

BEHAVIORAL RESEARCH IN ACCOUNTING

Volume 19, 2007

pp. 179–196

The Impact of Financial Information and Voluntary Disclosures on Contributions to Not-For-Profit Organizations

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ABSTRACT: This study uses a field-based experiment combined with a follow-up laboratory experiment to investigate whether accounting information reduces perceived uncertainty about nonprofit operations. Potential donors were sent, via a direct mail campaign, fundraising appeals containing varying amounts of financial and nonfinancial information in order to determine whether individual donors are more likely to contribute when accounting information or voluntary disclosures are provided. Participants in a lab experiment were asked to assess the usefulness of the different versions of the fundraising appeals.

A logistic regression provides evidence that some donors who have previously donated use financial accounting information when making a donation decision. The results are inconclusive regarding whether donors use nonfinancial service efforts and accomplishments disclosures to determine whether and how much to give, but participants in the lab experiment judged the nonfinancial disclosures to be useful for making a giving decision.

Keywords: voluntary disclosures; service efforts and accomplishments; not-for-profit; field experiment.

Data Availability: Data used for this paper are derived from a proprietary source.

INTRODUCTION

Charitable contributions to not-for-profit (NFP) organizations in the United States exceeded \$200 billion each year from 2000 to 2003. This figure represents over two percent of the U.S. gross domestic product (Strom 2002). Despite the enormous size of the nonprofit sector and its relative importance to the total U.S. economy, there is scarce empirical research examining the impact of *accounting* data on charitable giving decisions.

This paper is based on my dissertation at the University of Houston. I express my appreciation to the members of my dissertation committee: Saleha Khumawala (chair), Steve Buchheit, George Gamble, Archer McWhorter, and Tom Noland. I also thank Valrie Chambers, Denton Collins, Haijin Lin, Janet Meade, Lou Orchard, Austin Reitenga, Robert Richardson, A. J. Stagliano, Simon Yang, Bryan Church (editor), an anonymous referee, and workshop participants at the University of Houston, Clemson University, George Mason University, The George Washington University, and the 2002 American Accounting Association (AAA) Mid-Atlantic Regional and Annual Meetings for their helpful comments on earlier drafts of this paper. The financial support of the Government and Nonprofit Section of the AAA, the Bauer College of Business, and the Department of Accountancy and Taxation at the University of Houston is gratefully acknowledged. Additionally, I express my gratitude to the management and members of the Board of Directors at the People with AIDS Coalition-Houston for their willingness to allow me to work with their organization on this study. Finally, I am indebted to the staff and volunteers at the Coalition for their tireless effort to prepare and mail more than 8,000 fundraising letters during the data collection phase of the project. This paper won the 2002 AAA Outstanding Dissertation Award in Governmental and Nonprofit Accounting.

This research study is the first to directly examine the relationship between financial statement data and donations in a natural setting. In addition, it is the first empirical study to investigate voluntary nonfinancial disclosures in a nonprofit setting.

There are several important reasons to examine the value of accounting data to financial information users generally, and donors specifically. The first is the size and economic importance of the nonprofit sector in the U.S. and elsewhere. Second, accountants in not-for-profit entities should understand whether and how their organizations' accounting reports influence charitable giving by the donor community, just as corporate accountants understand how the investment community uses their financial reports. Third, standard setters are interested in providing the most useful information to financial statement users in both the business and nonbusiness sectors. Therefore, accounting researchers need to examine the usefulness of accounting reports in nonbusiness contexts. Finally, fundraisers, officers, and board members of NFP organizations should be interested in how accountability can be used to inform potential donors about the ways that charities put contributed funds to work.

Gordon and Khumawala (1999) note that individuals make charitable contributions for a number of reasons, including religious or spiritual obligation, social pressure, to curry favor with superiors, or due to general altruism. Many of the motivations for charitable giving (such as a desire to please peers or complete a religious duty) do not involve seeking evidence that a recipient NFP organization uses contributed resources efficiently or effectively. However, donors are sometimes motivated by a desire to eliminate a societal problem and want assurance that their charitable gift will make a difference. Eckel and Grossman (1996) find that donors are more likely to contribute if the recipient organization is seen as more "deserving." List and Lucking-Reiley (2002) find that seed money may signal organizational quality to potential donors. Eckel and Grossman (2003) note that donors are more likely to contribute to an organization when a matching grant will increase the impact of their contribution. These studies provide evidence that once a donor has selected a particular cause to support, organizational quality can play a role in the decision regarding which charity dedicated to that cause to fund. Gordon and Khumawala (1999, 47) state that the probability a donor will seek assurances of organizational performance increases as the donor has less direct contact with the organization or its beneficiaries and "is not in a position to directly observe the impact of the gift."

Other than observing gifts from other donors (such as seed money or matching gifts), donors can obtain the information necessary to assess organizational performance from reports issued by NFP organizations. This study seeks to determine the extent to which, once a donor has decided to support a particular cause, financial accounting numbers and supplemental voluntary disclosures impact decision-making. The following specific questions are addressed: Can efficient not-for-profit firms (those that dedicate more of their resources to program services) use financial reports to favorably affect contributions from individual donors? Can not-for-profit managers provide private information in order to increase the funds received from individual donors?

This study combines a field-based experiment with a follow-up laboratory experiment to examine these questions. Harrison and List (2004) suggest that combining lab and field data is a good way to obtain a more complete understanding of a phenomenon. The field experiment provides potential donors with a request for funds from an actual charitable organization. The field-based approach used in this study offers a greater degree of motivation than a laboratory experiment to carefully consider the available information, because donors are using their own money. While this research has high external validity, it does not allow the researcher to perform manipulation checks to determine which items influenced the subjects' decisions, because the donors are not aware their behavior is being

observed. Further, there is no way to know how many recipients read the material and how many threw it away without examining the fundraising request. To gain an understanding of which factors affected the giving decisions of the donors, I administer the same experiment in a laboratory setting. Instead of asking for an actual donation, participants are asked for an evaluation of the various fundraising appeals. The lab experiment is used to eliminate some alternative explanations for the results from the field experiment.

Both experiments use a two-by-two design to manipulate the direct provision of (1) financial information (derived from mandatory informational tax filings which are available only if requested by the donor) and (2) voluntary disclosure of nonfinancial accounting information (not otherwise available to the donor). By analyzing actual cash receipts from the fundraising appeal, I find that donors who had previously contributed to the organization are more likely to donate when financial accounting information is directly provided. New prospective donors make larger contributions when either financial information or voluntary, nonfinancial accounting information is included with a basic fundraising appeal, but differences are not statistically significant. The follow-up laboratory experiment results show that prospective donors find fundraising appeals more informative if they include voluntary disclosures. Additionally, participants who reviewed a version of the fundraising appeal that includes either financial information or voluntary disclosures are more likely to select those items as the most informative in the appeal.

This paper is organized as follows. The next section presents the research hypotheses, followed by a description of the research design. The analyses and results are provided next. The conclusion discusses the limitations of the study and presents the contributions of this research project, as well as discussion of directions for future research.

RESEARCH HYPOTHESES

Describing what he calls a market for lemons, Akerlof (1970) argues that where sellers are better informed than buyers, buyers are unsure whether the product they are buying is of high or low quality. To compensate for this lack of knowledge (information asymmetry), sellers tend to set the price at the average price of good and bad products. This encourages the supply of bad products (for which customers overpay) and suppresses the supply of good ones (for which suppliers are underpaid). Eventually, the existence of bad products can reduce the demand of all products, because consumers do not want to risk buying low-quality products at a price that exceeds the value. Akerlof (1970) and Spence (1973) observe that the sellers of high-quality products can mitigate the information asymmetry problem in a market through the use of signaling (i.e., guarantees, reputation). Though a seller of a high-quality product must bear some cost to provide a signal, the signal will be produced if its benefit (increased price) exceeds its cost.

The relationship between the management of an NFP and donors is an example of a situation with information asymmetry. Many donors are asked to support charitable organizations about which they know relatively little. Typically, such requests are accompanied by a discussion of the needs of the organization and its beneficiaries, but there is often no "accountability" included in the request. In light of several highly publicized scandals

involving charities, individuals are understandably skeptical of these requests.¹ Donors in the not-for-profit sector want their contributions to be used in a way that maximizes the benefit to the organization's beneficiaries. If donors are unsure about how NFP managers use contributed resources, the supply of contributed funds may decrease (in a manner similar to what happens in Akerlof's (1970) market for lemons theory). Perhaps it is possible for managers of high-quality NFPs to increase donations received if they provide a signal to communicate the quality of their organizational performance.

An important function of accounting and financial reporting is to assist in the analysis and evaluation of organizations. If some donors consider the worthiness of an organization before making a charitable contribution, accounting reports and voluntary performance disclosures may play a role in the donation decision. NFP researchers have begun to explore the relationship between accounting information and donations. Anthony and Young (2003) suggest measuring NFP performance on two distinct dimensions: efficiency and effectiveness. Drtina (1984) and Cherny et al. (1992) indicate donors and regulators who examine NFP accounting measures are most interested in the efficiency and effectiveness of operations.

Efficiency Measures

Efficiency is defined as the degree to which NFPs direct their available resources to the organization's mission (Parsons 2003). Regarding efficiency, researchers in the NFP arena document an association between efficiency measures and total donations (e.g., Weisbrod and Dominguez 1986; Greenlee and Brown 1999; Tinkelman 1999). This study takes the next step and explores whether financial information that communicates efficiency can *directly* affect contributions.

The Internal Revenue Service requires most tax-exempt entities to complete and submit financial information on Form 990. By law, this information, which need not be audited, must be available to donors or potential donors upon request. However, individual donors rarely take the time to obtain financial information from charitable organizations that request contributions from them (Gordon et al. 1999). Without easy access to financial reports, donors may experience the problem of information asymmetry. Directly providing financial information from a charitable organization with good news (high efficiency) can possibly reduce the principal's perceived risk (uncertainty) and increase donor contributions.

This study expands current research by providing some prospective donors with summary financial data to determine whether the direct provision of *positive* information makes them more likely to give than those that are not directly provided with the accounting data. I expect real-world donors, who have no direct relationship with a charitable organization, to be more willing to make charitable contributions when they are directly provided with accounting data to assess operating efficiency. This motivates the first hypothesis, stated in the alternative form.

¹ The following represent examples of scandals that concerned the public about operations of charitable organizations. In 1993, the management of Girl Scouts of America was discovered to receive a large portion of the selling price of each box of cookies, leaving only 10–15 percent, or 40¢ per box, for the individual troops (Graham 1993). In 2003, the State of Illinois, with support of 45 other states and the federal government, sued a telemarketing firm for fraud, claiming the fundraising firm misled potential donors about the portion of the funds it raised for VietNow that would directly benefit needy veterans (Greenhouse 2003). Bradley et al. (2003) claim that the nonprofit sector could save \$100 billion annually if charities operated more efficiently.

- H1:** Prospective individual donors who receive positive financial accounting information (efficiency measures) are more likely to donate than those who do not.

Effectiveness Disclosures

Effectiveness, defined as the degree to which the wants and needs of an NFP's beneficiaries are satisfied (Cherny et al. 1992), is not necessarily measured by looking at the amount of funds received and expended. Most often, supplemental disclosures of nonfinancial data are the best way to provide information about organizational effectiveness (Brace et al. 1980; FASB 1980). Currently the Financial Accounting Standards Board (FASB) guidelines make reporting this information, which they call service efforts and accomplishments (SEA), optional. Empirical studies have not yet examined the association between effectiveness disclosures and contributions, because these optional disclosures are not frequently available.

Individual donors (versus foundation, corporate, or government grantors) often have little ability to require disclosures from a charitable entity and may be most likely to benefit from the private information contained in voluntary disclosures. By providing optional information, such as that contained in SEA disclosures, NFPs may be able to increase the likelihood that a prospective donor will respond to a fundraising request. Donors who want to contribute to organizations that effectively use their funds are expected to gain assurance from the optional reports of effectiveness that are contained in SEA disclosures. I anticipate that donors will give more readily to organizations that voluntarily report SEA. This leads to the second hypothesis, stated in the alternative form.

- H2:** Prospective individual donors who receive voluntary SEA disclosures (effectiveness measures) are more likely to donate than those who do not receive voluntary SEA disclosures.

RESEARCH DESIGN

This study uses a blocked 2×2 field-based experiment to manipulate the amount of accounting information supplied to potential donors with a fundraising request from the People with AIDS Coalition-Houston (PWACH). PWACH is an AIDS service organization that provides social services to its local community. The prospective donors solicited have no direct contact with beneficiaries, and must therefore rely on reports from PWACH to determine whether funds are used efficiently and effectively. Compared with employees, volunteers, and beneficiaries, these individuals are more apt to rely on accounting information when making a giving decision (Gordon and Khumawala 1999).

The PWACH fundraising appeal is typical of those received by millions of donors in each day's mail. It describes the mission of the organization and the plight of its intended beneficiaries (see Appendix A). The first manipulation is to include financial information drawn from the audited financial statements with the basic fundraising appeal. Summary charts and graphs, instead of full financial statements complete with footnotes, are used to highlight the efficiency measures typically emphasized in previous literature. The financial information indicates that 92.5 percent of the entity's expenditures were directed to program expenses in the prior year. This figure compares favorably with the 60 percent suggested minimum level recommended by the National Charities Information Bureau² (see Appendix B).

² The National Charities Information Bureau is now the Better Business Bureau's Wise Giving Alliance.

The second manipulation is to include a voluntary disclosure of service efforts and accomplishments (SEA) that describes the organization's past efforts to serve its beneficiaries and gives specific information about the success of its programs (see Appendix C). This information is in narrative form and written in lay terms.³ It provides both output (quantity of product or service produced) and outcomes (results) information as defined in Hatry et al. (1990).

To avoid the chance that differences in cash contributions among the experimental groups occur due to differences in their ability to give, the subjects (both prior donors and new prospective donors) were stratified by zip code before being randomly assigned to treatment groups. Zip code was chosen as a proxy for financial ability to give, because individuals living within a single urban zip code tend to share a similar socio-economic status.⁴ The random assignment within each zip code helps to avoid income differences across experimental groups.

The fundraising appeal was randomly mailed to prospective individual donors in the local community. Two groups of potential donors received the mailings. First PWACH compiled a list of 2,372 donors who had previously made contributions to the organization but were not volunteers or beneficiaries. These donors have shown a propensity to support the mission of PWACH with their past contributions, and are more likely to read the correspondence than someone who has not previously supported the organization. PWACH need only demonstrate that it is a "deserving" organization based on its stewardship of contributed funds. Second, in order to evaluate whether prior donors react differently to accounting information than other individuals, 5,672 additional fundraising appeals were mailed to individuals who had not been included in PWACH's list of prior donors. Because these individuals may not know PWACH, they are less likely than prior donors to open and read the fundraising letter.⁵ For the individuals in this group that choose to open it, the fundraising appeal must first convince these donors that the organization's mission is worth their support, and then provide evidence that the organization is a worthy recipient of their contribution.

The 2×2 design produced four groups. The "Letter Only" group received a mailing that contained only the appeal without any accounting information (Appendix A only). The mailing to the "Financial Info" group included summary financial accounting information (efficiency measures) in the form of charts and graphs with the fundraising appeal (Appendices A and B). The "SEA" group received a description of service efforts and accomplishments (effectiveness measures) in addition to the fundraising appeal (Appendices A and C). The mailing sent to the "Both" group enclosed both the summary financial accounting information and the voluntary service efforts and accomplishments with the appeal (Appendices A, B, and C).

To conduct the follow-up laboratory experiment, I recruit 254 students from graduate and upper-division undergraduate business classes at a large state university. After excluding sixteen surveys that were mostly blank, the final sample size is 238. The lab experiment

³ The SEA information has not been subjected to audit procedures. It is common that corporate voluntary disclosures, such as management's forecasts, are also unaudited.

⁴ According to Benabou (1996, 584) "In the United States a person's income, education, ethnic background, and lifestyle can be predicted quite accurately from his zip code." Recent economic and public policy studies examining a variety of health-related issues have used zip code as a proxy for income or socio-economic status (McCormack et al. 2001; Merkin et al. 2002; Millen et al. 2002).

⁵ Warwick (1994) suggests that an individual's decision to respond to a direct mail fundraising request with a donation depends in part on whether the individual knows the organization making the request and has previously given to the organization.

was conducted during the individuals' class periods, and took approximately one-half hour. The students' participation was voluntary, responses were anonymous (students' names were not included on the experimental instrument), and those who participated received a small amount of class credit.⁶ Participants range in age from 18 to 49 (average age is 23). The subject pool appears to be a reasonable surrogate for potential donors based on recent individual charitable donations (over 72 percent had made a charitable contribution within the previous year) and the participants' average household income (over \$25,000). Only 13 percent had previously given to an AIDS service organization, and 3.5 percent had given to PWACH, making them most like the prospective donors in the field experiment. Each participant was randomly assigned to review one version of the fundraising appeal (the same four treatment groups as in the field experiment) and was asked a series of follow-up questions to ascertain which aspects of the appeals influenced their evaluations (see Appendix D).

ANALYSIS AND RESULTS

In total, 8,044 fundraising appeals were sent by PWACH to potential donors. After the return of 22 undeliverable appeals, the total sample size was 8,022. Overall, fundraising appeals generated 93 cash contributions, totaling \$5,825. The overall response rate was 1.16 percent, and the average cash contribution was \$63. Prior donors responded to the fundraiser at almost three times the rate of people who had not previously donated and with an average donation that was almost two and one-half times the average contributed by new donors. A summary of the results from the fundraising appeal are presented in Table 1.

If potential donors perceive that accounting information can improve the information asymmetry situation, I expect a greater number of donations from those who receive accounting information or disclosures with a fundraising appeal. A logistic regression model is used to determine whether donors who receive accounting information in a fundraising

TABLE 1
Descriptive Statistics

	Appeals Sent	Undeliverable	Net	Cash Contributions		
				n	Response Rate	Average
Prior Donors:						
Letter Only	593	(2)	591	12	2.03%	\$69.17
Financial Info	593		593	19	3.20%	\$98.95
SEA	593	(3)	590	12	2.03%	\$97.08
Both	593	(6)	587	8	1.36%	\$56.25
All Prior Donors	2,372	(11)	2,361	51	2.16%	\$84.80
New Donors:						
Letter Only	1,418	(2)	1,416	14	0.99%	\$30.36
Financial Info	1,418	(3)	1,415	8	0.57%	\$32.50
SEA	1,418	(1)	1,417	13	0.92%	\$39.62
Both	1,418	(5)	1,413	7	0.50%	\$42.86
All New Donors	5,672	(11)	5,661	42	0.74%	\$35.71
All Donors	8,044	(22)	8,022	93	1.16%	\$62.63

⁶ An alternative assignment was available to students who opted not to participate in the experiment.

appeal are more likely to make a contribution than those who do not. The logistic regression model used to examine the number of responses to the varying fundraising appeals is presented in the equation below.

$$\begin{aligned}
 P(\text{Donation}) = & \lambda_0 + \lambda_1 \text{Financial Info} + \lambda_2 \text{SEA} + \lambda_3 \text{Both} + \lambda_4 \text{Prior Donor} \\
 & + \lambda_5 \text{Financial Info} * \text{Prior Donor} + \lambda_6 \text{SEA} * \text{Prior Donor} \\
 & + \lambda_7 \text{Both} * \text{Prior Donor} + \epsilon
 \end{aligned}$$

where:

Donation = 1 if a cash contribution was received, 0 otherwise;

Financial Info = 1 if a recipient received basic letter with summary financial information, 0 otherwise;

SEA = 1 if a recipient received basic letter with SEA disclosures, 0 otherwise;

Both = 1 if recipient received basic letter with both summary financial information and SEA disclosures, 0 otherwise; and

Prior Donor = 1 if recipient had previously contributed to the charity, 0 otherwise.

The dependent variable is a bivariate variable, coded as 1 if a contribution is received and 0 otherwise. Three indicator variables are used to represent the four versions of the solicitation. The first is coded as 1 if an appeal included only financial information, the second is valued at 1 if the fundraising letter enclosed only SEA disclosures, and the third has a value of 1 if the solicitation included both summary financial information and SEA disclosures. The recipients that received only the basic letter comprise the control group.

Another indicator variable is used to determine whether a donor has previously made donations to the organization. This variable is coded as 1 if the recipient is a prior donor, and 0 otherwise. Finally, to determine whether there is a difference in the likelihood of a positive response between prior and new donors, the model contains variables representing the interactions between the prior donor variable and each of the variables representing the solicitation type.

Because the additional accounting information is predicted to increase the frequency of donations, each of the coefficients λ_1 through λ_7 is expected to be positive. Positive and significant coefficients suggest that the specific type of appeal increases the likelihood that an individual will make a contribution. A positive and significant coefficient for the variable representing prior donors implies that prior donors are more likely to make a donation. A significant coefficient on an interaction term indicates the version of the appeal is more important to prior donors than to new prospective donors. The results of the logistic regression are summarized in Table 2.⁷

A Chi-square statistic of 34.7 demonstrates that the overall model is significant (at $\alpha = 0.0001$) in improving the estimation of the dependent variable. The pseudo $R^2 = 0.034$ indicates that the model has low explanatory power when predicting whether a prospective donor will contribute. This is not surprising, because many factors that influence charitable giving, such as discretionary income, preference for the charity's cause, personal altruism,

⁷ A dependent variable defined as the actual amount of the cash contribution (and the natural logarithm of cash contributions) for responders only was examined using an OLS regression that included the types of appeals as independent variables. There were no significant differences in the average amount of cash received based on treatment groups; only the response rate (number of givers) varied based on the type of fundraising appeal.

TABLE 2
Multivariate Analysis of Likelihood of Contributions
(Tests of H1 and H2)

$$P(\text{Donation}) = \lambda_0 + \lambda_1 \text{Financial Info} + \lambda_2 \text{SEA} + \lambda_3 \text{Both} + \lambda_4 \text{Prior Donor} \\ + \lambda_5 \text{Financial Info} * \text{Prior Donor} + \lambda_6 \text{SEA} * \text{Prior Donor} \\ + \lambda_7 \text{Both} * \text{Prior Donor} + \epsilon$$

Variable	Predicted Sign	λ	S.E.	Wald Statistic	% Δ in odds*
<i>Financial Info</i>	+	-0.05	0.29	0.03	-4.6
<i>SEA</i>	+	-0.04	0.28	0.02	-3.6
<i>Both</i>	+	-0.55	0.33	2.84	-42.3
<i>Prior Donor</i>	+	1.43	0.44	10.62**	317.8
<i>Financial Info*Prior Donor</i>	+	1.03	0.58	3.15*	180.5
<i>SEA*Prior Donor</i>	+	0.08	0.57	0.02	8.0
<i>Both*Prior Donor</i>	+	0.29	0.65	0.20	33.7
<i>Constant</i>	NA	-4.56	0.22	431.74***	
Model:					
n		8,022			
χ^2		34.698***			
Pseudo R ²		0.034			

*, **, *** Significant at the 0.05 (one-tailed), 0.001 (one-tailed), 0.0001 (two-tailed), respectively.

* The percentage change in odds = $[\exp(B) - 1] * 100$.

Variable Definitions:

Donation = 1 if cash contribution was received, 0 otherwise;

Financial Info = 1 if only financial information is included in appeal, 0 otherwise;

SEA = 1 if only service efforts and accomplishments disclosure is included in appeal, 0 otherwise;

Both = 1 if both financial information and SEA disclosure are included in appeal, 0 otherwise; and

Prior Donor = 1 if individual has previously contributed to PWACH, 0 otherwise.

and religious affiliation (Gordon and Khumawala 1999), are not specifically measured and included in the model. More important than the model's overall explanatory power are the individual coefficients.

The coefficient of prior donor is positive and significant at 0.001. This implies that prior donors are more likely to contribute in response to a fundraising letter than individuals who have not previously given. This finding is not surprising, because donors who have previously given have demonstrated an affinity for the organization's cause. Sending an appeal to prior donors increases the odds of a donation by three times (see Table 2—odds of a donation increase by 318 percent for prior donor versus prospective new donor).

The only other coefficient that is significant ($\alpha = 0.05$) is the interaction term "*Financial Info*Prior Donor*." Providing financial accounting information to a prior donor almost doubles the likelihood that the individual contributes (increase in odds of a donation is 181 percent). In this sample, with 2,361 prior donors solicited, a one percent increase in the response rate results in approximately 23 additional contributions. This supports the claim that positive financial accounting information, provided directly to prospective donors, can be a signal that reduces perceived uncertainty about the efficiency of a charity's operations (as predicted in H1). The efficiency information may be particularly important to prior donors (versus those who have not previously given) because it signals how well previous donations have been spent.

Understanding Donor Responses

The field experiment does not allow the researcher an opportunity to question donors and potential donors about their giving decision. Therefore, a follow-up lab experiment is used to gain an understanding of the decisions made by the actual donors. First, the participants were asked to rate the overall information content of the fundraising packet on a five-point scale (1 = extremely informative, 5 = not informative). Table 3, Panel A shows both the main effect of *SEA* information and the interaction of *SEA* and financial information are statistically significant ($F = 9.4$, $p < 0.01$, two-tailed and $F = 5.8$, $p = 0.02$, two-tailed, respectively). As shown in Table 3, Panel B, the mean informative score is lower (more informative) when *SEA* information is included with the fundraising appeal (2.90 with *SEA* only and 2.46 with both *SEA* and financial information) than when it is not (2.97 with no additional disclosure and 3.03 with only financial information). These results provide evidence that potential donors who are not familiar with a specific charitable organization view voluntary *SEA* disclosures as informative for making a charitable giving decision.⁸ However, there is no indication that donors feel more informed about an organization when they receive financial information without voluntary *SEA* disclosures.

Second, subjects were asked how much, on average, is a reasonable amount for a nonprofit organization to spend on fundraising efforts and administrative expenses. This is to eliminate the possible alternative explanation that new prospective donors did not view the 92.5 percent that PWACH dedicated to programs as "positive" news. The average (and

TABLE 3
Examination of Informativeness Question

How informative did you find this appeal?

(Scale: 1 = Extremely Informative, 5 = Not Informative)

Panel A: Analysis of Variance

Factor	df	Sum of Squares	F	p-value (two-tailed)
SEA Disclosure	1	5.964	9.35	< 0.01
Financial Disclosure	1	1.989	3.11	0.08
SEA × Financial	1	3.670	5.75	0.02
Error	230*			

Panel B: Comparison of Means

Appeal Type	Mean Informative Score	n
Letter Only	2.97	61
Letter with Financial Disclosure	3.03	60
Letter with SEA Disclosure	2.90	59
Letter with Financial & SEA	2.46	54

* Participants were given the option of "no opinion" on this question. Four students out of 238 expressed "no opinion," thus accounting for the reduced sample size.

⁸ This result is the same when the 3.5 percent of participants who had previously given to PWACH and then the 13 percent who had supported any AIDS service organization (including PWACH) are excluded from the analysis.

median) amount that subjects think is reasonable for non-program expenditures is 20 percent.⁹ Subjects who evaluated a fundraising appeal that contained PWACH's financial information (which included the benchmark of 60 percent for program services recommended by the National Charities Information Bureau) gave lower estimations of appropriate fundraising and overhead costs (average = 16 percent, median = 10 percent) compared to those who did not see PWACH's actual performance or the recommended benchmark (average = 24 percent, median = 25 percent). A t-statistic = 5.7 and a Mann Whitney U test indicate these differences are significant at 0.001, implying that having PWACH's financial information available impacted the donors' expectation of a reasonable program ratio. Based on the subjects' responses, I expect potential donors to view PWACH's efficiency ratios as positive.

Third, subjects were asked to name the most informative item they saw in the fundraising appeal. This question is used to address the concern that the potential donors who had financial and SEA information focused on something in the fundraising appeal other than those items. Sixty-two percent of those who had only the fundraising letter, without any accounting information, said the statistics on AIDS/HIV in the local area were the most important items in the appeal. However, only 37 percent of those who had either financial information or SEA disclosures pointed to the AIDS/HIV statistics as the most important information. Forty-seven percent of the subjects that had the fundraising letter with the financial measures found the program ratio the most informative item. Fifty-five percent who had the letter plus the voluntary SEA disclosures named the disclosures as the most important item. Among those who had both the financial information and the voluntary disclosures, 74 percent selected either the financial information or the SEA disclosures (or both) as the most informative. These findings provide evidence to indicate that prospective donors focused more often on the accounting information and voluntary disclosures than on other information in the appeal, and imply that donors view the accounting information provided in the fundraising appeal as informative for making a donation decision.

Finally, as an additional test to determine whether donors view financial information and SEA disclosures as important, I asked subjects to identify the information they would most like to have available that was missing from their appeal. Fifty percent of those who evaluated the fundraising letter without accounting information listed either the program ratio or evidence of accomplishments (SEA) as the most important item missing from the appeal. No one who evaluated the financial information asked for additional financial ratios. Only 13 percent of the subjects who had SEA disclosures in their appeal asked for additional information about accomplishments of the organizations. These responses further demonstrate that donors focused on the experimental manipulations.

Though the subjects in the follow-up laboratory experiment were not making an actual giving decision, they were evaluating the usefulness of each of the appeals used in the field experiment. Based on responses from subjects in the laboratory setting, I provide evidence to eliminate two alternative explanations for the results in the field experiment; that donors who read the fundraising appeal focused on something other than the experimental treatment and that donors did not view the program ratio as good news.

⁹ According to the data from the Internal Revenue Service Statistics of Income (SOI) database, the average amount of total expenses dedicated to program services is 80 percent. Subjects' expectations seem reasonable based on actual 990 financial data.

CONCLUSIONS

Given the size of the nonprofit sector and its relative importance to the total U.S. economy, understanding the value of accounting information to donors is important for accounting researchers, accounting practitioners, executive officers, board members, and standard setters working with not-for-profit (NFP) organizations. This study is the first to examine how accounting information can directly impact an individual's decision to make a charitable contribution. It is also the first to examine voluntary disclosures in a nonprofit setting.

Using a field-based experiment, this study finds that some donors are more likely to respond to a fundraising appeal if it includes positive financial accounting information. Donors who have previously donated to an organization are almost three times as likely to make a charitable contribution if the NFP directly provides them with summary financial reports (instead of expecting the donors to incur the costs to obtain the information themselves).

The results from the field experiment suggest that voluntary disclosures of service efforts and accomplishments (SEA) information do not produce more donations. However, evidence from the follow-up lab experiment indicates that potential donors think SEA information is important for evaluating an NFP organization when making a donation decision. The lack of significance in the field experiment may be due to a lack of power that results from the small sample size (only 93 donations across eight treatment groups). Also, the SEA information is not as easy to read and process as the graphs used to provide the summary financial information, which may have limited its impact in the field experiment (compared to the lab experiment where subjects were asked to read the appeal in its entirety). Further research could examine more streamline SEA disclosures, presented in graph or bullet-point form, to determine whether the format of the voluntary disclosures impacts the likelihood that it will be read and processed by donors. Perhaps SEA disclosure information could be integrated into the fundraising appeal. Additionally, a larger sample size (using a charity that gets a higher donor response rate) could determine if the lack of significance is due to lack of the impact of SEA disclosures or a result of low statistical power of the test.

This study makes two important contributions to the accounting literature. First, it provides evidence that financial accounting information can directly impact an individual's giving decision. Other studies (e.g., Weisbrod and Dominguez 1986; Tinkelman 1999) have shown a positive relationship between contributions and measures of efficiency, but the underlying reason for the relationship is unclear. This field-based experiment demonstrates that summary financial information can directly affect contributions from individuals. The finding supports recent efforts to increase the availability of accounting information to potential donors through websites such as GuideStar.org which provides accounting information on approximately 1.5 million nonprofit organizations.

Second, the study provides some evidence to standard setters that accounting information and nonfinancial disclosures may impact donors' views of a nonprofit organization. Recently a wide range of governing bodies, including state attorneys general and the U.S. Senate Finance Committee, have been examining the need for more transparency from nonprofit organizations (Irvin 2005; Panel on the Nonprofit Sector 2005). Among the suggestions from regulators and watchdog agencies is that nonprofit organizations provide information about outcomes and results (similar to SEA disclosures). Irvin (2005) cautions regulators to consider the effectiveness of new proposals for increased reporting. This study provides some evidence of the usefulness to donors of both required accounting reports and recommended nonfinancial information.

**APPENDIX A
FUNDRAISING LETTER**

Jane Doe
123 Main Street
Houston, TX 77008

Dear Jane,

Did you know that 1 in every 90 Houstonians is HIV positive? This grim fact places our city 7th in the U.S. in the number of reported AIDS cases. This disease is spreading most quickly among women and African American men.

Many of your neighbors living with HIV or AIDS need help with basic human needs, including shelter, food and clothing. Others need transportation assistance to doctors' offices, clinics and hospitals. Still some just need a sympathetic ear, someone to listen to their fears and concerns.

Since 1986, The People with AIDS Coalition-Houston has provided these and other critical services for those living with HIV/AIDS. We are a unique organization of, by and for people with HIV/AIDS that promotes independence and self-reliance so that people with HIV/AIDS may live with dignity, self-esteem and acceptance.

Our community has grown in the past few years, and PWACH has changed existing programs and developed new programs that meet the needs of our community. We depend on individuals like you to help us to meet the challenges of serving Houstonians with HIV/AIDS. Our financial supporters in the Houston community are the driving force behind the accomplishments and successes of PWACH's programs. Because of people like you, we are able to serve, improve and educate our neighbors in need through various programs.

To continue this important work, **we need your help!** With your tax-deductible gift of \$15, \$25, \$50 or more, we can continue to assist those living with HIV/AIDS and their families. Please use the enclosed envelope and give what you can today! Your generous gift can make all the difference to the health and well being of our friends and neighbors.

Sincerely,

M. Naomi Madrid
Executive Director

P.S. Remember, every dollar you share today will make a tremendous difference to Houstonians living with HIV/AIDS. And, I hope, to you.

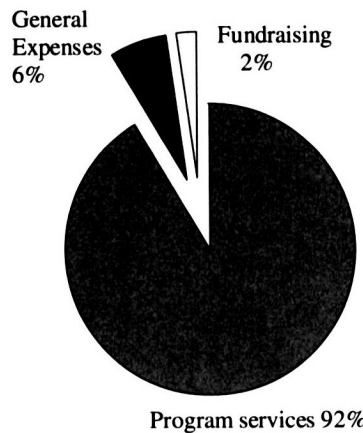
**APPENDIX B
SUMMARY FINANCIAL INFORMATION**

Some Things our Supporters Should Know about the PWACH

We at People With Aids Coalition Houston are proud of the way we manage our funds. We pledge to be diligent in our fiduciary responsibility and cost-effective in our fundraising.

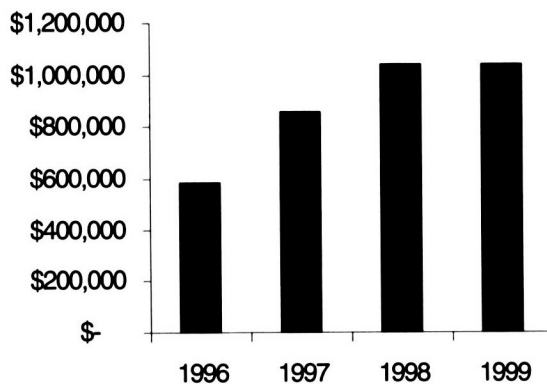
To those ends, we follow accounting procedures established by the Financial Accounting Standards Board and the AICPA and we are audited annually by an independent CPA firm. Summary information from the audited annual report is provided below.

Here is a summary of how we spent our funds in fiscal year 1999.

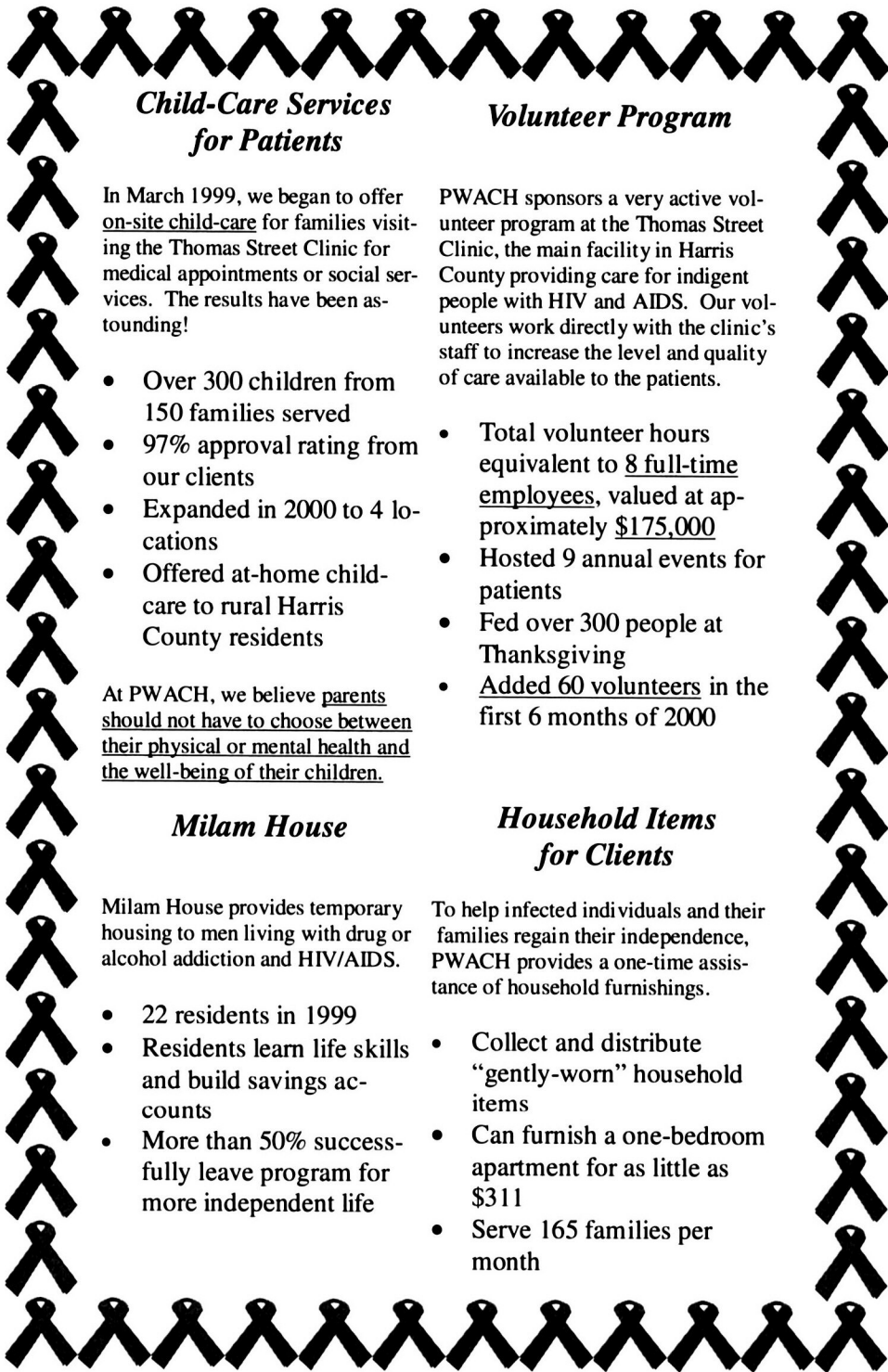


- 92.5¢ of each dollar goes directly to programs that benefit the lives of people in the Houston area living with AIDS and HIV.
- This amount **greatly exceeds** the National Charities Information Bureau suggested minimum level of 60% for program services.
- PWACH does not use promoters or professional fundraisers. The entire amount of your contribution is deposited in the PWACH's account.

Our expenditures for program services have increased 76% in the last 4 years.



**APPENDIX C
SERVICE EFFORTS AND ACCOMPLISHMENTS**



***Child-Care Services
for Patients***

In March 1999, we began to offer on-site child-care for families visiting the Thomas Street Clinic for medical appointments or social services. The results have been astounding!

- Over 300 children from 150 families served
- 97% approval rating from our clients
- Expanded in 2000 to 4 locations
- Offered at-home child-care to rural Harris County residents

At PWACH, we believe parents should not have to choose between their physical or mental health and the well-being of their children.

Milam House

Milam House provides temporary housing to men living with drug or alcohol addiction and HIV/AIDS.

- 22 residents in 1999
- Residents learn life skills and build savings accounts
- More than 50% successfully leave program for more independent life

Volunteer Program

PWACH sponsors a very active volunteer program at the Thomas Street Clinic, the main facility in Harris County providing care for indigent people with HIV and AIDS. Our volunteers work directly with the clinic's staff to increase the level and quality of care available to the patients.

- Total volunteer hours equivalent to 8 full-time employees, valued at approximately \$175,000
- Hosted 9 annual events for patients
- Fed over 300 people at Thanksgiving
- Added 60 volunteers in the first 6 months of 2000

***Household Items
for Clients***

To help infected individuals and their families regain their independence, PWACH provides a one-time assistance of household furnishings.

- Collect and distribute "gently-worn" household items
- Can furnish a one-bedroom apartment for as little as \$311
- Serve 165 families per month

APPENDIX D
QUESTIONNAIRE FOR LABORATORY EXPERIMENT PARTICIPANTS

Your Opinion about the Fundraising Appeal: Please answer the following questions about the fundraising appeal you just reviewed.

- Do you think this is too much information to be sent to potential donors via direct mail?
 - Yes
 - No
 - No opinion / not sure

- How informative did you find the organization's direct mail appeal?

<input type="checkbox"/> Extremely informative	<input type="checkbox"/> Somewhat informative
<input type="checkbox"/> Very informative	<input type="checkbox"/> Not informative
<input type="checkbox"/> Informative	<input type="checkbox"/> No opinion

- In your opinion, what is the maximum acceptable portion of income that a charity should spend on overhead and fundraising expenses?

_____ %

- What did you find most informative about the fundraising appeal?

- What did you find least informative about the fundraising appeal?

- What other information (if any) should the organization provide in order to assist potential donors with a giving decision?

REFERENCES

- Akerlof, G. A. 1970. The market for "lemons": Quality uncertainty and the market mechanism. *Quarterly Journal of Economics* 84 (3): 488–500.
- Anthony, R. N., and D. W. Young. 2003. *Management Control in Nonprofit Organizations*. 7th edition. Boston, MA: McGraw-Hill Irwin.
- Benabou, R. 1996. Heterogeneity, stratification, and growth: Macroeconomic implications of community structure and school finance. *American Economic Review* 86 (3): 584–609.
- Brace, P. K., R. Elkin, D. D. Robinson, and H. I. Steinberg. 1980. *Reporting of Service Efforts and Accomplishments*. Stamford, CT: FASB.
- Bradley, B., P. Jansen, and L. Silverman. 2003. The nonprofit sector's \$100 billion opportunity. *Harvard Business Review* 81 (5): 94–103.
- Cherny, J., A. R. Gordon, and R. J. L. Herson. 1992. *Accounting—A Social Institution: A Unified Theory for the Measurement of the Profit and Nonprofit Sectors*. New York, NY: Quorum Books.

- Drtina, R. E. 1984. Measurement preconditions for assessing nonprofit performance: An exploratory study. *The Government Accountants Journal* 33 (2): 13–19.
- Eckel, C. C., and P. J. Grossman. 1996. Altruism in anonymous dictator games. *Games and Economic Behavior* 16 (2): 181–191.
- , and ———. 2003. Rebate versus matching: Does how we subsidize charitable contributions matter? *Journal of Public Economics* 87 (3–4): 681–701.
- Financial Accounting Standards Board (FASB). 1980. *Objectives of Financial Reporting by Non-business Organizations*. Statement of Financial Accounting Concepts No. 4. Norwalk, CT: FASB.
- Gordon, T. P., and S. B. Khumawala. 1999. The demand for not-for-profit financial statements: A model for individual giving. *Journal of Accounting Literature* 18: 31–56.
- , ———, and L. M. Parsons. 1999. The impact of regulatory standards on donors' decision to support nonprofit organizations. Presented at the 28th Annual Conference of the Association for Research on Nonprofit Organizations and Voluntary Action (ARNOVA), Arlington, VA, November 4–6.
- Graham, E. 1993. Thin rewards: Sprawling bureaucracy eats up most profits of Girl Scout cookies—Troops get a small portion from children's efforts, spurring angry backlash—But officials do goods deeds. *Wall Street Journal* (May 13): A1.
- Greenhouse, L. 2003. Justices seem to lean to charity telemarketer. *The New York Times* (March 4): A18.
- Greenlee, J. S., and K. L. Brown. 1999. The impact of accounting information on contributions to charitable organizations. *Research in Accounting Regulation* 13: 111–125.
- Harrison, G. W., and J. A. List. 2004. Field experiments. *Journal of Economic Literature* 42 (4): 1009–1055.
- Hatry, H. P., J. R. Fountain, Jr., J. M. Sullivan, and L. Kremer. 1990. *Service Efforts and Accomplishments Reporting: Its Time Has Come*. Norwalk, CT: GASB.
- Irvin, R. A. 2005. State regulation of nonprofit organizations: Accountability regardless of outcome. *Nonprofit and Voluntary Sector Quarterly* 34 (2): 161–178.
- List, J. A., and D. Lucking-Reiley. 2002. The effects of seed money and refunds on charitable giving: Experimental evidence from a university capital campaign. *The Journal of Political Economy* 110 (1): 215–233.
- McCormack, L. A., S. A. Garfinkel, J. H. Hibbard, K. E. Kilpatrick, and W. D. Kalsbeek. 2001. Beneficiary survey-based feedback on new Medicare information materials. *Health Care Financing Review* 23 (1): 37–46.
- Merkin, S. S., L. Stevenson, and N. Powe. 2002. Geographic socioeconomic status, race, and advanced-stage breast cancer in New York City. *American Journal of Public Health* 92 (1): 64–70.
- Millen, B. E., J. C. Ohls, M. Ponza, and A. C. McCool. 2002. The elderly nutrition program: An effective national framework for preventive nutrition interventions. *Journal of the American Dietetic Association* 102 (2): 234–240.
- Panel on the Nonprofit Sector. 2005. Strengthening transparency, governance, and accountability of charitable organizations: A final report to congress and the nonprofit sector. Available at <http://www.nonprofitpanel.org/>.
- Parsons, L. M. 2003. Is accounting information from nonprofit organizations useful to donors? A review of charitable giving and value-relevance. *Journal of Accounting Literature* 22: 104–129.
- Spence, M. 1973. Job market signaling. *Quarterly Journal of Economics* 87 (3): 355–374.
- Strom, S. 2002. Charitable contributions in 2001 reached \$212 billion. *The New York Times*. (June 21): A19.

- Tinkelman, D. 1999. Factors affecting the relation between donations to not-for-profit organizations and an efficiency ratio. *Research in Government and Nonprofit Accounting* 10: 135–161.
- Warwick, M. 1994. *How to Write Successful Fundraising Letters*. Berkeley, CA: Strathmoor Press.
- Weisbrod, B. A., and N. D. Dominguez. 1986. Demand for collective goods in private nonprofit markets: Can fundraising expenditures help overcome free-rider behavior? *Journal of Public Economics* 30 (1): 83–96.