The role of seed money and threshold size in optimizing fundraising campaigns: Past behavior matters!

Griet Alice Verhaert [1], Dirk Van den Poel *

Department of Marketing, Faculty of Economics and Business Administration, Ghent University, Tweekerkenstraat 2, B-9000 Ghent, Belgium

A B S T R A C T

Fund raising appeals often announce that some funds have already been raised in order to reach a certain threshold. This article reports results from a field experiment examining the role of seed money (i.e., no, 50%, and 67%) in combination with threshold size (i.e., low versus high) in fundraising appeals across different targets (i.e., prospects, low fidelity donors, and high fidelity donors). Based on a $2 \times 3 \times 3$ between-subjects design we investigate charitable behavior of 25,617 households. Findings reveal a novel qualification of using seed contributions as well as the necessity of a communication differentiation by considering past behavior. We show that seed money works well if the threshold is high but with a low threshold it could have a baleful influence. More specifically, in campaigns targeted at prospects and low fidelity donors, the announcement of seed money increases donations regardless of the threshold level. However, in campaigns targeted at high fidelity donors, seed money is an effective strategy only when the threshold is rather high.

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1. Introduction

Over the last years, professional fundraisers have utilized a spectrum of possible strategies in order to optimize their direct mail campaigns (e.g., Barzanti, Gaspari, & Saletti, 2009). These strategies are mainly focused on the optimization of the target selection (e.g., Malthouse, 2010; Malthouse & Derenthal, 2008) as well as the solicitation letter (e.g., Berger & Smith, 1997). Regarding this latter strategy, an important aspect is related to the announced amount in the donation request (Verhaert & Van den Poel, 2011a). Recently, academic literature gives more and more attention to a broad range of techniques that focuses on the announced amount such as the use of rebates (e.g., Buckinx, Moons, Van den Poel, et al., 2004; Eckel & Grossman, 2003), refunds (e.g., List & Lucking-Reiley, 2002), reciprocity (e.g., Croson, Fatas, & Neugebauer, 2005), matching (e.g., Karlan & List, 2007; Rondeau & List, 2008), conditional cooperation (e.g., Frey & Meier, 2004), identity congruency (e.g., Shang, Reed, & Croson, 2008), social information (e.g., Croson & Shang, 2008; Reingen, 1982) and seed money (e.g., List & Lucking-Reiley, 2002). Charities often use this last strategy by showing that some funds have already been raised in order to reach a certain threshold to realize the benefaction. Hence, in practice, this strategy is since long the rule of thumb but it has only been recently picked up by few studies. Therefore, the focus of this

article restricts itself to the use of seed money in fundraising appeals in order to provide more extensive insight into this strategy.

Seed money, for example in the form of a challenge gift from leadership givers, is an unconditional commitment by a donor, or set of donors, to provide a given sum of money to the cause (Rondeau & List, 2008). In this kind of fundraising appeal, the seed money is announced in combination with a certain threshold that has to be gathered. Consequently, this technique mainly consists of two components: the level or percentage of seed money and the size of the threshold. Whereas previous studies investigated the role of seed money by considering one threshold (e.g., List & Lucking-Reiley, 2002; Rondeau & List, 2008), we conducted a first study that incorporates different sizes of the threshold in combination with different levels of seed money. In addition, various authors suggest that the effectiveness of direct mail campaigns may differ regarding the loyalty of the customer (e.g., Rust & Verhoef, 2005). Previous studies on seed money examined this strategy in either a cold list of prospects (List & Lucking-Reiley, 2002) or a warm list of previous donors (Rondeau & List, 2008). Moreover, we did not find a study that split up between most and low fidelity donors. Because the impact of seed money across different donor segments has never been studied before, we included different groups (i.e., prospects, low fidelity donors, and high fidelity donors) in our study based on their past donation behavior.

Additionally, a lot of studies on charitable giving are based on laboratory experiments investigating intentions to contribute. However, recently, some academics (e.g., List, 2008) stressed the growing importance of field experiments because of the possible

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* Corresponding author. Tel.: +32 (0)9 264 89 80.
  E-mail address: Dirk.Vandenpoel@UGent.be (D. Van den Poel).
[1] Tel.: +32 (0)9 264 35 28; fax: +32 (0)9 264 42 79.

discrepancy between the laboratory setting and the field situation. This paper therefore presents results of a large-scale field experiment investigating charitable behavior of 25,617 households. In our setting, we have the added benefit of implementing this controlled experiment in a real fundraising campaign of two charities. Based on each of the original campaigns, we created several versions, each representing an experimental manipulation.

The contribution of this study is threefold. Starting from two recent studies on seed contributions, we compare the previously identified optimal levels of seed money. We include 67% as in the study of List and Lucking-Reiley (2002) and 50% as in the field experiment of Rondeau and List (2008). We also incorporate a control treatment with no seed money. Hence, one contribution of this paper is to investigate whether both former levels of seed money are equally successful. In this respect we can report that both levels are indeed equally effective. Consequently, we build on previous studies and at first glance, our study might be perceived as a replication study. However, in our opinion, previous studies clearly ignored the role of the magnitude of the threshold level in combination with seed money. Therefore, the second and main contribution of this study is that we make new forays into the interaction between the announcement of seed money and threshold level. In other words, is there a difference in contributions when working with a relatively low versus relatively high threshold in combination with and without the announcement of seed money? We answer this question by including a factor with a relatively low (i.e., €3900) or high threshold level (i.e., €11,900). Our empirical results show that both threshold levels result in similar revenues except for appeals targeted at the best donors. Finally, we are the first authors that captured different donor segments into one study. Consequently, the third contribution of this study is to explore whether the announcement of seed money is equally successful when soliciting from cold list of prospects versus a warm list of low fidelity donors versus a warm list of high fidelity donors. In others words, is there a need for differentiation in the communication strategy in accordance with the type of the donor segment when working with seed money? The answer to this question is a definite 'yes', because we observe a detrimental effect of using seed money in campaigns with a relatively low threshold towards the best donors. Our results largely accord with those reported by List and Lucking-Reiley (2002) and Rondeau and List (2008) except for one important novel finding: the identification of an interaction effect between the use of seed money and the level of the threshold in campaigns towards the best donors. In sum, we believe that we are the first authors that showed that seed money does not always increase giving and that the size of the threshold as well as the donor commitment to the organization are important as well.

The remainder of this paper is organized as follows. The subsequent section describes the theoretical background of our study in combination with the formulation of the hypothesis and research questions. This is followed by presenting the design of our field experiment. Next, the corresponding results are summarized and finally, we conclude with implications for further research and practice.

2. Conceptual background and formulation of hypothesis and research questions

2.1. Seed money and threshold level

Andreoni's theory of charitable fundraising (1998) predicts that publicly announced seed money will increase charitable donations from a Nash equilibrium with zero charitable giving to a positive equilibrium level G^* that is greater than or equal to the level of the threshold. More specifically, in the absence of seed money

there exists a Nash equilibrium with zero-contribution. This zero charitable giving can be eliminated by initial commitments of seed money, which lower the residual amount needed to be raised during the fundraising campaign. This theory points to a discretely jump from zero charitable funds to an amount greater than or equal to the threshold level. Consequently, in this theory, seed money is used to eliminate the zero-contribution equilibrium. However, recently, the theory of signaling (Andreoni, 2006; Vesterlund, 2003) discusses a different effect of seed money by proposing the announcement of seed money as a credibility mechanism rather than an elimination device. This alternative theory for an increase in contributions states that seed contributions signal the quality and value of the charity and reduces uncertainty by potential donors. Notwithstanding the fact that both theories originates from different mechanisms (elimination device versus credibility device) both theories predict that the announcement of seed money leads to an increase in contributions. Therefore, we formulate the following hypothesis in order to test their common prediction.

> **H1**: Appeals with the announcement of a seed contribution yields higher revenues in comparison with the absence of a seed contribution in fundraising direct mail campaigns.

Later on, using Andreoni's theory (1998) as a starting point, List and Lucking-Reiley (2002) were the first authors who evaluated this theoretical model by providing field experimental evidence. These authors tested the use of three different levels of seed money (i.e., 10%, 33%, and 67%) in the context of threshold public goods (i.e., a university capital campaign) targeted at a cold list of prospects where $3000 had to be raised for a computer. Based on Andreoni's theory (1998), the authors expected that the revenues should jump from equilibrium of zero to equilibrium of at least the threshold level. However, they found a continuous increase along the level of seed money. This continuous raise in gift size was unexpected according to Andreoni's theory. However, Andreoni's theory includes the simplifying assumption of complete information assuming that people have complete information about each other's utility functions and thus can predict other's gift sizes with certainty. Therefore, List and Lucking-Reiley (2002) suggested a potential improvement of Andreoni's theory (1998) by introducing incomplete information in order to explain this continuous increase. List and Lucking-Reiley (2002) refers to the fact that in reality, donors may have uncertain ideas of what other donors are giving so donors may play an incomplete-information game. The results of their study indicated that increasing seed money yields more response as well as higher average contributions. Moreover, they found that the 67% of seed money outperformed the other levels. List and Lucking-Reiley (2002) also referred to the study of Vesterlund (2003) as an alternative theory for why seed contributions should raise the funds. This theory of signaling (Vesterlund, 2003) indicates that donors might be uncertain about the quality of the charity and that seed contributions may signal the quality of the charity.

A second field experiment was that of Rondeau and List (2008) who compared the effect of presence and absence of seed money in a real charitable giving campaign. They manipulated a solicitation letter to a relatively warm list of donors (i.e., Sierra Club supporters) for a campaign in an effort to expand their K-12 environmental education program. Their challenge treatment contained 50% seed money, the total amount required was set at $5000 and the leadership gift was thus $2500. In the high and low control treatments, the announced thresholds were respectively $5000 and $2500. The authors proved evidence of the superior performance of seed contributions for the reason that the challenge treatment outperformed both control conditions. Based on the two most