Article

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Does Mandatory Disclosure Matter? The Case of Nonprofit Fundraising

Putnam Barber[1], Megan M. Farwell[2], and Brian Galle[3]

Abstract

Do donors seek out potentially adverse information about organizations making fundraising appeals? Do they react when it is readily available? Do they draw negative inferences when critical information is not available? To answer these questions, we consider previously unexamined large-scale natural experiments involving U.S. charitable organizations—tax-exempt organizations that file Internal Revenue Service (IRS) Form 990. Using standard difference-in-differences designs, we find that donors penalize organizations with high fundraising costs when there is mandatory disclosure or involuntary disclosure by a third-party reporter. Organizations with lower fundraising costs fundraise more successfully in the presence of these disclosures. The contrast with donors' behavior when such information is not available suggests that donors do not draw correct inferences when potentially consequential information is not disclosed. Disclose-on-request requirements, in contrast, apparently do not have any significant impact on donors' or organizations' behavior. We then sketch implications for the regulation of donations to charities and their modern cousins, such as crowdfunding and social enterprise organizations.

Keywords

fundraising, disclosure, transparency, mandatory disclosure, quantitative study of giving

[1]University of Washington, Seattle, USA
[2]University of Pennsylvania, Philadelphia, USA
[3]Georgetown University Law Center, Washington, DC, USA

Corresponding Author:
Brian Galle, Georgetown University Law Center, 600 New Jersey Ave NW, Washington, DC 20001, USA.
Email: brian.galle@georgetown.edu

Introduction

Information has always been a central dilemma for charities supported by donations. Foundational work by Hansmann (1980) and Glaeser and Shleifer (2001) argues that, in many ways, a charity resembles a service-providing commercial organization, in which the founder must seek start-up capital and donors "consume" the charity's efforts in providing services to third-party beneficiaries. Because donors often cannot verify that donations are used for their intended purposes, these organizations adopt the nonprofit form, pledging not to distribute profits to those who control the recipient organization or related commercial fundraising firms. But because nonprofit status alone does not solve the information problem, disclosure requirements and other forms of regulation may still be needed to minimize market failures (Hansmann, 1981). Many U.S. states currently oversee charitable solicitation activities to deter frauds and make information about soliciting organizations' finances available online (Lott et al., 2016).

Similar informational problems seemingly would affect new forms of philanthropy that have proliferated over the last decade, but regulation of them has not developed as quickly. For example, "crowdfunding" platforms resemble traditional charities in their effort to overcome the free-rider problem in the production of public goods (Boudreau et al., 2018). In addition, globally, many jurisdictions now provide distinct legal status for hybrid organizations that combine traditional charitable work with limited profit seeking (Boeger, 2018). Like donors to more traditional charities, individuals who contribute to or purchase goods from these enterprises may struggle to verify that their support serves its intended purposes (Yablon, 2018).

Most regulators have left resolution of these recent informational challenges to the private sector to solve (Reiser & Dean, 2017). For example, in Delaware, a leading U.S. jurisdiction for development of corporate law, social enterprise firms may, but need not, offer the public any information about their performance or decision processes on metrics unrelated to profit (Galle, 2019). Likewise, approaches to crowdfunding regulation for the most part allow platform operators to decide for themselves what information fundraisers must provide (Cascino et al., 2019; Kim & Park, 2019). Many regulators in the United States do provide online listings of registered fundseekers (Lott et al., 2016).[1] These may include summary information on past financial performance or links to copies of registrations and annual reports.

These approaches to regulating solicitations could be defended by law and finance literatures examining the merits of mandatory disclosure in securities regulation. A well-known claim is that government regulation of commercial firms seeking outside financing is unnecessary because firms will voluntarily disclose negative information (Easterbrook & Fischel, 1984). Failure to offer complete disclosure, it is said, will lead donors to draw strong negative inferences about organizational quality. Decades of empirical investigation have yet to decisively confirm or reject these theories (Hail et al., 2010). It has been a challenge to find settings to test the effects of disclosure on both treatment and control groups (Dranove & Jin, 2010).

Theory and evidence offer considerably more support in favor of mandated disclosures for household finance and other consumer products (Dranove & Jin, 2010). The cost of acquiring useful information often exceeds its value for individual consumers. Mandatory disclosure, therefore, can potentially improve consumer welfare, although designing effective disclosure regimes is always challenging (Ben-Shahar & Schneider, 2014; Fung et al., 2007).

Should philanthropic activities be regulated more like securities or the consumer marketplace? Crowdfunding, social enterprise, and traditional charity share aspects of each, as each can be characterized either as requests for investment or as the sale of philanthropic services. Past evidence on whether donors act like securities investors or consumers is mixed (Hofmann & McSwain, 2013). Laboratory experiments suggest that donors may fail to recognize when organizations conceal potential negative information (e.g., Khumawala et al., 2005), whereas correlational studies find evidence suggesting that some donors may respond to accounting manipulation (Yetman & Yetman, 2013).

In this article, we examine donor behavior with respect to subjectively adverse information by drawing on three previously unexamined large-scale natural experiments involving disclosure of charities' fundraising expenditures. On average, donors dislike excessive fundraising and other administrative expenses (Bekkers & Wiepking, 2011; Okten & Weisbrod, 2000; Parsons, 2003; Posnett & Sandler, 1989; Tinkelman & Mankaney, 2007; Trussel & Parsons, 2007). Although we take no position on whether donors *correctly* view a high fundraising ratio as negative information about the fundseeker, other scholars have argued that donors are mistaken to do so (Bowman, 2006; Connolly et al., 2013; Steinberg, 1988; Steinberg & Morris, 2010; Tinkelman, 2006). If the Easterbrook and Fischel (1984) approach to securities disclosures applied in the charitable context, fundseekers would voluntarily reveal fundraising ratios, and disclosures mandated by the government or revealed by third parties would not provide additional information to donors. Recent research is inconsistent on whether donors respond more to fundraising expenses when they are made readily available through ratings offered by third-party evaluators (Gordon et al., 2009; Szper & Prakash, 2011).

The first two of our experiments look to changes in U.S. law. From the late 1970s, U.S. states increasingly enacted laws requiring that any direct-to-donor charitable solicitation include a statement disclosing the fundseeker's cost-of-fundraising ratio (COFR; Barber & Farwell, 2016). We call these "must disclose" (MD) provisions. In June 1988, the U.S. Supreme Court struck down all these statutes as unconstitutional restrictions of a charity's free speech. This rolling adoption and uniform repeal, combined with financial information from a large database of Form 990 tax returns filed by charitable organizations across the country, provide us with a series of difference-in-differences (DiD) regressions. Our second experiment applies the same form of analysis to disclose-on-request (DOR) rules, which require fundseekers to disclose financial information when asked.

In the third experiment, we look at the impact of selective, independent posting of organizations' fundraising costs and other financial data to the internet. Beginning in

1996, GuideStar (now a service of Candid [https://candid.org/]) made available by CD-ROM and on its website limited financial information on 42,919 public charities. These data included fundraising expenditures and the ratio of fundraising to donations, the latter as calculated by GuideStar. We use these data to conduct another DiD analysis in which organizations not listed by GuideStar serve as the control group. (For background on GuideStar data, see Collins, 2011.)

In the MD and GuideStar cases we find evidence that donors responded strongly to changes in disclosure. Such disclosures are correlated with a statistically significant and economically large increase in the negative effects an organization's COFR has on donations; these negative impacts are concentrated in fundseekers whose COFR is significantly above the median. Adopting DOR rules appears to have no significant effect on donor behavior; see Online Appendix D.

We suggest that these results imply that charitable giving is more like the consumer setting in which mandatory disclosures are meaningful. If donors respond to changes in disclosures, it implies that fundseekers were not already voluntarily revealing information that is important to donors. Furthermore, our results suggest that donors are not resistant to all negative information, as prior lab findings suggest (Metzger & Günther, 2019; Null, 2011), but instead are sensitive to the cost and ease of acquiring information. Interventions that lower access costs can increase donor use of disclosed information.

The article is organized as follows. First, we review the legal background of charitable solicitations regulation in the United States, primarily focusing on court cases addressing issues of financial disclosure. We then outline theories related to fundraising disclosure, including findings from previous scholarship. The "Method" section details our data sources and analytic approach, followed by our findings. We conclude with a discussion of our results, including their implications for practice and future research.

Legal Background and Context

Individual U.S. states have long sought to regulate how organizations raise money (Barber, 2012, 2013, 2017; Steinberg, 1997). Although the details vary, in most states, a charity seeking to raise money must register with the state and comply with local rules governing charitable solicitations. Multistate solicitation is relatively rare; by some estimates, more than three quarters of philanthropic giving is local (The Center On Philanthropy at Indiana University, 2007, 2008; Glückler & Ries, 2012).

The 1970s saw a wave of aggressive efforts by states to curtail costly charitable solicitation (Hopkins, 1980). These efforts included what we term "MD" statutes. Although MD statutes varied, they typically obliged organizations to disclose the share of total contributions used for charitable purposes prior to making any request. Although aimed primarily at professional fundraising organizations, most MD statutes were worded broadly enough that they applied to any fundraising conducted by a charitable organization's paid staff.

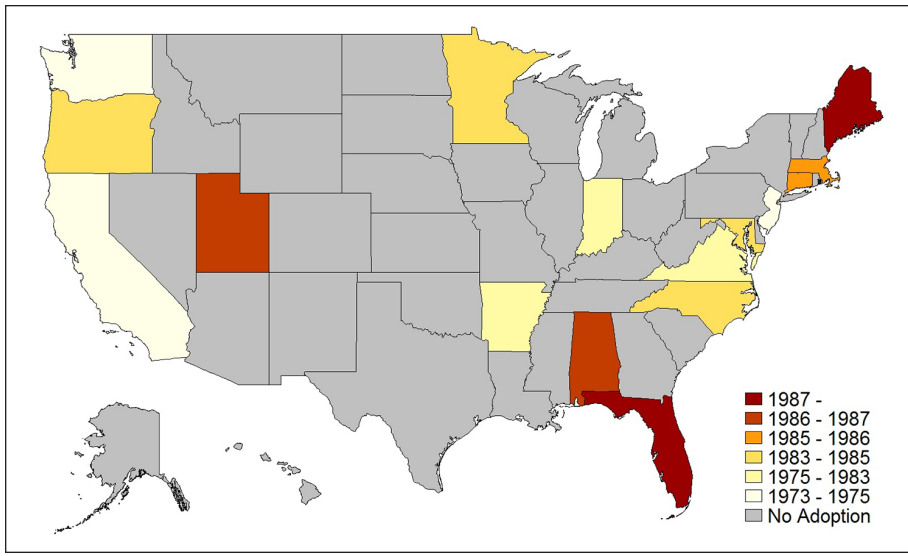

Figure 1. Adoption of state must disclose statutes.

Figure 1 maps adoption of MD rules nationally. North Carolina's MD statute was to have gone into effect in September 1985. But North Carolina's new statute was immediately challenged and, by early 1986, a federal trial court issued an order barring North Carolina from enforcing it. North Carolina appealed to the U.S. Supreme Court, and, in June 1988, the Court ruled that the state's MD law was unconstitutional (*Riley v. National Federation of the Blind*, 1988). As a result, many states repealed their MD laws in the following years; none currently enforce them.

The Supreme Court explicitly left in place North Carolina's rule obliging fundraisers to disclose their fundraising ratio upon (potential) donor request (*Riley v. National Federation of the Blind*, 1988). Beginning shortly after the Court's decision, and continuing through today, other states have adopted similar provisions. Although DOR provisions vary in detail, their core element is an obligation that a fundraiser—or any organization that spends money on fundraising—must accurately answer requests for information about the proportion of donated funds spent on fundraising.

A different avenue for making financial information available about fundseeking nonprofits followed in 1996 when GuideStar made available by CD-ROM and on its website limited financial information on 42,919 public charities. These data included fundraising expenditures and the ratio of fundraising to donations, the latter calculated by GuideStar. In 1998, GuideStar expanded its database to show all public charities that had filed a Form 990 with the Internal Revenue Service; traffic to the site increased astronomically after it was featured in the October 18, 1999, edition of the *New York Times* (Johnston, 1999).

There was, therefore, a window of more than 2 years in which data for the nearly 43,000 organizations in the initial release were more readily available than for other fundseekers. In this era, data on nonprofit financials were generally available only from the organizations themselves (though several states made similar information available on their official websites). A central repository of data in which donors could readily compare financial outcomes across organizations was a dramatic change from the existing informational landscape (Galle & Walker, 2016; Gordon et al., 1999).

Theory and Hypotheses

What should we expect to be the impact of MD laws and inclusion in GuideStar's list? Prior research suggests donors give less to organizations with higher ratios of fundraising to charitable expenditures (Bekkers & Wiepking, 2011; Parsons, 2003). Nonetheless, one hypothesis is that neither MD laws nor GuideStar would change behavior because fundseeking organizations were already voluntarily providing those data to their donors.

In many commercial settings, however, firms do not voluntarily disclose information that customers or investors would find adverse. Firms would, of course, volunteer information if failure to do so led observers to assume the worst about the firm, a process commentators dub "unraveling" (Grossman, 1981; Milgrom, 1981). But unraveling requires that observers draw more damaging inferences about firm quality from failure to disclose than the firm's actual quality. If observers lack information about the industry, they may not know what level of quality to assume of nondisclosing firms (Dranove & Jin, 2010). If observers then fail to draw proper inferences, unraveling will not occur and firms need not voluntarily reveal adverse information (Fishman & Hagerty, 2003; Hirshleifer et al., 2004). Similarly, firms may not disclose on their own if voluntary disclosures would not be credible to or comprehensible by their intended audience (Dranove & Jin, 2010).

Empirically, unraveling fails to occur in many consumer settings (Ben-Shahar & Schneider, 2014; Dranove & Jin, 2010). Evidence is more mixed in financial markets, where sophisticated and highly motivated traders can provide price discipline (Gilson & Kraakman, 2014; Leuz & Wysocki, 2016).

Our expectation is that charitable donors will more closely resemble consumers than securities traders.[2] Developing the financial savvy to read and draw inferences about financial data consumes scarce time and attention (Conlisk, 1996; Simon, 1990). Unlike actors in securities markets (Gilson & Kraakman, 1984), individuals have little obvious payoff from investments in understanding "unraveling" and gathering enough information about industry-wide fundraising to draw correct inferences from nondisclosure. Krasteva and Yildirim (2013) suggest that many donors will not invest in gathering information under these conditions. In fact, if individuals obtain "warm glow" from giving (Andreoni, 1989), learning negative information about the organizations they support might actually make donors subjectively worse off (Null, 2011). Donors may thus choose to interpret negative information positively to avoid cognitive tension with their desire to support an organization (Savary et al., 2020). Metzger

and Günther (2019) report lab evidence that some donors will not incur costs to learn socially useful information about recipient organizations; Krasteva and Yildirim (2013) argue the opposite will hold if charities promise to refund donations to failed projects.

We expect, however, that MD and GuideStar publication will influence how donors give and that these changes will depend on each organization's COFR. Donors are likely to penalize fundseekers with relatively high fundraising ratios (Grizzle, 2015; Marudas et al., 2012; Portillo & Stinn, 2018). Organizations with low ratios may find their donations increasing. Mandatory reporting may also improve donors' perceptions of organizations with relatively lower ratios. Absent disclosure, donors may simply pool all organizations together, whereas disclosure allows organizations with more desirable features to credibly distinguish themselves. We therefore offer two hypotheses.

Hypothesis 1 (H1): Disclosure of fundraising ratios will reduce donations to fundseekers with ratios higher than average.
Hypothesis 2 (H2): Disclosure of fundraising ratios will increase donations to fundseekers with ratios lower than average.

A contrary possibility is that disclosures requiring some level of donor effort will have no effect. Again, lab experiments suggest donors may avoid consuming negative information (Golman et al., 2017; Metzger & Günther, 2019; Null, 2011). If so, we might expect different results for MD laws versus DOR and GuideStar. Although GuideStar and DOR make information readily available, the reader must choose to access it; under MD, the donor is given the information automatically. Thus, our third hypothesis follows:

Hypothesis 3 (H3): H1 and H2 will hold for MD statutes but not DOR or GuideStar.

This hypothesis is potentially quite important for regulatory policy. If mandatory disclosure is costly for organizations but is not taken up by donors for whom it would be relevant, disclosure is unlikely to be cost justified. Prior research suggests most donors do little research about donee organizations (Hope Consulting, 2010).

It is less clear whether disclosures will change how organizations fundraise, although GuideStar and lawmakers may expect disclosures will create downward pressure on fundseekers' COFRs. MD laws fall within the concept of "targeted disclosure" (Fung et al., 2007). The concept is well represented by the placards increasingly being required (by municipal health departments) near the doors of restaurants. By offering visible grades for hygiene issues, these notices have an immediate effect on prospective customers who can be expected to turn away from low-rated establishments unless there are no available alternatives. Importantly, they also affect proprietors, who can be expected to take immediate action to avoid damaging effects on their business. In the vocabulary of targeted disclosure, this sequence is called an action cycle. Scholars have examined the effect of action cycles—successful and not—in a

wide variety of settings; Barber and Farwell (2016) analyze the degree to which contemporary charitable solicitations regulation is an attempt to create an action cycle that discourages high-cost fundraising.

But disclosing fundraising revenues and expenditures may increase the amount of fundraising organizations report on their tax returns. One possibility is that disclosure could improve the accuracy of organizations' reporting. Historically, many charities appear to have been unreliable in reporting fundraising expenditures (Keating et al., 2008; Krishnan et al., 2006). Heightened scrutiny might cause inaccurate reporters to take more care to present correct figures, and these corrected figures might be higher. The opposite is also possible, of course, as fundseekers whose donors are more sensitive to high reported fundraising rates might work harder to "game" their disclosures (Eckerd, 2015). Disclosure might also increase real fundraising. If newly disclosed fundraising ratios reduce the marginal returns to fundraising, disclosure would put pressure on the organizational bottom line. Organizations under financial pressure tend to engage in more fundraising, not less (Andreoni & Payne, 2011; Galle, 2017).

Method

Data

We drew organization-level data from the Public Charity–Statistics of Income (PC-SOI) files collected by the National Center on Charitable Statistics. Each year of PC-SOI data comprise a stratified sample of annual tax returns filed by U.S. charitable organizations (the "Form 990"); tax-exempt organizations with assets above US$10 million appear in every year of the sample. We cleaned the returns following a protocol described in Online Appendix A. Prior research shows that charities underreport fundraising costs (Brooks, 2004; Castaneda et al., 2008; Hager et al., 2004; Krishnan et al., 2006; Yetman & Yetman, 2013). In response, we omit organizations reporting more than US$50,000 in donations but zero fundraising expenses in the same year (Hargrove, 2012). We discuss other ways potential misreporting affects interpretation of our results in the "Discussion and Conclusion" section.

PC-SOI data exist for fiscal year 1983, and then continuously for the period after 1985. We stop our data collection at 2007 due to significant changes to the Form 990 effective in 2008. Because our focus is on donative behavior, we limited the sample to those tax-exempt organizations that ever reported receiving a donation. To avoid endogenous selection of legal regimes, we restrict our sample to organizations that did not relocate during the sample period.

We hand-collected and coded state adoptions of MD and DOR laws, building on Barber and Farwell (2016). MD adoption dates are summarized in Figure 1. For reported regressions, we coded an organization's fiscal year as being subject to an MD statute if at least 6 months of the organization's fiscal year occurred while the law was in effect. In robustness analysis, we varied the coding to include 1- and 12-month intervals and used enactment rather than effective dates; the results were largely unchanged.

For most jurisdictions, we coded the MD regime as terminating in June 1988. As described earlier, North Carolina was under judicial order not to implement its regime, beginning almost from the moment of enactment. Furthermore, in May 1987, a U.S. Court of Appeals with legal authority over not only North Carolina but also South Carolina and Maryland (as well as other states that never adopted MD laws) upheld that initial order (*National Federation of the Blind v. Riley*, 817 F.2d 102 (1987)). We, therefore, coded North Carolina as never adopting MD laws, and we coded South Carolina and Maryland as terminating their regimes in May 1987 (results are not significantly affected by coding those states' statutes as being in effect until 1988).

We define the control variables and explain their selection and construction in Online Appendix A.

Table 1 provides summary statistics.

Analytic Approach

We employed a DiD analysis in which the "treated" period is the time leading up to treatment, rather than the more common setting in which treated years follow treatment. Because some states adopted MD laws within our sample period, we have variation on both ends of our natural experiment. Our results are unaffected by excluding states that adopted MD within the sample period.

One of our central research questions is whether fundraising disclosures affect fundraising success. To investigate this, we regressed donations on reported fundraising, outside fundraising (e.g., professional fundraising firm costs), and fundraising share, and allowed coefficients on each of these variables to vary between MD treatment and control organization-years. We estimated equations of the form

$$\begin{aligned} D_{it} = {} & \alpha_0 + \beta_1 F_{it} + \beta_2 OF_{it} + \beta_3 FS_{it} + \beta_4 MustDisclose_{it} + \\ & \beta_5 F_{it} \times MustDisclose_{it} + \beta_6 OF_{it} \times MustDisclose_{it} + \\ & \beta_7 FS_{it} \times MustDisclose_{it} + \beta_8 \tau_{st} + \beta_9 X_{it} + \beta_{10} W_{st} + \\ & \varphi_i + \delta_s \omega_t^{1,2} + \varepsilon_{it} \end{aligned} \tag{1}$$

where *MustDisclose* is an indicator variable for whether at least 6 months of a given organization-year is governed by an MD statute, *F* is fundraising, *OF* is outside fundraising, *FS* is a vector of 10 indicators for lagged COFR deciles, τ_{st} represents the tax price of giving for a given state year, *X* and *W* are vectors of organization- and state-level controls, and φ_i and λ_t are organization- and calendar-year fixed effects, respectively. $\delta_s \omega_t^n$ is a set of linear and quadratic state by year trends. ε_{it} is the error term. All the nonindicator variables are logged.

We include decile indicators because, as described earlier, our theory predicts that disclosure would be especially significant for fundseekers whose fundraising ratio is higher than average. To capture this possible nonlinearity, we estimated equations with a series of indicators for annual COFR decile.[3] We then computed the predicted marginal effects of MD laws at each of these deciles.

Table 1. Summary Statistics.

	All organizations		GuideStar orgs	
Variable	*M*	*SD*	*M*	*SD*
Organization-level variables				
Direct public support	4,775.15	2.75[a]	6,554.29	3.24[a]
Fundraising expenses	465.93	2,567.13	698.291	4,103.37
Outside fundraising	20.34	379.08	30.56	361.17
Fundraising share	0.027	0.074	0.032	0.065
Log S&P 500	6.51	0.65	6.52	0.64
Assets	9.22[a]	48.6[a]	6.16[a]	41.8[a]
Interest income	532.36	3,390.34	327.53	4,615.92
Dividend income	1,290.90	9,356.61	1,156.53	1.26[a]
Other investment income	184.47	4,204.36	91.60	1,371.49
Program service revenue	4.33[a]	22.1[a]	1.42[a]	6.25[a]
Listed in GuideStar 96	0.26	0.44	1	0
State-level variables				
Must disclose in effect	0.036	0.19	0.033	0.18
Tax price of giving	0.65	0.05	0.64	0.05
State population	1.11[a]	8.9[a]	1.17[a]	9.1[a]
State population share $<$ 25	0.36	0.02	0.36	0.02
State population share $>$ 65	0.13	0.02	0.13	0.02
State median income	50.173	6.75	50.32	6.53
State GDP per capita	0.04	0.01	0.04	0.01

Note. Dollar amounts in 2007 dollars. Values in thousands. GDP = gross domestic product.
[a]Ten millions. "GuideStar Orgs" are all organization-year observations for organizations appearing in 1996 GuideStar release.

We expect some degree of attenuation of the measured coefficients for the effects of state law. We can observe only the principal address of the entities in our data, not the states in which they solicited funds. We assume that an organization's solicitations are mostly governed by the law of its principal location. To the extent this is untrue, any measured effects of state law will be biased toward zero.

Results

To conserve space, we summarize our main results graphically and with brief tables. Full tabulations are available in Online Appendix A.

MD Statutes

We first examine whether disclosure statutes affect the return to fundraising, summarized in Table 2. Again, we measure fundraising share using a set of indicators for deciles 1 through 10. As in prior research (e.g., Yetman & Yetman, 2013), about half

Table 2. Effects of Must Disclose Statutes on Donations and Fundraising.

	(1)	(2)	(3)	(4)
Variables	Log donations	Log donations	Log fundraising	Log fundraising ratio
Log fundraising expenditure	0.228***	0.194***		
	(0.0129)	(0.00227)		
Must disclose in effect	−0.140	0.0757***	−0.00974	−0.0551***
	(0.0968)	(0.0271)	(0.0574)	(0.0197)
Must disclose × Log fundraising	0.0545**	0.0118		
	(0.0246)	(0.00778)		
Observations	243,327	238,986	204,767	204,430
R^2	.027		.424	.376
Number of organizations	24,845	21,744	21,686	21,657

Note. Columns 1, 3, and 4: ordinary least squares fixed-effects panel regression. Column 2: negative binomial fixed-effects panel regression. Full tabulation in Online Appendix Table A1.
**statistically significant at the 5% level. ***statistically significant at the 1% level.

of fundseekers that ever received donations reported zero fundraising in a given organization-year, so that deciles 1 through 5 all report zero fundraising and form the excluded category. That is, the coefficients on the decile indicators are relative to organizations with zero fundraising expenses. The results are summarized in Figure 2, which plots the net predicted marginal effects of MD laws at zero-share fundseekers and each of the remaining five deciles.

Results were largely in line with our predictions. MD laws have a large negative impact on donations for fundseekers with notably higher than average COFR. Beginning in the seventh decile, there is a marked negative effect from MD statutes. Under MD regimes, donations are higher for organizations in the first through sixth deciles, though this result is not quite statistically significant for the sixth decile. We interpret these results as supporting our expectation that, in the absence of mandatory disclosures, donors tend to pool higher and lower COFR organizations together. With MD in effect, donors discover that low-COFR organizations are subjectively more desirable than the donor expected.

Perhaps contrary to expectations, coefficients for the MD × decile indicators are similar for deciles 7 through 10. That is, although giving to these organizations is lower under an MD regime, it is lower by about the same amount for those with the very highest fundraising ratios as for those that are only above average. It thus appears that, as Yetman and Yetman (2013) also report, donors do not distinguish much between organizations with what they see as undesirable levels of fundraising.

Table 2 summarizes some additional results. Column 1 reports the impact of MD on log donations using ordinary least squares (OLS), whereas Column 2 repeats the analysis using negative binomial regression. As expected, donations are increasing with fundraising (Table 2, Columns 1 and 2) and (as shown fully in Online Appendix Table A1)

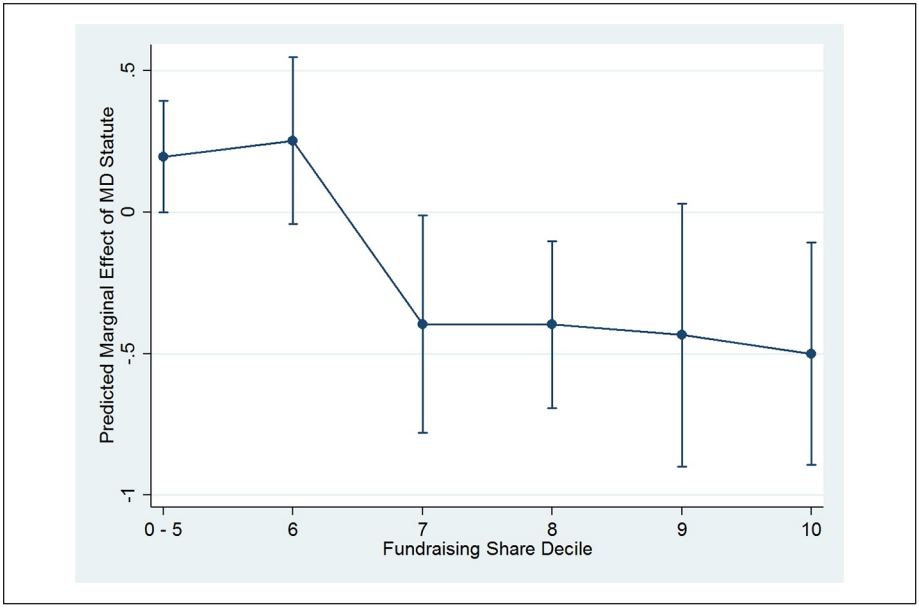

Figure 2. Marginal effects of must disclose statutes on log donations, by decile of fundraising share.

decreasing with COFR decile. In OLS, we find a positive and significant coefficient for the MD × fundraising variable. This implies that each dollar of fundraising on average brings in more money in a state with an MD law in effect. Using an alternative technique (negative binomial regression; Table 2, Column 2), we find no difference in the effect of fundraising, but average donations are higher at these organizations.[4] Either way, we interpret these results as consonant with our pooling theory. Holding COFR constant, an organization raises more money with its solicitations when donors have more available information about its fundraising expenses.

Columns 3 and 4 of Table 2 report the impact of MD laws on fundraising expenditures and same-year fundraising share, respectively. Here again, we bin by lagged fundraising share. For the most part, we cannot rule out the possibility that MD laws have no effect on fundseekers' practices, although we do see a statistically significant but economically small reduction in mean COFR when MD is in place.

As Tinkelman and Neely (2011) report, outliers can be important when conducting OLS analysis with Form 990 data. We thus repeat our analysis using quantile regression to obtain estimates for the median organizations. Results (not tabulated) are quite similar to those reported.

GuideStar

We next test the effects of the initial GuideStar release of data on roughly 43,000 organizations. With assistance from GuideStar staff, we identify all the organizations

appearing in the 1996 and 1997 GuideStar data. We repeat the approach we used analyzing the effect of MD statutes, but using GuideStar listing, beginning in October 1996, as the treatment effect (GuideStar CD-ROMs were available in July 1996, but the website went live in October). Again, for these releases, GuideStar used Form 990 data to calculate and report the ratio of fundraising to donations. Thus, to estimate the impact of GuideStar on fundraising success, we interact lagged reported fundraising ratio deciles with GuideStar data availability. We include separate indicators for post-1996 release date and for organizations that appear in the initial GuideStar release, and interpret the Postrelease Date × GuideStar Inclusion interaction as the impact of GuideStar disclosure in the affected years. We cluster errors by organization.

We believe that, at least for organizations that were close to exclusion or inclusion, appearance in GuideStar's data was essentially random. On average, GuideStar-listed organizations had fewer assets but received more donations and had greater total expenditures in 1995. We control for observable variables that might have systematically varied between charities listed by GuideStar and others. To further help ensure that the two groups do not differ in some unobservable way, we use propensity score matching. We run a probit regression using 1995 fiscal year data and use these results to predict the likelihood a given organization would be selected. We then include only organizations falling between 10% and 90% likelihood. This limitation does not meaningfully change the results.

Table 3 summarizes some basic results. More complete results are tabulated in Online Appendix Table A2.

We find evidence of two powerful GuideStar effects. Inclusion in the GuideStar release, on average, corresponds to a large increase in reported giving. We find no evidence that giving fell at unlisted organizations. One interpretation consistent with these results is that the additional information or confidence that the GuideStar listing provided increased total willingness to give and did not simply reallocate donations away from fundseekers with less information available. As illustrated in Figure 3, all of the differential effect appears within a year of the GuideStar differential-disclosure window.

Several factors could contribute to the boost in donations among GuideStar-listed organizations. Most simply, listing might raise donor awareness of the organization (Peng et al., 2019). Alternately, GuideStar may help donors distinguish between low- and high-COFR organizations, allowing them to give more to the organizational type (here, low COFR) they favor.

Furthermore, as illustrated in Figure 4, inclusion in GuideStar correlates with an increased penalty for high-COFR organizations to a very substantial and statistically significant degree, with negative coefficients for appearing in each decile bin averaging about 30% larger (i.e., in the figure, giving is much higher postrelease for Deciles 1 through 5 for GuideStar-included fundseekers, but there is no difference among deciles for unlisted organizations). As with MD laws, donors do not appear to distinguish among organizations with relatively high COFR. GuideStar thus appears to have communicated new information to donors about fundraising expenditures. The effect size we measure for GuideStar appears larger than for MD statutes. However, because we use somewhat different identification strategies for each,

Table 3. Effects of GuideStar on Donations and Fundraising.

Variables	(1) Log donations	(2) Log donations	(3) Log fundraising	(4) Log fundraising ratio
Log fundraising expenditure	0.221***	0.202***		
	(0.0130)	(0.00258)		
Post-1996?	−0.0984	0.934**	−0.0416	−0.00752
	(0.0733)	(0.393)	(0.0431)	(0.0132)
Post-1996 × Ever in GuideStar?	0.407***	0.186***	−0.0602	−0.00133
	(0.0973)	(0.0163)	(0.0522)	(0.0156)
Observations	201,353	198,103	169,777	169,532
R^2	.027		.434	.380
Number of organizations	20,191	17,727	17,628	17,611

Note. Columns 1, 3, and 4: ordinary least squares fixed-effects panel regression. Column 2: negative binomial fixed-effects panel regression. Full tabulation in Online Appendix Table A2.

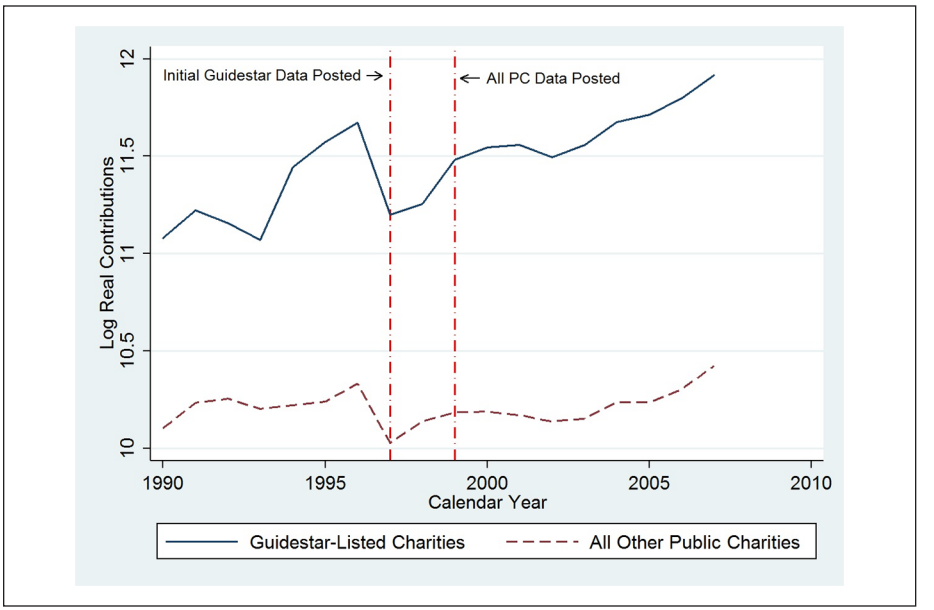

Figure 3. Donations at charitable organizations covered in initial GuideStar release vs. donations at all other observed public charities.

and our MD method may be subject to attenuation, we cannot be confident that one or the other was in fact more impactful.

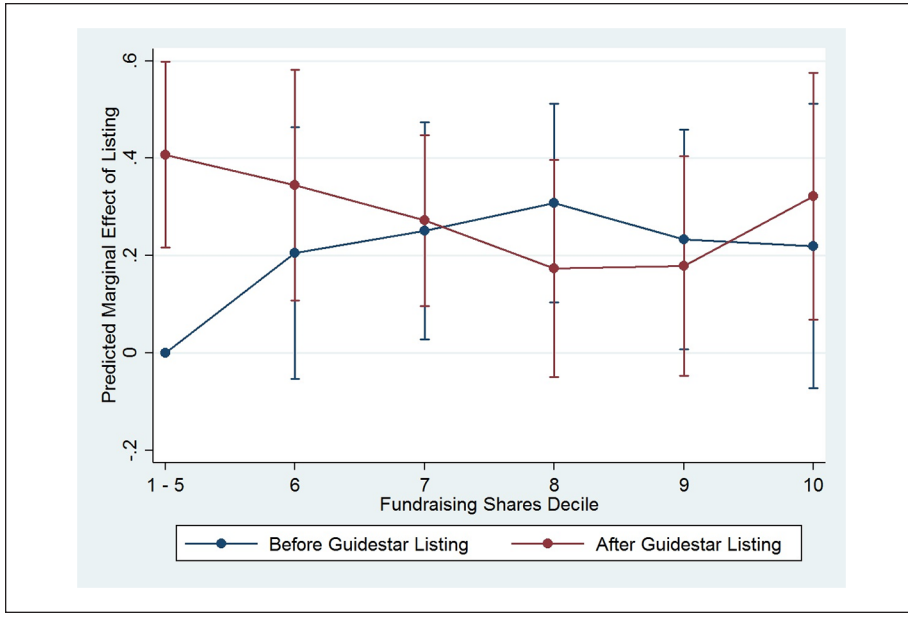

Figure 4. Effect of GuideStar listing on donations, by deciles of fundraising share.

We find no evidence, however, that greater information about fundraising costs reduced reported fundraising (Table 3, Columns 3 and 4). Although our point estimate is negative, our 95% confidence interval includes as much as a 4% increase in fundraising expenditures. It is possible that fundseekers did alter their fundraising practices in response to GuideStar, but did so in heterogeneous ways that tend to wash out in the aggregate. For instance, some organizations might have reduced real fundraising, whereas others might have begun reporting more scrupulously, or vice versa. Organizations may also have tried harder to explain the potential value of their fundraising to donors (Qu & Levine Daniel, 2020).

Again, we account for potentially influential outliers by repeating the analysis using quantile regression. Results are quantitatively similar to those reported, with a statistically significant point estimate of the effect of GuideStar disclosure on giving slightly smaller, at .176.

Discussion and Conclusion

We have shown evidence that MD statutes tended to reduce donations for fundseekers with above-average COFR. For fundseekers with lower fundraising costs, donations were higher, possibly because each dollar of fundraising, on average, brought in more donations. These results confirm earlier findings that donors care about fundraising costs. Likewise, our evidence suggests that reporting of fundseekers' financial information by

GuideStar also caused donors to penalize organizations with high COFR, while improving the average productivity of fundraising expenditures of low-COFR charities. Furthermore, donors overall gave more to GuideStar-listed fundseekers.

We also find notable null results. We find no statistically significant evidence that either MD statutes or GuideStar reduce reported fundraising costs. As detailed more in Online Appendix, we also find no evidence that DOR statutes have any effect on donations or fundraising, although this null finding may be due to limitations in the data or research design. That null finding is consistent, though, with H3, as well as the observation that users rarely visit websites where financial and other information about fundseeking organizations is published (Barber, 2013; Barber & Farwell, 2016; Hope Consulting, 2010).

Our GuideStar results seem to reject a strong version of H3, however. Disclosure has some impact on donations even when donors who want to avoid it can do so. Our results are thus more consistent with Krasteva and Yildirim (2013), who found donors make more use of information when it is easier to acquire.

These results tend to support the idea that mandatory disclosures could play a critical role in informing donors' choices. If competition among nonprofit fundseekers led to disclosures that fully satisfied donor demand for information, we would not see any additional consumer-like response when disclosures are mandatory. We can deduce that, much like consumers of other products, donors do not draw strong negative inferences about a fundseeker's attractiveness from its failure to disclose voluntarily.

Our results may be disappointing for legislators who view MD laws as targeted disclosures aimed at curtailing high-cost fundraising. As in Eckerd (2015), we find no evidence that disclosure meaningfully reduces reported fundraising costs. Changes in how information about administrative costs would be available to prospective donors may have encouraged charities to recharacterize fundraising costs as program related, without necessarily changing the underlying activity (Connolly et al., 2013; Fung et al., 2007; Keating et al., 2008; Krishnan et al., 2006). But, as noted in our GuideStar results, the opposite is also possible: organizations may have kept fundraising effort level or even reduced its cost but reported it more accurately. Regulators whose goal is to reduce fundraising costs likely need more information before determining whether disclosure is desirable.

Although our data derive from several decades ago, we think these inferences remain valuable. We are not arguing that a modern MD law would have the same impact it did in 1988. Today, data on U.S. charities are widely available (Saxton et al., 2014). Instead, we suggest there remain a variety of lightly regulated contemporary settings in which donors are in a similar position to where U.S. charity supporters stood in 1988 or 1997. Information is crucial to donor support for social enterprise organizations (Reiser, 2013), and many nations lack the United States' developed charity-disclosure regime, relying instead on various forms of self-governance (Gugerty & Prakash, 2010). How do donors behave in these situations? Do they act like the highly incentivized actors in securities markets, who are willing to invest in costly information gathering? Assuming that human nature has not changed fundamentally since the time of our data, our results suggest that they likely do not.

Using these previously unexamined data sets and standard analytic techniques, this article has shown that MD regulations have significant effects on donor behavior in the short run. Whether or not they would, in addition, have affected fundseekers' behavior in a longer term action cycle cannot be determined from the available data, because the MD statutes were declared unconstitutional after a relative short span of time. The data from GuideStar reveal a similar effect on donor behavior.

High-cost fundraising continues to occur, however, despite the ready availability of financial and other information from GuideStar, from many state regulators' websites, and from a growing number of third-party rating and evaluation services (Eckerd, 2015). Further research, and additional data on fundseekers' and donors' behavior that can be examined, are necessary, though, to determine whether the increasingly transparent data environment is having any effect on fundseekers' practices.

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ORCID iD

Brian Galle https://orcid.org/0000-0003-0733-2174

Supplemental Material

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Notes

1. Following Barber and Farwell (2016), we use the term "fundseeker" to include organizations that seek donative revenue from the public, whether legally organized as charities or otherwise.
2. We do not claim that donating is necessarily the same as investing or purchasing a consumer product. Instead, we use these two categories to describe two points on the continuum of individual responses to limited information: the detailed game-theoretic inferences said to characterize securities market participants, or the more limited inference drawing that characterizes consumer markets.
3. Results using a linear measure of fundraising expenditures are fairly similar and are tabulated in Online Appendix Table A3.
4. We explain negative binomial regression and discuss its potential usefulness in Online Appendix B.

References

Andreoni, J. (1989). Giving with impure altruism: Applications to charity and Ricardian equivalence. *Journal of Political Economy*, *97*(6), 1447–1458.

Andreoni, J., & Payne, A. A. (2011). Is crowding out due entirely to fundraising? Evidence from a panel of charities. *Journal of Public Economics*, *95*(5–6), 334–343. https://doi.org/10.1016/j.jpubeco.2010.11.011

Barber, P. (2012). Regulation of US charitable solicitations since 1954. *Voluntas*, *23*(3), 737–762. https://doi.org/10.1007/sl

Barber, P. (2013). *The official word: What state charities webpages tell the public* [2013 Columbia Law School Charities Regulation and Oversight Project Policy Conference on "The Future of State Charities Regulation," pp. 1–18]. https://academiccommons.columbia.edu/doi/10.7916/D8348H9M

Barber, P. (2017). Muddy waters: Cross currents in fundraising and its control—1907-1954. *Nonprofit Policy Forum*, *8*(3), 275–298. https://doi.org/10.1515/npf-2017-0007

Barber, P., & Farwell, M. M. (2016). Charitable solicitations regulation and the principles of regulatory disclosure. *Nonprofit Policy Forum*, *7*(3), 311–338. https://doi.org/10.1515/npf-2015-0017

Bekkers, R., & Wiepking, P. (2011). A literature review of empirical studies of philanthropy: Eight mechanisms that drive charitable giving. *Nonprofit and Voluntary Sector Quarterly*, *40*(5), 924–973. https://doi.org/10.1177/0899764010380927

Ben-Shahar, O., & Schneider, C. E. (2014). *More than you wanted to know: The failure of Mandated Disclosure*. Princeton University Press.

Boeger, N. (2018). Shaping corporate reform: Social enterprise, cooperatives, and mission-led and employee-owned businesses. In B. Means & J. Yockey (Eds.), *Cambridge handbook of social enterprise law* (pp. 123–141). Cambridge University Press.

Boudreau, K., Jeppesen, L. B., Reichstein, T., & Rullani, F. (2018). *Entrepreneurial crowdfunding without private claims*. SSRN. https://doi.org/10.2139/ssrn.2669545

Bowman, W. (2006). Should donors care about overhead costs? Do they care? *Nonprofit and Voluntary Sector Quarterly*, *35*(2), 288–310. https://doi.org/10.1177/0899764006287219

Brooks, A. C. (2004). Evaluating the effectiveness of nonprofit fundraising. *Policy Studies Journal*, *32*(3), 363–374. https://doi.org/10.1111/j.1541-0072.2004.00070.x

Cascino, S., Correia, M., & Tamayo, A. (2019). Does consumer protection enhance disclosure credibility in reward crowdfunding? *Journal of Accounting Research*, *57*(5), 1247–1302. https://doi.org/10.1111/1475-679X.12289

Castaneda, M. A., Garen, J., & Thornton, J. (2008). Competition, contractibility, and the market for donors to nonprofits. *Journal of Law, Economics, and Organization*, *24*(1), 215–246. https://doi.org/10.1093/jleo/ewm036

The Center On Philanthropy at Indiana University. (2007). *Bank of America study of high net-worth philanthropy: Portraits of donors* [Issue December]. https://scholarworks.iupui.edu/bitstream/handle/1805/5644/2006_baml-portraits_of_donors.pdf?sequence=1&isAllowed=y

The Center On Philanthropy at Indiana University. (2008). *An analysis of million dollar gifts, January 2000-2007: Findings from a study of publicly announced charitable contributions of $1 million or more*. https://scholarworks.iupui.edu/bitstream/handle/1805/5651/2008ccsfellowshipreport.pdf?sequence=1&isAllowed=y

Collins, J. M. (2011). Improving financial literacy: The role of nonprofit providers. In O. S. Mitchell & A. Lusardi (Eds.), *Financial literacy: Implications for retirement security and the financial marketplace* (pp. 268–287). Oxford University Press.

Conlisk, J. (1996). Why bounded rationality. *Journal of Economic Literature*, *34*(2), 669–700.

Connolly, C., Hyndman, N., & McConville, D. (2013). Conversion ratios, efficiency and obfuscation: A study of the impact of changed UK charity accounting requirements on external stakeholders. *Voluntas*, *24*, 785–804. https://doi.org/10.1007/s11266-013-9371-8

Dranove, D., & Jin, G. Z. (2010). Quality disclosure and certification: Theory and practice. *Journal of Economic Literature*, *48*(4), 935–963. https://doi.org/10.1257/jel.48.4.935

Easterbrook, F. H., & Fischel, D. R. (1984). Mandatory disclosure and the protection of investors. *Virginia Law Review*, *70*(4), 669–716.

Eckerd, A. (2015). Two approaches to nonprofit financial ratios and the implications for managerial incentives. *Nonprofit and Voluntary Sector Quarterly*, *44*(3), 437–456. https://doi.org/10.1177/0899764013518845

Fishman, M. J., & Hagerty, K. M. (2003). Mandatory versus voluntary disclosure in markets with informed and uninformed customers. *The Journal of Law, Economics, & Organization*, *19*(1), 45–63. https://doi.org/10.1093/jleo/19.1.45

Fung, A., Graham, M., & Weil, D. (2007). *Full disclosure: The perils and promise of transparency*. Cambridge University Press.

Galle, B. (2017). How do nonprofit firms respond to tax policy? *Public Finance Review*, *45*(3), 364–394. https://doi.org/10.1177/1091142116634850

Galle, B. (2019). Self-regulation of social enterprise. In B. Means & J. W. Yockey (Eds.), *The Cambridge handbook of social enterprise law* (pp. 26–42). https://doi.org/10.1017/9781316890714.003.

Galle, B., & Walker, D. I. (2016). Donor reaction to salient disclosures of nonprofit executive pay: A regression-discontinuity approach. *Nonprofit and Voluntary Sector Quarterly*, *45*(4), 787–805. https://doi.org/10.1177/0899764015609728

Gilson, R. J., & Kraakman, R. H. (1984). The mechanisms of market efficiency. *Virginia Law Review*, *70*(4), 549–644.

Gilson, R. J., & Kraakman, R. H. (2014). Market efficiency after the financial crisis: It's still a matter of information costs. *Virginia Law Review*, *100*(2), 313–375.

Glaeser, E. L., & Shleifer, A. (2001). Not-for-profit entrepreneurs. *Journal of Public Economics*, *81*(1), 99–115. https://doi.org/10.1016/S0047-2727(00)00130-4

Glückler, J., & Ries, M. (2012). Why being there is not enough: Organized proximity in place-based philanthropy. *Service Industries Journal*, *32*(4), 515–529. https://doi.org/10.1080/02642069.2011.596534

Golman, R., Hagmann, D., & Loewenstein, G. (2017). Information avoidance. *Journal of Economic Literature*, *55*(1), 96–135. https://doi.org/10.1257/jel.20151245

Gordon, T. P., Greenlee, J. S., & Nitterhouse, D. (1999). Tax-exempt organization financial data: Availability and limitations. *Accounting Horizons*, *13*(2), 113–128. https://doi.org/10.2308/acch.1999.13.2.113

Gordon, T. P., Knock, C. L., & Neely, D. G. (2009). The role of rating agencies in the market for charitable contributions: An empirical test. *Journal of Accounting and Public Policy*, *28*(6), 469–484. https://doi.org/10.1016/j.jaccpubpol.2009.08.001

Grizzle, C. (2015). Efficiency, stability, and the decision to give to nonprofit arts and cultural organizations in the United States. *International Journal of Nonprofit and Voluntary Sector Marketing*, *20*, 226–237. https://doi.org/10.1002/nvsm

Grossman, S. J. (1981). The informational role of warranties and private disclosure about product quality. *The Journal of Law & Economics*, *24*(3), 461–483.

Gugerty, M. K., & Prakash, A. (2010). *Voluntary regulation of NGOs and nonprofits: An accountability club framework* (M. K. Gugerty & A. Prakash, Eds.). Cambridge University Press.

Hager, M. A., Pollak, T., Wing, K., & Rooney, P. M. (2004). The quality of financial reporting by nonprofits: Findings and implications. In *Nonprofit overhead cost project: Facts and perspectives* (No. 4). https://doi.org/10.1007/BF01888944

Hail, L., Leuz, C., & Wysocki, P. (2010). Global accounting convergence and the potential adoption of IFRS by the U.S. (Part I): Conceptual underpinnings and economic analysis. *Accounting Horizons*, *24*(3), 355–394. https://doi.org/10.2308/acch.2010.24.3.355

Hansmann, H. B. (1980). The role of nonprofit enterprise. *The Yale Law Journal*, *89*(5), 835–901. https://doi.org/10.1021/ja804069n

Hansmann, H. B. (1981). Reforming nonprofit corporation law. *University of Pennsylvania Law Review*, *129*(3), 497–623.

Hargrove, T. (2012, May 20). Many nonprofits incorrectly claim no expense for fund-raising. *Scripps-Howard News Service*. http://www.knoxnews.com/news/2012/may/20/many-non-profits-incorrectly-claim-no-expense-for/

Hirshleifer, D. A., Lim, S. S., & Teoh, S. H. (2004). *Disclosure to an audience with limited attention*. https://doi.org/10.2139/ssrn.604142

Hofmann, M. A., & McSwain, D. (2013). Financial disclosure management in the nonprofit sector: A framework for past and future research. *Journal of Accounting Literature*, *32*(1), 61–87. https://doi.org/10.1016/j.acclit.2013.10.003

Hope Consulting. (2010). *Money for good: The US market for impact investments and charitable gifts from individual donors and investors*. http://www.cambercollective.com/moneyforgood

Hopkins, B. (1980). *Charity under siege: Government regulation of fundraising*. John Wiley.

Johnston, D. C. (1999, October 18). Tax returns of charities to be posted on the web. *The New York Times*. https://www.nytimes.com/1999/10/18/business/tax-returns-of-charities-to-be-posted-on-the-web.html

Keating, E. K., Parsons, L. M., & Roberts, A. A. (2008). Misreporting fundraising: How do nonprofit organizations account for telemarketing campaigns? *The Accounting Review*, *83*(2), 417–446.

Khumawala, S. B., Parsons, L. M., & Gordon, T. P. (2005). TRACKS: Assessing the quality of not-for-profit efficiency ratios: Do donors use joint cost allocation disclosures? *Journal of Accounting, Auditing & Finance*, *20*(3), 287–309. https://doi.org/10.1177/0148558X0502000305

Kim, K., & Park, J. (2019). *Risk disclosure in crowdfunding*. SSRN. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2942685

Krasteva, S., & Yildirim, H. (2013). (Un)Informed charitable giving. *Journal of Public Economics*, *106*, 14–26. https://doi.org/10.1016/j.jpubeco.2013.06.011

Krishnan, R., Yetman, M. H., & Yetman, R. J. (2006). Expense misreporting in nonprofit organizations. *The Accounting Review*, *81*(2), 399–420.

Leuz, C., & Wysocki, P. D. (2016). The economics of disclosure and financial reporting regulation: Evidence and suggestions for future research. *Journal of Accounting Research*, *54*(2), 525–622. https://doi.org/10.1111/1475-679X.12115

Lott, C. M., Boris, E. T., Goldman, K. K., Johns, B. J., Gaddy, M., & Farrell, M. (2016). *State regulation and enforcement in the charitable sector* [Issue September 2016]. https://www.urban.org/sites/default/files/publication/84161/2000925-State-Regulation-and-Enforcement-in-the-Charitable-Sector.pdf

Marudas, N. P., Hahn, T., & Jacobs, F. A. (2012). An improved model of donations to nonprofit organizations. *Proceedings of ASBBS*, *19*(1), 545–560.

Metzger, L., & Günther, I. (2019). Making an impact? The relevance of information on aid effectiveness for charitable giving. A laboratory experiment. *Journal of Development Economics*, *136*, 18–33. https://doi.org/10.1016/j.jdeveco.2018.08.015

Milgrom, P. R. (1981). Good news and bad news: Representation theorems and applications. *The Bell Journal of Economics*, *12*(2), 380–391. https://doi.org/10.2307/3003562

Null, C. (2011). Warm glow, information, and inefficient charitable giving. *Journal of Public Economics*, *95*(5–6), 455–465. https://doi.org/10.1016/j.jpubeco.2010.06.018

Okten, C., & Weisbrod, B. A. (2000). Determinants of donations in private nonprofit markets. *Journal of Public Economics*, *75*(2), 255–272. https://doi.org/10.1016/S0047-2727(99)00066-3

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.

Peng, S., Kim, M., & Deat, F. (2019). The effects of nonprofit reputation on charitable giving: A survey experiment. *Voluntas*, *30*(4), 811–827. https://doi.org/10.1007/s11266-019-00130-7

Portillo, J. E., & Stinn, J. (2018). Overhead aversion: Do some types of overhead matter more than others? *Journal of Behavioral and Experimental Economics*, *72*, 40–50. https://doi.org/10.1016/j.socec.2017.11.003

Posnett, J., & Sandler, T. (1989). Demand for charity donations in private non-profit markets: The case of the U.K. *Journal of Public Economics*, *40*, 187–200. https://doi.org/10.1016/j.ress.2008.03.018

Qu, H., & Levine Daniel, J., (2020). Is 'Overhead' a tainted word? A survey experiment exploring framing effects of nonprofit overhead on donor decision, *Nonprofit and Voluntary Sector Quarterly*, *50*(2), 397–419. https://doi.org/10.1177/0899764020959475

Reiser, D. B. (2013). Theorizing forms of social enterprise. *Emory Law Journal*, *62*(4), 681–739. http://hotbreadkitchen.org/about-us/our-mission

Reiser, D. B., & Dean, S. A. (2017). *Social enterprise law: Trust, public benefit and capital markets*. Oxford University Press.

Riley v. National Federation of the Blind, 487 US 781, 799 (1988).

Savary, J., Li, C. X. , & Newman, G. E. (2020). Exalted purchases or tainted donations? Self-signaling and the evaluation of charitable incentives, *Journal of Consumer Psychology*, *30*, 671–679.

Saxton, G. D., Neely, D. G., & Guo, C. (2014). Web disclosure and the market for charitable contributions. *Journal of Accounting and Public Policy*, *33*(2), 127–144. https://doi.org/10.1016/j.jaccpubpol.2013.12.003

Simon, H. A. (1990). Invariants of human behavior. *Annual Review of Psychology*, *41*, 1–19.

Steinberg, R. (1988). Economic perspectives on regulation of charitable solicitation. *Case Western Reserve Law Review*, *39*, 775–797.

Steinberg, R. (1997). On the regulation of fund raising. In D. F. Burlingame (Ed.), *Critical issues in fund raising* (pp. 234–244). Jossey-Bass.

Steinberg, R., & Morris, D. (2010). Ratio discrimination in charity fundraising: The inappropriate use of cost ratios has harmful side-effects. *British Journal of Sociology of Education*, *29*, 79–89. https://doi.org/10.1080/01425690701737481

Szper, R., & Prakash, A. (2011). Charity watchdogs and the limits of information-based regulation. *Voluntas*, *22*(1), 112–141. https://doi.org/10.1007/s11266-010-9156-2

Tinkelman, D. (2006). The decision-usefulness of nonprofit fundraising ratios: Some contrary evidence. *Journal of Accounting, Auditing & Finance*, *21*(4), 441–462. https://doi.org/10.1177/0148558X0602100406

Tinkelman, D., & Mankaney, K. (2007). When is administrative efficiency associated with charitable donations? *Nonprofit and Voluntary Sector Quarterly*, *36*(1), 41–64. https://doi.org/10.1177/0899764006293176

Tinkelman, D., & Neely, D. G. (2011). Some econometric issues in studying nonprofit revenue interactions using NCCS data. *Nonprofit and Voluntary Sector Quarterly*, *40*(4), 751–761. https://doi.org/10.1177/0899764010371010

Trussel, J. M., & Parsons, L. M. (2007). Financial reporting factors affecting donations to charitable organizations. *Advances in Accounting*, *23*(07), 263–285. https://doi.org/10.1016/S0882-6110(07)23010-X

Yablon, C. M. (2018). Mixed-motive investments and agency costs. In B. Means & J. Yockey (Eds.), *Cambridge handbook of social enterprise law* (pp. 384–400). Cambride University Press.

Yetman, M. H., & Yetman, R. J. (2013). How does the incentive effect of the charitable deduction vary across charities? *Accounting Review*, *88*(3), 1069–1094. https://doi.org/10.2308/accr-50370

Author Biographies

Putnam Barber has been a leader of several nonprofit organization in his hometown of Seattle, Washington. He has also taught courses focused on nonprofit organizations at both the University of Washington and Seattle University. Recently, he served as an advisor to the American Law Institute's project drafting *Restatement of the Law, Charitable Nonprofit Organizations* (forthcoming).

Megan M. Farwell, PhD, is a graduate of the University of Pennsylvania's School of Social Policy and Practice. Her research focuses on nonprofit funding mechanisms, with a specific emphasis on their implications for enhancing social welfare.

Brian Galle is a professor of law at the Georgetown University Law Center. He writes on nonprofit organizations, taxation, and law and economics.