

A Research Proposal

DOES ELECTRONIC DISCLOSURE AFFECT
CONTRIBUTIONS TO
NONPROFIT ORGANIZATIONS?

Shirley A. Hunter*
Assistant Professor of International Accounting
The Fletcher School
Tufts University
160 Packard Avenue
Medford, MA 02155
email: shirley.hunter@tufts.edu

Royce D. Burnett
Assistant Professor of Accounting
University of Miami
Miami, Florida 33133
email: broyce@miami.edu

Janet Takaringwa
Candidate for the Masters of Business Administration
Simmons College
Boston, MA 02121

*corresponding author

Abstract

Electronic disclosure is defined as supplemental voluntary disclosure of financial information on an entity's website (Lymer 1998; Lymer *et al.* 1999; Ashbaugh *et al.* 1999). Our research proposal investigates whether electronic disclosure of financial information affects contributions to nonprofit organizations (NPOs)? The research objective is to determine if donors, like investors, value increased levels of accountability over financial resources. The proposal is motivated by the increasingly levels of contributions to NPOs; in 2004, the Top 100 NPOs received \$49.7 billion in revenues, an increase of 9.8% over prior year's funds. The research proposes to examine financial disclosure at two levels. Initially, we want to determine whether the NPO is complying with mandatory reporting guidelines as established by state regulators and the Internal Revenue Services. Secondly, we want to examine whether the NPO is engaging in electronic disclosure by measuring the tenure and information content of the website. Additionally for each website, we will examine if the NPO is engaging in *ecommerce* by testing its ability to receive and process financial transactions. To conduct this inquiry, we will regress the change in total revenues of the top 100 NPOs on aspects of disclosure for the sample period 1998 to 2004.

Key questions that we seek to answer from this research proposal are:

- ✓ *Do donors value NPOs that disclose timely audited financial and performance information on their websites?*
- ✓ *Do donors expect any type of independent assurance that contributions are being disbursed for their intended purpose?*
- ✓ *Could the information content of an NPO's website instill a level of confidence in donors to influence their decision-making?*
- ✓ *Should the donor public assume that those NPOs that mimic for-profit financial reporting practices are more fiduciary responsible than their counterparts?*

Keywords: nonprofit organizations; electronic disclosure; financial disclosure.

Data Availability: Data may be obtained from the sources identified in the text.

Research Methodology

Hypotheses

Mandatory Disclosure:

- H1: Performance indicators are higher for NPOs that adhere to mandatory disclosure guidance than those that do not.
- H2: Financial contributions are higher for NPOs that disclose audited financial information in their annual reports than those that do not.
- H3: Financial contributions are higher for NPOs that file timely Form 990 with the IRS on an annual basis than those that do not.

Voluntary Supplemental Electronic Disclosure:

- H4: Financial contributions are incrementally higher for NPOs that use their websites to disclose both performance and financial information than those that present such information in print form.
- H5: Financial contributions are incrementally higher for NPOs that post their Form 990 on their websites than those that present such information in print form.
- H6: Financial contributions are incrementally higher for NPOs that use their investments in information technology to electronically accept donations than those that accept traditional collection methods.

Research Models

Mandatory Disclosure (OLS Regression Model 1)

The effects of the hypothesized variables testing mandatory disclosure requirements (*Hypothesis One, Hypothesis Two, and Hypothesis Three*) on the change in Total Revenues (ΔLnTR_{1iy}) are examined in the OLS Regression Model (1) for each NPO (i) for the current year (y) minus the prior year (y-1), where:

$$\Delta \text{LnTR}_{1iy} = \text{Mandatory Disclosures}_{iy} + \varepsilon_{1iy} \quad (1)$$

represents the simple model and

$$\Delta \text{LnTR}_{1iy} = \beta_0 \text{Intercept} + \beta_1 \text{ARFL}_{iyt} + \beta_2 \text{F990}_{iyt} + \beta_3 \text{ABIG4}_{iy} + \beta_4 \text{ER}_{iy} + \beta_5 \text{PR}_{iy} + \beta_6 \text{FR}_{iy} + \beta_7 \text{CEOCOMP}_{iy} + \beta_8 \text{NOEMP}_{iy} + \beta_9 \text{NOVOLNT}_{iy} + \beta_{10} \text{STATE}_{iy} + \beta_{11} \text{INTL}_{iy} + \beta_{12} \text{NTEE}_{iy} + \varepsilon_{1iy}$$

represents the expanded model when the components of Mandatory Disclosures are presented. The variable definitions are as follows:

ΔLnTR_{iy} = The log of the difference in total annual funds received by the non-profit-organization (NPO) (i) during the current year (y) minus total annual funds received in the prior year (y-1).

ARFL_{iyt} = Index measuring timely release of annual report by NPO after the fiscal year end (FYE) date for timeliness (t) measured as a dummy variable coded (1) if yes, otherwise (0):

- Less than 90 days after FYE
- Greater than 90 days and less than 120 days after FYE
- Greater than 120 days and less than 180 days after FYE, or
- Greater than 180 days after FYE.

$F990_{iyt}$ = Index measuring timely filing of Form 990 by NPO with the Internal Revenue Services (IRS) after FYE for timeliness (t) measured as a dummy variable coded (1) if yes, otherwise (0):

- Less than 90 days after FYE
- Greater than 90 days and less than 120 days after FYE
- Greater than 120 days less than 180 days after FYE, or
- Greater than 180 days after FYE.

$ABIG4_{iy}$ = A dummy variable coded (1) if the NPO contracts with a Big-4 accounting firm for audit services; otherwise, (0).

ER_{iy} = Efficiency Ratio measuring the annual cost per client per achieved outcome defined as Total Program Expenses/Number of Clients Served.

PR_{iy} = Performance Ratio measuring how effective the NPO is in accomplishing its overall mission objectives as Total Program Expenses/Total Expenses.

FR_{iy} = Fundraising Ratio measuring annual contributions received relative to the costs of raising the funds Total Revenues/Fundraising Expenses.

$CEOComp_{iy}$ = CEO Compensation Ratio provides an annual measure of the cost of management control of operations as CEO Compensation/Total Expenses.

$NOEMP_{iy}$ = Number of paid employees working at the NPO providing an annual measure of the per capita cost of operations as Total Expenses/Number of Paid Employees.

$NOVOLNT_{iy}$ = Number of volunteers working at the NPO providing an annual measure of any efforts at cost containment of administrative expenses Total Expenses/Number of Volunteers.

$STATE_{iy}$ = Grouping of the 501(c)(3) NPO by state of registration to denote the degree of oversight provided under state solicitation laws:

- Coded (1) States that do not require charitable reporting.
- Coded (3) States that accept either Form 990 or other audited financial statements.
- Coded (5) States that require only Form 990 for registration and/or annual filing.
- Coded (7) States that require audited financial statements along with Form 990 for registration and/or annual filing.

$INTL_{iy}$ = A dummy variable coded (1) if the NPO provide international program activities; otherwise, (0).

$NTEE_{iy}$ = National Taxonomy of Exempt Entities classification of the NPO under ten broad categories:

- Category 1 Arts, Culture, and Humanities
- Category 2 Education
- Category 3 Environment and Animals
- Category 4 Health
- Category 5 Human Services
- Category 6 International, Foreign Affairs
- Category 7 Public, Societal Benefit
- Category 8 Religious
- Category 9 Mutual/Membership Benefit
- Category 10 Unknown, Unclassified

Voluntary Electronic Disclosure (OLS Regression Model 2)

The effects of the hypothesized variables testing voluntary electronic disclosure requirements (*Hypothesis Four, Hypothesis Five, and Hypothesis Six*) on the change in total revenues (ΔLnTR_{2iy}) are examined in the OLS Regression Model (1) for each NPO (i) for the current year (y) minus the prior year (y-1), where:

$$\Delta \text{LnTR}_{2iy} = \text{Electronic Disclosure}_{iy} + \varepsilon_{2iy} \quad (2)$$

represents the simple model and

$$\Delta \text{LnTR}_{2iy} = \alpha_0 \text{Intercept} + \alpha_1 \text{WEBYES}_{iy} + \alpha_2 \text{EDISAR}_{iy} + \alpha_3 \text{EDISF990}_{iy} + \alpha_4 \text{EDON}_{iy} + \alpha_5 \text{NTEE}_{2iy} + \varepsilon_{2iy}$$

represents the expanded model when the components of Electronic Disclosure are presented. The variable definitions are as follows:

ΔLnTR_{2iy} = The log of the difference in total annual funds received by the non-profit-organization (NPO) (i) during the current year (y) minus total funds received in the prior year (y-1).

WEBYES_{iy} = A dummy variable coded (1) if the NPO disclose existence of a website; otherwise, (0).

EDISAR_{iy} = A dummy variable coded (1) is the NPO disclose the annual report on its website; otherwise, (0).

EDISF990_{iy} = A dummy variable coded (1) is the NPO disclose the annual Form 990 on its website; otherwise, (0).

EDON_{iy} = A dummy variable coded (1) denoting the level of sophistication of the website, if it has the ability to electronically accept financial donations; otherwise, (0).

NTEE_{iy} = National Taxonomy of Exempt Entities classification of the NPO under ten broad categories:

Category 1 Arts, Culture, and Humanities
Category 2 Education
Category 3 Environment and Animals
Category 4 Health
Category 5 Human Services
Category 6 International, Foreign Affairs
Category 7 Public, Societal Benefit
Category 8 Religious
Category 9 Mutual/Membership Benefit
Category 10 Unknown, Unclassified

Sample Data

The sample comprises the listing of the Top 100 Nonprofit Organizations published by the NonProfit Times (2005). This list is compiled annually by Grant Thornton. We select this group of NPOs because we expect more information to be available within the public domain on their operations for our sample period 1998 to 2004 than for others.

Preliminary Questions

- 1. How to control for exogenous events that could affect contributions to NPOs, such as natural disasters, etc.? For example, the tsunami in Asia in December 2004 and the Hurricane Katrina in September 2005 caused significant increases in donations to NPOs, are these levels of donations sustainable? If not, how to isolate these seasonal surges in revenues?*
- 2. As donors like investors become more sophisticated in their use of web based disclosures, their information needs may increase. Should we differentiate the information content of web pages over the sample period?*