THE ECONOMICS OF GIVING

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Charitable contributions made by individuals constitute one of the principal sources of finance for the vast nonprofit sector in the United States. In spite of, or perhaps because of, the apparent incongruity between giving and the usual kind of selfish behavior portrayed in economics textbooks, economists have devoted considerable attention to it. This paper presents a discussion of the positive research on giving, particularly the empirical models that account for the effects of income and taxes.

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In 1995 individuals contributed some $116 billion to religious, charitable, and other nonprofit organizations, or almost 2 percent of the country's total personal income. Such donations have economic significance, not only because of their magnitude, but also because they represent a form of behavior rather unlike anything else we observe in the economy. Under the title of this paper, it is possible to imagine several different approaches being taken. For example, one might examine the economic importance of behavior and institutions associated with charitable giving, including their importance in comparison to government, their financial importance to nonprofit organizations, their effectiveness in allowing those organizations to achieve their objectives, and their impact on the well-being and behavior of the donors themselves. In the current paper, I focus almost exclusively on the behavior of individual donors.

The present paper thus focuses on the economics of individual giving, including bequests at death and the giving during life of both money and physical assets. A related behavior, the donation of time for volunteer work, is not covered in this paper, mainly because the issues surrounding volunteering, while related to those associated with charitable giving, involve

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exploration into a largely separate sphere of behavior and involve a distinct set of analytical tools. Nor does the paper deal with corporate contributions. Following the approach taken by economics in general, the paper emphasizes the positive aspects of giving behavior -- both observed and predicted behavior -- at the expense of normative concerns. And, within this positive approach, the paper emphasizes empirical aspects of giving, devoting only minimal attention to the interesting but purely theoretical questions surrounding this kind of behavior.

The act of giving money away appears on its face to be behavior wholly out of character with the reputation of *homo oeconomicus*, that calculating, utility-maximizing actor portrayed in textbooks of economics. But in spite of, or possible because of, the apparent incongruity between donative behavior and selfish consumption, there has been no shortage of interest among economists in this kind of behavior. As I note below, the apparently "irrational" behavior of giving may be explained in several ways, requiring varying degrees of departure from the most simplistic form of self-aggrandizing behavior. At the same time, however, the economic models exhibit a certain narrowness illustrated best by the small number of individual characteristics that find their way into formal analyses. Relatively little attention is paid, for example, to the question of motivation, to the role of friendship, propinquity, power, or social networks in giving, or to the possibly transforming effects of giving on the donors themselves. This narrowness should come as no surprise, of course, since it has been the practice of economists to pay little attention to underlying motivations, preferring to focus on measurable actions. As will become evident, however, motivation has not been ignored altogether.

A first step in reviewing what is known about the economics of giving is to pay some attention to the kinds of actions we consider under this rubric and to its institutional

surroundings. As will become clear from a little reflection, the nature of charitable giving has changed over time along with the structure and functions of government and nonprofit organizations. Next, the paper considers the enigmatic question of motivation, a question that has not been a central concern of economists. In order to provide some notion of quantities, patterns, and trends in giving, the paper's third section presents some tabular information on contributions in the U.S. The fourth section summarizes the main findings of statistical studies of giving. In the last 20 years economists have undertaken numerous studies on charitable giving, with much of the attention being place on the effect of taxes. The summary offered in this section likewise emphasizes the effect of taxes, but also notes findings related to other influences as well. Without doubt, the issue that has created the most controversy has to do with the magnitude of the incentive effect exerted by the charitable deduction. The fifth section discusses this controversy in some detail. The paper's final section lists several important empirical questions left unanswered by existing economic research on giving and suggests some types of data that would enable researchers to answer some of these questions.

1. Institutional Landscape

It is hard to do justice to the topic at hand without at least a brief review of the everyday customs, rules, and institutions that surround the activity of giving in the United States in the 1990s. As in many other realms of social science, the ever-present is often overlooked, but these routine details to a large degree circumscribe the activity of giving as it is currently practiced. At least three aspects of this contemporary institutional landscape are worth noting.

The first feature to be noted about contemporary giving is that it is usually a monetary

transaction which does not involve face-to-face contact between donor and ultimate recipient. Intermediary organizations, often featuring professional staffs and sophisticated financial procedures, come between donor and beneficiary. This indirect and monetized form of support stands in sharp contrast to the mode of charitable giving that was common in this country, for example, a century before, when charitable activity consisted largely of giving alms directly to the needy and visiting the poor, often with religious tracts in hand.[1] Increasingly, the process of aiding the needy -- when it was not taken over by government -- was institutionalized and depersonalized, a transformation marked by the widespread use of collections and charity events and the rise of federated fundraising campaigns.[2] Despite these general trends, some giving does retain its personal quality, particularly among the biggest donors. In addition to form, the uses to which private donations are put have also changed over time. As government has increasingly taken primary responsibility for support of the poor, it is apparent that a larger share of what would be thought of as giving goes toward the support of other activities, such as education, health, and cultural institutions.

The second institutional feature of contemporary giving, not unrelated to the first, is the existence of a vast, heterogeneous set of institutions one of whose principal tasks is to take and use donations made by individuals. This sector, constituting some 10 percent of the economy, contains organizations ranging from world-famous universities and national charities to storefront churches and tiny self-help community organizations. The institutions in this sector differ markedly in purpose, function, source of income, and distributional impact.[3] While some are devoted to aiding individuals far removed from the lives of donors, others are engaged in the support and operation of activities in which donors themselves participate.[4] Examples of the

latter include religious congregations and many educational and cultural organizations. Consequently, the term “giving” includes a range of possible transactions, ranging from those in which the donor is far removed from the activity being supported to those in which the donor is virtually a consumer of the service.

A third feature of contemporary giving is its tax-favored status. Not only are the nonprofit organizations exempted from tax on their incomes, and usually on their purchases and property as well, contributions to them are deductible in the personal income tax, the corporation income tax, and the estate and gift tax. In the personal income tax, the key tax provision of deductibility applies of course only to those who itemize their deductions. Itemization applies to those who spend a sufficient amount on a limited number of items. Since two of the most important of these items are mortgage interest and property taxes, itemization is for all practical purposes coincident with home ownership. The effect of deductibility is the lower the net-of-tax cost of making contributions. As explained in more detail below, this net cost, or "price," of giving is roughly one minus the marginal tax rate for those who itemize their deductions. For a taxpayer facing a 20 percent marginal tax rate, for example, the price would be 80 cents per dollar of giving. Other provisions of the income tax, especially those applying primarily to wealthy taxpayers, also influence this price in minor ways. By contrast, the tax laws in virtually every other country are less favorably inclined toward the kind of formal charitable giving that is the subject of this paper. For example, the British tax law features a charitable deduction, but it applies only to covenants, which are long-term commitments to make annual gifts. The German income tax also contains a charitable deduction, but its force appears to be greatly weakened by the inclusion in the income tax of a special tax that is turned over to organized churches.[5]

It should be clear from this discussion that institutional facts such as these imply that what it means to give is conditioned by time and place, in effect defining the term "giving." In the American experience, the activity itself has changed over time, over the same period that has witnessed important shifts in the functions of government and the tax system. These simultaneous trends suggest, but do not prove, a relationship between government provision, tax policy, and giving.

2. Why Do People Give?

In light of the apparent incongruity between giving and the kind of self-interested behavior usually examined by economists, it is natural to wonder about what motivates people to make charitable gifts in the first place. Yet economists, by and large, have paid little more attention to this ticklish question than they have to the reasons why households buy apples or oranges, pay to heat their homes, or take vacations. Instead, economists simply take preferences for these items as a given, leaving deeper explanations to the psychologists. Nor do they pay much attention to what people say about their motivations, preferring simply to observe behavior. In the case of giving, this skepticism may well be warranted, as illustrated by responses to a national survey in 1973. When asked whether tax deductibility made a difference in decisions to give, respondents were about twice as likely to say that it made a difference to other people like themselves than to them personally.[6] In any case, economists' stock in trade has been to consider the much narrower question of how changes in prices and incomes will affect the amount consumed, an approach carried over to the case of contributions, as will be seen below.

While it has been ignored in empirical work, the question of motivation has received a little attention in theoretical discussions. Economic theorists have suggested four basic reasons to explain giving. The most readily reconciled with the narrow utility-maximizing model is actual material return -- tangible benefits that accrue to the donor, such as marketing advantages or reduced labor costs that might arise when a proprietor makes recognized gifts. A second reason, dubbed "warm glow," is pleasure that a donor derives from the very act of making a gift.[7] This motivation would cause a donor to prefer to be a contributor to a cause than not to be, even if the same total amount would have been donated in the absence of his or her gift. A third possibility is altruism: the donor is interested in the well-being of the recipient, and thus benefits when the recipient is better off. While both the second and third explanations are also consistent with utility maximization, in the altruism case the individual does not care about who gives, only how much is given. A fourth explanation, decidedly not based on utility maximization, maintains that economists must allow for the possibility that some giving does not make the donor better off in any useful sense, but rather proceeds out of a higher-order set of beliefs or morality.[8] Taking all of these explanations as reasonable, one is left to conclude that most giving probably involves some amalgamation of more than one of these.[9]

3. Patterns and Trends

The giving of donations to tax exempt organizations is a widespread activity in the United States, with over two thirds of households reporting having made such donations in 1996.[10] Taking donors and non-donors together, Americans on average gave away almost 2 percent of their personal income, as noted at the outset, amounting to some $116 billion in 1995.

Decedents left another $9.8 billion in the form of charitable bequests. As shown in Table 1, the amount given by individuals far surpassed the contributions made by corporations or the grants made by private foundations. As shown in Table 2, giving by individuals has remained at a nearly constant proportion of personal income over the last two decades. Indeed, the constancy of this share in the face of significant changes in the U.S. income tax has been used -- mistakenly, I believe -- as evidence to support the idea that taxes are not an important determinant of charitable giving.

Among individuals, giving differs markedly, as suggested by the fact that almost a third of households report no contributions whatsoever. Some of these individual differences correspond to the familiar categories of age and income, as shown in Table 3, which reports some results of a 1996 Gallup survey. Both average contributions and the percentage of households who report any contributions tended to rise with age into middle age and then go back down. The 45-54 age group boasted the highest percentage of givers, while the 55-64 category showed the largest average amount. The pattern of average giving was much smoother when households were arranged by income, and the percentage who gave also tended to rise with income. The table also reports on the difference in giving between those who attended church and those who did not, with the former group more likely to give. Other variables that have been found in past studies to be positively related to giving include education, marriage, number of children, home ownership, living in a city under one million in population, and having parents who gave regularly.[11] Of course, since some of these characteristics tend to vary together, it is not clear if all would be judged to have independent effects on giving holding other things constant.

Since tax-exempt institutions differ one from another in sometimes dramatic ways , it is both instructive and useful to differentiate giving by the type of organization receiving the donations. As shown in Table 4, churches and other religious organizations were by far the most common type of recipient, accounting for some 57.5 percent of all donations from individuals in 1993. The type of recipient organization receiving the next biggest share of donations was human services (9.4 percent), a category that contains many social welfare agencies typically included in local federated giving drives such as United Way. Educational institutions, principally colleges and universities, and health-related organizations, including hospitals, were the other two sizable categories, with 8.9 and 8.1 percent of all donations, respectively. Of the remaining categories, one that includes some of the most prominent institutions in the entire nonprofit sector is arts, culture, and humanities, though donations to these organizations account for a surprisingly small share of the total, less than 3 percent.

Most information on donations suggest that the types of organizations to which donors contribute differ systematically by income level. Table 5 presents data based on the most comprehensive survey of giving, the 1973 National Study of Philanthropy. Based on information provided by donors on their largest gifts, the table shows a decreasing share for religious giving as one moves up the income scale. For those making between $76,000 and $126,700 (in 1989 dollars), for example, religious giving represented 42 percent of all giving, and 58 percent of gifts for which the donee was identified. Taking the place of religious giving at higher income levels was giving to higher education, cultural organizations, and other types of organizations not shown here, such as hospitals.[12]

Table 6 presents a more detailed view of differences by income, based on a combination

of government data from itemized tax returns and estimates of the giving of nonitemizers for the year 1992. Based on a much larger sample than the survey results discussed above, particularly at high incomes, this table reveals a smooth increase in average giving as income rises. One fact that stands out clearly is the stark inequality in giving: those with incomes over $100,000, constituting only 3.9 percent of all taxpayers, were responsible for 22.9 percent of all giving. As a percentage of income, giving shows the U-shape that has often been commented on in studies of charitable contributions. The percentage falls from 4.4 percent in the lowest income group shown to about 2.5 percent over a broad range of incomes, before rising again in the highest category to 3.1 percent.[13] While the rise in this percentage at the top is borne out in study after study, there is reason to treat the high percentage in the lowest income class with some skepticism: the lowest income class contains some individuals, many of whom are old, whose annual incomes were considerably less than their average lifetime incomes.[14] The table also distinguishes between those who do and do not itemize their deductions, revealing that the former, not surprisingly, give more. Finally, the table also presents rough estimates of the distribution of giving into three donee groups. Giving to religious organizations, which is by far the dominant type of giving in most income classes, diminishes markedly in importance at the top, where education and other types of tax-exempt organizations take the lion's share of donations.

4. Statistical Studies of Giving

It is the practice of economists, when studying a subject, to concoct a formal model and then, where feasible, to apply statistical methods using data relevant to the subject. The study of

charitable giving is no exception. In order to summarize what is known about the economics of giving, it is useful to begin by describing these models. This section begins by sketching out the essential elements of the basic model and the results of its statistical application, particularly the estimated effects of income and tax variables. It then notes some implications arising from the estimates, findings related to other influences on giving, and other empirical issues.

The Effects of Income and Price

When they analyze the consumption of most goods or services, economists tend to pay little attention to the underlying motivations that lead an individual to buy an item. Instead, it is their usual practice to concentrate on the effects of two factors -- income and price -- on the quantity purchased. The approach taken in the case of charitable contributions is exactly analogous.[15] Income is defined as it often is in other applications, as disposable income, that is, after subtracting taxes. "Price," however, takes on a rather special definition in the case of contributions. Owing to the deduction for contributions that is available in the income tax to those itemizing their deductions, a dollar donated is not exactly a dollar forgone, in terms of consumption. An itemizer who is subject to a marginal tax rate of 20 percent, for example, sacrifices only 80 cents worth of consumption for each dollar contributed, owing to the reduction of 20 cents in tax for each dollar given away. By virtue of the tax deduction, then, the net-of-tax price of giving is 80 cents per dollar. Thus taxpayers in higher tax brackets face lower net-of-tax prices of giving than taxpayers in lower brackets, if they itemize their deductions, while taxpayers who do not itemize (and therefore who receive no deduction for contributions) face a price of one dollar for each of the dollars they contribute.[16]

Once defined, the income and price variables are then incorporated into statistical models to determine their quantitative effect on the amount given. As is the case with empirical studies of consumer demand for automobiles or food products, the structure of the models utilized to explain contributions do not suggest that price or income determine *whether or not* an individual makes contributions. Rather, the models embody the built-in assumption that these factors merely influence the *amount* contributed. Nor do the models exclude the possibility that contributions are influenced -- even heavily influenced -- by personal characteristics or other factors, though in practice economists have closely examined few factors other than income, price, and a handful of demographic descriptors. As is their practice in analyzing consumer behavior in general, economists tend to devote little attention to the underlying reasons for the behavior, but instead focus on how these two variables influence the extent of the activity. Because it is basically agnostic with respect to the origins of giving behavior, this empirical approach is consistent with any number of possible motivations for giving. One point in particular is worth emphasizing. Just because it implies that taxes can affect the amount of giving, the economic model is not, as one commentator has written, "based on the mistaken assumption that the primary driving force behind charitable donations is the income tax deduction."[17]

Using data sets that include information on contributions, income after taxes, the tax-defined price of giving, and various other characteristics of the individuals covered, analysts have applied statistical methods in order to estimate behavioral parameters corresponding to these effects on giving. While most of these data sets include information on separate individuals or households, other data sets feature information that is aggregated over large

numbers of individuals. The models that have been estimated differ in specific mathematical form, but the primary focus in all of them has been to determine the quantitative importance of the effect of the two variables of primary interest: price and income. Almost invariably, researchers have found it convenient to express these effects in terms of elasticity, defined as the percentage change in the amount given associated with a one percentage change in price or income. For example, an income elasticity of 0.80 implies that if Jones had an income 10 percent higher than Smith, an otherwise similar individual, Jones will, on average, contribute 8 percent more than Smith.

As is the case in virtually every empirical application in economics, the precise estimates for the price and income elasticities differ from one study to the next. However, they have tended to cluster, which permits some degree of generalization. Moreover, the clustering appears to have shifted over time. In studies published before 1990, most estimates of the price elasticity were in the range of -0.5 to -1.75 and most estimates of the income elasticity were in the range of 0.4 to 0.8.[18] More recent studies, however, have tended to produce larger income elasticities and smaller (in absolute value) price elasticities. To illustrate the application of these elasticities, consider -1.0 as a representative value for the price elasticity. This value implies that a 10 percent increase in the price of giving, for example from 0.60 to 0.66 (occasioned by a drop in the marginal tax rate from 0.40 to 0.34), would be associated in the long run with a 10 percent lower level of contributions. If 0.8 is taken as a representative value for the income elasticity, as in the example above, this would imply that a 10 percent increase in after-tax income would imply a long-run level of giving 8 percent higher. The qualifying term “long run” is added here because the estimated models yielding these parameters are generally thought of as applying to

long-run, equilibrium behavior, not necessarily to immediate responses to changes in these variables. All the same, parameters such as these imply that taxes have a potent effect on charitable giving.

Implications for Tax Policy

Once it becomes clear how the charitable deduction imparts a price effect on giving, it is not hard to see how changes in the income tax, other features of the income tax, or proposed changes might affect charitable giving. One straightforward implication of this research is that the schedule of marginal tax rates is a central determinant of prices. If tax rates are reduced, as they were in the top brackets in 1981 and 1986, the price of giving to itemizers in the affected tax brackets will rise. Depending on what happens to tax liabilities, the economic model would imply that contributions by these taxpayers would be lower, at least in the long run, than they would have been had the change not occurred. Another clear implication is that eliminating the deduction altogether, as has been suggested in numerous proposals in the last decade, would raise the price of giving for all itemizers, again implying (in the absence of large changes in total taxes) a long-run level of contributions lower than what would have been the case under the existing type of income tax.[19]

Similarly, the model can be applied to more specific features of the tax law. For example, in 1985 and 1986, the price of giving faced by nonitemizers was lowered by a special charitable deduction for nonitemizers that was in force in those two years, a deduction for half of gifts in 1985 and a full deduction in 1986. Another feature of the income tax, whereby taxpayers can normally deduct the full market value of appreciated property given away without paying the

tax on the capital gains that would have been due if the asset had been sold, causes the price of giving to be lower than it would be if the gift were in cash. Yet a provision, which temporarily was in force in the 1980s, effectively nullified that feature for many high-income taxpayers, raising the price of making such gifts for those donors. More generally, the economic model of giving can be applied to assess the likely impact of a variety of possible tax provisions, ranging from the use of tax credits in place of the deduction to the elimination of the deduction altogether. The calculations produced in such simulations have received considerable attention.

To illustrate how estimated models have been used to simulate the likely effects of tax changes, I offer two sets of calculations of my own. The first of these sought to simulate the effects of the 1986 Tax Reform Act. It presents a table showing simulated impacts on total contributions, using two different behavioral models, of -15 and -16 percent, respectively. Although the article, in its text and the footnote to that table, emphasizes that these numbers refer to differences in long-run giving under the assumption of everything else equal, some commentators have interpreted these numbers as predictions, and predictions of immediate effects at that.[20] More recently, I have used alternative sets of parameters for price and income elasticities to simulate the likely long-run effects of replacing the current income tax with proposed flat-tax schemes. Based on the parameters used, replacing the current tax with the Armey-Shelby flat tax is estimated as causing contributions in the long run to be from 10 to 22 percent lower than they otherwise would have been, owing largely to the proposed elimination of the charitable deduction under that plan.[21] In sum, the models that have been estimated to explain charitable giving can be used in models that simulate the likely effects of tax changes. However, it is not appropriate to use such models as forecasting tools, in light of the important

influences on charitable giving that are not reflected in the underlying econometric models.[22]

Some Finer Points on the Price Effect

Because it turns out to have the lion=s share of the predicted effect on giving in almost any simulation of tax changes, the price effect has received special scrutiny in statistical studies of contributions. For example, some commentators have voiced the suspicion that, while a few sophisticated taxpayers (and their tax or financial advisors) might be sensitive to variations in tax rates, the average taxpayer is too oblivious or unresponsive to the marginal tax rate for anything like the economic model to be a realistic representation of reality. Other important questions have been raised about just how this price effect works. As a part of a broader overview of empirical research on giving, it is useful to summarize some of the questions that have been raised about the form and nature of the price effect.

Differences in price sensitivity by income class. Several studies have compared the effects of both income and price for different income classes. The studies tend to suggest that taxpayers with higher incomes do appear to be more responsive to changes in both variables, although most studies also conclude that individuals in lower and middle income categories exhibit statistically significant price and income elasticities as well.[23]

Itemization status. Another test of the intuition that giving by those of modest means would not be sensitive to tax considerations was to ask, statistically, whether it is simply itemization status itself, not the tax-defined price, that constitutes the mechanism through which the tax code affects giving; but this idea could not be supported by the data.

Overstated contributions. Another idea raised, and rejected, focused on the fact that

statistical studies explain reported rather than actual contributions. If the tendency to over-report contributions rises with tax rates, the reasoning went, then models showing that price-sensitivity might say much more about reporting behavior than actual contributions. It turns out that contributions are indeed over-reported to a modest extent, but not in a way that would cause estimated models based on unaudited tax returns be systematically corrupted by it.[24]

"Crowding out." If donors care about the total amount spent on services or causes about which they care and not where the money comes from (an attitude consistent with the kind of pure altruism referred to above), then they will be inclined to give less when others give more. This would apply of course to giving by others in the form of private donations. But in the eyes of many donors, government programs also address some of the same social needs as programs financed by charitable contributions, raising the possibility that public expenditures could be viewed as a substitute for private donations. As such, public spending could also "crowd out" private giving, either fully or partially. The few studies that have examined this possibility suggest that public spending does have a small effect in this direction, but that it is far from a dollar-for-dollar effect.[25]

Relationship to volunteering. An activity with obvious similarities to giving contributions is doing volunteer work. Although such work could in theory be a substitute for giving or something that is usually done along with giving, empirical work suggests that it is the latter. An implication of this finding is that the amount of volunteer work is influenced by the tax-defined price of giving money: a lower price not only stimulates contributions of money but also of time as well.[26]

The Effects of Other Household Characteristics

A consideration of the economics of giving would not be complete without some attention to influences on individual behavior other than income and tax status. In recognition of such influences, econometric models of charitable giving have invariably been designed to allow for differences by age, marital status, family size, and other characteristics. Among these characteristics, age has shown itself to be the variable most consistently related to giving. Holding constant income and price, giving rises markedly with age. According to one recent study, the effect of age actually accelerates, with an extra year adding about 1.5 percent to giving at age 40, 3.3 percent at age 60, and 4.3 percent at age 70.[27] Several possible explanations exist for the positive age effect. One possibility is that age reflects the effect of wealth, a frequently omitted variable. Another is that there is a cohort effect at work, wherein older generations are simply more generous than those born more recently. The mostly likely explanation, though, is a simple life-cycle effect, wherein individuals of all generations become more generous as death approaches.

Other characteristics frequently associated with more donations are marriage, the presence of children, and home ownership, though empirical studies are not unanimous on these scores.[28] Again, there is the possibility that these variables may be capturing the effect of omitted variables. Another, more likely effect, is that these characteristics suggest both ties to community and participation in the activities of voluntary and nonprofit organizations, many of whose services are directed toward children. Indeed, some of the giving that parents do to organizations in which their children participate might be viewed more as dues than as purely altruistic philanthropy.[29] As suggested above, wealth is a household characteristic found to be

associated with higher levels of giving, although many studies have had no data on wealth to include.[30] Studies have occasionally included other characteristics than those mentioned here, but not on a consistent basis or often in multiple regressions.[31]

Bequest Giving

Although much smaller than contributions made by living donors, charitable bequests are a significant source of support for some types of nonprofit organizations. And, in a way analogous to the effect of the deduction in the personal income tax, the charitable deduction embodied in the gift and estate tax lowers the net cost of making charitable bequests, in comparison to other bequests. Empirical studies suggest that a price effect similar to the one at work in individual giving decisions also influences the amount that decedents leave to tax-exempt organizations. Although only a small percentage of all decedents are subject to this tax, the rates of tax are substantial, creating a sizable subsidy for making such bequests. As an indication of the magnitude of the price effect, simulations suggest that, if the estate tax were eliminated altogether, charitable bequests would eventually settle at a level somewhere between 24 and 44 percent lower than they would have been otherwise.[32]

5. Issues of Debate over the Price Effect

Despite all of the interest in the various factors influencing charitable giving, most of the energy of debate -- in policy circles and esoteric scholarly journals alike -- has been over the nature and magnitude of the price effect. The question that underlies all of the debate is, can taxes possibly have as powerful an influence, through its price effect, as the first wave of

econometric models seem to imply? This question has been addressed on two levels. At one level, the skeptical observer has asked simply how the implications of the models have squared with actual experience. On a deeper level, scholars have engaged in technical debates over the proper application and interpretation of various estimation techniques.

The Lessons of Recent Experience

The 1980s witnessed two major revisions in the nation=s personal income tax, the tax acts of 1981 and 1986. Both pieces of legislation resulted in reductions in marginal tax rates for many taxpayers, especially those in the highest income brackets. According to the economic model of giving, tax rate cuts such as these, by raising the net-of-tax price of giving, should have reduced charitable giving, other things equal. It would appear to be a fair question to ask how, in fact, the economic model fared in anticipating changes in giving over this period. One bit of apparently damning evidence is the steady growth in total giving in the face of these tax changes. As Table 2 shows clearly, personal giving as a percentage of income remained fairly steady over the decade. For some commentators, this is prima facie evidence against the existence of a large price effect. In the words of one author, "If giving is a fixed share of income, how could taxes be important?"[33] Since taxes are just one of the possible influences on giving, it is of course possible for them to be important even when giving increases with income. Moreover, the sharp decreases in marginal tax rates in the top income classes were not enjoyed by taxpayers in general. In order to assess how well the economic model anticipated the trends of the 1980s, therefore, it is necessary to examine more carefully how and where the tax changes hit.

A more careful assessment of the experience of the 1980s and its implications for the

price effect requires comparing the changes in giving of those who experienced large increases in price and those who did not. The reason for making such comparisons among taxpayers is that, in so doing, one can hope to control for broad influences that may have touched all taxpayers, as would be the case if individuals stepped up their giving in response to cutbacks in government spending for domestic programs. While the economic model may not be an adequate forecasting tool, it would nevertheless imply different rates of change in giving among taxpayers experiencing different changes in their tax-defined prices of giving. I know of two such Monday-morning quarterback assessments comparing "predicted" and actual changes in giving, both looking at changes that occurred in the wake of the 1986 tax act.[34] Both of these indicate patterns very much consistent with the economic model. Using data on the actual changes in giving by middle and upper income taxpayers drawn from the more complete of the two assessments, a comparison was made between two versions of the economic model. It pitted against each other two sets of parameters, a "conventional" set featuring a price elasticity over one in absolute value and an income elasticity smaller than one and an alternative set using a smaller price elasticity and a larger income elasticity. Neither set clearly outperformed the other. However, both models implied decreases in giving for otherwise similar taxpayers who had experienced increases in the price of giving, and this is what happened.[35] Based on comparisons among taxpayers, therefore, the experience of the 1980s appears to very much consistent with the existence of an observable price effect.

Statistical Issues

Of the numerous technical points which have been raised in the scholarly debate over the

price effect in economic models of giving, four principal ones stand out. The purpose of this section is to provide a simplified summary of the issues without doing violence to the inherent complexities.

Identifying the independent effect of price. Under ideal circumstances, a researcher seeking to find the effect of price on giving would conduct a controlled experiment in which otherwise similar individuals were faced with different prices. In practice, of course, researchers must depend on observed characteristics and behavior. Because the price of giving depends in large part on an individual's tax rate, which is a function of taxable income, which in turn is closely related to total income, it has been long recognized that there is a danger that observed variations in price may simply reflect variations in income. If this were the case, the effects of price estimated in econometric models would not be a true indication of the likely effect of a change in price that came about independently of a change in income.[36] A remedy for this interdependence that has been used in several studies is to find some other source of variability of price other than individuals' incomes. One such source is the differences in state income tax rates, which was utilized in a study where information on state of residence was available.[37] Another source is changes over time in the federal tax schedule arising from changes in the law, an approach available in panel data sets, which contain observations for individuals in several different years. Although the first of these approaches did not produce qualitatively different estimates, estimates based on panel data have tended to imply smaller price effects than those based on cross-section data.[38]

Accounting for the endogeneity of price. Because the charitable deduction serves to reduce taxable income, it sometimes happens that a taxpayer=s contributions causes him or her

to fall from one marginal tax bracket into another, thus raising the price of giving. Since it is a cardinal econometric sin for an explanatory variable to depend on the thing it is explaining, analysts have had to deal with this problem in some way. The most common approach has been to define the price that would apply to the very first dollar of giving, thus making it completely independent of the amount given. A more complete approach, however, is to reflect the complete set of prices available to an individual, but this refinement appears not to make a great deal of difference in the magnitude of estimates.

Omitted variables. A central tenet of econometric theory is that bias may result when important variables are omitted from estimated equations. How serious the bias depends on whether the omitted variables are correlated, either positively or negatively, with included variables. Most of the studies examining individual giving have included only a handful of explanatory variable, often omitting such factors as wealth, education, and religious background. It seems likely that some of these variables are correlated to income, leaving open the possibility of bias in the estimated income effect. And, because price tends to be negatively related to income, it is possible that these omissions could also bias the estimate of price. Some degree of comfort can be taken from the few estimated equations in which a wide array of variables are included, for these tend not to exhibit systematically different price elasticities. Another approach that has been taken to deal with omitted variables has been to explain *changes* in giving to changes in price and income, models that are not afflicted by the omission of other characteristics that do not change over time. These models tend to produce price elasticities much smaller in absolute value than conventional cross-section models, a result consistent with the notion that omitted variables are a problem in conventional models. Another explanation for

the small elasticity, however, is that the ability of individuals to perceive changes in prices is greatly exceeded by the ability to calculate them with computers, with the result that the measured variables are poor representations of the actual factors at work in individual decisonmaking. Whenever variables are measured with error, their estimated effects are biased toward zero, which then might be a second reason for smaller elasticity estimates.

Permanent versus transitory effects of taxes. A much more serious reservation concerning the price effect has to do with its permanence. Owing to fluctuations in income over time as well as to periodic changes in the tax law, the net-of-tax price faced by a taxpayer may well vary from one year to the next. In a way analogous to the approach that has been taken in some studies of income, analysts have distinguished permanent from transitory changes in price, a distinction with very important implications for tax policy. One logical possibility is that taxes have an effect on the timing of charitable gifts -- with donors bunching their giving into years when their tax rates are highest and thus when the net cost of giving is the lowest -- but not on the lifetime amount of giving. This case would be comparable to that in which a family whose lifetime purchases of light bulbs are unaffected by price but which nonetheless buys all its bulbs when they are on sale. If taxes, by way of the price effect, influence mainly the timing of gifts and not their long-run level, there would be less reason to believe that tax changes will have a significant long-term impact on giving. One recent study makes just such a claim, arguing that most statistical studies of giving, by using annual data on income and prices, incorrectly ascribe permanent significance to variations in prices that are in fact heavily influenced by transitory fluctuations in income. Estimates based on this argument imply a smaller price effect and a larger income effect, with elasticities of about -0.5 and 1.1, respectively.[39]

6. Directions for Future Research

In considering where future research on giving might go, it is helpful to list some of the important unanswered questions as well as to assess the data that might be needed to address them.

Unanswered Questions

After all the attention paid to it, the question that has generated the most interest among economists -- how price affects giving -- is still not resolved. While there is near universal consensus that price has a significant effect, neither the magnitude nor the coverage of the effect is agreed upon. Additional analysis of panel data, with emphasis on the development of more reliable measures of permanent price, will undergird or modify recent research on the permanent effect of price.

Several questions have received less attention than they warrant. First, we know very little about how individuals decide among giving today, saving, and giving in the future. The models of giving define price in terms of forgone current consumption. With very few exceptions, they have not addressed the consumption choices over time. There has been some very interesting work done to relate current giving to the incentives provided by the estate and gift tax, and this work deserves to be extended. However, we know next to nothing about how savings incentives, for example, would affect either lifetime giving or bequest giving. We also cannot say very much about the rather large question of how the estate and gift tax affects the amount and timing of lifetime giving. These behavioral questions are also relevant the effect on

giving of asset holding, and especially to the holding of assets with unrealized capital gains. During the recent period of rising stock prices, the opportunity to give away appreciate assets has surely influenced the decisions of many high-income donors, and it would be very helpful indeed to know how these taxpayers evaluate the alternatives of realization, donation, and simply holding onto the assets for eventual bequest.

A second issue that has been discussed more than it has been analyzed is the interdependence of giving behavior. To what extent does any individual's giving depend on the giving of friends, neighbors, and business associates? Since peers are thought to be influential in other kinds of personal behavior, it seems likely that there would be an effect here as well. A related possibility is that relative income rather than absolute income might be the more important measure.

Third, it would be helpful to our understanding -- quite apart from the obvious usefulness to nonprofit organizations -- to have a better understanding of the effectiveness of fundraising appeals. Casual observation suggests that fundraising as an activity has become increasingly sophisticated at the same time it has absorbed larger shares of nonprofit budgets. For one thing, one might well wonder what portion of the growth in giving in recent years is the result of this heightened activity. Virtually no empirical studies of giving attempt to measure or model fundraising activity, although it is a commonplace that such efforts do play a role in how much is given to what causes at what time. Here, by the way, is a question that could profitably be examined separately by type of donee organization. A somewhat related possible effect would also be of interest: the influence that appeals from public officials and other leaders for donations.

Fourth, our knowledge would be significantly enriched if more were known about the differences in giving behavior as it relates to different kinds of recipient organizations. While some studies have been done comparing giving by donee type, the results to date yield still rudimentary knowledge. A major barrier in learning more on this score is the absence of a data set that would differentiate gifts by donee and also have sufficient numbers of high-income households to allow inferences to be made about their behavior.

A fifth quite general question, and one that would interact with almost every empirical issue discussed here, has to do with the very motivation behind giving. Although this is not a question that economists feel they must, or can, answer, it has obvious importance. Given the differences in disciplinary interests and approaches, we must here appeal to those trained in fields other than economics -- particularly sociology, psychology, and history. Among the approaches that might be taken here, it would be very interesting to see whether and how knowledge about the activities of recipient organizations, perhaps gained through participation and volunteer work, influences giving to those same organizations. Is it possible, in other words, to see whether preferences are influenced through contact?

Data

Because such a large proportion of giving is done by relatively affluent individuals, only data sets that include a sufficient number of high-income households have the potential to provide reliable estimates of detailed giving patterns. Tax return data have been a very useful source of information because they typically over-sample high-income tax returns, thus yielding enough observations to allow statistical inferences to be made. The kind of national household

surveys done by Gallup, in contrast, are more or less random samples of the population and thus do not feature the kind of over-sampling of the wealthy that is required. Not since the National Study of Philanthropy in 1973 has there been a household survey that both over-sampled the wealthy and devoted special attention to charitable behavior. Among the data sets that one might desire in order to advance understanding about charitable giving, the most promising avenue would seem to be a new national survey of the same sort as that undertaken in 1973. Not only would this permit more investigation into the distribution of giving by type of donee, it would also permit models to be estimated with wealth, as well as to allow further work related to attitudes regarding charitable giving.

References

Andreoni, James, "Impure Altruism and Donations to Public Goods: A Theory of Warm-Glow Giving," *Economic Journal* 100 (June 1990), 464-477.

Andreoni, James, William G. Gale, and John Karl Scholz, "Charitable Contributions of Time and Money," unpublished paper, October 1995.

Auten, Gerald E., James M. Cilke, and William C. Randolph, "The Effects of Tax Reforms on Charitable Contributions," *National Tax Journal* 45 (September 1992), 267-290.

Auten, Gerald and David Joulfaian, "Charitable Contributions and Intergenerational Transfers," *Journal of Public Economics* (January 1996), 55-68.

Barry, John S., "How A flat Tax Would Affect Charitable Contributions," *Heritage Foundation Backgrounder*, No. 1093, November 7, 1996.

Broman, Amy J., "Statutory Tax Rate Reform and Charitable Contributions: Evidence from a Recent Period of Reform," *Journal of the American Tax Association* 11 (Fall 1989), 7-20.

Brown, Eleanor, "Taxes and Charitable Giving: Is There a New Conventional Wisdom?" Unpublished paper prepared for presentation at meetings of the National Tax Association, November 10-12, 1996, Department of Economics, Pomona College, 1996.

_____ and Hamilton Lankford, "Gifts of Money and Gifts of Time," *Journal of Public Economics* 47 (April 1992), 321-329.

Carroll, Robert and David Joulfaian, "Taxes and Corporate Giving to Charity," unpublished paper, Office of Tax Analysis, January 1995.

Choe, Yong S., and Jinook Jeong, "Charitable Contributions by Low- and Middle-Income Taxpayers: Further Evidence with a New Method," *National Tax Journal* 46 (March

1993), 33-39.

Clotfelter, Charles T., *Federal Tax Policy and Charitable Giving* (Chicago: University of Chicago Press, 1985a).

_____, "The Impact of Tax Reform on Charitable Giving: A 1989 Perspective," in Joel Slemrod (ed.), *Do Taxes Matter?* (Cambridge, MA: MIT Press, 1990).

_____, "Life After Tax Reform," *Change* (July/August 1987), 12-18.

_____, "Tax Reform and Charitable Giving in 1985," *Tax Notes* (February 4, 1985b), 477-487.

_____ (ed.), *Who Benefits from the Nonprofit Sector?* (Chicago: University of Chicago Press, 1992).

_____ and Richard L. Schmalbeck, "The Impact of Fundamental Tax Reform on Nonprofit Organizations," in Henry J. Aaron and William G. Gale (eds.), *Economic Effects of Fundamental Tax Reform* (Washington, DC: Brookings Institution, 1996), 211-243.

Cruciano, Therese M., "Individual Income Tax Returns, Preliminary Data, 1993," *Statistics of Income Bulletin*, Vol. 14, No. 4 (1995), 9-27.

Feenberg, Daniel, "Are Tax Price Models Really Identified: The Case of Charitable Giving," *National Tax Journal* 40 (December 1987), 629-633.

Feldstein, Martin, "The Income Tax and Charitable Contributions: Part I -- Aggregate and Distributional Effects," *National Tax Journal* 28 (1975), 81-100.

Giving USA (New York: AAFRC Trust for Philanthropy, 1993 and 1995).

Glenday, Graham, Anil K. Gupta, and Henry Pawlak, "Tax Incentives for Personal Charitable Contributions," *Review of Economics and Statistics* 68 (November 1986), 688-693.

Greenwood, Daphne T., "Price and Income Elasticities of Charitable Giving: How Should Income be Measured?" *Public Finance Quarterly* 21 (April 1993), 196-209.

Hodgkinson, Virginia Ann et al., *Giving and Volunteering in the United States* (Washington, DC: Independent Sector, 1990, 1996).

_____, *Nonprofit Almanac 1992-1993* (San Francisco: Jossey-Bass Publishers, 1992, 1996).

Jencks, Christopher, "Who Gives to What?" in Walter W. Powell (ed.), *The Nonprofit Sector* (New Haven: Yale University Press, 1987), 321-339.

Jones, Andrew and John Posnett, "The Impact of Tax Deductibility on Charitable Giving by Covenant in the U.K.," *Economic Journal* 101 (1991), 1117-1129.

Khanna, Jyoti, John Posnett, and Todd Sandler, "Charity Donations in the UK: New Evidence Based on Panel Data," *Journal of Public Economics* 56 (1995), 257-272.

Kingma, Bruce R., "An Accurate Measurement of the Crowd-Out Effect, Income Effect, and Price Effect for Charitable Contributions," *Journal of Political Economy* 97 (No.5, 1989), 1197-1207.

Lankford, R. Hamilton and James H. Wyckoff, "Modelling Charitable Giving Using a Box-Cox Standard Tobit Model," *Review of Economics and Statistics* 73 (August 1991), 460-470.

Lynd, Robert S. and Helen Merrell Lynd, *Middletown: A Study in Contemporary American Culture* (New York: Harcourt, Brace and Company, 1929).

Morgan, James N., Richard F. Dye, and Judith H. Hybels, "Results from Two National Surveys of Philanthropic Activity," in Commission on Private Philanthropy and Public Needs,

Research Papers (Washington: Department of the Treasury, 1977), Vol. I, 157-323.

Odendahl, Teresa, "The Culture of Elite Philanthropy in the Reagan Years," *Nonprofit and Voluntary Sector Quarterly* 18 (Fall 1989), 237-248.

O'Neil, Cherie J., Richard S. Steinberg, and G. Rodney Thompson, "Reassessing the Tax-Favored Status of the Charitable Deduction for Gifts of Appreciated Assets," *National Tax Journal* 49 (June 1996), 215-231.

Ostrower, *Why the Wealthy Give: The Culture of Elite Philanthropy* (Princeton: Princeton University Press, 1995).

Posnett, John and Todd Sandler, "Demand for Charity Donations in Private Non-profit Markets," *Journal of Public Economics* 40 (1989), 187-200.

Prince, Russ Alan and Karen Maru File, *The Seven Faces of Philanthropy* (San Francisco: Jossey-Bass Publishers, 1994).

Randoph, William C., "Dynamic Income, Progressive Taxes, and the Timing of Charitable Contributions," *Journal of Political Economy* 103 (August 1995), 709-738.

Reece, William S., "Charitable Contributions: New Evidence on Household Behavior," *American Economic Review* 69 (March 1979), 142-151.

Reynolds, Alan, "The Myth of the Independent Sector," unpublished paper, Hudson Institute, 1996.

Ribar, David C. and Mark O. Wilhelm, "Charitable Contributions to International Relief and Development," *National Tax Journal* 48 (June 1995), 229-244.

Ricketts, Robert C. and Peter H. Westfall, "New Evidence on the Price Elasticity of Charitable Contributions," *Journal of the American Taxation Association* 15 (Fall 1993), 1-25.

Schiff, Jerald, "Tax Policy, Charitable Giving, and the Nonprofit Sector: What Do We Really Know?" in Richard Magat (ed.), *Philanthropic Giving: Studies in Varieties and Goals* (New York: Oxford University Press, 1989), 128-142.

Sen, Amartya K., "Rational Fools: A Critique of the Behavioral Foundations of Economic Theory," in H. Harris (ed.), *Scientific Models and Men* (Long: Oxford University Press, 1978), pp. 317-344; reprinted in Jane J. Mansbridge (ed.), *Beyond Self-Interest* (Chicago: University of Chicago Press, 1990), 25-43.

Slemrod, Joel, "Are Estimated Tax Elasticities Really Just Tax Evasion Elasticities? The Case of Charitable Contributions," *Review of Economics and Statistics* 71 (August 1989), 517-522.

Steinberg, Richard, "Taxes and Giving: New Findings," *Voluntas* 1 (November 1990), 61-79.

U.S. Bureau of the Census, *Statistical Abstract of the United States, 1994* (Washington, D.C.: Government Printing Office, 1994).

U.S. Council of Economic Advisers, *Economic Report of the President*, February 1994.

U.S. Internal Revenue Service, *Statistics of Income -- Individual Tax Returns, 1992* (Washington: Government Printing Office, 1995).

Table 1

Total Contributions in 1995

(in billions of dollars)

Source of contributions	
Individuals	116.2
Bequests	9.8
Foundations	10.4
Corporations	7.4
Total	143.9

Source: Giving USA 1996, p. 12.

Table 2
Individual Giving, Total and as Percentage of Personal Income

Year	Giving, in billions of 1995 dollars	Giving as % of income
1974	60.4	1.78
1975	60.0	1.79
1976	63.5	1.81
1977	66.9	1.83
1978	67.9	1.76
1979	71.2	1.79
1980	72.5	1.78
1981	74.9	1.80
1982	73.0	1.75
1983	76.5	1.80
1984	80.0	1.76
1985	80.3	1.71
1986	90.3	1.85
1987	93.6	1.87
1988	100.1	1.92
1989	105.3	1.95
1990	104.8	1.90
1991	106.3	1.93
1992	105.9	1.87
1993	107.1	1.86
1994	107.2	1.82
1995	116.2	1.91

Source: Giving USA 1996, p. 56; Economic Report of the President, February 1996, p.284, 308

GDP: Fourth Quarter 1996 Release, January 31, 1997;

Table 3

Contributions and Income of Households, Selected Characteristics, 1996

		Percentage of all households	Average contribution	Average household income	Percentage who contributed
All households		100.0	696	41,484	68.5
Category					
Age	18-24	12.5	164	38,780	57.1
	25-34	20.6	497	40,769	66.9
	35-44	22.0	920	46,363	68.5
	45-54	16.0	750	51,126	78.5
	55-64	10.3	1,284	43,506	71.7
	65-74	11.1	716	30,323	73.0
	75 or more	6.0	516	20,671	61.5
Income (thousands)	under 10	11.6	139	6,792	47.3
	10-20	16.2	217	15,065	51.1
	20-30	14.2	375	25,177	64.9
	30-40	12.2	519	34,797	71.8
	40-50	9.9	434	44,736	75.3
	50-60	7.2	856	54,792	85.5
	60-75	10.0	1,022	67,493	78.5
	75-100	8.1	1,261	85,449	79.7
	100 or more	6.8	2,994	--*	88.6
Church attendance					
	No	21.9	268	34,469	48.9
	Yes	77.0	822	41,951	73.9

*Top-coded category: mean income cannot be calculated.

Source: Hodgkinson et al., Giving and Volunteering in the United States, 1996,

Appendix D, Table 1.

Table 4
Distribution of Household Contributions by Type of Charity, 1993

Type of Organization	Percentage of total
Religious organizations	57.5
Human Services	9.4
Education	8.9
Health	8.1
Youth development	3.9
Arts, Culture and humanities	2.8
International, foreign	2.4
Public/societal benefit	1.7
Environment	1.7
Recreation - adults	1.6
Other	0.5
Private and community foundations	0.5
TOTAL	100

Source: Hodgkinson and Weitzman (1996), Table 1.3, p.1-25.

Table 5

Giving by Type of Organization, National Survey of Philanthropy, 1973

Income class lower bound		Percentage of giving, by type of organization							Religion	Lower bound Income in
1973 dollars	1989 dollars	Religion	Higher education	Combined appeals	Culture	Other identified	Not identified*	Total	as percent of identified	1994 $ (105.0)
0	0	59	1	2	0	5	33	100	88	0
10,000	25,339	67	1	3	0	7	22	100	86	29,661
20,000	50,678	59	2	5	0	15	19	100	73	59,322
30,000	76,017	42	5	6	3	16	28	100	58	88,983
50,000	126,695	16	9	10	4	31	30	100	23	148,305
100,000	253,390	10	14	9	5	21	41	100	17	296,610
200,000	506,780	8	27	10	6	25	24	100	11	593,220
500,000	1,266,949	9	24	6	9	25	27	100	12	1,483,051
All		46	5	6	2	15	26	100	62	

*Note: Information on type of organization was obtained for only the four major gifts of each donor; therefore additional giving was not allocated to donee categories.

Source: Morgan et al., Table 38, p.208; Economic Report of the President, 1996, p. 284, GDP Price deflator, 35.4

Table 6

Selected Information on Taxpayers by Adjusted Gross Income (AGI) Class (1992)

AGI (in thousands)	Number of Returns	Average AGI	Average Giving	Giving as a percent of AGI	Average Itemizers	giving Nonitemizers	Estimated Contributions Religion	percentage of by donee Higher Ed.	group Other	Percentage Itemizers	Percentage of all contributions
$5 to <$10	14,874,759	$7,505	$327	4.4%	$689	$311	72.4%	1.4%	26.2%	4.1%	4.9%
$10 to <$15	13,240,069	$12,438	$428	3.4%	$838	$397	76.2%	0.8%	23.0%	7.1%	5.8%
$15 to <$20	11,490,171	$17,413	$553	3.2%	$1,084	$475	76.4%	0.7%	22.9%	12.8%	6.4%
$20 to <$25	9,553,310	$22,411	$621	2.8%	$963	$550	75.6%	0.7%	23.7%	17.1%	6.0%
$25 to <$30	7,590,153	$27,434	$752	2.7%	$1,149	$603	74.3%	0.8%	24.9%	27.3%	5.8%
$30 to <$40	12,324,990	$34,765	$914	2.6%	$1,281	$696	72.1%	0.9%	27.0%	37.4%	11.4%
$40 to <$50	9,008,646	$44,746	$1,107	2.5%	$1,333	$818	68.5%	1.1%	30.3%	56.1%	10.1%
$50 to <$75	11,796,348	$60,381	$1,496	2.5%	$1,660	$1,010	62.4%	1.5%	36.1%	74.8%	17.9%
$75 to <$100	3,988,202	$85,410	$2,139	2.5%	$2,229	$1,341	52.6%	2.3%	45.1%	89.8%	8.7%
$100 to <$200	2,810,579	$131,066	$3,303	2.5%	$3,375	$2,001	37.8%	4.0%	58.2%	94.7%	9.4%
$200 to <$500	746,344	$292,900	$7,147	2.4%	$7,323	$4,418	15.2%	11.2%	73.6%	93.9%	5.4%
$500 to <$1 M	141,159	$675,591	$17,301	2.6%	$17,811	$10,604	6.1%	23.1%	70.8%	92.9%	2.5%
$1 M and up	67,243	$2,631,348	$81,122	3.1%	$84,672	$33,811	6.3%	20.5%	73.3%	93.0%	5.5%

Source: Published data on itemizers and estimates for nonitemizers from Clotfelter and Schmalbeck (1996), Table 6-4.

**3/10/97 draft with tables added 4/18/00 (7/18/00-Table 6), g:\ch\papers\econgiv.wpd

Endnotes

1. See, for example, Katz (1986 , pp. 58-61).

2. In their classic sociological study of American urban life in the 1920s, Lynd and Lynd (1929, p.464) describe the launching of the community chest drive in Muncie, Indiana: "The first step was to enlist the big men in town, the Rotary crowd, as the responsible heads upon whom success or failure depended. There was the minimum of Christian *caritas* about it, no zeal for a particular emergency or needy family...."

3. For evidence on distributional consequences, see Clotfelter (1992).

4. At one extreme, Odendahl (1989, p. 243) has argued that the wealthiest donors fund institutions from which they benefit and over which they exert great control: "Whether it be high culture, high education, or the high medicine of private nonprofit hospitals, the rich fund and make policy for these institutions, while, on the whole, the middle class produces the cultural and intellectual products and services."

5. See Clotfelter (1985) for a fuller description of tax provisions used by other countries.

6. Some 43 percent of respondents interviewed in 1973 said they thought deductibility encourages people to give more. When asked how people in similar financial positions as themselves would react if contributions were not deductible, 26 percent said such people would give less. When asked the same question about their own likely response, 13 percent said they would give less (Morgan et al. 1977, pp.285-286).

7. For a discussion of this motivation and its implications, see Andreoni (1990).

8. Sen's (1978, 1990) essay is not only a contribution to the theory of giving but also an attack on the narrow interpretation of utility maximization.

9. One recent line of work seeks to categorize donors according to their primary motivation, in order to use this classification to fine-tune approaches in fund-raising. Based on interviews with over 200 big donors, the seven major motivations, listed in descending order of importance were: 1) pragmatic considerations of personal and community benefits; 2)devotion to religious principles and institutions; 3)awareness of tax advantages; 4)interest in social functions and networks attached to charitable activities; 5)perceived obligation to repay an institution for past services received; 6)altruism as a moral imperative; and 7)desire to continue family tradition of giving (Russ and File 1994, pp.13-16).

10. Hodgkinson et al. (1996), Table 1.

11. See Jencks (1987, pp. 326-328).

12. This generally acknowledged pattern of a diminished importance for religious giving at higher incomes is not, however, supported by a Gallup survey taken in 1989. This survey indicates that, by income class, the percentage reported given to religious groups held fairly steady at the 67 percent reported overall. By age category the percentage varies a little more, but not much. Since this survey stands alone in suggesting that the percentage of giving made to religious organizations is constant by income class, it seems reasonable to treat these results with skepticism.

13. These percentages are larger than the share that giving is of personal income because personal income is a broader definition of income than adjusted gross income.

14. Jencks (1987, p.324), commenting on the U-shape pattern, provides an interesting theory, arguing that it is caused by the confluence of two reasons for giving: paying one's dues, especially in the context of religious organizations, which would imply payments that fall as a percentage of income, and giving away one's surplus, which would imply payments that rise more than proportionately with income.

15. The model described here, elaborated on in many subsequent studies, and reviewed in Clotfelter (1985a), Steinberg (1990), and Brown (1996), was developed and first spelled out by Feldstein (1975).

16. Another feature of the tax code that influences the tax-defined price of giving is capital gains. Under current law, virtually all donors who make contributions in the form of appreciated assets are allowed to deduct the full market value of the asset but are not required to pay tax on the appreciation, which would be taxed as capital gains if the asset had been sold. If the donor would otherwise have sold an asset, this treatment further reduces the amount of forgone net income from making a gift. For example, a taxpayer facing a marginal tax rate of .396 and a capital gains tax rate of .28 and contemplating giving away an asset worth $1000 with a basis of $750 would save $466 in taxes ($396 from the deduction and .28($250)=$70 from the forgone capital gains tax), making the net cost per dollar only 53.4 cents each. If the basis of the asset were only $250, the savings would be $606, yielding a price of 39.4 cents.

If the donor would otherwise have held onto the asset until death, there is no capital gains tax that is avoided, and the price of giving would be the same as that applying to gifts of cash. In this case, that price is 1-.396= .604.

17. Barry (1996, p.11) writes: “Many analysts believe that elimination of the charitable tax deduction would decrease significantly the amount of money donated to nonprofits. However, this is based on the mistaken assumption that the primary driving force behind charitable donations is the income tax deduction. In other words, these analysts believe that individuals donate a certain amount of money almost solely because there is a benefit to be had through the federal tax code.” He continues (p.12); “It is the same as saying that the only reason people purchase a house is to take advantage of the home mortgage income tax deduction.”

18. These ranges are based on the reported price and income elasticities reported in two surveys of empirical studies: Clotfelter (1985, pp. 57-59) and Steinberg (1990, pp.65-67). As they make no distinction among studies or include estimates from the most recent studies, they should be taken only as rough indicators of the range of existing results.

19. Another implication of the model is that a tax credit for contributions would also have the effect of lowering the price of giving. A tax credit of 20 percent, for example, would lower taxes by 20 cents per dollar of contributions, making the price 80 cents per dollar.

20. In discussing this analysis, Reynolds (1996, p.30) writes that the article "estimated that the actual 1986 bill would cut individual contributions by 15-16% in the following year." In fact, the footnote to the table states: "The simulations were computed for 1988 and compared long-run levels of contributions between the new tax law and the 1985 law (indexed), in which nonitemizers received a deduction of half of all charitable gifts." The text (p. 15) states "I compare 'long-run' levels of giving under each law, the levels that would theoretically be reached after taxpayers had adjusted their behavior and expectations to the tax law hypothetically in force. I also look only at donations by individuals. The tax law reflected in the computer model represents the major provisions related to charitable contributions and the calculation of tax liability, but the model does not account for the effects of the alternative minimum tax."

21. These calculations are accompanied by the caveat: "To reiterate, these calculations should be treated as no more than illustrations of the sorts of magnitudes one would expect in comparing one tax regime with another in the long run and assuming that nothing but the tax regime changed" (Clotfelter and Schmalbeck 1996, p.230).

22. One issue related to simulations of likely tax effects has to do with the projected impact of tax reform proposals on personal income. A major point of contention in the debate over flat tax schemes is the extent to which a lowering of marginal tax rates will stimulate new economic activity and thus lead to higher incomes and therefore more giving. The simulations discussed in the text do not embody any such assumptions, but others have argued that they should. See, for example, Barry (1996).

23. Two recent studies suggesting that low-income households are not responsive to price are O=Neil et al. (1996) and Glenday (1986).

24. See Slemrod (1989) for an analysis of the possible role of tax evasion.

25. See, for example, Kingma (1989) and Brown and Lankford (1992, p.335).

Crowding out from the donations of others also tends to dampen the price effect. If price declines, for example, stimulating more giving, all are less inclined to give because the giving of others has increased. See Ribar and Wilhelm (1995).

26. See Brown and Lankford (1992).

27. Randolph (1995, p. 728). See also Clotfelter (1985, pp. 61-62).

28. For a review of a number of studies, see Clotfelter (1985, pp. 62-63) and Jencks (1987, p. 326). Randolph (1995, p.727), however, finds that marital status makes no difference in this regard.

29. Jencks (1987, p. 327) makes the analogy to user fees.

30. See Clotfelter (1985, p. 63) for a discussion of wealth as a variable.

31. See Jencks (1987, pp.327-328) for summaries of other variables, including education, religion, and race, most of which discussion is based on partial tabulations rather than multiple regression analysis.

32. Clotfelter and Schmalbeck (1996, pp. 233-234) employ two sets of parameters, based on previous econometric studies of charitable bequests. For estates less than $1 million in 1976 dollars, a price elasticity of -1.6 and an income elasticity of 0.4 is used. For larger estates, two alternative pairs of price and income elasticities are used: -1.0 and 0.4 for one and -2.4 and 1.3 for the other.

33. Reynolds (1996, p.35). On p.36 he elaborates: "Over decades in which the highest tax rate ranged from 28% to 70%, charitable contributions invariably continued to amount to 1.9-2.0% of GDP, give or take one-tenth of a percentage point. *Real growth of giving depends on real growth of the economy*, with tax considerations evidently playing an almost invisible role over time (except in the timing and form of gifts)."(Italics in original.) Barry (1996, p.1) by implication makes a similar argument: "Although the top marginal income tax rate has ranged from 28 to 91 percent over the past two decades, the amount that individuals donate to nonprofit organizations has remained relatively constant: around 1.85 percent of personal income."

34. Clotfelter (1990) and Auten, Cilke, and Randolph (1992).

35. See Clotfelter and Schmalbeck (1996, pp. 220-221), which uses data from Auten, Cilke, and Randolph (1992).

36. Jencks (1987, p. 329) puts the statistical problem nicely, "The Internal Revenue Code is not an experiment in which taxpayers with the same income are randomly assigned different tax rates."

37. See Feenberg (1987).

38. For example, see Randolph (1995, p.730).

39. Randolph (1995) argues that, although people appear to smooth their giving in response to

transitory variations in income, the effect on price is just the opposite: they tend to bunch their gifts into years when transitory income is the highest to take advantage of the unusually high tax rate in those years. He also presents statistical estimates consistent with this argument, although the necessary heavy reliance on instrumental variables argues for caution in placing undue reliance on one set of statistical findings. Estimates of elasticities are presented on p. 724.

See also Brown (1996, p.11) for a clear discussion of these issues.