GREEDY OR GRATEFUL? ASKING FOR MORE WHEN THANKING DONORS

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June 2019

Revised March2021

COWLES FOUNDATION DISCUSSION PAPER NO. 2183R

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We thank HelpAge India for its support for the project. The authors thank Nathan Novemsky, Taly Reich, Karen Winterich, Guy Voichek, and Minju Han for helpful discussions and comments, and participants at the Yale SOM Quantitative Marketing Lunch Workshop for comments and feedback.

Greedy or Grateful?

Asking for More when Thanking Donors

Charities routinely send "thank you letters" and small gifts to express gratitude to donors but seek to defray these costs by making additional asks for donations and/or engagement. But the "ask for more" can backfire if potential donors perceive persuasive intent in the expression of gratitude, inducing reactance. We hypothesize that such reactance and its impact on giving will vary by donor loyalty. Loyal donors are more likely to experience reactance to additional asks, muting the feeling of reciprocity aroused by the expression of gratitude to suppress giving. In contrast, non-loyal donors are less likely to experience reactance, and therefore more likely to channel the feeling of reciprocity toward giving. We test our hypothesis using a large-scale natural field experiment involving nearly 180,000 past donors to a leading charity in India. We find evidence in support of our hypothesis. We therefore recommend that additional asks only be made to non-loyal donors. Such differentially targeted ask messages based on past donation behavior, using data readily available to charities, can increase overall donation amounts by 12.8-17.5%. Our findings highlight that purely cross-sectional experiments that do not account for past donor/customer history may offer incomplete insight and lead to erroneous managerial implications.

Keywords: gratitude, field experiments, reactance, fundraising, donor relationship management, nonprofits

JEL Codes: L31, M31, M37, C93

INTRODUCTION

As nonprofits increasingly depend on private individual giving, in particular small donations from a large donor base,[1] the use of marketing and persuasion techniques for fundraising is gaining in importance. Traditional marketing concepts like customer relationship management (CRM) can help nonprofits in their donor relationship management (DRM) efforts. Just as CRM encourages ongoing customer engagement to enhance customer retention, cross-sell, and up-sell, DRM encourages ongoing donor engagement with the goal of generating regular donations of increasing magnitude (Sargeant 2008, Netzer et al. 2008). The motivation to engage with existing customers/donors is similar for both for-profit and nonprofit organizations: it is more cost-effective to keep an existing customer/donor than to attract a new one (Sargeant 2001).

A common practice for managing and growing donor relationships is to express gratitude to donors for their past support using "thank you" letters (Bennett 2006, Merchant et al. 2010). Thank you letters may sometimes also be accompanied by a token gift. It is well-understood that expressions of gratitude and token gifts generate reciprocity (Falk 2007, Grant and Gino 2010, Raggio and Folse 2011, Eckel et al. 2016). In the context of fundraising, the expression of gratitude can therefore lead to further donations (Merchant et al. 2010). Thus, even though thank you and gift campaigns are expensive, nonprofits find them effective tools for donor relationship management because the additional funds raised not only defray the costs of the gratitude campaign, but even augment fundraising. For example, Food for the Poor, a nonprofit, receives more than one-fifth of its net income from direct mail thank you letters.[2]

But nonprofits often go further than expressing gratitude. Beyond expressing gratitude and sending token gifts for past donations, they combine the expressions of gratitude with a fundraising ask. Though Ahern (2017) notes that fundraising professionals recommend that thank you letters should not include additional asks, Claire Axelrad, a fundraising professional, highlights that the

[1] In 2017, individual giving represented 72% of charitable giving in the U.S. (Source: `https://nonprofitssource.com/online-giving-statistics/`)

[2] Source: `https://trust.guidestar.org/how-quickly-should-you-thank-a-new-donor`, excerpted from Ahern (2017).

practice of combining additional asks with thanking is common:

> "21 percent of donors say they were never thanked for their gifts. Some weren't, but my hunch is that a lot were. *They just didn't perceive what you sent them to be a thank you. Too often thank you letters sound exactly like fundraising letters.*"[3] (emphasis added)

The quote above reflects the conflict involved in *asking for more when expressing gratitude.* The central tradeoff arises from two conflicting effects: On the one hand, the additional ask can harness and convert more effectively the feelings of reciprocity aroused by the expression of gratitude to the concrete action of giving. Reciprocity, which can be induced by feelings of gratitude, is one of the most fundamental psychological principles of influence and drivers of persuasion (Cialdini and Rhoads 2001). In general, the marketing literature advocates a call to desired action in communications to elicit the desired action (Eisenberg et al. 2010, Niblick 2013). Specifically in the context of fundraising, research suggests that calls to action will lead to increased donations. On the other hand, persuasion research suggests that there is a flip side in asking for more when expressing gratitude; a call to donate as part of an expression of gratitude can be seen as having persuasive intent (McCullough et al. 2001, Morales 2005). While the expression of gratitude and the token gift can induce reciprocity and elicit donations, the perception or knowledge that the expression of gratitude is motivated by the intent to obtain more donations can negate the goodwill generated by the expression of gratitude and induce reactance. Reactance to a message can motivate individuals to do the opposite of the advocated message (Brehm 1966). Hence the decision of whether to ask for more will be determined by whether the negative reactance effect dominates the positive goodwill and reciprocity effect of expressing gratitude. Recognizing these conflicting tradeoffs, our primary goal in this paper is to answer the following research question: When thanking donors, should a nonprofit ask for more?

Our premise is that the answer to this question is not absolute. We hypothesize that such reactance and its impact on giving will vary by donor loyalty. Loyal donors are more likely to perceive an ask for more donation along with an expression of gratitude as being manipulative of their re-

[3] Source: https://www.linkedin.com/pulse/thanksforgiving-9-mistakes-nonprofits-make-thanking-claire/

lationship with the organization. Thus, loyal donors are more likely to experience reactance to additional asks for donation, muting the feeling of reciprocity aroused by the expression of gratitude and suppressing giving. In contrast, non-loyal donors are less likely to experience reactance, and therefore more likely to channel the feeling of reciprocity toward giving, increasing donations.

Our hypothesis on heterogeneous reactance to additional asks by loyalty may be related to the CRM literature. That literature classifies some marketing tactics as relationship-oriented and others as action-oriented, and finds that relationship-oriented tactics are more effective on loyals while action-oriented tactics are more effective on non-loyals (Rust and Verhoef 2005). To the extent that expressing gratitude for past donations is relationship-oriented, it is more effective on loyals, while asking for donations is action-oriented and more effective on non-loyals. In our context, this suggests that when the expression of gratitude and ask for donation are combined, the reciprocity benefit from expressing gratitude is lost among the loyals but enhanced among the non-loyals.

We next ask an auxiliary but related question. Rather than an ask for donation, how would an ask for engagement impact donations when coupled with an expression of gratitude? Here again, if the ask for engagement makes the expression of gratitude seen as having a persuasive intent, which is more likely for loyals, the induced reactance will lead to the suppression of any feelings of reciprocity among loyals. In contrast, non-loyals are less likely to experience reactance and therefore more likely to channel feelings of reciprocity toward giving. But the effect on non-loyals is complicated by the interaction between donations and engagement. A call to engage with the mission can do two things. First, the greater engagement with the mission can increase the want to "give" in response to the call to engage (Liu and Aaker 2008). If the desire to give is directed towards engagement with the mission rather than donation, the call to engage will decrease donations among non-loyals (Cornelissen et al. 2013, Kristofferson et al. 2013). However, it is also possible that individuals value being consistent in their actions so greater engagement could enhance donations (Heider 1946, Lee and Hsieh 2013). Alternatively, if the non-loyals find the call to engage costly or not feasible, then it can lead to positive spillovers on donations through

donors' preference to donate (Feldman 2010). Thus we conjecture that the call to engage will reduce donations among loyals, but it is an empirical question as to whether the ask for engagement increases or suppresses donations among non-loyals.

Finally, we ask how a dual ask for both donation and engagement impacts giving. We conjecture that such a dual ask makes the persuasive intent even more salient and therefore induces reactance not just among the loyals, but also among the non-loyals, reducing the arousal of reciprocity among both groups. Therefore we conjecture that the dual ask will suppress giving for both loyals and non-loyals.

To answer our research questions, we conduct a large-scale natural field experiment in cooperation with one of India's leading charities, HelpAge India, a nonprofit that provides assistance to the elderly who lack social security. We alter the asks sent in HelpAge's annual thank you letter to 178,971 warm list donors (i.e., donors who have previously given to the charity within the last 7 years). Alongside the thank you letter, everyone receives a token gift of a small pocket diary. The default thank you letter is the control condition. The three treatment conditions include: (1) a call to donate within the letter; (2) a call to engage within the letter for which we include a Facebook like request; and (3) the combination of a call to donate and a call to engage. We use a Facebook like request as the call to engage because HelpAge (and many nonprofits) seeks to use Facebook to engage with their donors on social media.[4] To test our hypotheses, the primary outcome measures of interest are the decision to donate and the donation amount. We also record Facebook likes to assess the relationship between donation and engagement.[5] Given our interest in studying how donor loyalty moderates the variables of interest, we ensure that donors are randomized across the experimental conditions based on various observable metrics of past giving behavior. We operationalize loyalty in terms of recency and frequency of giving. Since donation amount is highly correlated with average past donation amounts, we also control for the average of past donations. As the base rates of giving are much higher online, but most donors are offline, we conduct sep-

[4]According to the 2018 Global NGO Technology Report, Facebook is the most used social media channel with 93% of nonprofits having a Facebook page and 85% of nonprofits report posting on Facebook at least once a week.

[5]We do not compare like rates across conditions as there is no Facebook like in the control condition.

arate analyses for offline and online donors to completely control for any potential unobserved channel-based differences that may impact responses to the asks.

Our results support our main predictions about heterogeneous responses to additional asks based on loyalty. When the expression of gratitude is coupled with the the call to donate, it significantly reduces donations among the loyal (recent and frequent) segment, but increases donations among the non-loyal (non-recent and/or non-frequent) segment. We find qualitatively consistent results for both historically offline and online donors for both probability of donation and amount given.

When the expression of gratitude is combined with a call to engage through a Facebook like, our results qualitatively replicate the call to donate. The ask for a Facebook like also significantly reduces donations among the loyal segment, but increases donations among the non-loyal segment. Again, we find qualitatively consistent results for both historically offline and online donors for both probability of donation and amount given. We also note that in our data, the call to engage had very limited direct impact on engagement as very few people actually responded by liking HelpAge on Facebook, so concerns of "slacktivism," where the choice to engage with the nonprofit substitutes for actual donations, was not a driver of the reduced donations from the loyal donors.

Finally, we find the net effect of a simultaneous call to engage and donate is negative for loyal donors and no better than an ask for either donation or engagement for non-loyal donors. Thus we conclude that asking for more when thanking loyal donors arouses reactance, whether it is for additional donation, engagement, or both. In contrast, asking for more when thanking non-loyal donors effectively converts the gratitude-based reciprocity into giving, but it is suboptimal to ask for too much (i.e., both donation and engagement).

Our results have clear implications for fundraising. It shows that targeting the content of messages based on donor loyalty that can be proxied easily by past giving behavior can increase expected donations in economically meaningful magnitudes. Nonprofits should refrain from asking for more, either for donations or for engagement, from their loyal customers as it will induce reactance that suppresses donations. However, it is optimal to make such an ask to non-loyals—such

asks indeed will have a positive impact on donations. But it is never optimal to ask for both donation and engagement. For HelpAge, back-of-the-envelope calculations suggest that a targeted ask strategy can increase donations; donations increase by 17.5% when the nonprofit includes an ask for donation only to non-loyals, and 12.8% when it includes an ask for engagement on Facebook only to non-loyals.

Our key contributions are as follows: Theoretically, we expand on the literature of whether we should harness the feelings of reciprocity aroused by expressions of gratitude into desired fundraising behavior through a call to action. We conjectured that the net effects would be moderated by past loyalty and find evidence for the conjecture using a field experiment. For those who are already loyal and giving, the negative effect of reactance induced by the ask dominates the positive impact of asking. In contrast, for those who are non-loyal, the net effect is positive.[6] In addition, while the vast majority of reactance studies have been done in the West among fairly narrow populations (e.g., university students), our study is based on a nationwide sample from a non-Western country; the negative response to asks when thanking among loyals can be thought of as a replication of the reactance hypothesis across cultures in a different context.

Substantively, this paper contributes to the growing literature on the design of fundraising content (Karlan and List 2007, Small and Verrochi 2009, Winterich et al. 2009, 2013, Khodakarami et al. 2015, Sudhir et al. 2016, Dubé et al. 2017, Townsend 2017, Fajardo et al. 2018) and has clear managerial implications. Using readily available data, nonprofits can increase expected donations by targeting content based on past prosocial behavior. When thanking, our results show that nonprofits need to be cognizant of not asking for more from their loyal donors or risk appearing greedy rather than grateful. However, it is important to ask the less loyal donors so that their aroused reciprocity can be channeled effectively to a behavior desired by the nonprofit (donation or engagement).

[6]The literature on gratitude often refers to Adam Smith's famous quote: "The sentiment which most immediately and directly prompts us to reward, is gratitude..."; but the results in our paper about the negative effects of reactance highlight that Smith was even more prescient in that he also anticipated aspects of the role of reactance, by noting immediately after his widely quoted statement "...that which most immediately and directly prompts us to punish, is resentment" (Smith 1759, p. 154).

Methodologically, our analysis highlights that bridging empirical work in behavioral and quantitative marketing by combining between-subjects field experiments with individual-level panel data on these subjects can lead to important insights due to heterogeneous treatment effects. Whereas behavioral studies are typically cross-sectional studies (the case for most of the work on gratitude) and therefore typically focus on average treatment effects, our setting allows for the analysis of heterogeneous effects based on previous donation behavior. The treatment effects are heterogeneous not just in terms of size, but also in sign. Our results also suggest that one reason effects that are discovered in lab studies with greater control over the environment through manipulated and temporary emotions may not be replicated in field settings is due to the substantially larger heterogeneity among customers and donors in their attitude towards the product category. Mere randomization without controlling for these heterogeneous impacts may produce null effects. For instance, beyond the separation between loyals and non-loyals, the offline and online differences captured some significant differences in base rates that would have swamped any differences induced by the treatments if we merely relied on randomization for control.

Finally, we note that donor relationship management can be costly and nonprofits receive much greater scrutiny of their operational expenditures compared to for-profits due to overhead aversion (Gneezy et al. 2014). Nonprofits need to keep fundraising/marketing costs low not simply to keep such costs down, but also because nonprofits are often penalized for having a high share of donations going into fundraising/relationship maintenance overheads, even if they are extremely efficient at using those funds to deliver on their cause (Rose-Ackerman 1982, Gneezy et al. 2014). Thus, nonprofits face extra pressure relative to for-profit organizations to keep marketing costs minimal, and leverage the funds for maximal efficiency in fundraising. In this context, increasing the donations raised from these relationship management campaigns are even more valuable in nonprofit settings.

The rest of the paper is organized as follows. First, we overview the related literature that motivates our hypotheses and the need for a field experiment. Next, we lay out our hypotheses around the heterogeneous impact of asking for more when thanking donors of different behavioral

loyalty. We then describe the field experiment and its results. Finally, we discuss the managerial implications of the paper before concluding with a summary of the results and future research directions.

RELATED LITERATURE

The paper is connected to three streams of literature: (1) gratitude and reciprocity, (2) persuasion and reactance, and (3) customer relationship management. We discuss each in turn.

Gratitude

There is a large stream of literature that links feelings of gratitude to prosocial behavior (McCullough et al. 2001, Tsang 2006, Bartlett and DeSteno 2006, Algoe et al. 2008, Palmatier et al. 2009, Grant and Gino 2010, Raggio and Folse 2011). Interestingly, the research documents that not only does gratitude lead to prosocial behavior in the person expressing gratitude, but also in the person receiving gratitude. Several studies show that benefactors that are thanked are more likely to engage in prosocial behavior than those who are not thanked (Clark et al. 1988, Rind and Bordia 1995, Merchant et al. 2010, Andreoni and Serra-Garcia 2021). For example, Rind and Bordia (1995) find that servers who write "thank you" on the back of restaurant bills can receive tips up to 11% higher than those who do not. Merchant et al. (2010) find that acknowledging donor gifts increases donation intentions while failing to thank donors decreases donation intentions.

Recently, there has also been attention on how gratitude impacts consumer behavior in for-profit settings. Research shows that customer feelings of gratitude to a firm can increase firm sales (Morales 2005, Palmatier et al. 2009, Wetzel et al. 2014). Morales (2005) finds in lab experiments that consumers are typically grateful to firms for sales effort and reward them with a sale. Similarly, Palmatier et al. (2009) demonstrate that relationship marketing investments generate gratitude in customers, increasing short-term purchase intentions. When customers feel grateful to a firm, they feel a need to return the favor and failing to do so may even induce feelings of guilt. In a nonprofit setting, Falk (2007) finds that the desire to reciprocate after receiving a gift with a direct

mail donation solicitation causes donors to reward a nonprofit with a donation. Overall, we have conclusive evidence that individuals who feel grateful to another person or firm have the need to reciprocate in both for-profit and nonprofit settings.

A complementary stream of research, however, cautions that such motivations for reciprocity are tempered by the perception that the action meant to induce gratitude and reciprocity was done with persuasive intent (e.g., Carey et al. 1976, Morales 2005). When consumers perceive the effort to be motivated by persuasion, they no longer feel grateful towards the firm and discount the effort (Morales 2005). Importantly, it is the perception of persuasion, which may not reflect true underlying motives, that triggers the discounting.

In this paper, we take the results from the literature on gratitude as given: that expressions of gratitude and giving gifts induce reciprocity and prosocial behavior. In our context, we recognize that the thank you note and the token gift induce gratitude and a feeling to reciprocate. What we focus on is the question of how "asking for more" impacts giving by leading donors to perceive the intent to persuade.

Persuasion and Reactance

Persuasion attempts threaten an individual's freedom to behave a certain way or to have a certain opinion, inducing psychological reactance. Brehm (1966) first defined psychological reactance to capture the motivational state that emerges when individuals experience a threat to their freedom. When individuals are in a state of psychological reactance, they seek to restore their freedom and can do so by doing the opposite of the desired behavior, known as the boomerang effect (Dillard and Pfau 2002).

Critical to the arousal of psychological reactance is the perception of the intent to persuade, as was seen in the gratitude studies. Individuals who perceive a message to have persuasive intent are less likely to accept the message (Fransen et al. 2015). Friestad and Wright (1994) develop the Persuasion Knowledge Model specifically for sales settings, which details how knowledge of persuasion tactics used by firms is formed and impacts sales outcomes. When the intent to persuade

is detected, customers become suspicious of the salesperson's motives, feel manipulated, and are likely to respond unfavorably.

The perception of persuasive intent and therefore reactance has been shown to depend on message attributes. Past studies have found that forceful and intense language is more likely to induce reactance than more suggestive language (Dillard and Pfau 2002, Dillard and Shen 2005, Moyer-Gusé et al. 2012, Fransen et al. 2015). For example, Moyer-Gusé et al. (2012) find that the addition of explicit appeals to a more suggestive appeal induces reactance while the suggestive appeal alone does not.

While past studies have assessed the average effect of reactance across all individuals, this paper seeks to understand how reactance depends on the strength of the relationship between the customer and the firm. For example, donors who consistently donate may find an ask for more to be more off-putting than a donor who has given only once before. If reactance to asks for more in messages of gratitude results in a boomerang effect in giving, the loyal donor will reduce donations more than the one-time donor. To further explore this differential impact, we look to the customer relationship management literature.

Customer Relationship Management

The customer relationship management (CRM) literature recognizes that different customers have different levels of loyalty to a firm and should therefore receive different treatment from a firm (Bolton et al. 2004). A firm's best customers are often prioritized in terms of firm effort because they account for a large percentage of profits. These customers then reward the firm with sales because of gratitude they feel for the effort the firm exerted (Morales 2005, Palmatier et al. 2009, Wetzel et al. 2014). Indeed, Wetzel et al. (2014) find that firm prioritization programs positively impact profit through customer gratitude and sales growth. However, the authors point out that the flip side to gratitude among these prioritized customers is a sense of entitlement, which increases service costs. In a similar way, loyal donors may expect (and feel entitled to) the expression of gratitude, and the persuasion ask in combination with the expression of gratitude may therefore

nullify the expression of gratitude, creating greater reactance among the firm's most loyal customers relative to less loyal customers.

The CRM literature characterizes firm interventions as either relationship-oriented or action-oriented (Berry 1995, Garbarino and Johnson 1999, De Wulf et al. 2001, Rust and Verhoef 2005). Relationship-oriented interventions encourage relationship-building between the customer and the firm while action-oriented interventions encourage a more immediate action and are transactional in nature. In particular, marketing practitioners have long encouraged the use of a call to action (CTA) to encourage customers to perform a desired action. A CTA is any instruction to the audience designed to provoke an immediate response (e.g., phrases in a call script, a web page "click here" button). Thousands of pages in practitioners' guides can be found on the importance of a CTA (e.g., Eisenberg et al. 2010, Niblick 2013). The effectiveness of these two types of firm interventions depends on customers' relationship with the firm. Rust and Verhoef (2005) find that relationship-oriented interventions are effective among loyal customers while action-oriented interventions are effective among non-loyal customers. Compared to non-loyal customers, a firm's most loyal customers expect greater relational value from the firm. To the extent that thanking is relationship-oriented and asking for more is action-oriented, the thank you alone should be more effective on loyals and asking for more should be more effective on non-loyals.

HYPOTHESES

In this section we develop our hypotheses, which build on the above literature and motivate the experimental design.

Call to Donate

The first question we seek to answer is whether a call for donation coupled with an expression of gratitude differentially impacts loyal and non-loyal donors. A call to donate provides clear instructions to donors regarding a desired action. While a call to donate encourages giving, it also risks arousing reactance by inducing suspicion about the sender's motives and perceptions of manipu-

lation. Based on the CRM literature, we hypothesize that the perception of an ask for donation varies by donor loyalty, which we define using the recency and frequency of past donations. CRM studies typically characterize recent and frequent customers as more loyal customers and lapsed and/or infrequent customers as less loyal customers. Because monetary value reflects an individual's ability to donate rather than the potential donor's investment in the cause, we have no prior beliefs about the impact of asks on donors based on their previous giving amounts.

We hypothesize that a call to donate will induce greater reactance among loyal donors than non-loyal donors because loyal donors will perceive the ask as being more manipulative of their relationship with the organization than someone who does not have such a loyal history. Loyal donors expect more relational value from the firm (Reinartz and Kumar 2000) and reactance reduces, if not eliminates, the good will generated by a letter of gratitude. Since reactance can induce a boomerang effect, we conjecture the call to donate will have a net negative effect on more loyal donors and decrease the likelihood of giving and/or the amount given. In contrast, we conjecture non-loyal donors are less likely to experience reactance because they are less likely to expect relational value from the firm. In addition, the CRM literature finds that action-oriented interventions are more effective among a firm's less loyal customers. Therefore, we hypothesize that the positive effect of the call to donate will dominate and increase giving for non-loyal donors.

We summarize our key hypothesis around the call to donate as follows: When coupled with an expression of gratitude, an ask for donation increases donations among non-loyal donors, but decreases donations among loyal donors.

Call to Engage

We also consider another ask: a call to engage. There are many benefits to keeping customers engaged. Engaged customers are less likely to churn and more likely to make larger purchases. Likewise, engaged donors are more likely to give and to give more (Sargeant 2008, Netzer et al. 2008). We therefore also explore the option of asking for additional engagement from donors, which we operationalize through a Facebook like request. Facebook is a low-cost channel for

attracting attention, disseminating information and evidence of a nonprofit's activities, and facilitating engagement (Waters 2011, Mochon et al. 2017). While a donation request generates the funds for a nonprofit to operate, a Facebook like request increases the potential for future engagement between the firm and donors. Although a call to donate may be more likely to be perceived as transactional and persuasion-driven, a call to engage may not be.

As before, we hypothesize that the extent to which a call to engage would enhance empathy for the mission and feelings of reciprocity is heterogeneous based on the donor's relationship. If the call to engage is perceived as being motivated by persuasion and generates reactance, which is more likely among loyal donors, then we expect a negative effect. The call to engage can impact not only Facebook liking rates, but also donations through a spillover effect so we conjecture a negative effect on Facebook liking rates and donations among loyal donors.

If the call to engage does not arouse reactance, which is more likely among non-loyal donors, then the ask for engagement will instead channel the aroused reciprocity from the expression of gratitude towards "giving," which can be expressed by liking on Facebook or donating. How the desire to "give" is distributed between the two actions is an empirical question. On the one hand, donors may fulfill their need to reciprocate by engaging rather than by donating, which would decrease donations relative to the control. Indeed, studies have found that Facebook engagement can lead to "slacktivism"—in that engaging on Facebook replaces more impactful action like donating and volunteering (Cornelissen et al. 2013, Kristofferson et al. 2013). On the other hand, a call to engage can arouse greater empathy for the cause, amplifying the desire to reciprocate, and increase donations indirectly (Liu and Aaker 2008). Liu and Aaker (2008) find that asks for time generate more donations than asks for money. Additionally, consistency of purpose (Heider 1946) suggests that a donor would be more likely to donate after accepting an invitation to engage. Studies have found that Facebook and other social media reinforce offline civic engagement (Christensen 2011, Lee and Hsieh 2013). Lee and Hsieh (2013), for example, find that individuals who signed an online petition were also more likely to donate to a related charity. Finally, it is also possible that donors may choose to donate rather than engage if engaging is costly. Past work has found that

individuals substitute volunteering with giving when volunteering is more costly (Feldman 2010).

We summarize our key hypothesis around the call to engage as follows: When coupled with an expression of gratitude, an ask for engagement is more likely to arouse reactance among loyal donors than non-loyal donors, negatively affecting donations among loyal donors. For non-loyal donors, it is an empirical question as to how the call to engage will impact donations.

Call to Donate and Engage

Finally, we conjecture that the dual ask for both donation and engagement is the most likely to appear motivated by a persuasive intent, arousing reactance not only among loyals but also among non-loyals. Unlike the call to donate, we hypothesize the negative effect of the increased salience of the more demanding ask will dominate the benefit of the call to action for non-loyal donors.

We summarize our key hypothesis around a call to donate and engage as follows: When coupled with an expression of gratitude, an ask for both donation and engagement decreases donations for both loyal and non-loyal donors.

FIELD EXPERIMENT

In this section, we first describe the setting of the field experiment and its design. We then describe HelpAge's warm list donors in terms of their past giving behavior since our interest is in the heterogeneous impact of asking for more in expressions of gratitude.

Experimental Setting

We run a large-scale natural field experiment in collaboration with HelpAge India. In FY17-18, HelpAge received ₹102.9 crores ($14.5M) in donations, 48% of which came from individual donors. Every January, HelpAge runs a Thank You campaign by sending a letter of gratitude to all of its roughly 200,000 warm list donors (i.e., donors who have previously given to the charity within the last 7 years). Nearly one-fifth of the FY17-18 donations came from the Thank You campaign. HelpAge's practice of sending Thank You letters to *all* warm list donors and not only

Figure 1: Default Thank You Letter (Control)

donors who gave the previous year allows for a wide range of heterogeneity in past giving, which we will describe below.

The default Thank You letter (see Figure 1) expresses gratitude to donors and is sent alongside a small pocket diary, which serves as a token of gratitude. The mailer also includes a link for online donations and a mail-in donation form but does not call for a donation. Donors have the option to donate online via HelpAge's website using credit card or offline via the mail-in form by check or credit card. The setting of our experiment is the January 2018 Thank You campaign.[7]

Experimental Design

The goal of the experiment is to understand whether a nonprofit should ask for more when thanking donors. To test this, we add to the default letter a call to donate, a call to engage through an ask to

[7]In the Web Appendix, we share an example of a regular mailer sent out annually during the month of October/November for comparison. The figure shown (Figure A1) is from November 2017; so it is the last mailer before our Thank You Campaign. As with all regular campaigns, the mailer asks for donations, and does not include a token gift. As can be seen, the content design is similar but it is not about thanking and is instead about asking.

like on Facebook, and a call for both donation and engagement.

In designing the field experiment, we had to balance the tradeoffs between managers' objectives with our need to rigorously test our hypotheses. During this time, HelpAge sought to increase donor engagement. For nonprofits that have historically had an offline relationship with donors, initiating online engagement can be challenging. HelpAge management hoped that an invitation to engage online using the offline mailer would introduce donors to engaging with HelpAge online. The hope was that donors who like the HelpAge Facebook page will more regularly receive updates about the charity's programs that demonstrate the impact of donors' gifts and, ultimately, increase giving. As a result, more samples were randomly assigned to conditions that involve a call to like on Facebook.

Table 1: Experimental Treatments Overview

Condition	Call to Donate	Call to Engage	Text Added to Letter	# Mailers Sent
Control	0	0		19,869
Call to Donate	1	0	"Please donate online or use the coupon below."	19,862
Call to Engage	0	1	"Please like us on Facebook at facebook.com/helpageindiaspage"	99,412
Call to Donate and Engage	1	1	"Please like us on Facebook at facebook.com/helpageindiaspage and also donate online or use the coupon below."	39,828

An additional compromise was made in designing a treatment that removed the mail-in donation form. As researchers, we wanted to understand the impact of the donation reminder on giving and therefore include a treatment without the form. Understandably, the organization was hesitant to remove the form since it is the offline channel for donation. As a compromise, they allowed us to remove the donation form if we included a Facebook like request because of the potential upside from increased Facebook engagement. Given the change in cost to giving due to the removal of the offline channel, we decide not to include this treatment in our analysis.

Figure 2: Thank You Letter Treatments

(a) Call to Donate

(b) Call to Engage

The resulting experimental treatments follow a 2 x 2 full factorial between-donors design in which the factors are the call to donate and the call to engage (Facebook like request). We summarize our between-donors experimental design in Table 1. The Control condition letter contains neither a call to donate nor a call to engage and follows the exact format that HelpAge has always used. The Call to Donate condition adds to the default thank you letter an ask for donation: "Please donate online or use the coupon below." Besides the additional sentence, all other aspects of the mailer remain the same (see Figure 2(a)). The Call to Engage condition adds to the default thank you letter an ask to like HelpAge's Facebook page: "Please like us on Facebook at facebook.com/helpageindiaspage," as well as a Facebook logo to the top right of the mailer (see Figure 2(b)). The Call to Donate and Engage condition includes both a donation ask and a Facebook like request in the letter and includes a Facebook logo. Table 1 summarizes the text added to the letter in each of the treatments along with the number of mailers sent under each condition. As previously noted, more donors are randomly assigned to the conditions that include an invitation to

engage on Facebook because of HelpAge's goal to increase donor engagement. The total number of mailers included in the 2 x 2 design is roughly 180,000. Out of the original 200,000 sent, 20,000 mailers were part of the no mail-in form condition and are not included in the analysis.

In all of the conditions, the donation options are the same. The design allows for the comparison of donation rates and donation amounts. The donation rates and amounts allow us to test our hypotheses around the effects of the call to donate, the call to engage, and the call to donate and engage on donations by loyal and non-loyal donors.

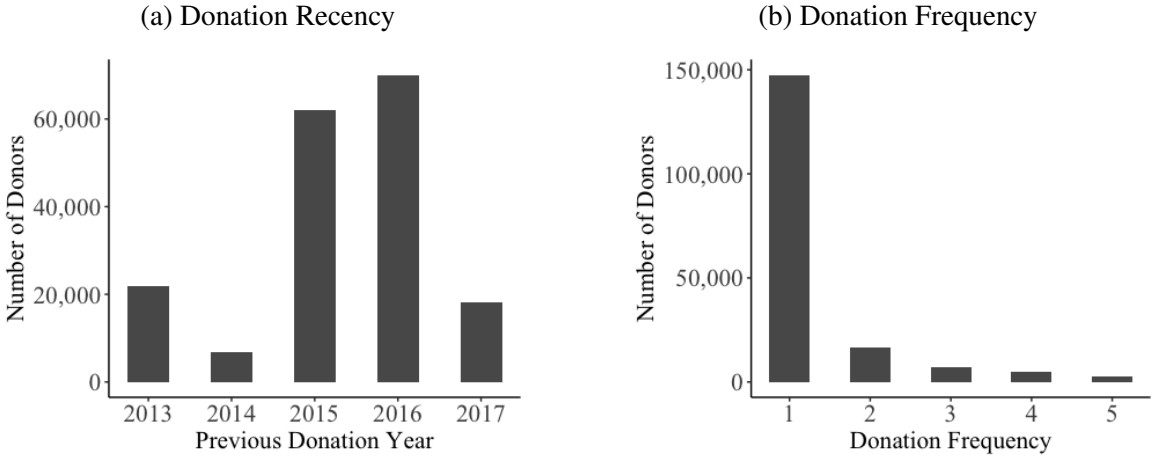
Randomization Check

To check for randomization of the treatments, we compare the mean recency, frequency, average donation per year conditional on giving, and percentage of historically online donors for each of the experimental conditions. Recency represents how recently the donor last gave and higher recency indicates more recent giving (1 = 2013,..., 5 = 2017). Frequency is defined as the number of years a donor gave between 2013 and 2017. Monetary value is the average donation given per year conditional on giving. To prevent the influence of outliers, we cap monetary values greater than ₹50,000 by setting them to ₹50,000. Historically online donors are donors who have previously given online. Table 2 shows the average recency, frequency, and monetary value over the previous five years as well as the percentage of online donors by treatment. A means comparison test indicates that past donation behaviors do not differ significantly among the treatments, thus confirming the randomization of the treatments.

Table 2: Past Giving by Treatment—Randomization Check

Treatment	Mean Recency	Mean Frequency	Mean Monetary Value (₹'000s)	% Previously Gave Online
Control	3.31	1.31	4.32	13
Call to Donate	3.32	1.31	4.29	13
Call to Engage	3.31	1.32	4.29	13
Call to Donate and Engage	3.32	1.32	4.35	13
ANOVA F-value	0.34	0.54	1.55	0.15
P-value	0.79	0.65	0.20	0.93

Figure 3: Past Donation Heterogeneity



Characterizing Past Donation Behavior

Since our hypotheses are about heterogeneous effects by donor loyalty, we next characterize donors by variables that have been found to be associated with behavioral loyalty, namely recency and frequency (Bolton et al. 2004, Rust and Verhoef 2005).

The warm list donors exhibit a wide range of donation behaviors. As shown in Figure 3(a), warm list donors highly differ in when they last gave. Only 10% of donors gave the previous year in 2017. Figure 3(b) indicates that 82% of warm list donors only donated one out of five years between 2013 and 2017 and 9% donated two out of five years. Of the remaining 8% of donors who gave more often, roughly half gave the previous year. There is a segment of donors who give year after year and who we will characterize as loyal donors. We define loyal donors as those who gave the previous year and have given at least three years out of the previous five. They constitute 4% of warm list donors but account for 10% of the total donation amount and 16% of the number of donations in the 2018 Thank You campaign. We characterize the remaining warm list donors who did not give the previous year or are non-frequent donors as non-loyal donors.

RESULTS

We begin by reporting the heterogeneous treatment effects based on loyalty segment. We then show that failing to account for heterogeneity by loyalty results in incorrect insights about including asks for donations and engagement within the Thank You mailer.

Descriptive Statistics

The Thank You mailer was sent in mid-January. The donation data covers the nine and a half weeks between January 25 and March 31. Of the 178,971 warm list donors included in the experiment, 1,839 made a donation during the time period of interest,[8] yielding a 1% donation rate.[9]

To prevent the impact of extreme outliers on the results, we cap outliers in donation amount to ₹50,000, which captures the 98th percentile of donations in the campaign.[10] To provide some initial evidence of heterogeneous treatment effects, Table 3 shows the average donation outcomes for all donors, the donation outcomes for recent and frequent donors (donors who gave the previous year and more than two out of the previous five years), and the donation outcomes for non-recent and non-frequent donors (donors who did not give the previous year and have given at most twice). Immediately we can see that the effects of the call to donate and the call to engage differ by group, even before more finely controlling for past giving. The average effects over all donors suggest small effect sizes but the results by past giving hint at a different story. The call to donate greatly decreases giving among the recent and frequent donors, decreasing the average donation per mailer sent by 35%. Meanwhile, the same call to donate greatly increases giving among the non-recent and non-frequent donors, increasing the average donation per mailer sent by 41%. Regarding the call to engage, the Facebook like request generated only 33 likes during this time window.

[8] During the month of March, HelpAge conducted some small campaigns but these were completely orthogonal to our treatments. As a robustness check we conduct separate analyses for the donation period prior to March and in March to isolate these effects, and our results remain qualitatively consistent.

[9] The donation rate is in line with the 1.2% donation rate in a different campaign on the HelpAge donor warm list (Sudhir et al. 2016).

[10] We also try capping the donation amount at the 95th percentile and the 99th percentile and the results are robust to this decision. The results are also robust to not capping donation amounts but we cap amounts so the effects are not overstated.

Although the call to engage was unsuccessful at generating likes it appears to have generated a negative spillover on donations among the recent and frequent donors, HelpAge's most committed donors.

Table 3: Donation Outcomes

	All Donors		Recent & Frequent		Non-recent & Non-frequent	
Treatment	Donation Rate (%)	Donation/ Mailer (₹)	Donation Rate (%)	Donation/ Mailer (₹)	Donation Rate (%)	Donation/ Mailer (₹)
Control	1.11	83	4.83	207	0.55	32
+Call to Donate	1.08	87	4.24	135	0.56	45
+Call to Engage	1.04	68	3.84	173	0.52	32
+Call to Donate and Engage	0.92	71	3.80	193	0.43	25

Another potential source of donor heterogeneity that could impact our results is donation channel preference. Table 4 shows the average donation outcomes of the control group as well as the profiles of historically online and offline donors. Online donors represent only 13% of donors but have much higher base rates of giving and give larger amounts. When we look at the past giving behavior of online and offline donors we see the two groups are quite different. Online donors have on average given more recently, more frequently, more monetarily, and are younger. Since the base rates of giving are higher online but most donors are offline, we conduct separate analyses for online and offline donors to control for any potential channel-based differences that may impact responses to the asks.

Table 4: Historically Online vs. Offline Donors

Channel	Donation Rate (%)	Donation/ Mailer (₹)	Mean Recency	Mean Frequency	Mean Monetary Value (₹'000s)	Mean Age
Online	4.13	380	3.72	1.46	4.81	44
Offline	0.65	37	3.25	1.29	4.23	56

Although the randomization check ensures that the averages of the RFM variables and percentage of historically online donors are the same across conditions overall, there can still be noise within subpopulations so we cannot test directly the differences in average donation rates across conditions by loyalty segment using z-tests. It is important to control for these differences within

subpopulations using logistic regression. Logit and tobit regression analyses allow us to adjust for covariates and improve the precision of our estimated treatment effects (Athey and Imbens 2017).

Regression Analysis

We report the results of logit and tobit regressions on whether donations are made and on donation amounts, respectively. The logit coefficients provide information on how a call to action impacts the decision to donate. The tobit coefficients provide information on how an ask impacts the donation amount, accounting for the fact that individuals cannot donate negative amounts. These coefficients are of great interest to nonprofits because they describe the aggregate effect of the treatments on charitable giving. We specify the model as follows:

$$(1) \qquad Outcome_i = f(\alpha + \beta Treatment_i + \gamma(Treatment_i \times Loyal_i) + \boldsymbol{\delta X_i} + \varepsilon_i)$$

where $Outcome_i$ represents the donation decision in the case of logit ($Outcome_i$ = 1 if individual i donated) and the donation amount (in ₹'000's) in the case of tobit. $Treatment_i$ is an indicator variable equal to one if the individual was exposed to the treatment. To allow for heterogeneous effects, we include an interaction with $Loyalty_i$, an indicator for loyalty. Finally, $\boldsymbol{X_i}$ is the vector of control variables capturing the past giving of individual i.

Loyal donors are defined as those who gave the previous year and gave at least three out of five years prior to the experiment. All others are considered non-loyal donors. We will subsequently assess the sensitivity of the results to other recency and frequency cutoffs. To control for past donation behavior we include recency, frequency, and monetary value (in ₹'000's) variables as continuous variables and define them as in the randomization check. The β and γ coefficients are the main coefficients of interest.

Tables 5, 6, and 7 display the logit and tobit regression coefficients for online and offline donors. We begin with a discussion of the call to donate, followed by the call to engage, and then the call for both donation and engagement.

Call to donate. The call to donate analysis shown in Table 5 uses only the data from the control and call to donate conditions to identify the effect of the call to donate. The results are consistent with our hypothesis. For loyal donors, the call to donate significantly reduces giving in terms of probability of donating as well as in donation amount for both online and offline donors. For non-loyal donors, the call to donate is statistically significant to positively affect giving for offline donors and the coefficient estimates for online donors are also positive, although not statistically significant. Interestingly, the effect on the offline group is easier to detect not only because it has a much larger sample size, but also because offline donors have a lower baseline rate of giving so changes in giving will generate large changes in the odds ratios. It is harder to detect effects for online donors because of their higher baseline rate of giving and smaller sample size. The results support our conjecture that the ask induces greater reactance among loyal donors but elicits the desired behavior from non-loyal donors.

The positive coefficients on the controls indicate that giving is increasing in the RFM variables. More recent donors, more frequent donors, and donors who have previously given more are more likely to give again and/or give more.[11]

Call to engage. The call to engage analysis shown in Table 6 uses data from the control and call to engage conditions to identify the impact of the ask for engagement. The results tell a very similar story to the ask for donation. For loyal donors, the ask induces reactance, generating negative spillovers on donations for online and offline donors.

For non-loyal donors, the call to engage is statistically significant to positively affect giving for offline donors. For non-loyal online donors, the coefficient estimates are positive and statistically significant for the logit but not statistically significant for the tobit. The positive spillover of the call to engage on donations could not have been generated by a need for consistency since very few donors liked HelpAge on Facebook. A potential pathway for why the ask to engage positively affected donations comes from the call to engage arousing greater empathy for the cause and amplifying the desire to reciprocate. Another potential pathway is through the substitution of likes

[11] In the Web Appendix, we include plots of the marginal effects of the calls to action for individuals of different past giving behaviors to show that the qualitative results are stable across individuals within a loyalty segment.

Table 5: Call to Donate Heterogeneous Treatment Effects

	DV: Donated (binary) Logit		*DV: Donation Amount Tobit*	
	Online (1)	Offline (2)	Online (3)	Offline (4)
Constant	-5.649^{***}	-7.353^{***}	-55.653^{***}	-65.304^{***}
	(0.393)	(0.300)	(4.432)	(4.209)
Call to Donate	0.038	0.498^{***}	0.352	3.120^{***}
	(0.167)	(0.148)	(1.343)	(1.044)
Call to Donate x Loyal	-1.594^{***}	-1.405^{***}	-16.566^{***}	-11.388^{***}
	(0.346)	(0.295)	(3.145)	(2.454)
Recency	0.147	0.098	1.670^{**}	0.782
	(0.097)	(0.082)	(0.776)	(0.556)
Frequency	0.862^{***}	0.926^{***}	7.607^{***}	7.000^{***}
	(0.067)	(0.059)	(0.727)	(0.592)
Monetary Value	0.039^{***}	0.031^{***}	0.577^{***}	0.425^{***}
	(0.007)	(0.007)	(0.064)	(0.055)
Pseudo R^2	0.163	0.136	0.117	0.102
Akaike Inf. Crit.	1,425	2,461	2,630	3,821
Observations	5,282	34,449	5,282	34,449

Note: *p<0.1; **p<0.05; ***p<0.01

with donations when engaging is costly.

Call to donate and engage. To assess the impact of asking for both donation and engagement rather than one or the other, we use the full dataset and share the results in Table 7. The results for the individual donation and engagement asks are the same as before. However, the call to donate and call to engage interaction coefficients tell us the effects of the two calls are not additive. Among loyals, asking for more when thanking, whether it is for a donation, engagement, or both, generates reactance and suppresses donations by similar levels regardless of the ask. Among non-loyals, it is generally worse to ask for both a donation and engagement than to ask for one of the two. The analysis supports our hypothesis of a negative reactance effect on loyal donors, but the dual ask did not increase the likelihood of reactance among non-loyals as we had hypothesized. Nevertheless, it is suboptimal to ask for both donation and engagement from non-loyals.

Summary of results on asking for more. Figures 4 and 5 summarize the donation rate and donation amount treatment effects by loyalty and channel preference segment for the three types of

Table 6: Call to Engage Heterogeneous Treatment Effects

	DV: Donated (binary) *Logit*		*DV: Donation Amount* *Tobit*	
	Online (1)	Offline (2)	Online (3)	Offline (4)
Constant	-6.207^{***}	-7.646^{***}	-54.576^{***}	-53.124^{***}
	(0.271)	(0.220)	(2.577)	(2.192)
Call to Engage	0.307^{**}	0.426^{***}	1.511	1.591^{**}
	(0.125)	(0.116)	(0.942)	(0.658)
Call to Engage x Loyal	-2.002^{***}	-1.752^{***}	-16.924^{***}	-10.644^{***}
	(0.168)	(0.158)	(1.449)	(1.051)
Recency	0.154^{***}	0.126^{**}	1.481^{***}	0.694^{**}
	(0.058)	(0.051)	(0.419)	(0.271)
Frequency	1.071^{***}	1.034^{***}	8.540^{***}	6.256^{***}
	(0.040)	(0.037)	(0.420)	(0.313)
Monetary Value	0.036^{***}	0.010^{*}	0.522^{***}	0.176^{***}
	(0.004)	(0.005)	(0.036)	(0.031)
Pseudo R^2	0.191	0.121	0.127	0.090
Akaike Inf. Crit.	4,264	6,798	8,024	10,156
Observations	15,878	103,403	15,878	103,403

Note: *p<0.1; **p<0.05; ***p<0.01

asks. The odds ratios and donation amount treatment effects are calculated from the logit and tobit regression coefficients in Table 7. Note that the filled triangles and circles in Figures 4 and 5, which represent loyal donors, are all below 1 for the logit and below 0 for the tobit. For loyal donors, who represent 4% of warm list donors (but who made up 16% of the number of donations in the Thank You campaign), any ask for more, whether for donation, engagement, or both generates reactance and hurts donations significantly. The unfilled triangles and circles represent non-loyal donors and are all above 1 for the logit and above 0 for the tobit. For non-loyal offline donors (83% of donors) and non-loyal online donors (12% of donors), the calls to action effectively converted the feelings of reciprocity induced by the expression of gratitude and token gift into donations. Although the negative effect of reactance on donations among loyals was much larger in magnitude than the positive effect of the ask on donations among non-loyals, non-loyals represent the vast majority of donors.

Table 7: Call to Donate and Engage Heterogeneous Treatment Effects

	DV: Donated (binary) Logit		*DV: Donation Amount Tobit*	
	Online (1)	Offline (2)	Online (3)	Offline (4)
Constant	-6.378^{***}	-7.737^{***}	-57.318^{***}	-58.139^{***}
	(0.242)	(0.193)	(2.300)	(1.992)
Call to Donate	0.194	0.657^{***}	1.136	3.353^{***}
	(0.169)	(0.144)	(1.296)	(0.895)
Call to Donate x Loyal	-2.166^{***}	-1.765^{***}	-20.013^{***}	-12.163^{***}
	(0.316)	(0.272)	(2.713)	(1.952)
Call to Engage	0.321^{**}	0.469^{***}	1.643^{*}	1.921^{***}
	(0.125)	(0.115)	(0.969)	(0.717)
Call to Engage x Loyal	-2.048^{***}	-1.842^{***}	-17.785^{***}	-12.174^{***}
	(0.158)	(0.149)	(1.394)	(1.071)
Call to Donate x Call to Engage	-0.312	-0.881^{***}	-1.978	-4.554^{***}
	(0.197)	(0.173)	(1.519)	(1.074)
Call to Donate x Call to Engage x Loyal	2.232^{***}	2.067^{***}	20.694^{***}	13.422^{***}
	(0.403)	(0.359)	(3.454)	(2.535)
Recency	0.198^{***}	0.108^{**}	1.783^{***}	0.591^{**}
	(0.050)	(0.042)	(0.365)	(0.242)
Frequency	1.070^{***}	1.073^{***}	8.819^{***}	7.089^{***}
	(0.033)	(0.031)	(0.360)	(0.286)
Monetary Value	0.035^{***}	0.016^{***}	0.532^{***}	0.238^{***}
	(0.004)	(0.004)	(0.030)	(0.026)
Pseudo R^2	0.189	0.128	0.127	0.095
Akaike Inf. Crit.	6,247	9,988	11,723	15,094
Observations	23,774	155,197	23,774	155,197

Note: *p<0.1; **p<0.05; ***p<0.01

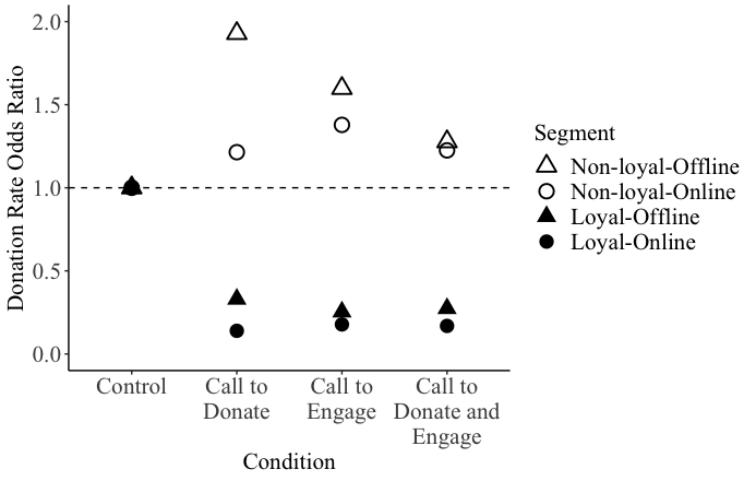
Robustness Checks

To check the robustness of the results, we conduct additional sensitivity analysis.

Replication by time period. We divide our data into two roughly equal 5-week time periods, January 25 to February 28 and March 1 to March 31, to assess if the results replicate separately. We recognize that since the giving data is split, the statistical significance of the results is also likely to be lower, but nevertheless, it would be interesting to see if the results replicate qualitatively.

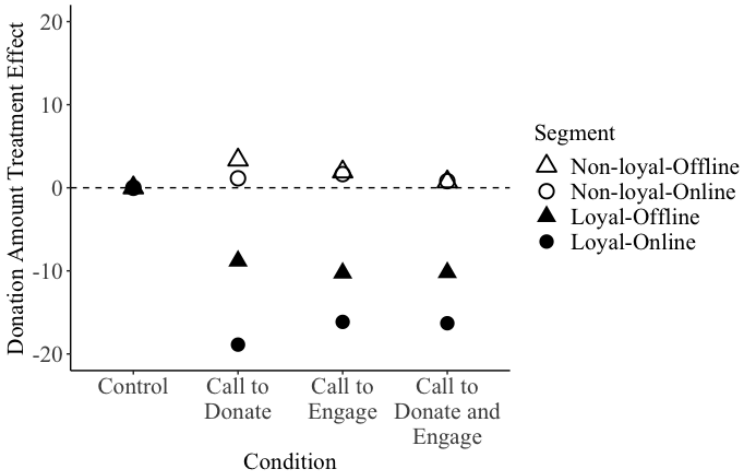
Because the logit and tobit regressions generate qualitatively consistent results, we report only the tobit coefficients in Table 8. The coefficients are qualitatively consistent between the two time

Figure 4: Donation Rate Odds Ratios—Logit



Note: The odds ratios for all treatments are relative to the control, which is normalized to 1, i.e., exp(0).

Figure 5: Donation Amount Treatment Effects—Tobit



Note: The donation amount treatment effect for all treatments are relative to the control, which is normalized to 0.

periods, which in turn are consistent with the full time period (January 25 to March 31) regression results.

Sensitivity to recency and frequency cutoffs. Our goal is to use the opposing effects of asking for more on loyals versus non-loyals to improve the nonprofit's targeted "ask for more" strategies. We therefore assess the sensitivity of our definition of loyals to alternative recency-frequency cutoffs. In the previous analysis, loyal donors are defined as those who gave the previous year and gave at least three of the previous five years. We expect that someone who just gave in the last year is

Table 8: Time Period Robustness Check—Tobit

	Online		*Offline*	
	Jan 25-Feb 28	Mar 1-Mar 31	Jan 25-Feb 28	Mar 1-Mar 31
	(1)	(2)	(3)	(4)
Constant	-61.151^{***}	-65.955^{***}	-49.414^{***}	-83.607^{***}
	(3.628)	(3.198)	(2.257)	(4.209)
Call to Donate	0.690	1.549	2.014^{**}	5.651^{***}
	(1.690)	(1.722)	(0.910)	(1.706)
Call to Donate x Loyal	-13.924^{***}	-19.744^{***}	-7.806^{***}	-16.575^{***}
	(3.373)	(3.451)	(1.897)	(3.663)
Call to Engage	0.130	2.560^{**}	0.770	4.227^{***}
	(1.269)	(1.284)	(0.722)	(1.390)
Call to Engage x Loyal	-9.645^{***}	-18.843^{***}	-8.144^{***}	-17.402^{***}
	(1.680)	(1.811)	(1.066)	(2.069)
Call to Donate x Call to Engage	-1.782	-2.073	-2.665^{**}	-7.737^{***}
	(2.021)	(2.003)	(1.098)	(2.040)
Call to Donate x Call to Engage x Loyal	14.068^{***}	21.728^{***}	7.866^{***}	20.761^{***}
	(4.238)	(4.377)	(2.506)	(4.742)
Recency	2.493^{***}	1.650^{***}	0.513^{**}	0.639
	(0.538)	(0.482)	(0.256)	(0.449)
Frequency	6.696^{***}	9.216^{***}	5.449^{***}	8.662^{***}
	(0.466)	(0.470)	(0.299)	(0.527)
Monetary Value	0.357^{***}	0.529^{***}	0.042	0.404^{***}
	(0.039)	(0.037)	(0.033)	(0.042)
Pseudo R^2	0.101	0.124	0.083	0.096
Akaike Inf. Crit.	5,661	8,075	9,035	7,326
Observations	23,774	23,774	155,197	155,197

Note: *p<0.1; **p<0.05; ***p<0.01

likely to have greater reactance when the thank you note asks for additional giving. Hence relaxing the recency cutoff for loyal donors to include someone who has given in the last two years should weaken the differences between loyals and non-loyals. However, our results on loyals versus non-loyals should not be very sensitive to changes in frequency cutoffs if we change the definition of loyals to include someone who had given two or four years (instead of three) in the last five years.

The tobit regression results with revised cutoffs for loyals and non-loyals are provided in the Web Appendix (see Web Appendix Table A1). As expected, when the recency cutoff for loyals is based on the last two years (as opposed to just last year), the coefficients of the asks all lose significance and some even reverse in sign. For example, for offline donors the call to donate

coefficient is positive although insignificant for both loyal and non-loyal donors. As hypothesized, this suggests a call to action is particularly useful for donors who have lapsed a year in giving.

The results are insensitive to the frequency cutoff. When the cutoff is altered so that loyal donors are those who have donated at least four years out of the previous five (rather than at least three), the coefficients maintain the same sign and level of significance. When the cutoff is altered so that loyal donors are those who have donated at least two years out of the previous five, the offline results remain the same. The impact of the call to donate on historically online donors becomes negative but the coefficient is small in magnitude and not significant.

Overall, the sensitivity analysis suggests that for targeting, loyal donors should include only those who have given in the last year. Though our results are not sensitive to how many times they have given in the past five years (from two to four), we retain the cutoff at three in assessing the benefits of the "targeted asks for more" analysis.

Average Treatment Effects

Now suppose we had not theorized about the heterogeneous effects, and simply estimated the average treatment effects. Then the relevant regression equation becomes:

$$Outcome_i = f(\alpha + \beta Treatment_i + \boldsymbol{\delta X_i} + \varepsilon_i) \tag{2}$$

Here we also include in the controls $\boldsymbol{X_i}$, an indicator for online to capture differences in past giving channel. The regression coefficients shown in Table 9 indicate that there is no significant main effect of the call to donate or the call to engage. The canceling of the positive effects on non-loyal donors with the negative effects on loyal donors produces null effects.[12]

Our study highlights the value of using warm donors as a sampling frame for whom we have panel data on past giving behavior to obtain a more nuanced understanding of heterogeneous treat-

[12]We also estimated the model with online and offline effects separately, but estimating the average effects without heterogeneous impact for loyals and non-loyals. There, the average effect across loyals and non-loyals is negative for online donors, but other effects are insignificant. This can be expected given the composition of loyals and non-loyals and the large negative effect of the call to donate on loyals relative to the small positive effect on non-loyals.

Table 9: Average Treatment Effects

	DV: Donated (binary) Logit	*DV: Donation Amount Tobit*
	(1)	(2)
Constant	-6.445^{***}	-56.698^{***}
	(0.113)	(1.388)
Call to Donate	-0.057	0.068
	(0.100)	(0.727)
Call to Engage	-0.100	-0.602
	(0.077)	(0.566)
Call to Donate x Call to Engage	-0.075	-1.036
	(0.118)	(0.860)
Recency	-0.038	-0.143
	(0.028)	(0.194)
Frequency	0.813^{***}	6.190^{***}
	(0.020)	(0.195)
Monetary Value	0.028^{***}	0.391^{***}
	(0.003)	(0.020)
I(Hist. Online)	1.690^{***}	12.207^{***}
	(0.049)	(0.432)
Pseudo R^2	0.187	0.164
Akaike Inf. Crit.	16,685	20,052
Observations	178,971	178,971

Note: *p<0.1; **p<0.05; ***p<0.01

ment effects. With the increasing availability of panel data on customer behaviors within firms, we note that leveraging such data in experimental designs to assess behavioral theories can provide additional insights, relative to purely cross-sectional between-subjects designs focused on average treatment effects.

MANAGERIAL IMPLICATIONS

While many nonprofits send their annual thank you notes and gifts to only those who gave in the past year, our research suggests that sending notes of thanks and gifts to past donors who have lapsed and requesting them for funds can be a particularly effective fundraising tactic. In particular, the paper contributes to the recent literature that studies the relative effectiveness of different donor appeals on donation behavior (Small and Verrochi 2009, Winterich et al. 2013, Gneezy et al. 2014,

Sudhir et al. 2016, Touré-Tillery and Fishbach 2017, Townsend 2017, Kaikati et al. 2017, Munz et al. 2018, Fajardo et al. 2018).

Given that thank you campaigns are costly, should a nonprofit ask for more when thanking donors? The results of the field experiment suggest that the answer depends on the nonprofit's ability to target. If the nonprofit can only send one message to all potential donors, then including a call to donate or call to engage hurts giving and risks alienating its most loyal donors. Table 10 displays the expected donation rate and donation amount per mailer based on our estimated models. The results find that an untargeted ask for more decreases the donation rate and donation amount.

However, if the nonprofit can target its asks, it should ask for more from non-loyal donors. For HelpAge, Figure 5 informs a strategy of including a call to donate in expressions of gratitude to non-loyal donors but sending only the default mailer to loyal donors.

Expected Donation Benefit from Message Targeting

To calculate the expected benefit from targeted messaging based on past giving, we use the logit and tobit model coefficients in Table 7. We calculate the expected giving for each individual under two targeting scenarios: 1) a call to donate is sent to non-loyals while the default is sent to loyals, 2) a call to engage is sent to non-loyals while the default is sent to loyals. We compare the expected giving from the targeted approach against the expected giving from the untargeted default approach in Table 10. We find that targeted messaging by past giving behavior can increase donation rates by 23.3% to 27.2% and expected donations by 12.8% to 17.5%. The standard errors of the expected benefit of targeting are shown in parentheses and estimated by bootstrapping the data and re-estimating the models 500 times. Details of the standard error calculations are included in the Web Appendix.

Table 10: Targeted "Asks for More" versus Untargeted "Only Thank You with Gift"

	All	Targeted to Non-loyals	Rel. to Control %Change (Std. Err.)
Donation Rate			
Control: Thank You with Gift	1.16%		
+Call to Donate	1.09%	1.48%	+27.2% (8.2%)
+Call to Engage	1.04%	1.43%	+23.3% (6.2%)
Donation Amount			
Control: Thank You with Gift	106		
+Call to Donate	81	125	+17.5% (7.0%)
+Call to Engage	77	120	+12.8% (5.1%)

CONCLUSION

Nonprofits send thank you letters and token gifts as a donor retention device but often include an ask for more that can help generate additional donations. In this paper we investigated how such an "ask for more" can lead to heterogeneous impacts across loyal and non-loyal donors. While the positive effect of the call to action can help increase donations among non-loyals, the reactance induced among loyals can hurt donations. We also assessed how a call to engage through an ask for a Facebook like, which could be seen as greater commitment to the mission (and therefore may induce less reactance), would affect donations. Surprisingly, very few responded with the Facebook like, so there was little concern of engagement substituting for donations. However, the reactance effects were similar to the call to donate; we found the ask to engage increased donations among non-loyals, but suppressed donations among loyals. Finally, we found that combining a call to donate and a call to engage followed the same pattern.

There remain several avenues for future research. First, while the reactance heterogeneity across loyals and non-loyals is robust to both a call to donate and a call to engage in this context, it would be useful to replicate this effect in other for-profit and nonprofit settings. Relatedly, though very few people responded to the call for engagement using Facebook like, it would be useful to see whether potential donation substitution effects occur when people respond to requests for engagement. Second, while this paper focused on warm list donors, the asks for donation and engagement could also be useful for cold lists, which warrants further testing. Third, it would also

be interesting to further test the heterogeneous impact of the thank you letter based on past giving behavior. Similarly, another extension would be to test the impact of the gift sent during the thank you campaign. Newman and Shen (2012) find that thank you gifts to donors on average reduce charitable donations because they reduce feelings of altruism. In contrast, Falk (2007) finds that thank you gifts increase giving. While we manipulated the ask, manipulation of the gift could shed additional light on potential heterogeneous effects of token gifts and when they should and should not be used.

Finally, we note that our results highlight the importance of considering various aspects of the data generating process when modeling data even with well-designed experiments and randomization across treatments. For example, without recognizing the baseline differences in rates of giving between online and offline donors or between loyals and non-loyals, estimated effects can be misleading. It highlights also that average treatment effects from cross-sectional experiments can lead to incomplete insight and erroneous managerial implications. We hope our work inspires behavioral and quantitative scholars to work together to study behavioral phenomena in real world settings by highlighting the importance of accounting for the data generating process and historical behaviors (using panel data) even when using randomization within field-experiments.

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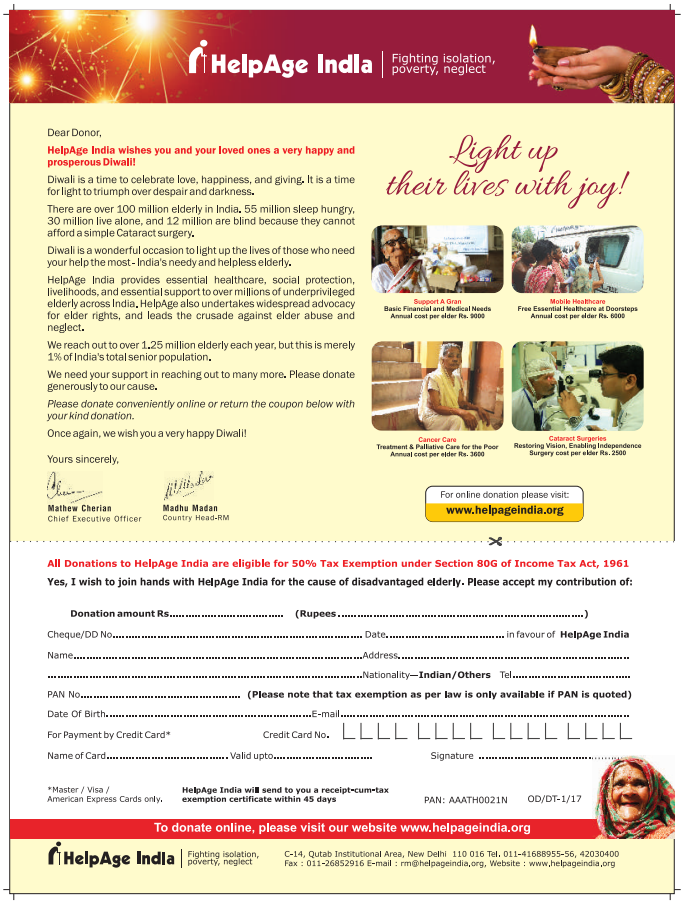
Web Appendix

Example of Fundraising Mailer

We share an example of a regular mailer sent out annually during the month of October/November to coincide with the Indian festival of Diwali—when people are more likely to make charitable contributions. The figure below is from November 2017; so it is the last mailer before our Thank You campaign.

As with all regular campaigns, the Diwali mailer asks for donations, and does not include a token gift. As can be seen, the content design is similar but it is not about thanking and is instead about asking.

Figure A1: Diwali 2017 Mailer

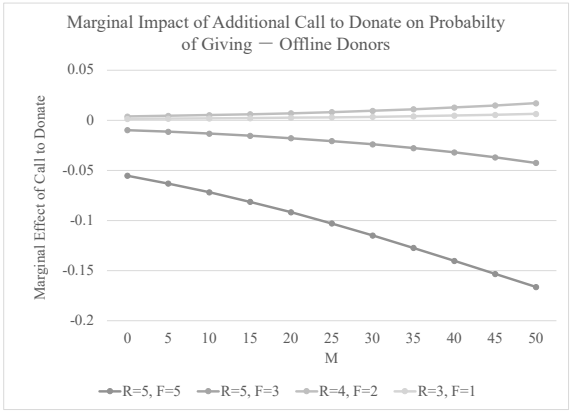


Marginal Effects Graphs of Calls to Action on Probability of Donation

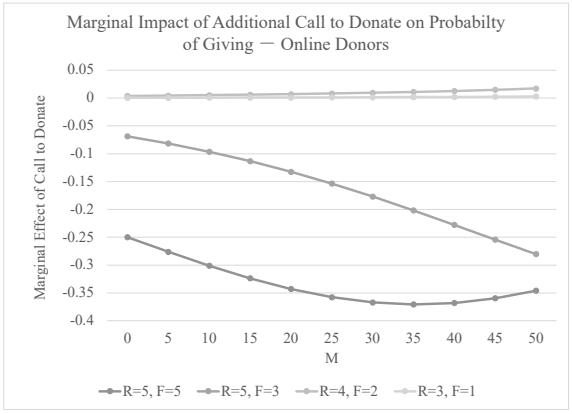
We plot the marginal effects of the call to donate, the call to engage, and the call to donate and engage on donors with different past giving histories based on our estimated logit coefficients in Tables 5, 6, and 7. According to the definition of loyalty used in the main analysis of the paper (donors who gave the previous year and three or more years out of the previous five), R=5, F=5 and R=5, F=3 represent loyal donors and R=4, F=2 and R=3, F=1 represent non-loyal donors. We plot the marginal effects over different monetary values measured in ₹'000s. As can be seen, the marginal effects have the same sign across the range of monetary values within each loyalty group and is consistent with the interpretation of the effect of asks on loyals and non-loyals in the paper.

Figure A2: Marginal Effects Graphs

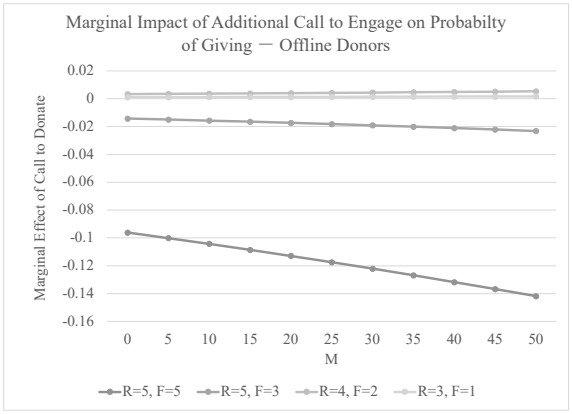
(a) Call to Donate — Offline Donors



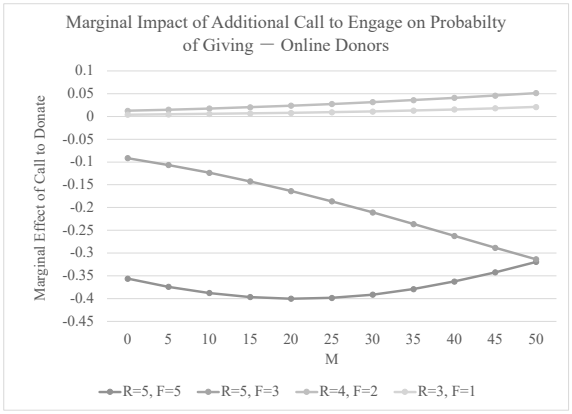
(b) Call to Donate — Online Donors



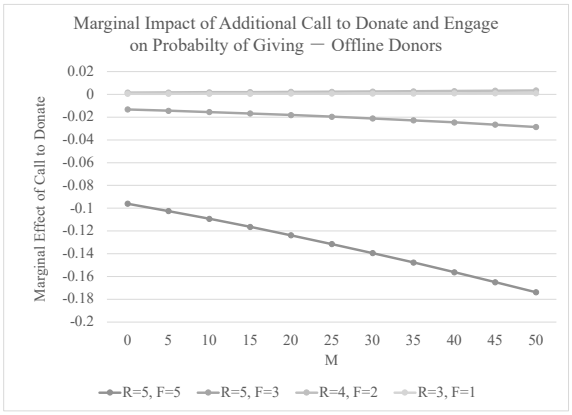
(c) Call to Engage — Offline Donors



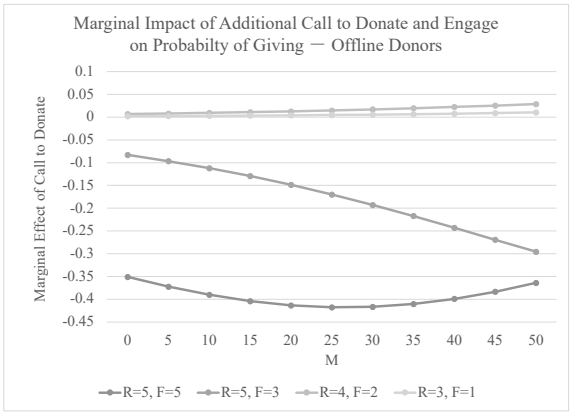
(d) Call to Engage — Online Donors



(e) Call to Donate and Engage — Offline Donors



(f) Call to Donate and Engage — Online Donors



Sensitivity Analysis to Recency and Frequency Cutoffs

Table A1: Sensitivity Analysis

	Recency Cutoff		Frequency Cutoff		Frequency Cutoff	
	Online	Offline	Online	Offline	Online	Offline
	(1)	(2)	(3)	(4)	(5)	(6)
Constant	−47.581***	−52.849***	−55.404***	−57.254***	−55.809***	−58.345***
	(2.118)	(1.881)	(2.204)	(1.944)	(2.326)	(2.019)
Call to Donate	−1.183	0.755	0.710	3.135***	−0.195	3.234***
	(1.407)	(0.968)	(1.278)	(0.887)	(1.353)	(0.901)
Call to Donate x	−3.691	1.470	−25.083***	−13.110***	−8.732***	−9.959***
Loyal	(2.264)	(1.488)	(3.298)	(2.132)	(2.203)	(1.780)
Call to Engage	−1.584	−0.287	1.146	1.816**	1.074	1.759**
	(1.031)	(0.745)	(0.965)	(0.710)	(0.975)	(0.718)
Call to Engage x	1.068	−0.057	−19.901***	−15.512***	−10.695***	−9.684***
Loyal	(1.332)	(0.989)	(1.555)	(1.262)	(1.196)	(0.974)
Donate x Engage	−0.076	−2.210*	−1.535	−4.534***	−0.649	−4.366***
	(1.704)	(1.184)	(1.498)	(1.064)	(1.585)	(1.085)
Donate x Engage x	5.284*	−0.460	25.333***	17.424***	9.274***	10.367***
Loyal	(2.769)	(1.896)	(4.117)	(2.809)	(2.883)	(2.324)
Recency	0.283	−0.144	1.153***	0.234	1.922***	0.848***
	(0.339)	(0.231)	(0.348)	(0.233)	(0.393)	(0.256)
Frequency	6.403***	5.554***	9.051***	7.318***	7.650***	6.680***
	(0.454)	(0.337)	(0.370)	(0.294)	(0.331)	(0.274)
Monetary Value	0.550***	0.256***	0.533***	0.238***	0.543***	0.243***
	(0.031)	(0.027)	(0.030)	(0.026)	(0.030)	(0.026)
Pseudo R^2	0.109	0.084	0.129	0.098	0.116	0.092
Akaike Inf. Crit.	11,968	15,290	11,704	15,054	11,869	15,143
Observations	23,774	155,197	23,774	155,197	23,774	155,197

Note: *p<0.1; **p<0.05; ***p<0.01

(1) & (2): Change in recency cutoff—Donated within last 2 years and at least 3 years out of previous 5

(3) & (4): Change in frequency cutoff—Donated within last year and at least 4 years out of previous 5

(5) & (6): Change in frequency cutoff—Donated within last year and at least 2 years out of previous 5

Bootstrapping Procedure to Obtain Standard Error of the Predicted Benefit from Targeted Asks

The standard errors of the benefits to targeting are calculated via bootstrap (Wooldridge 2016). Each iteration k for $k \in 1, ..., 500$ of the bootstrap follows the procedure below:

1. Sample the full data set with replacement to generate $data_k$ (the number of samples is the same as the original data ($n = 178,971$).

2. Estimate the logit and tobit regressions for online and offline donors using $data_k$.

3. For each individual in $data_k$, calculate the counterfactual predicted probability of donation and donation amount using the estimated models under an untargeted messaging strategy and a targeted messaging strategy.

4. Sum the predicted probabilities and donation amounts over all individuals in $data_k$ for each of the strategies.

5. Calculate the percentage change of the targeted messaging strategies relative to only sending the control to all.

The standard error of the benefit of each targeted messaging strategy relative to the untargeted control strategy is the standard deviation of the calculated percentage change over the 500 iterations.