

# **Constraining Managers without Owners: Governance of the Not-for-Profit Enterprise**

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ABSTRACT

In the absence of owners, how effective are the constraints imposed by the state in promoting effective firm governance? This paper develops state-level indices of governance environment facing not-for-profits and examines the effects of these rules on not-for-profit behavior. Stronger provisions aimed at detecting managerial misbehavior are associated with significantly greater charitable expenditures, increased foundation payouts and lower insider compensation. Instrumental variables analysis confirms the relationship between the governance environment and not-for-profit performance. The paper also examines how governance influences an alternative metric of not-for-profit performance – the provision of social insurance. Stronger governance measures are associated with intertemporal smoothing of resources and greater activity in response to negative economic shocks.

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## 1. *Introduction*

In the absence of owners, how effective are the constraints imposed by the state on insiders in providing for effective governance of firms? The not-for-profit sector is characterized by the absence of owners but the presence of legal and reporting rules. Indeed, one differentiating characteristic of not-for-profits is that management is subject to specific legal constraints imposed by the states intended to detect and prosecute instances of asset theft and misuse. The strength of these laws vary by state within the U.S. creating the opportunity to analyze the efficacy of legal rules in a setting without owners and without the complicating features of cross-country studies.

This paper analyzes the influence of state-varying legal rules on the behavior of public charities and private foundations from 1987 to 2000. If these entities are motivated purely by altruistic motives or if the rules themselves are ineffective, these governance constraints would not be expected to have any effect on not-for-profit outcomes. Alternatively, some aspects of these governance constraints might constrain not-for-profit managers from exploiting the latitude afforded by the absence of owners and thereby improve firm performance.

In order to consider this possibility, we develop two state-level indices of the legal mechanisms that are designed to *detect* and *prosecute* instances of asset theft and misuse. The “detection index” summarizes those laws that assist state authorities in identifying potential unlawful not-for-profit behavior. The “prosecution index” includes those laws that provide specific prosecutorial powers for the not-for-profit sector. These two subindices are aggregated into an overall combined index. Assessing the efficacy of these indices requires observed metrics of the behavior they are trying to prevent. As in the for-profit setting, observed examples of outright theft are rare. Indeed, the expressed motivation behind these various laws has shifted toward curtailing reckless and fraudulent activity, generally. Accordingly, we rely on several common measures of managerial opportunism in the not-for-profit sector that have been repeatedly associated with reckless and fraudulent activity – levels of insider compensation, the share of expenditures devoted to charities, the prevalence of inefficient fundraising, the magnitude of payouts – to assess the efficacy of the governance environment. Various enforcers of these laws have employed these metrics to isolate wrongdoing and so we rely on these same measures.

The governance environment of not-for-profits is associated with differential performance by public charities and private foundations on several different margins. For public charities, the analysis demonstrates that laws intended to detect asset theft and misuse are associated with a greater fraction of expenditures devoted to charitable activities and a lower probability of undertaking inefficient fundraising activity. In addition to these effects on public charity behavior, stronger detection laws are also associated with lower insider compensation. With respect to private foundations, stronger detection laws are associated with larger payouts, a lower probability of delaying required payouts, and prosecution laws are associated with lower officer compensation, although this last result is sensitive to the model specification.

In order to further examine the link between governance environments and managerial opportunism, two further analyses are provided. First, rather than mapping general laws to somewhat general measures, it is possible to examine the specific effect of a particular legal rule in deterring the activity that it targets. Analysis is provided on the degree to which asset sales are opportunistic and how legal rules targeted at such activity appear to deter that specific activity. Second, it is possible to instrument for the governance variables with state-level economic variables that are plausibly unrelated to the outcome measures being analyzed. This instrumental variables analysis has the advantage of addressing concerns related to other explanations for the link between the governance variables and the outcome measures. This IV analysis, while subject to some limitations, provides reassuringly similar estimates to the OLS estimates discussed above. Several additional robustness tests are conducted to calibrate the sensitivity of the results.

While the previous analyses emphasize the prevention of managerial opportunism, our final analysis investigates the degree to which a strong governance environment stimulates *beneficial* behavior. In order to do this, we need a measure of positive performance in a sector where success is notoriously hard to define. Adapting a logic from other economic literatures, we suggest that the degree to which not-for-profits provide social insurance - by building stocks of reserves and responding to local negative income shocks - represents a plausible measure of positive performance. Much as the efficiency of private firms is measured by their responsiveness to investment opportunities, this test capitalizes on the idea that not-for-profits should expand activity at times when their activity is most warranted - that is, do they help when helping helps the most. We show that not-for-profits in states with stronger laws intertemporally

smooth resources more by attenuating the link between the raising of resources and charitable expenditures. This intertemporal smoothing appears to fulfill a social insurance objective as not-for-profits in states with stronger governance also respond to negative income shocks with greater activity. Taken together, the analyses indicate that the governance environment prevents managerial opportunism and stimulates positive performance defined in this speculative but novel way.

The rest of this paper proceeds as follows. Section 2 reviews the related literature. Section 3 motivates the construction of the governance indices, the choice of not-for-profit behaviors analyzed and the underlying empirical methodology. Section 4 provides the results and section 5 considers a variety of robustness checks. Section 6 concludes.

## **2. *Related Literature***

This analysis of the governance of not-for-profits is related to the growing literature on the economic functioning of not-for-profits and the extensive literature on social insurance mechanisms. Analyses of not-for-profit firms typically consider why particular economic activities are undertaken by not-for-profit firms. This literature emphasizes that not-for-profit firms are distinctive primarily because of the non-distribution constraint and that this constraint can lead to efficient provision by these entities in some sectors. The intuition of Hansmann (1980), as expressed in models of asymmetric information (Easley and O'Hara 1983) or ex-post expropriation (Glaeser and Shleifer 2001), suggests that sectors characterized by the inability to contract fully over quality will feature not-for-profit firms. The available evidence on the sectors where not-for-profits are most active is consistent with this interpretation.<sup>1</sup>

These analyses are helpful in considering what types of activities are undertaken by not-for-profits but provide limited guidance on analyzing the degree to which not-for-profit firms are characterized by agency problems and the mechanisms by which those agency problems are resolved. The nature of agency problems within not-for-profits has drawn the attention of several papers that emphasize that without owners and a traditional for-profit governance framework, not-for-profit organizations evolve into worker cooperatives where worker preferences, particularly elite worker preferences, determine activities. This view is framed within the

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<sup>1</sup> In an alternative vein, Fama and Jensen (1983a) argue that potential conflicts between donors and residual claimants necessitate the not-for-profit form.

context of not-for-profit hospitals in Pauly and Redisch (1973) and extended to other settings in Glaeser (2003).<sup>2</sup> This problem of constraining managers is precisely why Fama and Jensen (1983b) suggest that insiders should not sit on the boards of not-for-profits.<sup>3</sup> This paper extends this emphasis on the problems created by the autonomy granted elite workers and managers in not-for-profits by emphasizing the role of the legal environment.

In addition to the relevant literature on not-for-profit firms, the analysis also frames not-for-profit firms within the larger literature on social insurance mechanisms. This large literature typically emphasizes programs that are explicitly designed to provide insurance, such as unemployment insurance [as in Hamermesh (1982) or Gruber (1997)], and their effects in allowing recipients to smooth consumption. The intuition of social insurance has been extended to the mechanisms that are operative between and within families [as in Hayashi, Altonji, and Kotlikoff (1996)] or through the progressivity of the tax code [as in Auerbach and Feenberg (2000) and Kniesner and Ziliak (2004)]. While Cochrane (1991) alludes to the role of not-for-profits in smoothing consumption, there do not appear to be any empirical efforts that conceptualize not-for-profits in this way. This is surprising given the large literature, summarized in Rose-Ackerman (1996), on the altruistic motives behind the donations that fund most not-for-profits. As described below, one of the tests used to assess the quality of not-for-profit performance is their level of intertemporal resource smoothing and their responses to negative local income shocks.

Finally, this examination of the governance environment of not-for-profits parallels the growing literature on the impact of legal and reporting rules on for-profit firm performance. As in La Porta et al. (1997, 1998) and subsequent work in the law and finance literature, these efforts can emphasize cross-country differences in legal rules or, as in Bushman, Piotroski and Smith (2004), differences in accounting procedures. As Shleifer and Vishny (1996) note, ownership patterns themselves can embody responses to weak legal rules; in this sense,

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<sup>2</sup> The public finance literature has emphasized the responsiveness of contributions to taxes rather than the nature of the entity-level treatment of not-for-profits. See Bittker and Rahdert (1976) for a history of the exemption of not-for-profit and Hines (1998) for a discussion of the tax treatment of taxable income earned by not-for-profits.

<sup>3</sup> In parallel with this economics literature, a growing literature in the accounting field has examined the reporting behavior of not-for-profits. For example, Baber, Daniel, and Roberts (2002) find that not-for-profit managerial compensation is at least partially explained by variations in the relative performance of the not-for-profit suggesting that the pay-for-performance relationship documented in the for-profit sector is also present in the not-for-profit sector. Krishnan, Yetman, and Yetman (2004) find that not-for-profit managers opportunistically report their accounting results so as to attract higher levels of donations and to appear more “charitable” to regulators.

examining not-for-profits where owners are absent allows the examination of how legal and reporting rules alone influence firm performance. In emphasizing within-country differences, this paper may be closest in spirit to Gompers, Ishii and Metrick (2003) who create firm-specific measures of governance and link these governance measures to subsequent firm performance. This paper imports the emphasis on quantifiable measures of governance to the field of not-for-profit enterprise. The most closely related paper on not-for-profits is Fisman and Hubbard (2003) that links several attorney general powers as measured in 1977 to the endowment characteristics of not-for-profits.<sup>4</sup>

### **3. *Empirical Methodology***

For the not-for-profit sector, as in the large law and finance literature on for-profit firms, “the question of whether legal rules matter is fundamentally empirical (La Porta et al. (1998, p. 1121)).” Accordingly, this section begins by outlining the available data on the not-for-profit sector and the creation of the indices of state-level governance of not-for-profits. Relating these indices to observable outcomes is a particular challenge. The final two subsections rationalize the outcome measures employed and discuss a variety of alternative methodologies to ensure that any results obtained are not spurious.

#### **3.1 *The Not-for-profit Sector***

While approximately 30 different types of not-for-profit organizations recognized by the IRS, those exempt under section 501(c)(3) of the Internal Revenue Code account for over 90 percent of the total assets and revenues of the not-for-profit sector. The nearly \$1 trillion in assets in the 501(c)(3) portion of the not-for-profit sector are deployed by two types of firms – private foundations and public charities – that, in aggregate, are approximately equally sized. In addition to receiving relief from federal and state income, sales, and property taxes, contributions to these two types of not-for-profits are tax-deductible. There are five general types of public charities including churches, schools, hospitals, widely supported public charities, and organizations that support any of the above. Since churches are not required to report their

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<sup>4</sup> Fisman and Hubbard (2003) also attempts to identify and measure state-level measures of not-for-profit governance. The measure of legal and reporting governance used in this paper differs from their measure in several respects. First, the measure is based on a recent re-evaluation of state level governance (Fremont-Smith 2004). Second, the measure includes several new state-varying governance measures included in the recent source that were not included in the prior version. Third, a state-level measure of reporting requirements is also used. Finally, the construction of indices used in this paper is based on the distinctive purposes of these rules.

information to the IRS, they are not included in the analysis. Similarly, schools and hospitals are frequently exempted from many state level not-for-profit laws and are subject to other specific laws and regulations not considered below. Accordingly, schools and hospitals are excluded from the analysis.

Foundations are organizations that receive their support from a single person or a small group of (frequently related) persons and make grants to public charities. Public charity status is generally preferred to private foundation status as foundations are subject to mandatory payout requirements (i.e., 5 percent of assets) and are also subject to a tax on their net investment income. In part, the minimal payout requirement for private foundations is designed to prevent the creation of foundations for purely tax-minimizing purposes.<sup>5</sup>

All public charities and foundations with revenues over \$25,000 must file an IRS Form 990 or 990-PF annually that are available to the public.<sup>6</sup> The public charity dataset spans 1987 to 2000 and contains 160,140 firm-year observations of which 65,795 are not educational or medical not-for-profits.<sup>7</sup> The sample is further reduced to 51,917 by requiring that they receive donations of a least \$10,000. Charities that receive few donations are frequently not subject to state reporting requirements and are less likely to be subject to enforcement efforts by state oversight agencies. In the final sample of 51,917 observations there are 9,324 unique organizations. The foundation dataset spans the years 1994 through 2000.<sup>8</sup> After removing private operating foundations (which operate charitable programs rather than make grants and face a different set of tax rules) as well as foundation-year observations with zero assets and

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<sup>5</sup> See Marsh (2002) for a discussion of the historic rationale for the distinction between private foundations and public charities.

<sup>6</sup> To ensure the wide dissemination of Form 990 information the IRS Statistics of Income (SOI) division sponsors the Urban Institute to collect the data and make it freely available on the Internet at [www.guidestar.org](http://www.guidestar.org). Computer readable data is available from the National Center for Charitable Statistics directly at [www.nccs.urban.org](http://www.nccs.urban.org).

<sup>7</sup> The 2000 sample contains 15,669 observations, while the 1987 sample contains 8,357. Each of the annual public charity datasets includes all charities with assets over \$10 million plus a stratified random sample of charities with assets less than \$10 million.

<sup>8</sup> The 1994 database includes the entire population of 50,914 foundations, while the 1995 to 2000 samples include approximately 8,000 observations for each year. The sample observations for 1995 to 2000 were compiled by the IRS and include all foundations with total year-end assets of \$10 million or more as well as a stratified random sample of smaller foundations.



missing data, there are 38,560 observations in the sample.<sup>9</sup> In the final sample of 38,560 observations there are 10,242 unique foundations.<sup>10</sup>

### 3.2. *Measuring state-level variation in the governance environment*

Why are states the locus of legal authority over not-for-profits and what motivates these laws? The English Statute of Charitable Uses, enacted in 1601, was the first law to govern the behavior of organizations that retained and used assets on the behalf of non-owners.<sup>11</sup> This law permitted the existence of a trust that did not have named beneficiaries. According to Fremont-Smith (2004) and Brakman-Reiser (2004, 2005), the creation of a legal means to detect and prosecute instances of asset theft and asset misuse was one of the primary goals of this statute. This statute governed the behavior of trusts and charities in the American colonies by acting as a “federal” law superimposed on the various territories. In 1792, the State of Virginia led the repeal of all English-based laws replacing them with American laws. However, the Statute of Charitable Uses was not immediately reenacted by any of the 15 states, thereby causing charitable trusts to become illegal. In fact, charitable trusts remained illegal in the United States until New York led the reestablishment of legal status for not-for-profits in 1893.

As the legality of charitable trusts was reinstated by states, authority over charitable trusts, which previously resided at the federal level, shifted and remained at the state level. Collectively, these state level laws represent the primary governance authority over not-for-profit organizations in the United States (Fremont-Smith 2004). The federal government, via the IRS, does have a governance role over not-for-profits but that role is restricted to policing federal tax exempt status primarily by precluding certain “prohibited transactions” such as political activism.

As noted above, a primary objective of existing state trust laws is to detect and prosecute instances of asset theft and asset misuse. The emphasis in the legal literature on detection and prosecution naturally leads to two corresponding governance indices according to these

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<sup>9</sup> Zero asset foundations frequently act as little more than annual conduits where a donor provides funds to the foundation, which disburses those funds to a charity before the end of the year.

<sup>10</sup> Because the foundation sector is diverse and the sample contains observations with extreme minimum and maximum values of many of the variables of interest the analysis attempts to mitigate the influence of extreme values on the analyses in several ways. First, all of the data is winsorized at the 1<sup>st</sup> and 99<sup>th</sup> percentiles. Second, extensive outlier testing is done in each regression model including examining residual plots and screening the data based on Cook’s D statistics, leverage statistics, and standardized residual statistics.

<sup>11</sup> See Fremont-Smith (2004) for a comprehensive history of trusts.

functions.<sup>12</sup> Rather than make arbitrary assumptions about which laws will be more or less effective, the analysis in this paper aggregates the various laws into the two governance metrics as unweighted sums of the number of laws a particular state has enacted.<sup>13</sup> Using unweighted legal indices is common in governance research. La Porta et al. (1998) develop measures of investor protections at the country level and Gompers, Ishii and Metrick (2003) similarly summarize governance at the firm level in this manner. The development and application of the measures of state-level charity governance developed in this paper parallels this tradition.<sup>14</sup>

Two sources of information are used to create the governance metrics. The first is Fremont-Smith (2004) which provides a detailed analysis of the various state laws intended to govern the behavior not-for-profit organizations, providing a state-by-state breakdown of the various laws enacted by each state. Because Fremont-Smith (2004) excludes some state reporting laws, additional reporting laws were taken from the Charitable Organization Multi-State Filing Project. The Project is an internet-based clearinghouse which provides information about filing requirements in all states. Together, these two sources provide a comprehensive state-by-state analysis of not-for-profit laws.

### *3.2.1. The Detection Index*

Laws directed at detecting asset theft and misuse necessarily involve the ability to identify and investigate problem situations (Brakman Reiser 2004). There are eleven various state laws that are included in this category.<sup>15</sup> A detailed discussion of these laws is contained in Table 1a. There is considerable variation in the presence of these laws as shown in Table 2a. Only Tennessee has all 11 laws while only Hawaii has none of them. Table 3 reports the average detection index across the states as 6.75 while the median is 8.0.

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<sup>12</sup> It is possible that in some cases a single law could have an effect on both detection and prosecution. In those cases the law was grouped according to its primary intent.

<sup>13</sup> The specific array of laws chosen by a state reflects that state's collective political attitude towards the oversight of charities. It is not unreasonable to presume that many of these laws are intended to work together in ways that likely differ across the states making it difficult to ex-ante identify which specific laws taken in isolation will provide stronger oversight. Furthermore, neither prior literature nor legal theory provide a basis on which to identify laws that are relatively "stronger" or "weaker" in isolation.

<sup>14</sup> Fisman and Hubbard (2003) also use an unweighted additive state-level governance metric to examine the effects of governance on endowments in the not-for-profit setting.

<sup>15</sup> Fremont Smith (2004) lists several additional laws that are not used to construct the index as they do not vary across states.

These laws are thought to enhance detection by either by requiring the reporting of specific acts or by demanding that more information be disclosed on a more regular basis. The first two laws of this index ensure that specific acts trigger reporting to the Attorney General. Specifically, the Attorney General must be notified of all legal suits brought against a not-for-profit and must be notified of substantial asset sales by not-for-profits. Both such provisions provide the Attorney General with information about any not-for-profit that is involved in any type of legal proceeding, alerting them to potential legal problems. Asset sales are particularly noteworthy as a manager can steal assets by selling assets to insiders or other related parties at less than fair market value or selling some assets and paying the manager a bonus with the funds.

The remaining components of the index specify additional disclosures that are required, particularly associated with registration. The third law requires that not-for-profits register prior to receiving donations. Registration puts the Attorney General on notice that the not-for-profit exists and is operating in the state. The fourth law requires that registration (if required) be renewed annually, providing the state authorities with annually updated information. The fifth law requires that the use of any outside fundraising firms be disclosed.<sup>16</sup> The sixth law requires financial statement audits when the not-for-profit has assets above some threshold amount. Financial statement audits are independent certification by Certified Public Accountants, who in addition to providing an opinion about whether the financial statements are free of material misstatement, are also required to notify directors of potential fraud. The seventh law requires that, if the not-for-profit is audited, a copy of the audited financial statements along with the accountant's opinion letter must be included with the registration. The eighth law requires that the not-for-profit's incorporation by-laws be included in registration. Because by-laws provide information as to what the inherent charitable purpose of the not-for-profit is, they can provide a useful benchmark for state authorities seeking to identify managerial misbehavior. The ninth law requires that the not-for-profit's Articles of Incorporation be included in the registration. The reasoning is similar to that for by-laws. The tenth law requires that the federal tax-exempt determination letter be included in registration. The federal letter contains some details about the IRS's rationale for granting exempt status and provides an additional benchmark for state authorities seeking to identify managerial misbehavior. The final law relating to the ability to

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<sup>16</sup> Some outside fundraisers have been found to retain large proportions of the donations they raise on behalf of their not-for-profit clients, potentially misleading donors about where their donations are going. Keeping track of not-for-profits that use outside fundraisers can assist a state authority in uncovering excessive fundraising expenses.

detect misbehavior requires not-for-profits to provide additional state-specific disclosure forms in the registration.

### 3.2.2. *The Prosecution Index*

Laws directed at prosecuting asset theft and misuse necessarily involve prosecutorial powers as well as legal standing to bring suit in a court of law. Six state laws are summarized in this index. They are described in Table 1b and presented in Table 2b. Both California and Oregon have all six laws and no state has none of them. Table 3 reports the average prosecution index across the states as 4.71 while the median is 5.0. The combined index is the additive sum of the detection and prosecution sub-indices. The average combined index is 11.47 with a median of 13.

The first component of the prosecution index makes the Attorney General the primary oversight authority (rather than some other state agency such as the Secretary of State). The Attorney General's office has the legal authority to directly bring suit against not-for-profits whereas other state agencies must bring suit indirectly (frequently through the Attorney General). The second law gives legal standing to parties (i.e., directors) other than the Attorney General to bring suit against officers of the not-for-profit. This law expands the scope of those with authority to legally file suit against a not-for-profit's managers thus enhancing the ability to prosecute misbehavior. The third law distinguishes not-for-profits from for-profit corporations. Some states have separate statutes for for-profit and not-for-profit organizations. Typically the not-for-profit specific laws include additional restrictions and rules on managers, such as not permitting any related party transactions, even if they would benefit the not-for-profit (such transactions are generally permitted in the for-profit sector unless they are done at the expense of shareholders). The fourth law requires that, when a not-for-profit is dissolved, its assets must be distributed to another not-for-profit. This statute provides the Attorney General with the ability to prosecute not-for-profits that distribute any dissolution proceeds to management. The fifth law is *Cy Pres*, which provides the Attorney General with the ability to enforce the stated terms of the trust document (i.e., articles of incorporation, by-laws, etc.) if the not-for-profit is not following them. The sixth law sets limitations on direct conversion from not-for-profit to for-profit status. The reasoning is similar to the law limiting the types of mergers.

### 3.3 *Empirical Measures of Not-for-profit Misbehavior*

The focus of state laws on asset theft and misuse has its roots in the original Statute of 1601 and virtually all existing state-level not-for-profit laws ultimately relate to detecting and prosecuting these two specific behaviors. Unsurprisingly, blatant instances of asset theft and misuse, as in for-profit firms, are rarely observed clearly. As a consequence, the majority of current state-level enforcement efforts are directed at uncovering and prosecuting broader and subtler ways in which a manager can “steal” or “misuse” a not-for-profit’s assets. According to Fremont-Smith (2004, p. 187), “trust laws have been enacted to assure that those persons who have legal responsibility for the administration of charitable corporations and trusts will act to further those purposes and neither seek private benefit at the expense of the charity nor be reckless in its administration.” Based on their review of criminal and civil cases, Fremont-Smith and Kosaras (2003) note that the most common form of asset theft is private inurement by managers and the most common form of asset misuse is reckless administration of duties.

In order to identify empirically tractable measures that would constitute “private benefit seeking” and “reckless administration of duties,” the paper relies on three sources: a discussion of actual court cases brought against not-for-profits (Fremont-Smith and Kosaras 2003), the discussions of motivation in state not-for-profit statutes, and State Attorney General publications. These sources provide three clear and consistent behaviors that State Attorneys General consider to be associated with private benefit seeking and reckless administration of duties. The most common way for a manager to seek private benefits is via excessive managerial compensation though there is no firm cutoff at which compensation would be considered legally excessive by the state courts.<sup>17</sup> Lacking a clear definition of excessive, Attorneys General typically compare compensation across not-for-profits in order to benchmark their reasonableness. For example, the Pennsylvania Attorney General states “In determining whether compensation is reasonable, the salary ranges of similarly situated individuals in similar not-for-profit organizations should be examined” (Pennsylvania Attorney General 2005, page 5). The higher a manager’s pay is relative to other managers at other not-for-profits, the more likely it is that the Attorney General could build a successful case for asset theft via excessive compensation. This definition suggests that the ratio of managerial compensation to total expenses would be a reasonable empirical

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<sup>17</sup> See Schwinn, Elizabeth. *Chronicle of Philanthropy*, 2004. “Big Not-for-profit Salaries Face Government Scrutiny” (June 24) for a discussion of State level actions against excessive managerial compensation.

measure that a state authority could use to calibrate excessive compensation. This metric captures the Attorney General’s notion of “similar not-for-profit organizations” as it controls for the scale of the not-for-profit’s operations.<sup>18</sup> Table 3 shows the average ratio of managerial pay to total expenses as six percent with a median of three percent.

The analysis uses two measures of “reckless administration of duties” including excessively high amounts of fundraising spending relative to donations received, and excessively low amounts of charitable spending relative to total spending.<sup>19</sup> State Attorneys General have brought suit specifically claiming excessive fundraising or insufficient charitable spending, and these measures are commonly used as measures of not-for-profit performance by charity watchdog agencies such as the Better Business Bureau and the Wall Street Journal.<sup>20</sup> Comparably (in the cross section) high fundraising expenses relative to donations is an indicator that either paid fundraisers are keeping large proportions of the donations they raise on behalf of not-for-profits, or the not-for-profit is engaging in excessive investments in its fundraising activities.<sup>21</sup> Fundraising activities, rather than serving to effectively raise funds, can serve the interests of insiders through extensions of social networks and the consumption of perquisites.

To measure inefficient levels of fundraising, an indicator variable is set equal to one if the ratio of fundraising expenses to donations is equal to 1.0 or greater, and zero otherwise. An

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<sup>18</sup> Officers compensation includes any amounts (wages, benefits, bonuses, etc.) paid to employees who have decision control over a not-for-profit’s operations or finances.

<sup>19</sup> There are many examples of Attorney General interest in these two specific measures. The Texas Attorney General encourages its citizens to “ask for written information that will show you a comparison of how much money the organization spends on administrative and fundraising fees and expenses versus how much it spends directly on the intended recipients” (Texas Attorney General 2005 page 1). The Washington Attorney General cautions donors to examine “What percentage of the contribution will be actually spent on the charitable purpose?” (Washington Secretary of State 1999, page 2). The Minnesota Attorney General encourages its citizens to “ask how much of your contribution will pay fundraising and overhead costs” (Minnesota Attorney General 2005, pages 1 and 4). The Kansas Attorney General tells its consumers to “Compare the percentages spent carrying out the programs of the organizations and the cost of fundraising and the day-to-day operations of the charity” (Kansas Attorney General 2005, page 1).

<sup>20</sup> See Fremont-Smith and Kosaras (2003) for an analysis of cases brought against not-for-profits by various State authorities. Some specific examples include the New York and Texas Attorneys General bringing suit against not-for-profits for excessive managerial compensation (Schwinn 2004). The Texas and Iowa Attorneys General filed suit against the American Deputy Sheriffs’ Association charging that they engaged in excessive fundraising and spent too little on charitable purposes (Muscatine Journal 2004, Texas Attorney General 1998).

<sup>21</sup> If the not-for-profits only objective were to maximize donations, it would fundraise until the marginal fundraising cost equaled the marginal donations revenue at which point donations revenues are maximized. However, most observers, regulators, and donors would consider such behavior to be wasteful because at the margin virtually all the donations are being used up for additional fundraising rather than for pursuing the charitable mission. Although the marginal ratio of fundraising expenses to donations revenues is more informative than the average ratio, the marginal ratio for a single not-for-profit is not observable.

average ratio in excess of 1.0 is suggestive of excessive or inefficient expenditures on fundraising. Comparably low charitable spending relative to total spending is an indicator that the not-for-profit is spending excessively on administrative items which could serve to increase the relative comfort of the employees of the not-for-profit at the expense of furthering the charitable mission. In order to consider the degree to which public charities are focused on charitable purposes (rather than administrative or fundraising expenses), tests examine the relationship between governance metrics and the ratio of charitable expenses to total expenses and the ratio of charitable expenses to total assets. The former ratio measures charitable expenditure efficiency, whereas the latter measure is comparable to a return on assets metric. Table 3 shows the average ratio of charitable expenses to total expenses as 79 percent with a median of 84 percent. The average ratio of charitable expenses to total assets is 74 percent with a median of 10 percent.

For foundations, managerial compensation is a central focus for similar reasons and similar variables are constructed to measure compensation.<sup>22</sup> Foundation payout policies are of particular interest to state authorities as they capture the degree to which foundations distribute their assets relative to what is minimally required by rules. As the tax deduction for a contribution to a private foundation occurs when the foundation receives the funds rather than when it is eventually distributed to a public charity, rules require minimal distribution amounts to ensure that foundations are not mere tax avoidance vehicles for the donors (Steuerle (1977)). Prevailing rules require that foundations meet a minimum distribution requirement by spending at least five percent of their non-charitable use assets (i.e., those not directly employed in conducting the operating of the foundation such as buildings) on charitable grants or charitable administrative expenditures in the current or following year (Internal Revenue Code §4942).<sup>23</sup>

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<sup>22</sup> Table 3 shows the average ratio of foundation managerial compensation to total expenses as 50 percent with a median of 53 percent. This ratio is significantly larger than the ratio for public charities (mean of six percent and median of three percent). Much of this difference is due to what total expenses are included in the denominator of the compensation ratios. For public charities, all expenses (charitable, administrative, and fundraising) are included in the denominator. For foundations, all similar expenses are also included, but grants paid to charities are not considered an expense per se. Because foundations conduct little charitable activity themselves, but rather pay out their funds to downstream charities, it is not surprising to find that officer's compensation is a significant portion of non-grant expenses. By contrast, most public charities give away little in the form of grants but rather perform charitable activities directly.

<sup>23</sup> The minimum distribution requirement has been the subject of considerable controversy, with public charity advocacy groups calling for increases in the percentage of assets that must be annually paid out while foundation groups defend the current rules. See Cambridge Associates (2000) and Mehrling (1999). Brody (1997) examines the broader questions of whether the non-profit sector should even have an endowment, whether this endowment

Prior research examines foundation payout behaviors and finds that foundation managers control the amounts they pay out as well as the timing of their required payouts, frequently doing so in such a manner so as to minimize the present value of total payouts (Sansing and Yetman (2005)). This research finds that tax laws act as effective governance mechanisms over foundation payout behaviors, while the current analysis examines the effects of state laws on these same payout behaviors.

The first measure of foundation payout is the ratio of current year payouts to the required amount.<sup>24</sup> Table 3 shows the average ratio of qualifying distributions to prior year's required distributions as 3.16 with a median of 1.13. This suggests that the median foundation pays out only slightly more than it legally needs to, but that at least some foundations pay out significantly more than legally necessary. The second measure of charitable payout is an indicator variable equal to one if the foundation delays its payout as long as possible and zero otherwise. Foundations can choose to disburse their required 5 percent either in the current year, or they may wait until the next year. By delaying disbursement, a foundation can retain use of its assets.<sup>25</sup> Table 3 shows the average delayed distribution indicator as 27 percent with a median of zero, suggesting that 27 percent of the sample delays the legally required payouts as long as possible.

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should be controlled by private foundations instead of public charities, and whether private foundations should be allowed to exist in perpetuity. Hansmann (1990) criticizes the accumulation of wealth by universities on grounds of inter-generational equity.

<sup>24</sup> The current payout amount is line 8 of Part V of the IRS 990-PF, and the minimum required amount is line 7 of Part XI of the prior year's IRS 990-PF. The payout requirement is based on the prior year's amount as foundations can meet their payout obligations in the current year or in the following year (with any excess distributions carried forward to the subsequent year). Although many foundations distribute the legal minimum of five percent, some distribute more than is required.

<sup>25</sup> This indicator variable is constructed on the basis of the ratio of the current year payout (line 8 of Part V of the IRS 990) to the amount of remaining undistributed amounts left over from the prior year that must be distributed by the end of the current year (line 2a Column C Part XIII of the IRS 990-PF). If this ratio is 1.0, the foundation has delayed its payout as long as is legally possible. If this ratio is less than 1.0 the foundation has violated the rules and will be subject to severe financial penalties and very few foundations fall into this category. If the ratio is larger than 1.0 the foundation has not only made up last years unpaid balances, but has made additional payments as well. A ratio of 1.0 (or slightly over 1.0) suggests that the foundation is attempting to delay its payout as long as is legally permissible. However, even those foundations that want to delay their payouts as long as possible will want to avoid the danger of being under the 1.0 cutoff, (lest they incur substantial penalties), so they typically pay out slightly more than is necessary. Accordingly, the indicator variable is set equal to one if the ratio is between 1.0 and 1.1 and zero otherwise.



Attorneys General reliance on these operating ratios as barometers of asset misuse is not without theoretical grounding.<sup>26</sup> Zack (2003) provides a detailed analysis of how the mechanisms by which these ratios capture the underlying accounting and operational decisions made by a not-for-profit organization. He concludes (Zack (2003, p. 326)) that the ratios “measure various aspects of an organization’s operations. While their value as a management and goal-setting tool is obvious, they also have great value as a fraud detection tool.”

Given that the States Attorneys General use these metrics as barometers of asset theft and misuse, it is plausible that not-for-profits located in states with relatively stronger laws would respond by attenuating the amount they pay their managers and spend in administrative and fundraising activities so as to avoid potential identification and prosecution. On the other hand, if state level not-for-profit laws are largely ineffectual in influencing not-for-profit behaviors the tests will fail to find any significant relationship between laws and behaviors.

#### 3.4. *Estimation Issues and Alternative Specifications*

For the primary specifications described below, the dependent variable is an outcome measure designed to measure managerial misbehavior. The specifications are OLS and the independent variables of interest are the detection index, prosecution index and overall governance index. An industry indicator is included to control for diversity in the charitable sector based on the National Taxonomy of Exempt Entities (NTEE) industry coding. Similarly, size controls based on assets or revenues are also included. Although the organization-specific characteristics examined vary from year to year, the governance metrics do not. To gain some understanding of the extent to which these various governance mechanisms have been stable over time, particularly during the sample periods, several individuals at various state not-for-profit regulating agencies were contacted. These individuals suggested that in general the existing rules have been in place for at least the past several years. Because the governance

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<sup>26</sup> As with the compensation ratio described above, there are no “bright lines” at which an Attorney General could presume “reckless administration of duties”, but rather a cross sectional comparison is commonly used by state authorities to identify and prosecute asset misuse situations. Highlighting state level interest in these two ratios is the fact that some states have attempted to codify specific cutoffs for these two ratios such as requiring a not-for-profit to spend no more than 35 cents of every dollar raised in donations on fundraising expenses, and requiring a not-for-profit to spend at least 75 percent of its total expenses on its charitable mission (*Village of Schamburg v. Citizens for a Better Environment* 1980, *Secretary of State of Maryland v. Joseph Munson* 1984, and *Riley v. National Federation of the Blind* 1988). These attempts to codify specific cutoffs have been ruled unconstitutional by the U.S. Supreme Court because they apply arbitrary standards, causing Attorneys General to resort to a cross-sectional reasonableness method of evaluation.

variables do not vary across time and the dataset is a panel, all standard errors are clustered at the entity level.<sup>27</sup>

In order to further explore the relationship between these laws and the outcome measures employed, we conduct several additional tests. First, we relate a specific law to a specific outcome measure in order to better identify the causal nature of the relationship. Second, we employ political and economic variables as instrumental variables for the governance variables in order to address potential endogeneity issues. Third, we consider the role of several additional control variables.<sup>28</sup> Fourth, we collapse all observations in each state into a single median based observation and reestimate our models using these 51 observations to ensure that our results are not driven by the nature of our data.

Finally, we employ an alternative measure of performance that is positive rather than one that emphasizes misbehavior. Typically, tests of the efficiency of investment, as in the setting of conglomerates, employ proxies for investment opportunities, typically industry  $q$ , to assess whether firm investment is responding to relevant opportunities. In the not-for-profit setting, the intuition of social insurance suggests that activity should increase in response to negative economic shocks when the marginal productivity of not-for-profit activities becomes greatest.<sup>29</sup> Said another way, not-for-profits fulfilling their mission should disproportionately respond during distressed times as this is when their investment opportunities are the greatest. One way to test this is to determine if not-for-profits respond differentially to local economic shocks depending on their governance environment.

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<sup>27</sup> Peterson (2005) provides an extensive review and analysis of various methods used to address correlations across time and/or firms and recommends that if a firm effect is present (i.e., there is correlation across time within firms) the standard errors should be clustered by firm. Clustered standard errors are unbiased and produce correctly sized confidence intervals in the presence of either temporary or permanent firm effects. Furthermore, clustered standard errors are robust to heteroscedasticity (Froot 1989, Rogers 1993, and Peterson 2005). However, even though cluster corrected standard errors mitigate concerns over firm level correlations, additional robustness analyses (discussed later in the paper) are conducted to further ensure that the results are not driven by these correlations.

<sup>28</sup> The additional variables are intended to control for state level effects that could be correlated with state laws and could also effect nonprofit outcomes. The controls include measures related to the nonprofit legal system in a state and the demographic makeup of a state. The first control is an indicator variable equal to 1 if the state was one of the 15 that existed when the Laws of Trusts were originally reinstated, and zero otherwise. The second control is a continuous variable equal to the relative time when the state was admitted to the Union. The third control is the percentage of a state's population that is urban. The fourth and fifth controls are the poverty and unemployment levels in a state, respectively. Results are essentially identical with or without these additional controls.

<sup>29</sup> Alternatively, the concavity of utility functions provides the same intuition. That is, not-for-profits that best internalize the utility functions of their customers will expand activity during periods when marginal utility is highest.

This test of the efficiency of not-for-profit activity has several advantages. First, it provides a measure of performance that is not entirely cost-driven in a setting where output is hard to measure. Second, the intuition of investment opportunities corresponds to the espoused goals of a variety of not-for-profits. This notion of social insurance is operationalized using two empirical tests. First, for insurance to be provided, there has to be some element of intertemporal smoothing where funds are gathered during some periods (typically economically robust ones) and saved for later periods when they are most effective. In order to identify the presence of intertemporal smoothing, the empirical analysis below examines how governance influences the relationship between changes in total revenue sources (including donations, the sales of products and services, and other income) and changes in charitable expenditures. If well-governed firms are intertemporally smoothing, the governance variable should attenuate the relationship between the sources of funds and the disbursement of those funds.

Such intertemporal smoothing need not be for purposes associated with the needs of not-for-profit beneficiaries. In order to examine if this intertemporal smoothing has an insurance component, it is possible to test if measures of governance influence the relationship between changes in local economic conditions (such as disposable income, gross state product, and unemployment levels) and changes in charitable expenditures. Local positive income shocks may well increase resource flows to not-for-profits permitting them to increase their charitable outputs. However, an insurance objective would be fulfilled if a positive relationship between local economic conditions and charitable output would be mitigated in well-governed firms. Said another way, the intertemporal smoothing identified in the first test could be characterized as insurance if this second test demonstrates that negative shocks are associated with increased activity for well-governed firms.

## **4. Results**

### *4.1. Public Charities*

As previously discussed the empirical analysis is directed towards addressing two broad issues. First, does stronger governance induce not-for-profits to focus more on charitable activities? Second, does stronger governance attenuate payments (in the form of salaries) to insiders? Table 4 initiates the analysis with an examination of how the governance metrics influence the charitable payout and fundraising activities of public charities. Industry, size (total

assets) and revenue controls are included in all regressions. All t-statistics are based on standard errors clustered at the firm level. Several variations of each model are presented in order to examine the independent and joint effects of the governance variables.

The dependent variable in columns 1 through 4 of Table 4 is the ratio of charitable expenses to total expenses. This measure captures the relative proportion of total expenditures devoted to charitable causes rather than consumed as administrative expenses or spent on fundraising activities.<sup>30</sup> The results in column 1 of Table 4 indicate that the combined index is associated with a larger share of not-for-profit expenses being dedicated to charitable purposes. When the combined index is partitioned into its two sub-indices (detection and prosecution) in columns 2-4 of Table 4, results suggest that the prosecution sub-index has no independent effect on public charity behavior when included along with the detection sub-index, but that it does have an independent effect when examined alone. In contrast, the detection sub-index has a statistically significant effect on public charity behavior. Columns 5 through 8 of Table 4 repeat this analysis using total assets as a scaling factor. Scaling by total assets is a useful check on these results and is comparable to a return on assets figure. Results for this alternative measure of charitable payout parallel those of the prior measure of payout. The results suggest that increasing detection governance from the 25<sup>th</sup> percentile to the 75<sup>th</sup> percentile (a change of 2.0) induces just over a one-half percent increase in expenses dedicated toward charitable purposes.

Columns 9 through 12 of Table 4 employ a dependent variable that measures the efficiency of fundraising. As noted by Steinberg (1986), a not-for-profit will benefit financially by increasing its fundraising activities until the marginal cost of fundraising is equal to marginal donation revenues.<sup>31</sup> The fundraising metric used is an indicator variable equal to one if the ratio of fundraising expenses to total donations is equal to or greater than 1.0 and zero otherwise. This measure captures the notion of “excessive” fundraising. These specifications employ a logit

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<sup>30</sup> Charitable expenses are those reported as “program expenses” in Part II of Page 2 of the IRS 990. On page 2 a charity must partition all of its expenses into one of three mutually exclusive categories; programs, administrative, and fundraising.

<sup>31</sup> Rose-Ackerman (1982) provides a formal analysis of the issue of “excessive” fundraising and finds that donors (who favor a particular type of public good) gain from fundraising to the extent it attracts other donors to their charity and lose to the extent that donations are diverted away from their favored charity towards alternative competing charities. This substitution effect can cause waste to the extent it merely increases overall fundraising expenditures without increasing the amount of overall donations in the market.

model.<sup>32</sup> These results indicate that the combined index is associated with a lower probability of incurring “excessive” fundraising expenses. When the combined index is partitioned into its two sub-indices (detection and prosecution) the results are consistent with those found using the payout variables in that the prosecution sub-index has no independent effect but that the detection sub-index has a statistically significant effect on fundraising. The consistency of the results across these various measures of output behavior provides some comfort that the underlying relationships are not dependent on the measure of not-for-profit output. In terms of magnitudes, the results suggest that increasing the detection index from the 25<sup>th</sup> percentile to the 75<sup>th</sup> percentile induces an approximately 37 percent decrease in the odds that a public charity will engage in excessive fundraising.

The importance of the detection laws relative to prosecution variables is something that persists in the analysis. Detection laws are intended to provide an ex-ante incentive to not-for-profits to behave in particular ways, while the prosecution laws provide an ability for ex-post settling up. It is interesting to note that the ex-ante laws appear to have more effect than the ex-post laws. One possible explanation is that not-for-profits might prefer to avoid legal confrontation altogether and thus would respond to detection laws more strongly. Because not-for-profits rely heavily on the support of donors, they would be expected act to act in a way that would not endanger this important source of revenue. Prior research shows that donors respond strongly to the suggestion of wrongdoing by a charity, and that even when the charity itself is absolved by the legal process it can take some time before the level of donations rises to its prior levels (Fremont-Smith and Kosaras 2003)

Table 5 presents the results of tests intended to measure the effects of governance on insider compensation.<sup>33</sup> Results are similar to those in Table 4 and show that the combined index as well as the detection sub-index is associated with significant differences in the ratio of officers’ compensation to total expenses. The results in subsequent columns (3 and 4) suggest that the prosecution sub-index has no independent effect.<sup>34</sup> In summary, the results for public

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<sup>32</sup> As the descriptive statistics in Table 4 indicate, only six percent of the sample has this indicator variable set equal to one. Alternative specifications that employ a cutoff of 0.8 instead of 1 reach similar conclusions.

<sup>33</sup> This figure is drawn from line 25 of Part II of the IRS 990 (line item description is “compensation of officers, directors, etc.”. This includes all salaries and bonuses as well as the value of all fringe benefits such as retirement or expense accounts.

<sup>34</sup> One problem with using the ratio of compensation to total expense is that many not-for-profit employees, including officers, donate their services. To the extent that the donation of services is correlated with governance

charities consistently demonstrate that laws intended to identify asset theft and misuse are more effective than laws intended to provide state authorities with enhanced ability to prosecute instances of theft and misuse.

#### 4.2. *Private Foundations*

The analysis of private foundations parallels that conducted on public charities. As with the examination of public charities, two basic issues are of primary concern; does stronger governance cause foundations to pay out more than the minimally required amount, and does stronger governance attenuate payments (in the form of salaries) to insiders? Columns 1 through 4 of Table 6 examine the effects of governance on the ratio of foundation payouts to legally required minimum amounts, described above.<sup>35</sup> The results in column 1 of Table 6 show that the combined index is associated with larger foundation payouts relative to the required amount. When the combined index is partitioned into its two sub-indices as in columns 2-4 of Table 6, results suggest that the detection sub-index has a statistically significant effect on foundation payouts while the prosecution sub-index has no independent effect on foundation payouts. These results suggest that an increase in detection governance from the 25<sup>th</sup> percentile to the 75<sup>th</sup> percentile induces an approximately eight percent increase in foundation payouts relative to the required amount.

As discussed above, a foundation has discretion over the amount and timing of payouts. Because foundations are permitted to delay their payouts one year they can retain their assets one additional year by deferring their payouts. Columns five through eight of Table 6 present results using an indicator variable equal to one if the foundation delays at least 90 percent of its payouts until the following year and zero otherwise. Results suggest that higher combined governance is associated with a lower probability of delay in foundation payouts. When the combined index is partitioned into its two sub-indices as in columns 5-8 of Table 6, results again suggest that the detection sub-index has a statistically significant effect on foundation payouts while the prosecution sub-index has no independent effect on foundation payouts. In terms of magnitude the results suggest that increasing reporting governance from the 25<sup>th</sup> percentile to the 75<sup>th</sup>

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this test is not necessarily isolating the effects of governance on compensation per se. To overcome this potential weakness, the analysis in Desai and Yetman (2005) also considers the ratio of total officer's compensation to other employee compensation as an alternative dependent variable and finds similar results.

<sup>35</sup> The payout amount is line 8 of Part V of the IRS 990, and the minimum required amount is line 7 of Part XI of the prior year's IRS 990-PF.

percentile induces an approximately six percent decrease in odds that a private foundation will delay its payouts as long as possible. These results are similar to those found for public charity behaviors and suggest that detection laws have a stronger effect than do prosecution laws.

With respect to foundation officers' compensation,<sup>36</sup> results in the first column of Table 7 show that higher levels of combined governance are associated with lower ratios of officer compensation to total compensation. The partitioned results in columns 2 through 4 depart from prior results and suggest that the detection sub-index has no independent effect while the prosecution sub-index does have such an effect. When a variety of additional control variables are included or when an instrumented governance variable is used, results show that the combined index as well as the detection sub-index are associated with attenuated officer compensation, consistent with the other results in the analysis. As discussed in the robustness section of the paper, none of the other analyses are altered by inclusion of these additional control variables or by instrumenting. In terms of magnitude the results suggest that increasing detection index from the 25<sup>th</sup> percentile to the 75<sup>th</sup> percentile induces an approximately six percent decrease in the ratio of officer compensation to total expenses.

The results for foundations are generally similar to those for public charities and suggest that similar forms of governance laws have similar effects on not-for-profit behavior. This is somewhat surprising given that private foundations are more likely to have a significant donor who can exert significant control. Nonetheless, in both cases detection laws generally appear to be associated with higher charitable distributions and attenuated managerial compensation in both types of not-for-profits. In part, this may be explained by the fact that the oversight of many foundations are provided by the families of donors and, more specifically, later generations of donors with less incentive to fulfill the charitable mission of the foundation. Alternatively, for foundations designed to facilitate tax avoidance rather than charity, these laws are ensuring that charity is pursued rather than simply tax avoidance. These possibilities are left for future work.

## **5. *Robustness and Causality***

In order to further examine the robustness and causal nature of this link, several further additional analyses are provided. The first analysis instruments the governance variables with state-level economic variables that are plausibly unrelated to the outcome measures being

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<sup>36</sup> This figures is taken from line 13a of the IRS 990-PF.

analyzed except through their influence on the governance laws. This instrumental variable analysis has the advantage of addressing concerns related to other explanations for the link between the governance variables and the outcome measures. To conduct this analysis, first stage regressions of the governance variables on state population, state domestic product, and an indicator variable equal to one if the state electoral votes were cast for the Republican candidate in the most recent presidential election are performed. Fitted values from this first stage regression are employed in second stage regressions that parallel the preceding analysis.<sup>37</sup>

The seven columns of Table 8 correspond to the seven different outcome measures from the analysis in Tables 4 through 7. The results in Table 8 which are restricted to the combined index show that the instrumental variables analysis provides results that are broadly consistent with the preceding analysis. As discussed earlier in the paper, the only difference between the IV results and the OLS results is for the private foundation managerial compensation model where the IV results find that the detection sub-index has an independent effect while the prosecution sub-index does not, consistent with the other results in the analysis. In summary, the IV analysis provides reassuringly similar estimates to the OLS estimates discussed above.<sup>38</sup>

If these rules are having the hypothesized effects, these effects should also be manifest in particular settings. Specifically, it is possible to examine the specific effect of a particular legal rule in deterring the activity that it targets. The analysis in Table 9 examines the relationship between the sales of property, plant, and equipment assets and officer's compensation, and how that relationship is attenuated in the presence of a specific governance variable intended to mitigate the relationship. A not-for-profit manager can enrich themselves through a liquidating dividend by selling assets of the not-for-profit and retaining the proceeds as salary. A specific not-for-profit law used by some states is that the State Attorney General must be notified of asset sales. This particular law is specifically intended to curb a manager's ability to sell off the not-for-profits' working assets and abscond with the funds. To investigate this hypothesis the log of

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<sup>37</sup> This instrumental analysis was conducted for each of the three governance metrics (i.e., combined index, detection index, and prosecution index). Results of the first stage regressions show adjusted  $R^2$ s of 29 percent, 22 percent, and 57 percent for the combined, detection, and prosecution regressions. All of these  $F$  statistics are significant at less than 0.0001 levels.

<sup>38</sup> Of course, such an analysis is premised on the assumption that these state characteristics only influence the outcome variables through their influence on the governance variables. As with most instrumental variables analyses, it is impossible to refute this claim entirely. With this caveat, the consistency of the results with the OLS results across the various dependent variables is reassuring.



officer compensation is regressed on asset sales as well as the interaction of the asset sales variable with the Attorney General notification indicator variable. Results in the first column of Table 9 show that asset sales are positively related to officer's compensation. Results in the second column of Table 9 show that this relationship is attenuated in the presence of the requirement that Attorney Generals be notified at the time of the asset sale. This analysis provides direct evidence that a specific governance rule has a specific effect on not-for-profit behavior.<sup>39</sup>

In order to consider if these effects relate to the broader governance environment or the specific legal rule, this same analysis is replicated in column 3 but the Attorney General notification variable is replaced with the *Cy Pres* variable to perform a falsification test. It is difficult to connect *Cy Pres* regulation to inappropriate asset sales so it should have no effect on the relationship between asset sales and officer's compensation. Results in column 3 of Table 9 support this hypothesis. This result provides some comfort that the results in columns 1 and 2 were not driven by a more general governance effect but were a reflection of the specific governance variable.<sup>40</sup>

As a final robustness test, the analysis has been replicated using the state-level median values of the dependent and independent variables. This analysis has only 51 observations and includes each state (and the District of Columbia) in the regression model only once, using the median value of the variables in a particular state for the analysis. Additional control variables for legal system development and state level economic indicators were included in all of these median regressions. For the combined governance index for public charities, unreported results show that the governance measure is statistically positively related to the ratio of charitable expenses to total expenses, and inversely related to the ratio of officer's compensation to total compensation. The relationship between governance and the ratio of charitable expenses to total assets is positive, but is not statistically significant. For the combined governance index for private foundations, unreported results show that governance is statistically positively related to the ratio of qualifying distributions to required amounts and negatively related to the ratio of

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<sup>39</sup> Additional tests in later periods did not find increased managerial payouts in years following asset sales.

<sup>40</sup> As an additional robustness test annual regressions were used. Untabulated results show that the annual regressions support the panel analysis with few exceptions. In no case was more than one of the 14 years in the analysis not statistically significant in the annual regressions. This provides evidence that the results are not being driven by including multiple years of data.

foundation managers' compensation to total expenses. Graphical analyses reveal that the results are not caused by a few outlying states, but that the underlying economic relationship between behavior and governance is an observable trend inherent in the sample as a whole. These analyses indicate that the results found in the primary pooled analyses are not the result of statistical artifacts that can arise from including multiple observations in a single state.

### 5.1.. *Not-for-Profits and Social Insurance*

The preceding analysis only emphasizes the cost-structure of not-for-profits without attempting to assess the degree to which not-for-profits are fulfilling their mission. In order to investigate further the importance of the governance environment on not-for-profits, it is possible to examine if not-for-profit firms fulfill a social insurance objective. The panel nature of the data allows one to assess the degree to which not-for-profits are intertemporally smoothing resources and if they are, indeed, helping when helping helps the most. These tests, while novel in the setting of not-for-profits, employ the differential response to shocks to see if the relationship between resources and activities and between local economic conditions and not-for-profit activities is mediated by the governance environment.<sup>41</sup> While less directly related to metrics that would trigger the attention of authorities, this more speculative test provides an alternative investigation of the relationship between governance and performance.

A social insurance object would be fulfilled if not-for-profits *both* intertemporally smooth resources *and* if they expend more resources when local economies are hardest hit. The intuition for intertemporal smoothing arises from the fact that a well governed not-for-profit would opt to limit the expansion of its charitable expenditures in flush times in order to build a reserve that can be employed in future bad times.<sup>42</sup> In order to consider this possibility, Table 10 examines the relationship between not-for profit activities and the resources available to a not-for-profit, including donations, program revenues (from the sales of products and services) and revenues from the sales of assets. Revenue sources naturally fall into these three categories as they are very different. Donations are received from donors while program revenues are earned income. Asset sales are neither donated nor earned, but result from the organization disposing of a portion

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<sup>41</sup> Because foundations are less subject to the effects of economy wide fluctuations (as they are predominantly funded by a single person) and typically pursue longer-term objectives, private foundations are excluded from this analysis.

<sup>42</sup> The implicit assumption of this analysis (that is borne out in the analysis) is that revenue sources are pro-cyclical.

of its investment or plant assets. These three revenue categories comprise the vast majority (over 95 percent) of total organization revenues. To conduct this analysis all of the variables are percentage changes and the models include year and industry effects. The analysis is restricted to human services type public charities as defined by the IRS only in order to narrow the scope of the examination to a setting where social insurance is most likely to be operative. The governance variable used is the detection index as prior results show this governance metric to have the most consistent effect on behaviors. The detection index is dichotomized at its median value.

The first three columns of Table 10 examine the link between these three resources and not-for-profit expenses for charitable purposes. The results in the first and second columns show that revenues from donations and programs (the sales of products and services) are positively related to charitable spending. The results in the third column of Table 10 show that revenues from asset sales are not associated with increases in charitable expenditures. Of more interest than these main effects is the coefficient on the interaction of the governance variable and these resource variables. Results in Column 2 suggest that the presence of stronger governance attenuates the increase in charitable outputs as resources from programs rise. This finding is consistent with a social insurance effect in that charities in well governed states increase their charitable spending less as resources increase, saving some resources for poorer economic conditions. Columns 4 and 5 of Table 11 combine the measures of economic resources into single equations. Column 4 presents the combined results excluding the main effect of governance while the results in Column 5 include the governance main effect. In both cases, the results show an insurance effect (as noted by a statistically negative sign on the interaction coefficient) for program revenues. Untabulated robustness tests using the raw detection index show that the interaction with program revenues (consistent with the results above) as well as the interaction with asset sales revenues are significantly negative, suggesting that stronger governance attenuates increases in charitable spending as resources from these two sources rise.

While these results indicate intertemporal smoothing of resources, particularly program revenues, it does not suggest that not-for-profits are increasing resources during economically difficult times. To consider this possibility, the analysis in Table 11 explores the relationship between several measures of local economic conditions and charitable expenses. As no single measure best captures local needs several measures are used including changes in disposable

income, disposable income per capita, gross state product, and state-level unemployment rates. The results in columns 1, 3, and 5 in Table 11 indicate that as the overall economic situation of a state improves (as measured by higher state disposable income, higher state disposable income per capita, and higher gross state product) the amount of charitable expenditures by public charities likewise increases. These results suggest that not-for-profits are expanding and contracting in tandem with local economic cycles. The results in column 7 suggest that changes in state level unemployment are not associated with charitable spending. When these economic variables are interacted with governance, the results in columns 2, 4, and 6 of Table 11 indicate that the increases in charitable expenditures in response to economic activity are attenuated in higher governance states. In other words, not-for-profits in states providing a stricter governance environment are more likely to attenuate the relationship between local economic conditions and charitable expenditures, enabling them to provide more resources during more difficult economic times. Untabulated robustness tests using the raw detection index are consistent with those above except that the statistical significance is slightly weaker.

These results can be viewed as supporting the view that good governance rules help not-for-profit entities fulfill a social insurance function. While the coefficients on the interaction terms are supportive of this intuition, the coefficients on the local economic variables are not consistent with not-for-profits, on average, providing an insurance function as conceptualized in this paper. While the direct test of the effect of governance on not-for-profit is on the sign of the interaction term, the coefficients on the economic variables alone indicate the degree to which not-for-profits remain tied to local economic conditions. Further analysis might usefully examine the other factors that allow not-for-profit firms to fulfill a social insurance function.

## **6. Conclusion**

Public charities face several important operating choices including how much financial resources to devote to charitable rather than administrative activities, how much to spend on fundraising, and how to compensate their officers. Private foundations likewise face important choices including how much of their assets to give away to charities annually, when to pay those gifts, and how much to compensate their officers. These choices are remarkably unconstrained by the usual mechanisms that constrain for-profit managers.

The legal and reporting requirements facing not-for-profit firms appear to shape their emphasis on charitable activities, their compensation patterns, their willingness to engage in inefficient fundraising, and their willingness to smooth and time their activities most effectively. These findings are consistent with the notion that state-level laws and regulations constitute an effective governance environment in the absence of owners. The results further suggest that detective provisions provide the largest effects on not-for-profit behavior. These results are reinforced through an instrumental variables analysis and tests of specific provisions on assets and executive compensation.

This analysis also suggests several lines of further inquiry. First, the diffusion of funders of not-for-profits might usefully be analogized to the concentration of ownership to examine how not-for-profit firms respond to the presence of large funders. One possible avenue for this would be to consider the role of government grants, or large block grants received from feeder organizations such as the United Way. Second, the effects of large liquid endowments on charitable behavior, analogous to the free cash flow problem encountered in for-profit corporations, is a relatively unexplored area. Third, the extent to which legacy effects alter private foundation payouts has not been examined. The payout philosophy of a foundation could be a function of whether or not the originating founder is still alive or a function of the influence of the founder's heirs on foundation payouts. Each of these questions could be analyzed within the framework of the governance environment articulated in this paper. These questions are left for future research.

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Table 1a  
Description of detection index measures

Variable	Description
Attorney General must be notified of any suits involving charities	Some states require the courts to notify the Attorney General of any legal action brought against a charity. One purpose of this requirement is that it permits the Attorney General to determine if there is any enforceable action it should undertake as well.
Attorney General must be notified of asset sales	Some states require charities to notify the Attorney General if it sells substantially all of its assets. This permits the Attorney General to enforce non-distribution rules on charitable liquidations.
Registration required	Most states exempt organizations that raise small amounts of donations (typically around \$10,000). Virtually all states exempt not-for-profit educational and medical organizations from registration as these types of organizations typically have their own state and frequently federal registration requirements.
Annual renewal of registration	For states that require registration the renewal period is generally either annually or never (once the charity is registered, it need never again register).
Fundraising organizations used	Some charities use professional fundraising firms, which raise donations and remit those donations, less a fee, to the charity.
Financial statement audit	Some states require the charity to undergo a financial statement audit by Certified Public Accountants
Financial statements included	In addition to the IRS 990 (which is required to be included in all state registrations), some states also require that financial statements be included.
Bylaws included	Are bylaws included as part of required reporting?
Articles of incorporation included	Are articles of incorporation included as part of required reporting?
Tax exempt determination letter included	The tax-exempt determination letter (the IRS 1023) is the formal document that exempts a charity from federal income taxation.
Other state specific information included	Some states have additional state-specific forms that must be included in the registration.

Source: Based on filing requirements as reported by the Charitable Organization Multi-State Filing Project. Further detail is available at [www.multistatefiling.org](http://www.multistatefiling.org). and Fremont-Smith (2004).

Table 1b  
Description of prosecution index measures

Variable	Description
Attorney General is situs for enforcement	Principal oversight authority over charities generally exists either with the Attorney General or some other state agency such as the Secretary of State.
Parties other than Attorney General have standing to bring legal actions	Some states give parties other than the Attorney General (such as officers or directors) the right to bring legal suit against a charity. This exposes the charity to additional sources of legal enforcement.
Not-for-profits legally distinguished from for-profit firms	Some states have a unique set of statutory laws that apply specifically to not-for-profits. One common element of these separate laws is that they typically act to prevent the distribution of charitable assets (i.e., residual claims) to officers, directors, or other specific individuals other than recipients specifically included in the organizations' by-laws.
Liquidating distributions restricted to other not-for-profits	Some states require that charitable liquidating distributions be paid to other registered charities only. This prevents charities from paying assets to corporate officers or directors or other non-charitable organizations.
Cy pres authority	Cy pres laws give the courts the power to modify the incorporated purpose of the organization if that organization's purpose became obsolete, wasteful, or otherwise impracticable.
Limitations on re-incorporating as a for-profit corporation	Some states prohibit or otherwise limit the extent to which charities can re-organize as for-profit corporations. This prevents charities from paying out their assets to new "shareholders", which could be officers or directors or non-charitable corporations.

Source: Fremont-Smith (2004).

Table 2a  
 Detection index measures

State	AG notice of suits	AG notice of asset sales	Register	Annual	Fundraiser	Audit	Financials	By-laws	Articles	1023	Addl.	<i>Total</i>
Alaska	0	0	1	1	1	1	1	0	0	0	0	5
Alabama	0	0	1	0	0	0	1	1	1	1	0	5
Arkansas	0	0	1	1	1	1	0	0	0	1	1	6
Arizona	0	0	1	1	1	0	0	0	0	0	0	3
California	1	1	1	1	0	0	1	1	1	1	0	8
Colorado	0	0	1	1	1	0	0	0	0	0	0	3
Connecticut	1	0	1	0	0	1	1	0	0	0	0	4
DC	0	0	1	1	1	0	1	1	1	1	0	7
Delaware	1	0	0	0	0	0	0	0	0	0	0	1
Florida	0	0	1	1	1	0	0	0	0	1	0	4
Georgia	1	1	1	1	0	1	1	0	0	1	1	8
Hawaii	0	0	0	0	0	0	0	0	0	0	0	0
Iowa	1	0	0	0	0	0	0	0	0	0	0	1
Idaho	1	0	0	0	0	0	0	0	0	0	0	1
Illinois	1	0	1	0	1	1	1	1	1	1	0	8
Indiana	1	0	0	0	0	0	0	0	0	0	0	1
Kansas	1	0	1	1	0	1	1	0	1	1	0	7
Kentucky	0	0	1	1	0	0	0	0	0	0	0	2
Louisiana	1	0	1	0	1	0	0	1	1	0	0	5
Massachusetts	1	1	1	0	0	1	1	1	1	1	0	8
Maryland	0	0	1	1	1	1	1	1	1	1	0	8
Maine	0	1	1	1	0	1	1	0	0	1	0	6
Michigan	1	0	1	1	1	1	1	1	1	1	0	9
Minnesota	1	1	1	1	1	1	0	0	1	1	0	8
Missouri	1	1	1	1	1	0	1	0	0	1	1	8
Mississippi	1	0	1	1	1	1	1	1	1	1	1	10
Montana	1	1	0	0	0	0	0	0	0	0	0	2
North Carolina	1	1	1	1	1	0	1	1	1	1	1	10
North Dakota	1	1	1	1	1	1	1	0	1	0	2	10
Nebraska	1	1	0	0	0	0	0	0	0	0	0	2
New Hampshire	0	0	1	1	0	0	1	1	1	1	1	7
New Jersey	1	0	1	1	1	1	1	1	1	1	0	9
New Mexico	0	0	1	0	1	1	1	0	1	1	0	6
Nevada	1	0	0	0	0	0	0	0	0	0	0	1
New York	1	1	1	0	0	1	1	1	1	1	0	8
Ohio	1	0	1	1	0	0	1	1	1	1	0	7
Oklahoma	1	0	1	1	1	0	1	0	0	0	0	5
Oregon	1	1	1	0	0	0	1	1	1	1	0	7

Table 2a  
 Detection index measures (continued)

State	AG notice of suits	AG notice of asset sales	Register	Annual	Fundraiser	Audit	Financials	By-laws	Articles	1023	Addl.	<i>Total</i>
Pennsylvania	1	0	1	1	0	1	1	1	1	1	0	8
Rhode Island	1	0	1	1	1	1	1	0	0	0	1	7
South Carolina	1	1	1	1	1	0	1	0	0	0	0	6
South Dakota	1	0	0	0	0	0	0	0	0	0	0	1
Tennessee	1	1	1	1	1	1	1	1	1	1	1	11
Texas	1	0	0	0	0	0	0	0	0	0	0	1
Utah	1	0	1	1	1	1	0	1	1	1	1	9
Virginia	1	0	1	1	1	1	1	1	1	1	0	9
Vermont	1	1	0	0	0	0	0	0	0	0	0	2
Washington	1	1	1	1	1	0	1	0	0	1	1	8
Wisconsin	1	0	1	1	0	1	1	1	1	1	0	8
West Virginia	0	0	1	0	1	1	0	0	0	1	1	5
Wyoming	1	1	0	0	0	0	0	0	0	0	0	2

Source: Based on filing requirements as reported by the Charitable Organization Multi-State Filing Project. Further detail is available at [www.multistatefiling.org](http://www.multistatefiling.org) and Fremont-Smith (2004).

Table 2b  
Prosecution index measures

State	AG is primary authority	Other party standing	Legally distinguished	Limitations on distributions	Cy pres	Limitations on Conversion	<i>Total</i>
Alaska	1	0	0	1	0	1	3
Alabama	1	1	0	1	1	1	5
Arkansas	1	0	1	1	1	0	4
Arizona	1	0	0	1	1	1	4
California	1	1	1	1	1	1	6
Colorado	0	1	0	1	1	1	4
Connecticut	0	1	0	1	1	1	4
DC	0	1	0	1	1	1	4
Delaware	0	1	0	0	1	1	3
Florida	0	1	0	1	1	1	4
Georgia	0	1	0	1	1	1	4
Hawaii	0	1	0	0	1	1	3
Iowa	0	0	0	1	1	1	3
Idaho	0	1	0	1	1	1	4
Illinois	1	1	0	1	1	1	5
Indiana	0	0	1	1	1	0	3
Kansas	1	0	0	1	1	1	4
Kentucky	1	0	0	1	1	1	4
Louisiana	0	0	0	1	1	1	3
Massachusetts	1	1	0	1	1	1	5
Maryland	1	1	0	1	1	1	5
Maine	0	0	1	1	1	0	3
Michigan	1	1	0	1	1	1	5
Minnesota	1	1	0	1	1	1	5
Missouri	1	1	1	1	1	0	5
Mississippi	1	1	0	0	1	1	4
Montana	0	1	1	1	1	0	4
North Carolina	1	1	0	1	1	1	5
North Dakota	1	1	0	1	1	1	5
Nebraska	0	1	1	1	1	0	4
New Hampshire	1	0	0	0	1	1	3
New Jersey	1	1	0	1	1	1	5
New Mexico	1	0	0	1	1	1	4
Nevada	0	1	0	1	1	1	4
New York	1	1	1	1	1	0	5
Ohio	1	1	0	1	1	1	5
Oklahoma	1	1	0	0	1	1	4
Oregon	1	1	1	1	1	1	6
Pennsylvania	1	1	0	1	1	1	5
Rhode Island	1	0	0	1	1	1	4
South Carolina	0	1	1	1	0	1	4
South Dakota	0	0	0	1	1	1	3
Tennessee	1	1	1	1	1	0	5
Texas	1	1	0	1	1	1	5
Utah	0	0	0	1	1	0	2
Virginia	1	0	0	1	1	1	4
Vermont	0	1	1	1	1	0	4
Washington	1	0	1	1	1	0	4
Wisconsin	1	1	0	1	1	1	5
West Virginia	1	0	0	1	1	0	3
Wyoming	0	1	1	1	1	0	4

Source: Fremont-Smith (2004).

Table 3  
Descriptive statistics for public charities and private foundations

Variables	Mean	Median	25%	75%	$\sigma$
Governance Variables:					
Combined Index	11.47	13	10	13	3.06
Detection Index	6.75	8	6	8	2.58
Prosecution Index	4.71	5	4	5	0.78
Charitable Not-for-profits:					
Charitable expenses / total expenses	0.79	0.84	0.73	0.90	0.20
Charitable expenses / total assets	0.74	0.10	0.28	0.71	1.43
Fundraising indicator	0.06	0.00	0.00	0.00	0.23
Officer compensation / total expenses	0.06	0.03	0.01	0.06	0.08
Total revenues (in \$millions)	13.26	4.18	1.11	11.43	47.79
Total assets (in \$millions)	29.09	11.29	2.48	25.77	86.46
Log of officer's compensation	12.05	11.22	12.10	12.98	1.38
Log of asset sales	2.94	0.00	0.00	7.31	4.89
Log of state population	15.84	15.39	15.91	16.49	0.94
Log of state disposable income per capita	3.00	2.86	3.02	3.15	0.21
Percentage changes in charitable expenditures	0.08	0.01	0.07	0.17	0.35
Percentage change in donations	-0.48	-0.31	0.07	0.40	2.91
Percentage change in program revenues	0.03	0.00	0.07	0.18	0.62
Percentage change in asset sales	-2.40	-0.39	0.30	0.86	13.61
Percentage change in state disposable income	0.06	0.04	0.05	0.07	0.04
Percentage change in state disposable income per capita	0.05	0.03	0.04	0.06	0.04
Percentage change in gross state product	0.06	0.04	0.06	0.07	0.05
Percentage change in state unemployment	-0.06	-0.15	-0.07	0.03	0.15
Private Foundations:					
Qualifying distributions / required distributions	3.16	1.13	0.97	1.65	9.58
Delayed distributions indicator	0.27	0.00	0.00	1.00	0.44
Officer compensation / total expenses	0.50	0.53	0.23	0.77	0.29
Total revenues (in \$millions)	23.98	1.76	0.28	11.68	232.87
Total assets (in \$millions)	3.16	1.13	0.97	1.65	9.58

Notes: The governance variables are described in Tables 1a and 1b. Charitable nonprofit data is from the IRS Statistics of Income files for the years 1987 to 2000. The Private foundation data is from the IRS Statistics of Income files for the years 1994 to 2000. Charitable expenses (line 13 of the IRS 990) are expenses directed towards accomplishing the charitable mission rather than for fundraising or administrative activities. Total expenses are line 17 of the IRS 990. Total assets are year end and are from line 59B of the IRS 990. The fundraising indicator is equal to one if the ratio of fundraising expenses (line 15 of the IRS 990) to donations received (line 1a of the IRS 990) is one or greater, and zero otherwise. Officers compensation is from line 25A of the IRS 990. Total revenues is from line 12 of the IRS 990. Asset sales (line 8 of the IRS 990) are the sales of property, plant, and equipment. State population, unemployment, product, and disposable income data are from the U.S. Census Bureau. Program

revenues (line 2 of the IRS 990) are those from the sales of goods and services. Qualifying distributions (line 6 part XII of the IRS 990-PF) are amounts paid by a foundation that qualify towards meeting the five percent payout minimum. Required distributions (line 7 of part XI of the IRS 990-PF) is five percent of total assets. The delayed distribution indicator variable is equal to one if the foundation makes at least 90 percent of its qualifying distributions in the following (rather than in the current) year and zero otherwise. Officer's compensation is from line 13 of the IRS 990-PF. Total expenses are from line 24 of the IRS 990-PF. Total revenues are from line 12 of the IRS 990-PF. Total assets are from line I of the IRS 990-PF.

Table 4  
Effects of governance on charitable organization operating efficiency

Dependent variable:	Ratio of charitable expense to total expense				Ratio of charitable expense to total assets				Fundraising indicator variable															
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)												
Constant	0.647 (62.90)	0.658 (78.87)	0.641 (45.86)	0.646 (46.39)	0.367 (11.16)	0.389 (15.36)	0.288 (5.65)	0.341 (6.62)	-17.29 (-21.59)	-17.55 (-22.92)	-17.32 (-16.76)	-16.08 (-17.17)												
Combined index	0.003 (4.30)				0.005 (2.06)				-0.09 (-2.74)															
Detection index	0.004 (4.13)				0.003 (3.02)				0.005 (1.72)				0.001 (0.35)				-0.114 (-2.95)				-0.187 (-1.86)			
Prosecution index	0.009 (3.30)				0.003 (1.12)				0.290 (2.76)				0.019 (1.49)				-0.187 (-1.34)				-0.247 (-1.61)			
No. of observations	51,756	51,756	51,756	51,756	51,756	51,756	51,756	51,756	51,756	24,050	24,050	24,050	24,050											
R <sup>2</sup>	0.06	0.06	0.06	0.06	0.14	0.14	0.14	0.15	0.45	0.44	0.44	0.45												

Notes: All specifications are OLS analyses with standard errors corrected for clustering at the firm level. The sample includes all public charities included in the IRS Statistics of Income files for the years 1987 to 2000. There are 7,028 unique observations in the year 2000 sample. The dependent variable in the first four columns is the ratio of charitable expenses (line 13 of the IRS 990) to total expenses (line 17 of the IRS 990). The dependent variable in the second four columns is the ratio of charitable expenses to total year end assets (line 59B of the IRS 990). The dependent variable in the final four columns is a dummy variable set equal to one if the ratio of fundraising expenses (line 15 of the IRS 990) to donations received (line 1d of the IRS 990) is one or greater, and zero otherwise. All regression employ industry effects, size controls (total assets) and revenue controls (total revenues). Models are restricted to observations with total donations greater than \$10,000. Governance variables are described in Tables 1a and 1b.



Table 5  
Effects of governance on the ratio of charitable organization officers' compensation to total expenses

	(1)	(2)	(3)	(4)
Constant	0.064 (21.77)	0.062 (25.84)	0.062 (15.11)	0.064 (14.39)
Combined index	-0.001 (-2.72)			
Detection index		-0.001 (-2.95)		-0.001 (-2.57)
Prosecution index			-0.001 (-1.27)	0.001 (0.52)
No. of observations	26,971	26,971	26,971	26,971
R <sup>2</sup>	0.09	0.09	0.09	0.09

Notes: All specifications are OLS analyses with standard errors corrected for clustering at the firm level. The sample includes all public charities included in the IRS Statistics of Income files for the years 1987 to 2000. There are 7,028 unique observations in the year 2000 sample. The dependent variable is the ratio of officer's compensation (line 25 of the IRS 990) to total expenses (line 17 of the IRS 990). All regression employ industry effects, size controls (total assets) and revenue controls (total revenues). Models are restricted to observations with total donations greater than \$10,000 and non-zero officer's compensation. Governance variables are described in Tables 1a and 1b.

Table 6  
Effects of governance on foundation payouts

Dependent Variable:	Ratio of qualifying distributions to required amount				Delayed payout indicator			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Constant	1.602 (11.06)	1.728 (17.68)	1.625 (6.91)	1.669 (7.18)	-1.145 (-13.90)	-1.310 (-21.84)	-0.809 (6.18)	-1.111 (-7.98)
Combined index	0.035 (2.81)				-0.032 (-4.42)			
Detection index		0.041 (2.94)		0.039 (2.82)		-0.032 (-3.74)		-0.027 (-2.64)
Prosecution index			0.080 (1.62)	0.016 (0.32)			-0.149 (-5.35)	-0.048 (-1.40)
No. of observations	38,411	38,411	38,411	38,411	28,956	28,956	28,956	28,956
R <sup>2</sup>	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01

Notes: All specifications are OLS analyses with standard errors corrected for clustering at the firm level. The sample includes all private foundations included in the IRS Statistics of Income files for the years 1994 to 2000. There were 7,513 unique observations in the 2000 database. The dependent variable in the first four columns is the ratio of qualifying distributions (line 6 part XII of the IRS 990-PF), which are amounts paid by a foundation that qualify towards meeting the five percent payout minimum, to the required amount (line 7 of part XI of the IRS 990-PF). The dependent variable in the second four columns is a delayed distribution indicator variable is equal to one if the foundation makes at least 90 percent of its qualifying distributions in the following (rather than in the current) year and zero otherwise. Total revenues (line 12 of the IRS 990-PF) and total assets (line I of the IRS 990-PF) are included as control variables in all models. Models are restricted to observations with total donations greater than \$10,000. Governance variables are described in Tables 1a and 1b.

Table 7  
Effects of governance on the ratio of foundation officers' compensation to total expenses

	(1)	(2)	(3)	(4)
Constant	0.537 (51.29)	0.514 (68.97)	0.663 (38.78)	0.657 (37.70)
Combined index	-0.002 (-2.46)			
Detection index		-0.001 (-0.30)		0.001 (0.46)
Prosecution index			-0.032 (-8.81)	-0.031 (-7.34)
No. of observations	33,516	33,516	33,516	33,516
R <sup>2</sup>	0.02	0.02	0.03	0.03

Notes: All specifications are OLS analyses with standard errors corrected for clustering at the firm level. The sample includes all private foundations included in the IRS Statistics of Income files for the years 1994 to 2000. There were 7,513 unique observations in the 2000 database. The dependent variable is the ratio of officer's compensation (line 13 of the IRS 990-PF) to total expenses (line 24 of the IRS 990-PF). Total revenues (line 12 of the IRS 990-PF) and total assets (line I of the IRS 990-PF) are included as control variables in all models. Models are restricted to observations with total donations greater than \$10,000 and non-zero officer's compensation. Governance variables are described in Tables 1a and 1b.

Table 8  
Effects of instrumented combined governance on various nonprofit behaviors

Dependent Variable:	(1) Ratio of charitable expense to total expense	(2) Ratio of charitable expense to total assets	(3) Fundraising indicator variable	(4) Ratio of nonprofit officers' compensation to total expenses	(5) Ratio of qualifying distributions to distributable amount	(6) Delayed payout indicator	(7) Ratio of foundation officers' compensation to total expenses
Constant	0.619 (39.08)	0.314 (5.30)	-16.80 (-15.84)	0.067 (14.13)	1.206 (4.08)	-0.201 (-1.26)	0.602 (29.29)
Combined Index	0.005 (4.28)	0.009 (1.94)	-0.128 (-1.95)	-0.001 (-1.93)	0.070 (3.16)	-0.117 (-8.17)	-0.008 (-4.41)
No. of Observations	51,756	51,756	24,050	26,971	38,411	28,956	33,516
R <sup>2</sup>	0.06	0.14	0.44	0.09	0.01	0.01	0.03

Notes: All specifications are OLS analyses with standard errors corrected for clustering at the firm level. The sample includes all public charities included in the IRS Statistics of Income files for the years 1987 to 2000. There are 7,028 (7,513) unique observations in the year 2000 sample of public charities (foundations). The governance variables (which are described in Tables 1a and 1b) are the fitted values from a first stage regression run at the state level. The first stage regression used 51 observations (50 states plus the District of Columbia) and regressed the governance variables on state population, state domestic product, and per-capita state income. Results are robust to various combinations of these regressors both in levels and per-capita. The first dependent variable is the ratio of charitable expenses (line 13 of the IRS 990) to total expenses (line 17 of the IRS 990). The second dependent variable is the ratio of charitable expenses to total year end assets (line 59B of the IRS 990). The third dependent variable is a dummy variable set equal to one if the ratio of fundraising expenses (line 15 of the IRS 990) to donations received (line 1d of the IRS 990) is one or greater, and zero otherwise. The fourth dependent variable is the ratio of officer's compensation (line 25 of the IRS 990) to total expenses (line 17 of the IRS 990). The fifth dependent variable is the ratio of qualifying distributions (line 6 part XII of the IRS 990-PF), which are amounts paid by a foundation that qualify towards meeting the five percent payout minimum, to the required amount (line 7 of part XI of the IRS 990-PF). The sixth dependent variable is a delayed distribution indicator variable is equal to one if the foundation makes at least 90 percent of its qualifying distributions in the following (rather than in the current) year and zero otherwise. The seventh dependent variable is the ratio of foundation officer's compensation (line 13 of the IRS 990-PF) to total expenses (line 24 of the IRS 990-PF). All regression employ industry effects (except for the foundation models 5, 6, and 7), size controls (total assets) and revenue controls (total revenues). Models are restricted to observations with total donations greater than \$10,000.

Table 9  
Effects of governance on the relationship between sales of property, plant and equipment and officer's compensation

	(1)	(2)	(3)
Constant	6.894 (22.82)	6.877 (22.21)	6.936 (22.53)
Asset sales	0.043 (15.02)	0.047 (13.61)	0.030 (1.67)
Notice to attorney general of substantial asset sales indicator		0.011 (0.29)	
Interaction of asset sales and attorney general notification		-0.012 (-1.94)	
Cy pres			-0.049 (-0.41)
Interaction of asset sales and cy-pres			0.013 (0.69)
No. of Observations	28,126	28,126	28,126
R <sup>2</sup>	0.12	0.12	0.12

Notes: All specifications are OLS analyses with standard errors corrected for clustering at the firm level. The sample includes all public charities included in the IRS Statistics of Income files for the years 1987 to 2000. There are 7,028 unique observations in the year 2000 sample. The dependent variable is the log of nonprofit officer's compensation (line 25 of the IRS 990). Asset sales (line 8 of the IRS 990) are the log of sales of property, plant, and equipment. The notice to the attorney general of substantial asset sales is a governance mechanism employed by some states that is specifically intended to limit a manager's ability to inappropriately distribute a nonprofit's assets. Cy pres laws give the courts certain administrative powers as explained in table 1a. Cy pres administrative powers are not intended to limit inappropriate asset distribution. The sample is limited to observations with positive non-zero values for officer's compensation. So that observations with zero values could be used (other than officer's compensation), they were reset to a value of one prior to logging. All regression employ industry effects, size controls (log total assets) and revenue controls (log total revenues). The governance variables are from Freemont-Smith (2004). Models are restricted to observations with total donations greater than \$10,000.

Table 10  
Effects of governance on the sensitivity of charitable expenses to charity-specific resources

	(1)	(2)	(3)	(4)	(5)
Intercept	0.002 (2.66)	0.064 (5.25)	0.021 (1.11)	0.048 (3.08)	0.048 (3.08)
Detection indicator variable					-0.000 (-0.07)
Percentage change in donations	0.002 (3.06)			0.002 (2.54)	0.002 (2.54)
Percentage change in donations * Detection indicator	0.001 (0.47)			0.006 (2.66)	0.006 (2.61)
Percentage change in program revenue		0.135 (45.09)		0.119 (28.98)	0.119 (28.96)
Percentage change in program revenue * Detection indicator		-0.025 (-2.74)		-0.041 (-3.60)	-0.041 (-3.59)
Percentage change in asset sales revenue			0.000 (0.93)	0.000 (0.34)	0.000 (0.35)
Percentage change in asset sales revenue * Detection indicator			0.001 (1.25)	0.000 (0.37)	0.000 (0.35)
No. of Observations	23,436	21,764	11,157	9,257	9,257
R-Squared	0.01	0.10	0.01	0.09	0.09

Notes: All specifications are OLS regressions. The sample includes all public charities included in the IRS Statistics of Income files for the years 1987 to 2000. There are 7,028 unique observations in the year 2000 sample. The dependent variable is the annual percentage change in charitable expenses (line 13 of the IRS 990). The Detection indicator variable is equal to 1 if the Detection Index is greater than 5 (its median value) and zero otherwise. Donations (line 1a of the IRS 990) are the total donations from individuals and corporations. Program revenues (line 2 of the IRS 990) are those from the sales of products and services. Asset sales revenues (line 8d of the IRS 990) are from the sales of assets including investments and equipment. All regressions employ industry effects and yearly indicator variables. T-statistics based on robust standard errors are underneath the parameter estimates. The sample is limited to observations with donations over \$10,000 and that are classified as human service organizations by the National Taxonomy of Exempt Entities as established by the IRS.

Table 11  
Effects of Governance on the Sensitivity of Charitable Expenses to Local Economic Shocks

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Constant	0.078 (8.84)	0.077 (8.72)	0.086 (9.72)	0.085 (9.62)	0.093 (11.64)	0.093 (11.59)	0.100 (12.64)	0.099 (12.58)
Percentage change in disposable income	0.409 (5.37)	0.434 (5.63)						
Percentage change in disposable income * Detection indicator		-0.119 (-2.05)						
Percentage change in per-capita disposable income			0.309 (3.48)	0.337 (3.74)				
Percentage change in per-capita disposable income * Detection indicator				-0.136 (-1.94)				
Percentage change in gross state product					0.225 (4.14)	0.239 (4.35)		
Percentage change in gross state product * Detection indicator						-0.101 (-1.73)		
Percentage change in state unemployment level							-0.014 (-1.25)	-0.019 (-1.65)
Percentage change in state unemployment level * Detection indicator								0.028 (1.32)
No. of Observations	25,581	25,581	25,581	25,581	25,581	25,581	24,280	24,280
R-Squared	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01

Notes: All specifications are OLS regressions. The sample includes all public charities included in the IRS Statistics of Income files for the years 1987 to 2000. There are 7,028 unique observations in the year 2000 sample. The dependent variable is the annual percentage change in charitable expenses (line 13 of the IRS 990). The Detection indicator variable is equal to 1 if the Detection Index is greater than 5 (its median value) and zero otherwise. State population, unemployment, and disposable income data are from the U.S. Census Bureau. All regressions employ industry effects and yearly indicator variables. T-statistics based on robust standard errors are underneath the parameter estimates. The sample is limited to observations with donations over \$10,000 and that are classified as human service organizations by the National Taxonomy of Exempt Entities as established by the IRS.