting at the University of Baltimore.

Appendix A. Definitions

Variable name	Definition
Abnormal Accruals	Set to 1 if the probability of program ratio manipulation is higher than the median value, and 0 otherwise. Program ratio manipulation is given in Footnote 8
Admin	The nonprofit's total administrative expenses; total management and general expenses from the functional expense section of Form 990
Competition	The number of other nonprofits in the zip code of a given nonprofit in year t
Direct donations	The natural log of total donations given to the nonprofit from individuals or other entities
Donation growth	The percent change in Direct Donations from year t − 1 to year t
Donation intensity	The ratio of Direct Donations to total revenue
Over spend compensation	Equal to 1 if adjusted compensation is positive, and 0 otherwise. Adjusted Compensation is nonprofit compensation less the industry median in a given year
External monitoring	An index that gives one point for the presence of the following: restricted donations, financial audit, A-133 audit, bond
Feeder donations	Total donations from federated fundraising organizations
Fin need	Total net assets divided by total assets
GDP	Year gross domestic product of state where the nonprofit operates
GDP growth	Percentage change in GDP from year t − 1 to year t
Governance	An index that gives one point for presence of the following: audit committee, review of Form 990 by the board, delegated management, board size above the sample median, percentage of outsiders above sample median
Govt grants	Total grants from federal, state, or local agencies
Highly Indep. Board	Coded 1 if nonprofit is above sample median of percentage of independent directors, and coded 0 otherwise
Industry Adjusted Trust	The difference between a nonprofit's trust value and the median trust value of the nonprofit's industry in a given year
Information quality	Coded 1 if the year is between 2008 and 2012 and 0 if the year is prior to 2008
Large boards	Coded 1 if the nonprofit is above the sample median of board size, and coded 0 otherwise
Leverage	Total liabilities divided by total assets
Non profit density	The number of nonprofits in the zip code where the nonprofit operates per year
Over Spend Admin	Coded 1 if residual from Model (1) is positive and 0 otherwise
Over Spend FR	Coded 1 if the residual from the expectation regression is positive and 0 otherwise
Prof Acct	Coded 1 if the nonprofit spent money for outside professional accountant and 0 otherwise
Public charities	Coded 1 if the nonprofit is not a service organization and 0 otherwise
Service organizations	Coded 1 if a nonprofit is in the following industries: arts, culture and humanities, health, education, and religious organizations; coded 0 otherwise
Small size	Coded 1 if the nonprofit has total assets under one million dollars in the current year and 0 otherwise
State prosecution	An index developed in Desai and Yetman (2015) to capture the relative strength of a state's prosecution activity against nonprofits
Total assets	The natural log of prior year total assets
Total expenses	Total nonprofit expenses
Total Rev	The natural of prior year total revenue
Trust	A measure of the trust in a region. The variable is based on a questionnaire administered by the World Values Survey and yields the percentage of people in different regions of the United States who consider themselves trusting

Appendix B. States in trust regions

East North Central: Illinois, Indiana, Michigan, Ohio, Wisconsin
East South Central: Kentucky, Tennessee, Alabama, Mississippi
Mid-Atlantic: New Jersey, New York, Pennsylvania
New England: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont
Rocky Mountain: Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada
South Atlantic: Delaware, Maryland, Washington, D.C., Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida
West North Central: Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, Kansas
West South Central: Arkansas, Louisiana, Oklahoma, Texas
Pacific: Washington, Oregon, California, Alaska, Hawaii

References

Aghion, P., Algan, Y., Cahuc, P., & Shleifer, A. (2010). Regulation and distrust. *Quarterly Journal of Economics, 125*, 1015–1049.

Ahern, K. R., Daminelli, D., & Fracassi, C. (2015). Lost in translation? The effect of cultural values on mergers around the world. *Journal of Financial Economics, 117*(1), 165–189.

Andreoni, J. (1990). Impure altruism and donations to public goods: A theory of warm-glow giving. *The Economic Journal, 100*(401).

Archambeault, D. S., Webber, S., & Greenlee, J. (2015). Fraud and corruption in U.S. nonprofit entities: A summary of press reports. 2008–2011. *Nonprofit and Voluntary Sector Quarterly, 44*(6), 1194–1224.

Atuahene-Gima, K., & Li, H. (2002). When does trust matter? Antecedents and contingent effects of supervisee trust on performance in selling new products in China and the United States. *Journal of Marketing, 66*(3), 61–81.

Baber, W. R., Daniel, P. L., & Roberts, A. A. (2002). Compensation to managers of charitable organizations: An empirical study of the role of accounting measures of program activities. *The Accounting Review, 77*(3), 679–693.

Balsam, S., & Harris, E. (2014). The impact of CEO compensation on nonprofit donations. *The Accounting Review, 89*(2), 425–450.

Becker, G. (1974). A theory of social interaction. *Journal of Political Economy, 82*(2), 1063–1093.

Bjørnskov, C. (2007). Determinants of generalized trust: A cross-country comparison. *Public Choice, 130*(1–2), 1–21.

Blodgett, M. S., & Melconian, L. (2012). Healthcare nonprofits: Enhancing governance and public trust. *Business and Society Review, 117*(2), 197–219.

Desai, M. A., & Yetman, R. J. (2015). Constraining managers without owners: Governance of the not-for-profit enterprise. *Journal of Government & Nonprofit Accounting, 4*(1), 53–72.

Dong, W., Han, H., Ke, Y., & Chan, K. C. (2016). Social trust and corporate misconduct: Evidence from China. *Journal of Business Ethics,* 1–24.

Fama, E., & Jensen, M. (1983a). Separation of ownership and control. *Journal of Law and Economics, 26*(2), 301–325.

Fama, E., & Jensen, M. (1983b). Agency problems and residual claims. *Journal of Law and Economics, 26*(2), 327–349.

Feng, N. C., Ling, Q., Neely, D., & Roberts, A. A. (2014). Using archival data sources to conduct nonprofit accounting research. *Journal of Public Budgeting, Accounting & Financial Management, 26*(3), 458–493.

Garbarino, E., & Johnson, M. S. (1999). The different roles of satisfaction, trust, and commitment in customer relationships. *The Journal of Marketing, 63*(2), 70–87.

Gaver, J. J., & Im, S. M. (2013). Funding sources and excess CEO compensation in not-for-profit organizations. *Accounting Horizons, 28*(1), 1–16.

Giroud, X., & Mueller, H. M. (2010). Does corporate governance matter in competitive industries? *Journal of Financial Economics, 95*(3), 312–331.

Gordon, T. P., & Khumawala, S. P. (1999). The demand for non-profit financial statements: A model of individual giving. *Journal of Accounting Literature, 18*, 31–56.

Grunewald, D. (2008). The Sarbanes-Oxley act will change the governance of nonprofit organizations. *Journal of Business Ethics, 80*(3), 399–401.

Hansmann, H. B. (1980). The role of nonprofit enterprise. *The Yale Law Journal, 89*(5), 835–901.

Hilary, G. and Huang, S., 2015. Trust and Contracting. Working Paper. Available at SRRN: https://ssrn.com/abstract=2604974 or doi:http://dx.doi.org/10.2139/ssrn.2604974.

Keating, E. K., Parsons, L. M., & Roberts, A. A. (2008). Misreporting fundraising: How do nonprofit organizations account for telemarketing campaigns? *The Accounting Review, 83*(2), 417–446.

Kitching, K. A., Roberts, A. A., & Smith, P. C. (2012). Nonprofit resource allocation decisions: A study of marginal versus average spending. *Journal of Governmental & Nonprofit Accounting, 1*(1), 1–19.

Knack, S., & Keefer, P. (1997). Does social capital have an economy payoff? A cross-county investigation. *Quarterly Journal of Economics, 112*(4), 1251–1288.

Knechel, W. R., Mintchik, N., Pevzner, M., & Velury, U. (2017). The effects of generalized trust and civic cooperation on the big N presence and audit fees across the globe. Working Paper. Available at SSRN http://ssrn.com/abstract=2815180.

Krishnan, R., Yetman, M., & Yetman, R. (2006). Expense misreporting in nonprofit organizations. *The Accounting Review, 81*(2), 399–420.

Lloyd, R., & De las Casas, L. (2006). *NGO self-regulation: Enforcing and balancing accountability.* One World Trust. Available at: www.oneworldtrust.org.

Morgan, R., & Hunt, S. (1994). The commitment-trust theory of relationship marketing. *The Journal of Marketing, 58*(3), 20–38.

Nanda, D., & Wysocki, P. (2013). *Trust, external capital, and financial transparency.* (Working paper).

Neely, D. (2011). The impact of regulation on the U.S. nonprofit sector: Initial evidence from the Nonprofit Integrity Act of 2004. *Accounting Horizons, 25*(1), 107–125.

Pevzner, M., Xie, F., & Xin, X. (2015). When firms talk, do investors listen? The role of trust in stock market reactions to corporate earnings announcements. *Journal of Financial Economics, 117*(1), 190–223.

Robinson, P., & Robinson, S. (2015). *Pirates, prisoners, and lepers: Lessons from life outside the law.* Potomac Books.

Saxton, G., Neely, D., & Guo, C. (2014). Web disclosure and the market for charitable contributions. *Journal of Accounting and Public Policy, 33*(2), 127–144.

Tinkelman, D., & Mankaney, K. (2007). When is administrative efficiency associated with charitable donations? *Nonprofit and Voluntary Sector Quarterly, 36*(1), 41–64.

Trussel, J., & Parsons, L. (2007). Financial reporting factors affecting donations to charitable organizations. *Advances in Accounting, 23*, 263–285.

Wei, C., & Zhang, L. (2015). Trust and certification in financial markets: Evidence from reactions to earnings news. Working Paper. Available at SSRN https://ssrn.com/abstract=2469034.

White, H. (1982). Maximum likelihood estimation of misspecified models. *Econometrica, 50*, 1–25.

World Values Survey website (2016). Available at: http://www.worldvaluessurvey.org/wvs.jsp.

Yetman, M. H., & Yetman, R. J. (2012a). How does the incentive effect of the charitable deduction vary across charities? *The Accounting Review, 88*(3), 1069–1094.

Yetman, M. H., & Yetman, R. J. (2012b). The effects of governance on the accuracy of charitable expenses reported by nonprofit organizations. *Contemporary Accounting Research, 29*(3), 738–767.

Yetman, M., & Yetman, R. (2013). Do donors discount low-quality accounting information? *The Accounting Review, 88*(3), 1041–1067.

Zak, P., & Knack, S. (2001). Trust and growth. *The Economic Journal, 111*(470), 232–295.