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Understanding Donor-Advised Funds: The Behavioral Economics, Macroeconomics, And Public Policies Relating To An Emerging Trend In Philanthropy

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Abstract
Donor-advised funds (DAFs) are changing the mode of philanthropy in the United States. The lack of research on DAFs leaves nonprofit managers and policymakers with little empirical evidence or theoretical framework. The purpose of this dissertation is to provide scholarly research about why people use DAFs, how they function within the nonprofit economy, and what public policies may most effectively address public concerns. To this end, the dissertation is a combination of three peer-reviewed scholarly articles covering these topics. The first article tests behavioral economic concepts relating to charitable giving that help to explain why people use DAFs. The results showed that lower prices of giving lead to increases in charitable giving amounts and that increases in agency lead to higher participation rates in giving. The second article addresses how money flows through DAFs to other charities, and how this grantmaking is affected by macroeconomic factors. The study uses a panel data set of about one thousand DAF sponsors over a ten-year period, and merges this data with four macroeconomic factors. The findings suggest that money flows relatively quickly through DAFs to other nonprofits, and that giving out of DAFs is more resilient to recession economies than other forms of charitable giving. The third article reviews the public policy debates around donor-advised funds and makes public policy recommendations. The paper starts by reviewing the three major policy issues with DAFs: 1) the timing of donations and tax deductions, 2) transparency issues, and 3) the costs to the federal government. After analyzing current proposals within a historical context, the paper makes recommendations designed for the best interest of the nonprofit sector as a whole. The dissertation as a whole represents a seminal effort to conduct empirical research on donor-advised funds to better understand them and provide a theoretical framework for public policy.

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UNDERSTANDING DONOR-ADvised FUNDS:
THE BEHAVIORAL ECONOMICS, MACROECONOMICS, AND PUBLIC
POLICIES RELATING TO AN EMERGING TREND IN PHILANTHROPY

H. Daniel Heist

A DISSERTATION

in

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Presented to the Faculties of the University of Pennsylvania

in

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Dedication:

This work is dedicated to my wife Katie, and our five children Autumn, Harry, Lucy, Kate, and Eliza (who was born during the writing of the dissertation), for all of their love and support, and for helping me to remember what is really important.
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ABSTRACT

UNDERSTANDING DONOR-ADVISED FUNDS: THE BEHAVIORAL ECONOMICS, MACROECONOMICS, AND PUBLIC POLICIES RELATING TO AN EMERGING TREND IN PHILANTHROPY

H. Daniel Heist
Ram A. Cnaan, PhD

Donor-advised funds (DAFs) are changing the mode of philanthropy in the United States. The lack of research on DAFs leaves nonprofit managers and policymakers with little empirical evidence or theoretical framework. The purpose of this dissertation is to provide scholarly research about why people use DAFs, how they function within the nonprofit economy, and what public policies may most effectively address public concerns. To this end, the dissertation is a combination of three peer-reviewed scholarly articles covering these topics. The first article tests behavioral economic concepts relating to charitable giving that help to explain why people use DAFs. The results showed that lower prices of giving lead to increases in charitable giving amounts and that increases in agency lead to higher participation rates in giving. The second article addresses how money flows through DAFs to other charities, and how this grantmaking is affected by macroeconomic factors. The study uses a panel data set of about one thousand DAF sponsors over a ten-year period, and merges this data with four macroeconomic factors. The findings suggest that money flows relatively quickly through DAFs to other nonprofits, and that giving out of DAFs is more resilient to recession economies than other forms of charitable giving. The third article reviews the public policy debates around donor-advised funds and makes public policy recommendations. The paper starts by reviewing the three major policy issues with DAFs: 1) the timing of donations and tax
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INTRODUCTION

Donor-advised funds (DAFs) are changing American philanthropy as we know it. Nothing since the advent of private foundations has changed the way that money is voluntarily redistributed through sanctioned charitable organizations so profoundly than the proliferation of donor-advised funds. A half-a-million Americans now give their charitable donation through a “giving account” held by a philanthropic intermediary, known as a donor-advised fund sponsor, and the number of users is increasing rapidly. More than 10% of all individual giving is now going through DAFs instead of directly to charities, and DAF sponsors hold over $110 Billion in Assets designated for charitable purposes (National Philanthropic Trust, 2018) The largest DAFs now rival the largest private foundations and the largest nonprofit corporations. But we do not know a lot about DAFs, because the data on DAFs is difficult to collect, and the usage of DAFs is not well understood. As a result, much of the conversations and debates around DAFs are informed by anecdotal evidence or summary statistics. This dissertation work constitutes some of the first scientific treatments of this emerging and increasingly influential form of philanthropy.

Understanding the underlying decision making that drives donor-advised fund growth is an important element to an analytical approach to the subject. The field of behavioral economics offers both economic and psychological constructs that have been applied to the understanding of philanthropic behavior (List, 2011). Donor-advised funds help donors to maximize deductions for charitable giving, and allow them a lot of flexibility for how and when to give charitable donations. By maximizing tax deductions, donor-advised funds effectively reduce the price of giving for many donors.
increasing flexibility, donor-advised funds increase the agency of donors. Given the limited access to donor-advised fund users, this dissertation starts by analyzing the concepts of price and agency within a donative situation, by using online experiments. Evidence for the effects of price and agency with online workers helps us begin to understand some of the behavioral decisions being made by donor-advised fund users.

It is also important to understand how donor-advised funds function on the macro level. Every year DAFs report some very simple metrics to the IRS about the amount of money that they received (contributions), the amount of money they have (assets), and the amount of money they gave away (grants). By tracking these metrics over ten years, using a panel of one thousand DAF sponsors, this dissertation is able to provide insightful analyses on how money moves through DAFs over time. The article also looks at the various types and sizes of sponsors within the panel. We find that different types and sizes of DAF sponsors have different patterns of the flow of money over time. When compared to macroeconomic indicators, we also find some interesting patterns. We see that grant money coming out of DAFs does drop slightly in recessions, but not nearly as much as the decrease in assets or contributions. These findings suggest that giving out of DAFs is resilient to downward shocks in the economy and may have important implications for how policy makers choose to regulate DAFs in the future.

The question about regulating DAFs has been a hot topic in philanthropic periodicals and other popular news journals. The current treatment of donor-adviced funds under law allows them a wide degree of freedom, which is in part the reason for their meteoric growth. Several reform advocates have suggested that more stringent policies be imposed upon donor-advised funds sponsors to ensure the best interests of the
public sector. While well intentioned, many of the critiques and proposed regulations do not account for the underlying principles of behavioral economics, nor the empirical evidence of the economic analyses presented in this dissertation. Based on a deeper understanding of donor-advised funds, the last part of this dissertation reviews the various policy issues relating to DAFs. Considering these issues in a historical context of how government has traditionally regulated nonprofit and philanthropic activity, the article provides a balanced approach to future regulation. Several policies are proposed with the intention of maintaining the maximum freedom for donor-advised fund sponsors and users, while safeguarding public trust in nonprofits and philanthropy. These policies are designed to avoid unintended consequences and for the best interest of the nonprofit sector as a whole.
Article 1.

Price and Agency Effects on Charitable Giving Behavior


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Abstract

Charitable giving challenges our understanding of human behavior; it benefits others yet is guided by personal preferences. This study uses online experiments to test how donors respond to circumstantial conditions in donative behavior. We vary two factors, the amount of agency and the price of giving, to test how these factors affect charitable giving behavior. Experiment 1 demonstrated that a simple choice set enhancing perceived agency increased donations by increasing participation rates, but not the average donation amount. Experiment 2 used a text entry mechanism to demonstrate that a higher level of agency leads to even higher donations. Both experiments demonstrated that price incentives strongly affect the average donation amounts, and in some cases participation rates.

Key words
Charitable giving; donations; agency; price; prosocial behavior; altruism
INTRODUCTION

The act of charitable giving challenges our understanding of human behavior. Donors seek to benefit others, but also respond to selfish incentives. Those who give to others do not maximize financial benefit to self, but do respond to financial incentives and other forms of personal benefit. Andreoni’s (1990) conception of charitable giving as impure altruism treats donors as quasi-consumers, who exhibit personal preferences in their giving decisions, just as consumers exhibit personal preferences in their purchasing behavior. How personal preferences govern the extent to which a person pursues altruistic desires is still a matter of considerable research. Bekkers and Weipking (2011) identified eight mechanisms that drive giving decisions. Among those eight, donors consider the costs of giving, as well as psychological benefits and the alignment of values. We test the extent to which the psychological condition of agency and the economic condition of price relate to personal preferences for benefiting others. We ask how these two factors affect giving behavior while employed simultaneously.

Giving money to others is considered to be a prosocial behavior, defined as a deed intended to benefit the welfare of others (Frey & Meier, 2004). Consistent with warm glow theory, prosocial action occurs for different reasons, including both altruistic motives and selfishness (e.g. Batson, 1994; Oliner, 2002; Schroeder, Penner, Dovidio, & Piliavin, 1995; Van de Vliert, Huang, & Levine, 2004). That is, individuals behave in a prosocial manner because it serves their own needs, and hence, prosocial behavior should be more prevalent in individualistic cultures. Using the World Values Survey, Welzel (2010) found that individualism and self-expression are in fact associated with altruism. Kemmelmeier, Jambor, and Letner (2006) found individualism in the US to be positively related to charitable giving and volunteering, and that both were more likely to occur in more individualist states. There are many economic and non-economic aspects of charitable giving that may be tested in experimental settings (c.f. Zarghamee et al., 2017). Our article explores two ways in which enhancing personal benefit to donors increases donative behavior. We alter the levels of agency and the prices of giving in “real charity” online experiments (see Eckel, Herberich & Meer, 2014) to investigate the relationships that these conditions have with giving outcomes. Agency and price effects on giving have been tested separately in controlled laboratory settings (c.f. Andreoni & Miller, 2002;
Berman & Small, 2012; Eckel & Grossman, 2003; Eckel, Herberich & Meer, 2014; Goswami & Urminski, 2016; Harbaugh, Mayr & Burghart, 2007), as well as in natural field experiments (see Eckel & Grossman, 2008; Karlan & List, 2007; Kessler, Milkman, & Zhang, 2017; Meer, 2014), and have been shown to increase donations in fundraising appeals. Our study pairs the two factors of agency and price into one study and asks how these mechanisms affect charitable giving behavior and how they interact with each other. The findings from our study help to develop theory for how agency and price relate to altruism, and inform researchers and practitioners on how they may be used to maximize prosocial, donative behavior.

**AGENCY IN PROSOCIAL BEHAVIOR**

The concept of *agency*, or autonomy, is a psychological element of prosocial behavior related to individualism and is known to enhance the performance of the benefactor. Human agency is the capacity for people to decide between options. Weinstein and Ryan (2010) used self-determination theory to explain that those who perceive higher levels of agency, or autonomy, while performing prosocial activities experience higher well-being outcomes, and their efforts result in better outcomes for the recipients. They measured this effect among volunteers, with findings consistent with the theory. Other field experiments have investigated agency in a charitable giving context. Eckel, Herberich and Meer (2014) tested agency by giving annual donors to a large public university more options to direct the donation within the university. This manipulation led to an increase average donation amounts, but not an increase in the probability of donating, results that our findings will contradict. Kessler, Milkman and Zhang (2017) similarly tested agency among donors to a prestigious university through simple modifications to the mail response cards, allowing the donors more perceived agency. They found that increased agency led to significant increases in donations among the “rich and powerful”, indicating that agency effects may be moderated by personal attributes or circumstances. Our study will use similar treatments by giving donors more control over their donation, increasing their perception of agency, while modifying various price conditions.
Several studies have used laboratory settings to test agency and charitable giving. Harbaugh, Mayr, and Burghart (2007) tested the responses of individuals to different agency conditions (voluntarily donating to charity, or being taxed) with varying donation amounts, by tracking neural activity using fMRI scanning technology. They found that both the voluntary nature of a monetary transfer and the amount of a transfer affected the participants’ satisfaction with their decisions. Berman and Small (2012) used experiments to test the hedonic effects of donating money with greater and lesser perceived agency, to see if people got more pleasure from giving when they got to choose or not. One of Berman and Small’s experiments used the online platform of Amazon’s Mechanical Turk (MTurk), as a way to study charitable giving. We also used MTurk as our method for recruiting participants in the study. In the Berman and Small (2010) experiment, participants were assigned UNICEF as their charitable recipient. Our design will allow participants more options for charities, as a way to augment the perception of agency. We anticipated that augmenting donor agency will increase overall donor behavior.

THE PRICE OF GIVING

In many countries, charitable donations are deductible from taxable income. This deductibility effectively reduces the “price” of making a donation. The price of giving can be defined as \( p = d(1 - r) \), where \( p \) is the price of giving, \( d \) is the donation amount, and \( r \) is the tax rate. For example, if a person in a 20% tax bracket makes a $1,000 donation to a nonprofit, the donation only costs the donor $800, because he or she foregoes $200 in taxes – the amount he or she would have paid on the $1,000 of income that was given to charity. So the price of giving $1 to charity, with a 20% tax rate, is $0.80. Basic economic theory predicts that as the price of giving decreases the amount of giving will increase, and a body of literature on the price of giving provides empirical support for this phenomenon (Bekkers & Wiepking, 2011). Auten, Sieg, and Clotfelter (2002) modeled how changes in tax policies affect long-term giving behaviors, and found that removing tax incentives from those in a 30% tax bracket could reduce individual giving by 25 to 36 percent. Others have analyzed longitudinal, national charitable giving data and found varying price effects (Brooks, 2007; Peloz & Steel, 2005; Tiehen, 2001).
It is important to note that tax implications only affect those who itemize deductions on their tax returns, a small percentage of the population, but a large percentage (60%) of total donations (Deb, Wilhelm, Rooney, & Brown, 2003).

Andreoni and Miller (2002) defined a basic utility model for giving as: \( U_s = u_s(\pi_s, \pi_o) \), where the utility for one’s self \( U_s \) is determined by how an individual allocates an endowment between the payout to self \( \pi_s \) and the payout to the other \( \pi_o \). After gathering evidence for how price affects giving, through a series of dictator game experiments, Andreoni and Miller encouraged future research to test variations of price with systematic changes in other giving conditions. They labeled other test conditions in their model as \( \gamma \) and wrote, “Future work will have to explore the more general assumptions that for a given \( \gamma \) the preferences \( U_s = u_s(\pi_s, \pi_o; \gamma) \) are well-behaved with respect to \( (\pi_s, \pi_o) \) and that these preferences shift systematically as \( \gamma \) changes” (p. 738).

For our study, we tested how giving preferences, depending on price, shift systematically at various levels of agency. In other words, we introduced agency as another giving condition, or \( \gamma \), and tested how agency modifies the price effects on the donor preference models.

The price of giving has been operationalized in various ways through experiments. Eckel and Grossman (2003) used a laboratory setting to find that the mechanism for reducing the price of giving, either a rebate or a matching gift, makes a difference in how donors respond. They then replicated those findings in a natural field experiment with direct mail appeals (Eckel & Grossman, 2008). This suggests that the rebate from tax deductibility may not be the most effective public policy towards charitable giving. Karlan and List (2007) also tested the price of giving using various matching gift programs in a large natural field experiment with direct mail appeals. They found that price effects through matching programs had limits, that a 1:1 match was just as effectual as higher matches (i.e. 2:1 or 3:1). Meer (2014) tested the price of giving, using an online giving platform, identifying various levels of administrative costs. We decided to use a rebate because we felt that it would be the most salient form of price manipulation for our participants, and the easiest to administer.

Our paper develops the empirical evidence of price effects on individual giving behavior by combining elements of previous behavioral economics experiments and by
utilizing an increasingly popular online sampling technique. We use Amazon’s Mechanical Turk as our online platform to collect our sample. This method is both quick and affordable compared to natural field experiments, and even running labs on campus. Thus it is ideal for initial, exploratory testing of theoretical assumptions. MTurk differs from Meer’s (2014) crowdfunding platform in that MTurk workers are not using the site specifically to make donations, and so our sample is not primed for making charitable contributions and more closely represents recipients of an uninvited online fundraising solicitation. Most significantly, compared to other experiments on the price of giving, we test the relationship of price and giving simultaneously with the variation of agency.

*Interaction of Agency and Price*

While it is not clear whether and how agency and price will interact, because these two variables have not previously been tested together, we make assumptions based on research of agency with other factors on giving. Kessler, Milkman, and Zhang (2017) found that the effect of agency with those deemed “rich” and “powerful” had significantly positive interaction with those particular variables. That is to say that, agency had a more pronounced effect on those who were categorized rich and powerful. While we do not collect wealth or title data on our sample, it is known that MTurk workers have lower average income than the general population (Paolacci, Chandler, & Ipeirotis, 2010). If agency enhances donation amounts among the wealthy, it may be that agency has a greater effect on those with lower price conditions. This rationale is based on the assumption that a lower price of giving effectively increases the “buying power” of a participant’s endowment in an experimental setting.

*MEASUREMENTS OF GIVING*

Experiments on fundraising and charitable giving commonly employ three outcome variables designed to measure treatment effects on both the extensive and intensive margins of giving. These measures consist of the unconditional average donation, participation rate and conditional average donation (see Karlan and List, 2007). The unconditional average donation is the total amount of donations divided by the total number of those being solicited – in this study, all participants. The participation rate is the percentage of those solicited who make any donation, regardless of the amount. The conditional average donation is calculated as the mean donation among only those who
give. These measurements suggest that charitable giving behavior includes two basic
decisions: whether or not to give, and how much to give. We seek to understand how
agency and price affect both of these decision making processes.

METHODS

In order to test our assumptions about agency and price, two randomized
controlled trials were conducted online. Each experiment recruited participants using
Amazon’s Mechanical Turk (MTurk). This method is widely used in marketing,
psychology, and other fields, and it provides researchers with a platform to quickly and
inexpensively test theoretical assumptions. Samples from MTurk are more representative
of the larger society than groups of students on college campuses (Paolacci, Chandler &
Ipeirotis, 2010). MTurk is affordable. It cost us less than $300 to collect a sample of 400
participants. We paid each participant $0.50 to take a 2-minute survey (equivalent to a
$15/hour payment). When we ran our experiments, we collected 400 responses for each
experiment in less than an hour. Our experiments were conducted several weeks apart
from each other, and collected samples from different M-Turk workers. We also
restricted participation to U.S. based workers only, because the nonprofits we used are
mostly located in the U.S. and would be more familiar to a U.S. sample. We did not
choose other restrictions, because we wanted our findings to be more generalizable and
useful in fundraising contexts in which large groups of people are being solicited.

In the experiments, respondents were told that they had the chance to win a $10
bonus. One participant in each experiment was awarded the bonus, but the participants
were not aware of that probability, so they had no way to calculate the expected value of
the bonus. We then asked each participant to consider a donation to a charitable
organization, should they win the bonus. This strategy was used by Goswami and
Urminsky (2016) to test other aspects of charitable giving. The potential bonus is similar
to endowing a participant with a lottery ticket, which is known to maintain value for the
participant (Kahneman, Knetsch, & Thaler, 1991).

After being informed of the potential bonus, each participant was randomly
assigned to one of eight different giving scenarios in which they could use the potential
$10 bonus to donate to a charitable organization in $1 increments. The eight scenarios
came from a 2 x 4 design, in which there were two agency conditions and four prices of giving (see Appendix A). Participants only made one giving decision during the experiment, based on their particular scenario. Thus we compare giving choices across subjects, not within subjects, for varying price and agency conditions. We chose an across-subject design to eliminate effects of price referencing from other conditions. We also did not want to confound agency effects, by allowing participants to compare various agency treatments.

Once the participants made a giving decision, they were asked a short series of questions consisting of manipulation checks and questions about potential covariates. After the surveys were completed, one of the participants in each experiment was selected, using a random number generator and then picking that number respondent. The participant was transferred the bonus money through MTurk payment system. If there was a donation chosen by that participant, the donation was made online by the authors and the donation receipt was emailed to the MTurk participant to prove the fulfillment of the donation.

**Price Variations**

The experiments used the same price variations, across both the control and treatment groups. Participants were randomly assigned one of four prices of giving: $1, $0.80, $0.50, and $0.20. The four prices of giving were operationalized through an immediate rebate. For the $1 condition, there was no rebate, and participants were informed that every dollar they donated to the charity would be deducted from their potential bonus. For the $0.80 condition, participants were informed that for every dollar they donated out of the bonus, they would get $0.20 back—so the donation of $1 would only cost them $0.80. Likewise, the rebate for the $0.50 price condition was $0.50; and the rebate for the $0.20 price of giving was $0.80. Participants were presented a table that indicated all of the possible choices for giving and how much their potential bonus would be (see Appendix A). This table was the result of feedback from pilot groups. It minimized any calculation the participant had to do, and was designed to clarify the rebate mechanism.

**Manipulation check and covariates**
Following the giving decision in each experiment, respondents were asked several questions as a manipulation check to see if the treatment altered the participant’s perceived agency in giving. The check consisted of three items that asked respondents to rate on a 5-point Likert scale how much they agreed with the statements (1 = agree, 5 = disagree): 1. “I was able to choose where I would donate”; 2. “I was able to choose how much I would donate”; and 3. “I had complete control over my donation decision.” Regarding the second question, there should not have been a significant variation, as participants in both control and treatment groups were given the same price variations. This was included to detect response bias, if any.

Amazon’s Mechanical Turk does not provide any demographic or other information on individual workers. This information has to be collected via survey and adds to the expense of the survey. We surveyed each participant on three covariates known to correlate closely with giving behavior. We asked about charitable giving amounts to other nonprofits in the past 12 months, volunteer activity in the past 12 months, and religious attendance. Paolacci, Chandler and Ipeirotis (2010) noted that MTurk workers have a lower average income than the U.S. average. We did not ask about income because of space constraints, concerns about the integrity of response data, and because the other covariates are also known to be strong correlates with giving, when controlling for income variation. We then used the data on covariates to test the randomization process, to be sure that our findings are not confounded with random variation between groups on factors known to influence giving. We used t-tests between the agency treatment and control conditions and one-way ANOVAs to test differences between price variations. In Experiment 1, we found no statistically significant differences for any of our covariates between any of the cells. In Experiment 2, we found that the control group had significantly higher religious attendance than the treatment group, as will be discussed later. Because religious attendance is significantly different in this group, we will include religion as a covariate in the relevant analyses. We acknowledge that this difference suggests that we collected too few covariates, and that we are limited in our ability to test the randomization of our samples.
Experiment 1 – Drop-down list

For the first experiment, the control condition (no choice), participants were randomly assigned one of ten possible charities, taken from a list of the top ten charities in the United States for donations received (Forbes, 2016): United Way, Red Cross, Feeding America, Salvation Army, YMCA, St. Jude's Children's Research Hospital, Food for the Poor, Boys and Girls Club, Catholic Relief Services, Goodwill Industries. These charities were selected because of their likeliness to be recognized, and to represent a variety of causes. The charities were pre-tested in a pilot survey, and due to feedback the Red Cross was added to the list and Task Force for Global Health was dropped. The control group had no ability to choose which charity they were assigned and they did not see the list of the other charities (See Appendix B).

The agency treatment in the first experiment allowed participants to pick a charity from a list of ten charities, using a drop-down list (see Appendix C). The same list of ten charities was used as the list in the control condition. In the agency treatment, the participants could see the options and make their own decision from the choice set, which charity they would prefer to give to. This treatment is intended to increase the agency of donors in regards to where they direct a donation. The decision of where to give enhances with the mechanism of “aligning values” identified by Bekkers and Weipking (2011), and would theoretically increase their willingness to donate.

Results

We first tested both the control and treatment groups for any significant difference in donations between the choices of ten charities from the drop-down list, using a one-way analysis of variance (ANOVA). We found no significant variance in donation amounts within either the assigned charities in the control group: $F(9,192) = 0.96, p = 0.48$, or the chosen charities in the treatment group: $F(9,192) = 1.53, p = 0.14$. We then tested responses to the manipulation checks to determine whether the treatment had any effect on the perceived agency of participants. On a 5 point Likert scale where 1 is “strongly disagree” and 5 is “strongly agree”, those with the drop-down list more strongly agreed that they had control over “where to donate”, $(M = 4.45, SD = 1.01)$ than those who were assigned a charity $(M = 2.07, SD = 1.63)$, $t(403) = 17.66, p < .001$ (see Table 1). The treatment group also had a small but significant increase in the perceived agency
of the broader “donation decision” with virtually no difference in the perceived agency for “how much to donate”, as would be expected (see Appendix D).

We then investigate our primary research question: how do agency and price affect giving participation rates and average donation amounts? Table 1 presents the differences in means between our agency treatment and control groups. We find some initial evidence that augmented agency increased participation rates, but not necessarily donation amounts. When comparing the various price variations to the control condition of $1 price of giving using pairwise t-tests, we find strong evidence that lowering prices does increase giving amounts, but not necessarily participation rates (see Table 2). The only price for which participation rates significantly increase is in the most extreme, $0.20 price condition.

Table 1. Experiment 1 participation rates and average donations by agency condition, with t-tests for differences in means between the agency treatment and control condition.

<table>
<thead>
<tr>
<th>Agency Condition:</th>
<th>Perceived Agency (where to donate)</th>
<th>Unconditional Average Donation</th>
<th>Participation Rate</th>
<th>Conditional Average Donation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Control Condition (no choice)</strong></td>
<td>2.07 (1.63)</td>
<td>$3.07 (2.56)</td>
<td>57.4% (.51)</td>
<td>$5.34 (3.28)</td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Agency Treatment (drop-down list)</strong></td>
<td>4.45 (1.01)</td>
<td>$3.78 (3.27)</td>
<td>69.5% (.50)</td>
<td>$5.44 (3.27)</td>
</tr>
<tr>
<td><strong>n=203</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Difference:</strong></td>
<td>**2.38 *****</td>
<td>**$0.71 * **</td>
<td>**12.1% **</td>
<td><strong>$0.10 (n/s)</strong></td>
</tr>
</tbody>
</table>

Note: Standard deviations in parentheses. P-values from t-tests of differences in means indicated by: * for p<.05, ** for p<.01, *** for p<.001
Table 2. Experiment 1 participation rates and average donations by price variations, with pair-wise t-tests for differences in means between each variation and the $1 price of giving.

<table>
<thead>
<tr>
<th>Price of giving:</th>
<th>Unconditional Average Donation</th>
<th>Participation Rate</th>
<th>Conditional Average Donation</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1 (control)</td>
<td><strong>n=102</strong></td>
<td><strong>$2.17</strong></td>
<td><strong>58.8%</strong></td>
</tr>
<tr>
<td></td>
<td><strong>n=101</strong></td>
<td><strong>$2.63</strong></td>
<td><strong>56.4%</strong></td>
</tr>
<tr>
<td><strong>Difference from control:</strong></td>
<td><strong>$0.46</strong></td>
<td><strong>-02.4%</strong></td>
<td><strong>$0.99</strong> *</td>
</tr>
<tr>
<td>$0.50</td>
<td><strong>n=103</strong></td>
<td><strong>$3.40</strong></td>
<td><strong>63.1%</strong></td>
</tr>
<tr>
<td></td>
<td><strong>n=103</strong></td>
<td><strong>$5.56</strong></td>
<td><strong>75.8%</strong></td>
</tr>
<tr>
<td><strong>Difference from control:</strong></td>
<td><strong>$1.23</strong> <strong>04.3%</strong></td>
<td><strong>$1.70</strong> ***</td>
<td></td>
</tr>
<tr>
<td>$0.20</td>
<td><strong>n=99</strong></td>
<td><strong>$5.56</strong></td>
<td><strong>75.8%</strong></td>
</tr>
<tr>
<td></td>
<td><strong>n=99</strong></td>
<td><strong>$5.56</strong></td>
<td><strong>75.8%</strong></td>
</tr>
<tr>
<td><strong>Difference from control:</strong></td>
<td><strong>$3.39</strong> <strong>16.9%</strong></td>
<td><strong>$3.65</strong> ***</td>
<td></td>
</tr>
</tbody>
</table>

Note: Standard deviations in parentheses. P-values from t-tests of differences in means indicated by: * for p<.05, ** for p<.01, *** for p<.001

We further tested our main effects as well as an interaction between agency and price using regression analyses. Table 3 presents the results from the regression models for each giving outcome - unconditional giving, participation, and conditional giving. For the regressions of unconditional and conditional donations, we used OLS regression, and for the models on participation we used logistic regressions reporting odds ratios. We used our treatment and our price variable as dependent variables in the first model for each outcome, and then we add an interaction term to test for the interaction between price and agency. From Table 3, we interpret that providing participants a drop-down list...
increases the odds of participation by 69.3%, which results in a $0.69 increase in
donation per participant, but does not significantly increase the average donation amount
amount those who donate. Decreasing the price, however, does significantly increase
average donations and the participation, which increases the unconditional donation
amounts. We did not find a significant interaction effect between agency and price in any
of the models for the various giving outcomes. However, it could be that our sample size
is not large enough to detect this interaction.

### Table 3. Regressions of Giving Outcomes, Testing Interaction of Agency Treatment

and Price

<table>
<thead>
<tr>
<th></th>
<th>Unconditional Donations (Including $0)</th>
<th>Participation</th>
<th>Conditional Donations (Excluding $0)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b/se</td>
<td>b/se</td>
<td>odds ratio /se</td>
</tr>
<tr>
<td>Treatment (drop-down List)</td>
<td>0.685*</td>
<td>-0.072</td>
<td>1.693*</td>
</tr>
<tr>
<td></td>
<td>(-0.347)</td>
<td>(-0.849)</td>
<td>(0.356)</td>
</tr>
<tr>
<td></td>
<td>1.085**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Price (high to low)</td>
<td>*</td>
<td>0.627</td>
<td>1.285**</td>
</tr>
<tr>
<td></td>
<td>(-0.156)</td>
<td>(-0.494)</td>
<td>(0.122)</td>
</tr>
<tr>
<td>Treatment x Price</td>
<td></td>
<td>0.304</td>
<td>1.146</td>
</tr>
<tr>
<td></td>
<td>(-0.311)</td>
<td>(-0.494)</td>
<td>(0.122)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.379</td>
<td>0.76</td>
<td>0.729</td>
</tr>
<tr>
<td></td>
<td>(-0.457)</td>
<td>(-0.602)</td>
<td>(0.198)</td>
</tr>
<tr>
<td>Observations</td>
<td>405</td>
<td>405</td>
<td>405</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.12</td>
<td>0.12</td>
<td>0.12</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.11</td>
<td>0.11</td>
<td>0.11</td>
</tr>
</tbody>
</table>

Note: OLS regressions used for donation amounts, and logistic regression used for participation; standard errors in parentheses. The price variable is ordered from high to low.

* p<0.05, ** p<0.01, *** p<0.001

In Experiment 1, we begin to find some evidence that agency effects participation,
but not the conditional giving amount. In other words, those who were given more
agency were more likely to make some form of donation, but they did not make higher
donations than the control donors. A lower price of giving does lead to higher giving
amounts among those who give, but from Table 2 we see that only the lowest price of
giving induces a significantly higher percentage of participants to make some form of
donation. These initial findings contradict those of Eckel, Herberich and Meer’s (2014),
who found that giving people more choice in directing a donation did not lead to
increased likelihood of participation, but did lead to larger donations. In order to further
investigate these relationships, we test another treatment intended to evoke an even
greater sense of agency. Our initial evidence suggests there is no interaction between
agency and price but is not conclusive.

**Experiment 2 – Text entry box**

In the second experiment, the control condition was the same as Experiment 1.
The control participants had no choice of what charity to give to, but they were randomly
assigned a charity from the same list of ten used in the previous experiment.

*Agency treatment: Text entry box*

The agency treatment in this experiment allowed participants to write in their own
charity. They were given a text entry box, in which they could type the name of any
charity they like. This treatment was designed to augment the ability of the donors to
choose “where” they give, a manipulation meant to allow greater alignment of values,
which would be expected to result in higher donations. To reinforce their choice of
charity, once they typed the name of their charity into the text entry box and clicked the
button to move to the next screen, the name of their charity appeared in the following
question, that asked how much they would be willing to give to that charity (see
Appendix E).

*Results*

Experiment 2 yielded even stronger results in the manipulation check, with the
difference in the perceived agency for where to donate even more pronounced. Those
with a text entry box agreed more strongly that they had control over where to donate, on
a 5 point Likert scale where 1 is “strongly disagree” and 5 is “strongly agree”, ($M = 4.70,
SD = .86$) compared with the control group ($M = 1.86, SD = 1.43$), $t(405) = 24.28, p <
.001$ (see Table 4). As before, the difference in means for the second item of the
manipulation check, the perceived control over donation amount, was small and not statistically significant.

From Experiment 2, we report similar findings as those from the Experiment 1. Table 4 presents the results series of t-tests comparing our agency treatment to the control condition. Those with the agency treatment, using a text entry box to write in the name of a charity, gave significantly higher unconditional average donations ($M = 5.45, SD = 3.88$) than those in the control condition ($M = 3.97, SD = 3.92$), a difference in means of $1.48, t(406) = 3.84, p = .0001$ (see Table 4). This agency treatment, allowing people to write in their own charity, had an overall effect size of Cohen’s $d = 0.38$. When we look at the components of this effect, by analyzing the participation rates and conditional average donations, we found that an increase in agency led to higher participation rates, but not to significantly higher donation amounts among those who gave. Again, agency led more people to give, but not to give more.

Table 4. Experiment 2 Giving Outcomes by Agency Condition

<table>
<thead>
<tr>
<th>Agency Condition:</th>
<th>Perceived Agency (where to donate)</th>
<th>Unconditional Average Donation</th>
<th>Participation Rate</th>
<th>Conditional Average Donation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Control Condition (no choice)</strong></td>
<td>1.86 (1.43)</td>
<td>$3.97 (3.92)$</td>
<td>67.6% (.47)</td>
<td>$5.88 (3.28)$</td>
</tr>
<tr>
<td>n=202</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Agency Treatment (open text box)</strong></td>
<td>4.70 (0.86)</td>
<td>$5.45 (3.89)$</td>
<td>84.4% (.36)</td>
<td>$6.45 (3.34)$</td>
</tr>
<tr>
<td>n=205</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difference:</td>
<td><strong>2.84</strong>*</td>
<td><strong>$1.48</strong>*</td>
<td><strong>16.7%</strong>*</td>
<td><strong>$0.58</strong>*</td>
</tr>
</tbody>
</table>

Note: Standard deviations in parentheses. * $p<0.05$, ** $p<0.01$, *** $p<0.001$

As mentioned earlier, we detected significantly higher rates of religious attendance in the control group, while testing the randomization process with covariates. This discrepancy only strengthens our finding an increase in participation among the agency treatment group, as the higher religious attendance would indicate a greater
willingness to donate among the control group. We will discuss this further in the next section that compares both experiments.

Looking at the price effects in Experiment 2, we again found that decreases in the price of giving yielded higher donation amounts (see Table 5). This time, however, the price reductions also correlated with significant increases in participation at both the $0.50 and $0.20 prices of giving. This is a more pronounced effect on participation than that of Experiment 1, where we found increased participation only in the $0.20 price group. This suggests that with a higher level of agency, price may also induce higher participation. We again tested an interaction term using logistic and linear regressions, but found no evidence of a significant interaction between agency and price (see Table 6). Agency and price both affect charitable giving in different ways, and don’t seem to interact with each other.

Table 5. Experiment 2 Giving Outcomes by Price Variations

<table>
<thead>
<tr>
<th>Price of giving:</th>
<th>Unconditional Average Donation</th>
<th>Participation Rate</th>
<th>Conditional Average Donation</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1$ (control)</td>
<td>$2.66 (3.06)$</td>
<td>61.8% (.49)</td>
<td>$4.30 (2.83)$</td>
</tr>
<tr>
<td>n=102</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$0.80</td>
<td>$4.05 (3.77)$</td>
<td>71.6% (.45)</td>
<td>$5.66 (3.28)$</td>
</tr>
<tr>
<td>n=102</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difference from control:</td>
<td>$1.39 **</td>
<td>9.8%</td>
<td>$1.36 **</td>
</tr>
<tr>
<td>$0.50</td>
<td>$5.05 (3.80)$</td>
<td>83.3% (.37)</td>
<td>$6.06 (3.33)</td>
</tr>
<tr>
<td>n=103</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difference from control:</td>
<td>$2.39 ***</td>
<td>21.6% ***</td>
<td>$1.76 ***</td>
</tr>
<tr>
<td>$0.20</td>
<td>$7.09 (3.87)$</td>
<td>87.3% (.34)</td>
<td>$8.12 (2.95)</td>
</tr>
<tr>
<td>n=99</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difference from control:</td>
<td>$4.43 ***</td>
<td>25.5% ***</td>
<td>$3.82 ***</td>
</tr>
</tbody>
</table>

Note: Standard deviations in parentheses. * p<0.05, ** p<0.01, *** p<0.001
Table 6. Regressions of Giving Outcomes, Testing Interaction of Price and Agency

<table>
<thead>
<tr>
<th></th>
<th>Unconditional Donations (Including $0)</th>
<th>Participation</th>
<th>Conditional Donations (Excluding $0)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b/se</td>
<td>odds ratio/se</td>
<td>b/se</td>
</tr>
<tr>
<td><strong>Treatment</strong></td>
<td>1.549***</td>
<td>2.884***</td>
<td>0.69</td>
</tr>
<tr>
<td>(open text Box)</td>
<td>(-0.353)</td>
<td>(0.732)</td>
<td>(-0.359)</td>
</tr>
<tr>
<td><strong>Price</strong></td>
<td>1.437***</td>
<td>1.692***</td>
<td>1.795</td>
</tr>
<tr>
<td>(high to low)</td>
<td>(-0.158)</td>
<td>(0.194)</td>
<td>(-0.161)</td>
</tr>
<tr>
<td>Religious attendance</td>
<td>0.062</td>
<td>1.150</td>
<td>-0.06</td>
</tr>
<tr>
<td></td>
<td>(-0.15)</td>
<td>(0.126)</td>
<td>(-0.149)</td>
</tr>
<tr>
<td><strong>Treatment x Price</strong></td>
<td>0.107</td>
<td>1.252</td>
<td>-0.194</td>
</tr>
<tr>
<td></td>
<td>(-0.315)</td>
<td>(0.305)</td>
<td>(-0.326)</td>
</tr>
<tr>
<td><strong>Constant</strong></td>
<td>0.209</td>
<td>0.449</td>
<td>2.683***</td>
</tr>
<tr>
<td></td>
<td>(-0.539)</td>
<td>(0.161)</td>
<td>(-0.588)</td>
</tr>
<tr>
<td>Observations</td>
<td>407</td>
<td>407</td>
<td>309</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.2</td>
<td>0.17</td>
<td>0.17</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.2</td>
<td>0.19</td>
<td>0.16</td>
</tr>
</tbody>
</table>

Note: OLS regressions used for unconditional and conditional donations and logistic regression used for participation. Religious attendance entered as a control variable. Standard errors in parentheses. The price variable is ordered from high to low.
* p<0.05, ** p<0.01, *** p<0.001

Comparison of Experiments 1 and 2

A comparison of the two experiments strengthens the evidence for more agency increasing donative behavior. Figure 1 presents a bar chart with the levels of perceived agency and the unconditional average donations, between the treatment and control groups in both experiments. Comparing the treatment groups from both experiments, we found that the open text box resulted in significantly higher perceived agency than the drop-down list ($M_{text~box} = 4.70, SD = 0.86$ vs. $M_{drop-down} = 4.45, SD = 1.01$), $t (408) = -2.68, p < .01$). These changes in agency resulted in higher participation rates in both experiments, but not in average donation amounts among those who did give. This rise in the number of participants willing to donate something led to significantly higher giving overall. The unconditional average donation in Experiment 2 among the treatment group ($M = $5.45, $SD = 3.88$) was significantly higher than the unconditional average donations.
of the treatment group in Experiment 1 ($M =$3.78, $SD = 3.70), $t (408) = -4.46, p < .001. This supports the notion that an increase in the agency of donors leads to higher donations overall.

**Figure 1. Perceived Agency and Average Donations in Agency Treatment and Control Groups in both Experiments.**

Note: The control group in Experiment 2 had significantly higher rates of religious attendance, which helps to explain the higher average donation than the control group in Experiment 1.

Other factors may account for the differences in donations between the two experiments. In Figure 1, we see that the control group in Experiment 2 has higher donations than the treatment group in Experiment 1. This is the group that had the significantly higher rates of religious attendance, which may explain some of the difference. There may be other covariates that account for the difference that we did not capture. Moreover, the experiments were conducted several weeks apart, and at different times of the day, which may account for undetected fixed effects. Comparing the two experiments provides initial evidence that increasing perceived agency among potential
donors leads to higher participation, and thus higher total donations. The comparison also suggests that certain mechanisms are more effective in increasing perceived agency.

**Discussion and Conclusions**

Much has been written on the price of giving. Testing the price of giving has been conducted in laboratory experiments, but only a few have used giving to actual charitable organizations (c.f. Berman and Small, 2012; Eckel & Grossman, 2003). Our study uses Amazon’s Mechanical Turk to test charitable giving scenarios to actual charitable organizations, in a controlled experiment. Although much has been written about MTurk workers and the types of sample populations one can get by using MTurk (Paolacci, Chandler and Ipeirotis, 2010), little is known about their donative behavior. We know that MTurk participants are motivated by making money (Sheehan and Pittman, 2016), but it is unclear how strong the profit motive is, and if it would override any charitable inclinations. Our experiments show that U.S.-based MTurk participants are willing to donate to charity at the sacrifice of their own bonus money. This study opens the doors for further research on charitable giving using MTurk as a platform.

The importance of agency in charitable giving is not well understood. The agency treatment used in the experiments were very simple mechanisms used to test the theory that increase agency leads to increased donations. We found significant increases in participation rates and overall donations, although not the average gift amounts. This could have immediate implications for professional fundraisers. Finding ways to increase the agency of donors, such as allowing donors more say in where a donation is directed could lead to significantly higher contributions to nonprofits. For example, United Way gave donors more choice of where to direct their donation to increase their participation in corporate campaigns. The open text box mechanism is easily employed in online settings, and could be used in a variety of ways to increase perceived agency. More research translating experimental findings to application in the field is needed. Agency is a complex psychological construct. Some aspects of agency, such as freedom to pick one’s recipient, yielded higher donations than other forms, such as picking from a list. Agency also has its limits, where too many choices can lead to diminished consumer responses (Simonson & Tversky, 1992). More research on the types and bounds of
agency involved in charitable giving will help identify the most effective types of agency mechanisms.

Kessler, Milkman, and Zhang (2017) found that a greater sense of agency had a more significant effect on the the wealthy and powerful, than on other donors. The use of MTurk limited our sample to participants with relatively lower income. Agency may have varying effects across other dimensions of social and economic demographics. We did not find a significant interaction between agency and price. However, our samples may have been too small to detect a true interaction. Our findings also contradicted in some ways the findings of Eckel, Herberich and Meer (2014). We found that agency increased participation but not giving amounts, while they found the inverse relationship. More research will have to be done to better understand the contexts in which agency effects the various aspects of the donation decision making process.

Our findings on price effects are not surprising, but our study makes two significant contributions to the literature. First, we found that price primarily affected the conditional donation amounts, but only the lowest prices affected the participations rates. This distinction may have implications in research designed to estimate tax effects on charitable giving. Furthermore, such price effects will have to be tested with other mechanisms for manipulating price, such as matching gift programs. Second, price did not interact with agency. While this may easily be overlooked as a failure to reject the null hypothesis, there are some potential theoretical implications. Is it possible that donor process varying motivations separately and distinctly from each other. The M-Turk donors in this study seemed to process the price variations completely separately from the agency treatments. Fundraising appeals often combine a variety of elements designed to attract donors, with little consideration to how the relate or don’t relate to each other. Suppose that an agency treatment were employed first to increase participation, and then a price variation were employed to increase average donation amounts. Then these two separate mechanisms may be used more effectively. Knowing the distinct effects of various factors in giving is important to future research in charitable giving. Being able to segment out the psychological processes of charitable giving will allow researchers to more carefully study this challenging human behavior.
References


### APPENDIX A. CHOICE SETS IN THE VARIOUS PRICE OF GIVING CONDITIONS

#### Choice set for $1 price of giving

<table>
<thead>
<tr>
<th>Your donation to [Charity]:</th>
<th>$0</th>
<th>$1</th>
<th>$2</th>
<th>$3</th>
<th>$4</th>
<th>$5</th>
<th>$6</th>
<th>$7</th>
<th>$8</th>
<th>$9</th>
<th>$10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your potential bonus:</td>
<td>$10</td>
<td>$9</td>
<td>$8</td>
<td>$7</td>
<td>$6</td>
<td>$5</td>
<td>$4</td>
<td>$3</td>
<td>$2</td>
<td>$1</td>
<td>$0</td>
</tr>
</tbody>
</table>

#### Choice set for $0.80 price of giving

<table>
<thead>
<tr>
<th>Your donation to [Charity]:</th>
<th>$0</th>
<th>$1</th>
<th>$2</th>
<th>$3</th>
<th>$4</th>
<th>$5</th>
<th>$6</th>
<th>$7</th>
<th>$8</th>
<th>$9</th>
<th>$10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your potential bonus:</td>
<td>$10</td>
<td>$9.20</td>
<td>$8.40</td>
<td>$7.60</td>
<td>$6.80</td>
<td>$6</td>
<td>$5.20</td>
<td>$4.40</td>
<td>$3.60</td>
<td>$2.80</td>
<td>$2</td>
</tr>
</tbody>
</table>

#### Choice set for $0.50 price of giving

<table>
<thead>
<tr>
<th>Your donation to [Charity]:</th>
<th>$0</th>
<th>$1</th>
<th>$2</th>
<th>$3</th>
<th>$4</th>
<th>$5</th>
<th>$6</th>
<th>$7</th>
<th>$8</th>
<th>$9</th>
<th>$10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your potential bonus:</td>
<td>$10</td>
<td>$9.50</td>
<td>$9</td>
<td>$8.50</td>
<td>$8</td>
<td>$7.50</td>
<td>$7</td>
<td>$6.50</td>
<td>$6</td>
<td>$5.50</td>
<td>$5</td>
</tr>
</tbody>
</table>

#### Choice set for $0.20 price of giving

<table>
<thead>
<tr>
<th>Your donation to [Charity]:</th>
<th>$0</th>
<th>$1</th>
<th>$2</th>
<th>$3</th>
<th>$4</th>
<th>$5</th>
<th>$6</th>
<th>$7</th>
<th>$8</th>
<th>$9</th>
<th>$10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your potential bonus:</td>
<td>$10</td>
<td>$9.80</td>
<td>$9.60</td>
<td>$9.40</td>
<td>$9.20</td>
<td>$9</td>
<td>$8.80</td>
<td>$8.60</td>
<td>$8.40</td>
<td>$8.20</td>
<td>$8</td>
</tr>
</tbody>
</table>
APPENDIX B. CONTROL CONDITION IN AGENCY AND PRICE EXPERIMENTS.

If you win the $10 bonus, you will have the chance to donate to YMCA.

For every dollar you donate, you will get $0.50 back in the bonus.

So the options are:

<table>
<thead>
<tr>
<th>Your donation to YMCA:</th>
<th>$0</th>
<th>$1</th>
<th>$2</th>
<th>$3</th>
<th>$4</th>
<th>$5</th>
<th>$6</th>
<th>$7</th>
<th>$8</th>
<th>$9</th>
<th>$10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your potential bonus:</td>
<td>$10</td>
<td>$9.50</td>
<td>$9</td>
<td>$8.5</td>
<td>$8</td>
<td>$7.50</td>
<td>$7</td>
<td>$6.50</td>
<td>$6</td>
<td>$5.50</td>
<td>$5</td>
</tr>
</tbody>
</table>

How much of the bonus would you donate to YMCA?

Donation amount:

- None
- $1
- $2
- $3
- $4
- $5
- $6
- $7
- $8
- $9
- $10

...
APPENDIX C. AGENCY TREATMENT IN EXPERIMENT 1 – DROP-DOWN LIST
APPENDIX D. EXPERIMENT 1: PARTICIPATION RATES AND MEAN DONATIONS BY PRICE AND AGENCY

<table>
<thead>
<tr>
<th>Agency / Price of Giving</th>
<th>Participation rate (s.d), n</th>
<th>Average donation amount ($ US) (s.d.), n</th>
<th>Diff.:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Control</td>
<td>Agency Treatment</td>
<td>Diff.:</td>
</tr>
<tr>
<td>$1.00</td>
<td>.59 (.50), n=51</td>
<td>.59 (.50), n=51</td>
<td>0</td>
</tr>
<tr>
<td>$0.80</td>
<td>.49 (.50), n=51</td>
<td>.64 (.48), n=50</td>
<td>.15</td>
</tr>
<tr>
<td>Difference:</td>
<td>-.10</td>
<td>.05</td>
<td>1.48 *</td>
</tr>
<tr>
<td>$0.50</td>
<td>.48 (.50), n=52</td>
<td>.78 (.42), n=52</td>
<td>.30 ***</td>
</tr>
<tr>
<td>Difference (from $1):</td>
<td>-.11</td>
<td>.20 *</td>
<td>1.72 *</td>
</tr>
<tr>
<td>$0.20</td>
<td>.75 (.43), n=48</td>
<td>.76 (.43), n=51</td>
<td>.01</td>
</tr>
<tr>
<td>Difference (from $1):</td>
<td>.16 *</td>
<td>.18 *</td>
<td>3.40 ***</td>
</tr>
</tbody>
</table>

Note: Standard deviations in parentheses. P-values from t-tests of differences in means are as follows: * for p<.05, ** for p<.01, *** for p<.001
In this survey you will have the chance to donate to any charity, or nonprofit organization, that you like.

Which charity, or nonprofit organization, would you like to donate to?
(Please enter the name of the organization)
APPENDIX F. MEAN SCORES ON MANIPULATION CHECK ITEMS:

<table>
<thead>
<tr>
<th>Likert scale responses: (1= Strongly Agree, 5 = Strongly disagree)</th>
<th>Experiment 1</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Control</td>
<td>Treatment</td>
<td>Difference</td>
</tr>
<tr>
<td>“I was able to choose where I would donate”</td>
<td>2.07 (1.63)</td>
<td>4.45 (1.01)</td>
<td>2.38***</td>
</tr>
<tr>
<td>“I was able to choose how much I would donate”</td>
<td>1.41 (1.00)</td>
<td>1.39 (0.93)</td>
<td>0.02</td>
</tr>
<tr>
<td>“I had complete control over my donation decision.”</td>
<td>4.10 (1.12)</td>
<td>4.59 (0.95)</td>
<td>0.49***</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Control</th>
<th>Treatment</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>“I was able to choose where I would donate”</td>
<td>1.86 (1.43)</td>
<td>4.70 (0.86)</td>
<td>2.84***</td>
</tr>
<tr>
<td>“I was able to choose how much I would donate”</td>
<td>1.34 (0.82)</td>
<td>1.32 (0.85)</td>
<td>0.02</td>
</tr>
<tr>
<td>“I had complete control over my donation decision.”</td>
<td>3.92 (1.26)</td>
<td>4.61 (0.91)</td>
<td>0.69***</td>
</tr>
</tbody>
</table>

P-values from t-tests of differences in means are as follows: * for p<.05, ** for p<.01, *** for p<.001
Article 2.

Understanding donor-advised funds:
How grants flow during recessions

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Abstract

Donor-advised funds (DAFs) are becoming increasingly popular. DAFs receive a growing share of all charitable donations and control a sizable proportion of grants made to other nonprofits. The growth of DAFs has generated controversy over their function as intermediary philanthropic vehicles. Using a panel data set of 996 DAF organizations from 2007 to 2016, this article provides an empirical analysis of DAF activity. We conduct longitudinal analyses of key DAF metrics, such as grants and payout rates. We find that a few large organizations heavily skew the aggregated data for a rather heterogeneous group of nonprofits. These panel data are then analyzed with macroeconomic indicators to analyze changes in DAF metrics during economic recessions. We find that, in general, DAF grantmaking is relatively resilient to recessions. We also find payout rates increased during times of recession, as did a new variable we call the flow rate.
Introduction

The growth of donor-advised funds (DAFs) demands more attention from researchers. With tens of thousands of new donor-advised fund accounts established every year, they have been called “the fastest-growing vehicle in philanthropy” (National Philanthropic Trust, 2017). In 2016, DAFs accounted for 10% of charitable donations by individuals (Andreoni, 2017). That same year, Fidelity Charitable Gift Fund, a donor-advised fund sponsor, surpassed the United Way as the top nonprofit in donations received (Lindsay, Olson-Phillips, & Stiffman, 2016; National Philanthropic Trust, 2017). Every year, donor-advised funds facilitate hundreds of thousands of people making billions of dollars of transfers to the nonprofit sector. This article analyzes a comprehensive data set to better understand the flow of money through donor-advised funds as intermediary philanthropic organizations.

We begin by overviewing the fundamental DAF activities and the different types of sponsor organizations. We briefly review issues regarding donor-advised funds that are salient to public policy debate. We then present our data and our analyses with two specific aims: 1. Analyze how donor-advised fund grantmaking relates to other metrics; and 2. Explain how DAF activities relate to economic conditions. Using a panel data set of nearly one thousand donor-advised fund organizations from 2007-2016, we offer empirical analyses of grants, payout rates, and a new metric called flow rate. Merging this panel data with macroeconomic indicators, we then explore how DAF activity changes during recession conditions. We discover important correlations between DAF activity and economic conditions that will be useful for policy considerations. While other forms of charitable giving
generally drop during economic downturns, we find that grants from DAFs remain relatively stable in recession conditions, despite reduction in contributions and decline in assets. This contributes to an increase in payout rates and flow rates during recessions. Given these findings, donor-advised funds may be an important resource to the nonprofit economy in future recessions.

Overview

Donor-advised funds are intermediary philanthropic vehicles. They function as personal giving accounts, like checking or savings accounts that are designated irrevocably for charitable giving. There are three basic activities that occur in the use of donor-advised funds (see Figure 1). First, a person contributes money, or other assets, into a donor-advised fund account. The account is held by a 501(c)(3) nonprofit organization, known as a donor-advised fund sponsor, so the contribution into the account is considered by the Internal Revenue Service (IRS) to be a tax-deductible donation. Second, the nonprofit organization manages the assets in the account for a fee. Third, the donor advises the sponsor to make grants out of the donor-advised fund account to recipient public charities.

[Figure 1. here]

Donor-advised fund sponsors can be grouped into three categories: community foundations, single-issue charities, and national sponsor organizations (National Philanthropic Trust, 2017). Community foundations were the original sponsors of donor-advised funds. They are the most common type (60% of all DAF sponsors) and usually attract donors within a specific geographic region. Single-issue charities host donor-advised funds as a way to attract and retain donors for a certain cause, such as religion or
education. National sponsor organizations (NSOs) are typically subsidiary nonprofits to financial services providers such as Fidelity, Vanguard, or Schwab. There were only 46 NSO entities that reported to the IRS in 2015 (5% of all DAF sponsors), but these relatively few organizations controlled about half (49%) of all assets under management in donor-advised funds.

**Donor-advised Fund Issues**

There are many reasons why people use donor-advised funds. They offer low cost, easy-to-use solutions for conducting charitable giving. However, the proliferation of donor-advised funds has sparked public policy debates around several issues (Daniels, 2015). This section explains some of the main issues that donor-advised fund reform advocates raise. This review gives context to our analyses on grantmaking and DAF activity. However, the purpose of our analyses is not to respond to the debates, but rather to provide insightful empirical evidence to inform policy discussions.

**Donor-Advised Fund Growth**

What makes donor-advised funds an important topic to study is the sheer scope of their growth in recent years (Dagher, 2017). Daniels and Lindsay (2017) have aptly described the expansion of donor-advised fund usage as “reshaping the philanthropy landscape” (p. 26). In their annual report on donor-advised funds, National Philanthropic Trust (2018) reported that in the fiscal year 2017, the total assets under management by donor-advised funds reached over $110 B (an increase of 27.3% over the previous year), and a total of 463,622 individual accounts (an increase of 60.2%). In comparison to the 82,516 private foundations that control about $856 B in assets, donor-advised funds represent a significant market share of nonprofit assets. In the same year, DAFs granted
$19.08 B, roughly 40% of the $49.5 B granted by private foundations (National Philanthropic Trust, 2018). One caveat to this statistic is that DAFs are able to make grants to other DAFs. In a special report on donor-advised funds, Giving USA (2018) reported: “From 2012 to 2015, DAF-to-DAF granting accounted for 4.4 percent of all dollars from donor-advised fund grants” (p. 29). On all measures, assets, number of users, grants distributed, and contributions received, donor-advised funds have experienced prolific growth, which raises the importance of understanding them more fully.

**Timing of the Tax Deduction**

Perhaps the most attractive feature of donor-advised funds is also the most controversial. Donors claim a tax deduction in the year that they contribute to the DAF, without needing to decide where the money will be distributed. Rooney (2017) notes that this separation in timing makes it easier for donors to make major giving decisions and allows donors to maximize tax benefits during periods of income fluctuation. There is no legal requirement for money placed in a donor-advised fund to be used within a certain timeframe; it is possible that the money could sit in the account indefinitely. Madoff (2016a) questioned the current legal treatment of donor-advised funds, and argued that donors should not get a publicly subsidized tax-deduction until their donation is in the hands of an organization that will use it to create public goods.

**Tax Advantages**

The immediate deduction and other tax treatments of donor-advised funds allow their users several tax advantages. Contributions of appreciated assets into donor-advised funds avoid capital gains taxes and receive a deduction for the fair market value of the asset (such donations to private foundations do not receive a deduction for the full fair-
market value). Moreover, donor-advised funds can be used to bunch charitable donations that normally would be made over a period of years. Andreoni (2017) explained how using a donor-advised fund to front-load charitable giving into a single year maximizes tax advantages. There is some evidence that the recent increase in the standard deduction prompted a spike in contributions to donor-advised funds at the end of 2017 (Rubin, 2018). These tax advantages are a driving motivation for the use of DAFs, but also cost the federal government through the loss of tax revenue, and some suggest that such tax advantages benefit primarily the wealthy (The Economist, 2018). Andreoni (2017) explained that from a public policy standpoint, net societal benefit of DAFs would only be worth the cost if they generated more charitable giving to compensate for losses in tax revenue. Many argue that such tax advantages should not be offered without a guarantee for when and how the money will be used for charitable purposes (Gelles, 2018; Hussey, 2010; Madoff, 2016b).

**Regulation**

The timing of the tax deduction has led to policy suggestions around payout rates and time limits on donor-advised funds. Madoff (2016a) suggested requiring DAF accounts to meet a minimum payout rate, like private foundations. Generally, the organization-level payout rates of DAF sponsors well exceed the 5% minimum imposed on private foundations, as will be shown later in this paper. However, payout rates of individual accounts within a DAF sponsor may range widely. In 2014, David Camp of the House Ways and Committee, proposed to tax individual donor-advised fund accounts if the money had not been allocated within five years (Colinvaux, 2017; Daniels, 2015). At the organization-level, Andreoni (2017) found that the “shelf-life” of money is
between 3 to 4 years. Both the minimum payout rate and time limit for DAF accounts are attempts to bring more assurance that money going into donor-advised funds will be used in a timely manner for public purposes. Other possible regulations involve more accountability, regulation of grants, or different tax treatments for contributions into DAFs (Colinvaux, 2017).

Available Data

The biggest limitation to the study of donor-advised funds is the availability of data. Brostek’s (2006) Government Accountability Office report offered summary statistics and requested that more data be collected on DAFs by the IRS. The Pension Protection Act of 2006 began to require DAF sponsors to report specific information on their annual Form 990. Since then, the Treasury Department (McMahon, 2011), Congressional Research Services (Sherlock & Gravelle, 2012) and the IRS (Arnsberger, 2012, 2016) have produced reports that used this 990 data to analyze DAF trends over time. These reports provide summary statistics on aggregated IRS data, and some bivariate analysis with little or no inferential statistics. In 2016, the IRS was mandated to release machine-readable data from electronic filings of 990s (Orsen-Phillips, 2016; Perry, 2015), however not all DAF sponsors file electronically and the data format still requires extensive manual work.

Starting in 2006, National Philanthropic Trust (NPT), which is itself a DAF sponsor, began compiling 990 data made publicly available by the IRS. NPT has used this compiled dataset to produce an annual report on donor-advised funds (National Philanthropic Trust, 2017). The NPT report is often cited by other articles as a primary source of donor-advised fund statistics (c.f. Andreoni, 2017; Colinvaux, 2017; Madoff,
2014; Rooney, 2017). *The Chronicle of Philanthropy*, has collected its own primary data by conducting annual surveys of 105 of the largest donor-advised fund sponsors since 1999. This data is useful because it has information not collected by the Form 990, such as administrative fees, and because it predates 2006, when all DAF sponsors began reporting to the IRS. *Giving USA* (2018) produced a special report on donor-advised funds, using IRS Statistics of Income microdata. Other primary data come from annual reports produced by DAF sponsors themselves, such as Fidelity Charitable (2017) and National Christian Foundation (2017). What is needed is a deeper analysis of donor-advised fund activity, to better understand trends and behaviors within this subset of nonprofits.

**Data for this Study**

The data we use allow us to investigate DAFs with more granular analyses than previous empirical work. They have been collected on discrete DAF sponsor organizations and, therefore, can better reveal some of the complexities of donor-advised funds. Beginning in 2006, all donor-advised fund sponsors report four relevant pieces of data: 1) the total number of accounts managed by the DAF sponsor, 2) the total value of contributions collected, 3) the total year-end value of assets, and 4) the total value of grants made. These variables are reported by each sponsor organization as aggregated totals; they are not individual, account-level data. The four variables are reported annually on the Form 990, Schedule D and eventually made public. The panel data used in this study includes 996 donor-advised sponsors for years 2007-2016. Our data set also includes the Employer Identification Number (EIN), name of the organization, the month of the organization’s fiscal year end, and sponsor type: community foundation, single-
issue charity, or national sponsor. In Table 1, we present the summary statistics for our panel data, including the sum, mean, and median values for each of the four key variables.

[Table 1 here]

**Data completeness**

Because our research aims to understand variation among DAF sponsors, we must carefully define the study population and ensure that we have captured all relevant organizations. The 996 donor-advised fund sponsors in our panel include all DAF sponsors with substantive activity. By comparison, the IRS reported a total of 2,121 DAF sponsors in tax year 2012, which were all nonprofits that returned a Schedule D in their 990 (Arnsberger, 2016). The total reported by the IRS fails to account for the fact that many exempt organizations erroneously submit a Schedule D when they do not actually operate donor-advised fund accounts and that many small DAF sponsors have little to no activity. While our panel has fewer than half of the organizations claiming to operate DAFs, it represents almost the entirety of DAF assets reported by the IRS$^2$.

Using the IRS Form 990 data on donor-advised funds also requires careful handling of missing data. Missing data problems take three forms: erroneous information, slow reporting, and inconsistent reporting by some organizations in the panel. Some missing data result from poor accounting practices, including submitting when not active, placing information in the wrong fields, and submitting erroneous values. We drop any observation with missing data on all four key variables from all of our analyses. We also drop any variables that include clearly erroneous data (e.g. negative payout rates) in analyses of those values. Another issue is the timing of when the data is made available,
which can take several years in some cases. We are missing about 80% of the data for year 2016 because it had not yet been released by the IRS when we collected the data. Therefore, we do not include that year in most of the analyses. Finally, to account for inconsistent reporting, as well as emerging and discontinued DAFs, we create a balanced panel. We conduct most analyses with both the full panel and the balanced panel. We present the balanced panel for longitudinal analyses to eliminate organizations that may have inconsistent accounting, and to ensure that our results are not due to different panel assemblies between years. We use the full set of observations in regressions and other analyses when we do not find a significant difference between the balanced and full panels.

**Skewness**

One of the unique contributions of this paper is to highlight the skewness of the data behind aggregated DAF statistics. This skewness can be clearly seen in Table 1 by looking at the means and medians in the summary statistics. For example, in 2015, the total value of assets in donor-advised funds was $74.0 billion. The mean was $83 million, but this represents roughly the 85th percentile of the distribution; the median DAF only held about $5.6 million in assets. The single largest DAF sponsor, Fidelity Charitable, held $15.2 billion (21% of the total sum). The ten largest DAFs (top 1.1% of the distribution) held $43 billion (58% of the total sum). Two problems result from the skewness in the data. First, any patterns in the aggregated statistics will be due to a few large organizations. To more accurately represent DAF activity in our analyses, we report the statistics for the median organizations whenever possible. Second, highly skewed data pose challenges for regression analyses. The outliers unduly leverage any regression line
being fit to the rest of the data, and the standard errors of the residuals in regressions are
not normally distributed. To mitigate these challenges, we use log transformations or
inverse hyperbolic sine transformations of the variables in most of our regression
analyses.

Most DAF analyses in both academic and practitioner literatures use the
aggregated national totals. Using aggregated statistics to calculate mean averages with
DAF data can be misleading. For example, the average account size of donor-advised
funds in 2015 was $278,458, and the average contribution into DAFs was $77,330, when
calculated using aggregated sums. Looking at all DAF organizations in our sample for
2015, the range of average account sizes was $251 to $74.4 million and the median was
$137,923 (half of the average value calculated with aggregated statistics). In 2015, the
range of average contributions by organization was $3 to $254 million and the median
value was $21,238 (only 27% of the average calculated with aggregated statistics). Using
aggregated data, Andreoni (2017) estimated the income of the average DAF user to be
between $1.4 and 2.2 million, which provided evidence for the claim that DAFs are used
predominantly by the very wealthy. Using organization-level data leads to a substantially
different understanding of the typical DAF user. Understanding the skewness of data
allows researchers and others to more carefully interpret aggregated DAF statistics.

**Methods and Findings**

We approach our analyses of donor-advised funds in an exploratory manner. We
identify grants as the key variable of interest because understanding DAF granting seems
to be at the crux of much of the public policy debate. First, we analyze the relationship
between grants and other DAF variables. We then examine the ratios of grants to assets,
known as payout rates, as well as the ratio of grants to contributions, a new metric we call flow rate. Lastly, we explore how these key DAF metrics relate to macroeconomic indicators.

**Grants, Payout Rates, and Flow Rates**

In 2015, over $13.5 billion was granted to public charities out of DAFs. Sponsor grant totals ranged from $0 to $2.8 billion, with a mean of $15.5 million and a median of $750,000. Out of 897 observations for that year, only 5 sponsors (less than 1% of the population) reported $0 in grants. In the absence of immediate economic incentives, such as tax deductions, what factors explain this outflow of money from DAFs to other nonprofits? To understand grants coming out of DAFs, we begin by analyzing the relationships between grants and the other DAF variables. Figure 2 shows scatter plots of grants with the other three variables. There are generally strong and positive correlations between the value of grants coming out of DAFs and the value of assets, contributions into DAFs, and number of accounts. This is unsurprising. Using organization-level data, as the size of an organization increases, so should its activity.

[Figure 2 Here]

To further explore these relationships, we turn to regression analyses of grants and related ratios. Grants, contributions, and assets, like many monetary variables, are highly skewed. However, a log transformation does not allow for zero values, which are present in our data. Therefore, we perform an inverse hyperbolic sine (IHS) transformation to correct for skewness. The IHS transformation is preferred to a log transformation when the skewed variable also includes zeros, because the IHS transformation allows for zero and negative values (Burbidge et al. 1988, MacKinnon and
Magee 1990, Pence 2006). The IHS transformation is interpreted similarly to a log-log transformation.

**Grants**

To understand the variation in grant amounts, we run a regression of grants on the other DAF variables – contributions, assets, and number of accounts. Table 2, models 1 through 3, show that each of the other DAF variables correlates positively and significantly with grants, as was observed in the scatter plots in Figure 2. Model 4 shows these variables entered into the same model. Each still significantly explains a portion of the variance in grants. Model 5 controls for year fixed effects, to account for any major events that may cause changes in grant-making and other DAF variables for all organizations in a particular year. Model 5 shows that, holding other DAF variables constant, a one percent increase in assets yields a 0.41 percent increase in grants; a one percent increase in contributions into DAFs yields a 0.35 percent increase in grants out of DAFs; and a one percent increase in the number of accounts yields a 0.39 percent increase in grants. These simple findings suggest that grants coming out of DAFs are not based solely on the amount of assets in the DAF. Other variables, such as the contributions coming into the DAFs within the same year, also explain the amount of grants going out that year.

[Table 2 Here]

**Payout Rate**

As discussed above, a common statistic used to describe donor-advised fund behavior is the ratio between grants and the asset value – known as the payout rate. The payout rate concept is derived from policies regulating private foundations. How this
ratio is best calculated for donor-advised funds, and what it means in the donor-advised fund context, has been a matter of some debate (Daniels & Lindsay, 2016b; Madoff, 2014). While the National Philanthropic Trust (2017) uses the same method for calculating payout rate as is used by foundations\(^3\), Arnsberger (2016) provided a formula that indirectly accounts for investment earnings and fees in the calculation of asset value, uses data from within the same reporting year\(^4\), and generally yields slightly lower rates. It will be used for the analyses in this article, because it mitigates problems with missing data between years.

In 2015, a relatively representative year, the median payout rate by DAFs was 13%, which has remained fairly flat between 2007 and 2015. Out of 849 observations in 2015, 156 (18% of the sponsors) had payout rates of 5% or less, giving us an indication of the minority that grant the same or less than the minimum for private foundations. Table 3 depicts the generally flat trend of payout rates, which indicates that grant values grow at roughly the same rate as asset values. The exception to the flat payout rates in this period is in 2008, when the median payout rate reached 16%. Because 2008 was the beginning of an economic recession in the United States, the increase in payout rate indicates that further examination of DAF use during recessions is warranted.

Table 3. Here

Flow Rate

While payout rate is a useful measure of DAF activity, it only measures the relationship of grants to assets, and we know from our regression analyses that grants also correlate with contributions. Holding assets constant, grants still change when contributions change. In other words, the amount of grantmaking from a DAF sponsor is
explained in part by the amount of money coming into a DAF sponsor within the same year. This finding means that we cannot think of DAFs as operating like private foundations, where the grantmaking is based almost completely on the level of assets. We must think of DAFs as a different type of intermediary philanthropic organization.

To understand DAF operations, we must use measures that capture not only grantmaking in relation to assets but also grantmaking in relation to contributions. DAF account holders often contribute funds to established DAF accounts, and this activity is not captured well by a payout rate. Using an individual example, suppose a donor transfers $10,000 of securities into a DAF account that began the year with $2,000, and then grants $9,000 out to various charities that same year. Assuming no interest or fees, according to the formula above, the payout rate would be $9,000 divided by $2,000, or 450%. This measure is not a good indicator of how this donor-advised fund was used. Another way to look at the same DAF activity would be to consider that a donor contributed $10,000 into a DAF account and granted out 90% within the same year. The ratio of grants to contributions gauges an important aspect of DAF usage that is not measured by payout rate. We call this measure the flow rate and use it at the organization level to assess the volume of grant money leaving DAF coiffeurs in relation to the volume of DAF money entering DAF coiffeurs within the same year.

If donor-advised fund sponsors were likened to a reservoir, the flow rate would measure the amount of water released by the reservoir as a percentage of the amount of water coming into the reservoir. This gives us a sense of the rate at which water is flowing through a reservoir. Just as water flowing into a reservoir is not necessarily the same water that is flowing out, we are unable to distinguish whether the money being
granted from donor-advised funds is the same money as that which is being contributed within a given year. Without individual account-level data, it is impossible to use this statistic to measure how individuals are using their accounts. If a DAF sponsor has a 90% flow rate, the grants may be coming out of different accounts than those receiving contributions, but we still get a sense, at the organization level, of the rate at which money is coming and going.

Recent articles and reports about donor-advised funds have begun to use other measures of how money is flowing in and out of DAFs, to get a more complete picture of DAF usage. Fidelity Charitable claimed that “three-quarters of donor contribution dollars are granted within 5 years” (Fidelity Charitable, 2017). Andreoni’s (2017) “shelf-life” of donor-advised fund money estimates that contributions into DAFs for a given year will be spent, after all previous moneys are spent, within 3 to 4 years. The flow rate variable is limited in its ability to describe all DAF activity, but it gives an additional perspective to the common measure of payout rates and is helpful in understanding how DAFs function.

The median flow rate in 2015 was 87%. This means that for the median DAF sponsor, the value of the grants given out of the organization was 87% of the value of the contributions that were made into the organization in that year. It also suggests that about 13% of the value of contributions is remaining in the organization to be used in the future. The median for this statistic has remained fairly flat over the time period of the data, except for the year 2009, when it peaked at 103% (see Table 3). This means that in 2009 the median DAF sponsor gave away more money than it received – another indication that DAF activity is different during a recession.

**Differences Across DAF Categories**
DAFs in the United States range from large national sponsors to small single-issue charities. It is possible that different types and sizes of DAFs behave differently. This section of the analysis looks at how the type and size of DAFs relate to the metrics of grants, payout rates, and flow rates. These relationships are important for policy makers, as legislation may have distinctive consequences on different types and sizes of DAFs.

**Type**

There are three types of donor-advised fund sponsors: community foundations, single-issue charities, and national sponsors. We explored how DAF metrics differ by sponsor type by regressing grants on the other DAF variables separately for each sponsor type (Table 4). We found differing coefficients for each explanatory variable (assets, contributions, and number of accounts). We find that an increase in National sponsor assets is not associated with a significant increase in grants. Contributions and number of accounts do significantly explain differences in granting from National sponsors. This is in contrast with community foundations and single-issue charities where increases in all three variables are significantly associated with increases in grants. These findings, taken together, suggest that national sponsors are not as reliant on or responsive to asset levels when making grants. Granting from community foundation DAFs and single-issue DAFs is more affected by asset levels, after controlling for contributions and number of accounts, suggesting that there may be more of an emphasis on preserving an asset base among these sponsors or the donors they work with.

[Table 4 here]

**Size**
Not all donor-advised funds are the same size. Some sponsors are extremely large, but the vast majority are relatively moderate or small. To analyze how the relationship between grants and other DAF variables differs by size, we categorized DAF sponsors into three categories: small, medium, and large. We used the median asset value in 2014 ($5.56 million) to differentiate the small and medium DAF organizations. We chose 2014’s median because we have the most complete data for that year. We defined the largest DAF sponsors as those with assets over $1 billion. This group can be thought of as outliers. It has very few organizations (less than 1% of all observations) but has the potential to influence relationships in the regression analyses.

When we regressed grants on other DAF variables separately by size category (see Table 5), we found that each size group has different relationships between the explanatory factors (assets, contributions, or number of accounts) and grants. We found that larger DAF sponsors are significantly more responsive to changes in contributions than changes in assets. The large sponsors behave similarly to the national sponsors, because most (but not all) of the large sponsors are national sponsors. Medium sponsors’ grants respond significantly more to changes in assets than do the large sponsors’ grants. For both medium and small sponsors, grantmaking increases significantly with increases in contributions, assets, and number of accounts. Again, we find that donor-advised funds sponsors are not granting solely based on assets and that there is significant variation between different sizes of sponsors.

[Table 5. Here]

**Payout Rates and Flow Rates by Type and Size.**
Knowing that type and size affect the relationship between grants other DAF variables, we also explored categorical effects on the metrics of payout rates and flow rates. If we track payout rates and flow rates over time, we see differing trends in each category. Figure 3 shows the longitudinal trends of the median payout and flow rates from a balanced panel of organizations by type and size. In Figure 3(a) we see that community foundations have consistently lower payout rates, and Figure 3(b) shows that single-issue charities have consistently higher flow rates. Figure 3(c) displays consistently higher payout rates among large organizations. We tested categorical differences in the metrics with pooled quantile (median) regressions of the payout rates and flow rates by size and sponsor type and found that each of these differences was significant at the 0.05 level. (Appendices A1 and A2). Figure 3(d) shows a peak in flow rates among all sizes in 2008-2009 (an indicator of the economy’s influence on flow rates), with flow rates dropping more substantially among large organizations in later years.

[Figure 3 Here]

**DAF Activity and the Economy**

We have already noted that payout rates and flow rates both peaked during recession periods with fiscal year ends in 2008 and 2009. Median payout rates peaked in 2008 at 16%, and median flow rates peaked in 2009 at 103%. Two patterns help explain these phenomena. First, by all measures – sum total, median, and means – grants actually increase in fiscal year 2008 (see Table 1), during an economic recession. Contrast this phenomenon with the drop in overall charitable giving from individuals and private foundations during this same year (Reich & Wimer, 2012). The increase in the value of
grants going out of DAFs, however, corresponded with a decrease in both the value of contributions coming into DAFs and asset values. These conditions led to the highest ever payout rate among donor-advised funds. The second pattern, which helps to explain the increase in flow rates, is that grants out of DAFs did not drop as much as contributions between 2008 and 2009 (see Table 1). During the first two years of the recession, 2008 and 2009, contributions dropped substantially each year – similar to the decreases in all charitable giving (Reich & Wimer, 2012). While grants did decrease from 2008 to 2009, they only decreased by 7% of the aggregate total, compared to a 36% decrease in contributions into DAFs.

In order to more deeply explore how DAF activities relate to the economy, we merged the panel data with specific macroeconomic indicators that are known to correlate with other forms of charitable giving: GDP, the S&P 500 index, Consumer Confidence Index (CCI), and unemployment rates\(^5\) (List & Peysakhovich, 2011; Parth, Wilhelm, Rooney, & Brown, 2003). Our measure of GDP came from Macroeconomic Advisers (2017), the S&P 500 index numbers came from Cboe (2017), the Consumer Confidence Index from the Organisation for Economic Cooperation and Development (2017), and unemployment statistics from Bureau of Labor Statistics (2017). We used monthly statistics from 2007 to 2016 for each indicator because sponsor organizations had different months for their fiscal year end. If a sponsor reported their fiscal year end as September, the economic factors merged with that sponsor’s data were for the month of September in each year. In this way, changes in the economy and changes in DAF metrics are aligned by month to reduce unintended lagged effects.
First, we scrutinized a correlation matrix of the macroeconomic indicators and DAF variables (Appendix A3) to detect patterns in significant correlations (see List & Peysakhovich, 2011). We found that changes in contributions into DAFs correlated significantly with changes in the GDP, and changes in asset values correlated significantly with changes in the S&P 500 index. DAF grants, interestingly, did not correlate with either of these economic variables. Because GDP and the S&P 500 seemed to be the most influential correlates with DAF activity, we used those two macroeconomic factors as our indicators for recession conditions. We coded dummy variables for 12 month periods in which the GDP had a negative change (GDP recession) or a positive change (GDP growth), and likewise for the S&P 500 index. Note that GDP and the S&P index do not follow each other exactly. So, there are 12 month periods when one may increase while the other decreases. We track both to see if DAF activity may be more sensitive to one or the other indicator.

In Figure 4, we present the Kernel density plots of the three DAF metrics of interest (grants, payout rates, and flow rates) during periods of economic growth and recession (measured by GDP and S&P). Figures 4(a) and 4(b) show the distribution of the percent changes in grants during years with different economic conditions. During recessions (blue dotted line), organizations do not dramatically change grantmaking. The shift to the left in the distribution of percent changes in granting during GDP recessions indicates that a slightly larger proportion of sponsors had decreases in grantmaking during recessions. Looking at payout rates in both Figures 4(c) and 4(d), the shift to the right in the distribution indicates that, during both GDP and S&P recessions, substantially more sponsors had large payout rates above 15 or 20 percent. For flow rates, shown in
Figures 4(e) and 4(f), the flattening of the distribution and shift towards the right also indicates substantially more sponsors with higher flow rates during the recession. In the GDP recession graph, there is a marked increase in the proportion of sponsors with flow rates above 100 percent, which indicates that these organizations were granting more than they received in contributions. These distributions begin to suggest that donor-advised fund granting stayed largely consistent during the recession, despite changing economic conditions and organizational inputs.

[Figure 4 Here]

We next test if these changes during recession conditions vary by sponsor type and size and are statistically significant. We begin by running t-tests for the differences of means in the percent changes in our three DAF metrics during economic growth versus recession. We then analyze these differences according to the size and type of the sponsor organizations (Appendices A4, and A5). Overall, average grants during GDP recession are 4.5 percentage points less than average grants during GDP growth. They are not significantly different in S&P recession. Average payout rates are 2.1 percentage points and 0.9 percentage points higher during GDP and S&P recessions respectively. Likewise, flow rates are 12.1 percentage points and 3.4 percentage points higher during GDP and S&P recessions respectively. Of the three sponsor types, community foundations had the largest percentage decrease in grants (in GDP recessions) and the largest increase in payout and flow rates (in both GDP and S&P recessions). Only the changes in community foundations were significant at the 0.05 level. National sponsors and single-issue charities had overall increases in their rates, but had so much variance, the changes were not significant. When looking at size groups, the medium-sized DAFs were the only
group where payout rates were significantly higher in both forms of recession. The most striking changes were the average flow rates in the large ($1B+ in assets) sponsors, which were 50 percentage points and 30 percentage points higher during GDP and S&P recessions, respectively. The higher flow rates among large DAF sponsors during recession indicate that large DAFs are granting more from contributions than from assets.

Finally, we ask whether the changes in DAF metrics (grants, payout rates, and flow rates) differ according to the magnitude of the changes in the economy. For each level of change in the economy in our data, we calculate the point estimates for percent change in grants and the point estimates for payout rate and flow rate. Figure 5 shows the point estimates and 95% confidence intervals, which vary in width based on the number of observations (and to a lesser extent the variation) at each level of recession. The figure shows different patterns of DAF activity for recession and growth conditions. The non-parametric regression displayed in these figures adds additional insight to our t-test results. In the t-test, most of the recession periods measured were severe recessions, while many of the growth years were minor growth years, leading to a larger difference in grants.

[Figure 5 Here]

We see in Figure 5 that the point estimates for changes in grants are actually higher during slight GDP recessions (but with much larger confidence intervals), and that increases in grants are also present during the smallest decreases in S&P. As recessions are more severe, there is a trend for grants to also decrease. However, many of these changes are not significant, and the most severe GDP recession still has a positive point estimate for changes in grants, though it is not significant at the .05 level. This suggests
that donors' grantmaking is affected by the severity of recessions, but the relationship may not be linear. It is important to note that in slight recessions, the assets are still contracting, thus an increase in grants is countercyclical to what would be expected. Payout rates seem to increase with more severe recessions, which is explained by greater drops in asset levels, but relatively smaller drops in granting. Flow rates seem to follow a similar, but less dramatic, pattern, signaling that the contributions are not dropping as much as assets during more severe recessions. What we learn from these analyses is that DAF granting differs according to the magnitude of changes in the economy. Overall, we see donor-advised fund sponsors continued to distribute money in a way that was resilient to the economic downturn.

Discussion and Conclusions

This article introduces donor-advised funds, reviews some main issues salient to public policy discussions, and presents some of the first organizational-level analyses from a sample that approaches the full, active population. The new data provided in this article pulls back the curtain on the mostly aggregate numbers that we have hitherto seen in the reports and articles about donor-advised funds. We are beginning to understand the complexity and heterogeneity of this increasingly important subset of nonprofit organizations.

One of the main contributions of this paper is the statistical evidence for heterogeneity among various types and sizes of DAF sponsors. Much attention has been given to the largest DAF sponsors, such as Fidelity, Vanguard, Schwab, and National Philanthropic Trust. It is readily apparent that the activities of such organizations dominate the national trends. It is almost impossible to talk about “normal” donor-
advised funds by looking at national sums, because they are strongly influenced by the largest sponsors. By segregating these larger organizations in our analysis, we can study the other 99% of donor-advised funds more effectively. This work highlights the skewness of DAF data and contributes to researchers’ ability to more accurately analyze and discuss them. We hope that future discussions about donor-advised funds will no longer assume that the “average” DAF sponsor is just a smaller version of Fidelity Charitable. We see from our data that smaller and medium donor-advised fund sponsors behave differently than the large ones, and community foundations, single-issue charities and national sponsors each behave differently.

Using organization-level data also uncovers evidence that donor-advised funds are a more mainstream philanthropic vehicle than some have suggested. Our data suggests a lower average account level than was previous supposed from the aggregate data (c.f. Andreoni, 2017). This is supported by evidence that the number of DAF accounts is rapidly increasing. National Philanthropic Trust found a 60% increase in the number of donor-advised fund accounts in 2017 and a 20% decrease in the average account balance (National Philanthropic Trust, 2018). Callahan’s (2017) book about ultra-wealthy philanthropists suggests that DAFs are a tool for the wealthy to circumvent regulations around private foundations. The Economist (2017) also suggested that donor-advised funds are primarily a tax saving vehicle for the philanthropy of the extremely wealthy. While DAFs may be used to maximize tax advantages among elite wealth holders, we find evidence suggesting DAF proliferation among a broader base of charitable donors.
Our findings also suggest that DAF sponsors behave differently than private foundations and require different metrics. Median and average payout rates are multiple times higher than the 5-6% that private foundations pay out. In addition, DAF grants are correlated closely with contributions. To measure this distinct phenomenon, we introduce the flow rate metric, which we hope will lead to a more sophisticated understanding of donor-advised funds. While payout rates are a critical measure of DAF activity, payout rates do not fully or accurately describe the continual flow of money through donor-advised funds. Focusing on payout rates misguided equates donor-advised funds, which make grants using a combination of contributions and assets, with private foundations, which generally make grants using endowment earnings.

Much of the concern around donor-advised funds focuses on the fact that once money is placed into a DAF account, there is no guarantee that money will be redistributed (Daniels, 2015, Daniels & Lindsay, 2016b, Madoff, 2016b). Many reform advocates fear that money will stagnate in donor-advised funds. When considering our findings on this topic, it is important to reiterate that the data and analyses in this article cannot be used to directly address the individual use of donor advised funds. While our findings describe organizational behavior, they cannot describe how individuals use DAFs. Inferring patterns of individual behavior from ecological data, such as 990 returns, involves multiple assumptions that cannot be supported by the data currently available on donor-advised funds (King, 1997). Andreoni (2017) suggested that, from a public policy perspective, one should focus on the aggregate activities, not individual accounts. While the individuals may benefit from the tax advantages of donating to donor-advised funds, the onus is on DAF sponsors to maintain a charitable purpose for their exempt status.
When we analyze organizational-level DAF activity, we observe that DAF grantmaking is relatively robust when compared to DAF assets and contributions. The median payout rate is approximately 13%, indicating that funds for DAF grantmaking are not generated solely from interest earnings. Median flow rates of 87% suggest that donor-advised funds act as pass-through philanthropic intermediaries, not as long-term parking lots for charitable dollars. The rise of asset levels seems to be driven by the remainder left in the accounts combined with compound interest. While researchers and policymakers would ultimately like to know to what extent these patterns hold for individual DAF accounts, these organization-level patterns are valuable because they can help researchers and policymakers to compare DAFs to other nonprofit grantmaking institutions.

We also found that different types of sponsor organizations behave differently. These differences in donor-advised funds sponsors presumably reflect the differences in clientele across the organizations. Community foundation DAFs act more like grantmaking foundations than other DAF sponsors. This suggests that those who use community foundations take a more grant-on-earnings approach than those who use other types of DAF sponsors. Community foundations significantly decreased their grants during recessions, following the pattern of private foundations. Single-issue charities had the highest flow rates, suggesting that they operate more as pass-through intermediaries, functioning to liquidate assets and then distribute those assets quickly to related charitable entities. More research will have to drill down on the various groups and subgroups of donor-advised funds. For example, how do religious donor-advised funds differ from other single-issue charities? Or how do urban community foundation DAFs differ from those in rural communities? In regards to size, we see that smaller sponsors
tend to have higher flow rates. Larger sponsors, however, have higher payout rates. These patterns suggest that regulations meant to control payout rates would primarily affect DAFs with smaller assets.

Our final analysis of donor-advised activities during recession conditions is perhaps the most important contribution of this paper, when considering their place in the nonprofit sector and society as a whole. Giving from foundations decreased as readily as individual giving during the recession years of 2008-2009 (Reich & Wimer, 2012), when nonprofits needed the money the most. During this time, donors with money in donor-advised fund accounts were uniquely positioned to continue to support the causes they cared about. Our findings suggest that grantmaking from donor-advised funds is less affected by economic recession than other forms of charitable giving. More research will be needed to understand what charities benefit from this DAF recession giving. Furthermore, policy makers may want to carefully consider the recession-resilient nature of donor-advised funds as they formulate regulation for this growing form of philanthropy.

**Endnotes**

1 The Bill and Melinda Gates Foundation granted $4.5 billion, and DAF grants from Fidelity Charitable totaled $3.5 billion (Bill & Melinda Gates Foundation, 2017; Fidelity Charitable, 2017a).

2 The IRS reported that all DAF sponsors had a combined asset value of $52.9 billion for that 2012 tax year, and the sample for this study has a combined asset value of $56.8 billion for fiscal year 2013. The difference is due to the panel data being organized by fiscal year instead of tax year (calendar year), as well as some IRS file error as noted by Arnsberger (2016).

3 NPT divides grants in a given year by the year-end assets of the previous year.
Arnsberger divides grants in a given year by the year-end asset value in the same year plus the grants for that year minus the contributions that year.

GDP and S&P 500 are inflation adjusted to 2012 dollars, and unemployment rates are seasonally adjusted.
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Article 3.
Regulating Donor-Advised Funds:
Policy Recommendations for an Emerging Form of Philanthropy

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Abstract

Donor-advised funds (DAFs) are changing the way that many people make charitable donations to nonprofit organizations. Instead of giving cash or assets directly to a charity, donors opt to use a donor-advised fund account, or “giving account,” as a philanthropic intermediary. Recent proliferation of DAF usage has led to suggestions of tighter regulations on this increasingly common form of philanthropy. This article reviews the concerns around the growth of donor-advised funds and the related policy proposals suggested by reformers. With consideration for the historical precedents of governing philanthropic action and nonprofit organizations, I recommend a relatively conservative approach to regulating donor-advised funds. Policy recommendations include minimum requirements that would match regulations for charitable trusts, increase reporting, and close loopholes that DAFs create for private foundations. The policy recommendations are intended to maintain public trust in American philanthropy, preserve freedom for individuals who wish to donate to charity, while promoting the best interests for the nonprofit sector as a whole.

Keywords:
Public Policy; Philanthropy; Donor-Advised Fund; Charitable Giving; Tax Deduction
Introduction

What makes donor-advised funds such a pressing public policy issue is the recent rapidity of their growth. Over a thousand nonprofit organizations sponsor donor-advised funds, and almost half a million Americans are now using them to make donations (National Philanthropic Trust, 2018). Donor-advised funds emerged in the early twentieth century and started becoming more popular after the Tax Reform Act of 1969 (TRA) (Berman, 2015). Over the last ten years, however, the number of DAF accounts has almost tripled – from 156,620 in 2007 to 463,622 in 2017 (National Philanthropic Trust, 2018). Figure 1 shows the growth in assets, contributions and grants. The expansion of DAFs is largely due to financial service providers, such as Fidelity Investments, which have entered the charitable market with their own nonprofit subsidiaries, expanding this philanthropic service to their broad client bases.

[Insert Figure 1 here]

The growth of DAF’s is “changing the landscape” of American Philanthropy, leading to new forms of charitable organizations (Daniels & Lindsay, 2016). In 2017 alone, the number of users jumped 60% (National Philanthropic Trust, 2018), largely due to the advent of a new type of sponsor, which uses DAFs to facilitate workplace giving (see Figure 2). For example, Benevity is a B-Corporation that partners with large multinationals such as Microsoft and Coca-Cola to facilitate workplace giving through its own donor-advised fund (Ebeling, 2018). These new users represent a younger, more mainstream population of givers. More and more Americans, even the less wealthy, are
giving through a DAF account. In 2017, DAFs received $29 billion in contributions, representing more than 10% of all individual giving. Donor-advised funds are beginning to rival private foundations in financial influence in the nonprofit sector. Total assets under management at DAFs have grown to over $110 billion, and in 2017 DAFs granted over $19 billion - almost 40% of the amount of money that private foundations granted (National Philanthropic Trust, 2018). Amidst the change, policy makers question whether more regulations are needed.

[Insert Figure 2 here]

Reform advocates have raised several reasons for concern about this meteoric growth. These concerns involve three core issues: 1) the timing of donations made through DAFs, 2) transparency in giving through DAFs, and 3) the costs of DAFs to the public sector. This article will analyze each of these concerns within the context of public policy history relating to nonprofits and philanthropy. Frumkin (2006) described how changes in public policy towards nonprofits can have unintended consequences. The purpose of the paper is to address the critical concerns around donor-advised funds and make policy suggestions considering the best interest of the nonprofit sector as a whole.

**Historical Context**

In 1969, Congress singled out private foundations as philanthropic organizations that needed to be regulated more closely because of their rising prominence and influence in society. Legislators determined that if wealthy individuals were going to have subsidized
influence over society the public needed more accountability (Hall, 2006). Rules were established to control tax benefits for contributing to private foundations; a mandatory payout rate was designed to ensure granting that would keep pace with interest earnings; and more stringent reporting requirements were enacted. Berman (2015) explained that during this time, a tax attorney named Norm Sugarman recognized the benefits that TRA offered public charities and began advocating ways that community foundations, especially Jewish organizations, could benefit from the new law. He counseled community foundations to use their public charity status to attract the money of wealth philanthropist, while allowing them to maintain some control over their donations. The new arrangements were eventually formalized with a private-letter ruling from the IRS which allow the donors informal control, giving donors privileges to “recommend” or “advise” the community foundations in how to use their philanthropic contributions. These informal compacts eventually became what we now know as donor-advised funds (Berman, 2015).

In the early 90’s, Fidelity Investments created its own version of the donor-advised fund by establishing a public charity subsidiary knows as Fidelity Charitable Gift Fund. The affiliate provided its clients a public charity option for directing donations that avoided the regulations on private foundations – a convenient way to facilitate charitable gifts and still keep the investments with the firm. The exempt status of these commercially sponsored charities, also known as National Sponsor Organizations (NSOs) was challenged by the IRS during the 90’s. The courts ultimately decided in favor of the NSOs, granting them tax-exempt status as public charities (Colinvaux, 2017). The
decision reaffirmed the historically broad definition of charitable purpose. This common law ruling and the increasing popularity of donor-advised funds led other financial-service providers, as well as many other community foundations and various charities to start their own DAFs as well. What’s important about this historical context is the fact that donor-advised funds rose in large measure as a response to a piece of legislation that was considered to be adversarial towards the sector. The regulations pushed donors to find alternative ways to direct private philanthropy to preferred causes without costly regulations. It is important to ask ourselves, how would donors respond to additional policy regulating the use of donor-advised funds?

Frumkin (2006) argued that the Tax Reform Act (TRA) of 1969 led to unintended consequences on the way that private foundations make grants for social purposes. In response to more demanding regulations, private foundations professionalized and bureaucratized their staff. This response led to higher administrative costs, meaning less money for charitable recipients. Private foundations strengthened their professional associations with each other in order to respond to regulation in a unified manner. This formal association led to more homogenized approaches to grantmaking, involving fewer transformative gifts and more, smaller, programmatic grants. Frumkin (2006) concluded that these associational responses to TRA led to private foundations becoming more rigid in their philanthropic activity, and thus less responsive to addressing large societal problems.
What approach should be taken when considering policies for donor-advised funds? In her book *Governing Nonprofit Organizations: Federal and State Law and Regulation*, Fremont-Smith (2004) advocated regulating nonprofits sufficiently to ensure public trust, but restrainedly as to allow maximum freedom. She wrote:

The wise course, therefore, is to provide a sufficient degree of regulation of charities to assure the public of the integrity of the sector, yet that it not be so draconian as to limit its freedom to meet changing needs….

[The nonprofit sector] must be allowed the greatest degree of freedom to operate, consistent with the need to assure the public of its integrity. (p.2)

Regarding the long history of government-nonprofit relations, Fremont-Smith (2004) emphasized that government has generally taken a hands-off approach, so long as nonprofit fiduciaries can maintain a position of trust with the public. The definition of “public good” has traditionally been treated in the broadest sense from a public policy standpoint. Government has extended to the nonprofit sector the freedom to generate public goods in a multiplicity of ways, resulting in a plurality of causes, without prescribing exactly what qualifies as charitable.

In the Pension Protection Act of 2006, Congress formally identified donor-advised funds as a particular form of exempt organizations and began to require more reporting from DAF sponsors. Specifically, they introduced the Schedule D into Form 990, which requires the reporting of the number of accounts, aggregated contributions, aggregated grants, and total asset value. In addition, DAF sponsors also report a list of grants made to other charitable organizations on Schedule I. This initial regulation of donor-advised
funds was designed primarily to increase accountability and transparency. It did not at all alter the tax treatment of donor-advised fund contributions, which is currently identical to other public charities. Whether donor-advised funds continue to enjoy relative freedom, or whether they will be more tightly regulated is a matter of debate. This article will review the major concerns about donor-advised funds and some potential regulations to address those concerns, while trying to maintain as Fremont-Smith (2004, p. 2) put it, “the greatest freedom to operate.”

**Concerns of Reform Advocates**

Several authors as well as legislators have raised important critiques of donor-advised funds and called for reform in their treatment under the tax code (Andreoni, 2018; Callahan, 2017; Colinvaux, 2017, 2018; Gelles, 2018; Hussey, 2010; Madoff 2014, 2016a, 2016b; Sherlock & Gravelle, 2012). These critiques have coalesced around three key concerns. The first concern is about timing. Contributions to donor-advised funds are immediately tax-deductible, but there is no guarantee that the money will be granted in a timely manner to other public charities. The second concern is that DAFs create a transparency loophole for grants from private foundations. The third concern is that donor-advised funds offer their users distinct tax advantages, resulting in greater losses in public revenues than other forms of giving. Addressing these concerns from a public policy standpoint requires the consideration of how possible regulation of donor-advised funds would affect the entire nonprofit sector.
1. The Timing Issue.

Nonprofits generally prefer outright donations that are immediately spendable. Needs for services are ever present, and financial demands are constant for most charities.

Sometimes nonprofits will set aside money in the form of an endowment, and only use the interest from investments for operating expenses. Donor-advised funds are somewhere in between these two models, and sometimes don’t fit either. Money that is contributed to a donor-advised fund has no prescription for when it will be used. Each donor decides when to make a grant out of his or her account. Like outright donations, money can be given through a donor-advised fund to another charity almost immediately. Like endowments, the money in donor-advised funds is invested, and the earnings are available for distribution to charitable purposes. But unlike either of these two models, money in a donor-advised fund could, theoretically, sit in the account earning interest indefinitely. This is the problem. Madoff (2016b, p. 2) succinctly apprised, “Since federal law doesn’t require DAF funds to ever be distributed, there’s no way to be sure the money in them will ever flow to charities.” While contributions to donor-advised funds are irrevocable, and can only be redistributed to a public charity, there is no guarantee for when that will happen.

Several public policies have been suggested for how to deal with this problem. Some have suggested a minimum payout rate, similar to private foundations, but this idea has some critical flaws when examined closely. Madoff (2016a) pointed out that the minimum payout was designed for private foundations with the idea of perpetuity in mind, and that donor-advised funds are not necessarily intended to exist in perpetuity.
Current payout rates from donor-advised funds sponsors are generally well above the 5% mark, which is the bright-line requirement for private foundations, with the median payout rate hovering around 13% over the past ten years (Heist & Vance-McMullen, 2019). This figure is measured per organization, not each individual account, and thus represents an aggregate of many accounts in one.

Colinvaux (2017) proposed that such a minimum be imposed only on the commercially affiliated NSOs, recognizing that most of the other DAF sponsor organizations, such as community foundations, exist for charitable purposes outside of hosting DAFs. The minimum payout (at whatever rate) would be enforced by commercial sponsors on its individual account holders to meet the minimum standard. NSOs serve no other charitable purpose than to redistribute charitable money, and this would ensure that they meet a “commensurate test” used to determine if a fundraising organization is adequately fulfilling its charitable purpose (Colinvaux, 2017). Applying this regulation to NSOs would protect the majority of sponsors such as community foundations and single-issue charities from having to comply, but would affect the majority of DAF users. National Sponsor Organizations serve a vast majority, 338,141 of the 463,622 account holders (National Philanthropic Trust, 2018). Such a regulation would artificially incentivize many donors to use community foundations or single-issue charities. Those who would be most likely to move accounts would be those least likely to meet a minimum requirement. Heist and Vance-McMullen (2019) found that community foundations and single-issue charities already have historically lower payout rates than NSOs. How would the migration of lower-rate DAF users to other charities improve the usefulness of DAFs
to the nonprofit sector? For those who would keep their DAF accounts at an NSO, the imposition of a minimum payout rate would likely diminish their flow of charitable dollars, because they would use the minimum as an anchor in their charitable decision making. Rooney (2017) explained that “a minimum payout rate for DAFs likely would ossify the minimum into a new maximum as well—essentially causing, in other words, a new standard of minimal compliance.” So, the minimum payout rate regulation would be counterproductive to the way that donor-advised funds are used.

Another similar idea came from David Camp in 2014, then Chairman of the House Ways and Means Committee, to impose a five-year payout period for when donations need to be redistributed. This idea strikes more of a balance in maintaining some flexibility for DAF users, while addressing the concern about money sitting in the account indefinitely. Andreoni (2017) analyzed aggregated DAF data, and calculated a “shelf-life” for how long money turns over at the organization level. He found that on the aggregate it takes between 3 and 4 years for DAF sponsors to redistribute their moneys, taking a first-in first-out approach. Again, the organizational data indicates that DAFs are out-performing even this seemingly reasonable request. Heist and Vance-McMullen (2019) found that money flows fairly consistently through donor-advised fund sponsors. When comparing the value of grants being distributed by DAFs to the value of contributions being received by DAFs, year-over-year, the median “flow-rate” is about 85%. This suggests that if the median DAF sponsor receives $1 M in contributions in a given year, then it will give out $850,000 in grants that same year.
While these proposed regulations are well intended, after considering the empirical evidence of how DAFs are being used, they seem a bit excessive. Implementing a universal regulation for all DAF holders to ensure that money is being redistributed in a timely manner, when the current data imply that DAF money is already flowing at a reasonable rate overreaches the intended outcome. As the proverbial axiom goes, “if it’s not broken, don’t fix it.” Fremont-Smith (2004) emphasized “[The nonprofit sector] must be allowed the greatest degree of freedom to operate, consistent with the need to assure the public of its integrity.” The aggregate data indicate that collectively speaking DAF users are not abusing the flexibility of time allotted to them, but are gifting money out of their donor-advised funds at reasonable rates and speed (Heist & Vance-McMullen, 2019).

Because the aggregate data does not represent individual behavior, consideration must be given to those individuals who are outliers and do not follow the average organizational behaviors. There is still a chance that some people are parking charitable dollars in donor-advised funds, with no immediate intention for redistribution to charitable causes. In fact, I have interviewed such DAF users, and found evidence that some people leave money in DAF accounts with no plan for when to move it out. Why is it a problem? Even though contributions into DAFs are irrevocable, the donations are subsidized by the deductibility of the gift, and require some level of accountability to the public that the money will be used to generate public goods. Private foundations are allowed to exist in perpetuity, but they have a minimum payout to ensure that some money flows to the public. With donor-advised funds, one could establish an account in perpetuity, with no
requirement for any public benefit. The trick is to figure out a policy that prevents this situation without impairing the charitable behavior of the vast majority of DAF givers.

Part of the solution lies within the sector itself. The nonprofit sector has a history of employing self-regulation policies to promote best practices and cultivate public trust (Brody, 2006). Hale (2013) wrote that formal regulation of nonprofits may not be suitable to the public’s true concerns and that “normative sector values, such as trust and collaboration” may be the best motivating force for improved nonprofit performance. In a comparative analysis of European countries, Bies (2010) found that nonprofit self-regulation occurs where the sector is well established, but also found a professional type of self-regulation in emerging nonprofit sectors where the legal systems are also emerging. According to Institutional Theory, professional types of self-regulation enact values-based policies designed to generate normative behavior meant to engender trust in the organization (Bies, 2010). Given that DAFs are an emerging subsector in the United States and that the legal regime relating specifically to DAFs is also emerging, we can expect to find professional forms of self-regulation. For example, Fidelity Charitable requires donors to grant a minimum average of 5% of assets annually over a five-year rolling period. If this is not met, then Fidelity Charitable distributes money out of the account in order to meet their own minimum requirement (Fidelity Charitable, 2018). Not all sponsors have such a policy at this point, and legislation aimed at organizations could be used to encourage or nudge them to adopt such policies.
In determining what public policies would be appropriate to address the issue of perpetuity without payout, two considerations should guide the process. The first consideration has already been covered in large measure. That is, whatever policy is implemented, this policy would be meant to control the few outliers that breach the normal standard of redistributing DAF money for public use in reasonable time. It would not be a policy for the average DAF user, but rather a stopgap for relatively few. The second consideration is that we already have laws that govern similar forms of charitable giving. Any regulation of DAFs that supersedes those imposed on other philanthropic entities may be taken as unfair and punitive, and may merely shift behavior to other charitable forms, just as the Tax Reform Act of 1969 inadvertently catalyzed the growth of DAFs.

Tax-exempt charitable entities can take either of two basic forms: charitable trusts or nonprofit corporations. The legal regimes governing both forms have the same intent – to ensure charitable purposes and prohibit private inurement. Technically, donor-advised funds sponsors are chartered as nonprofit corporations, but in practice they operate similar to charitable trusts. Any regulation of donor-advised funds could be compared with the treatment of charitable trusts, to determine fairness and propriety. In regard to the timing issues, how is timing treated in charitable trusts? Many charitable trusts allow a separation in timing between the tax-deductibility and the distribution of money for public purposes. Split-interest trusts, such as charitable remainder unitrust (CRUTs), provide a tax-advantaged contribution up front (prorated depending on the life of the donor and the terms of the trust), and make the charitable distribution at the termination
of the trust (usually the life of the donor). Comparing donor-advised funds to a charitable remainder trusts, both are irrevocable and enjoy immediate tax advantages. DAF donors receive no payments from split-interest, but do enjoy the flexibility of choosing multiple charitable recipients at multiple periods of time. The one feature that DAFs lack, that make CRUTs legally viable, is an ultimate remainder beneficiary. Should DAFs be required to name a remainder beneficiary and an ultimate term of expiration, such as the life of the donor, then the legal regimes governing the two forms would be equitable.

By establishing a lifetime term limit for donor-advised funds with a remainder beneficiary, we answer the concern about when the money will be used for public purposes. We do not accept a minimum payout, but we also remove the possibility of perpetuity. We leave to the donor to decide, within his/her lifetime, when to designate the irrevocable gift for its ultimate purpose. Some may argue that it is wiser to spend charitable dollars in the present, when the needs are immediate. However, the strategic decision of when to use philanthropic resources is a matter of personal philosophy about social needs, involves the discounting of the future value of money, makes projections about investment growth and predictions about future needs (Frumkin, 2006). Indeed, the question of timing is as much a matter personal choice as any aspect of philanthropic activity. Brody (2006) stated: “The absolute discretion of a donor to give or withhold making a charitable gift—with whatever conditions the donor imposes—is, to some, the essence of private philanthropy.” This essence of private philanthropy, the freedom to choose when and how to give, has traditionally been given wide latitude under various legal regimes. There is no good reason why donor-advised funds should be any different.
2. The Transparency Issue.

One feature of donor-advised funds that makes them attractive to some donors, tricky to manage for many development officers, and concerning for reform advocates is the ability to give anonymously through a donor-advised fund. When donors establish DAF accounts, they name them. Some name the account after themselves, some take the opportunity to honor a beloved family member, and some use indistinctive titles, such as “The Doing Good Fund.” No matter what the name of the account, giving through a philanthropic intermediary adds a layer of separation between the donor and the nonprofit recipient. This creates challenges for nonprofit managers and fundraisers. Moreover, even those whose accounts reflect their own names may choose to make some of their grants anonymously, which will withhold any identifying information from the charity. Technically, it is the sponsor organization that is making the grant. While this creates additional challenges for the grantees, it should not be considered illegal.

For individual donors, donor-advised funds offer a more strategic way to regulate their direct acknowledgement and involvement with charities. Some donors do not want to be known for differing reasons. They may value the principle of anonymity from an ethical or moral perspective. Anonymity has long been praised as a virtuous aspect of charitable giving (i.e. Maimonides’ eight levels of Tzedakah). They may not want to be constantly solicited by nonprofits, which happens when people become known for making large donations. So donor-advised funds offer a service to individual donors who desire less transparency around their giving. Individual donors already enjoy the right to give
directly to a nonprofit and keep that donation anonymous. Charities have the right to maintain the confidentiality of their donors, and do not have to report who donated to them. DAFS merely facilitate anonymity. Requiring individuals or DAF sponsors to disclose all donations would be overreaching the current regulations of charitable giving and raise serious ethical questions for those who value anonymity.

While we want to protect the freedoms of individuals, other entities that donate through donor-advised funds may not warrant that same level of freedom. As Madoff (2014) and Callahan (2017) have pointed out, private foundations are able to funnel money through donor-advised funds anonymously, thus defeating one part of the regulations governing them. One of the purposes of the Tax Reform Act of 1969 was to demand greater accountability and transparency from private philanthropists who could yield significant influence in society through publicly sanctioned foundations. The idea was to inform the public on what causes private foundations support. Donor-advised funds offer private foundations a loophole for this transparency regulation. Technically, a private foundation can grant to a DAF first, then to another charity, and only report the grant to the DAF sponsor, while the public remains uninformed about the ultimate recipient. Clearly this is a breach of the standing legal structures governing private philanthropy. Future public policy needs to close this loophole by disallowing private foundations the ability to grant to donor-advised funds.

Related to this transparency loophole, donor-advised funds also offer private foundations an out for meeting their minimum payout rate. Madoff (2014) explained, “Adding to the
problem is that private foundations can meet their 5-percent payout rule simply by transferring money to donor-advised funds rather than giving to real charities.” I have interviewed philanthropists with private foundations who use the DAF as an “overflow” fund during years when their foundations do not have enough qualifying grants to meet their payout quota. Again, in support of the current legal framework, I advocate for a ban on private foundation transfers to donor-advised funds. Doing so would close two loopholes for private foundations – the ability to anonymize giving, and the ability to defer their minimum granting.

Another issue relating to transparency comes from DAFs transferring money to other DAFs. Oftentimes donors will open a different DAF account because of an easier platform or an affiliation with a particular organization. While this is not illegal, and allows for flexibility in the market, it does create some reporting opaqueness. When a DAF sponsor returns Schedule D of the Form 990, it only reports the “aggregate value of grants.” Right now, that aggregate value includes transfers to other DAF sponsors, because they are technically 501(c)(3) organizations. This aggregate value can be misleading when trying to determine payout rates and other measures of DAF activity. A special report by Giving USA (2018, p. 29) reported that, “From 2012 to 2015, DAF-to-DAF granting accounted for 4.4 percent of all dollars from donor-advised fund grants.” DAFs do report a list of all of their grantees in Schedule I, but it is extremely difficult to determine all of the DAF-to-DAF grants. In order to report these grants, there would need to be a national registry of DAF sponsors, which is currently lacking, so that DAFs could track grants to other DAFs by EIN. Ultimately, such a measure would not affect the
philanthropic activity of donors, but bring greater accountability and transparency to this unique subset of nonprofits.

3. **The Cost Issue.**

Smart donors can maximize the tax-advantages of giving by using a donor-advised fund. In years when they experience a liquidity event, or realize a capital gain, donors give some or all of the appreciated asset to a donor-advised fund. DAFs facilitate the reception and liquidation of appreciated assets, including real-estate, closely held business stock, and other complex gifts. In this way, the giver forgoes paying a capital gains tax on the appreciation of the asset, but also receives a tax deduction for the fair market value of the donated asset. While donations of appreciated assets to most public charities enjoy these double benefits, similar gifts to private foundations are not valued at the fair market value, but rather at the cost basis, and thus do not maximize the deduction (Andreoni, 2017).

This differentiation in treatment may seem unfair at first, but important distinctions between private foundations and DAFs must be articulated. Donors who use private foundations enjoy much more control over their charitable money than donors who give through DAFs. Part of the 5% payout for private foundations may be used for administrative costs of running the foundations which can be paid to oneself or a family member. These administrative expenditures can include travel and other expenses related to running the foundation. Distributions from foundations can be directed toward
individuals or other causes, as the board of the foundation sees fit, not just grants to public charities. By contrast, DAF users cannot pay themselves out of their DAF account to administer their philanthropic activities; they cannot use DAF money for travel or other personal expenses relating to their giving; and they can only forward their DAF money to other qualified 501(c)(3) organizations. Comparing the tax-treatment of private foundations to that of DAFs is not comparing apples to apples.

As mentioned before, donating appreciated assets to any public charity enjoys the double tax advantage of avoiding capital gains tax and deducting the full market value. Donor-advised funds merely facilitate the reception of non-cash assets, and allow more flexibility for how and when to distribute the charitable donation. Consider a real-estate developer who wishes to give some property to charity. Donating an appreciated real-estate holding that belongs to a family-run LLC may be a fairly complicated gift for a small charity to receive, and the donor may not want just one charity to receive the gift. The developer can gift the property into a donor-advised fund; the DAF sponsor liquidates the assets; and then the donor can make cash grants out of the account to the charities of choice whenever he or she decides. Savvy givers plan ahead and use DAFs to bunch giving into one year, taking full advantage of their maximum percentage (generally 50 percent) deduction from taxable income, and then take the standard deduction in future years as they continue to give out of their DAF. This technique is even more salient now with the recent doubling of the standard deduction. While these features largely explain why DAFs have become so popular, they also make DAFs more expensive for the government to sanction.
Donor-advised funds help people maximize the tax-advantages of giving, especially for those who have appreciated assets to give away, which generally means the wealthy (Andreoni, 2017). From a public policy standpoint these tax advantages for the wealthy represent a loss in tax revenues for the government. One question that reform advocates have asked is whether or not it is worth it to the public to allow donor-advised funds? Andreoni (2017) conducted a benefits and costs analysis of DAF activity, in an attempt to answer this question. He found that DAF donors contribute about 15% more appreciated assets, compared to high-income donors. He modeled the costs in tax-revenues lost and the benefits in increased giving through DAFs. He concluded that DAFs help donors minimize taxes more than they increase giving, resulting in a net loss for the public sector. These findings offer an important piece of the puzzle for developing policy around DAFs, but they do not represent the whole picture of DAF usage.

In his analyses, Andreoni (2017) compared DAF users to high-income (over $500,000) itemizers from the Statistics of Income (SOI) data set from the IRS. This comparison was based on the average DAF contributions, calculated by aggregated organizational data. Heist and Vance-McMullen (2019) found that mean DAF statistics are highly skewed, and do not accurately represent the heterogeneity among DAF sponsors. The net losses reported by Andreoni may be limited to only the high-income segment of DAF user and that segment may be smaller than previously suspected. In 2017, the number of accounts jumped by 174,144 in one year. This increase was largely due to a huge influx of corporate employees who signed up for donor-advised funds through the online giving
platform Benevity. Ebeling (2018) reported that these donors work for large corporations and are generally younger millennial employees. They mostly give out of their paychecks, not appreciated assets, and most of these donors do not itemize their charitable deductions (Ebeling, 2018). If this growing segment of DAF users do not donate appreciated assets and do not itemize their deductions, then this influx of DAF donors do not account for any losses in tax revenues. In terms of benefits to nonprofit sector and society, future research will need to investigate if and how much such platforms increase charitable giving. However, all of these employees work at corporations that match employee giving (Ebeling, 2018). Given that we know that matches effectively incentivize donors (Karlan & List, 2007; Eckle & Grossman, 2003, 2008), and assuming that this online platform facilitates the process of giving, which reduces the transaction costs (c.f. Huck and Rasul, 2010), then we can assume that such workplace giving platforms will increase charitable donations.

Not all regulations for donor-advised funds would affect such workplace givers. For example, Andreoni (2017, p. 39) suggested limits on advantages for non-cash assets, or “requiring non-cash contributions to DAFs be paired with additional cash contributions.” Such measures would attenuate the cost of lost revenues to the IRS by forcing donors to liquidate part of an asset and pay capital gains or donate cash from income which can be deducted but does not avoid capital gains tax. Colinvaux (2017) identified one of the problems of non-cash donations, that the value of the asset can change during the time that it goes into the DAF and finally to the grantee. This is especially problematic if the asset loses value after being transferred into the DAF, because the donor gets a deduction
of the fair market value at the time of donation, which may be more than what the grantee ultimately receives. In this case the donor receives a tax break that is not commensurate with the benefit to the charity. To moderate this potential unfairness, Colinvaux (2017) proposed a net-benefit-to-charity approach of valuing non-cash assets. This approach would effectively reduce the tax-advantages for wealthy DAF donors.

The perception of the efficacy of regulating tax deductions for the wealthy largely depends on their perceived purpose. In his history of the last 100 years of the tax deduction (implemented in 1917), Duquette (2018) explained, “the contribution deduction was created to encourage voluntary giving to public purposes by rich industrialists who had made their fortunes in business.” The perception of the deduction as a way to encourage giving has morphed into a perception of it being an implicit cost for government (Duquette, 2018). In regards to donor-advised funds, if the purpose of the charitable deduction is a cost to government that should be minimized, then the proposed regulations mentioned above would be effective measures. If the purpose of the tax-deduction rules were to encourage the voluntary, private provision of public goods, then such regulations would not be effective because they disincentivize donors by raising the price of giving. From the perspective of nonprofit managers and fundraisers, such regulations would be seen as disincentivizing major gift prospects. In professional fundraising, some of the most vital donations for a nonprofit organization come from major gifts and planned gifts which frequently involve the donation of appreciated assets (Ciconte & Jacob, 2009; Dove, Spears, & Herbert, 2002; The Fundraising School, 2010). DAFs are often used as intermediaries to liquidate such assets. Regulations limiting the
ability of donors to utilize appreciated assets to make major gifts and planned gifts would be counterproductive to the development of the nonprofit sector.

Evaluating the costs and benefits of DAFs to society and the nonprofit sector is a complex and evolving task. While DAFs may decrease tax revenues from the wealthy, they may also increase charitable giving among non-itemizers. A central element of this question is whether DAFs increase total giving or if donations to DAFs substitute other forms of charitable giving, resulting in a zero-sum situation. Rooney (2017) summarily evaluated the question and noted that DAFs are not decreasing charitable giving. In approaching the substitutes theory, there is a perception that giving in the US has remained constant as a percentage of GDP over the past four decades (Perry, 2013). However, this is not the case. List (2011) found that, “Charitable giving as a percentage of GDP has climbed steadily since the mid-1990s, from roughly 1.5 percent to more than 2 percent today.” This growth in giving actually aligns historically with the proliferation of donor-advised funds. Similarly, Duquette (2018) found that philanthropic giving as a percentage of GDP has increased since the early twentieth century, due largely to tax deductions for wealthy business owners. More research on donor-advised funds will be needed to determine if they increase charitable giving, or if they merely act as substitutes for other forms of giving.

Policy Recommendations
Given the reasons for concern about the growth of donor-advised funds, reform advocates seek to protect public interests from a dramatic change in American philanthropy that is not yet fully understood. The history of governing nonprofits sets a precedent for a *laissez-faire* approach to regulating charitable activity (Brody, 2006). The commercial aspect of much of the DAF growth chafes the publicly-minded reform advocates, who are calling for more aggressive treatment of an increasingly popular charitable industry.

Some of the concerns for misconduct and loopholes are obvious, others are much more complex and remain under-researched. For those breaches of extant legal structures, simple fixes may obviate the few participants who have found the cracks in the system. For larger concerns over the nature of donor-advised funds as exempt entities and their role in controlling vast amounts of publicly subsidized charitable dollars, the formation of new public policies must carefully weigh the ramifications for current and future developments in the nonprofit sector. The advent of the donor-advised fund, for better or worse, was itself an unintended consequence of the Tax Reform Act of 1969. Mindful of the concerns of many reform advocates, in an attempt to preserve the public trust for the nonprofit sector and to preserve as much freedom of the philanthropic activity of Americans, I propose the following policy recommendations:

1. *Set a life-term for all donor-advised funds and require a remainder beneficiary designation.* By establishing a maximum payout period of the donor’s life, the timing concern is addressed in a way that maintains the maximum flexibility for donors, while preventing charitable funds to go unused in perpetuity. This policy would effectively treat DAFs as charitable
trusts with no split-interest and the option for earlier distributions. Such a provision would not likely interfere with the vast majority of donors who use DAFs for more immediate philanthropy, yet would prevent donors from carelessly leaving publicly subsidized funds without a plan.

2. **Prohibit Private Foundations from transferring funds to Donor-Advised Funds.** The most obvious violation of current legislation is the loophole for private foundations to transfer money to DAFs either to avoid transparency or to meet their minimum payout. Closing this loophole would prevent DAFs from being misused as well as clarify their unique functions vis-à-vis private foundations.

3. **Mandate Reporting DAF-to-DAF transfers.** Right now, it is difficult to accurately ascertain how much of a DAF sponsor’s grants are sent directly to operating charities and how much are merely transferring money to another DAF. This opaqueness can lead to inflated estimates of grantmaking by DAF sponsors. Requiring DAFs to distinguish between grants to operating public charities versus other DAFs, will provide a higher level of transparency.

4. **Do not limit the deduction for non-cash donations.** While DAFs may cost the federal government more than other forms of charitable giving in lost tax revenues, because donors can use them to maximize current tax-advantages, they should not be limited just for the sake of saving the federal government money. We still do not fully understand if and how DAFs may increase overall charitable activity. Any regulation that increases the price of giving for
wealthy donors can frustrate nonprofits’ efforts to secure major, transformative donations.

These four recommendations represent a policy approach that is designed to maintain the public trust in the nonprofit sector and maximize the benefit of nonprofits, while maintaining the maximum freedom for private citizens to exercise their voluntary desires to serve public causes.

**Discussion and Conclusion**

As early as the Elizabethan Charitable Uses Act of 1601, governments have encouraged private citizens to donate to public works and other charitable purposes. The United States has developed one of the most vibrant and pluralistic voluntary sectors in the world. State and Federal governments’ encouragement of charitable giving has been a vital element to the flourishing charitable sector in the United States. Government has also regulated philanthropic activity to ensure transparency and accountability of private citizens who take advantage of the favorable tax rules designed to encourage giving. The Tax Reform Act of 1969 singled out private foundations as needing more regulation, which increased their accountability to the public, but also had inadvertent consequences for the whole nonprofit sector. The propagation of donor-advised funds is one of those consequences. Congress has since identified DAFs as a type of nonprofit that required more public accountability, and through the Pension Protection Act of 2006 required better reporting, but did not alter their financial operations.
The rapid growth of donor-advised funds has rightly attracted critical attention from reform advocates who have raised insightful concerns about their entry into the charitable economy. Some of these concerns deserve immediate correction, while other concerns raise rather controversial debates. While all of these concerns are important to debate and consider, not all of them merit immediate action. Hundreds of thousands of people are now using donor-advised funds, with hundreds of thousands joining every year. The more we learn about their activity, the more we recognize the plurality of uses and the heterogeneity of their clients. Making changes to the law in order to more tightly regulate one segment of DAF users, like high-income itemizers, may inadvertently affect other users, like millennial corporate employees, or the even rest of the nonprofit sector.

One of the big questions that needs much more exploration is if and how DAFs increase charitable giving. From a behavioral economics perspective, when you decrease the price of a product, increase the value of the product, and lower the transactions costs, you would expect a much higher consumption of the product. These are the basic underlying forces that are driving the growth of DAFs. Tax-advantages lower the price; the timing advantages and flexibility increase the value of the philanthropic experience; and the handling of complex non-cash assets, as well as the online, easy-to-use platforms decrease the transaction costs for charitable giving. By the same rationale, we would expect that this cheaper, better, easier form of charitable giving would increase overall giving, but we are lacking any conclusive empirical evidence.
Some may argue that charitable donations should not be allowed to sit in an account, earning interest, while not being used to benefit the public. This matter of timing is biased toward the present and is more a matter of personal philosophy about social justice than a matter of legal correctness. Various forms of charitable trusts allow donors to defer the distribution of their charitable dollars to a later date. The only legal precedent for establishing a minimum payout is with private foundations, which regulations are designed to allow for perpetuity. In lieu of an allowance for perpetuity with a forced payout, I propose a life-term for the existence of a DAF account, essentially treating DAFs as an irrevocable planned gift with the flexibility of early distributions. Such a treatment would maintain equitable treatment across different forms of exempt entities.

Some flaws in the uses of donor-advised funds are obviously egregious and may easily be corrected with simple regulations that would not affect the majority of donors. Eliminating transfers from Private Foundations to DAFs would maintain the transparency standards established by previous legislation and ensure that DAFs are not being misused. More detailed reporting about grants going to other DAFs will also increase the transparency in the sector and provide more accurate assessments of how money is flowing through DAFs to other charities.

Until we can more fully understand how DAFs augment the nonprofit economy as a whole, we must refrain from imposing reactive regulations designed to increase the price of giving by the wealthy. In the meantime, more research must be conducted to better
understand how DAFs encourage donations to charitable purposes, which is the primary purpose of laws governing philanthropy.
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DISCUSSION AND CONCLUSION

The three articles found in this dissertation represent a seminal work in the research of donor-advised funds. While the immediate findings of the articles may be the most apparent contributions to the various bodies of literature to which they belong as well as the fields of nonprofit studies and philanthropic studies in general, what I hope does not get overlooked is the importance of multidisciplinary research in these fields and the necessity for the convergence of social sciences in understanding the complexities of nonprofit entities and philanthropic behavior. Donor-advised funds provide an urgent and meaningful impetus for economists, social psychologists, law professors, political scientists, public administration professors and the like to come together to wield the various perspectives and disciplines in an attempt to improve knowledge and understanding about such social phenomena.

Some groundwork has been laid for investigating the underlying behavior economic concepts and theories that help to explain why individuals use donor-advised funds and how these concepts can help us to understanding how lowering the price of giving and increasing agency in giving leads to more donative behavior and high rates of giving. One of the critical issues that was attempted in the original experiments but failed, was measuring the effect of time on giving decisions. Given that the time is probably the most important factor that increases the agency of the donor, more work needs to be done to investigate how giving a donor more time to make a giving decision effects the way that decision is made. Other features of donor-advised funds also need to be explored. For
example, DAFs anonymity is not well understood. How often do donors give anonymously through DAFs, why, and how does it affect their giving choices? Other features include the ability to involve family in charitable decision making, or the choices for investment of DAF assets, or the facilitation of non-cash assets. All of these issues present new and exciting topics for research in nonprofit philanthropic studies. They will require multidisciplinary approaches involving various techniques and theoretical frameworks.

One of the biggest limitations of the dissertation is the lack of data on individual giving behavior. Without individual-level data, so many of the most important questions about donor-advised funds will go unanswered. The organization data gives us some indications about trends and the various uses of DAFs based on differing sizes and types of sponsors, but these differentiations are too simple to accurately describe the full population of DAF users. Moreover, the heterogeneity of activity among sponsors may only be a reflection of the heterogeneity that exists between individual DAF users. If heterogeneity between organizations causes us reason for pause in developing policy to regulate DAFs, how much more will the heterogeneity among individual DAF users be reason to think critically about how public policy will affect the growing population of DAF users.

In order to pursue the critical research needed for understanding individual DAF usage, I am currently working to compile samples of deidentified account-level data from a representative sample of DAF sponsors. Once such data is available we can begin to explore how various demographic factors relate to DAF usage; we can investigate the
relationship between investment choices and charitable choices; we can research the
critical issue of timing in DAF giving, and truly begin to understand the flow of money,
and the life-cycle of DAF usage.

One of the main finding of article two was that DAFs are resilient to recession
economies, but we don’t know by what mechanisms this resilience is manifested. Are
there only certain types of DAF users that give in the recession, or those who have certain
levels of assets? DAFs may also be resilient to microeconomic shocks or changes. For
example, it could be that DAFs allow older Americans to continue or even increase
charitable giving post-retirement, when their income is diminished and limited. In other
words, how are DAF used at different stages of life? The bottom line is that we know so
little about who uses donor, how they use them, and why. For those who conduct research
in the area of charitable giving, philanthropy, and nonprofit studies, there is much work
to be done on understanding donor-advised funds. This work will require academics from
multiple disciplines as well as the collaboration of donor-advised fund sponsors and
users.

Charitable activity is one of the great mysteries of human behavior. Donor-advised funds
have given us a twist to how charitable giving is done in America. Unraveling this twist
allows us insight into the inner-threads of the act of give to others.
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