

Charitable Giving Around the World: Thoughts on How to Expand the Pie

John A. List* and Michael K. Price†

*Department of Economics, University of Chicago, and NBER, Chicago, IL, USA.
e-mail: jlist@uchicago.edu

†Department of Economics, University of Tennessee, and NBER, Knoxville, TN, USA.
e-mail: mprice21@utk.edu

Abstract

One fact that has emerged in modern societies is that people help others. Whether it is donating a few dollars to help feed the poor or volunteering time to help rebuild someone's life after a natural disaster, people around the globe commonly lend a hand. This study provides an overview of that support, summarizing gifts of both time and money around the globe. We also highlight research that indicates useful ways in which we can enhance the charitable pie. Our discussion revolves around both individual giving and corporate philanthropy, but we focus on empirical insights from recent charitable fundraising field experiments in the Western World. We present information that is useful for policymakers, fundraising practitioners, and academicians. (JEL codes: C93, H3, J24)

Keywords: Charitable giving, field experiments

To give away money is an easy matter and in any man's power. But to decide to whom to give it, and how large, and when, and for what purpose and how, is neither in every man's power nor an easy matter.

Aristotle

1 Introduction

The word philanthropy has Greek roots: *Philos* meaning loving, caring, fond, and *anthropos* meaning man or human, and is believed to have been coined 2500 years ago in ancient Greece by the playwright, Aeschylus. The *Britannica Concise Encyclopedia* notes that philanthropic groups existed in the ancient civilizations of the Middle East, Greece, and Rome. Through the history of humanity, philanthropy has served many important purposes; it is well-known that an endowment supported Plato's Academy for some 900 years, the Islamic *waqf* (religious endowment) dates to the 7th century AD, and the medieval Christian church administered trusts for many benevolent purposes.

As Landry et al. (2010) note, charitable fundraising has taken a much broader role in the past several centuries. In the Western world, near the mid-1800s, it was recognized that individuals and corporations could play a part in financing non-profit agencies with the introduction of new

fundraising techniques. In this study, we describe how far reaching such giving has become, and provide guidance into avenues to enlarge the giving rates.

Our study begins by providing a summary of recent giving trends worldwide. Such a summary is enlightening, in that we are able to rank countries and regions of the world based on not only gifts of money, but volunteerism and helping strangers as well. The actual rankings provide some facts of interest, but they highlight that the simple economics surrounding these trends, such as whether gifts of money and time are substitutes or complements, remains largely unknown.

We then turn to a discussion of recent work in the Western World that provides insights into what induces individuals to give, why they stay committed to the cause, and what factors can help maintain their giving commitment. From there, our discussion turns to corporate giving, which in the USA represents 10% of overall philanthropic gifts. We find that corporations have developed interesting means to give to charitable causes. We conclude with some remarks on where research on the economics of charity should head next. A strong plea is made to engage researchers in the exploration of why non-Westerners give. There is a dearth of evidence in this regard, and a research agenda exploring incentive effects for such givers is the logical next step in deepening our understanding of the economics of charity. A first examination of whether the pecuniary and non-pecuniary incentive effects found in the USA and European data extend to other regions of the world would be of great interest.

2 Giving of time and money

Understanding why people give is no easy task. One useful starting point is to compare how behavior varies across different populations. Making clean inference from crosscountry comparisons is not our aim for this section. So many parameters that shape the giving decision vary between countries that it would be impossible to. Cross country comparisons can still be worthwhile, though. They yield suggestive evidence and inform hypotheses that can be tested with finer tuned analysis. This is especially valuable with a newer area of study like charitable giving where there are more open empirical questions than there are answers.

Finding data to compare giving between countries is no easy feat. The best source we have found is from The Charities Aid Foundation (CAF). CAF hosts the World Giving Index which ranks 153 countries based on charitable behavior of their citizenry. The index, while certainly far from

Table 1 Top 10 countries in WGI 2010

WGI rank	Country	WGI score (%)
1	Australia	57
1	New Zealand	57
3	Ireland	56
3	Canada	56
5	USA	55
5	Switzerland	55
7	The Netherlands	54
8	UK	53
8	Sri Lanka	53
10	Austria	52

perfect, is compiled using data gathered by Gallup through the WorldView World Poll (worldview.gallup.com). The WorldView World Poll is an ongoing survey carried out in 153 countries (about 95% of world's population) on representative samples of about 1000 people per country, aged ≥ 15 years over and living in urban centers.

The index is constructed based on three survey questions:

- (1) Have you donated money to a charity in the past month? (Giving money)
- (2) Have you volunteered your time to an organization in the past month? (Giving time)
- (3) Have you helped a stranger or someone you didn't know who needed help in the past month? (Helping a stranger)

Specifically, the World Giving Index (WGI) is calculated as follows. For each country, the percentage of people answering yes to each question is tabulated. The final index number is then calculated as the average of these three measures.

Table 1 lists the 10 countries with the highest index numbers. As noted in the table, Australia and New Zealand have the highest percentage of the population (57%) involved in charitable giving. Canada and Ireland occupy the second step on the podium while the USA and Switzerland are tied for the fifth position. With the exception of Sri Lanka, the remaining countries in the top 10 are from Europe, and have between 52% and 54% of their population indicating some form of charitable giving over the past month.

Table 2 WGI, giving money, giving time and helping a stranger by region

Country	WGI score (%)	Giving money (%)	Giving time (%)	Helping a stranger (%)
Australasia	57	69	40	64
North America	56	62	37	67
Western and Southern Europe	41	53	24	46
Central America	34	32	23	46
South America and Caribbean	33	28	20	49
South Eastern Asia	33	40	22	37
Western Asia/Middle East	33	34	13	51
Central Asia	32	15	38	43
Northern Africa	32	31	10	55
Sub-Saharan Africa	30	18	22	49
Eastern Asia	29	33	18	36
Southern Asia	26	25	20	33
Central and Eastern Europe	23	21	13	34

Breaking this comparison down by Region, we find interesting conclusions.¹ Table 2 summarizes this information and provides both the WGI and its three components by Region. It shows that Australasia (with New Zealand and Australia) has the highest WGI score at 57% but is closely followed by North America with a WGI score of 56%. Western and Southern Europe occupy third place in the rankings, but have a WGI score that is ~15 percentage points lower than that for North America. At the other end of the spectrum, Central and Eastern Europe has the lowest WGI score with only 23% of the population indicating involvement in some form of charitable giving. Other relatively low performers include Eastern and Southern Asia with respective WGI scores of 26% and 29%.

As noted in Table 2, individuals from Australasia and North America are significantly more likely to give money and help strangers than are counterparts from other regions. Considering the percentage of individuals reporting that they have volunteered their time in the past month,

¹ We follow the Charity Aid Foundation in defining regions. The CAF breaks the globe into 13 regions based on the United Nations regional breakdown. The CAF then adjusts these regions to account for geographic reality and acceptance of contemporary political norms. A more detailed description of this process can be found in CAF's 2010 World Giving Index (available at <https://www.cafonline.org/navigation/footer/about-caf/publications/2010-publications/world-giving-index.aspx>).

Table 3 Top 10 countries in giving money

Country	People (%)	Region
Malta	83	Western and Southern Europe
The Netherlands	77	Western and Southern Europe
Thailand	73	South Eastern Asia
UK	73	Western and Southern Europe
Ireland	72	Western and Southern Europe
Morocco	72	Northern Africa
Switzerland	71	Western and Southern Europe
Australia	70	Australasia
Hong Kong SAR	70	Eastern Asia
Austria	69	Western and Southern Europe

only Central Asia matches the rates observed in these regions. Similarly, [Table 2](#) highlights that individuals are much more likely to give money or help strangers than they are to give time. The lone exceptions to this trend are Sub-Saharan Africa and Central Asia where individuals are 22.2% and 153.3%, respectively, more likely to give time than money. Such trends deserve more serious consideration, as it is unknown whether gifts of time and money are economic complements or substitutes.

2.1 Giving money

We now take a closer look at the three measures of giving separately, grouping the results by best performers (top 10 countries) and region. [Table 3](#) summarizes the top 10 countries in terms of giving money. As noted in the table, Malta has the highest percentage of people (83%) giving money to charity in a given year, while the Netherlands (77%) occupies second spot on the list.

Interestingly, nine of the top 10 countries have rates of giving of 70% or higher—Austria at 69% is the lone exception. Moreover, six of the ten are located in the Western and Southern Europe region while no other region has more than one country on the list.

Comparing this same measure across regions as opposed to individual countries returns a slightly different view of the data. As shown in [Figure 1](#), Australasia and North American have the highest percentage of people donating money—69% and 62%, respectively. Western and Southern Europe occupy the third position with ~53% of all people in the region donating money to charity. At the other end of the spectrum, Sub-Saharan Africa and Central Asia are the least generous regions with 18% and 15% respective rates of giving. Both Southern Asia and Central

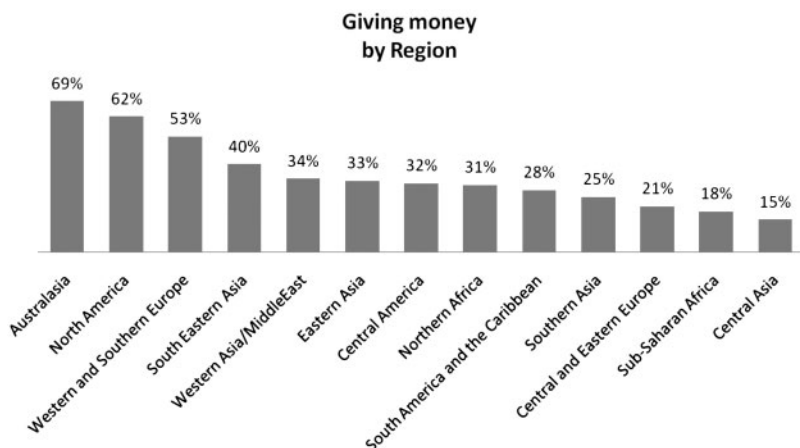


Figure 1 Percentage of people giving money to charities, by region.

Table 4 Top 10 countries in giving time

Country	People (%)	Region
Turkmenistan	61	Central Asia
Sri Lanka	52	Southern Asia
Central African Republic	47	Sub-Saharan Africa
Sierra Leone	45	Sub-Saharan Africa
Guinea	42	Sub-Saharan Africa
Tajikistan	42	Central Asia
New Zealand	41	Australasia
Myanmar	40	South Eastern Asia
The Netherlands	39	Western and Southern Europe
Angola	39	Sub-Saharan Africa
USA	39	North America
Uzbekistan	39	Central Asia

and Eastern Europe report rates of giving that are less than one-half of that observed among Western and Southern European countries.

2.2 Volunteerism

Turning to the question of volunteerism, the country-level data highlight a markedly different pattern. Table 4 summarizes the top performing countries with respect to the percentage of individuals volunteering time in a typical year. As noted in the table, Turkmenistan has the highest

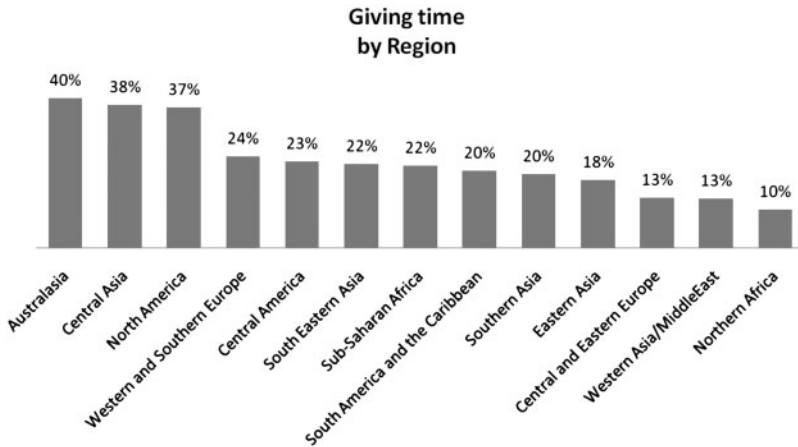


Figure 2 Percentage of people giving time to charities, by region.

percentage of people volunteering time (61%). Other top performers include Sri Lanka and the Central African Republic, with rates of 52% and 47%. Overall, 7 of the 12 countries on the list of best performers are located Sub-Saharan Africa (Central African Republic, Sierra Leone, Guinea, and Angola) or Central Asia (Turkmenistan, Tajikistan, and Uzbekistan). Interestingly, the Netherlands is the only country appearing on the list of best performers for both gifts of money and time.

Comparing response rates at the regional level, as in Figure 2, the data suggest a slightly different perspective on volunteerism. As with gifts of money, Australasia (40%) is the region with the highest rate of volunteerism. Central Asia ranks second on the list with ~38% of the individuals in the region donating time—a marked increase over the 15% of the population who reported making a monetary donation. North America closely follows in third place with an ~37% rate of volunteerism. Northern Africa is the least generous region—only one in ten individuals report volunteering time. Other poor performing regions include Central and Eastern Europe and Western Asia/Middle East where rates of volunteerism are ~67.5% lower than that observed in Australasia. Of these regions, Central and Eastern Europe is among the least generous in terms of both monetary gifts and gifts of time.

There are many important economic implications of the results on giving of time and money. On the one hand, people who have a relatively low value of time seem to respond by committing more of their time to good causes. This is exactly as mainstream economics would predict provided that such giving of time is productive. Likewise, the fact that people

Table 5 Top 10 countries in helping a stranger

Country	People (%)	Region
Liberia	76	Sub-Saharan Africa
Sierra Leone	75	Sub-Saharan Africa
Sudan	69	Northern Africa
Canada	68	North America
Guyana	67	South America and the Caribbean
Kuwait	67	Western Asia/Middle East
USA	65	North America
Australia	64	Australasia
Kenya	64	Sub-Saharan Africa
New Zealand	63	Australasia
Colombia	63	South America and the Caribbean

seemingly trade-off gifts of time and money opens up interesting avenues on the optimal allocation of resources on the individual level. Alternatively, how governments treat individual contributions of money and time merits more serious consideration as the raw data presented above do not account for differences across space on the dimensions of tax treatment or public good provision.

2.3 Helping strangers

Table 5 summarizes the best performing countries when it comes to the percentage of the population reporting that they have helped a stranger in the past month. As with gifts of time, countries from Sub-Saharan Africa are amongst the top performers when it comes to helping strangers. Liberia and Sierra Leone occupy the top two spots on the list of best performers and are the only countries where the percentage of population declaring to have helped a stranger in need is $> 75\%$. The North American countries of Canada and the USA occupy the fourth and seventh spots on the list, respectively. In both nations, $> 65\%$ of their populations reported helping unknown persons. Other top performers include the Australasia nations—Australia and New Zealand—where $> 60\%$ of the respective populations indicate that they have helped a stranger.

Comparing generosity levels at the regional level, as in **Figure 3**, the data suggest a pattern similar to that observed for gifts of both time and money. North America and Australasia are the top two performing regions with $> 64\%$ of the respective populations reporting that they have helped a stranger in the past month. Northern Africa and the Middle East, occupy the next two spots in the rankings with $> 50\%$ of

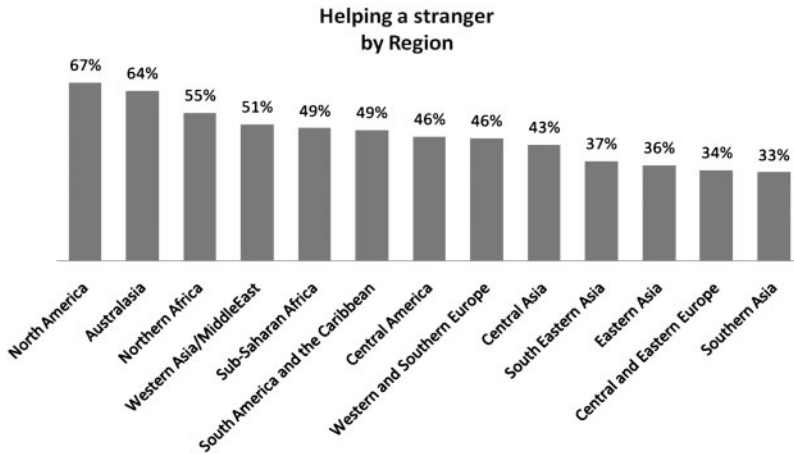


Figure 3 Percentage of people helping a stranger, by region.

those interviewed declaring that they helped others. At the other end of the spectrum, Southern Asia and Central and Eastern Europe are the least generous regions with < 34% of the respective populations reporting to have helped a stranger. Other poor performing regions include South Eastern and Eastern Asia—both of whom report rates of helping others below 40%.

Taken jointly, the data on gifts of money, volunteerism, and the likelihood of helper a stranger highlight considerable heterogeneities not only across but also within the same region. Yet, in aggregate, the data paint a fairly consistent picture. The Australasia countries of Australia and New Zealand are the most generous givers in terms of both money and time and are the second most generous when it comes to helping others. Whereas, the North American countries (the USA and Canada) demonstrate the highest level of generosity when it comes to helping strangers and are among the top three givers in terms of both time and money. At the other end of the spectrum, the Central and Eastern European countries are among the least generous and rank in the bottom three regions for all measures of charity. Yet, what drives these regional differences remains largely unknown and is thus a fruitful avenue for future research.

2.4 Charitable giving, well-being and GDP per capita

CAF's report also compares charitable giving to the well-being status of the interviewed population and the GDP per capita in the country and region. Measures of well-being are taken from the Gallup survey and are derived by asking people to rank their own lives from 0 (the worst possible

Table 6 Regression results—generosity, GDP, and well-being

	Giving money	Giving time	Helping a stranger
GDP per capita (log)	0.0736*** (0.0101)	−0.0017 (0.007)	0.0013 (0.008)
Wellbeing score	0.094*** (0.0113)	0.0165* (0.0080)	0.0174* (0.0093)

*** $P < 0.01$ level, * $P < 0.10$ level

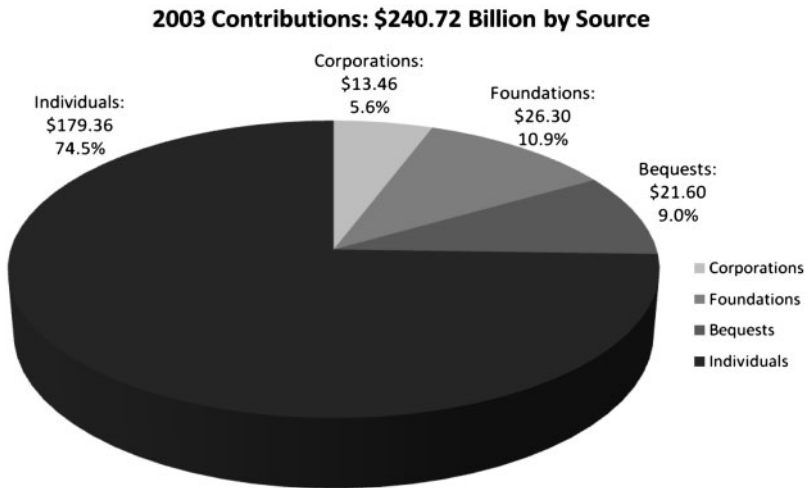
life) to 10 (the best possible life). The measure of GDP is taken from the IMF’s World Economic Outlook and is designed to capture purchasing-power parity per capita.

These relationships are summarized in Table 6 which reports the results from a series of OLS regressions of the different measures of generosity on country-specific measures of well-being and the log of GDP per capita. As noted in the table, both GDP and well-being scores have a positive and statistically significant impact on gifts of money. In contrast, the only significant determinant of gifts of time and helping behavior is one’s satisfaction with their life. The happier, on average, people in a country are with their lives the more likely they are give time and help others.

3 Private provision of public goods—attracting individual donors to give money

With all of these global summary statistics in hand, one might wonder what causes people to give in the first place, and what are the underlying determinants that keep people engaged with their charitable actions. Whereas scholars have yet to explore such questions in the developing world, research has recently emerged examining data patterns in the Western World. Consider data from the USA, where annual giving of money to charity exceeds 2% of GDP. Figure 4 provides an indication of where that money comes from.

As noted in the figure, charitable donations arise from four central entities—individuals, bequests, corporations, and charitable foundations—each of whom provides a considerable amount of resources. Yet, the most significant source of charitable donations is by far individual givers, who comprise roughly 75% of the total gifts given annually. The second biggest source, foundations, is typically responsible for roughly 10% of all donations; bequests and corporations make up the remainder, roughly 6% each. Given the changing demographics, however,



Source: Giving USA Foundation -- AAFRC Trust for Philanthropy/*Giving USA 2004*. All dollar figures are in billions of dollars.

Figure 4 Composition of giving in the USA.

an area of substantial growth is bequests, which remains an under-researched area.

In the remainder of this section, we focus on individual gifts of money and the factors that drive such acts. In many regards, the problem facing fundraisers is analogous to that of value elicitation for the benefit cost practitioner. Ideally, one would like donors to truthfully reveal their preferences for the services provided by the charity. Yet, it is well established that in such settings there is no incentive for a self-interested individual to truthfully reveal preferences. Accordingly, relying upon voluntary contributions for the provision of public goods generally results in under provision relative to first-best levels. This quandary has lead economists to develop a number of instruments designed to mitigate the tendency to free-ride.

In what follows, we summarize a body of experimental evidence that examines the effectiveness of these instruments in field settings. In particular, we will focus on studies that employ natural field experiments.² From the perspective of the donor, a natural field experiment is no different than fund raising as it is usually carried out. For example, some donors receive

² We will also reference a few studies that use framed field experiments to study giving. The key distinction between natural and framed field experiments is that subjects in a framed field experiment know that they are part of a study. Subjects in a natural field experiment do not. The reader interested in a further discussion should see [Harrison and List \(2004\)](#).

incentives to give or information on seed money and others do not. The charity then compares giving rates between the two groups. Since there is no process of informed consent there is no need to worry about subject behavior changing because of the increased scrutiny. This does not mean that the interests of the subject are entirely neglected. Any study involving human subjects is still required to undergo a thorough investigation of its procedures and data collection by an Internal Review Board (IRB) in the USA.

Our discussion will focus on two distinct approaches considered in this literature: (i) using up-front monies to alter either the ‘price’ or expected benefits of giving and (ii) varying the information provided with the ask request. Results from these first set of studies highlight the importance of pecuniary incentives for overcoming the free-rider problem—donors respond to incentives that alter the perceived benefits/costs of giving. Yet such results are not absolute. For instance, although donors are more likely to contribute when provided a rebate or matching gift that lowers the ‘price’ of giving, there are ranges of the ‘price’ vector over which donors are unresponsive to change. Moreover, certain types of incentives crowd out long-run motives for giving or lead to an inter-temporal substitution of donations.

The second set of studies pinpoint that non-pecuniary incentives can have important effects on givers. Much of this work builds upon insights from social comparison theory (Festinger 1954) which posits that individuals compare themselves to others—particularly in situations when objective standards are not available or perceived irrelevant. In the context of charitable giving, objective standards of generosity are often lacking. Hence, it is not surprising that providing potential donors information on the contributions of others would influence subsequent behavior. Yet results from this literature provide a cautionary tale; providing low social comparisons can crowd-out contribution levels and have a stronger influence on behavior than do high social comparisons.

3.1 The use of up-front money: charitable lotteries and auctions

Cornes and Sandler (1984) develop a theoretical model which shows how linking contributions to a public good with the provision of a private good can attenuate free-riding. This fundamental insight provides the genesis for an important class of mechanisms—charitable lotteries and auctions—that have been explored as means to finance the private provision of public goods. Intuitively, these mechanisms introduce compensating externalities that serve to attenuate free-riding tendency. Contributions by others provide direct benefit (increased public good provision). However, this benefit comes at a cost—increased contributions by others lower the chance of

obtaining the private good. The presence of these compensating externalities generates increased contributions relative to those obtained via simple asks for money.

Despite the prevalence of theoretical studies exploring such mechanisms, there are but a handful of experiments that examine the performance of such mechanisms in the field. Landry et al. (2006) summarize data from a capital campaign for the Center for Natural Hazards Mitigation Research at East Carolina University. In their natural field experiment, paid solicitors approached nearly 5000 households randomly divided into four experimental treatments—a simple ask for money (VCM) with and without seed money, a single-prize lottery, and a multiple-prize lottery.

In each treatment, households in predetermined neighborhoods blocks of Pitt County, NC were approached by a paid solicitor and asked to make a contribution to the Hazards Center. Households that answered the door were provided an informational brochure and read a fixed script outlining the reason for the solicitor's visit. Across all treatments, potential donors were informed that all donations would go to support the Hazards Center.

In the VCM with seed money treatment, potential donors were also informed that an anonymous donor had provided a \$1000 commitment to the Hazards Center. In the single-prize lottery treatment, households were informed that each dollar contributed to the Hazards Center would provide them one ticket for a raffle whose winner would receive a \$1000 pre-paid credit card. Households in the multi-prize lottery were informed that each dollar contributed would provide a chance in a lottery for one of four \$250 pre-paid credit cards. Agents in the lottery treatments were informed that the odds of winning the raffle would be based upon the number of tickets they purchased relative to the total number of tickets purchased during the fundraising drive.

Empirical results highlight the importance of institutions on fundraising success: participation rates in the lottery treatments are roughly twice those observed in the VCM treatments and a 1SD increase in physical attractiveness among women solicitors increases average gifts by ~35–72%. For example, ~25.3% of the households who answered the door in the VCM treatment contributed to the Hazard Center. For the single- (multiple-) prize lotteries, the respective participation rates were 45.5% and 35.9%. Similar differences are observed when comparing average contribution levels across treatments—average donations in the single- (multiple-) prize lottery were \$1.89 (\$1.52), significantly higher than the respective \$1.01 and \$1.16 average donations in the VCM and seed money treatments.

Fundraising strategists often rank building and maintain a 'donor development pyramid' as the most important aspect of successful long-term

fundraising efforts. Yet the extent to which such factors influence long-run patterns of giving remains an open question. Landry et al. (2010) attempt to fill this gap and move the focus from measuring short-run substitution effects to exploring long-run dynamics. Using detailed information on household that were previously approached, previous givers ('warm' list agents) and those who had never given ('cold' list agents) were randomly assigned into treatments that varied both solicitor characteristics and ask strategy.³

Empirical results from their natural field experiment provide support for fundraising convention. Donors who contributed in the initial campaign for the Hazard Center were twice as likely to give and provide average gifts that were twice as large as 'cold' list counterparts. For example, among those households approached using a simple ask strategy (VCM), the average gift from previous donors was approximately \$3.33 greater (\$4.75 versus \$1.44) than that provided by 'cold' list counterparts. Yet the manner in which a donor was initially attracted influenced subsequent fundraising success. Removing the lottery incentive had no discernable impact on the behavior of warm-list households. However, removing the 'beauty incentive' caused a significant reduction in average contribution levels.

Carpenter et al. (2008) summarize results from a natural field experiment conducted at Addison County, VT preschools. In their study, attendees of festival designed to raise funds for a local preschool had the opportunity to bid for a variety of goods in either a winner pay or all-pay auction format. Theoretically, the latter auction format should raise more money than any winner pay auction (Goeree et al. 2005; Engers and McManus 2007). However, empirical results provide little support for these predictions. Both participation rates and revenues are greater in first-price auctions than in either second-price or all-pay counterparts.

3.2 The use of up-front money: gift exchange and the role of donor gifts

Reciprocity is a powerful norm influencing interpersonal interactions. According to cultural anthropologists, this norm creates a mutually beneficial 'web of indebtedness', whereby individuals feel an obligation to repay in kind gifts provided by others (Ridley 1997). Yet, as demonstrated by Regan (1971), the norm of reciprocity need not require that a gift is repaid along similar domains. Indeed, many businesses provide consumers

³ Solicitor characteristics were varied by either (i) removing the 'beauty incentive' present in the initial campaign, (ii) adding a 'beauty incentive', or (iii) holding constant the initial 'beauty incentive'.

drinks or related ‘tokens of appreciation’ to trigger reciprocal feelings and thus influence subsequent purchase decisions.⁴

Similar sentiments emerge amongst non-profits. A popular belief among fund-raisers is that potential donors are more generous when gifts are included with solicitation requests. The remainder of this section will review a burgeoning literature that examines the influence of gift-exchange in field settings. Although we will focus largely on studies arising within economics, we will review related studies from social psychology—particularly in regard the use of conditional gifts.

Falk (2007) examines the influence of gift exchange on charitable donations using a natural field experiment. In collaboration with a well-known charitable organization, nearly 10 000 solicitation letters were mailed to potential donors in the canton of Zurich.⁵ The purpose of the mailing was to raise money to fund schools for street children in Dhaka, Bangladesh. Treatments systematically manipulated the solicitation letters such that one-third of the donors received a letter outlining the Dhaka project, another third received the letter along with a small gift (a single postcard) and the final third received a letter with a large gift (a set of four postcards). Households who received a gift were informed that the postcards were a ‘gift from the children of Dhaka’ that could ‘be kept or given to others’.

Compared to the no gift condition, the relative frequency of donations increased by 17% (75%) respectively in the small gift (large gift) treatments. For example, whereas 12% of all households in the no gift treatment supported the Dhaka project, nearly 21% of those receiving a large gift made a contribution. Interestingly, however, gifts appear to crowd-in relatively small contributions at the expense of large donation amounts. For donations up to CHF 60, the cumulative frequency is significantly higher in the two gift treatments than that observed in the baseline, no gift treatment. In contrast, relatively large donations (> 200 CHF) are more frequent in the no gift treatment. Yet, from the charities’ perspective, gift exchange proves a profitable strategy—net proceeds are ~8.2% (59.2%) higher in the small gift (large gift) treatment.

Combined, these results suggest the short-run promise of establishing a gift-exchange relationship. However, from the perspective of a fund-raiser, the effect of establishing a gift-exchange relationship on subsequent

⁴ For example, many spas provide customers with wine or similar beverage of their choice to enjoy while waiting for a massage or while getting a pedicure. Such spas do not expect customers to reciprocate these gifts by returning at a later date with a bottle of wine. Rather the intent of such gifts is to induce the consumer to purchase additional services.

⁵ Solicitation letters were only sent to households that had contributed to the charitable organization in a prior fundraising effort.

fundraising efforts is of equal import. In particular, it is important to explore whether increased donations in the short-run come at the expense of reduced future donations. To explore whether donors engage in such intertemporal substitution, Falk (2007) examines donation data for the solicitation that followed the Dhaka project.⁶ Although donation probabilities and associated contribution levels were lower for those who received a gift in the preceding campaign, the observed differences were not significant at any meaningful level. Hence, the data provide little evidence of intertemporal substitution.

Alpizar et al. (2008) examine the effect of gift exchange on voluntary contributions to Poas National Park (PNP) in Costa Rica. Subjects were international tourists visiting the park who completed an interview and asked if they would be willing to make a contribution to the PNP. Experimental treatments varied three key aspects of the solicitation; (i) the use of donor gifts, (ii) the anonymity of the donation decision, and (iii) information on prior donations.⁷ Providing subjects a small gift (a handcrafted magnet) increased participation rates by 5% but, conditioned on giving, lead to lower contribution levels. Interacting anonymity with reciprocity highlights an important asymmetry—the effects of reciprocity are driven entirely by increased participation rates in the non-anonymous treatment.

Landry et al. (2010) examine the effectiveness of gift-exchange in the context of a door-to-door fundraising. Potential donors were approached in one of three experimental treatments—a VCM, a small gift treatment, and a large gift treatment—and asked to make a contribution to support the Center for Natural Hazard Mitigation at East Carolina University. Empirical results highlight an important asymmetry in the effectiveness of gift exchange across household types. Whereas previous donors to the Hazard Center are unaffected by gifts, cold-list households are considerably affected by gift-exchange.⁸ For example, cold-list households are approximately 14–17 more likely to contribute when approached in a gift treatment. Similar data patterns emerge when examining average contribution levels, although such differences are only significant when comparing behavior across the VCM and large-gift treatments.

⁶ This fundraising drive occurred approximately 2 months later and was designed to collect money in support of needy mothers with little children.

⁷ As noted in Section 2, anonymity was manipulated by varying whether potential donors made contribution decisions in private or in the presence of the interviewer. To manipulate social information, potential donors were provided information about typical contributions of others.

⁸ Among prior donors, both participation rates and average contribution levels are significantly higher in the VCM than those observed in either gift treatment.

In a series of influential papers, [Lerner \(1975, 1980\)](#) sets forth the notion that individuals may resist appeals for unconditional help so as to avoid an expectation of helping others in need—an outcome that may undermine the ability of the individual to maintain just outcomes. In the context of charity, such behavior may explain why individuals refuse requests to contribute to organizations from which they clearly benefit. Complying with such a request would create an expectation of future gifts and increase the likelihood that the individual will be asked to support other charitable causes.

[Holmes et al. \(2002\)](#) posit that adding an exchange reference to charity provides a means to mitigate such concerns. Intuitively, the offer of an exchange provides psychological cover for altruistic behavior. By framing the decision as an economic transaction, the individual is able to avoid the expectation of future gifts—an unwanted psychological burden. Charities can therefore provide psychological cover for altruistic acts, and hence increase contributions, by offering donors some product (e.g., magazine subscriptions, coffee mugs, and T-shirts) in exchange for some minimum donation level.

[Holmes et al. \(2002\)](#) evaluate this hypothesis using a framed field experiment to examine whether willingness to help a charitable organization is greater when the act is presented as an economic transaction as opposed to an act of charity. Potential donors were approached with a request to assist a charity by making a financial contribution either through a direct donation or by purchasing decorative candles. Consistent with the idea that exchange motives provide psychological cover for charitable acts, both participation rates and average contribution levels were higher in the exchange condition. Moreover, such differences were most pronounced when solicitors recited a script that portrayed a high level of victim need.⁹

3.3 The use of up-front money: leadership gifts and donor subsidies

Professional fund-raisers take seriously the importance of leadership gifts. Conventional wisdom maintains that substantial seed gifts should be secured during the so-called ‘quiet’ phase of a fundraising campaign. [List and Lucking-Reiley \(2002\)](#) design a natural field experiment to provide the first test of such wisdom. As part of a capital campaign to fund the Center for Environmental Policy Analysis (CEPA), solicitation

⁹ [Briers et al. \(2010\)](#) posit an alternate explanation for the use of conditional gifts—the provision of a reference price that signals an expected donation level. However, evidence in support of this view is generated via scenario studies that compare hypothetical rather than real contribution levels. Nonetheless, we view this alternative as one that warrants additional research.

requests were mailed to 3000 central Florida households randomly assigned to six different treatment groups of 500 households each.¹⁰

Experimental treatments were designed to evaluate the impact of leadership gifts and refund rules on the provision of a threshold public good—a computer for use at CEPA. Solicitation varied from 10% to 67% the proportion of total project costs provided by an initial seed donation and the availability of refund should the group not reach the desired goal. Solicitation letter described the seed money gift as follows, ‘...we have already obtained funds to cover X percent of the cost for this computer, so we are soliciting donations to cover the remaining \$Y...if we fail to raise the \$Y from this group of 500 individuals, we will not be able to purchase the computer, but we will use received funds to cover other operating expenditures...’. In the refund treatments, this final sentence was replaced with, ‘...if we fail to raise the \$Y from this group of 500 individuals, we will not be able to purchase the computer, so we will refund your donation to you...’.

Experimental results from were striking. Increasing seed money from 10% to 67% of the campaign goal generated an ~6-fold increase in contributions—a result driven by gains along both the intensive and extensive margins, i.e. increased average gift size and participation rates. For example, as the seed donation was increased from 10% to 67% of the cost of the computer, participation rates increased from 3.7% to 8.2% and average donations go from \$15.42 to \$39.87—differences that are significant at the 95% level.

The impact of a refund was significantly less pronounced. Average contributions increased 20%—a result largely driven by larger average gifts. For example, at the 10% seed level, introducing a refund increases average gift size from \$11.85 to \$18.95 but has no discernable impact on participation rates. Yet, from the perspective of the charity, the refund rule proves counter-productive. At both the 10% and 33% seed levels, donations were insufficient to cover the costs of purchasing the computer and thus returned to the respective donors.

Rondeau and List (2008) report similar results for a fundraising drive organized to support the British Columbia Chapter of the Sierra Club. Using direct mail solicitation, approximately 3000 supporters of the Sierra Club were randomly assigned to one of four treatments and asked to support the expansion of a K-12 environmental education program. Compared to the baseline, the announcement of a leadership gift increased participation rates by 23% and total dollars contributions by 18%.

¹⁰ All households that received a solicitation request satisfied two important criteria; (i) annual income above \$70 000 and (ii) a prior history of charitable contributions.

Landry et al. (2006) change the mode of solicitation and examine leadership gifts in the context of door-to-door fundraising. Relative to a simple ask for money (VCM), the announcement of a leadership gift crowds out the marginal donor—i.e. those who contributed but a dollar.¹¹ For example, the proportion of donors who contributed a single dollar in the VCM (single-prize lottery) was approximately five times (eight times) greater than that observed in the seed money treatment. Yet, conditioned on giving, average donations in the seed money treatment were more than double those observed in all other treatments.

A related use of leadership gifts is the provision of matching grants, whereby a donor(s) agrees to match the contributions of others at a pre-determined rate. Intuitively, such grants change the ‘price’ of giving and should thus influence both participation rates and average contribution levels. Karlan and List (2007) use a natural field experiment to explore the effects of ‘price’ changes on charitable giving by soliciting contributions from more than 50 000 supporters of a liberal organization. Potential donors are randomized into several different treatments to explore whether the presence of a match and the match rate itself influence giving.

Empirical results call into question a rule-of-thumb convention amongst professional fund-raisers that larger match rates have greater influence on contributions than smaller match rates. Simply announcing that a match is available considerably increasing the revenue per solicitation—by 19%. In addition, the offer of a match increases the probability that an individual contributes—by 22%. Yet, the impact of larger match ratios—i.e. a \$3 or \$2 match for every \$1 donated—is no different than that observed for 1:1 matches.

Meier (2007) extends this basic line of inquiry by exploring the effect of matching grants on both short- and long-run behavior using a natural field experiment. Every semester, students at the University of Zurich have to decide anonymously whether or not to contribute to two social funds—one that offers cheap loans to students and another to support foreign students studying at the University. For the winter 2002 semester, a random sample of 600 students was informed that their donations would be matched at a predetermined rate (either 25% or 50%) should they contribute to both funds. To explore the long-run effects of matching grants, data on contribution decisions for both the treatment and control group in the three semesters following the intervention are analyzed.

Empirical results suggest the import of matching grants in the short-run. The likelihood of contributing to both funds is significantly higher

¹¹ Overall participation rates in the VCM are ~40% greater than that observed in the seed money treatment.

amongst those receiving a match. However, in the periods following intervention, contribution rates among the treatment group significantly decline. In fact, this long-run decline is so pronounced that the net effect of the match on participation rates is negative.

Eckel and Grossman (2008) organize a fundraising drive for Minnesota National Public Radio (MPR). Their natural field experiment was designed to compare the affect of theoretically equivalent rebates and matching grants on donor behavior. The rebate subsidy is one whereby a donor pledging \$1 to MPR receives a partial refund. The matching subsidy works as follows: a donor pledge of \$1.00 is matched by an additional donation to MPR. Potential donors are randomly assigned to one of five treatment groups that vary the type and level of subsidy. Empirical results suggest that matching grants result in larger total donation to MPR than otherwise equivalent rebates. Moreover, estimated price elasticities suggest that those receiving a matching subsidy are significantly more responsive to price changes than counterparts receiving an equivalent rebate.

Huck and Rasul (2008) integrate these literatures using a novel natural field experiment to examine the relative effectiveness of leadership gifts, linear matching schemes, and non-linear matching schemes. In conjunction with the Bavarian State Opera House, solicitation letters to support a social program for disadvantaged youths were mailed to a randomly selected list of 25 000 regular opera attendees. Potential donors were randomly assigned to one of six treatments designed to explore behavioral response to various linear and non-linear matching schemes—(i) linear matching schemes that provided donors either a 100 or 50% match rate, (ii) non-linear matching schemes, whereby contributions above a fixed threshold were matched at a given rate, (iii) leveraged matching schemes whereby positive donations were matched with a fixed amount, and (iv) schemes that announced the presence of a lead donor.

Empirical results highlight the importance of leadership gifts and call into question the relative effectiveness of linear matching grants. The announcement of a leadership gift generates an ~80% increase (from 74.3 to 132 Euros) in average contributions. Interestingly, leadership gifts prove most effective amongst high donors and the effect of such gifts is increasing in the amount the household would have contributed if assigned to the control group. In contrast, linear matching schemes prove ineffective for the fund-raiser. As the ‘price’ of the charitable good falls, total contribution levels (including the match) increase but out of pocket expenditures fall—i.e. out of pocket donations are inelastic.

Additional results suggest the promise of non-linear matching grants. Such schemes serve to crowd in donations received with little or no change in overall participation rates. Yet, the effectiveness of such grants depends

critically on the minimum donation required to obtain the match. Finally, the leverage matching scheme leads to the highest participation rates but draw in relatively small gifts. However, such schemes lead to an approximate dollar for dollar crowding of out of pocket contributions from large givers. Hence, such schemes have no discernable impact on behavior and prove a highly ineffective fundraising mechanism. Taken jointly, these results suggest that leadership gifts are more effective than comparable linear match grants.

Viewed in its entirety, these data highlight the role of incentives on charitable giving. Donors respond to changes in the costs/benefits of giving in ways predicted by standard consumer theory. In this regard, the use of upfront money provides an important avenue for charities to influence donor behavior and acquire new gifts. However, long-run fundraising success depends on the incentives used to attract first-time donors. Certain types of incentives induce an intertemporal substitution of gifts or crowd out reasons for giving in the long-run.

3.4 The import of the ask strategy: the provision of social information

Festinger's (1954) social comparison theory claims that individuals validate the appropriateness of an action through comparison with referent others. Hence, perceived normative behaviors of like others (my reference group) should influence own decision making. In the context of charitable giving, objective standards of generosity are often lacking. According to social comparison theory, knowing what others have contributed should therefore have an impact on donor behavior.¹²

Early work in social psychology provides support for social comparison theory and highlight that such comparisons influence participation rates. For example, Bryan and Test (1967) increase the frequency at which individuals donate to a Salvation Army bell ringer by showing participants cooperative confederates. Reingen (1978) was able to increase the proportion of individuals contributing to the Heart Association by showing potential donors a list of those who had previously donated.

Despite its roots in social psychology, a recent set of innovative natural field experiments has provided the basis for a nice research agenda in economics exploring the effect of social information on charitable

¹² A related line of literature examines the effectiveness of ask strategies designed to legitimize paltry donations. Such strategies include phrases such as 'even a dollar will help' with the ask, and have been shown to dramatically increase participation rates. Although this technique has garnered much attention in the social psychology literature, we are unaware of any study in economics that explores this technique. We refer the interested reader to Fraser et al. (1988) or Shearman and Yoo (2007) for an overview of this literature.

behavior. Frey and Meier (2004) examine how information on historical participation rates influences the decision to contribute today. Every semester, students at the University of Zurich have to decide anonymously whether or not to contribute to two social funds—one that offers cheap loans to students and another that to support foreign students studying at the University. A random sample of 2000 upper level students was provided differing information on the behavior of other students. Half of these students were informed that a relatively high proportion of the student population (64%) had contributed to the two funds in the past. The other half were informed that a relatively low proportion of the student population (46%) had contributed to the funds in the past.

Observed contribution levels are consistent with social comparison theory—the probability of students contributing is positively correlated with participation rates for the reference group. The percentage of students contributing to at least one fund in the ‘High’ information treatment was ~ 2.3 percentage points greater than that observed in the ‘Low’ information treatment. Similar data patterns emerge if one restricts the analysis to examine the percentage of students contributing to both funds. Yet, such effects depend on past contribution decisions. Those who have never (always) contributed to at least one of the funds, are unaffected by social comparisons. In contrast, those who show indifference towards contributing—i.e. those for whom the decision to donate varies across semesters—react strongly to information about the decisions of others.

Shang and Croson (2009) extend this analysis to examine the effect of social information on the intensive margin by working with phone banks receiving inbound calls as part of an on-air fundraising campaign for public radio. Thus, they have a sample of individuals who have already decided to donate. This design feature allows them to examine whether social information alters the amount the individual elects to give.

Shang and Croson employed a between-subject design, whereby subjects were randomly allocated into a control group that provided no social information or one of three social information conditions informing the caller that a previous member had contributed either \$75, \$180, or \$300 dollars. The levels of social information were drawn from the distribution of donations from previous on-air fundraising drives and correspond to the 50th, 85th, and 90th percentiles of this distribution. Contribution decisions are observed for a total of 538 individuals who called into the station during the fundraising drive.

Empirical results are intriguing and suggest that contributions from ‘recent donors’ matter greatly. In fact, the most influential level of social information is drawn from the 90th to 95th percentile of previous contribution. In this condition, social information increases contributions by 12% (or approximately \$13) from the \$106.7 average gift observed in

the control condition. Interestingly, such effects are most pronounced amongst new members and have little impact on the decisions of renewing members. For example, new members who are randomly assigned to the \$180 (\$300) social information treatment contribute approximately \$15.45 (\$23.37) more on average than counterparts in the control group—differences that are statistically significant. For renewing members, the corresponding average treatment effects are much smaller in magnitude and statistically insignificant. Moreover, these increased contributions do not crowd out future donations. Contributions to the station 1 year later are orthogonal to past treatment assignment.

Croson and Shang (2008) extend this line of inquiry to examine the effect of downward social information on donor behavior. In their study, conducted in conjunction with an anonymous public radio station, renewing members were presented with social information (another donor's contribution) that was either above or below their previous contribution. Empirical results suggest that respondents change their contribution in the direction of the social information. Interestingly, the downward effect of a low social comparison is approximately twice as large in magnitude (\$24.05 versus \$12.08) as the upward effect of providing a high social comparison amount.

Martin and Randal (2008) synthesize the two literatures by exploring the effect of changes in both the number of previous donations and the average donation level. To investigate these questions, the contents of a transparent donation box at an art gallery with free admission were manipulated at the start of each day. Experimental treatments varied the contents of the donation box to manipulate perceived social information. In particular, the authors investigate four treatments: one with primarily a few large denomination bills, one with several small denomination bills, one with a large amount of coinage, and one empty.

Empirical results are consonant with previous research and suggest the import of social information on donor behavior. The average contribution per visitor was higher in all non-empty treatments than that observed in the baseline. Yet treatments affect behavior along different margins. For the coin treatment, the increase in average donations per visitor reflects gains along the extensive margin—i.e. higher participation rates. For the bill treatments, the increase in average donations per visitor reflects gains along both the extensive and intensive margin (higher conditional contribution levels). Taken jointly, these data suggest a potential trade-off associated with the manipulation of social information. Treatments that increase the propensity to donate reduce average donation size and vice versa.

4 Corporate provision of public goods—social responsibility and bundling

As Figure 4 makes clear, corporate giving to charitable causes represents an important component of overall giving in the USA. Yet, such giving has not been entirely welcome by all economists. Milton Friedman (1970), for example, set off a firestorm when he likened corporate social responsibility to ‘pure and unadulterated socialism’. From this came the mantra from Friedmanites that ‘the business of business is business’. In the four decades since, the debate over the nature and extent of the social responsibilities of business has become heated and complex.

Within academic circles, several areas of study have been launched in response to Friedman’s arguments, including a vast literature that explores the relationship between corporate social performance and financial performance. By and large, the empirical results emanating from this line of research are far from conclusive. While some studies find a positive relationship between social and financial performance (e.g. Waddock and Graves 1997), other report no or even a negative relationship (e.g. Wright and Ferris 1997; McWilliams and Siegel 2001).

At roughly the same time, a vibrant literature in industrial organization was emerging that examined the properties of commodity bundling. An early contribution was due to Friedman’s colleague, George Stigler (1963), who showed that it is potentially profitable for a monopolist selling two goods to bundle them by requiring a buyer to purchase both in order to get either. This line of research has proliferated with several seminal advances, showing various rationales for tying arrangements.

Although Friedman and Stigler were noted close friends going as far back as their graduate school days at the University of Chicago, the literature has yet to marry these two lines of scholarship.¹³ This gap in the literature is surprising as it is not difficult to find examples of consumption goods that are bundled with charitable donations. For example, profits from certain iPods, T-shirts, and other items with the (RED) label go to the Global Fund to Fight AIDS, TB, and malaria. Products with the pink breast cancer awareness logo are widespread and reach from products like T-shirts and other visible and durable goods, to fruit juices. Alternately, many firms elect to adopt ‘green’ production processes or fair-trade practices that raise costs but provide external benefits in the form of pollution reductions or improved living standards for farmers in developing countries. For example, Heal (2001) reviews a number of cases in which

¹³ ‘...there is no one anywhere I would rather have as a colleague than you.’ – George Stigler to Milton Friedman, October 19, 1954 (Hammond and Hammond, 2006).

developers (or community members) have chosen to conserve local environmental amenities as a means to raise property values.

Yet it is not only for profit firms that engage in such practices. Many non-profit organizations sell products to augment charitable revenues or offer potential donors gifts for contributions exceeding some predetermined threshold. For example, the Nature Conservancy sells items ranging from organic sheets and crib bedding to books, magazines, and DVDs on its website. And other organizations such as National Public Radio or the Public Broadcast System offer products such as coffee mugs, T-shirts, or CD collections during on-air fundraising efforts as a 'gift' to donors who contribute more than a specified amount.

Despite the widespread use of such practice, there is a dearth of experimental evidence exploring how consumers respond to charity-linked products. Loureiro and Lotade (2005) examine whether WTP for eco-labeled products—fair trade and shaded coffee. In their study, a total of 284 respondents completed in-person surveys at supermarkets in one of five locations throughout Colorado and Wyoming. Empirical results suggest that consumers are willing to pay, on average, 22¢ per pound more for fair trade coffee. Moreover, this premium is significantly enhanced when respondents are approached by an interviewer from a region that produces the eco-labeled products. Hiscox and Smyth (2008) report similar findings from a natural field experiment conducted at major retail store in New York City. In their study, sales of products that were labeled as being made under good labor (or fair trade) standards rose markedly in relation to substitute goods that did not display such label.

Leszczyc and Rothkopf (2010) examine whether bidders are willing to pay higher prices in charity auctions. In their natural field experiment, identical products are simultaneously offered for sale on-line in charity and non-charity auctions. Empirical results, drawn from 263 unique auctions with sales revenues of \$404,483 Canadian, suggest that selling prices are significantly higher when proceeds are designated for charity and that such differences are increasing in the percentage of revenue donated to charity.¹⁴ For example, relative to non-charity auctions, winning bids are approximately \$6.86 greater (\$25.98 versus \$19.13) when the auction rules specify that 100% of all proceeds will be donated to charity. Interestingly, this difference is driven entirely by an increased willingness to pay for charity-linked products rather than increased competition—charity-linked auctions attract fewer bidders and bids.

¹⁴ Similar results are found in a non-experimental setting by Elfenbein and McManus (2009) who find an ~6% increase in prices for charity linked auctions on eBay.

However, such price effects only arise when the charitable donation is directly related to auction revenue. Announcing an exogenously fixed charitable donation has no effect on winning bids. Average revenues in auctions that awarded a fixed amount—set at 40% of the estimated winning bid—to charity were \$0.35 lower (\$35.52 versus \$35.87) than those observed in parallel non-charity auctions. Moreover, revenues from such auctions were approximately \$4.44 lower (\$35.52 versus \$39.96) than those observed in parallel auctions that awarded 40% of actual auction revenue to charity.

McManus and Bennet (2011) conduct a field experiment at a non-profit organizations online store to examine how demand changes when the consumer's purchase generates revenues for a charitable cause. Informing customer's that purchases of at \$10 in merchandise would trigger a donation of \$1–5 to the charity by an anonymous, outside group significantly affected order size and lead to an ~20% increase in revenues. Moreover, in the year following the experiment, consumers who initially purchased under a donation pledge were more likely to return to the store and purchase additional items.

We view studies exploring the potential profitability of bundling strategies for both private firms and charitable organizations as important avenue for future research. Such studies would undoubtedly shed important insights into the debate on the efficacy of corporate social responsibility. Ideally, such studies would reconcile the disparate empirical results regarding the profitability of corporate social responsibility and highlight that not all actions driven by a desire to provide a 'social good'. For example, while many would consider a Whole Foods donation of 5% of a store's total sales to a non-profit organization as corporate social responsibility, it is possible that such an activity is *necessary* for rather than at odds with profit maximization.¹⁵

5 Conclusions

Charitable fundraising remains an important matter for the international community and more narrowly in the Western World, where in some

¹⁵ One need look no further than the following comment from CEO John Mackay, to see that such motives are a key driven of Whole Foods actions, Mackey (2005). 'While our stores select worthwhile organizations to support, they also tend to focus on groups that have large membership lists, which are contacted and encouraged to shop our store that day to support the organization. This usually brings hundreds of new or lapsed customers into our stores, many of whom then become regular shoppers. So a 5% Day not only allows us to support worthwhile causes, but is an excellent marketing strategy that has benefited Whole Foods investors immensely.'

economies gifts of money now exceed 2% of GDP. Most experts believe that the combination of increased wealth and an ageing population will lead to even higher levels of gifts in the coming years. Interestingly, even though the stakes are clearly high, until the past several years even the most primitive facts concerning alternative fundraising mechanisms are largely unknown. Recently, a set of natural field experiments (see [Harrison and List 2004](#)) have lent insights into the ‘demand side’ of charitable fundraising (where demand side means from the view of the charity). The data generated speak to theorists in that their main results can not only test existing theories, but provide crucial behavioral parameters that help to construct new theories. In addition, empirical insights are important for fundraisers, policymakers, and academics alike.

We suspect that field experiments will continue to provide insights into the demand side of charitable fundraising, which remains long on anecdotes and short on hard empirical facts. In particular, there remain many low apples that have yet to be picked. What motivates people to give their time? How do individuals in developing countries respond to the pecuniary and non-pecuniary incentive schemes that have worked in the Western World? Are gifts of time and money substitutes or complements? Should each be treated within the governmental tax code? How does each get crowded out when the government steps in to provide the public good of interest? We hope that in some small way our study motivates scholars to tackle these first order questions.

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References

- Alpizar, F., F. Carlsson and O. Johansson-Stenman (2008), “Anonymity, Reciprocity, and Conformity: Evidence from Voluntary Contributions to a National Park in Costa Rica”, *Journal of Public Economics* **92**, 1047–1060.
- Briers, B., M. Pandelaere and L. Warlop (2007), “Adding Exchange to Charity: A Reference Price Explanation”, *Journal of Economic Psychology* **28**, 15–30.
- Bryan, J. H. and M. A. Test (1967), “Models of Helping: Naturalistic Studies in Aiding Behavior”, *Journal of Personality and Social Psychology* **6**, 400–407.

- Carpenter, J. P., J. Holmes and P. H. Matthews (2008), “Charity Auctions: A Field Experiment”, *The Economic Journal* **118**, 92–113.
- Cornes, R. and T. Sandler (1984), “Easy Riders, Joint Production, and Public Goods”, *The Economic Journal* **94**, 580–598.
- Croson, R. and J. Shang (2008), “The Impact of Downward Social Information on Contribution Decisions”, *Experimental Economics* **11**, 221–233.
- Eckel, C. C. and P. J. Grossman (2008), “Subsidizing Charitable Contributions: A Natural Field Experiment Comparing Matching and Rebate Subsidies”, *Experimental Economics* **11**, 234–252.
- Elfenbein, D. W. and B. P. McManus (2010), “Last Minute Bidding in eBay Charity Auctions”, *Economic Letters* **107**, 42–52.
- Engers, M. P. and B. P. McManus (2007), “Charity Auctions”, *International Economic Review* **48**, 953–994.
- Falk, A. (2007), “Gift-Exchange in the Field”, *Econometrica* **75**, 1501–1512.
- Festinger, L. (1954), “A Theory of Social Comparison Processes”, *Human Relations* **7**, 117–140.
- Fraser, C., R. E. Hite and P. L. Sauer (1988), “Increasing Contributions in Solicitation Campaigns: The Use of Large and Small Anchor Points”, *Journal of Consumer Research* **15**, 284–287.
- Frey, B. and S. Meier (2004), “Social Comparisons and Pro-Social Behavior: Testing ‘Conditional Cooperation’ in a Field Experiment”, *American Economic Review* **94**, 1717–1722.
- Friedman, M. (1970), “The Social Responsibility of Business Is to Increase Its Profits”, *The New York Times Magazine*, September 13, 1970, 32–33, 122, 126.
- Goeree, J. K., E. Maasland, S. Onderstal and J. L. Turner (2005), “How (Not) to Raise Money”, *Journal of Political Economy* **113**, 897–926.
- Hammond, J. D. and C. H. Hammond (eds) (2006), *Making Chicago Price Theory: Friedman-Stigler Correspondence, 1945–1957*, Routledge, London.
- Harrison, G. W. and J. A. List (2004), “Field Experiments”, *Journal of Economic Literature* **42**, 1009–1055.
- Heal, G. (2001), “Bundling Public and Private Goods”, Working Paper, Columbia Business School.
- Hiscox, M. J. and N. F. B. Smyth (2008), “Is There Consumer Demand for Improved Labor Standards? Evidence from Field Experiments in Social Labeling”, Working Paper, Department of Government, Harvard University.

- Holmes, J. G., D. T. Miller and M. J. Lerner (2002), “Committing Altruism under the Cloak of Self-Interest: The Exchange Fiction”, *Journal of Experimental and Social Psychology* **38**, 144–151.
- Huck, S. and I. Rasul (2008), “Comparing Charitable Fundraising Schemes: Evidence from a Natural Field Experiment”, Working Paper, University College London.
- Karlan, D. and J. A. List (2007), “Does Price Matter in Charitable Giving? Evidence from a Large-Scale Natural Field Experiment”, *American Economic Review* **97**, 1774–1793.
- Landry, C. E., A. Lange, J. A. List, M. K. Price and N. G. Rupp (2006), “Toward an Understanding of the Economics of Charity: Evidence from a Field Experiment”, *Quarterly Journal of Economics* **121**, 742–782.
- Landry, C. E., A. Lange, J. A. List, M. K. Price and N. G. Rupp (2010), “Is a Donor in Hand Better than Two in the Bush? Evidence from a Natural Field Experiment”, *American Economic Review* **100**, 958–983.
- Lerner, M. J. (1975), “The Justice Motive in Social Behavior: Introduction”, *Journal of Social Issues* **31**, 1–19.
- Lerner, M. J. (1980), *The Belief in a Just World*, Plenum, New York.
- Leszczyc, P. T. L. and M. H. Rothkopf (2010), “Charitable Motives and Bidding in Charity Auctions”, *Management Science* **56**, 399–413.
- List, J. A. and D. Lucking-Reiley (2002), “Effects of Seed Money and Refunds on Charitable Giving: Experimental Evidence from a University Capital Campaign”, *Journal of Political Economy* **110**, 215–233.
- Loureiro, M. L. and J. Lotade (2005), “Interviewer Effects on the Valuation of Goods with Ethical and Environmental Attributes”, *Environmental and Resource Economics* **30**, 49–72.
- Mackey, J. (2005), “Putting Customers Ahead of Investors.”, Reason, October. <http://reason.com/archives/2005/10/01/rethinking-the-social-responsibility/singlepage>.
- Martin, R. and J. Randal (2008), “How is Donation Behavior Affected by the Donations of Others?”, *Journal of Economic Behavior and Organization* **67**, 228–238.
- McManus, B. and R. Bennet (2011), “The Demand for Products Linked to Public Goods: Evidence from an Online Field Experiment”, *Journal of Public Economics* **95**, 403–415.
- McWilliams, A. and D. Siegel (2001), “Corporate Social Responsibility: A Theory of the Firm Perspective”, *Academy of Management Review* **26**, 117–127.

- Meier, S. (2007), “Do Subsidies Increase Charitable Giving in the Long Run? Matching Donations in a Field Experiment”, *Journal of the European Economic Association* **5**, 1203–1222.
- Regan, D. T. (1971), “Effects of a Favor and Liking on Compliance”, *Journal of Experimental and Social Psychology* **7**, 627–639.
- Reingen, P. H. (1978), “On Inducing Compliance with Requests”, *The Journal of Consumer Research* **5**, 96–102.
- Ridley, M. (1997), *The Origins of Virtue: Human Instincts and the Evolution of Cooperation*, Penguin Books, London.
- Rondeau, D. and J. A. List (2008), “Matching and Challenge Gifts to Charity: Evidence from Laboratory and Natural Field Experiments”, *Experimental Economics* **11**, 253–267.
- Shang, J. and R. Croson (2009), “Field Experiments in Charitable Contribution: The Impact of Social Influence on the Voluntary Provision of Public Goods”, *The Economic Journal* **119**, 1422–1439.
- Shearman, S. M. and J. H. Yoo (2007), “Even a Penny Will Help!: Legitimization of Paltry Donations and Social Proof in Soliciting Donation to a Charitable Organization”, *Communication Research Reports* **24**, 271–282.
- Stigler, G. J. (1963), “United States v. Loew’s, Inc.: A Note on Block Booking”, *Supreme Court Review* **1963**, 152–157.
- Waddock, S. A. and S. B. Graves (1997), “The Corporate Social Performance – Financial Performance Link”, *Strategic Management Journal* **18**, 303–319.
- Wright, P. and S. P. Ferris (1997), “Agency Conflict and Corporate Strategy: The Effect of Divestment on Corporate Value”, *Strategic Management Journal* **18**, 77–83.