



## Reprint of: Bidding to give in the field<sup>☆</sup>



Sander Onderstal<sup>a,b</sup>, Arthur J.H.C. Schram<sup>a,b</sup>, Adriaan R. Soetevent<sup>b,c,\*</sup>

<sup>a</sup> University of Amsterdam, The Netherlands

<sup>b</sup> Tinbergen Institute, The Netherlands

<sup>c</sup> University of Groningen, The Netherlands

### ARTICLE INFO

#### Article history:

Received 28 March 2012

Received in revised form 7 April 2013

Accepted 29 April 2013

Available online 4 December 2013

#### JEL classification:

C93

D44

D64

H41

#### Keywords:

Charitable fundraising

Field experiment

Auction

Lottery

Voluntary contribution mechanism

### ABSTRACT

In a door-to-door fundraising field experiment, we study the impact of fundraising mechanisms on charitable giving. We approached about 4500 households, each participating in an all-pay auction, a lottery, a non-anonymous voluntary contribution mechanism (VCM), or an anonymous VCM. In contrast to the VCMs, households in the all-pay auction and the lottery competed for a prize. Although the all-pay auction is the superior fundraising mechanism both in theory and in the laboratory, it did not raise the highest revenue per household in the field and even raised significantly less than the anonymous VCM. Our experiment reveals that this can be attributed to substantially lower participation in the all-pay auction than in the other mechanisms while the average donation for those who contribute is only slightly (and statistically insignificantly) higher. We explore various explanations for this lower participation and favor one that argues that competition in the all-pay mechanism crowds out intrinsic motivations to contribute.

© 2013 Published by Elsevier B.V.

## 1. Introduction

Across the world, charities have raised staggering amounts of money in all kinds of funding drives. For example, the [Giving USA Foundation \(2011\)](#) reports estimates that over \$290 billion was raised by charities in the U.S. in 2010. Especially raffles and auctions seem to generate incredible amounts of money. An auction of a lunch with Warren Buffett (CEO of Berkshire Hathaway Inc.) raised \$2.6 million for a charity serving the homeless in San Francisco (Wall Street Journal, June 11, 2010). eBay has a special site for charity auctions that has by now raised approximately \$190 million.<sup>1</sup> But lotteries are also successful: the Dutch Postcode Lottery for example raised a total of more than €500 million in 2009 alone (which is almost €30 per inhabitant).<sup>2</sup>

This may make one think that lotteries or auctions are the best way to raise money for a charity. Other mechanisms are still widely used, however. For example, (anonymous) voluntary contribution mechanisms (VCM) are still very common in Dutch door-to-door fundraising and in church. This co-existence of mechanisms raises the question which yields the highest revenue. In previous work, we have addressed this question both theoretically ([Goeree et al., 2005](#)) and with laboratory experiments ([Schram and Onderstal, 2009](#)). The experiments confirmed the theoretical prediction that all-pay auctions raise more than lotteries. In this paper, we complement this project by comparing these mechanisms in a field experiment. Given the nature of the mechanisms actually used in the field, we also decided to extend the set studied by including VCMs. In this comparison across mechanisms, our main focus is on the revenue they raise. This is what seems most relevant to most charities. Revenue may vary due to distinct participation levels or differences in contribution levels. We will address both issues.

For practical reasons (to be discussed below), we will restrict the mechanisms to the three types mentioned above and consider all-pay auctions (APA), lotteries (LOT) and (two variations of) the VCM. We will compare these mechanisms in an environment that is as familiar as possible to the participants in this field experiment. In fact,

<sup>☆</sup> This article is a reprint of a previously published article. For citation purposes, please use the original publication details; Journal of Public Economics Volume 105, September 2013, Pages 72–85.

DOI of original article: <http://dx.doi.org/10.1016/j.jpubeco.2013.04.011>.

\* Corresponding author.

E-mail address: [a.r.soetevent@rug.nl](mailto:a.r.soetevent@rug.nl) (A.R. Soetevent).

<sup>1</sup> <http://givingworks.ebay.com/>.

<sup>2</sup> [http://files.postcodeloterij.nl/Jaarverslag\\_2009/magazine.html#/spreadview/70/](http://files.postcodeloterij.nl/Jaarverslag_2009/magazine.html#/spreadview/70/).

participants were unaware that they were taking part in a comparative field experiment, though (as will be explained below) we mentioned in a flyer that the fundraising was part of a research project. The fundraising was organized in the same way the charity concerned conducts it every year. In the Harrison and List (2004) taxonomy, our experiment is closest to a 'framed field experiment'.

We are the first to compare voluntary contribution mechanisms, lotteries and all-pay auctions in a field experiment. We compare the three mechanisms in a private value setting. This is an important endeavor for various reasons. First and foremost, the VCM is the mechanism most often used in door-to-door fundraising in the Netherlands. In fact, the coordinating agency (the Central Bureau on Fundraising, CBF) lists all door-to-door drives by its members and this list contains only VCMs.<sup>3</sup> Together, these raised almost €50 million in 2010. In our experience, the only alternative mechanisms that fundraisers would seriously consider are LOT and APA. Second, voluntary contributions, lotteries and auctions seem to be the three categories of mechanisms typically used for fundraising, both in the Netherlands and elsewhere. Our field experiment allows us to compare these three categories. Third, the private value setting for the prize is likely to be the one most often encountered in charity auctions. Charities will generally not use cash or pre-paid credit cards (as in Landry et al., 2006) as prizes but instead items that have very different values to different people (like an Eric Clapton guitar; see Schram and Onderstal, 2009).<sup>4</sup> Finally, the fact that we were able to organize this in a natural setting is important. Not only does it mean that participants were making choices in a situation very familiar to them, it also means that it would be relatively easy to implement any of our mechanisms on a large scale. This is true because the fundraising that we organized in some neighborhoods of one town is held multiple times a year in the same way, all across the Netherlands.

The remainder of this paper is organized as follows. After giving a brief review of the relevant literature in Section 2, the experimental design is presented in Section 3. We will then discuss the theory and derive hypotheses in Section 4. The results are presented in Section 5 and further discussed in Section 6. Section 7 concludes.

## 2. Literature review

When discussing previous studies comparing the mechanisms we are interested in, it is useful to organize them along two dimensions. First, we distinguish between theoretical studies, laboratory results and field experiments. Second we make a distinction between common value and private value environments.<sup>5</sup> For charity auctions, the review below shows that laboratory data provide opposite revenue results for these two types of values. Comparing lotteries to all-pay auctions shows lower revenues in the latter when there are common values and lower revenues in lotteries when values are private. Hence, this distinction appears to matter for the revenue generating properties of fundraising mechanisms.

The theoretical results that the literature has shown for the mechanisms we study predict that VCM will be less successful than APA (Orzen, 2008; Corazzini et al., 2010) and LOT (Morgan, 2000; Lange et al., 2007; Orzen, 2008; Landry et al., 2006; Corazzini et al., 2010). Though this result has only been found in common value settings, it also holds true for the private values case as we will show in Section 4. The average theoretical contribution in APA is higher than

in LOT in the case of both private (Goeree et al., 2005; Schram and Onderstal, 2009) and common values (Orzen, 2008; Faravelli, 2011; Corazzini et al., 2010).

In laboratory experiments, LOT raises more money than VCM (Morgan and Sefton, 2000; Lange et al., 2007; Orzen, 2008; Corazzini et al., 2010; all in common value settings). APA dominates VCM in terms of revenue in the lab when values are common (Orzen, 2008; Corazzini et al., 2010). The result that APA is a more successful fundraising mechanism than LOT has received mixed empirical support, however. Schram and Onderstal (2009) and Carpenter et al. (2011) confirm the higher revenue generation by APA than by LOT for private values, but in common value settings, LOT is found to raise at least as much money as APA (Orzen, 2008) or even to strictly outperform APA (Corazzini et al., 2010). By and large these results support the theoretical presumption that both LOT and APA will raise more than VCM in a laboratory experiment, though we are not aware of any direct laboratory comparison between VCM and either other mechanism in a private value setting.

There have also been a few mechanism comparisons in field experiments.<sup>6</sup> For example, Landry et al. (2006) observe in a common value setting that LOT raises more money than VCM. Carpenter et al. (2008) study an environment best characterized as being a private value setting. They do not consider LOT and VCM as possible mechanisms, however. Instead, they compare APA to various other auction formats. They observe that revenue was lower in APA than in these alternatives and attribute this to lower participation in APA. These alternative mechanisms are irrelevant for our setting, however. This is because for door-to-door fundraising it does not make sense to consider other auction mechanisms than APA.<sup>7</sup> These would require either returning money to those with lower than the highest bid, or first collecting bids (but not money) door-to-door and then returning at a later date to pick up money from the winner. Neither option would even be considered by the fundraisers we talked to. In a similar vein, two mechanisms that are very relevant options for door-to-door fundraising, VCM and LOT, are not considered by Carpenter et al. On the other hand, their application of APA to raise funds for a local school in a schoolyard event does provide an interesting opportunity to compare our results for this mechanism to those obtained in an entirely different context.

One should note an important difference between the two implementations of the APA, however. Carpenter et al. (2008) frame the APA as an auction by telling participants "[t]he person who places the highest bid will receive the item. However, this is an All-pay Auction which means that everyone must pay their bid whether or not they are the highest bidder. All the money we collect in the form of bids will be contributed directly to this preschool". Instead, in order to remain in sync with the VCM frame we chose to frame our APA (and also LOT) as a contribution by not using words like "pay" and "all-pay". To explain APA, we say "[we] will compare the contributions of all of these households. The household that contributed most will win ..." where 'these households' refers to a group of 300 households competing for a single prize.

Finally, to the best of our knowledge there are no studies that attempt to compare fundraising mechanisms using naturally occurring field data (i.e., by comparing uncontrolled charity fundraising using distinct mechanisms).

<sup>6</sup> Other (field) experiments studying charitable giving do not compare mechanisms but focus on how contribution decisions are influenced by social comparison (Crosan and Shang, 2008; Frey and Meier, 2004), social pressure (DellaVigna et al., 2012), status (Kumru and Vesterlund, 2010) and seed money and sequential giving (Potters et al., 2005; Bracha et al., 2011).

<sup>7</sup> Carpenter et al. (2011) introduce a different frame for APA. In a laboratory experiment, participants pass around a bucket and may either contribute one token or withdraw. The bucket keeps going around until one participant remains. This basically makes it a second-price all-pay auction. The authors report that it outperforms other auction formats, both in contributions and in participation. Note that it would be very difficult to implement in door-to-door fundraising, however.

<sup>3</sup> <http://www.cbf.nl/Collecten/totaalopbrengsten.php?Leeg=1>.

<sup>4</sup> As an anonymous referee pointed out, there are notable exceptions. State lotteries in the U.S. and the 'Postcode Loterij' in the Netherlands award cash prizes (and donate some of the proceeds to charity).

<sup>5</sup> In practice, most goods will combine common and private value characteristics (Goeree and Offerman, 2002). For example, Eric Clapton's guitar legendary 1956 Fender Stratocaster 'Brownie' raised \$497,500 for the 'Crossroads Centre'. It seems clear that this guitar has different values to distinct people, but the resale value could create a common value element. Nevertheless, the extent to which values are affiliated is important. Private values seem more important for this guitar than for a pre-paid credit card, for example.

Download English Version:

<https://daneshyari.com/en/article/969130>

Download Persian Version:

<https://daneshyari.com/article/969130>

[Daneshyari.com](https://daneshyari.com)