The Economics of Charitable Giving

What Gives?

By Rubén Hernández-Murillo and Deborah Roisman

Generosity is a long-standing American tradition, one that continues to grow. The Giving USA Foundation estimates that Americans gave $248.5 billion to charity last year, a threefold increase in inflation-adjusted terms since 1964. To put the size of the donations in perspective, Americans gave to charity last year an amount roughly equal to the national incomes of Norway or Indonesia.[1] The most important source of giving is, not surprisingly, contributions from private individuals, which represent more than 75 percent of the total. The second most important source of contributions is foundations, and in third place, bequests.

What motivates people to give? Who gives? What is the price of giving? Why do people volunteer time to charitable activities? Economists have found some answers to these questions, but they have just started to model philanthropy as a market. As they do so, they are trying to analyze not only the strategic behavior of donors, but also the strategic behavior of charities. They are viewing charities as firms that hire inputs to produce goods and services. Competition among charities for private donations is also being examined, as are the interactions between the supply and demand for giving. Then there's the role of the government: It often provides charitable organizations with grants that are financed by income taxes. Do these grants displace donations from private individuals—the "crowding out" hypothesis—and, if so, to what extent?[2]

All of this is important for the design of public policy and for assessing how efficient charities are at providing the services they offer, such as alleviating poverty or funding cancer research.

Motivations for Giving

Why do people give? Studies overwhelmingly suggest that people are not entirely altruistic when giving. Individuals seem to derive more benefits from the act of giving itself than from the benefits that their gifts generate for others. The nature of these benefits, however, is not very clear. Donors may care about the total amount of goods or services that charities produce, or donors may enjoy the simple act of giving. Individuals may also care about the public recognition they receive from giving.

Perfect Altruism

Under the theory of "perfect altruism," donors are concerned primarily that charities receive some total amount of money, regardless of the sources. An individual donor is indifferent between giving a dollar to a charity and the charity's receiving the dollar from someone else. For example, if a donor thinks that a particular charity should receive a total of $1,000 from all sources to meet its needs, and the donor estimates that other sources will provide $900, he will donate the remaining $100. If, instead, the donor estimates that other sources will provide $1,000 or more in total, he will not give anything to that charity.

One implication of the perfect altruism model is that individual donations can be completely "crowded out" by government contributions. Using the example above, if the government taxes the donor $10 and hands it over to the charity, the donor will simply reduce his contributions to the charity by $10. For the charity, the net effect of the government donation is zero.

This theory, however, has several implications that are not validated by the empirical evidence on private charities. Studies have found that the crowding out is only partial at most.[3] Why? Because donors get more satisfaction out of giving a dollar directly to charity than they do out of seeing a dollar of their tax money go directly to that same charity. They want to contribute on their own.

The "perfect altruism" theory also seems to fall apart when the number of potential donors is large. Economist James Andreoni and others established in the 1980s that the theory would imply that individuals would not try to anticipate what everyone else is giving because the gift of any one donor would be small relative to the total. The contributions of most donors, then, would fall toward zero, except for the donations from the very rich, who, because of the size of their contributions, would maintain some control over the total amount raised. But the data don't support this scenario. They show, instead, that people from all income levels continue to give.

The Warm Glow

Andreoni and others have come up with alternative theories for why people give to charity. One is the "warm glow" theory, by which donors derive an internal satisfaction from giving, although their contributions may be entirely anonymous. Under this theory, donors view the gifts of others as imperfect substitutes of their own contributions. That is, they would prefer that gifts come from themselves rather than from others. This, too, implies that the crowding-out from government grants will not be complete. The reason is that voluntary contributions and involuntary giving through taxes are not equivalent in people's minds; consequently, government taxation does not reduce private contributions by the same amount.

Prestige

Yet another model comes from economists Amihai Glazer and Kai Konrad. They say the data show that donors give, at least partly, to signal wealth status and not just because they obtain internal satisfaction. Economist William Harbaugh further realized that when the names of donors are publicly announced and the gift amounts are given in categories (gifts of $500 to $999 to qualify as "sponsor," $1,000 to $1,999 to qualify as "patron," etc.), most contributions are exactly the minimum amount required for inclusion in each category. Preference for prestige implies that charities can increase contributions by reporting gift categories and publicizing donations.

Who Gives?

Although several demographic characteristics have been found useful in predicting charitable giving, income is by far the most important predictor of giving behavior, according to economists Robert McClelland and Arthur Brooks. Giving as a function of income has a U-shaped pattern—people in the lowest and highest income groups give larger proportions of their incomes to charity than individuals in middle-income groups. A plausible explanation for this is that people in lower-income groups tend to give more to religious organizations, while people in higher-income groups simply have more disposable income. (Interestingly, very rich people give almost nothing to religious charities.) McClelland and Brooks find that this U-shaped pattern persists even when accounting for additional variables associated with income. This relationship with income implies that the philanthropy industry will continue to thrive as the economy prospers.

Charitable giving also increases with age and education; it varies, too, with respect to sex (women give more) but not with race.[4]

The Price of Giving

The fact that charitable donations can be deducted from taxable income implies that the richest individuals, who face the highest marginal tax rate, have the greatest incentive to donate because they face the lowest marginal cost of giving. (For them, charitable giving carries with it the highest effective subsidy.) In other words, for an individual facing a marginal tax rate of 30 percent, the price of a dollar given to charity is 70 cents; the remaining 30 cents are paid by the government in taxes foregone, hence the subsidy. (Note that someone who does not itemize deductions effectively pays a price of one dollar for each dollar of giving.)

Giving Time or Money

Individuals often volunteer time to charitable activities. Andreoni explains that if individuals were perfectly altruistic, we should observe little volunteering. Why? Volunteering time implies an opportunity cost to individuals, as they could work and be paid elsewhere and instead give some of those wages to the charity. Charities value volunteer services at the market wages they would have to pay to hire labor services. Presumably, the opportunity cost of volunteers is higher than this imputed wage because people only volunteer to do work for which they are overqualified. If individuals were perfectly altruistic and cared only about the total value of their monetary contributions plus imputed wages for their time, they would prefer to work elsewhere for pay and contribute money to the charity. This implication is not validated by the evidence. People do volunteer their time to charitable activities. Thus, Andreoni concludes, it is best to think of volunteering as having some independent warm glow component as well.

What Gives?

Although some people may be altruistic when giving, economics tells us that the dominant motivation is the internal satisfaction that individuals derive from the act of giving itself. Individuals derive utility from giving much in the same way they obtain satisfaction from buying a new car or eating at a restaurant; especially when the number of donors is large, the social context of other people's giving is overshadowed by the satisfaction of one's own giving when considering how much to give.

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ENDNOTES

1. See www.worldbank.org/data/databytopic/GNI.pdf.
2. For a more thorough review of the literature, see Andreoni (forthcoming).
3. For example, see Steinberg (1989).
4. See Yen (2002), Andreoni and Vesterlund (2001), and Rooney et al. (2005).

REFERENCES

Andreoni, James. "Privately Provided Public Goods in a Large Economy: The Limits of Altruism," *Journal of Public Economics*, February 1988, Vol. 35, No. 1, pp. 57-73.

_______."Giving with Impure Altruism: Applications to Charity and Ricardian Equivalence," *Journal of Political Economy*, December 1989, Vol. 97, No. 6, pp. 1, 447-58.

______."Impure Altruism and Donations to Public Goods: A Theory of Warm Glow Giving," *Economic Journal*, June 1990, Vol. 100, No. 401, pp. 464-77.

______."Philanthropy," in: Louis-Andre Gerard-Varet, Serge-Christophe Kolm and Jean Mercier Ythier, eds., *Handbook of the Economics of Giving, Altruism and Reciprocity*, Part 1, North-Holland: Elsevier, forthcoming.

______ and Vesterlund, Lise. "Which is the Fair Sex? Gender Differences in Altruism," *The Quarterly Journal of Economics*, February 2001, Vol. 116, No. 1, pp. 293-312.

Glazer, Amihai and Konrad, Kai A. "A Signaling Explanation for Charity," *American Economic Review*, September 1996, Vol. 86, No. 4, pp. 1,019-28.

"Giving USA 2005: The Annual Report on Philanthropy for the Year 2004," *The Center on Philanthropy* at Indiana University, 50th Edition. See www.givingusa.org.

Harbaugh, William T. "The Prestige Motive for Making Charitable Transfers," *American Economic Review Papers and Proceedings*, May 1998, Vol. 88, No. 2, pp. 277-82.

McClelland, Robert and Brooks, Arthur C. "What is the Real Relationship between Income and Charitable Giving?" *Public Finance Review*, September 2004, Vol. 32, No. 5, pp. 483-97.

Rooney, Patrick M.; Mesch, Debra J.; Chin, William; and Steinberg, Kathryn S. "The Effects of Race, Gender, and Survey Methodologies on Giving in the U.S.," *Economics Letters*, February 2005, Vol. 86, No. 2, pp. 173-80.

Steinberg, Richard. "The Theory of Crowding Out: Donations, Local Government Spending, and the 'New Federalism'," in Richard Magat, ed., *Philanthropic Giving: Studies in Varieties and Goals*. New York: Oxford University Press, 1989, pp. 143-56.

Yen, Steven T. "An Econometric Analysis of Household Donations in the U.S.A.," *Applied Economic Letters*, October 2002, Vol. 9, No. 13, pp. 837-41.