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Charity and Philanthropy, Economics of

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Abstract

Philanthropy is defined as a benevolent behavior toward others in the society, usually in the form of charitable gifts. Charitable giving accounts for a significant fraction of income in the US and other nations and is often directly encouraged through government tax policy. This article discusses the motives, causes, and influences of philanthropic behavior. Special emphasis is placed on how government policy – through the charitable deduction on income taxes and through direct grants to charities – can affect the amount of philanthropy in the economy.

Introduction

In 2006, the second richest man in America, Warren Buffett, pledged that over the remainder of his life he would give away 85% of his wealth – at the time, a sum of over \$40 billion – to a foundation established by the richest man in the world, Bill Gates. By 2012, the two men have given away nearly \$26 billion, and held another \$36 billion in assets waiting to be handed out.

These are examples of philanthropic, or charitable, behavior – individuals freely giving money to help others. Most people are, in fact, philanthropists, although not on the scale of the two mentioned above. Through the last few decades, over two-thirds of Americans donated money to charity in any given year, with households giving over 2% of income on average. In 2011, average cash donations to charity were \$2227 per married household, and \$1303 for single people, making charitable giving a major category of household expenditures.

In addition, the government is an active partner with private donors in funding the charitable sector of the economy. It does this in two ways. The first way is direct grants to charities. In 2009, for instance, charitable organizations reported receiving \$140 billion in government grants, or about 10% of total revenue. The second way the government spends money on charity is by excluding income spent on charitable donations from the income tax. The US tax code was modified in 1917 to allow many taxpayers to deduct their charitable donations from their taxable incomes, and by 2011 individuals were claiming nearly \$175 billion in charitable deductions.

Here we will describe how economists think about and do research on philanthropy, what economists know about charitable giving, and how public policy influences it (see also Andreoni and Payne, 2013). The focus will be primarily on gifts of money and assets by individuals, although corporations and other institutions also make charitable gifts (see Williams, 2003), and people also give by volunteering time (see Brown and Martin, 2012). In addition, the discussion will center on philanthropy in the United States, since a large majority of the academic research has centered on the American experience (for information on charitable organizations internationally, see Anheier and Kendall, 2001). Finally, we will highlight what challenges remain ahead for the study of philanthropy.

An Economist's View of Charitable Behavior

Economics is founded on the view that people are selfinterested. Economists assume that since individuals have a choice in how they behave, they must always make the choices that they think are the best at the time. This assumption, called the 'axiom of rationality,' provides the bedrock from which economic models of behavior are formed.

Applying this framework to philanthropic behavior, we can ask why would someone who works hard for his or her money simply turn around and give it away? Does not this contradict the assumption that individuals are self-interested? Maybe. But by the axiom of rationality, we should first look for ways in which an individual believes that giving to charity is the best thing to do with that money at that time.

One possibility is that people desire more of the service provided by the charity. National Public Radio (NPR), for instance, is a charitable organization that survives largely on donations. Over a million people a year give to NPR with most giving under \$100. Are these givers getting their money's worth? Certainly not. Anyone can listen to NPR broadcasts, even without donating, and anyone who gives \$100 is unlikely to notice any increase in broadcast quality as a result. It follows that a self-interested person is better off giving nothing and taking a 'free ride' on the donations of others. Hence, this alone cannot be an adequate explanation for why people give to charity (Andreoni, 1988).

A second reason is that individuals may be getting something directly from the charity in exchange for their contributions. For instance, big donors may get better seats to the opera, or donors to a university may get buildings named for them. While this must surely matter for large donors, most individuals only receive tokens (a coffee mug?), if anything, in exchange for donations.

A third reason could be that individuals get some internal satisfaction – a 'warm-glow' – from giving to their favored charity, and the more they give, the better they feel (Andreoni, 1989). This would mean that giving to charity is like buying any other good, such as ice cream. We easily accept that people have a natural taste for ice cream, so why not a natural taste for warm-glow? If we accept this, then we can analyze charitable giving just like any other consumer good – when income goes up people should want more, and when the price goes up people should want less. Scholars have examined preferences

for giving from a number of different approaches, and it seems that warm-glow is in fact a core economic motivation for giving (Andreoni, 1993; Ribar and Wilhelm, 2002; Harbaugh et al., 2007). But what is it that produces the private benefit from giving? Warm-glow could stem from religious duty, from pressure at work or from friends, as a signal of social status (Rose-Ackerman, 1996), or to project a positive image to others (Andreoni and Bernheim, 2009). At the heart of all of these processes, however, seems to be a basic human interest in helping others or doing one's share. So for this discussion, we will take as our launching point the idea that people get joy from giving and apply our economist's tools for analyzing consumer behavior to the study of charitable giving.

The Facts about Philanthropy in the United States

How do we learn about charitable giving? One source is surveys of consumers. The Center on Philanthropy, for instance, conducts regular surveys of over 8000 households. Surveys are valuable since they can obtain information on age, education levels, and other personal characteristics of respondents. A disadvantage is that individuals must rely on imprecise memories when answering questions, or may be reluctant to give true information about their incomes or donations.

A second important source is samples of tax returns. Since individuals who itemize their tax returns in the US can take a charitable deduction, we can learn about donations for this sector of the economy. The advantage to tax returns is that the information on them is precise, as long as people do not cheat on their taxes. (Slemrod (1989) explored this potential problem and found that, while there is some evidence of cheating by overstating charitable deductions, the effects are small and do not appreciably affect the analysis.) The disadvantage to this data is that tax returns contain very little information about the personal characteristics of the filers that would be helpful in explaining giving, such as education levels or religious affiliation, nor can we learn about the giving habits of those who do not itemize their tax returns. Since no data source is perfect, economists must conduct many studies on many data sources in order to uncover the 'facts' on charitable giving.

Sources, Totals, and Trends in Giving

Charitable donations can come from individuals, charitable foundations, corporations, or through bequests. While all are significant, by far the dominant source of giving is from individuals. Table 1 shows that in 2011 individuals gave over

 Table 1
 Sources of private philanthropy, 2011

Source of gifts	Billions of dollars	Percent of total
Individuals	217.8	73
Foundations	41.7	14
Bequests	24.4	8
Corporations	14.6	5
Total for all sources	298.5	100

Source: Giving USA, annual report 2012.



Figure 1 Giving by individuals, 1981–2011. Dollars are inflationadjusted to 2011 values. Source: Giving USA, annual report 2012.

\$217 billion to charity, or 73% of the total dollars donated. The second biggest source, foundations, was responsible for 14% of all donations.

The trends in giving over the last 30 years can be seen in **Figure 1**. Total giving has been on a steady rise, with especially big jumps coming in 1996, 1997, and 1998. When measured as a percent of income, however, giving seems much more stable. Since 1968, giving has varied from 1.6 to 2.1% of the income. This figure has been remarkably stable for decades, with the occasional dips due to recessions or increases for special times of need.

Who Gives?

The Center on Philanthropy survey indicates that 65.6% of households gave to charity in 2009 and that the average gifts among those giving was \$2313, exactly 2% of income. **Table 2** shows that as household incomes rise, the household is more likely to give, and will make larger donations. This table also reveals an interesting pattern typically found in charitable statistics. Those with the lowest incomes tend to give the highest share of income to charity, in this survey it is 3.6% of income, while middle-income people give the least. For very high incomes, which are not captured by this data, giving again tends to swing up on average, although often with quite large differences in giving among the very rich (Auten et al., 2000).

What could cause this 'u-shaped' giving pattern? One explanation is that those with low incomes may be young people who know their wages will be rising, hence they feel they can afford more giving now. It may also be due to the types of charities people give to, since lower income people tend to give significantly more to religious causes. As we see, it will be important to account for all the factors that may explain giving before offering explanations for the averages seen in these tables.

Table 2 also illustrates that giving varies significantly with the age and educational attainment of the givers. As people get older, they are typically more likely to give to charity and to give a greater fraction of their incomes. Likewise, those with more education give more often, give more dollars, and generally give a higher fraction of income. Again, age, education, and income all vary with each grouping in the table and will have to be considered jointly.

Table 2	Private philanthropy by income, age, and education of the
giver, 2009	

	Percent of households who give	Average amount given by those who give (in dollars)	Percent of household income
All contributing households	65.6	2313	2.0
Household income			
Under \$15,000	32.5	899	3.6
\$15,000-\$29,999	50.1	1219	2.7
\$30,000-\$44,999	53.5	1322	1.9
\$45,000-\$59,999	68.8	1608	2.1
\$60,000-\$74,999	73.3	1699	1.9
\$75,000–\$99,999	77.7	2298	2.1
\$100,000-\$124,999	87.9	2850	2.3
\$125,000–\$149,999	91.1	3277	2.2
\$150,000-\$200,000	94.4	3428	1.9
\$200,000 and above	91.4	6989	1.8
Age of giver			
18–24 years	33.0	709	0.8
25–34 years	52.3	1385	1.2
35–44 years	61.4	1701	1.2
45–54 years	64.7	2692	1.9
55–64 years	76.3	2762	2.4
65–74 years	80.2	2785	3.3
75 years and above	80.3	2618	4.8
Highest education of giver			
Not a high school graduate	40.5	1209	1.2
High school graduate	57.0	1770	1.9
Some college	70.6	2122	1.2
College graduate or more	84.1	3145	2.3

Source: Author's calculations, data from the 2009 Center on Philanthropy Panel Study.

What Do They Give To?

In 2009, over 320 000 charitable, religious, and other nonprofit organizations filed with the US government. **Table 3** attempts to categorize these charities by the types of services they provide. This reveals that, among all types,

Table 3Private philanthropy by type of charitable organization,2009

Type of charity	Percent of households who give	Average ar given by th give (in dol	nount Percent of tota lose who household llars) contributions
Arts, culture, humanities	8.0	360	1.9
Combined	25.3	613	10.2
Education	14.5	544	5.2
Environment	9.2	215	1.3
Health	23.6	305	4.8
International	5.4	402	1.4
Need	31.5	549	11.4
Neighborhood	4.7	288	0.9
Religious	41.9	2086	57.5
Youth	12.0	247	2.0
Other	7.8	662	3.4

Source: Author's calculations, data from the 2009 Center on Philanthropy Panel Study.

households are most likely to give to religious organizations and to give them the most money – 41.9% of all households give to religion and 57.5% of all charitable dollars go to religion.

Taxes and Giving

How can taxes encourage philanthropic behavior? Taxpayers in the US who itemize their deductions can deduct their charitable giving from their taxable income. If someone in the 15% marginal tax bracket gives \$100 to charity and takes a charitable deduction, this person will save \$15 in taxes, making the net cost of the gift \$85. If the person was in the 31% tax bracket then the \$100 gift would have a net cost of \$69. Thus, the higher one's tax rate, the lower the net cost of giving. In this way the tax rate acts as a subsidy rate to giving, and those in higher tax brackets get bigger subsidies. (Note that state income taxes often add additional subsidies. See Feenberg, 1987.)

Since the tax deduction subsidizes giving, we should expect that those with higher subsidies will make larger contributions. It is also natural to expect that those with higher incomes will make larger contributions. However, those with higher incomes will typically also have higher subsidies, so when we see richer people giving more how can we know whether their income or the subsidy is causing the change? If we can compare people with similar subsidy rates but different incomes, and similar incomes but different subsidy rates, we can apply statistical techniques to separate the influences of income and the subsidy.

Note that no one can give to charity solely to 'get a tax benefit.' Even a person in the highest federal tax bracket, 35%, will still pay 65 cents to give away another dollar. But this can skew how we view the statistics when we report giving as a percent of income. Earlier we noted that someone with income of \$35 000 would give 1.9% of income, as would someone with income of \$175 000. Since the marginal tax rate at the low income is 15% and at the high income is 35%, the higher income person is getting a bigger tax benefit. After the tax savings, the low earner's net contribution is 1.6% of income, while for the high earner it is 1.3%.

An important thing for policy makers to determine is whether subsidizing giving through tax deductions is worth the cost to the government. If, for instance, the subsidy does not increase giving at all, then the policy is costing the government tax dollars without benefiting the charities. If, on the other hand, the subsidy creates a dramatic response, tax deductions may be an effective tool to increase social well-being. Generally, policy makers look for the increase in contributions due to the subsidy (the benefit) to be larger than the loss in tax dollars (the cost). The next section discusses how economists explore this issue.

The Effect of the Subsidy on Giving

Economists began conducting detailed empirical studies of giving in the 1970s in an attempt to isolate the effect of the subsidy on giving (see Clotfelter, 1985, for a review). You can imagine asking the counterfactual policy question this way: Consider a proposal that would allow everyone to claim 110% of their current deduction on their income taxes – make a \$100

contribution and take a deduction for \$110. This means that the net cost of a \$100 contribution would fall by 10%. For someone in the 28% marginal tax bracket, for instance, the cost of giving \$100 would fall from \$72 to \$62.80. We would expect that this lower cost might encourage more giving, but by how much?

The first generation of studies to explore this counterfactual relied on cross-sectional data, primarily from tax returns. Observing income and deductions for thousands of people in a given tax year, the researchers use the variations in income and cost to estimate how, on average, individuals would respond to such a change in policy. There were several limiting features of the data used in these studies. Of particular importance is that the samples, for reasons of confidentiality, typically did not include extremely wealthy people.

Depending on the source of the data, the years studied, the size of the sample, and the statistical approach, the results naturally varied. It has been generally agreed, however, that the prediction that best characterizes the results is that a policy that would reduce the cost to donors by 10% – without affecting the other income taxes paid by the individual – would increase their contributions by about 13% (Clotfelter, 1990). This suggests that behavior is quite responsive to the incentives offered by the tax deduction, and that the response is large enough to satisfy the policy criterion noted above. In particular, if the government pays an additional 10% of the cost of giving and if people respond by giving 13% more, then the policy generates more new charity than it costs the government in tax revenue.

These studies also confirmed that giving increases with income. If after-tax incomes were to rise by 10%, estimates are that giving would rise by about 8% (Clotfelter, 1990). Notice that this quantifies the left-hand part of the u-shaped giving curve discussed in Section An Economist's View of Charitable Behavior – since giving rises by a lesser percent than income, giving as a percent of income (all else equal) must be declining.

Later studies were able to supplement these findings using data from surveys rather than tax returns (see Clotfelter, 1990; Steinberg, 1990). Although the survey results varied, they generally confirmed the policy predictions stated above. In addition, they revealed the importance of other individual characteristics in explaining giving. Most strikingly, they consistently found that giving increases with the age and the education of the giver, as suggested in the tables above. It could be that those who are educated have more interest in charity or that interest in charity changes with age. A more plausible explanation, however, is that researchers have no information on individual wealth, and since wealth is correlated with both age and education, it is likely that the influence of wealth is being filtered through these other variables.

A second generation of studies, conducted mostly in the 1990s, has begun to shift the consensus view noted above. Unlike the earlier studies that relied on cross-sectional data, these newer studies used panel data, that is, data with observations on the same set of individuals over several years. Panel data is generally seen as superior to cross-sectional data. The reason is that by observing the same people at different points in time, the researcher is able to get a more precise measure of how behavior responds to changes in the environment.

Randolph (1995) used tax returns on about 12 000 people from 1979 to 1988, and statistical techniques designed explicitly for panel data identified a much weaker effect of the subsidy and a much stronger effect of income. His results indicate that a policy that would increase the government subsidy by 10% would increase giving by only about 5%, whereas if income were to rise by 10% giving would rise by 11%. Others using panel data have found similar effects. Hence, at the end of the 1990s, the literature on the effect of the subsidy to giving was in a state of flux.

Bakija and Heim (2011) waded into these waters in an attempt to reconcile these differences. Like Randolph, they assembled a panel of tax returns, but their panel was much larger, with over 550 000 returns on almost 60 000 tax filing units. They also adopted an estimation technique that contained elements of the original analysis from the 1970s and 1980s as well as the more dynamic analysis of the 1990s. In addition, the data had a distinct advantage in having data on very wealthy households.

Their results were a mix of the two prior generations of findings. For households with incomes below \$200 000, a 10% increase in the subsidy only raises giving by 7–8%. On these people, the government is getting less new charity than it is losing in revenue. For families reporting incomes of \$200 000 on up to millionaires, Bakija and Heim predict that, on average, a 10% increase in the subsidy will raise giving by 11–13%, thus the government gets a good return on its investment from these donors. An important caveat to these results, however, is that while the prediction for low- to upper-middle-income house-holds is fairly precise, estimates for the top 5% of incomes is very imprecise – the true response to a 10% increased subsidy could be anywhere from 5 to 20% increase in giving by the wealthy. While this article is a step forward, the literature is still inconclusive about the giving behavior of the very wealthy.

Do Government Grants Displace Private Philanthropy?

There are several reasons to suspect that government grants to charities might depress private donations. First, if givers are aware of the grants, then they may perceive the charity as less in need of their donations, leading them to keep the money or give it to a different cause. This is known as the 'crowding out' hypothesis (Warr, 1982; Roberts, 1984; Bergstrom et al., 1986). A second reason giving may decline is that the charity may be less aggressive in fundraising after receiving a government grant. Both effects would lead to government grants to offset private philanthropy.

There are also reasons to think that government grants could have the opposite effect. Citizens who are unsure about the quality of a charity could see a grant as a 'stamp of approval' (Andreoni et al., 2014). Or the grant could be used as 'seed money' that will allow the charity to expand into a bigger operation by, for instance, constructing new buildings or opening branches in different cities (Andreoni, 1998). In both of these cases, government grants could actually encourage private philanthropy.

An important difficulty in unraveling these effects is that the government and the voters are likely to have similar tastes. For instance, a tsunami may cause both individuals and the government to give more to that cause, but it would be incorrect to conclude that the government giving 'caused' the private giving – the tsunami caused them both simultaneously.

Failure to account for this 'simultaneity bias' would make it appear that crowding out is smaller than it appears.

This was pointed out in important study by Payne (1998). She used a 10-year panel of 430 US charities, and applied special statistical techniques to account for the fact that government grants to charities may be caused by the same needs and interests as private giving. While prior research that did not account for this found no crowding out, her analysis predicts about 50% crowding out.

Several years later, Andreoni and Payne (2003, 2011) discovered something important was missing from this research – charitable fundraising. Most charities find fundraising as a necessary distraction from their main mission, and a government grant gives them a reason to redirect their efforts back to the charity itself. That is, a grant may crowd out giving indirectly by causing the charities to cut back their efforts at fundraising.

Andreoni and Payne explore this possibility by analyzing tax filings of over 8000 charitable organizations in the US for up to 12 years. Looking at the congressional district the charity is located in, and including measures for how powerful their representative may be in helping secure grants in the district, they are able to map the simultaneity of government and private giving to the charity. They find that overall, a government grant of \$10 000 reduces giving about \$7500 – a substantial crowding out. However, a large fraction of this is due to a reduction in fundraising by the charity. Breaking it down, of the \$7500 reduction in giving, from \$5250 to all \$7500 is due to the charity reducing fundraising after a grant. This points to the importance of understanding fundraising for making wise policy decisions.

Fundraising and Matching Grants

The last section highlighted how important fundraising is in understanding the effects of government policy. Often times, major donors to charity can affect the same kinds of policies used by the government. For instance, a single wealthy donor will sometimes give a large sum, which they then promise as 'matching gifts' to other donors. The wealthy philanthropist may promise to spend up to \$1 million by giving \$1 for every \$1 raised from other donors. This is very similar to a government subsidy. What is the effect? Does it work as an effective subsidy to others' gifts?

Two papers looked at this issue, Karlan and List (2007) and Huck and Rasul (2011). There are several factors that make inference about matching gifts difficult. First, is it really a match? If the charity usually raises \$5 million in a fund drive, then the donor expects to spend the entire \$1 million, meaning that no one's donation really had an effect on whether \$1 would be collected. In that case the matching gift is really more like a 'leadership gift' (Andreoni, 1998). Leadership gifts have importance often because they can signal the quality of the charity, or they can provide assurance that the charity's goals will be met. In both cases, the leadership gift can inspire others to give more, that is, they can 'crowd in' rather than crowd out smaller donors.

These two research studies conducted experiments with actual charities to try to determine which story fit the data. What they found was that individuals tended to respond to the fact of a matching gift, but not to the match level; a \$1-for-\$1 match raised as much as a \$3-for-\$1 match. But giving responded to a simple announcement of an equivalent leadership donation about the same as it did to an announcement of a matching gift. Thus, matching gifts work, but it is likely because they work like leadership gifts rather than that they act like subsidies to giving.

Conclusions and Future Research

Philanthropy is a significant factor in the US economy, accounting for about 2% of income almost every year for the past 40 years. Government and private givers are in a partnership to fund the services of almost 200 000 charitable organizations. This article has discussed the economic influences on private philanthropy and how it interacts with government policy.

The most important finding is that individuals are indeed sensitive to the charitable deduction in the US tax system. By subsidizing giving, the tax deduction has clearly increased giving by the private sector, although the effect clearly differs across income groups. The tax deduction is only available to those who itemize deductions on their tax returns, thus low-income individuals get no benefit. For middle-income people who itemize, the deduction returns 10–28% of their donation in lower taxes, and increases their donations by 7–20%. High-income households, making \$200 000 per year and more get 33–35% of their donation back in lower taxes, and this raises their donations by about 35–40%.

The literature on the crowding out of private giving by government grants indicates that an important factor in the analysis is the role of fundraising. When charities get grants, many will redirect their efforts away from fundraising. As a result, government grants only result in about 30 cents on the dollar of new charitable services.

What can we look forward to as the important questions for future research? A surprising new development in the world of charitable giving is the explosion in private foundations. A foundation is a tax-exempt organization with a charitable or not-for-profit mission. Individuals, especially very wealthy individuals, have been setting up foundations at increasing rates. Part of this is to gain tax savings during life rather than to allow money to pass into an estate, but part is also a sincere desire to do good during one's life. Recent studies have indicated that foundations are increasingly important and powerful participants in the market for charity and deserve greater attention by researchers and policy makers.

See also: Altruism and Prosocial Behavior, Sociology of; Charity and Philanthropy: Overview; Income Taxes; Wealth Distribution.

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