

Unintended? The Effects of Adoption of the Sarbanes-Oxley Act On Nonprofit Organizations

Tamara Nezhina, Ph.D.
Assistant Professor
DePaul University
School of Public Service
25 E. Jackson Boulevard Suite 1250
Chicago, IL 60604

Phone: 312/362-5514

Fax: 312/362-5506

tnezhina@depaul.edu*

Jeffrey L. Brudney, Ph.D.
Professor and Albert A. Levin Chair of Urban Studies and Public Service
Cleveland State University
College of Urban Affairs
2121 Euclid Ave. UR 238A,
Cleveland, OH 44115

Phone: 216/687-5269

J.BRUDNEY@csuohio.edu

Tamara G. Nezhina, Ph.D., is an assistant professor at the School of Public Service at DePaul University. Her teaching and research focuses on nonprofit and volunteer management, local government, administrative ethics, and the broader concept of civil society in the international arena.

Jeffrey L. Brudney, Ph.D., is the Albert A. Levin Chair of Urban Studies and Public Service at Cleveland State University's Maxine Goodman Levin College of Urban Affairs. Dr. Brudney has published widely in the areas of public administration, the nonprofit sector, and volunteerism.

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* Please contact Tamara G. Nezhina, the principal author, for questions and comments.

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Abstract

This study investigates the benefits and costs to nonprofit organizations emanating from the adoption of the Sarbanes-Oxley Act (2002). The Act was intended to stem financial malfeasance in the for-profit sector, nevertheless the study finds that about half the surveyed nonprofits adopted provisions of the Act and experienced effects in proportion to the level of adoption. About one in four of the nonprofits attributed benefits of better financial controls (27.3%) and reduced risk of accounting fraud (24.3%) to the adoption of the Sarbanes-Oxley Act. With regard to the costs of adoption, more than one-third of the nonprofit organizations reported increased fees for external audit (36.5%), and about 15 percent cited “reallocation of resources from program to administrative expenses” (14.8%). This research discusses the unintended positive and negative effects of public policy on nonprofit organizations.

Unintended? The Effects of Adoption of the Sarbanes-Oxley Act on Nonprofit Organizations

In 2002 the U.S. Congress passed the Sarbanes-Oxley Act (SOX) with the goal of preventing financial scams and abuses among publicly-traded corporations. Although SOX was not binding on the nonprofit sector apart from two provisions,¹ research shows that nonprofit organizations adopted various provisions of the Act (Behn et al., 2005; Vermeer et al. 2006; Ostrower and Bobowick, 2006; self-identifying reference deleted).

Business analysts, scholars, and the popular press have discussed and examined the positive and negative effects of SOX on publicly-traded corporations (Bumgardner, 2003; Bisoux, 2005; CFO Research Services, 2005; Clark, 2005; Zhang, 2007; Linck et al., 2009). However, the possible effects of SOX adoption in nonprofit organizations have not been studied systematically. Our study expands the knowledge about SOX compliance effects in nonprofit organizations by bringing to the attention of nonprofit executives the reported benefits and costs that followed SOX adoption. Understanding costs and benefits may improve decision-making processes in nonprofits with regard to improved financial oversight and organizational governance (Pynes, 2011).

In view of the pronounced and sometimes dramatic effects of SOX on publicly-traded organizations, it is important for nonprofit sector leaders, as well as for policy makers, to understand the impact of public policy on unintended subjects – nonprofit organizations. Empirical studies of the effects of SOX on nonprofit organizations are limited in number with very few pertaining to this important issue (Ostrower and Bobowick, 2006). Therefore, we had to rely on the literature on the benefits and costs of SOX incurred by publicly-traded corporations to anticipate certain effects in nonprofit organizations should they decide to introduce SOX-

related changes. Based on that literature this article proposes and evaluates the costs and benefits that have accrued to nonprofit organizations by implementing SOX provisions.

As in the private business sector, SOX related change may impose costs on nonprofit organizations, although these costs are expected to be lower than in for-profit corporations because certain features of the latter, such as compensation to the board of directors, do not exist in most nonprofit organizations. Nevertheless, the increased working time for the board and audit committees resulting from SOX may impose indirect costs to nonprofit organizations by complicating the retention and recruitment of board members. By contrast, the improved financial oversight that the Sarbanes-Oxley Act is meant to accomplish may benefit nonprofit organizations as well as publicly-traded corporations. This study seeks to understand benefits and costs accruing to nonprofit organizations by virtue of SOX adoption.

Anticipated Benefits and Costs of The Adoption of The Sarbanes-Oxley Act for Nonprofit Organizations

In this article we consider the effects of those SOX provisions that are cited by experts as relevant to the nonprofit sector (Freudenberger, 2008; Jackson, 2006; Jackson and Fogarty, 2006; BoardSource and Independent Sector, 2003). Table 1 briefly introduces 15 SOX provisions considered relevant to nonprofit organizations by this group. Two of the SOX provisions, instituting a Whistle-blower Protection policy and a Document Preservation policy, are mandatory to all types of private organizations (see Endnote 1). We refer to SOX provisions as the general requirements of the Act (for example, to establish a Conflict of Interest policy), and to SOX practices as the variety of ways that adopting nonprofits might implement these provisions (for example, board members sign a conflict of interest statement)

[Table 1 here]

Benefits of adoption of SOX

The experience of for-profit executives helps to identify the likely effects of the adoption of SOX for nonprofit organizations. On the positive side, some business executives state that SOX requirements led them to re-examine the system of internal controls to find weaknesses and eliminate them. The results of a survey conducted by business consultants CFO Research Services together with Virsa Systems and PricewaterhouseCoopers LLP (2005) and other sources indicate that many responding executives of business corporations found the following benefits of compliance with SOX: (1) increased understanding, effectiveness, and communication of business processes (65%); (2) discovered internal control weaknesses that were potentially damaging (65%); (3) undertook more effective risk management (45%); (4) reduced fraud (20%); and (5) increased effectiveness of the board (8%). Executives in some business firms believed that investors acted on their perception of SOX compliance, and that the market penalized loose governance and poor controls with lower share prices (CFO Research Services, 2005; Grant Thornton, 2006; Wagner, 2006; Holt, 2007).

The characteristics of nonprofit organizations may lead to similar but not identical benefits accruing to those organizations that comply with SOX. First, nonprofit organizations do not have investors but donors; unlike business investors their donors do not aspire to receive monetary returns. Although this factor can make donors' expectations less intense, it may not eliminate their demands for improved accountability in nonprofit organizations. Second, a review of financial reporting and internal controls can yield a better understanding of risks and control weaknesses, knowledge beneficial to nonprofit and for-profit organizations alike. Third, the increased effectiveness of the board is a primary benefit for nonprofit organizations as well as for-profits.

Nonprofit organizations may benefit from adopting the SOX requirements of rigorous financial oversight and greater involvement of the board in controlling organizational finances. Similar to for-profit organizations, management in nonprofit organizations can be improved by establishing better financial control procedures and reducing the risk of fraud (Freudenberger, 2008; Mead, 2007, Dreier, 2005; Greene 2003; BourdSource and Independent Sector 2003). However, we assume that the most beneficial effect of compliance with SOX for nonprofit organizations may be an improved reputation as a transparent and accountable institution (Jackson, 2006; Behn, 2005; Mead, 2007; Petrovits, 2011), which should enable the organization to attract more individual and corporate donations, and to receive greater funding from government. Enhanced reputation may also help to facilitate government contracts and to develop community support. Thus, the nonprofit executives may believe that by improving organizational transparency and accountability, they would generate greater resources, which would allow their organizations to serve more clients. Yet, we expect that the effects of improved reputation may develop slowly and lag behind the implementation (and costs) of SOX-related change.

We anticipate that if nonprofit organizations comply with relevant SOX provisions (Table 1), they will garner similar benefits to those realized by for-profit corporations from SOX adoption and revision of their financial procedures and internal controls. We suggest the following hypotheses regarding the effects of compliance for nonprofit organizations:

Hypothesis B1: *Compliance with SOX will result in better financial controls in nonprofit organizations.*

Hypothesis B2: *Compliance with SOX will reduce risk of financial fraud in nonprofit organizations.*

Hypothesis B3: *Compliance with SOX will enhance the effectiveness of boards of directors in nonprofit organizations.*

Hypothesis B4: *Compliance with SOX will improve the reputation of nonprofit organizations by sending stakeholders a signal about their transparency.*

Hypothesis B5: *Compliance with SOX will facilitate contracts with government for nonprofit organizations.*

Hypothesis B6: *Compliance with SOX will facilitate more private donations to nonprofit organizations.*

Hypothesis B7: *Compliance with SOX will increase fundraising capability in nonprofit organizations.*

Hypothesis B8: *Compliance with SOX will help nonprofit organizations obtain more resources to meet their clients' needs.²*

Costs of compliance with SOX

Several studies have discussed the costs of SOX-related change on the functions of the CEOs and boards of directors in for-profit corporations (Gifford and Howe, 2004; Bisoux, 2005; Clark, 2005; Zhang, 2007; Linck et al., 2009). These studies find that SOX requirements for board independence have led to increases in the percentage of independent directors (outsiders) on the board, the percentage of firms with majority outsiders on the board, and the percentage of firms with dual leadership or separate CEOs and board chairpersons (Linck et al. 2009). Linck et al. (2009) showed that most for-profit firms improved board independence by adding outsider directors rather than replacing insider directors, who often were the executive managers of corporations, a strategy that increased the size of the board. For for-profit corporations this

move was costly because directors receive compensation for their work on the board; the larger the board, the higher the total compensation cost. Furthermore, the increased responsibilities and legal liabilities of board members dictated by SOX raised the risk of serving on the board, which led corporate leaders to augment individual compensation to attract new board members, and insurance companies to increase insurance premiums for the corporation (Clark, 2005; Linck et al. 2009). Some companies changed their board composition by removing executive managers of the company from the board and hiring non-executive board members who were not employed by the organization (Linck et al., 2009). These studies find that greater board independence increased the governance costs for for-profit firms.

Nonprofit boards of directors differ from their for-profit counterparts, though, in that board members typically do not receive compensation for their work (Colombo and Hall, 1995; Lechem, 2002; Fremont-Smith, 2004). This nonprofit board characteristic may eliminate material costs for most nonprofit organizations that comply with the SOX requirement to achieve complete board independence.

After SOX enactment, the New York Stock Exchange (NYSE)³ issued rules requiring publicly-traded corporate boards to hold regular executive sessions, at which management of the firm and other insiders are not present (Clark, 2005). Although these sessions, if implemented, would not incur direct monetary costs for nonprofit organizations, they will be costly in terms of time commitment for many board members. The same rules require boards to engage in formal periodic self-assessment and evaluation (Clark, 2005). Because such evaluations entail reassessment of boards' roles and functions and formalization of boards' responsibilities, the effect of this new regulation would be to extend the time devoted to board work. If nonprofits

elect to follow this provision, some board members may decide to withdraw from participating on the board because of increasing time commitment, responsibility, and legal liability.

SOX shifts the power to hire, fire, and compensate the external auditor from management to the board's audit committee. As a result, working as an audit committee member is likely to entail more time and greater responsibility for financial reporting and internal financial controls. If nonprofits choose to establish audit committees with the responsibilities required by SOX, the indirect cost of working on the audit committee will increase. Vermeer et al. (2006) suggest that it would be more difficult for nonprofits to attract new board members and qualified persons to serve on the audit committee because of both increased demands for time and increased liability for financial performance of the organization.

To comply with SOX requirements to increase the responsibility of the board and the CEO for financial oversight and reporting, nonprofit organizations as well as their for-profit counterparts will need to train CEOs and board members to understand details of financial reporting (Independent Sector, 2003; BoardSource and Independent Sector, 2003). These training costs will affect the organization's administrative costs. In addition, in the wake of SOX the United States Senate Finance Committee (2004) pressed for a reduction in board size to improve organizational accountability (Maehara, 2004; Grant Thornton LLP, 2007), which may have been heeded among our sample of nonprofit organizations. However, reducing board size might be undesirable for nonprofits because, as studies suggest, fundraising capabilities of nonprofit organizations are positively related to their board size (Dalton et al., 1999; Brown, 2005).

Clark (2005) and Zhang (2007) argue that the largest monetary cost to for-profit corporations stems from Section 404 of SOX, which mandates a review of the internal controls and further attestation by external auditors. Clark (2005) maintains that, in addition to complying with SOX requirements to revise their internal control procedures, many publicly-traded companies will have to build up their internal auditing staff. Corporations must also devote resources to document processes more completely and to improve the security of their financial information systems. Additionally, they may have to pay higher fees to external auditors -- up 50 percent or more -- for auditing their internal controls (Clark, 2005, Zhang, 2007). Zhang (2007) finds that the average first-year estimated cost for publicly-traded firms that complied with SOX Section 404 auditing requirements was about \$4.36 million for roughly 27,000 hours of internal work and 8,000 hours of external work, which includes a 57 percent increase in audit fees.

Accordingly, we may expect that those nonprofit organizations that decide to invite audit firms to review their financial oversight and internal controls will incur considerably higher costs because of increased audit fees (Anft & Williams, 2004, Zhang, 2007). Moreover, organizations that undertake revision and improvement of their internal controls may need to hire additional staff to deal with the associated processes and procedures (Vermeer, 2006; Petrovits et al. 2011).

These factors suggest that compliance with SOX requirements may lead to increased operational costs for nonprofit organizations. A possible consequence is that fewer resources may be available to these organizations for fundraising purposes. More importantly, we are concerned that an overall rise in operating costs may limit the ability of nonprofits to provide and expand services to clients. As a result, the costs associated with SOX compliance may undermine the ability of a nonprofit organization to deliver on its mission. Based on for-profit

corporations' experience with SOX, nonprofits that adopt provisions of the Act can be expected to accrue certain costs, as described in the following hypotheses:

Hypothesis C1: Nonprofit organizations will **not** incur costs complying with SOX requirements to improve board independence.

Hypothesis C2: SOX related financial oversight responsibilities will increase indirect costs in nonprofit boards by increasing the frequency and duration of board meetings.

Hypothesis C3: SOX related financial literacy training for board members and the CEO will increase administrative costs to nonprofit organizations.

Hypothesis C4: The SOX requirement to reallocate responsibility to hire and oversee audit firms from the executive to the audit committee will increase the working time of the audit committee.

Hypothesis C5: Nonprofit organizations that decide to conduct external audits in compliance with SOX requirements will increase their audit costs.

Hypothesis C6: SOX adoption may decrease the resources available to nonprofit organizations for fundraising activities and thus reduce the organization's fundraising capability.

Hypothesis C7: SOX related increase in administrative costs will limit the ability of nonprofit organizations to provide and expand services to clients.

Hypothesis C8: Adoption of SOX provisions will lead to reallocation of resources from program to administrative expenses.

Hypothesis C9: Adoption of SOX will increase the difficulty for nonprofit organizations to recruit new board members.

Hypothesis C10: *Adoption of SOX will increase the difficulty for nonprofit organizations to recruit new audit committee members.*

Direct and indirect effects of SOX

The literature regarding the benefits and costs of compliance with SOX provisions in for-profit corporations offers a benchmark for anticipation of certain benefits and costs in nonprofit organizations. We had initially assumed that only those nonprofit organizations that adopted SOX provisions would experience the effects of the Act. After interviewing nonprofit executives face-to-face as part of our qualitative study (see below), however, we discovered that some respondents who reported no SOX adoption claimed that their organizations still benefited from SOX because their existing financial control practices were reviewed and improved.

Interviewees explained that the improvements did not follow SOX requirements but were inspired by SOX enactment nonetheless.

To account for possible effects of SOX in those nonprofit organizations that indicated adoption of the Act as well as in those that did not specifically adopt any SOX provisions, we include in our explanatory model three variables tapping modes or types of organizational adoption: (1) adoption of SOX-like practices prior to passage of the Act; (2) considered adoption of SOX practices after the legislation had been passed; and (3) adoption of SOX practices after passage. In the analysis below we relate these explanatory variables to the benefits and costs of SOX realized by nonprofit organizations. Given different modes of SOX influence on nonprofit adoption decisions we hypothesize that these modes will explain SOX effects differently. We expect to find the strongest effects of SOX in those nonprofits that report explicit adoption. We expect more tenuous relationships to benefits and costs in those organizations that

already had similar provisions in place prior to the Act, or only considered adoption of SOX after its passage. Stated as an hypothesis:

***Hypothesis D1:** Nonprofit organizations that report SOX adoption are more likely to experience benefits and costs of the legislation than organizations that report no adoption but may have been affected indirectly.*

Methodology

Quantitative study

To evaluate whether nonprofit organizations have experienced specific benefits or costs from SOX we conducted a survey of top executives concerning the consequences to their respective organizations emanating from SOX adoption. Thus, this study has the usual limitations of surveys,⁴ however, financial data regarding the monetary costs and benefits such as audit fees paid, the allocation of funds to program or administrative expenses, or increased donations to nonprofit organizations were not available, and many of the benefits (for example, better financial controls, or enhanced reputation, etc.) were impossible to quantify soon after the Act had been adopted. Accordingly, we collected the information regarding SOX adoption and effects through a survey of the chief executive officers of nonprofit organizations.

Our quantitative study of SOX adoption and effects is based on a nationwide survey of nonprofit organizations. For this purpose a representative, stratified random sample of 2,000 public charities was selected from the NCCS Core Files 2004, obtained from the National Center for Charitable Statistics (NCCS) at the Urban Institute. The Core Files included data on all 501(c)(3) organizations that were required (and complied) to file Form 990 or Form 990-EZ.

Because 501(c)(3) organizations represent the largest and most inclusive group of public charities, they were selected for this study.

The sampling frame consisting of 303,077 organizations was stratified into three groups based the nonprofit's budgetary expenditures. To define the size groupings we sought the advice of the Urban Institute experts about SOX adoption by size; our size groups approximate the size stratification used by Ostrower and Bobowick (2006) in their study of SOX adoption in nonprofit organizations.⁵ We used the size strata to randomly select 2,000 organizations: 600 from the stratum of smaller organizations (\$100,000-\$1,999,999 annual expenditures) and 700 each from the strata of large organizations (\$2,000,000-\$9,999,999) and the largest organizations (\$10,000,000 and over). We employed this size stratification in response to the literature on SOX adoption by nonprofits, which suggested that SOX could be expected to have its greatest effects on larger organizations (Grant Thornton, 2003, 2004, 2005, 2006, 2007, 2008; Vermeer et al., 2006; Behn et al., 2005; Ostrower & Bobowick, 2006). Considering the experience of the aforementioned researchers, we excluded a significant majority of the smallest 501 (c)(3) nonprofit organizations with annual expenditures below \$100,000 from our random sample of 2000 organizations to ensure a better response rate and to account for the limited resources of the smallest nonprofits to undertake the changes required by the SOX.⁶

Our Survey of Adoption of the Sarbanes-Oxley Act by Public Charitable Organizations was administered in 2006 by regular mail. In accordance with the recommended procedures (Dillman, 2000; Yammarino, 1991; Gupta 2000), the survey was replicated three times, with reminder postcards mailed after each survey, and reminder follow-up telephone calls after the second survey. The response rate to the survey reached approximately 20 percent (19.6%), yielding a sample of 304 nonprofit organizations.⁷ Some researchers have argued that nationwide

surveys of for-profit and nonprofit organizations typically receive low return rates, with a 15 percent return rate sometimes reaching a level of acceptability for organizational surveys (Huselid, 1995; Kumar, Subramanian & Yauger, 1998; Milliken, Martin & Morgan, 1998; Simonin, 1997; Hager et al., 2003). Cycyota & Harrison (2002) also assumed that a response rate of 18 percent was quite common for top executive officers in private businesses. Grønbjerg and Child (2003) achieved an 18 percent response rate from mail and telephone supported surveys of Illinois nonprofits.

To evaluate the possibility of nonresponse bias we employed one-way analysis of variance tests (ANOVA). The test results showed no statistically significant differences in means between respondents and nonrespondents on such indicators as organizational size, wealth, age, and policy area.⁸ Additionally, as shown in Table 2, nonprofit organizations that reported adopting SOX provisions and those that did not responded to the survey in nearly equal numbers: 50.3 percent of respondents did not adopt any SOX provisions after the enactment of the legislation, while the remainder, 49.7 percent, reported adopting from one to 11 of the 15 SOX provisions identified as relevant to nonprofit organizations in Table 1. The even distribution of adopters and non-adopters shows that the survey did not elicit responses only from those organizations that might be most interested (i.e., those implementing the legislation) and suggests the absence of response bias originating from the fact of SOX adoption.

[Table 2 Here]

To assess the sampling error we performed a standard error of proportions test. The test (t-test) suggested that at a 95 percent confidence level the sample fell within the margin of error of +/- 4.5 percent of the population parameters⁹ of public charity organizations filing IRS Form-990 or Form 990-EZ.

Table 3 presents the characteristics of the respondents to the survey and their respective organizations. The results show that the about 90 percent of the respondents (89%) are either Chief Executive Officers (71%) or Chief Financial Officers (18%); the remaining 11 percent hold managerial positions. This distribution taps our intended participant pool. They have a mean of 9 years of experience (9.1) in their current position. On average, the nonprofit organizations in the sample have 367 employees and have been in existence about 30 years (29.8). Because research finds that nonprofit size is an important factor in predicting SOX adoption (self-identifying reference deleted); the sample organizations are stratified into three size categories by their annual budget: 37.4 percent are in the category of small organizations (average budget of \$888,893); 36.0 percent are in the second group of medium size organizations (average budget of \$4,723,240); and 26.6 percent are in the third group consisting of large organizations (average budget of \$41,129,012). The statistics presented in Table 3 show that the sample comprises great variation across organizations with respect to paid staff, age, and budget.

[Table 3 Here]

Qualitative study

To obtain a fuller understanding of the perceptions, attitudes, and behaviors of nonprofit practitioners in decision-making positions with regard to SOX, we conducted in-person interviews. We interviewed the executive director and the chief financial officer/comptroller in nonprofit organizations of different sizes in a Southern city of about 110,000 population.¹⁰ We selected six nonprofit organizations with regard to their size, two small, two medium-sized, and two large, corresponding to the sampling frame of our survey sample of nonprofit organizations described above.

The interview respondents provided important insights regarding the adoption, or non-adoption, of SOX provisions by their nonprofit organizations. In the face-to-face interviews, some respondents identified specific effects of SOX implementation on their organization. Other respondents, though, told us that they did not perceive SOX as an external challenge to their organization and reported that SOX had not been widely discussed at professional meetings as a matter of great urgency. Finally, some respondents acknowledged possible effects of the legislation even though their organization had not specifically adopted any of the Act's provisions.

Findings: SOX Adoption and Effects

The goal of this study is to assess whether the expected benefits and costs of SOX adoption developed from the literature on for-profits accrue to nonprofit organizations. Table 4 displays the benefit and cost items presented in the nonprofit survey, which were derived from business experts' opinions and from empirical studies of the effects of SOX on publicly-traded corporations. Respondents in our nonprofit sample indicated whether their respective organization had experienced each benefit or cost. Heretofore, these potential effects have not been examined empirically in the nonprofit sector.

The results presented in Table 4 show that far less than a majority of responding nonprofits experienced any of the effects of SOX adoption, either positive or negative.¹¹ Cumulatively, however, most of the organizations experienced at least one effect (see Table 5). This finding might have been anticipated because as shown in Table 2, adoption of SOX provisions by nonprofit organizations is rather modest. Half of the sampled nonprofits did not adopt any provisions (50.3%), and most of the organizations that did initiated only one or two (34.9%).

[Table 4 Here]

According to the survey respondents, the perceived benefits that accrue to nonprofit organizations most often as a result of SOX adoption are improvements in financial management and governance (Table 4). About one-quarter of the organizations indicate “better financial controls” (27.3%), “reduced risk of accounting fraud” (24.3%), and “enhanced effectiveness of the board” (21.1%) as positive effects of SOX.¹² These findings support our benefit hypotheses B1, B2, and B3. Another benefit hypothesis received less support in this sample: Consistent with our benefit hypotheses B4, 10 percent of the nonprofit respondents reported that SOX had “enhanced the reputation of the organization” (9.9%). Only about 4.3 percent said that “better fundraising capabilities” emanated from SOX (B7). Less than 3 percent of the nonprofits recognized benefits of “more private donations” (2.6%) (B6) and “more government contracts” (0.7%) (B5).

Among the negative effects experienced by nonprofit organizations as a result of SOX, those most often reported support our cost hypotheses C5, C4, and C8: “increased external audit fees” (36.5%)—the most frequently cited effect, whether positive or negative—“longer and more frequent audit committee meetings” (19.4%), and “reallocation of resources from program to administrative expenses” (14.8%). These findings support the expectation that the material costs of SOX adoption, such as higher audit fees and reallocation of resources, are immediate, while benefits, such as enhanced reputation and material gains such as more private donations and government contracts, might accrue more slowly, if at all. Experienced by fewer nonprofit organizations, other negative effects that support our cost hypotheses C3 and C7 describe increased financial training costs (13.8%) and fewer resources to meet clients’ needs (9.5%).¹³ About 6 percent of the nonprofits encountered difficulties pertaining to board governance, such

as having longer and more frequent board meetings (6.9%) (C2) or recruiting board members (6.3%) (C9) or audit committee members (5.9%) (C10). Only 3 percent identified decreased fundraising capabilities arising from SOX (C6).

The final cost item in Table 4 concerns the potential costs to nonprofit organizations from the board independence provisions of SOX. Hypothesis C1 anticipated that nonprofits would not incur costs related to increased board independence because these entities do not compensate the work of their board of directors. The survey responses provide support to this hypothesis, showing that only 2 percent of the nonprofit organizations were affected by the “board independence” requirement of SOX.

The analysis of the effects of SOX shown in Table 4 suggests that material costs accrue faster than material gains to nonprofit organizations. Direct material costs that adopting organizations experience most often are increased audit fees, higher financial training costs for board members and the CEO, and reallocation of resources from program to administrative expenses. An indirect cost reported by one-fifth of the organizations is longer and more frequent meetings of audit committees of the board. Potential material gains, such as more private donations and government contracts, occur much less frequently among the nonprofits (less than 3%). Less tangible benefits do accrue to them, however: financial management improvements follow SOX adoption for about one-quarter of the sample. In the following section we explore the relationship between the mode of SOX adoption and the positive and negative effects realized by nonprofit organizations.

Explaining the Positive and Negative Effects of SOX

As shown in Table 4, our survey assessed 18 possible effects of SOX, including both benefits ($n = 8$) and costs ($n = 10$). Table 5 presents the frequency of these “total” effects, either benefits or costs. The nonprofit respondents reported experiencing from 1 to 13 effects.

[Table 5 Here]

As seen in Table 5, 132 respondents reported no effects of SOX. Even though we hypothesized a relationship between SOX adoption and its effects, Table 2 shows that 153 organizations reported no SOX adoption. Thus, 21 respondents (153 minus 132) apparently adopted no provisions of SOX, yet experienced SOX effects. The difference between adopters and those who say that they experienced effects of SOX is intriguing.

One explanation for this inconsistency between the number of SOX adopting organizations and the number of organizations that cited SOX effects is provided by the participants in the face-to-face interviews. Some of the nonprofit executive directors we interviewed claimed that their organizations experienced costs from increased audit fees and benefits from revisions of existing financial management and accountability procedures following SOX enactment, but at the same time they maintained that their respective organizations adopted no SOX practices. Apparently, after SOX was passed the leaders of some nonprofit organizations revised and improved financial controls in their respective organizations, but did not attribute the changes to SOX requirements. Likewise, the increase in audit fees led to material costs to many nonprofit organizations, but some respondents did not attribute them to the influence of the new SOX related audit standards.¹⁴

To test this assumption we ran a negative binomial regression to incorporate different modes of SOX adoption – direct and indirect. We operationalized these modes as “Had before SOX,” “Considered but not adopted after SOX,” and “Adopted after SOX.” The last of these

was intended to measure the direct effects of SOX adoption, and the other two, the indirect effects.¹⁵ We hypothesized that those organizations that had provisions in place identical or similar to SOX before SOX was enacted would experience the smallest SOX effects, while the organizations that adopted SOX conscientiously following SOX enactment would experience more pronounced effects of SOX adoption.

To examine SOX effects in the nonprofit organizations we estimate two models that explain accruing costs and benefits by the same independent variables – the modes of SOX adoption. The dependent variables representing the effects of SOX adoption are constructed as the number of benefits and the number of costs experienced by the nonprofit organization, each constructed as a summated scale. The summated scale indices are considered the most appropriate for this type of data, where all items in the scale are equally important and equally distanced from each other.¹⁶

Figure 1 presents the distributions of responses of the nonprofit executives concerning the benefits and costs of SOX adoption. The distributions are nonlinear, with most responses at zero or at the low end of the effects spectrum.¹⁷ The skewed responses on the SOX benefits and costs indices are characteristic of a Poisson distribution. However, the high level of zero responses leads to over-dispersion, which suggests that the variance exceeds the mean—an indication of the hidden heterogeneity of observations.

[Figure 1 Here]

To eliminate the complications caused by over-dispersion, we estimated the negative binomial regression (NBR) model, which includes the alpha parameter that reflects the unobserved heterogeneity among the observations.¹⁸ To explain SOX benefits and costs we included in each model three variables indicating mode and level of adoption: (1) the number of

SOX practices that the nonprofit organization “had before SOX,” (2) the number of practices “considered but not adopted after SOX,” and (3) the number of practices “adopted after SOX.” We used the “had before SOX” and “considered after SOX” variables in the NBR models to account for effects experienced indirectly by a number of nonprofit organizations that reported no SOX adoption (n=21). The three explanatory variables are constructed as summated scale indices of the number of SOX practices adopted.

[Table 6 here]

Table 6 displays the results of the negative binomial regression models. The table presents the marginal effects of SOX adoption, and SOX-induced revisions or changes on the predicted levels of benefits and costs realized by the nonprofit organizations. Each of the three explanatory variables has a positive and highly statistically significant impact ($p < .0001$) and produces a distinct marginal effect on the predicted levels of benefits and costs. The mean predicted levels of benefits and costs are nearly identical, with costs exceeding benefits by only 0.018 (costs=0.873 - benefits=0.855), thus suggesting that SOX yielded equal benefits and costs on average. In the models for benefits and costs alike, the largest explanatory power is exhibited by post SOX adoption. The relative size of the statistically significant coefficients—largest for nonprofit organizations that explicitly adopted SOX, next largest for organizations that considered but did not adopt SOX provisions, and smallest for those that already had SOX-like practices in place prior to the Act—support hypothesis D1 pertaining to the direct and indirect effects of SOX.

The results of the NBR show that in the benefits model, among the post-SOX adopters one additional adopted SOX provision increases predicted benefits by 0.346, and in the costs model one additional adopted practice increases predicted costs by 0.354. As hypothesized, the

marginal effects of the two variables “considered after SOX” and “had before SOX” also show increases in predicted benefits and costs to nonprofit organizations, with the impacts successively less pronounced. For every provision considered post SOX, benefits are predicted to increase by 0.253 and costs by 0.239. Finally, for every practice in place prior to SOX, benefits are predicted to rise by 0.173 and costs by 0.186.

To determine whether various organizational characteristics might affect the benefits or costs realized by the sample from SOX adoption, we performed analyses of mean differences, based on organizational size, wealth, age, and policy area. The results showed no differences in costs according to any of these variables, and no differences in benefits emanating from organizational wealth, age, or policy area. The only statistically significant difference found was between the largest and smallest organizations by budget size (see Table 3), with the largest nonprofits reporting greater benefits. This finding is not surprising given that previous research had suggested that SOX might have greatest effects among large organizations (Grant Thornton, 2003, 2004, 2005, 2006, 2007, 2008; Vermeer et al., 2006; Behn et al., 2005; Ostrower & Bobowick, 2006; Benzing et al., 2010).¹⁹

In sum, most nonprofit organizations in the sample experienced benefits and costs as a result of SOX adoption, and a smaller group experienced costs and benefits indirectly despite claiming no SOX adoption. Among those nonprofits that reported the adoption of a larger number of SOX provisions, the benefits and costs were found at a higher level than among those that adopted fewer provisions. In addition, the largest organizations in the sample reported more benefits. The number of positive and negative effects of SOX adoption is proportional to the number of SOX provisions adopted. Yet, even non-adopters may see increases in costs and benefits from the indirect influence of SOX on their internal operations.

Conclusion

In 2002 Congress passed the Sarbanes-Oxley Act to address well-publicized, highly consequential financial abuses among publicly-traded corporations such as Enron, Tyco, and WorldCom. With minor exceptions pertaining to provisions for whistle-blower protection and preservation of documents, the Act did not encompass the nonprofit sector, and implementation was not intended or required. Nevertheless, according to the results of our study of a stratified random sample of nonprofit organizations, about half adopted provisions of SOX. More importantly, the sampled nonprofit organizations experienced effects from the legislation in proportion to the level of adoption. At least one in five of the nonprofits related benefits of better financial controls (27.3%), reduced risk of accounting fraud (24.3%), and enhanced board effectiveness (21.1%). The largest group, however, amounting to more than one-third of the nonprofits (36.5%), reported increased fees for external audit, and about 15 percent cited “reallocation of resources from program to administrative expenses” (14.8%) and increased financial training costs (13.8%). The benefits of SOX may be both desirable and “worth the costs,” but we are concerned about the reallocation of resources away from programming to administration and the additional expenses incurred that can jeopardize the ability of financially-strapped nonprofit organizations to pursue their missions—certainly not the intention of the Sarbanes-Oxley Act.

Given the difficulty of documenting the intended effects of public policies, the unintended effects are even more elusive and become targets for investigation both less systematically and less often. In the present research we try to improve inquiry into these unintended effects in several ways. First, we began our research with qualitative interviews that

enriched our quantitative analysis. Based on the information gleaned from the interviews, we designed a protocol and employed an innovative quantitative methodology that took into account not only explicit adoption decisions of nonprofits following SOX but also whether the organizations had SOX practices in place prior to the Act, and whether they considered adoption of SOX provisions after the Act but did not report adoption. Using negative binomial regression, we estimated models of the benefits and costs of SOX that were appropriate for these modes of adoption. The results confirmed our qualitative observations that SOX might affect organizations both directly through adoption and indirectly even if not adopted explicitly.

Our findings highlight the effects of SOX--nonbinding legislation to nonprofit sector organizations--on board operations, financial risk management, audit fees, and ultimately mission attainment. We encourage greater attention to the unintended effects of public policies on nonprofit organizations by the practice and research communities. We hope that the findings and methodology of this study may help nonprofit practitioners, advocates, and policy makers to understand and evaluate the unanticipated effects of legislation on governance, management, and costs and benefits for the nonprofit sector.

Endnotes

¹ Legal experts view two SOX provisions as mandatory for all types of private organizations because they are incorporated in the text of the U.S. Code. SOX refers to the amendment to Section 42121 (b) of Title 49 of the U.S. Code, which requires protection for informants who assist federal investigations in fraud cases. SOX also stipulates a similar amendment to the U.S. Code Chapter 3, Title 18 to prohibit destruction, alteration or falsification of records, including corporate audit records (Sarbanes-Oxley, 2002). These two SOX provisions established whistleblower protection and financial documents preservation; both provisions applied to nonprofit organizations as well as any for-profit corporations. However, these two provisions were the least controversial in the Act.

² Hypothesis H8 refers to the benefit of generating “more resources to meet clients’ needs” to solicit the perceptions of the CEOs regarding whether SOX compliance benefitted organizational clients. The hypothesis (and item, see Table 4) emphasized resources for clients’ needs as opposed to the operational needs of the nonprofit organization.

³ NYSE CG rules § 330A.03.

⁴ This survey studied the perceptions of nonprofit executives of positive and negative effects of SOX adoption. Although studies of perceptions are common, we considered the possibility that the survey of the CEOs may have produced an insider bias in the form of socially desirable answers. We tried to correct for this bias by structuring our survey. All possible benefits and costs were listed in the table, and respondents were asked to mark those benefits and costs the organization had experienced in regard to SOX. We analyzed the benefits and costs reported, and concluded that insider bias was not a factor here, as the CEOs and chief financial officers identified more costs than benefits.

⁵ The study of SOX adoption by Ostrower and Bobowick (2006) and Ostrower (2007) used full (9 strata) and reduced (5 strata) size strata of public charities to understand how size influenced the SOX adoption behavior of nonprofit organizations. Following similar stratification logic, we devised three strata – 100,000-1,999,999; 2 million – 9,999,999; and 10 million +. Our purpose was to achieve a higher response rate, and to survey more large organizations based on the expectation that large nonprofits adopt SOX provisions more actively. However, we included sufficient number of smaller organizations (600) in our sample to understand their SOX adoption activities.

⁶ As we expected, the response rate from organizations in the range of \$100,000-200,000 was extremely low numbering only 7 organizations at the level of 4 percent, while the response rate from organizations with expenditure size between \$1,000,000 and \$2,000,000 constituted 26 percent. This finding is not surprising given the human and monetary resources available in larger organizations.

⁷ To calculate the response rate, we also excluded 21 percent (or 420) of the sampled organizations after calling 300 randomly selected organizations from the preselected sample of 2000 and finding out that 21 percent of them were inactive. The total number of responses received was 315. Five of them were excluded because they either had too many missing answers or declined to participate on the ground that that SOX was not applicable to nonprofits. Four other cases were excluded because the respondents did not answer the questions pertaining to the main variable of interest—SOX adoption. Finally, two extreme outliers were excluded for the purpose of more accurate statistical analysis. Both outliers reported adoption of all 15 SOX provisions.

⁸ The size of organization was measured by the amount of annual expenditure, the wealth was calculated as a difference between annual revenues and expenditures, the age was calculated from the year when the tax-exempt status was granted to an organization, and policy area was defined based on the NTEE classification provided by the Urban Institute.

⁹ By population we mean the 2,000 organizations that were selected by a disproportionate stratified random sampling technique for the study.

¹⁰ The interviews were conducted face-to-face with the purpose to determine how executive directors and financial specialists perceived SOX in relation to their organizations, and whether any changes in financial oversight and management have been made in response to SOX. We used an open ended questionnaire with the follow up structured response table that asked our interviewees to mark those SOX practices that their respective organizations have adopted and those that they perceived as irrelevant or too expensive. We took notes while our respondents were sharing information with us. Immediately after the interview, the notes were reviewed for accuracy and transcribed.

¹¹ The questionnaire presented both types of effects to respondents to avoid possible selection bias. For example, based on the literature we included items for both “increased fundraising capability” and “decreased fundraising capability,” “more resources to meet clients’ needs” and “fewer resources to meet clients’ needs.”

¹² We treat these findings as suggestive of what is happening in nonprofit organizations as a result of SOX direct and indirect influence. At the time of the survey, there was no hard financial data to support the claim of executive directors concerning the improvements in financial management from the adoption of several SOX policies. Therefore, individual and professional opinions of directors are the only indicators of any SOX impact, which are often received by researchers with a grain of salt. However, the soft nature of the opinion data does not negate surveys as a useful research tool.

¹³ A few organizations (n=8) reported an increase in resources to meet clients' needs, hypothesis B8.

¹⁴ The results of the qualitative study revealed that SOX had created high demand for audit services among for-profit and nonprofit organizations alike. All but one out of six interview participants indicated that finding an accounting company for external audit after SOX had become harder. Therefore, many smaller nonprofits have experienced difficulties finding an external auditor, and larger nonprofits cited audit fee increases.

¹⁵ The survey presented respondents with four options relating to the SOX provisions: "Had before SOX," "Considered for Adoption," "Adopted after SOX," and "Not considered or adopted after SOX."

¹⁶ To assess the reliability of the scale we used the Cronbach's alpha test, which produced a coefficient of reliability $\alpha = 0.737$ for the benefits scale and of $\alpha = 0.733$ for the costs scale. The alpha test confirms that the underlying constructs "benefits" and "costs" are well represented by the items in the scales. We also explored items in the benefits and costs tables for dimensionality by using the multiple correspondence analysis (MCA). The MCA is used instead of a factor analysis to define the number of dimensions among the binary variables. Results of the MCA exhibit only one dimension among all benefit variables, and one dimension among the cost variables. Considering the internal reliability and unidimensionality of both scales we built summated scale indices for benefit and cost variables.

¹⁷ Figure 1 presents a weighted benefits index to account for the unequal number of benefit and cost items.

¹⁸ Negative binomial regression automatically makes a test for the PRM and compares it to the NBR. The likelihood-ratio alpha test allows one to choose between the models on the basis of the Chi-square test for $\alpha = 0$. If α is close to zero, the PRM model is preferred. The NBR with the benefits index as the dependent variable and the modes of SOX adoption as independent variables produces the likelihood-ratio alpha test Chi-square = 118.67 ($p = 0.0001$). Likewise, the likelihood-ratio alpha test for the costs index as dependent variable and modes of SOX adoption as independent variables, estimated as a regular procedure by the NBR, produces the Chi-square = 82.44 ($p = 0.0001$). Thus, both regressions produce alpha tests that strongly indicate that the NBR model is preferred to the PRM model.

¹⁹ The Welch Test (Robust Test of Equality of Means) indicated a statistically significant difference between the nonprofit organizations grouped by size with respect to total benefits from SOX adoption ($F = 3.82$, and $P = 0.24$). The Tukey post-hoc test revealed that the large organizations realized more benefits than the small organizations. However, we found no statistically significant difference in benefits between the large and the medium-size organizations, and between the small and medium-size organizations.

References

Anft, M., and Williams, G. "Internal-controls system may prove costly." *Chronicles of Philanthropy*, 2004, 16, 21.

Behn, B. K., DeVries, D. D. and Lin, J. *The determinants of transparency in nonprofit organizations: an exploratory study*. Social Science research Network: 2005. Retrieved December 21, 2008, from: <http://ssrn.com/abstract=727363>

Benzing, C., Leach, E., McGee, C. Sarbanes-Oxley and the New Form 990: Are Arts and Culture Nonprofits Ready? *Nonprofit and Voluntary Sector Quarterly*, first published on August 2, 2010 as doi:10.1177/0899764010378172

Bisoux, T. "The Sarbanes-Oxley." *BizEd. AACSB International*: 2005. Retrieved November 26, 2008, from: <http://www.aacsb.edu/publications/archives/julyaug05/p24-29.pdf>

BoardSource and Independent Sector. "The Sarbanes-Oxley Act and Implications for Nonprofit Organizations." *Independent Sector*: 2003. Retrieved March 11, 2011 from: http://www.independentsector.org/uploads/Accountability_Documents/sarbanes_oxley_implications.pdf

Bumgardner, L. "Reforming corporate America: how does the Sarbanes-Oxley Act impact American business?" *Journal of Contemporary Business Practice*, 2003, 6, 1. Retrieved December 01, 2008, from: <http://gbr.pepperdine.edu/031/sarbaneSOXley.html>

CFO Research Services. *Compliance and Technology: A Special Report of Process Implemented and Automation in the Age of Sarbanes-Oxley*. CFO Research Services in collaboration with Virsa System, and PricewaterhouseCoopers LLP, 2005, Retrieved December 06, 2008, from: www.ceec.ch/qsPortal/Home.asp?N=1637&C=155

Clark, R. C. "Corporate governance changes in the wake of the Sarbanes-Oxley Act: a morality tale for policymakers too." *Georgia State Law Review*, 2005, 22, 251; Retrieved March 5, 2009, from: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=808244

Colombo J. D., and Hall, M. A. *The charitable tax exemption*. Boulder, CO: Westview Press, 1995.

Cycyota, C., and Harrison, D. "Enhancing survey response rates at the executive level: are employee- or consumer-level techniques effective?" *Journal of Management*, 2002, 28, 2, 151-176.

Dillman, D. A. "Writing Questions," Chapter 2 in *Mail and Internet Surveys: The Tailored Design Method*. 2000. New York: John Wiley & Sons, pp. 32-78.

Dreier, A. Sarbanes-Oxley and College Accountability, *Chronicles of Higher Education, The Chronicle Review*, 2005, 51 (44): B10

Fremont-Smith, M.R. *Governing Nonprofit Organizations: federal and state law and regulation*. The Belknap Press of Harvard University Press, Cambridge, 2004.

Freudenberger, L. The effects of SOX (interview). Insights Accounting, Smart Business Network, Inc. 2008. Retrieved on Oct 22, 2008 at:
<http://bvccpa.net/images/Smart%20Business/SOX%20April.pdf>

Gifford R. and Howe H. "Regulation and unintended consequences: Thoughts on Sarbanes-Oxley," *The CPA Journal*: 2004. Retrieved March 21, 2009, from:
<http://www.nysscpa.org/cpajournal/2004/604/perspectives/p6.htm>

Grant Thornton LLP. *National Board Governance Survey for Not-for-Profit Organizations*. 2003. Retrieved June 23, 2007, from:
http://www.accountingmarketing.org/AAMMAA/G%20Thornton%203d_Niche-building%20campaign_NFP_Board_Survey.pdf

Grant Thornton LLP. *National Board Governance Survey for Not-for-Profit Organizations*. 2004. Retrieved September 23, 2005, from:
<http://www.grantthornton.com/staticfiles/GTCom/articles/2004%20National%20Board%20Governance%20Survey.pdf>

Grant Thornton LLP. *National Board Governance Survey for Not-for-Profit Organizations*. 2005, Retrieved December 23, 2006, from:
http://www.grantthornton.com/staticfiles/GTCom/files/Industries/NotForProfit/NFP_Board_Survey_05.pdf

Grant Thornton. Knock your SOX off – Getting business benefits from 404 compliance, 2006, *Grant Thornton Corporate Governance Series*, 2 (1): 1-20. Retrieved March 24, 2006, from:

http://www.grantthornton.com/staticfiles/GTCom/files/AboutUs/Corporate%20Governance/CorporateGovernor_white_paper_series/404%20whitepaper_FINAL.pdf

Grant Thornton LLP. *National Board Governance Survey for Not-for-Profit Organizations*, 20006. Retrieved July 12, 2007, from:

http://www.grantthornton.com/staticfiles/GTCom/files/Industries/NotForProfit/nfp_board1.pdf

Grant Thornton LLP. *National Board Governance Survey for Not-for-Profit Organizations*, 2007. Retrieved July 20, 2008, from:

http://www.gt.com/staticfiles/GTCom/files/Industries/NotForProfit/07_BG_Survey.pdf

Grant Thornton LLP. *2008 National Board Governance Survey for Not-for-Profit Organizations*, 2008. Retrieved July 21, 2009, from:

<http://www.gt.com/staticfiles/GTCom/files/Industries/NotForProfit/08%20Natl%20Board%20Gov%20Survey.pdf>

Greene, S. G. "One in five charity boards changed policies in past year." *Chronicles of Philanthropy*, 2003, 16, 5.

Grønbjerg, K. and Child, C. "Illinois Nonprofits: A Profile of Charities and Advocacy Organizations", Chicago, IL: Donors Forum of Chicago, 2003: 3-39. Retrieved on December 2, 2006, from:

http://www.donorsforum.org/s_donorsforum/bin.asp?CID=11776&DID=26623&DOC=FILE.PD

F

Gupta, N. Shaw, J. and Delery, J. “Correlates of response outcomes among organizational key informants.” *Organizational Research Methods*, 2000, 3(4):323-347

Hager, M. A., and Pollak, T.H. “The capacity of performing arts presenting organizations.”

Urban Institute: 2002. Retrieved October 26, 2008, from:

http://www.urban.org/UploadedPDF/410604_PerformingArts.pdf

Holt, F.M. *The Sarbanes-Oxley Act: costs, benefits and business impact*, 2007, Butterworth-Heinemann

Huselid, M. A. “The impact of human resource management practices on turnover, productivity, and corporate financial performance.” *Academy of Management Journal*, 1995, 38: 635-672.

Jackson, P. “Sarbanes-Oxley for nonprofit boards: a new governance paradigm,” John Wiley and Sons, Inc. Hoboken, New Jersey. 2006.

Jackson P. and Fogarty, T. *Sarbanes-Oxley and nonprofit management: Skills, techniques, methods*, John Wiley and Sons, Inc. Hoboken, New Jersey. 2006.

Independent Sector. "Accountability: Sarbanes-Oxley and Implications for Nonprofits."

Independent Sector: 2003. Retrieved January 11, 2009 from:

<http://www.independentsector.org/issues/sarbaneSOXley.html>

Kumar, K., Subramanian, R., and Yauger, C. "Examining the market orientation-performance relationship: A context-specific study." *Journal of Management*, 1998, 24(2): 201-233

Lechem, B. "Chairman of the Board: A Practical Guide," John Wiley and Sons, Inc. Hoboken, New Jersey. 2002.

Linck, J., Netter, J., and Yang, T. The Effects and Unintended Consequences of the Sarbanes-Oxley Act on the Supply and Demand for Directors, *The Review of Financial Studies*, 2009, 22(8): 3287-3328

Mead, J. Confidence in the Nonprofit Sector Through Sarbanes-Oxley-Style Reforms, *Michigan Law Review*, 2007, 106: 881-900.

Milliken, F. J., Martin, L. L., and Morgan, H. "Explaining organizational responsiveness to work-family issues: The role of human resource executives as issue interpreters." *Academy of Management Journal*, 1998, 41(5): 580-592

Ostrower F. and Bobowick M. *Nonprofit Governance and the Sarbanes-Oxley Act*, Washington DC: The Urban Institute: 2006, 1-8. Retrieved May 2, 2007, from:

http://www.urban.org/UploadedPDF/311363_nonprofit_governance.pdf

Ostrower, F. *Nonprofit Governance in the United States*, Washington DC: Urban Institute, 2007. Retrieved June 24, 2009, from: <http://www.urban.org/url.cfm?ID=411479>

Petrovits, C., Shakespear, C., Shih, A. The Causes and Consequences of Internal Control Problems in Nonprofit Organizations, *Accounting Review*, 2011, 86(1): 325-341

Pynes, Joan E. (2011). *Effective Nonprofit Management: Context and Environment*. Armonk, NY: M.E. Sharpe.

Sarbanes-Oxley Act 2002. *Public Law No. 107-204*. Washington, DC: GPO. Retrieved: August 26, 2005, from: <http://www.law.uc.edu/CCL/SOact/soact.pdf>

Simonin, B. L. "The importance of collaborative know-how: An empirical test of the learning organization." *Academy of Management Journal*, 1997, 40(5): 1150-1174

U.S. Senate Committee on Finance. *Charity oversight and reform: keeping bad things from happening to good charities*. 2004. Retrieved November 11, 2008, from: <http://www.senate.gov/%7Efinance/sitepages/hearing062204.htm>

Vermeer, T., Raghunandan, K., and Forgione, D. "The Composition of Non-Profit Audit Committees." *Accounting Horizons*, 2006, 20(1): 75-90.

Wagner, S. "The unexpected benefits of Sarbanes-Oxley". *Harvard business review*, 2006, (0017-8012), 84 (4), p. 133.

Yammarino F., Skinner S., Chiders, T. "Understanding mail survey response rate behavior a meta-analysis.: *Public Opinion Quarterly*, 1991, 55(4):613-639

Zhang, I. Economic Consequences of the Sarbanes-Oxley Act of 2002, *Journal of Accounting and Economics*, 2007, 44 (1-2):74-115

Table 1. SOX provisions relevant to nonprofit organizations

Conflict of Interest policy
Whistle-blower Protection policy*
Document Preservation policy*
Annual (or biannual) external audit
Audit partner rotation after 5-7 years
Separation of audit and non-audit services
Audit committee of board
Dual leadership (defined as the positions of Board chair and CEO held by different persons)
Board holds executive sessions
Independent board members
Basic financial training for board members
Basic financial training for executive director
CEO formal certification of the accuracy of financial documents
Open public access to financial statements
Open public access to audit reports

* The Whistle-blower Protection policy and the Document Preservation policy are mandatory provisions relevant to all types of private organizations.

Source: Adapted from Self-identifying reference deleted.

Table 2. Frequency of Post-SOX Adoption

Number of SOX			
Provisions adopted	Frequency	Percent	Cumulative Percent
0	153	50.3	50.3
1	58	19.1	69.4
2	48	15.8	85.2
3	18	5.9	91.1
4	13	4.3	95.4
5	9	3.0	98.4
6	1	.3	98.7
7	1	.3	99.0
8	1	.3	99.3
9	1	.3	99.7
11	1	.3	100.0
Total	304	100.0	

Table 3. Characteristics of Respondents and Participating Organizations

Respondent characteristics	N of resp.	% of resp.	Mean	Std. Deviation
Chief executive officers	216	71.0	n/a	n/a
Chief financial officers	54	18.0	n/a	n/a
Managers	34	11.0	n/a	n/a
Years in current position	303	99.7	9.1	7.3
Organizational characteristics	N of resp.	% of resp.	Mean	Std. Deviation
Number of paid staff	298	98.0	367	2160
Age of organizations	296	97.0	29.8	17.7
Budget size of organizations	297	98.0		
(three categories)				
1 – \$100,000- 1,999,999	111	37.4	\$888,893	\$495,573
2 - \$2,000,000 – 9,999,999	107	36.0	\$4,723,240	\$2,336,662
3 - \$10,000,000 and up	79	26.6	\$41,129,012	\$67,398,823

Source: Adapted from Self-identifying reference deleted.

Table 4. Frequencies of Benefits and Costs after SOX Adoption*

Benefits and Costs of SOX adoption	Percent and (N) of nonprofit organizations reporting benefit or cost *	
Benefits	%	(N)
B1: Better financial controls	27.3	(83)
B2: Reduced risk of accounting fraud	24.3	(74)
B3: Enhanced effectiveness of the board	21.1	(64)
B4: Enhanced reputation of the organization	9.9	(30)
B5: More government contracts	0.7	(2)
B6: More private donations	2.6	(8)
B7: Increased fundraising capability	4.3	(13)
B8: More resources to meet clients' needs	2.6	(8)
Costs	%	(N)
C1: Difficulties in achieving board independence	2.0	(6)
C2: Longer and more frequent board meetings	6.9	(21)
C3: Increased CEO and board training expenses	13.8	(42)
C4: Longer and more frequent audit committee meetings	19.4	(59)
C5: Increased fees for external audit	36.5	(111)
C6: Decreased fundraising capability	3.0	(9)
C7: Less resources to meet clients' needs	9.5	(29)
C8: Reallocation of resources from program to administrative expenses	14.8	(45)
C9: Difficulties in recruiting board members	6.3	(19)
C10: Difficulties in recruiting audit committee members	5.9	(18)

*N ranges from 268 to 304 depending on missing data.

Table 5. Total Effects of SOX Reported by Nonprofit Organizations*

Number of Effects*	Number of Nonprofit Organizations	Percent of Nonprofit Organizations
0	132	43.4
1	41	13.5
2	27	8.9
3	25	8.2
4	23	7.6
5	15	4.9
6	13	4.3
7	11	3.6
8	3	1.0
9	2	.7
10	3	1.0
11	3	1.0
13	1	.3
Total	299	98.4
Missing	5	1.6
Total	304	100.0

*Total effects include both benefits and costs

Table 6. Negative Binomial Regression Results for SOX Benefits and Costs

Estimated Benefits			Estimated Costs		
Mean = 0.855			Mean = 0.873		
Explanatory Variable	Marginal Effect*	Std Err	Explanatory Variable	Marginal Effect*	Std Err
Had before SOX	0.173	0.040	Had before SOX	0.186	0.036
Considered after SOX	0.253	0.070	Considered after SOX	0.239	0.060
Adopted after SOX	0.346	0.056	Adopted after SOX	0.354	0.050

*All coefficients are statistically significant at $p < 0.0001$

Figure 1. Distribution of Benefits and Costs of SOX Adoption

