

# The Impact of Voluntary Disclosures on the Demand for Collective Goods

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# **The Impact of Voluntary Disclosures on the Demand for Collective Goods**

## **Introduction**

The purpose of this paper is to empirically investigate the role voluntary disclosure plays on the demand for organizational services. We base our analysis on an economic model of demand that was first developed by Weisbrod and Dominguez (1986). They postulate that the market demand for a particular type of collective-good output depends – as in the case of purely private goods – on price, quality, and the information about both price and quality available to the buyer. This study presents the most direct empirical evidence to date on the effect of information about both price and quality on the demand for organizational services.

Not-for-Profit organizations (NFP) have a common underlying mission which is to use their funds to carry out the organization's activities, not withholding any portion of these funds as profit for any person or set of persons. When the issues of fairness, integrity, and ethics surfaced through the major scandals of the last few years the idea that the directors were influenced was closely scrutinized. With individual donors providing such a large portion of funding for NFPs, and with the sudden influx in the number of charitable organizations vying for their money, more and more individual donors are seeking objective performance measures and more information to facilitate their wise giving decisions. This promotes an increasing demand for better accountability and transparency of NFPs, which also highlights the crucial role of information disclosures as a communication tool between the organization and potential donors. Through information disclosures, NFPs can demonstrate accountability to their stakeholders about effective and efficient operations, compliance with laws and regulations, accomplishment of their mission, and capacity in fulfilling their social responsibility role in the long-term.

However, today's NFPs have lagged behind corporate America in providing "relevant, verifiable, unbiased, and quantifiable" financial and non-financial information, which is critical for the stability and development of the first-rank U.S. capital market. In fact, both policy-makers and researchers have realized that lack of disclosure in NFPs has resulted in significant market failures in the not-for-profit sector, by allowing inefficient NFPs to continue providing low social benefits relative to their costs and the market failing to reach efficiency (Tuckman and Chang, 1991; Stiefel, Rubenstein, and Schwartz, 1999).

In contrast to corporate America, publicly available sources of information for NFPs are the annual Form 990, required by regulation at the federal level; audited financial reports, depending on the reporting requirements at the state level; and voluntary disclosures of annual reports alongside press releases and published information on the NFP's website. There is little timely information, no industry statistics for comparison, skeletal analysis, and limited regulation in the NFPs external reporting. The inherent problem with the evaluation of NFPs is the difficulty in the measurement of their outputs as their services are intangible and hard to define. The loosely regulated financial reporting environment for NFPs further compounds this problem. Though both federal and state regulators and private standard-setting entities such as the Financial Accounting Standards Board (FASB), the Governmental Accounting Standards Board (GASB), and the American Institute of Certified Public Accountants (AICPA) have tried to issue some financial reporting guidelines for NFPs, in general, very little research has been conducted to empirically investigate the information content in their disclosures.

This study expands on the economic framework, detailed in Section 2, to incorporate the impact of voluntary disclosure. To date, there has been scant research that has evaluated the economic impact of a firm's voluntary disclosures. Christensen and Mohr (2003) identify three

possible explanations for a lack of research that examines the financial disclosures of NFP's. These include: 1) the relative 'newness' of standard setters' interest in not-for-profit reporting; 2) the lack of readily accessible financial and annual report data, and 3) the wide diversity of not-for-profit entities and their reporting.

Analogous to the Christensen and Mohr study, this paper focuses on the voluntary disclosures NFPs provide in their annual reports. But rather than describing the contents of these reports and relating the variation in reporting practices to characteristics of the reporting entities, it goes a step further and analyzes the value relevance of the NFPs annual report. We hypothesize that voluntary disclosures disclosed in the current period annual report drive the demand for the next period services of the organization.

We gathered the annual reports of NFP Organizations rated by the Better Business Bureau's Wise Giving Alliance<sup>1</sup>. Our sample represents annual reports from the years 2001-2003. Table 1 presents the descriptive statistics of our sample. Trussel and Greenlee (2000), identified 9 sectors in NFPs. Our sample represents 5 out of 9 sectors.

The remainder of this paper is organized as follows: Section 2 details the economic models. Section 3 reviews the disclosure literature. Section 4 discusses the sample & research design; Analysis is provided in section 5; we conclude in section 6 by summarizing our findings and discussing the limitations of the study.

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<sup>1</sup> The current list of organizations rated by the BBB Wise Giving Alliance can be view at [www.give.org](http://www.give.org). We compiled our sample from the list dated August 17, 2005.

## Section 2: The Economic Models

Weisbrod & Dominguez (1986) introduced a model to capture the demand for a not-for-profit's services. Their model states that the demand for the output of the  $i$ th nonprofit firm can be expressed as follows:

$$LDON_i = \beta_0 + \beta_1 \ln FUND_{-1i} + \beta_2 \ln PRICE_i + \beta_3 AGE_i + \beta_4 AGE_i * \ln FUND_{-1i} + \mu_i$$

Where:

$LDON_i$  = the natural logarithm of the dollar amount of 'contributions, gifts and grants' received by the organization.

$\ln FUND_{-1i}$  = the natural logarithm of the firm expenditures on fundraising in the previous period.

$\ln PRICE_i$  = the natural logarithm of current year price [defined as  $1 / (1 - \text{prior year fundraising expense} / \text{prior year donations revenue})$ ]

$AGE_i$  = the number of years the firm has existed as a nonprofit entity

$AGE_i * \ln FUND_{-1i}$  = the interaction term between age and prior year fundraising.

$LDON_i$  is a proxy for the demand for the firm's output.  $\ln FUND_{-1i}$  captures the delayed effect that fundraising expenses have on donations. Current fundraising expenses will typically drive future donations (analogous to advertising expense in for profit companies). The price offered by the  $i$ th firm,  $\ln PRICE_i$ , is defined as the cost to a donor of purchasing one dollar's worth of the organization's output. The lower the price, the more efficient the organization is being in providing program services.  $AGE_i$  is present in the model to proxy for the buildup of goodwill firm  $i$  has managed over the years. They hypothesize that the age of the organization will proxy for the quality of the output. The interaction term in this model reflects their belief that additional fundraising will be less effective for well established organizations. Around the same time, Steinberg (1986) introduced a first difference specification model that regressed change in contributions on the change in fundraising expense, administrative expense, and program expense, as well as the ratio of program expense to donations. He finds that the ratio of program expense to donations is not significant in explaining the change in donations. Later

Tinkelman (1999), finds that the first difference specification is not appropriate in a model studying price sensitivity. First, because contributions are subject to transitory shocks, such as large gifts in anyone year, changes in contributions can be very volatile over time. Thus the relationship between change in contributions and the change in our variables of interest can be expected to be very noisy. Tinkelman (1999) also points out that the Price variable is stable over time, noting that the first difference specification model is designed to screen out such stable variables. Because our variable of interest, level of voluntary disclosure, has been shown to be stable over time (Botosan 1997 pg. 327), we restrict our analysis to studying the relationship between level of donations and the level of disclosure.

Building on the Weisbrod and Dominguez (1986) model, Posnett and Sandler (1989) introduce the “crowding out effect.” They hypothesize that government transfers (financed by taxes from contributors) reduce charity contributions in a dollar-for-dollar fashion, identical to the neutrality theorem. They also suggest that alternative forms of funding [fees, investment income, etc.] will have a similar effect on donations. They find no significant empirical evidence to support the “crowding out effect” in their sample. Because they sample UK organizations, we control for this effect in model 2 [Table 5] for our sample of US organizations.

Callen [1994] also tests the “crowding out effect” as well as the relationship between donations and volunteer labor and the technical efficiency of the firm. The results suggest that the more technically efficient the charity, the more money donations it is able to raise. In addition, money donations and volunteering are found to be complementary at the organizational level. Like Posnett and Sandler (1989), the empirical results suggest that government financing does not crowd out private donations. Tinkelman (1999) builds on the Posnett and Sander (1989) model by introducing a control for size. He conjectures that price sensitivity will be lower for

small organizations due to lesser accessibility and reliability of expense ratios for smaller organizations. In addition to reliability issues, he suggests that small organizations are less likely to receive media attention, reducing data availability. Consistent with his conjecture, he finds that organizational size exhibits a significant positive relationship in explaining donations. We control for size in Model 3 & 4 [Table 5]. Tinkelman also conjectures that organizational type may be significant in explaining the cross sectional variation in donations. His findings suggest that industry differences are not significant after controlling for other organizational factors. As a sensitivity test to our results, we control for organizational type in Model 5 [Table 5]. Finally, Tinkelman notes that organizational characteristics that are strongly related to higher price sensitivity are dependent on direct contributions, and plausibility of data. As our sample comes from a list of high profile organizations, we assume a relatively constant level of plausibility of data across our sample. However, because the dependence of direct contributions is likely to fluctuate between organizations, we control for this effect in Model 6 [Table 5].

Finally, Okten and Weisbrod (2000), in an extension of the Weisbrod and Dominguez (1986) analysis, find no evidence of the “crowding out effect.” In fact, they find a significantly positive relationship between other sources of revenue and donations in most industries. The next section discusses the relevant voluntary disclosure literature.

### **Section 3: Review of the Disclosure Literature**

#### ***Regulation of Disclosure and Financial Reporting***

With for-profits, economic models assume that the demand for regulation arises to prevent market failures and/or protect the welfare of financially unsophisticated investors (Watts and Zimmerman 1986). However, with not-for-profits, there does not exist a theoretical

framework to address the regulation of disclosures. After the exposures of a series of NFP financial scandals such as various Episcopal and Baptist churches, the Foundation of New Era Philanthropy, and the United Way of America, the regulatory agencies began to tighten regulation. NFPs are accountable to: the federal government for granting them tax-exempt status, the state government that grants them their legal existence, their own governing board, individual donors and grantors, consumers of their services, and the public at large.

The public is informed from two perspectives, the accounting perspective, and the government perspective. From an accounting perspective, each entity will prepare financial statements. These statements may or may not be audited and access to these statements may be granted to its stakeholders to assist them in making economic decisions regarding the organization.<sup>2</sup> From a governmental perspective, NFP entities must file a Form 990<sup>3</sup>. Form 990 is the primary tool the federal government uses to collect information about the NFP and its activities. This form must be made available to the public for three years. It provides information to the stakeholders of NFP's, donors, grantors, funders, regulators, and researchers. At the state level, regulatory agencies require various reporting requirements for NFPs. Some states require audited financial statements along with Form 990 for registration and/or annual filings, while some states only require Form 990 for registration and or/annual filing. Moreover, certain states accept either Form 990 or audited financial statements as annual filing; and then there are other states that don't even require charitable reporting (Keating and Frumkin, 2003).

The importance of this information and the process with which this information is compiled should not be minimized. Stakeholders are looking for information that is trustworthy

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<sup>2</sup> An organization may be required to prepare audited financial statements or may voluntary have their financial statements audited. Currently, NFP organizations receiving over \$500,000 in federal funds are required to prepare audited financial statements. In addition, some states require certain NFP organizations to have audited financial statements. Note, not all NFP organizations prepare audited financial statements.

<sup>3</sup> Religious entities and entities reporting under \$25,000 in support and revenue are not required to file Form 990.

as well as relevant in the decision making process. Trustworthy is defined as compliance with rules of reporting promulgated by GAAP and the IRS code. Relevant is something much deeper. Improper reporting could lead to inaccurate decisions.

This leads us to a very important issue. Form 990 and the required audited financial statements are regulated by different agencies; therefore they generally contain different informational content. Keating and Frumkin (2003) identify the differences in disclosures between Form 990 and the Audited Financial Statements and Gordon et. al (2005) analyze these differences. The FASB has issued some initial authoritative guidance on the financial reporting practices of not-for-profit. SFAS No. 117 addresses the form and content of the basic financial statements. However, the annual report preparation for NFP's is characterized by an environment of self-regulation and the annual report itself is a voluntary disclosure document (Christensen & Mohr 2003).

Since there is a lack of authoritative guidance on regulation of disclosures and reporting by NFPs, the potential donor is exposed to heterogeneous reporting standards, and experiences difficulty in comparing the performance of different entities. Thus the manager has to find other communication tools to distinguish his organization from its competitors.

### ***Voluntary Disclosures***

Disclosures studies assumed there are information asymmetries between managers and stakeholders, "If auditing and accounting regulations work perfectly, manager's accounting decisions and disclosures communicate changes in their firm's business economics to outside investors. Alternatively, if accounting regulation and auditing are imperfect, a more likely possibility, managers trade off between making accounting decisions and disclosures to communicate their superior knowledge of firm's performance to investors, and to manage

reported performance for contracting, political or corporate governance reasons”(Healy and Palepu, 2001).

Due to the lack of authoritative guidance for NFPs’ reporting, managers of NFPs have incentives to make voluntary disclosures. Managers use the annual report to:

- 1) Increase the transparency of the organization through quantitative and qualitative information.
- 2) Reduce the likelihood of litigation by muting the possibility that management will be accused of intentionally concealing material information.
- 3) Signal manager’s talents. The manager can do this by choosing to disclose information that presents management in a positive light.

### ***The Role of Disclosures in the NFP Sector***

The American Institute of Philanthropy (AIP) notes, “tax-exempt organizations are the fastest growing sector in the United States economy. Over 60,000 new charities are created each year and there are over 1.6 million nonprofit organizations.” There is a constant demand for limited resources. Disclosures in the NFP sector are significantly different from those in for-profit sectors. For-profit, disclosures are created to mitigate information asymmetry and moral hazard problems between management and investors (Botosan, 1997; Diamond and Verrechia 1991; Coles et al. 1995). However, disclosures from NFP organizations play multiple roles. The donors of NFPs can use the annual report to reduce information asymmetry. However, since donors voluntarily give up some of their economic interests, many people derive satisfaction just from the act of giving and they are satisfied with their feeling of being generous and doing good for the society. Donors base their decision to contribute on religious affiliation, associations with local communities, pressure from employers to donate in certain ways, involvement of acquaintances with certain charities and various other reasons unconnected with the performance

of charities. Until recently, many donors did not delve into the operations of the organization to see if the organizations they supported had allocated their resources effectively and efficiently.

The apparent lack of donors' interest in information about charities also enhanced the reluctance of NFPs to spend resources on information gathering, since it both detracted from their primary mission and is also structurally difficult in a mostly volunteer organization. Moreover since the services provided by NFPs are mostly intangible, it is difficult to objectively measure and record the outcome of these services. Therefore both the manager and donors were not active in promoting disclosures as a communication tool.

Recently, faced with the sheer proliferation of the NFPs, and their fierce competitions for donor's money, many contributors have realized the importance of timely information in helping them discriminate the performance of NFPs. Conversely, corresponding to the increase in demand for information from donors, we conjecture that NFPs will allocate more resources to disclosures both to attract new donors and maintain a competitive status.

Few research papers have analyzed the empirical relevance of disclosure of non-financial and qualitative information. Amir and Lev (1996), find that the disclosure of non-financial information, such as market growth and market penetration, increases value in the wireless communications industry. More related to our work, Narayanan and Pinches (2000), provide evidence that the voluntary disclosure of qualitative information about managerial intentions in R&D project announcements affects firm policies and outcomes. The next section discusses proxies for voluntary disclosure that have been used in the literature.

### *Proxies for Voluntary Disclosure*

Previous literature has employed varying methods to proxy for the voluntary disclosure of an Organization. One of the major limitations in voluntary disclosure research is in measuring voluntary disclosure. Researchers have used several proxies for this variable, including management forecasts, metrics based on the AIMR database, and self-constructed measures (Healy and Palepu 2001). Christensen and Mohr (2003) cite several studies noting that accounting studies have often used number of pages as a measure of the emphasis placed by organizational managers. It has also been documented that the quality and quantity of disclosure are positively related (Botosan 1997 pg. 324). Lang and Lundholm (1993) document a significant rank-order correlation between the annual report and other publication disclosure rankings and between the annual report and investor relations disclosure rankings. For these reasons, our proxy for voluntary disclosure is the total number of pages of the annual report, in lieu of a self-constructed measure. We further decompose the total number of pages of the annual report into three components, the number of pages of financial information, the number of pages of service efforts and accomplishments, and the number of pages recognizing donors, to test the differential impact of the major components of the annual report on the subsequent donations. The next section discusses the sample selection and research design.

### **Section 4: Sample & Research Design**

The sample of organizations for this study was selected from organizations rated by the BBB Wise Giving Alliance (GIVE). GIVE rates 721 organizations (as of 8/17/2005). Since the list contains duplicate entries (multiple names for the same organization) the list was reduced to 534

unique organizations. From this list, we attempted to obtain the three most recent annual reports for each organization through its website. Through this process, we obtained 260 annual reports. Through phone calls, we obtained an additional 31 annual reports<sup>4</sup>. With annual report data, we navigated the GuideStar database of 990's to gather the 990 of these entities for the annual report year and the subsequent year. Because many of the annual reports were for the 2004 year, we were not able to gather the subsequent year Form 990<sup>5</sup>. The sample of organizations that had both Form 990 information and an annual report was reduced to 123 firm year observations<sup>6</sup>. Another five observations are deleted because of extreme reporting [Table 1].

Our sample consists of annual reports for Fiscal Year's 2001, 2002, 2003. Nearly all (110 of 118) are in 2002 or 2003. The organizations in our sample are large. The median end of year assets is \$10,116,070, and the mean end of year assets is \$67,091,202. The median current year support & revenue is \$9,299,978 and the mean current year support & revenue is \$59,038,922.

Additionally our sample represents diverse organization types. The five organization types, Environment & Animals, Health, Human Services, International Foreign Affairs, & Public, Societal Benefit, contain approximately 92% of our sample organizations. [Table 2].

The empirical models developed in this paper test the following question:

**RQ1: Does the information content of the voluntary disclosures of NFP organizations contribute to demand for the subsequent year services of the organization?**

Using a log-linear equation modeled after Weisbrod & Dominguez (1986), our model is as follows:

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<sup>4</sup> We attempted to contact 109 of the remaining organizations through phone calls.

<sup>5</sup> 2005 990's are not required to be filed until 9 months after the fiscal year end. We anticipate 2005 990's starting to be available at the end of the summer 2006.

<sup>6</sup> 8 from the phone calls, and 115 from the website search

$$LDONN_{t+1} = \beta_0 + \beta_1 LTP_t + \beta_2 LPRICE_t + \beta_3 LFR_t + \beta_4 LAGE_t + \beta_5 LAGE_t * LFR_t$$

Where:

LDONN = the log of subsequent year direct contributions

LTP<sub>t</sub> = the log of current year total pages of the annual report

LPRICE<sub>t</sub> = the log of current year price [defined as 1/ (current year program expense/total expense)]

LFR<sub>t</sub> = the log of current year fundraising expense

LAGE<sub>t</sub> = the log of the organization's age; measured as the ruling year on their exempt status obtained from Guidestar.

LAGE<sub>t</sub> \* LFR<sub>t</sub> = the interaction effect between Age and Fundraising

Callen (1994) notes that with the exception of the Steinberg (1986), researchers have modeled the function for the demand for organizational services as log-linear instead of linear. To test the function form for his model specification, he ran a Ramsey Reset (2) test described in Godfrey, McAleer, and McKenzie (1988). He is able to reject the linear form, but not the log-linear form at the 5% significance level. Thus we also ran the Ramsey Reset (4) test for our model and are able to reject the linear form, but not the log-linear form at the 5% significance level. As discussed earlier, we consider alternative specifications of the model by controlling for “the crowding out effect,” size, organization type, and reliance on direct contributions. Our results are discussed in the next section.

## **Section 5: Results**

Simple statistics for the sample indicate that total pages of the annual report range from 2-69. There is also quite a lot of variation in our dependent variable. Subsequent year direct contributions range from 3.3 million to over 460 million. Taking the log of each variable helps normalize the distribution. See Table [3]. Table [4] provides Pearson correlations for all of the voluntary disclosure proxies and major control variables.

The log of current year total pages is significant in the model (t-statistic of 3.02) indicating that the information content of the annual report helps drive subsequent year direct contributions after controlling for other previously identified determinants. See Table [5]. Price is significant and negative, consistent with prior literature. However, Age is insignificant in our model. This is in contrast to the Tinkelman (1999) findings that the log of age is a significant in determining the elasticity for donations. The adjusted  $R^2$  in the model is 62.4%, indicating that our model explains a significant portion of the subsequent year direct contributions.

As discussed in Posnett and Sandler (1989), it is possible that there might be a “crowding out effect”. Although empirical research has consistently rejected this hypothesis (Posnett and Sandler 1989, Tinkelman 1999), we test for the effect by controlling for governmental income, program income, and other revenue sources in model 2 [Table 5]. Consistent with prior literature, we do not detect a “crowding out effect”. The coefficients on both program income and governmental income are insignificant, and other revenue source is only marginally significant. The marginal significance of other revenue sources should be viewed with skepticism as eleven observations were dropped due to negative other revenue. Our voluntary disclosure measure remains significant, and we do not detect a “crowding out effect” which is consistent with prior literature.

Although there is not grounded theory to support size as determinant of donations (Tinkelman 1999), we never the less control for its effect in Model 3 [Table 5]. Note that our proxy for size (the log of end of the year assets for the current year) is not significant in our model. However, when we proxy for size with the log of current year revenue, size is significant in the model (Model 4 [Table 5]). This specification leads our voluntary disclosure proxy to be insignificant as well as our price variable. The variance inflation factor of size is greater than 3 in

model 4 indicating multicollinearity may exist for this specification (In all other models, the variance inflation factor is below two for all independent variables). The correlation between size and fundraising is also significantly positive (Pearson correlation of 0.72 significant at the 1% level) indicating this measure of size is most likely capturing a similar effect as fundraising and biasing the coefficients down. The sensitivity of our results to the specification of size we use is consistent with the findings in Tinkelman (1999).

Although Tinkelman (1999) finds that organization type is not a strong driver of contributions after controlling for other organization factors, we nevertheless test for the effect of industry. As note in Table 2, the three largest organization types in our sample, Health, Human Services, and Environmental organizations, make up 68% of the total organizations. We control for the major organization types in Model 5 by creating dummy variables for each of the three major organization types. Organization type is not significant in the model.

Finally, Tinkelman (1999) documented that the demand for organizational services can be driven by the dependence on direct contributions. For organizations with low dependence of donations, lower price sensitivity is predicted. We test for dependency by assigning a value of 1 if the organization receives less than 30 percent of its revenues from donations and zero if greater than or equal to thirty percent (9 of the 118 in the sample have below thirty percent dependency). The empirical test in model 6 support the findings in Tinkelman (1999) that finds firms that are less dependent on direct contributions exhibit a lower elasticity for contributions. Given this specification, the level of voluntary disclosures is still significant in explaining the demand for organizational services.

For each model specified above, we decompose the total pages of the annual report into three components: the natural log of the number of pages of financial information (LFSt), the

natural log of the number of pages of service efforts and accomplishments (LSEAt), and the natural log of the number of pages recognizing donors (LDt). We find no significance in our decomposed measures for all model specifications. In all specifications of our model (with the exception of model 4 noted above), our aggregate page number proxy for voluntary disclosure is significantly positive. While our model indicates that voluntary disclosure plays a significant role in explaining the subsequent year donations, there are several limitations of our study. One limitation is that due to data limitations, we are unable to control for large donors versus small donors. Tinkelman (1998) suggests large donors may be more sensitive to the information available to them in making their giving decision than small donors. We would therefore expect differential magnitude and significance on the total pages variable if we were able to partition the sample by concentration of large donors. However, the fact that we did not partition our sample and we still find significance in the total pages variable suggests that the voluntary disclosures of the organization as proxy by total pages of the annual report help to explain the subsequent donations of the organization on average. In addition, our sample is of large organizations followed by rating agencies. It is therefore difficult to make inferences about the impact of voluntary disclosures for the population of not for profit organizations.

## **Section 6: Conclusion**

There are several factors that make up a donor's giving decision. Tinkelman (1999) provided empirical evidence to support several variables including prior year fundraising expense, and price. This paper contributes to the literature by introducing a new variable for consideration. The voluntary disclosure of an NFP organization is one of the major avenues that exist for the NFP to signal to potential donors their mission, financial viability, and overall

effectiveness in delivering program services. In this paper, we have provided empirical evidence that donors are sensitive to the voluntary disclosures and react positively to the quantity of disclosure by giving more in the subsequent year. This evidence may also prove useful to regulators who up to this point have put few restrictions on the type of disclosures released by NFP organizations. In consideration of the scandals that have befallen NFP's in recent years, it may now be appropriate for regulators to scrutinize the disclosures of NFP organizations in a similar fashion as they do for For-Profit organizations.

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<b>Table 1</b>	
<b>Sample Selection</b>	
	<b>GIVE org<sup>(1)</sup></b>
Initial sample list	534
Less: annual reports not available on web	(274)
Plus: annual reports received via phone call	<u>31</u>
Total number of annual reports collected	291
Less: Form 990 not available for current year & subsequent year	(168)
Less: "zero" reported fundraising expenses for current year	(4)
Less: "zero" reported program expenses for current year	(1)
Total Sample	118
<p>(1) - GIVE is short for the BBB Wise Giving Alliance, which is affiliated with the Better Business Bureau. It is the oldest of the ratings organizations and has the most comprehensive ratings approach, using quantitative and qualitative analysis to pass or fail over 500 national charities (Lowell et. al. 2005).</p>	

**Table 2**  
**Sample Composition by Fiscal Year of Annual Report & Organization Category**

	<b>Sample</b>
<b>By Year</b>	
2001	8
2002	49
2003	61
<b>Total</b>	<b>118</b>
<b>By NTEE-CC Code - Major Groups<sup>(1)</sup></b>	
Arts, Culture & Humanities	3
Education	4
Environmental Quality, Protection & Beautification	17
Animal - Related	7
Health - General and Rehabilitative	13
Mental Health, Crisis Intervention	3
Disease, Disorders, & Medical Disciplines	14
Medical Research	8
Crime, Legal Related	5
Food, Agriculture, & Nutrition	3
Public Safety, Disaster Preparedness, & Relief	1
Recreation, Sports, Leisure, Athletics	1
Youth Development	4
Human Services - Multipurpose & Other	4
International, Foreign Affairs, and National Security	15
Civil Rights, Social Action, Advocacy	10
Philanthropy, Voluntarism, & Grantmaking Foundations	1
Social Science Research Institutes, Issues	1
Public, Society Benefit - Multipurpose and Other	1
Religion Related, Spiritual Development	3
<b>Total</b>	<b>118</b>
<b>By NTEE-CC Code - Broad Categories<sup>(1)</sup></b>	
Arts, Culture & Humanities	3
Education	4
Environment & Animals	24
Health	38
Human Services	18
International Foreign Affairs	15
Public, Societal Benefit	13
Unknown, Unclassified	3
<b>Total</b>	<b>118</b>

<sup>(1)</sup> The National Taxonomy of Exempt Entities Core Classifications (NTEE-CC) divides the universe of nonprofit organizations into 26 major groups under 10 broad categories.

**Table 3**  
**Descriptive Statistics**

N = 118

<b>Variable</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Minimum</b>	<b>Maximum</b>
AGEt	26.5500	18.9440	1.0000	84.0000
DONNt+1	28,237,100	65,878,855	38,665	465,277,321
TPt	22.62	13.84	2	69
PRICEt	1.3042	0.3511	1.0123	3.9134
FRt	3,843,779	12,286,236	3,109	122,945,847
BASSETN	57,215,577	308,175,637	294,790	3,333,188,647
REVN	60,847,274	286,319,776	748,911	3,065,541,356

AGEt = the age of the organization measure from the ruling year from Guidestar

DONNt+1 = subsequent year direct contributions

TPt = total pages of the current year annual report

PRICEt = current year Price ; Price is defined as 1/(Program Expense/Total Expense)

FRt = current year fundraising expense

BASSETN = the end of the year total assets

REVN = the total support and revenue for the year

**Table 4**  
**N = 118**

**Pearson Correlation**

	<b>LDONN<sub>t+1</sub></b>	<b>LTP<sub>t</sub></b>	<b>LFS<sub>t</sub></b>	<b>LSEAt</b>	<b>LD<sub>t</sub></b>	<b>LPRICE<sub>t</sub></b>	<b>LFR<sub>t</sub></b>	<b>LBASSET<sub>t</sub></b>	<b>LAGE<sub>t</sub></b>
<b>LDONN<sub>t+1</sub></b>	1.00	0.43 ***	0.22 **	0.24 ***	0.19 **	-0.17	0.72 ***	0.72 ***	0.23 ***
<b>LTP<sub>t</sub></b>	0.43 ***	1.00	0.45 ***	0.78 ***	0.45 ***	-0.22 **	0.26 ***	0.47 ***	0.14
<b>LFS<sub>t</sub></b>	0.22 **	0.45 ***	1.00	0.22 **	0.08	-0.01	0.20 **	0.26 ***	0.15
<b>LSEAt</b>	0.24 ***	0.78 ***	0.22 **	1.00	0.13	-0.12	0.12	0.26 ***	0.02
<b>LD<sub>t</sub></b>	0.19 **	0.45 ***	0.08	0.13	1.00	-0.12	0.09	0.22 **	-0.02
<b>LPRICE<sub>t</sub></b>	-0.17	-0.22 **	-0.01	-0.12	-0.12	1.00	0.21 **	-0.20 **	-0.01
<b>LFR<sub>t</sub></b>	0.72 ***	0.26 ***	0.20 **	0.12	0.09	0.21 **	1.00	0.72 ***	0.32 ***
<b>LASSET<sub>t</sub></b>	0.72 ***	0.47 ***	0.26 ***	0.26 ***	0.22 **	-0.20 **	0.72 ***	1.00	0.45 ***
<b>LAGE<sub>t</sub></b>	0.23 ***	0.14	0.15	0.02	-0.02	-0.01	0.32 ***	0.45 ***	1.00

\*\*\*, \*\* Statistically significant at the 0.01 0.05 level (two-tailed), respectively

LDONN<sub>t+1</sub> = natural log of subsequent year donations

LTP<sub>t</sub> = natural log of total pages of the current year annual report

LFS<sub>t</sub> = natural log of total pages of financial information

LSEAt = natural log of total pages of service efforts and accomplishments

LD<sub>t</sub> = natural log of total pages recognizing donors

LPRICE<sub>t</sub> = natural log of current year Price ; Price is defined as 1/(Program Expense/Total Expense)

LFR<sub>t</sub> = natural log of current year fundraising expense

LASSET<sub>t</sub> = natural log of the end of the assets

LAGE<sub>t</sub> = natural log of the age of the organization; age is measured from the ruling year obtained from Guidestar

**Table 5**

Model	Dependent Variable	Independent Variables									Adj. R <sup>2</sup>	
		Intercept	LTPt	LPRICEt	LFRt	LAGEt	LPROINC <sub>t+1</sub>	LGOVINC <sub>t+1</sub>	LOTHREV <sub>t+1</sub>	LAGEt*LFRt		
1 n=118	LDONN <sub>t+1</sub>	5.80646	0.4631	-2.4628	0.68043	0.31885					0.01943	0.6241
		(2.18)	(3.02)	(-4.54)	(3.45)	(-0.35)					(0.30)	
2 *n=107	LDONN <sub>t+1</sub>	4.83992	0.49185	-2.79128	0.84562	0.09551	-0.00372	0.00606	-0.09069			0.6354
		(5.37)	(2.92)	(-4.85)	(10.22)	(-0.72)	(-0.21)	(0.41)	(-1.99)			

LDONN<sub>t+1</sub> = natural log of subsequent year donations

LTPt = natural log of total pages of the current year annual report

LPRICEt = natural log of current year Price ; Price is defined as 1/(Program Expense/Total Expense)

LFRt = natural log of current year fundraising expense

LAGEt = natural log of the age of the organization; age is measured from the ruling year obtained from Guidestar

LPROINC<sub>t+1</sub> = the natural log of subsequent year program income

LGOVINC<sub>t+1</sub> = the natural log of subsequent year governmental income

LOTHREV<sub>t+1</sub> = the natural log of the subsequent year other revenue

LAGEt \* LFRt = interaction term between LAGEt and LFRt

Note: t-statistics in parentheses

\*Note: Because we log the alternative revenue sources, we add \$1 to all zero amounts. Eleven observations are dropped because they contain negative other revenue.

**Table 5 Continued**

Model	Dependent Variable	Independent Variables										Adj. R <sup>2</sup>	
		Intercept	LTPt	LPRICEt	LFRt	LASSETt	LREVNt	ENVIRONMENT	HEALTH	HS	REVCONIND		
3 n=118	LDONNt+1	4.2039 (4.49)	0.3662 (2.30)	-2.0071 (3.38)	0.6030 (6.33)	0.1674 (1.71)							0.6361
4 n=118	LDONNt+1	0.7390 (0.86)	0.2308 (1.83)	-0.3945 (0.78)	0.1958 (2.32)		0.7211 (7.79)						0.7572
5 n=118	LDONNt+1	4.7307 (5.70)	0.5120 (3.32)	-2.5566 (-4.79)	0.7333 (11.96)			-0.0392 (-0.15)	0.3669 1.50	0.1799 (-0.6)			0.6343
6 n=118	LDONNt+1	5.34814 (6.92)	0.39126 (2.71)	-2.45771 (-4.88)	0.72566 (12.52)							-1.32898 (-3.87)	0.6703

LDONNt+1 = natural log of subsequent year donations

LTPt = natural log of total pages of the current year annual report

LPRICEt = natural log of current year Price ; Price is defined as 1/(Program Expense/Total Expense)

LFRt = natural log of current year fundraising expense

LASSETt = natural log of the end of the assets

LREVNt = natural log of the current year support and revenue

Environment = 1 if the organization is classified as an environmental organization and zero otherwise

Health = 1 if the organization is classified as a health organization and zero otherwise

HS = 1 if the organization is classified as a human service organization and zero otherwise

REVCONIND = 1 if the organization has less than 30 percent in direct contributions, zero if greater than or equal to thirty percent

Note: t-statistics in parentheses