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The Causes and Consequences of Internal Control Problems in Nonprofit Organizations

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ABSTRACT: This study examines the causes and consequences of internal control deficiencies in the nonprofit sector using a sample of 27,495 public charities from 1999 to 2007. We first document that the likelihood of reporting an internal control problem increases for nonprofit organizations that are in poor financial health, growing, more complex, and/or smaller. We then present evidence that the disclosure of weak internal controls over financial reporting is negatively associated with subsequent donor support received after controlling for the current level of donor support and other factors influencing donations. We likewise report a negative association between internal control problems and subsequent government grants. Our results suggest that donors and government agencies, important sources of capital for nonprofit organizations, react either directly or indirectly to internal control information.

Keywords: *internal control; nonprofit organizations; donors; government grants; Sarbanes-Oxley.*

Data Availability: *Data are available from sources cited in the text.*

I. INTRODUCTION

The nonprofit sector represents a sizable slice of the United States economy. Nonprofit organizations had over $3.4 trillion in assets under their control and charitable giving to these organizations reached an estimated $295 billion, or 2.2 percent of gross domestic product, in 2006 (Wing et al. 2008). Several recent financial scandals have highlighted the sig-

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nificant fiduciary responsibilities of nonprofit managers as well as the relatively weak regulatory oversight of the nonprofit sector.[1] As a result, lawmakers have increased calls for nonprofit organizations to adopt more rigorous corporate governance practices, including improved internal control practices.

Internal control audits are not new to the nonprofit sector. Nonprofit organizations that receive federal funding have been subject to reviews of internal control since 1990. We make use of this unique setting to investigate the causes of internal control deficiencies and perhaps, more interestingly, the consequences of internal control reporting for these organizations. Specifically, we examine the characteristics of public charities that report internal control problems and the effect of such problems on subsequent contributions and government grants received.

Internal control is broadly defined as the process put in place by management to provide reasonable assurance regarding the achievement of effective and efficient operations, reliable financial reporting, and compliance with laws and regulations. Thus, results of internal control audits provide information on the level of risk that a nonprofit organization is not effectively carrying out its mission-related activities and fiduciary responsibilities. For this study, we define an internal control problem as the existence of a reportable condition over financial reporting or over compliance with federal program requirements.

We first model the probability of disclosing an internal control problem as a function of salient characteristics of nonprofit organizations using a sample of 27,495 public charities from 1999 to 2007. Our results generally suggest that nonprofit organizations that are more complex, financially distressed, smaller, and/or growing rapidly are more likely to disclose an internal control problem, consistent with prior research (Ge and McVay 2005; Keating et al. 2005; Doyle et al. 2007a; Ashbaugh-Skaife et al. 2007).

Next, we consider the consequences of disclosure of an internal control problem for nonprofit organizations. Previous research into the consequences of an internal control deficiency focuses predominately on for-profit firms' cost of equity capital, either directly or indirectly through the market's response to the announcement of an internal control problem. The results from this research are mixed. Ashbaugh-Skaife et al. (2009) report that the disclosure of an internal control problem is associated with a higher cost of capital. However, using a different specification, Ogneva et al. (2007) find no relation between internal control deficiencies and the cost of equity capital. Furthermore, there is mixed evidence on the market response to internal control problems, with Section 302 disclosures generating negative abnormal returns but Section 404 disclosures having no effect (Beneish et al. 2008; Hammersley et al. 2008).

Nonprofit organizations do not issue shares and their missions are not to maximize profit. While nonprofit managers are not accountable to shareholders, they are accountable to donors and grantors who provide an important source of capital. These donors and grantors do not have limitless resources and, therefore, nonprofit organizations must compete for funding. If an organization reports an internal control problem, donors could choose to support another organization where, presumably, the capital is used more efficiently. Therefore, disclosure of an internal control deficiency could result in lower subsequent contributions. Alternatively, unlike shareholders, donors do not ultimately benefit from a nonprofit organization's activities and, thus, are less likely to monitor the organization (Fama and Jensen 1983). Some donors may be unaware of the problem or may not care about the problem and, therefore, the disclosure of an internal control deficiency may be unrelated to subsequent contributions.

[1] These scandals include the conviction of the CEO of the United Way of America for fraud; the Ponzi scheme perpetuated by the Baptist Foundation of Arizona, which an audit by Arthur Anderson failed to detect, that resulted in the largest nonprofit bankruptcy ever; the embezzlement of funds from ACORN by the founder's brother; and the lavish spending of university money by the president of Oral Roberts University, to name a few.

We examine whether the disclosure of an internal control problem is associated with lower contributions received subsequently from donors using the Weisbrod and Dominguez (1986) model, which captures the responsiveness of donations to various economic factors. We use a two-stage estimation procedure to control for endogeneity between internal control problems and contributions received. Our results indicate that reportable conditions over financial reporting are negatively associated with future public support, even after controlling for the current level of public support and other drivers of contributions. Organizations that disclose internal control problems over financial reporting receive fewer contributions from individuals, corporations, and foundations in the subsequent year.

Next, we investigate the effect of disclosing internal controls deficiencies on subsequent contributions received from local, state, and federal government agencies. Because audits are mandated by the federal government for recipients of federal funding and the results of these audits are filed with the Federal Audit Clearinghouse, governmental agencies likely use the information contained in the audit reports as one factor in funding decisions. Our results are consistent with expectations. We report negative associations between reportable conditions over both financial reporting and federal program compliance and subsequent government contributions, after controlling for prior-year government contributions and political and economic determinants of governmental funding allocations.

This study informs the debate over whether public charities should adopt more rigorous corporate governance practices, particularly in relation to internal control. Recently, policymakers have focused attention on the perceived lack of accountability and transparency by charitable organizations. This increased scrutiny is not necessarily unwarranted due to the recent financial scandals and the size of the nonprofit sector. Recognizing that they must maintain the public's trust, charities are working together to convince policymakers that they can address their shortcomings without onerous regulations.[2] However, the nonprofit sector has not focused much attention on the particular issue of internal control. Opponents of increased regulation argue that most donors do not use detailed financial information to make giving decisions and that nonprofits do not have the funds to comply with burdensome rules (e.g., Irvin 2005; Mulligan 2007). Our evidence suggests that the internal control information currently produced by a subset of organizations in the nonprofit sector does affect, either directly or indirectly, both donors' and government agencies' funding decisions.

The results of this study should also interest nonprofit managers who make decisions about how to allocate scarce resources. During difficult economic times, when the demand for services is skyrocketing, it is essential that nonprofit organizations continue to attract donors and grantors. These organizations face tremendous pressure to focus resources on mission-related activities. However, Hager et al. (2004) argue that pressure from donors and watchdog groups to maximize mission-related spending and limit overhead costs to artificially low levels is detrimental in the long-run. Our results are consistent with the Hager et al. (2004) argument that underinvestment in administrative expenses (e.g., internal controls) can ultimately have negative consequences on mission-related activities. In particular, our evidence suggests that improving internal controls not only reduces the risk of monetary loss resulting from fraud or accounting error, but may also increase the organization's ability to deliver services by attracting additional funding.

Furthermore, this study contributes to the literature on the consequences of internal control reporting as it provides a more direct measure of the response to internal control problems. Prior

[2] The most prominent example of self-regulation is the National Panel on the Nonprofit Sector convened by the Independent Sector. This panel proposed extensive changes in nonprofit governance and oversight in a June 2005 report to Congress, "Strengthening Transparency, Governance, and Accountability of Charitable Organizations."

research examines the impact on the cost of equity capital, which could be considered a less direct measure of stakeholder response than donor contributions and government grants, in part because it is inferred from market models under some potentially strong assumptions. In this study, we measure stakeholder response to internal control problems by investigating the change in donor and government support.

Finally, understanding the effects of disclosure of internal control problems is important because auditors of nonprofit organizations adopted SAS No. 112, *Communicating Internal Control Matters Identified in an Audit*, in 2007 and its successor SAS No. 115 of the same title in 2009. These standards define the types of internal control deficiencies, provide detailed guidance on evaluating the severity of internal control deficiencies, and require auditors to communicate in writing to management and those charged with governance any deficiencies noted in an audit (*Professional Standards*, AICPA 2010, vol. 1, AU §352.01). As a result, these standards may influence public perception of nonprofit organizations. For example, PricewaterhouseCoopers (2006, 2) notes, "If an auditor identifies an internal control issue, it must be reported to trustees, granting agencies, and other regulators under new definitions and in a more public manner than before and, as a result, control deficiencies could be exposed to greater scrutiny by stakeholders." Thus, consequences from reporting an internal control deficiency during the sample period are likely to be amplified under today's standards.

The next section outlines current nonprofit regulatory oversight, with an emphasis on internal control reporting. Section III presents our hypotheses and related empirical models. Section IV describes the sample selection procedures and data. Section V reports our results. Section VI concludes.

II. BACKGROUND

The nonprofit sector is growing rapidly in size and complexity. Approximately 1.4 million nonprofit organizations operate in the United States today (Wing et al. 2008). These organizations vary significantly in terms of mission, size, and primary revenue source. The Internal Revenue Code defines over 25 categories of nonprofits, such as human service organizations, schools, health care providers, cultural institutions, community development corporations, affordable housing, and research laboratories. Nonprofits exist to provide a public benefit, and, therefore, receive preferential tax treatment and other regulatory privileges. Most nonprofit organizations are either public charities or private charitable foundations organized under Section 501(c)(3) of the Internal Revenue Code.[3] Brown (2007) reports that, since 1997, the IRS has added to its master-file on average 39,465 exempt organizations per year, or 108 exempt organizations per day.

Regulatory oversight has not kept pace with the growth in the number of nonprofit organizations. Currently there are two regulatory mechanisms by which most nonprofit organizations are monitored: (1) the IRS via the organization's tax return (Form 990), which is required for all organizations receiving at least $25,000 of public support, and (2) the nonprofit laws in the state of incorporation, which vary widely from state to state. These mechanisms have been criticized as insufficient to ensure that nonprofits meet their fiduciary obligations (Hansmann 1981; Atkinson 1998; Fishman 2003; Reiser 2005). In fact, the IRS acknowledges a lack of enforcement presence (Brown 2007). Other monitoring mechanisms do exist but vary by the type of organization and

[3] Private foundations generally receive funding from a single source (i.e., a family or corporation), earn significant investment income, and make grants to other organizations. Public charities, as defined in Section 509(a), receive substantial support from the general public or government and actively conduct charitable operations. Private foundations are subject to various excise taxes and restrictions in order to ensure that they are using their resources for charitable purposes. Congress did not impose the same excise taxes and restrictions on public charities, presumably because donors hold public charities accountable.

type of funding sources (e.g., watchdog groups like the Better Business Bureau, program service contracts like Medicare, periodic program evaluations required by foundation and corporate donors, and state telemarketing reporting).

Congress passed the Sarbanes-Oxley Act of 2002 in an attempt to improve the accountability and oversight of public companies. Most of the provisions of the Sarbanes-Oxley Act do not apply to nonprofit organizations and no federal equivalent of the Act currently exists for nonprofits.[4] Nevertheless, Sarbanes-Oxley influences attitudes about corporate governance in the nonprofit community (Ostrower 2007; Iyer and Watkins 2008). Policymakers at both the state and federal levels are considering various proposals aimed at enhancing nonprofit accountability (Fremont-Smith 2007). For example, Senator Charles Grassley (2006, 26), then Chairman of the Senate Finance committee, said:

> Just as Congress has acted in the public interest to protect shareholders and workers from corporate mismanagement, so too must Congress demand transparency, accountability, and good governance from the nonprofit sector... Tightening rules and regulations governing the nonprofit sector will help repair the breach of trust that threatens to tarnish even the most reputable charities in America.

One of the main elements of Sarbanes-Oxley is management's responsibility for internal controls. Section 302 of the Act requires that chief executive and chief financial officers evaluate the design and effectiveness of internal controls on a quarterly basis and report an overall conclusion about the effectiveness of internal controls. Section 404 of the Act requires an annual audit of management's evaluation of internal controls and of the effectiveness of internal controls. Even though public charities are not subject to either Section 302 or Section 404 of Sarbanes-Oxley, similar requirements have been considered for the nonprofit sector. For example, the attorneys general in the states of New York and Massachusetts have proposed bills with provisions similar to the requirements in Section 302.

Some charities already are required to undergo internal control evaluations annually because they receive federal funding. Specifically, all organizations with federal expenditures greater than $500,000 ($300,000 for fiscal years ending before January 1, 2004) must have an audit conducted in accordance with Office of Management and Budget (OMB) Circular A-133 "Audits of States, Local Governments and Non-Profit Organizations."[5] The results of these audits (Form SF-SAC) must be filed within nine months of the end of the fiscal year with the Federal Audit Clearinghouse and are publicly available.

The objective of an A-133 audit, also called a single audit, is to provide assurance that an organization receiving grants from the federal government is using the funds appropriately and is complying with all federal regulations (AICPA 2009). As part of an A-133 audit, auditors issue opinions on both the financial statements and on compliance with the provisions of the federal contracts or grants. In addition, auditors report on internal control over both financial reporting and federal program compliance.[6] The reports on internal control identify whether there are any reportable conditions and, if so, whether any reportable conditions are material weaknesses.[7]

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[4] The two provisions of SOX that do explicitly apply to nonprofit organizations are whistle blower protection and document destruction policies.

[5] OMB Circular A-133 was issued in 1990 under the name "Audits of Institutions of Higher Education and Other Non-Profit Institutions" and revised in 1996, 2003, and 2007. Our sample includes observations before and after the 2003 revision. The 2003 revision includes raising the audit threshold to $500,000 and technical changes related to the determination of cognizant agency (Federal Register 68 (June 27, 2003): 38401-38402). We include year controls in our empirical tests to control for any differences across time.

[6] Technically, auditors must test compliance requirements for "major programs." The determination of major programs takes into account risk, size, and oversight by a federal agency. See AICPA (2003) for more details.

[7] Reportable conditions involve deficiencies in the design or operation of internal controls that could adversely affect the organization's financial reporting or its ability to administer its federal programs. Material weaknesses are reportable

Circular A-133 establishes certain conditions for determining whether a nonprofit organization qualifies as a low-risk auditee. This determination is based on numerous factors including prior-year audit results, third-party references, the level of oversight of the granting federal agency, and the inherent risk of the federal programs involved. To be considered low-risk, an organization must have been audited annually for the past two years and these prior audits must have resulted in clean opinions, no internal control deficiencies, and no audit findings. The risk determination affects the amount of auditing that is required to be performed under OMB A-133. For organizations not deemed low-risk, auditors are required to perform more testing and, thus, are more likely to uncover internal control problems.

The assessment of internal controls required by Circular A-133 is not identical to the assessment of internal controls required by Sarbanes-Oxley. The A-133 audit is not overseen by the PCAOB, but rather is performed in accordance with *Government Auditing Standards* issued by the GAO. As noted above, the scope of an A-133 audit goes beyond financial statements to include the requirements of federal grants or contracts. Although the scope is wider, A-133 audits are generally less stringent and less costly. Despite the differences from public company audits, A-133 audits do provide information on the level of risk that a nonprofit organization is not effectively carrying out its mission-related activities and fiduciary responsibilities.

III. HYPOTHESIS DEVELOPMENT AND EMPIRICAL MODELS

Determinants of Internal Control Deficiencies

We first examine the determinants of internal control deficiencies. A significant body of research examines the characteristics of publicly traded companies disclosing internal control problems. Ge and McVay (2005) find that firms disclosing material weaknesses are more complex, smaller, and less profitable than firms not disclosing material weaknesses. Doyle et al. (2007a) add that firms disclosing material weaknesses are younger, growing rapidly, or undergoing restructuring. Likewise, Ashbaugh-Skaife et al. (2007) find that firms reporting internal control deficiencies have more complex operations, greater exposure to accounting risk, fewer resources to invest in internal control, and a higher likelihood of using a dominant auditor.

Despite the extensive academic literature on internal controls in publicly traded companies, there is little research on internal control in the nonprofit sector. Keating et al. (2005) examine A-133 audit results from 1997 to 1999 using univariate tests. They find that smaller organizations and organizations not classified as low-risk (i.e., new grantees, organizations with prior problems) disclose more internal control problems. They also report that organizations with audits performed by national, large regional, and specialist firms report fewer internal control problems, which differs from the Ashbaugh-Skaife et al. (2007) auditor quality results for public companies. Keating et al. (2005) suggest that small nonprofit organizations, which are more likely to have internal control problems, select small audit firms.

We extend Keating et al. (2005) by examining a more comprehensive set of factors that may be associated with reporting internal control deficiencies in nonprofit organizations. Specifically, we model the likelihood of reporting internal control problems as a function of several internal control risk factors and audit detection variables. As discussed below, we expect organizations that are more complex, in poor financial health, smaller, new to federal funding, and/or growing rapidly to disclose more internal control deficiencies.

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conditions in which the design or operation of internal controls does not reduce to a relatively low level the risk of material noncompliance with applicable grant requirements or with GAAP caused by error or fraud that may occur and not be detected in a timely manner (AICPA 2003, 104). OMB revised Circular A-133 in June 2007 to be consistent with SAS No. 112, which replaced the "reportable condition" concept with "significant deficiency." Because our sample period pre-dates SAS No. 112, we use the term reportable condition.

Public charities with diverse operations face challenges instituting internal controls across their various initiatives and divisions. We measure organizational complexity using the number of revenue sources (public support, government support, and/or program service revenue.) Organizations that receive funding from only one source generally engage in fewer types of charitable programs than organizations that receive funding from several sources. We predict that organizations with more sources of funding (*COMPLEXITY*) are more likely to have a variety of operations and, therefore, more likely to report an internal control problem.

Nonprofit organizations in poor financial health are less likely to have resources to invest in establishing strong internal controls. We use the existence of a going-concern paragraph in the opinion on the financial statements (*GOINGCONCERNRISK*) as a proxy for poor financial health. A going-concern paragraph indicates that the auditor has substantial doubt whether the organization can meet its obligations as they become due. We expect that organizations with a going-concern paragraph report more internal control deficiencies. Consistent with studies of public companies that use the existence of losses to measure financial health, we also include an indicator of whether the organization's revenues exceed its expenses (*SURPLUS*). We expect that charities with a surplus have fewer internal control problems.

Larger organizations (*SIZE*), as measured by total assets, have more resources and experience to draw on when implementing internal controls. For example, Greenlee et al. (2007) report that older and larger nonprofit organizations are more likely to have an internal audit function in place. Thus, we expect that smaller organizations disclose more internal control problems. Internal controls should change in response to organizational change as existing controls may be irrelevant or inefficient and new controls may be required. Rapidly growing organizations are often unable to adequately assess and update internal controls at the same pace at which organizational expansion occurs. We predict that change in size (*GROWTH*) is positively associated with the existence of internal control deficiencies. Similarly, organizations that receive federal funding for the first time (*NEWGRANTEE*) are less likely to have all of the internal controls systems in place to meet federal requirements.

We also investigate the effect of auditor type on the probability of reporting an internal control problem but do not make a prediction. On one hand, dominant audit firms (*BIG4*, *REGIONAL*, and *SPECIALIST*) have more training, experience, and exposure to litigation risk, all of which imply that these audit firms are more likely to discover internal control deficiencies. On the other hand, dominant audit firms may only contract with prestigious nonprofit organizations that are inherently less risky. This self-selection suggests that dominant audit firms are less likely to discover internal control problems at their nonprofit clients. In fact, Kitching (2009) finds evidence that donors behave as if dominant auditors are a signal of credibility.

As noted in Section II, auditors are required to determine whether a nonprofit organization qualifies as a low-risk auditee under OMB A-133. Because they are inherently less risky and because there is less testing involved, the likelihood of detecting an internal control problem is lower for low-risk auditees than it is for other auditees. Thus, we include an indicator variable if the organization is not deemed low-risk (*RISK*) as an important control in our model.

Based on the above discussion, we estimate the probability of disclosing an internal control deficiency as a function of organizational characteristics and audit detection variables as follows:

$$\begin{aligned} Prob(ICD) = {} & \beta_0 + \beta_1 COMPLEXITY + \beta_2 GOINGCONCERNRISK + \beta_3 SURPLUS + \beta_4 lnSIZE \\ & + \beta_5 GROWTH + \beta_6 RISK + \beta_7 NEWGRANTEE + \beta_8 BIG4 + \beta_9 REGIONAL \\ & + \beta_{10} SPECIALIST + \Sigma \gamma_i INDUSTRY + \Sigma \delta_i YEAR. \end{aligned} \quad (1)$$

Overall, we expect that the likelihood of reporting an internal control problem increases as a function of *COMPLEXITY*, *GOINGCONCERNRISK*, *GROWTH*, *RISK*, and *NEWGRANTEE* and

decreases as a function of *SURPLUS* and *SIZE*. The empirical specification also includes controls for industry and year.

Effect of Internal Control Deficiencies

We next examine the consequences of internal control deficiencies. Prior studies of public companies document that internal control problems are associated with equity market concerns. Specifically, firms reporting an internal control deficiency under Section 302 experience stock price declines, with the most negative returns for material weakness disclosures (Hammersley et al. 2008; Beneish et al. 2008). Evidence on the impact of internal control problems on the cost of capital for public companies is mixed. Ashbaugh-Skaife et al. (2009) find that internal control problems are associated with a higher cost of equity, while Ogneva et al. (2007), using a different specification, do not find an association. A limitation of these studies of public companies is that the cost of equity is a less direct measure of stakeholders' reactions, as it is inferred from a market model under certain strong assumptions.

There has been little consideration given to understanding the effect of internal control deficiencies in the nonprofit sector. Internal controls are established to provide assurance that operations are running efficiently and that financial reporting is reliable. We expect that nonprofit organizations with internal control problems have lower operating efficiency and produce lower quality financial reports, on average. Thus, internal control problems can influence directly or indirectly the amount of funds available to achieve the organization's mission. The source of funding takes many forms depending on the type of organization, including donor contributions, government grants, program service revenue, and/or debt financing. As discussed below, we examine the impact of internal control problems on donations (*PUBLIC SUPPORT*) and government grants (*GOV CONTRIBUTIONS*). Unlike the indirect cost of capital measure for public companies noted above, contributions by donors and government agencies to nonprofit organizations provide direct evidence of stakeholder reactions to internal control problems.

Public Support

Public support includes gifts received from individuals, trusts and estates, corporations, and foundations (*DIRECT SUPPORT*), as well as gifts received from federated fundraising agencies (*INDIRECT SUPPORT*), such as the United Way and the Combined Federal Campaign. Donors generally have less information about the quality of the nonprofit organization's output relative to government grantors, customers (who provide program service revenue), and creditors. Nevertheless, donors provide a substantial amount of support to the nonprofit sector. In the face of this information asymmetry, it is important to understand all factors, including the quality of internal control, that influence a donor's charitable giving decision in a competitive market for donations.

Several prior studies offer evidence that a public charity's operating efficiency is positively associated with the amount of donor support received (e.g., Weisbrod and Dominguez 1986; Posnett and Sandler 1989; Greenlee and Brown 1999; Tinkelman 2004; Tinkelman and Mankaney 2007).[8] Further, Yetman (2008) reports that donors give less to organizations that overstate mission-related expenses and understate fundraising expenses, providing some support for the idea that donors can unravel low-quality financial statements. However, Tinkelman (1998) and Khumawala et al. (2005) both provide evidence that most donors do not unravel joint cost allocations made to strategically overstate mission-related activities. Overall, prior research suggests that, in

[8] There are many slight variations in the definition of operating efficiency. In general, these operating efficiency measures attempt to capture how much the nonprofit organization spends on program-related activities (i.e., fulfilling its mission) relative to how much it spends on administrative and fundraising costs.

many but not all cases, donors use available information from the organization's Form 990 to distinguish higher quality nonprofit organizations from lower quality nonprofit organizations and make their giving decisions accordingly.

Because internal control deficiencies can signal a lack of effectiveness in providing charitable services and a higher probability of undetected misconduct, all else equal, we expect that nonprofit organizations with internal control deficiencies receive fewer subsequent contributions from the public than organizations with no internal control deficiencies. This hypothesis is based on the assumption that donors make giving decisions in order to assist in the provision of public goods and, thus, opt to give to organizations that can provide the public goods with minimum risks. While it is likely that some financially sophisticated donors (e.g., private foundations) actually obtain the publicly available A-133 audit report as part of the giving decision process, it is highly unlikely that all donors do. Even if donors do not directly learn that an organization has reported an internal control problem from the A-133 report, they may still indirectly receive information about that problem. For example, internal control problems can be associated with lower operating efficiency, which is observable on the more widely distributed Form 990. Alternatively, a donor may have lower quality interactions with an organization that has internal control problems (e.g., an internal control weakness causes donor acknowledgments not to be sent as required by the IRS).

There are reasons why the quality of an organization's internal controls may not affect public support. In particular, not all donors give in order to provide a public good. Some donors simply seek a warm glow (Andreoni 1990; Ribar and Wilhelm 2002) and, thus, internal control information, or any financial information for that matter, is irrelevant. Also, it may be too costly for donors to obtain and evaluate A-133 audit information.[9] Finally, if the internal control audit results are not filed until nine months after year-end, the information may be stale. Therefore, it is an open empirical question as to whether internal control problems affect subsequent contributions.

We adapt the widely used Weisbrod and Dominguez (1986) approach to capture the responsiveness of donations to various economic factors. Weisbrod and Dominguez (1986) model public support as a function of conventional market variables, including price, fundraising expenses, and age:

$$lnPUBLIC\ SUPPORT_t = \beta_0 + \beta_1 lnFUNDRAISING\ EXP_{t-1} + \beta_2 lnPRICE_{t-1} + \beta_3 AGE_t.$$

PRICE measures the cost to the donor of "purchasing" (i.e., contributing) one more dollar of the organization's charitable output. *PRICE* depends on the after-tax cost of giving, as well as the efficiency by which the organization generates output. Specifically, *PRICE* is defined as:

$$PRICE = \frac{(1-T)}{1-\left(\frac{FUNDRAISING\ EXP + ADMINISTRATIVE\ EXP}{TOTAL\ EXPENSE}\right)}.$$

Donors face the same marginal tax rate with respect to donations for all charitable organizations and, thus, we assume $T = 0$. Note that the denominator is equivalent to the program expense ratio (Program Expenses/Total Expenses) so when $T = 0$, *PRICE* equals the inverse of the program expense ratio (Total Expenses/Program Expenses).[10] Theoretically, price should have a negative

[9] This discussion suggests that any influence that internal control does have on public support is moderated by the level of sophistication of the organization's donor clientele. Unfortunately, it is impossible to test this supposition using archival data because nonprofit organizations do not disclose the identities of their donors in a consistent, systematic manner. See Baber et al. (2001) for a discussion of donor clienteles.

[10] When defining *PRICE*, some studies scale fundraising and administrative expenses by public support (e.g., Weisbrod

influence on the level of giving. However, Bowman (2006) notes that, in prior empirical studies, results of tests examining the effect of price on public support are sensitive to model specification. The Weisbrod and Dominguez (1986) model also includes *FUNDRAISING EXP*, which represents the organization's effort to reduce information asymmetry, and *AGE*, which represents the organization's stock of goodwill. Both are expected to positively affect public support.

In order to test our expectation about the effect of internal control problems on donor contributions, we estimate the following equation:

$$\begin{aligned} lnPUBLIC\ SUPPORT_t = {} & \beta_0 + \beta_1 INTERNAL\ CONTROL\ DEFICIENCY_{t-1} \\ & + \beta_2 lnFUNDRAISING\ EXP_{t-1} + \beta_3 lnPRICE_{t-1} + \beta_4 AGE_t \\ & + \beta_5 lnGOV\ CONTRIBUTIONS_{t-1} + \beta_6 lnPROGRAM\ REVENUE_{t-1} \\ & + \beta_7 lnPUBLIC\ SUPPORT_{t-1} + \Sigma \gamma_i INDUSTRY + \Sigma \delta_i YEAR. \end{aligned} \quad (2)$$

In addition to the Weisbrod and Dominguez (1986) variables, we include government grants (*GOV CONTRIBUTIONS*) and program service revenue (*PROGRAM REVENUE*) in order to control for any crowding-out or crowding-in effects. Khanna and Sandler (2000), and Okten and Weisbrod (2000) provide evidence of a positive relation between public support and government grants and program service revenue, indicating a crowding-in effect.[11] Finally, we include prior-year public support to capture any other organization-specific factors, as well as industry and year controls. We are primarily interested in the coefficient on internal control deficiency, β_1, and predict that the existence of an internal control problem is negatively associated with subsequent public support.[12]

Government Contributions

Government contributions represent gifts and grants from federal, state, and local governments.[13] Similar to our expectation for public support, we hypothesize that nonprofit organizations with internal control deficiencies receive fewer government contributions than organizations with no internal control deficiencies. Given that the federal government mandates internal control reporting as part of the required A-133 audit, all else equal, the federal government should use this internal control information to make funding decisions.

Even though our prediction of a negative association between internal control problems and subsequent government contributions seems intuitive, there are questions about the actual deter-

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and Dominguez 1986; Okten and Weisbrod 2000; Bowman 2006), while others scale by total expenses (e.g., Posnett and Sandler 1989; Tinkelman 1998; Khanna and Sandler 2000). That is, some studies measure the amount of charitable output relative to revenue received and some measure charitable output relative to total expenses. Our results are not affected by the choice of scale. We choose to present the results scaling by total expenses for a practical reason. In many instances, the sum of fundraising and administrative expenses exceeds public support. In these instances, log(*PRICE*) is undefined. Thus, scaling by public support limits the number of usable observations.

[11] Crowding-out occurs when an increase in government support discourages donors from increasing their own contributions because need is already being met by government support. Crowding-in occurs when government support encourages donors to increase their own giving, often because government grants enhance the reputation of the nonprofit organization and because government grants are accompanied by more monitoring that provides additional assurance to donors that their funds are being used appropriately.

[12] We examine the association between internal control problems and public support received in the following year. To the extent that information from internal control audits is not available until nine months after the fiscal year-end and donors directly use this information, our tests are biased against finding results. Our approach is consistent with prior studies that examine the influence of program-spending ratios on subsequent years' giving using 990 data, where 990s are generally filed from 5 to 11 months after year-end.

[13] It is important to note that government contributions on IRS Form 990 are distinct from government contracts or payments for service, which are included in program service revenue (e.g., Medicare payments received by a hospital are not classified as government contributions). Thus, it is common for organizations to receive no government contributions but still qualify for the A-133 audit because they earn revenue from federal contracts.

minants of government funding in the nonprofit sector. It is possible that political factors, and not the quality of the nonprofit organization as signaled by the internal control audit results, drive government contribution decisions. For example, the New York Attorney General recently initiated a probe into "pay-to-play" campaign donations made by nonprofit organizations to politicians in order for the nonprofit organizations to receive government grants (Dicker and Goldenberg 2009). In addition, government contributions include funds received from state and local governments, which may be less likely to use the A-133 audit report than the federal government.[14] Finally, the federal government comprises a wide variety of federal agencies. There are 55 different federal agencies with oversight responsibilities in our sample, ranging from the CIA to the Peace Corps and from the National Science Foundation to the National Endowment for the Arts.[15] These agencies have different missions and likely use internal control information differently. For these reasons, we empirically examine the link between internal control weaknesses and subsequent government grants.

We estimate a model of government contributions as a function of internal control problems and political and socio-economic factors, as follows:

$$\begin{aligned} lnGOV\ CONTRIBUTIONS_t = {} & \beta_0 + \beta_1 INTERNAL\ CONTROL\ DEFICIENCY_{t-1} \\ & + \beta_2 lnFUNDRAISING\ EXP_{t-1} + \beta_3 LOBBYING_t + \beta_4 AGE_t \\ & + \beta_5 lnPRICE_{t-1} + \beta_6 lnPUBLIC\ SUPPORT_{t-1} \\ & + \beta_7 lnPROGRAM\ REVENUE_{t-1} \\ & + \beta_8 lnGOV\ CONTRIBUTIONS_{t-1} + \beta_9 GDP_t + \Sigma \alpha_i STATE \\ & + \Sigma \gamma_i INDUSTRY. \end{aligned} \tag{3}$$

In order to address the political determinants of government funding, we include *LOBBYING*, which is an indicator variable that designates whether the organization incurred expenditures to influence legislation through communication with legislators or government officials.[16] While lobbying may not, *per se*, result in more government funding, engaging in lobbying activities signifies a politically savvy nonprofit organization. Thus, we expect a positive association between lobbying and government contributions.

We include annual gross domestic product (*GDP*) to control for economic conditions.[17] Governments should have a greater supply of funds available for gifts and grants when *GDP* is higher. Alternatively, the demand for government grants is higher during periods of low *GDP*. Thus, we make no predictions about the coefficient on *GDP*.

We also use state indicator variables as proxies for demand for government funding. One objective of government contributions is to redistribute revenue to geographic areas with eco-

[14] Different states and municipalities have different levels of monitoring of their grant programs. It is not possible to identify the specific source(s) of government contributions from the Form 990. The largest portion of government contributions for most nonprofits comes from the federal government, although large, complex organizations receive contributions from numerous federal, state, and local agencies.

[15] Nonprofit organizations expending more than $50 million ($25 million for fiscal years ending before January 1, 2004) in federal awards are assigned a cognizant agency. All other nonprofits are assigned an oversight agency. Generally, the cognizant or oversight agency is the federal agency that provides the predominant amount of federal funding. The purpose of the cognizant or oversight agency is to provide technical audit advice and act as a liaison between the nonprofit organization and other federal agencies with respect to audit issues.

[16] Nonprofit organizations are not allowed to make political campaign donations but are allowed to engage in some lobbying activities, subject to certain limitations, without risking their tax-exempt status. See Treasury Regulations Section 56.4911 for more details.

[17] Because we measure GDP on an annual basis, we cannot concurrently include year controls in the model.

nomic need. In some cases, the level of funding is established mathematically by the population served by the nonprofit organization (e.g., need-based formula grants). While nonprofit organizations do not operate exclusively in one geographic region, the state in which these organizations are headquartered can generally reflect characteristics of the populations that they serve (i.e., level of poverty). State indicator variables may also control for political factors (e.g., state representation on Congressional appropriation committees).

Andreoni and Payne (2003) find that nonprofit organizations reduce fundraising efforts when they receive government grants. If a nonprofit organization determines that government support will be slashed in the next period, either because the organization has fallen out of political favor or because of macroeconomic constraints, the nonprofit organization may increase fundraising. Thus, we expect a negative coefficient on *FUNDRAISING EXP*.

Generally, individual donors use *PRICE* as a measure of operating efficiency, while governments have more direct methods of monitoring an organization's efficiency (Khanna and Sandler 2000). Nevertheless, some government agencies, particularly at the state and local level, could use basic operating efficiency ratios to make decisions and/or *PRICE* could serve as a proxy for the more complex efficiency measures actually used by government agencies. Thus, we include *PRICE*, as defined in the previous section, in Equation (3). We also include *AGE* as an indicator of reputation, *PUBLIC SUPPORT* and *PROGRAM REVENUE* as controls for any crowding-in or crowding-out effects, prior-year *GOV CONTRIBUTIONS* to capture any other organization-specific factors, and industry controls. As with Equation (2), we are primarily interested in the coefficient on internal control deficiency, β_1, and expect that the disclosure of an internal control problem is negatively associated with subsequent government contributions.

A final note—reporting a negative coefficient on β_1 in either Equation (2) or Equation (3) may indicate that disclosure of internal control deficiencies influences giving decisions. However, it is also possible that low levels of contributions result in inadequate resources necessary for a nonprofit organization to implement strong controls. To address endogeneity concerns, we implement the Heckman (1979) selection model. In the first stage, we use Equation (1) to estimate the likelihood of reporting an internal control deficiency and, using the parameters of this model, compute an inverse Mills ratio. In the second stage, we estimate Equation (2) and Equation (3) with the inverse Mills ratio as a control.

IV. SAMPLE SELECTION AND DATA

We obtain data on public charities from two sources: (1) the A-133 Single Audit database available from the Federal Audit Clearinghouse and (2) the IRS Form 990 databases available from the National Center for Charitable Statistics (NCCS). The A-133 data include general auditee information, the amount of federal awards expended, auditor name, type of audit performed, audit opinions, internal control information, and audit findings as reported on the Form SF-SAC.[18] The IRS data include revenues, expenses, and balance sheet data as reported on the Form 990.[19] All variables that we use from these databases are defined in Table 1.

[18] Information on internal controls over major programs is not available in the electronic Single Audit database until 2001 when the federal government changed the format of Form SF-SAC. Information on internal controls over financial reporting is available for all years.

[19] We use data from several different Form 990 databases. The Core Trend v2009a file provides organizational characteristics and basic financial statement data from 1998–2007. The DD Revenues and Expenses v2005 file provides a detailed breakdown of revenues and expense categories from 1998–2003. The SOI file provides a detailed breakdown of revenue and expense categories from 2004–2007 for a stratified random sample of firms selected by the IRS. The Core Supplemental v2009 file provides a detailed breakdown of revenues and expenses categories for 2004–2006 for organizations not covered in the SOI file. Note our sample does not include detailed data for the universe of organizations for 2007 but rather only for the sample in the SOI file. Our results are consistent when we exclude 2007 from our analysis.

TABLE 1

Variable Definitions

Variable	Definition
RC_FS	= An indicator variable that equals 1 if the A-133 audit noted reportable conditions in internal controls over financial reporting (SF-SAC Part II #3); otherwise 0.
RC_GOV	= An indicator variable that equals 1 if the A-133 audit noted reportable conditions in internal controls over major programs (SF-SAC Part III #5); otherwise 0.
RC_ANY	= An indicator variable that equals 1 if *RC_FS* equals 1 or *RC_GOV* equals 1; otherwise 0.
PUBLIC SUPPORT	= Total public support received for the fiscal year, defined as the sum of direct support and indirect support.
DIRECT SUPPORT	= Direct public support received for the fiscal year (Form 990 Line 1a).
INDIRECT SUPPORT	= Indirect public support received for the fiscal year (Form 990 Line 1b).
PROGRAM REVENUE	= Program service revenue, including government fees and contracts, received for the fiscal year (Form 990 Line 2).
GOV CONTRIBUTIONS	= Government contributions (grants) received for the fiscal year (Form 990 Line 1c).
FUNDRAISING EXP	= Fundraising expenses for the fiscal year (Form 990 Line 15).
COMPLEXITY	= Number of revenue sources included on Form 990 from 0–3 (*PUBLIC SUPPORT, GOV CONTRIBUTIONS*, and/or *PROGRAM REVENUE*)
GOINGCONCERNRISK	= An indicator variable that equals 1 if the A-133 audit includes a going-concern explanation (SF-SAC Part II #2); otherwise 0.
SURPLUS	= An indicator variable that equals 1 if total revenues (Form 990 Line 12) − total expenses (Form 990 Line 17) ≥0; otherwise 0.
NEWGRANTEE	= An indicator variable that equals 1 if the current year is the first year an organization expends federal contributions; otherwise 0.
AGE	= Number of years the organization has been tax-exempt (IRS RuleDate).
SIZE	= Beginning-of-year total assets (Form 990 Line 59a).
GROWTH	= The growth in assets, measured as the ratio of end-of-year total Assets (Form 990 Line 59b) to beginning-of-year total Assets (Form 990 Line 59a).
RISK	= An indicator variable that equals 1 if organization is classified as "not low risk" on the A-133 audit (SF-SAC Part III #3); otherwise 0.
BIG4	= An indicator variable that equals 1 if auditor (SF-SAC Part I #7) of the A-133 report is classified as one of the Big 6 auditors; otherwise 0.
REGIONAL	= An indicator variable that equals 1 if auditor (SF-SAC Part I #7) of A-133 report is classified as one of the Regional auditors; otherwise 0.

(continued on next page)

TABLE 1 (continued)

Variable	Definition
SPECIALIST	= An indicator variable that equals 1 if auditor (SF-SAC Part I #7) of the A-133 report is classified as one of the Specialist auditors; otherwise 0.
PRICE	= Total Expenses/Program Service Expense, where Total Expenses is the sum of fundraising expenses (Form 990 Line 15), management and general expenses (Form 990 Line 14), and program services expenses (Form 990 Line 13).
LOBBYING	= An indicator variable that equals 1 if organization reports lobbying expenditures to directly influence a legislative body (Form 990 Schedule A Line 37b); otherwise 0.

Source: IRS Form 990 from the National Center for Charitable Statistics and Form SF-SAC from the Federal Audit Clearinghouse.

Table 2, Panel A details the sample selection process. A merge of the A-133 data and the IRS Core Trend data on EIN and year results in a sample of 127,988 observations (27,495 public charities) from 1999 to 2007.[20] We use the Full Sample to shed light on the determinants of internal control weaknesses for a broad cross-section of organizations.

As discussed in the previous section, the second stage of our tests focuses on the influence of internal control problems on subsequent public support and government contributions. Some public charities receive only an immaterial amount of public support and/or government contributions (e.g., low-income housing projects). Thus, for the second stage, we further limit our sample to the subsets of organizations where public support or government contributions represent a nontrivial source of revenue. Specifically, following Tinkelman and Mankaney (2007), we eliminate observations with public support (government contributions) of less than $100,000. This process results in a Public Support Sample of 47,318 observations (12,342 public charities) and a Government Sample of 65,415 observations (16,369 public charities). These limited samples are still significantly larger than samples in previous studies of internal control in the for-profit literature. Lack of necessary data further reduces sample size for specific tests.

In Table 2, Panel B, we classify observations into five main industries based on the National Taxonomy of Exempt Entities (NTEE) developed by the IRS. The five industries, which are the same industries used in Keating et al. (2005), include: Arts, Education, Health, Human Services, and Public Benefit. The remaining NTEE categories (i.e., Religion, International, Environment, and Unknown) are classified as "Other." Human Services organizations (e.g., Red Cross chapters, YMCAs) comprise approximately half of the sample, while Arts and Cultural organizations comprise the smallest fraction of the sample. Untabulated results indicate that, although Human Services are the most common type of nonprofit organizations receiving federal awards, these organizations are also the smallest as measured by total assets. Educational institutions, which

[20] Because the NCCS data contain some data errors we conduct the error-checking procedures recommended by the NCCS. We noted some organizations that had identical information in consecutive years. We could not universally determine which year contained the correct information and, thus, deleted all related years. This resulted in a loss of 9,735 observations. Also, as suggested by the 2006 *Guide to Using NCCS Data*, any suspicious observations were compared to full text versions of the Form 990 available at Guidestar (http://www.guidestar.org). A small number of corrections were made, primarily related to the units reported (i.e., the file listed $5 instead of $5 million). To our knowledge, any remaining errors create noise but do not systematically bias our tests.

TABLE 2

Sample Description

Panel A: Sample Selection

	Full Sample	Public Support Sample	Government Sample
Public operating charities reporting to IRS	2,261,486		
Organizations receiving A-133 audit	337,353		
Merge IRS and A-133 data	129,356		
Less audit periods other than "Annual"	(1,368)		
Full Sample	127,988		
Less public (government) support$_{t-1}$ < $100,000		(75,389)	(54,384)
Less no public (government) support$_t$ data		(5,281)	(8,189)
Total Observations	127,988	47,318	65,415
Unique Organizations	27,495	12,342	16,369

Panel B: Observations by NTEE Classification

	Full	Public Support	Government
Arts	1,912	1,136	1,268
Education	15,574	9,435	9,688
Health	26,397	10,397	14,935
Human Services	69,320	20,788	30,667
Public Benefit	10,923	3,745	6,761
Other	3,862	1,817	2,096
Total Observations	127,988	47,318	65,415

Panel C: Observations by Auditor Type

	Full	Public Support	Government
Big 4	11,254	7,370	6,690
Regional	11,467	5,225	6,051
Specialist	18,768	6,042	8,493
Other	86,499	28,681	44,181
Total Observations	127,988	47,318	65,415

NTEE classifications: Arts (Major Group A), Education (Major Group B), Health (Major Groups E, F, G, H), Human Services (Major Group I, J, K, L, M, N, O, P), and Public Benefit (Major Groups R, S, T, U, V, W).

comprise approximately 12 percent of the Full Sample and 20 percent of the Public Support Sample, are significantly larger than other types of nonprofit organizations. In Table 2, Panel C, we classify observations by the type of auditor, which is based on audit firm size and experience in conducting A-133 audits, similar to Keating et al. (2005). The Big 4 category includes the largest public accounting firms during the sample period.[21] The Regional category includes any of the next 25 largest accounting firms from *Accounting Today*'s 2004 Top 100 Firms list (ranked by

[21] This category includes any nonprofit organization audited by Deloitte & Touche, Ernst & Young, KPMG, PricewaterhouseCoopers (Coopers & Lybrand or Price Waterhouse), or Arthur Andersen.

revenues). The Specialist category includes accounting firms, not already classified as Big 4 or Regional, that conducted 100 or more A-133 audits during the sample period. The Other category includes all accounting firms not already classified as Big 4, Regional, or Specialist. The Specialists conducted approximately 15 percent of all A-133 audits in our sample, while the Big 4 and Regional firms each conducted 9 percent of the audits.[22] Organizations receiving at least $100,000 of public support are more likely to receive an audit by a Big 4 firm (15 percent of the Public Support Sample). In fact, untabulated results indicate that Big 4 firms audit the largest nonprofit organizations receiving federal funds. Using the Full Sample, the mean total assets of a Big 4 auditee is $405.9 million, while the mean total assets of a Regional auditee is $29.5 million. Regional firms, in turn, audit larger organizations than Specialists, which, in turn, audit larger organizations than the other accounting firms.

Table 3, Panel A provides descriptive statistics for the three samples. For the Full Sample, the mean (median) *SIZE* is $45.8 million ($2.4 million). The Public Support Sample is substantially larger, with a mean (median) *SIZE* of $101.6 million ($5.1 million). Across all three samples, organizations are relatively mature—the mean age for the Full Sample is 25 years. The median *INDIRECT SUPPORT* is $0 for all samples, indicating that many organizations do not receive any indirect support from federated fundraising campaigns. Note all of the continuous variables except *AGE* and *GROWTH* are right-skewed. Thus, we use natural log transformations for these variables in our analysis.

During our sample period, the A-133 audit provided four indicators of an internal control problem: (1) if the organization discloses a reportable condition related to financial reporting (*RC_FS*); (2) if any reportable condition related to financial reporting constitutes a material weakness (*MW_FS*); (3) if the organization discloses a reportable condition related to compliance with federal program requirements (*RC_GOV*); and (4) if any reportable condition related to federal program compliance constitutes a material weakness (*MW_GOV*). Material weaknesses are a subset of reportable conditions, representing the more severe internal control problems. In addition to theses four indicators, we also create a variable, *RC_ANY* (*MW_ANY*), which denotes the existence of a reportable condition (material weakness) over either financial reporting or federal program compliance.

Table 3, Panel B reports the frequency of each type of internal control problem. Given the relatively small number of observations with a material weakness, we focus primarily on reportable conditions. Overall, 14.86 percent of the sample discloses a reportable condition over financial reporting and 13.76 percent discloses a reportable condition of federal program compliance. Not surprisingly, there is significant overlap among organizations disclosing a financial statement internal control problem and organizations disclosing a federal program internal control problem. For comparison purposes, 14–15 percent of for-profit companies report a material weakness (Doyle et al. 2007a, Table 5).

V. RESULTS

Determinants of Internal Control Deficiencies

Table 4 reports simple correlations between our measures of internal control problems and organizational characteristics. As predicted, a going-concern paragraph in the audit opinion is positively associated with internal control deficiencies, while reporting a surplus is negatively associated with internal control deficiencies. Disclosure of internal control problems is positively associated with *GROWTH*, *RISK*, and *NEWGRANTEE* as expected. *SIZE* is negatively associated

[22] These frequencies are quite different from the frequencies in the for-profit sector. For example, Ashbaugh-Skaife et al. (2007) report that the six dominant audit suppliers account for 84.7 percent of the audits of public companies.

TABLE 3
Descriptive Statistics

Panel A: Descriptive Statistics for Continuous Variables

	n	Mean	Q1	Median	Q3
Full Sample					
PUBLIC SUPPORT	111,939	2,559,273	0	78,972	642,824
GOV CONTRIBUTIONS	111,939	4,094,543	0	765,158	2,444,370
DIRECT SUPPORT	111,939	2,278,322	0	39,397	466,141
INDIRECT SUPPORT	111,939	280,953	0	0	12,628
SIZE (TOTAL ASSETS)	127,988	45,783,365	861,596	2,354,736	7,124,068
AGE	125,345	25.13	12.00	22.00	34.00
GROWTH	127,306	1.11	0.97	1.02	1.14
PROGRAM REVENUE	127,988	16,409,849	43,038	380,984	2,749,254
FUNDRAISING EXP	111,939	265,676	0	0	47,164
PRICE	110,836	1.45	1.07	1.14	1.23
COMPLEXITY	127,998	2.19	2.00	2.00	3.00
Public Support Sample					
PUBLIC SUPPORT	47,318	5,482,325	252,395	705,244	2,532,311
GOV CONTRIBUTIONS	47,318	6,039,142	422,783	1,289,011	3,539,211
DIRECT SUPPORT	47,318	4,896,227	153,939	509,695	2,068,485
INDIRECT SUPPORT	47,318	586,099	0	0	140,223
SIZE (TOTAL ASSETS)	47,318	101,562,496	1,696,555	5,060,441	24,603,302
AGE	46,683	32.52	18.00	29.00	47.00
GROWTH	47,283	1.12	0.98	1.05	1.16
PROGRAM REVENUE	47,318	32,651,096	86814	1,118,323	9,882,294
FUNDRAISING EXP	47,318	574,088	0	50,235	290,720
PRICE	47,163	1.40	1.10	1.16	1.24
COMPLEXITY	47,318	2.72	2.00	3.00	3.00

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Panel A: Descriptive Statistics for Continuous Variables

	n	Mean	Q1	Median	Q3
Government Sample					
PUBLIC SUPPORT	65,415	3,499,496	10,519	177,774	999,367
GOV CONTRIBUTIONS	65,415	6,245,366	698,919	1,549,013	3,994,750
DIRECT SUPPORT	65,415	3,163,269	2,620	106,665	755,560
INDIRECT SUPPORT	65,415	336,228	0	0	41,745
SIZE (TOTAL ASSETS)	65,415	66,015,301	890,679	2,681,559	9,182,541
AGE	64,343	27.16	14.00	24.00	35.00
GROWTH	65,389	1.12	0.97	1.04	1.17
PROGRAM REVENUE	65,415	19,277,339	20,000	314,772	2,874,398
FUNDRAISING EXP	65,415	368,364	0	0	93,063
PRICE	65,150	1.33	1.08	1.14	1.23
COMPLEXITY	65,415	2.62	2.00	3.00	3.00

Panel B: Descriptive Statistics for Indicator Variables

	Full Sample	Public Support Sample	Government Sample
RC_FS	14.86%	13.78%	14.30%
RC_ANY	18.91%	18.01%	17.99%
RC_GOV	13.76%	13.05%	13.34%
MW_FS	5.25%	4.35%	4.94%
MW_ANY	5.97%	5.10%	5.61%
MW_GOV	3.86%	3.28%	3.74%
GOINGCONCERNRISK	1.16%	0.82%	0.99%
SURPLUS	58.00%	67.93%	64.97%
RISK	34.74%	30.68%	32.33%
NEWGRANTEE	9.37%	6.74%	5.79%
LOBBYING	2.80%	4.80%	3.69%

All variables are defined in Table 1.

TABLE 4

Pearson Correlation Matrix

	RC_GOV	*COMPLEX*	*GOING CONCERN*	*SURPLUS*	*AGE*	*SIZE*	*GROWTH*
RC_FS	0.537 (<0.0001)	−0.015 (<0.0001)	0.083 (<0.0001)	−0.008 (0.0063)	0.007 (0.0099)	−0.041 (<0.0001)	0.012 (<0.0001)
RC_ANY	0.799 (<0.0001)	−0.019 (<0.0001)	0.080 (<0.0001)	−0.012 (<0.0001)	0.024 (<0.0001)	0.001 (0.7876)	0.010 (<0.0001)
RC_GOV		−0.012 (<0.0001)	0.068 (<0.0001)	−0.018 (<0.0001)	0.001 (0.7949)	−0.002 (0.4835)	0.007 (0.0225)
COMPLEXITY			−0.015 (<0.0001)	0.147 (<0.0001)	0.195 (<0.0001)	0.202 (<0.0001)	0.0111 (<0.0001)
GOINGCONCERNRISK				−0.059 (<0.0001)	−0.008 (0.0078)	−0.025 (<0.0001)	−0.0065 (0.0209)
SURPLUS					0.135 (<0.0001)	0.127 (<0.0001)	0.083 (<0.0001)
AGE						0.481 (<0.0001)	−0.022 (<0.0001)
SIZE							−0.015 (<0.0001)

	RISK	*NEW GRANTEE*	*PRICE*	*GDP*	*LOBBY*	*PUBLIC SUP*	*GOV CONT*
RC_FS	0.228 (<0.0001)	0.048 (<0.0001)	0.022 (<0.0001)	0.073 (<0.0001)	−0.015 (<0.0001)	−0.028 (<0.0001)	−0.010 (0.0079)
RC_ANY	0.248 (<0.0001)	0.042 (<0.0001)	0.023 (<0.0001)	0.102 (<0.0001)	−0.011 (<0.0001)	0.011 (0.0181)	−0.006 (0.1349)
RC_GOV	0.245 (<0.0001)	0.043 (<0.0001)	0.015 (<0.0001)	0.036 (<0.0001)	−0.011 (0.0007)	0.019 (0.0002)	−0.00002 (0.9960)
COMPLEXITY	0.003 (0.2354)	0.103 (<0.0001)	0.022 (<0.0001)	−0.232 (<0.0001)	0.059 (<0.0001)	0.182 (<0.0001)	0.176 (<0.0001)

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	RISK	*NEW GRANTEE*	*PRICE*	*GDP*	*LOBBY*	*PUBLIC SUP*	*GOV CONT*
GOINGCONCERNRISK	0.056	0.003	0.015	−0.001	−0.015	−0.044	−0.012
	(<0.0001)	(0.2345)	(<0.0001)	(0.7380)	(<0.0001)	(<0.0001)	(0.0015)
SURPLUS	−0.025	0.014	0.026	0.037	0.047	0.131	0.086
	(<0.0001)	(<0.0001)	(<0.0001)	(<0.0001)	(<0.0001)	(<0.0001)	(<0.0001)
AGE	−0.105	−0.153	−0.007	0.128	0.067	0.317	0.104
	(<0.0001)	(<0.0001)	(0.0343)	(<0.0001)	(<0.0001)	(<0.0001)	(<0.0001)
SIZE	−0.096	−0.143	0.033	0.108	0.131	0.548	0.197
	(<0.0001)	(<0.0001)	(<0.0001)	(<0.0001)	(<0.0001)	(<0.0001)	(<0.0001)
GROWTH	0.021	0.0509	0.033	−0.005	0.0026	0.006	0.0008
	(<0.0001)	(<0.0001)	(<0.0001)	(0.0925)	(0.3529)	(0.1757)	(0.8355)
RISK		0.234	0.034	−0.051	−0.034	−0.081	−0.065
		(<0.0001)	(<0.0001)	(<0.0001)	(<0.0001)	(<0.0001)	(<0.0001)
NEWGRANTEE			0.079	−0.101	−0.026	−0.080	−0.107
			(<0.0001)	(<0.0001)	(<0.0001)	(<0.0001)	(<0.0001)
PRICE				0.006	0.009	0.008	−0.053
				(0.0587)	(0.0044)	(0.0862)	(<0.0001)
GDP					0.038	0.089	0.087
					(<0.0001)	(<0.0001)	(<0.0001)
LOBBY						0.119	0.060
						(<0.0001)	(<0.0001)

All variables are defined in Table 1. We use log form for all continuous variables except *AGE* and *GROWTH*. All variables except *PUBLIC SUPPORT* and *GOV CONTRIBUTIONS* use the full sample (n = 127,988). *PUBLIC SUPPORT* uses the public support sample (n = 47,318) and *GOV CONTRIBUTIONS* uses the government sample (n = 65,415). *RC_GOV* data is available for years beginning in 2001. p-values are in parentheses.

with *RC_FS*. The correlation between *COMPLEXITY* and the reportable condition measures is unexpectedly negative, which could be because *COMPLEXITY* is correlated with *SIZE*. For each of the empirical models estimated in the subsequent tables, we calculate variance inflation factors using ordinary least-squares and determine that multicollinearity is not a significant concern.

Table 5 presents the results from the first stage of our analysis. In Panel A, we estimate the probability of disclosing a reportable condition over financial reporting (*RC_FS*) as a function of organizational characteristics and audit detection factors, using a probit model for the three samples. The coefficients on *COMPLEXITY*, financial health (*GOINGCONCERNRISK* and *SURPLUS*), *SIZE*, *GROWTH*, and *RISK* have the predicted signs and are statistically significant. The coefficient on *NEWGRANTEE* is unexpectedly negative and significant. This negative coefficient results from the high association between *NEWGRANTEE* and *RISK*. When *RISK* is removed from the model, the coefficient on *NEWGRANTEE* is significantly positive.

In Table 5, Panel B, we estimate the probability of disclosing a reportable condition over either financial reporting or federal program compliance (*RC_ANY*). The results are similar to those in Panel A, except for the coefficients on *COMPLEXITY* in the Government Sample and *SIZE* in the Public Support and Government Samples. Overall, our evidence is consistent with the notion that less financially healthy and growing organizations disclose more internal control deficiencies. In addition, we provide some evidence that smaller and more complex organizations disclose more internal control problems.

The model in Table 5 also includes indicator variables for the type of auditor performing the A-133 audit. The coefficient on Big 4 auditors is reliably negative and significant, consistent with Keating et al. (2005). This result indicates that the probability of disclosing an internal control problem decreases if a Big 4 firm is used, and suggests that these audit firms selectively contract with certain high-quality nonprofit organizations. However, the coefficient on Regional firms is significantly positive, which indicates the likelihood of disclosing an internal control problem increases if a Regional audit firm is used.

We also estimate the probability of disclosing a reportable condition over federal program compliance (*RC_GOV*). The untabulated results are generally consistent with those in Table 5, with some minor exceptions. For the Full Sample, the coefficient on *COMPLEXITY* is not significant and for the Public Support Sample, the coefficients on *SIZE* and *GROWTH* are not significant. In addition, we estimate the probability of disclosing a material weakness (*MW_FS* and *MW_ANY*). Again, the results are generally consistent with those in Table 5. We find that all coefficients are statistically significant with the predicted sign, except for the coefficient on *GROWTH*, which is positive but not significant. Finally, we include the lagged internal control problem (either RC_FS_{t-1} or RC_ANY_{t-1}) and exclude *NEWGRANTEE* (because new grantees do not have prior-year internal control data). Not surprisingly, the coefficient on the lagged internal control problems is significantly positive. That is, if an organization reported an internal control weakness in the prior year, then the organization is more likely to report an internal control weakness in the current year.

Effect of Internal Control Deficiencies on Public Support

Table 6, Panel A reports the results from the second stage of our analysis. We estimate a regression of public support on the disclosure of reportable condition over financial reporting in the prior year and include the Inverse Mills ratio computed using the parameters from Table 5 for the Public Support Sample. For this table and all subsequent tables, we use Huber-White robust standard errors, where errors are clustered by organization.

In the first column ("Base") of Table 6, Panel A, we estimate the traditional Weisbrod and Dominguez (1986) model. Consistent with prior research, the coefficients on *FUNDRAISING EXP* and *AGE* are significantly positive, while the coefficient on *PRICE* is significantly negative. In

TABLE 5

Determinants of Internal Control Deficiencies

Panel A: Financial Statement Reportable Conditions

Variable	Pred. Sign	Full Sample	Public Support Sample	Government Sample
Intercept		−1.080***	−1.086***	−0.968***
		(398.828)	(117.427)	(161.340)
COMPLEXITY	+	0.081***	0.045***	0.029**
		(163.447)	(7.455)	(5.992)
GOINGCONCERNRISK	+	0.737***	0.882***	0.801***
		(455.994)	(173.643)	(238.627)
SURPLUS	−	−0.068***	−0.176***	−0.123***
		(48.240)	(111.267)	(78.667)
SIZE	−	−0.029***	−0.014***	−0.025***
		(91.230)	(6.670)	(34.136)
GROWTH	+	0.042***	0.052**	0.042***
		(15.460)	(5.930)	(7.260)
RISK	+	0.711***	0.726***	0.745***
		(5751.825)	(20960.732)	(3218.747)
NEWGRANTEE	+	−0.032**	−0.088***	−0.083***
		(4.270)	(8.624)	(9.810)
BIG4	?	−0.382***	−0.367***	−0.349***
		(316.585)	(150.812)	(142.823)
REGIONAL	?	0.280***	0.290***	0.243***
		(346.814)	(152.181)	(132.915)
SPECIALIST	?	−0.145***	−0.009	−0.102***
		(109.964)	(0.172)	(25.931)
Industry Indicators		Included	Included	Included
Year Indicators		Included	Included	Included
No. of Observations Used		127,236	47,281	65,364
No. of Observations with Internal Control Deficiencies		18,859	6,515	9,339
Likelihood Ratio		10356.535	3506.548	4857.398
		<0.0001	<0.0001	<0.0001
Percent Concordant		71.90%	71.30%	70.90%

Panel B: Any Reportable Conditions

Variable	Pred. Sign	Full Sample	Public Support Sample	Government Sample
Intercept		−1.385***	−1.562***	−1.334***
		(733.490)	(275.569)	(340.810)
COMPLEXITY	+	0.046***	0.046***	−0.010
		(58.822)	(8.833)	(0.749)
GOINGCONCERNRISK	+	0.705***	0.815***	0.786***
		(424.905)	(149.436)	(232.546)
SURPLUS	−	−0.081***	−0.148***	−0.120***
		(75.011)	(87.255)	(83.362)
SIZE	−	−0.008***	0.010*	−0.002
		(8.672)	(3.821)	(0.338)

(continued on next page)

Panel B: Any Reportable Conditions

Variable	Pred. Sign	Full Sample	Public Support Sample	Government Sample
GROWTH	+	0.046	0.061***	0.048***
		(19.673)	(8.864)	(10.339)
RISK	+	0.752***	0.753***	0.771***
		(7243.628)	(2531.856)	(3820.811)
NEWGRANTEE	+	−0.032*	−0.049*	−0.080***
		(4.668)	(2.893)	(9.469)
BIG4	?	−0.070***	−0.103***	−0.089***
		(15.905)	(15.623)	(12.412)
REGIONAL	?	0.288***	0.308***	0.251***
		(404.169)	(192.368)	(155.280)
SPECIALIST	?	−0.083***	−0.007	−0.049***
		(40.297)	(0.096)	(6.993)
Industry Indicators		Included	Included	Included
Year Indicators		Included	Included	Included
No. of Observations Used		127,236	47,281	65,364
No. of Observations with Internal Control Deficiencies		23,996	8,516	11,749
Likelihood Ratio		11345.371	3954.150	5346.047
		<0.0001	<0.0001	<0.0001
Percent Concordant		70.70%	70.30%	69.90%

*, **, *** Indicates statistical significance at the 0.10, 0.05, and 0.01 levels, respectively.

All variables are defined in Table 1. We use log form for all continuous variables except *GROWTH*. Wald Chi-squared statistics are reported in parentheses.

model (1), we include an indicator variable for the existence of a reportable condition over financial reporting. The coefficient on RC_FS_{t-1} (−0.210) is significantly negative. In model (2), we add *GOV CONTRIBUTIONS*, *PROGRAM REVENUE*, and $PUBLIC\ SUPPORT_{t-1}$ which are all significantly associated with $PUBLIC\ SUPPORT_t$. Nevertheless, the coefficient on RC_FS_{t-1} is still significantly negative. Note that by including lagged public support, we are essentially estimating the *change* in public support associated with disclosing an internal control problem. Our evidence suggests that, all else equal, reporting internal control problems over financial reporting is associated with 3.8 percent less public support on average. In model (3) of Panel A, we estimate the influence of reporting the more severe material weakness over financial reporting on subsequent public support. Again, the coefficient is significantly negative (−0.056). As indicated in Table 6, Panel B, we find similar results when we use *RC_ANY*. The evidence in Table 6 is consistent with our hypothesis that reportable conditions related to the financial statements have a detrimental effect on subsequent support.

Next, we examine the components of *PUBLIC SUPPORT* in models (4) and (5). Both Panels A and B of Table 6 suggest that that *DIRECT SUPPORT* is negatively associated with the existence of an internal control weaknesses. The evidence for *INDIRECT SUPPORT* is mixed; Panel A reports a significantly negative coefficient, while Panel B reports an insignificant coefficient. Interestingly, the frequency of internal control problems is not statistically different for firms with

TABLE 6

The Effect of Internal Control Deficiencies on Public Support

Panel A: Financial Statement Internal Control Weaknesses

	PUBLIC SUPPORT				*DIRECT*	*INDIRECT*
Variable	**Base**	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**
Intercept	13.079***	13.172***	0.699***	0.692***	0.511***	0.048
	(132.60)	(1212.15)	(13.91)	(13.80)	(10.98)	(1.63)
RC_FS_{t-1}		−0.0210***	−0.038***		−0.034**	−0.028**
		(−8.07)	(−3.09)		(−2.33)	(−2.14)
MW_FS_{t-1}				−0.056***		
				(−2.58)		
FUNDRAISING EXP$_{t-1}$	0.134***	0.135***	0.022***	0.022***	0.026***	0.003***
	(39.10)	(37.17)	(22.49)	(22.54)	(21.66)	(3.78)
PRICE$_{t-1}$	−0.151***	−0.226***	−0.058	−0.059	−0.031	−0.016
	(−4.72)	(−4.30)	(−1.46)	(−1.47)	(−0.73)	(−1.41)
AGE	0.016***	0.016***	0.002***	0.002***	0.001***	0.0004**
	(18.88)	(17.42)	(10.20)	(10.21)	(6.56)	(2.00)
GOV CONTRIBUTIONS$_{t-1}$			0.009***	0.009***	0.009***	0.002**
			(9.74)	(9.76)	(8.57)	(1.95)
PROGRAM REVENUE$_{t-1}$			0.010***	0.009***	0.006***	0.001
			(8.91)	(9.76)	(5.23)	(0.91)
PUBLIC SUPPORT$_{t-1}$			0.922***	0.922***		
			(266.21)	(266.20)		
DIRECT SUPPORT$_{t-1}$					0.933***	
					(309.96)	
INDIRECT SUPPORT$_{t-1}$						0.985***
						(1168.79)
Inverse Mills		0.064***	0.006	0.008	0.010	−0.006
		(4.87)	(0.91)	(0.58)	(1.15)	(−0.83)
Industry Indicators	Included	Included	Included	Included	Included	Included
Year Indicators	Included	Included	Included	Included	Included	Included

(continued on next page)

Panel A: Financial Statement Internal Control Weaknesses

	PUBLIC SUPPORT				*DIRECT*	*INDIRECT*
Variable	**Base**	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**
Number of Observations	44,353	40,030	37,878	37,878	37,588	36,601
R^2	35.59%	36.40%	83.20%	83.19%	90.13%	97.77%

Panel B: Any Internal Control Weaknesses

	PUBLIC SUPPORT				*DIRECT*	*INDIRECT*
Variable	**Base**	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**
Intercept	13.079***	13.146***	0.693***	0.690***	0.509***	0.038
	(132.60)	(121.80)	(13.83)	(13.77)	(10.97)	(1.31)
RC_ANY_{t-1}		−0.086***	−0.028**		−0.027**	−0.018
		(−3.77)	(−2.50)		(−2.17)	(−1.50)
MW_ANY_{t-1}				−0.046**		
				(−2.29)		
$FUNDRAISING\ EXP_{t-1}$	0.134***	0.136***	0.022***	0.022***	0.026***	0.003***
	(39.10)	(37.26)	(22.51)	(22.54)	(21.65)	(3.93)
$PRICE_{t-1}$	−0.151***	−0.227***	−0.058	−0.059	−0.030	−0.016
	(−4.72)	(−4.25)	(−1.46)	(−1.46)	(−0.72)	(−1.38)
AGE	0.016***	0.016***	0.002***	0.002***	0.001***	0.0005**
	(18.88)	(17.47)	(10.20)	(10.21)	(6.59)	(2.10)
$GOV\ CONTRIBUTIONS_{t-1}$			0.009***	0.009***	0.009***	0.002**
			(9.69)	(9.74)	(8.51)	(2.03)
$PROGRAM\ REVENUE_{t-1}$			0.010***	0.010***	0.006***	0.001
			(8.97)	(8.94)	(5.25)	(0.85)
$PUBLIC\ SUPPORT_{t-1}$			0.922***	0.922***		
			(266.52)	(266.27)		
$DIRECT\ SUPPORT_{t-1}$					0.934***	
					(310.24)	

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Panel B: Any Internal Control Weaknesses

		PUBLIC SUPPORT			*DIRECT*	*INDIRECT*
Variable	**Base**	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**
INDIRECT SUPPORT$_{t-1}$						0.985***
						(1171.170)
Inverse Mills		0.036***	0.008	0.008	0.009	−0.005
		(2.97)	(1.23)	(0.83)	(1.23)	(−0.80)
Industry Indicators	Included	Included	Included	Included	Included	Included
Year Indicators	Included	Included	Included	Included	Included	Included
Number of Observations	44,353	40,028	37,877	37,878	37,587	36,600
R^2	35.59%	36.32%	83.21%	83.19%	90.14%	97.77%

*, **, *** Indicates statistical significance at the 0.10, 0.05, or 0.01 level, respectively. All variables are defined in Table 1. We use log form for all continuous variables except *AGE*. Influential observations, identified as studentized residuals greater than 3, are removed. t-statistics are reported in parentheses. We use Huber-White robust standard errors clustered by organization.

direct support compared to firms with indirect support.[23] Those organizing and contributing to federated fund-raising campaigns do not appear to consider internal control problems as part of the giving decision in a more sophisticated manner than other donors.

We also estimate the effect of disclosing a reportable condition over federal program compliance on subsequent support (untabulated). The coefficient on *RC_GOV* is negative but not significant ($p = 0.16$). This result suggests that giving decisions made by individuals, corporations, and foundations are highly associated with internal control problems over financial reporting but not with internal control problems over federal program compliance.

We conduct a series of robustness tests on model (2) in Table 6, Panel A and Panel B. We control for macroeconomic factors by including GDP and state indicator variables. We address the possibility that low financial reserves are associated with both public support and the existence of an internal control problem by including *GOINGCONCERNRISK*. We include *SIZE*, as well as scale all dollar-denominated continuous variables by total revenue. Finally, we change the sample selection criteria to include all organizations with public support over $1,000, instead of $100,000. For each of these tests, we continue to find negative and significant coefficients on *RC_FS* and *RC_ANY*, suggesting donors directly or indirectly use internal control information in their giving decisions.

Finally, we investigate the association between internal control problems and subsequent public support across the six NTEE industries listed in Table 1. We find negative and significant coefficients on both *RC_FS* and *RC_ANY* for Education and Health. The coefficients on internal controls problems for the remaining industries are insignificant. According to Wing et al. (2008), excluding Religion,[24] Education receives the largest percentage of total public support, followed next by Health. Thus, it appears that internal control problems influence industries that receive substantial contributions from donors.

Effect of Internal Control Deficiencies on Government Contributions

Table 7 reports the results from estimating a regression of government contributions on *RC_FS*, *RC_ANY*, and *RC_GOV* for the Government Sample. We again include the inverse Mills ratio computed using the parameters from Table 5. The coefficients on *RC_FS* (−0.017) and *RC_ANY* (−0.017) are negative and significant. Unlike with public support, the coefficient on *RC_GOV* (−0.021) is also significantly negative. These results suggest that government agencies do use information regarding internal controls over federal program compliance to make funding decisions. When we use material weaknesses instead of reportable conditions, only the coefficient on *MW_GOV* is significant.

In addition, the coefficient on *FUNDRAISING EXP* is significantly negative, consistent with Andreoni and Payne (2003). The coefficient on *LOBBYING* is positive, suggesting that organizations that engage in activities to influence legislation receive more government grants. The coefficient on GDP is negative. Overall, government contributions to nonprofit organizations appear to be a function of political and economic factors, as well as the organization's perceived ability to fulfill its mission as signaled by the results of its internal control audit.

The results in Table 7 are consistent using alternative specifications of Equation (3). In

[23] In fact, 20.7 percent of organizations that receive only indirect support disclose an internal control problem, while 19.1 percent of organizations that receive only direct support disclose a problem. Of the organizations that receive both direct and indirect support, 16.8 percent disclose an internal control problem. These percentages suggest that any differential effects of internal controls problems on direct and indirect support are not caused by superior selection methods of federated fundraising campaigns (i.e., these campaigns do not select out of giving to organizations with problems).

[24] Religion receives the largest amount of public support. Most religious organizations are not included in our sample because religious institutions are exempt from the Form 990 filing requirement and most do not receive federal funding.

TABLE 7

The Effect of Internal Control Deficiencies on Government Contributions

Variable	*GOV CONTRIBUTIONS*					
Intercept	0.561***	0.558***	0.587***	0.556***	0.556***	0.588***
	(10.39)	(10.33)	(12.45)	(10.30)	(10.30)	(10.25)
RC_FS_{t-1}	−0.017**					
	(−2.42)					
RC_ANY_{t-1}		−0.017***				
		(−2.61)				
RC_GOV_{t-1}			−0.021**			
			(−2.52)			
MW_FS_{t-1}				−0.013		
				(−1.18)		
MW_ANY_{t-1}					−0.013	
					(−1.19)	
MW_GOV_{t-1}						−0.028*
						(−1.86)
FUNDRAISING EXP$_{t-1}$	−0.001*	−0.001*	−0.0005	−0.001*	−0.001*	−0.001
	(−1.90)	(−1.91)	(−0.90)	(−1.88)	(−1.88)	(−0.89)
$PRICE_{t-1}$	−0.026*	−0.025*	−0.024	−0.026*	−0.026*	−0.024
	(−1.76)	(−1.75)	(−1.46)	(−1.76)	(−1.77)	(−1.46)
$LOBBYING_t$	0.018**	0.019**	0.020*	0.018**	0.018**	0.019*
	(2.07)	(2.06)	(1.83)	−2.04	−2.05	−2.05
AGE	0.000	0.000	0.000	0.000	0.000	0.000
	(−0.16)	(−0.14)	(−0.43)	(−0.12)	(−0.13)	(−0.43)
PUBLIC SUPPORT$_{t-1}$	0.005***	0.005***	0.004***	0.005***	0.005***	0.004***
	(8.72)	(8.73)	(6.29)	(8.74)	(8.74)	(6.28)
PROGRAM REVENUE$_{t-1}$	−0.002***	−0.002***	−0.002***	−0.002***	−0.002***	−0.002***
	(−3.66)	(−3.64)	(−2.73)	(−3.63)	(−3.62)	(−2.72)
GOV CONTRIBUTIONS$_{t-1}$	0.978***	0.978***	0.977***	0.978***	0.978***	0.976***
	(518.71)	(518.82)	(454.62)	(518.72)	(518.36)	(554.35)

(continued on next page)

TABLE 7 (continued)

Variable	*GOV CONTRIBUTIONS*					
GDP	−0.014***	−0.013***	−0.016***	−0.014***	−0.014***	−0.016***
	(−9.34)	(−9.19)	(−8.29)	(−9.28)	(−9.26)	(−8.47)
Inverse Mills	0.013***	0.011***	0.012***	0.008	0.010*	0.015**
	(3.03)	(3.00)	(2.98)	(1.50)	(1.82)	(2.20)
State Indicators	Included	Included	Included	Included	Included	Included
Industry Indicators	Included	Included	Included	Included	Included	Included
Number of Observations	52,411	52,411	40,369	52,411	52,411	40,369
R^2	89.73%	89.73%	89.71%	89.73%	89.73%	89.71%

*, **, *** Indicates statistical significance at the 0.10, 0.05, or 0.01 level, respectively. All variables are defined in Table 1. We use log form for all continuous variables except *AGE*. Influential observations, identified as studentized residuals greater than three, are removed. t-statistics are reported in parentheses. We use Huber-White robust standard errors clustered by organization.

particular, we include *GOINGCONCERNRISK* and *SIZE*, scale the continuous variables by total revenue, and change the sample selection criteria to include all organizations with government contributions over $1,000 instead of $100,000. For each of these tests, we continue to find negative and significant coefficients on the reportable condition indicators, suggesting that government agencies use internal control information in their funding decisions.

In untabulated results, we next investigate the link between internal control problems and subsequent government contributions for the five most frequent oversight agencies in the Government Sample.[25] The most frequent oversight agencies (percentage of sample) are the Department of Health and Human Services (46 percent), the Department of Housing and Urban Development (16 percent), the Department of Education (14 percent), the Department of Agriculture (5 percent) and the Department of Justice (3 percent). No other federal agency represents more than 1 percent of the sample. The coefficients on all three measures of reportable conditions are significantly negative for organizations overseen by HUD. In addition, the coefficient on reportable conditions over financial reporting is significantly negative for organizations overseen by the Department of Agriculture. The coefficients on reportable conditions for organizations overseen by HHS, by far the most frequent oversight agency, are negative but not significant.[26] The coefficients on reportable coefficients for the remaining most frequent agencies are also insignificant.

VI. CONCLUSION

This study examines the causes and consequences of internal control weaknesses in nonprofit organizations. The nonprofit sector provides a useful setting to examine the effects of internal control disclosures because charitable giving by donors provides direct evidence of stakeholder reactions to such disclosures. We first document that the likelihood of reporting an internal control problem increases for nonprofit organizations that are complex, growing, smaller, and in poor financial health. We then present evidence that weak internal controls over financial reporting are negatively associated with subsequent public support and government contributions received after controlling for the current level of support and other factors influencing contributions. Thus, internal control information appears to affect, either directly or indirectly, the funders' giving decisions. Internal control reporting by nonprofits has been required for two decades. Our results are generalizable to the for-profit sector because they provide long-term evidence that stakeholders do indeed use internal control information to evaluate organizations.

Our specific results may interest several constituencies. First, the IRS and other regulators are reformulating laws in an attempt to increase public confidence in the integrity of exempt organizations. Second, donors want to make more informed charitable decisions. Third, watchdog groups promulgate standards to evaluate an organization's effectiveness in achieving its mission. These standards may encourage organizations to underinvest in infrastructure in the short-run. In fact, Hager et al. (2004) argue that pressure from donors and watchdog groups to maximize mission-related spending and limit overhead costs to artificially low levels is detrimental in the long-run.

[25] We define the oversight agency as the cognizant agency if a cognizant agency exists; otherwise it is the oversight agency designated in the A-133 report. The oversight agency is likely, but not necessarily, the predominant supplier of government contributions. To the extent that a nonprofit organization is complex and receives contributions from several federal agencies or receives most federal funding from contract revenue rather than from contributions, the oversight agency will be less meaningful for purposes of this test.

[26] Recall that Medicare and Medicaid are program service revenue and not part of our tests. One possible explanation for the lack of significant results for HHS is that the majority of HHS discretionary grant dollars are allocated to scientific research (http://www.hhs.gov/grants/). These are generally multiperiod grants. Thus, our tests may not properly cover the decision window for these grants.

Our evidence is consistent with the notion that short-term savings on administrative expenses (i.e., establishing internal controls) can ultimately have negative consequences on the organization's donor support and, thus, the organization's ability to deliver services.

Finally, nonprofit managers and board members need to understand the risks of failing to meet donors' and government agencies' expectations with regards to accountability. We estimate that, all else equal, organizations with internal control problems receive 3.8 percent less public support and 2.1 percent less government support. According to the National Council on Nonprofits (2009), the estimated cost of an audit for an organization with revenue of $600,000 is $12,000–$20,000. Audit costs likely increase in the presence of internal control problems (Hogan and Wilkins 2008). Thus, in some cases, a cost-benefit analysis indicates an overall benefit from conducting periodic, thorough internal reviews of internal controls. If attestations of internal controls by external auditors are cost-prohibitive, then nonprofit organizations can seek in-kind support to help them improve their internal controls. For example, technology companies often donate technical support to nonprofit organizations. Similarly, other corporate donors with Sarbanes-Oxley experience can provide guidance on creating and maintaining adequate internal control systems.

Internal control in the nonprofit sector is a relatively unexplored area for researchers and there are many questions left to be addressed. We show that the disclosure of any internal control weakness is associated with future declines in public support, but leave open the question of which types of donors (i.e., foundations, corporations, or individuals) respond to the internal control information. Likewise, a more refined analysis would assist in determining which federal, state, and local agencies use the A-133 data. Finally, further research is needed to investigate how internal control weaknesses influence other aspects of a nonprofit organization's operations, including earnings management and executive compensation.

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