



tax break

by Jon M. Bakija and William G. Gale

Effects of Estate Tax Reform On Charitable Giving

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I. Introduction and Summary

Since 1916, the United States has imposed a tax on the estates of the wealthiest individuals. The 2001 tax cut reduces the estate tax over time, and then repeals it as of 2010, only to reinstate it in 2011. Because politicians are unlikely to allow this pattern of changes to occur, estate tax reform will return to the policy agenda in the near future.

One of the most important issues in assessing reform options is the effect on charitable giving. The estate tax encourages charitable giving at death by providing a deduction for charitable bequests. It also encourages giving during life, as explained below. But the tax reduces charitable gifts by reducing the amount of wealth decedents can allocate to various uses. The net impact of these effects is ambiguous in theory.

Our previous research implies that estate tax repeal would reduce charitable bequests by between 22 percent and 37 percent, or between \$3.6 billion and \$6 billion per year. Previous studies are consistent with this finding, and also imply that repeal would reduce giving during life by a similar magnitude in dollar terms. To put this in perspective, a reduction in annual charitable donations in life and at death of \$10 billion due to estate tax repeal represents a 5 percent decline in overall charitable giving and implies that, each year, the nonprofit sector would lose resources equivalent to the total grants currently made by the largest 110

foundations in the United States.¹ The qualitative conclusion that repeal would significantly reduce giving holds even if repeal raises aggregate pretax wealth and income by plausible amounts.

II. Background

In 2001, charitable contributions totaled \$212 billion, of which living individuals gave 76 percent, bequests accounted for 8 percent, and foundations accounted for 12 percent (AAFRC Trust for Philanthropy 2002). Estate tax changes can plausibly affect giving through all of these channels. The remaining 4 percent was donated by corporations. Charitable bequests figure most prominently as a source of gifts for educational institutions, medical research institutions, museums, and the creation and maintenance of private foundations.

The federal estate tax currently applies to net estates in excess of \$1 million. The net estate equals gross assets at death less deductions for debts, spousal bequests, charitable bequests, expenses of administering the estate, and a few other miscellaneous items. The marginal estate tax rate varies between 41 percent and 49 percent, with the rate rising as wealth does. The exemption is scheduled to increase in steps, reaching \$3.5 million by 2009, while the top marginal tax rate is scheduled to fall to 45 percent, before the tax is temporarily eliminated in 2010.

In recent years, about 2 percent of decedents have had to pay federal estate taxes. Table 1 provides information on charitable bequests and wealth reported on federal estate tax returns filed in 2001. Most of these returns represent people who died in 2000, for whom the effective exemption was \$675,000. Charitable bequests appeared on one-sixth of estate tax returns, and amounted to \$16.1 billion, or 7.5 percent of the value of gross assets.

Both the likelihood of giving and the share of estate given rise significantly with wealth. These patterns are consistent with the incentives created by tax rates that rise with wealth. Of course, people may be willing to give larger shares of wealth to charity as their wealth rises for reasons other than taxes. In any event, charitable bequests are heavily concentrated among the wealthiest estates. In 2001, 301 decedents with

¹Private communication from Jeff Krehely, National Committee for Responsive Philanthropy, based on analysis of data from the National Center for Charitable Statistics 2001 Private Foundation file.

Size of Gross Estate (\$ millions)	Charitable Bequests				Avg. Tax Rate (Estate Tax as Percent of Net Worth)	Marginal Tax Rate at Mean Net Worth in Category	Share of			
	Percent With	As Share of Estate	Per Decedent (\$ thousands)	Per Giver (\$ thousands)			All Returns	Returns With Charity	Gross Estates	Charitable Bequests
All	17.3	7.5	149.4	863.1	11.3	45	100.0	100.0	100.0	100.0
0.6-1.0	14.2	2.4	19.2	135.1	2.0	39	42.0	34.5	17.1	5.4
1.0-2.5	16.6	4.1	61.2	369.1	8.1	43	43.8	41.9	32.6	17.9
2.5-5.0	25.1	6.1	209.9	836.0	15.3	50	9.2	13.3	15.8	12.9
5.0-10.0	32.4	7.6	516.8	1,594.1	18.6	50	3.3	6.2	11.2	11.4
10.0-20.0	36.5	9.7	1,301	3,563.5	18.9	55	1.2	2.5	8.0	10.3
20.0+	47.9	20.6	10,831	22,598.4	15.4	50	0.6	1.6	15.3	42.1

Source: IRS Statistics of Income division, April 2003 (<http://www.irs.gov/pub/irs-soi/01es01gr.xls>).
Note: Data represent returns filed in 2001, most of which are 2000 decedents. Marginal tax rate is calculated based on law in effect in 2000.

gross estates in excess of \$20 million gave \$6.8 billion to charity. These decedents represented fewer than one out of every 8,000 deaths in that year, but accounted for 42 percent of all charitable bequests and made average bequests of \$23 million. Likewise, 64 percent of all charitable bequests came from roughly 1,900 gross estates exceeding \$5 million.

III. Some Illustrative Examples

Some simple examples show the channels through which estate tax repeal would affect giving and why it is plausible to believe that repeal would reduce giving. Holding pretax wealth constant (an assumption we relax below), the estate tax directly reduces the price of charitable bequests and the level of after-tax wealth that decedents can allocate to various uses. The effect of estate tax repeal depends on (a) the relative magnitude of the changes in price and after-tax wealth; and (b) the relative responsiveness of charitable bequests to changes in each. Because the estate tax is highly progressive, the marginal tax rate (that is, the tax rate applying to the next dollar of wealth or deductions) is higher than the average tax rate (total estate tax liability divided by net worth) for most decedents. This difference implies that repeal would reduce the marginal tax rate — which determines the price of giving — by more than the average tax rate — which influences the after-tax level of wealth. As a result, repeal would generate a relatively large increase in the price of giving and a relatively small increase in the after-tax wealth of decedents. Therefore, repeal will reduce charitable bequests as long as the responsiveness of bequests to changes in after-tax wealth is not substantially larger than the responsiveness to changes in price.

Consider an individual with a marginal estate tax rate of 40 percent and an average tax rate of 10 percent. (These figures represent the averages for people who died in 1998 and filed an estate tax return, weighted by their charitable bequests.) For this representative estate tax filer, a \$1 charitable bequest reduces contributions to heirs by 60 cents. If the estate tax were

repealed, a \$1 contribution to charity would reduce contributions to heirs by \$1, so the price of charitable bequests (measured in terms of bequests to taxable heirs) would rise by 67 percent (from 0.6 to 1). If the individual's average estate tax rate were 10 percent, repeal would raise after-tax wealth by 11 percent (from 0.9 to 1).

Suppose a 1 percent increase in after-tax wealth always raises charitable bequests by 1 percent, and a 1 percent increase in the price always reduces such bequests by 1 percent. If so, repeal would reduce charitable bequests in this example by about one-third. These calculations hold pretax wealth constant. But even if estate tax repeal raised pretax wealth by as much as 10 percent, charitable bequests would still decline by 27 percent.²

Estate taxes also encourage giving during life. Charitable contributions made during life gain a double tax advantage: They reduce income taxes and they remove the assets from the estate and so avoid estate taxes as well. For example, assume the marginal income tax rate is 30 percent and the marginal estate tax rate is 40 percent. A donor giving \$100 to charity while alive could instead have kept the \$100, paid \$30 in income tax and bequeathed the remaining \$70 to heirs, who would receive a net inheritance of \$42, once estate tax was paid. With no estate tax, foregoing a \$100 charitable contribution during life would leave \$70 for heirs. That is, estate tax repeal would raise the cost of making charitable contributions while alive (relative to the cost of giving gifts to heirs).

²If a 1 percent increase in price (P) or after-tax wealth (W) causes charitable giving (G) to change by -1 percent or 1 percent, respectively, then $G = aW/P$, where a is a constant. In the example in the text, $W/P = 0.9/0.6 (= 1.5)$ under the estate tax. If pretax wealth is held constant, $W/P = 1/1 (=1)$ under repeal. So the percent change in G is $[(1 - 1.5)/1.5] \times 100 = -33$ percent. If pretax wealth rises by 10 percent, $W/P = 1.1$ under repeal and a similar calculation shows a 27 percent decline in giving.

Aggregate giving from living individuals far exceeds aggregate charitable bequests. As a result, even if the estate tax is only a relatively minor determinant of charitable giving while alive, the impact of repeal on giving while alive could be a large component of the overall impact.

IV. Evidence

Several kinds of evidence exist on how estate taxes affect charitable giving. Each type indicates that repeal would significantly reduce charitable giving. In particular, each type suggests that charitable giving is as sensitive or more sensitive to its price than to after-tax wealth. This result, combined with the fact that repeal would raise the price of giving more than after-tax wealth, implies that repeal would reduce giving.

Figure 1 illustrates, by decade, the share of gross estates given to charity and the marginal tax rate on the average estate for all estate tax filers.³ As tax rates rose, so too did the share of wealth given to charity. This evidence is consistent with the notion that the estate tax's stimulative effect on charitable bequests (due to improved incentives) outweighed its depressing effect (due to reduced after-tax wealth).⁴ Econometric analysis that relies on time-series variation like that depicted in figure 1, undertaken by economists Wojciech Kopczuk and Joel Slemrod (2003), also finds charitable bequests are sensitive to price. By itself, the time-series evidence is not decisive, though, because it is difficult to separate the impact of tax rates from other factors that vary over time.

A second type of study uses cross-sectional information — data on decedents from a single year. These studies almost universally find that estate taxes raise charitable bequests. Recent work by Treasury Department economist David Joulfaian (2000), based on a sample of 1992 decedents, exemplifies this line of research. His preferred estimates suggest that a 1 percent increase in the price of a charitable bequest reduces such bequests by 1.7 percent, and a 1 percent increase in after-tax wealth raises charitable bequests by 1.2 percent — that is, he finds that charitable bequests are more sensitive to price than to wealth. Cross-sectional studies are sometimes difficult to interpret, though. Table 1 shows that wealthier people give more of their estate to charity — perhaps because they face higher marginal tax rates or perhaps because they are wealthier. But in a cross-section sample, the main reason tax rates vary across decedents is that wealth varies,

³For additional discussion of the historical evidence, with special attention to changes in reported charitable bequests in the early years of the estate tax, see Doti (2003). Charitable bequests were first made deductible from the estate tax by the Revenue Act of 1918, effective for decedents dying after December 31, 1917. A place to report these bequests first appeared in the August 1918 revision of the estate tax form.

⁴Average pretax wealth reported on estate tax returns also changed over time, in a u-shaped pattern, which would have affected charitable bequests as well. The share of wealth given to charity by people at fixed real wealth levels produces a rising pattern over time similar to that shown in Figure 1.

too, so it is difficult to disentangle the separate effects of each.

A third kind of evidence exploits the fact that estate and inheritance tax rates have changed in different ways over time for people in different states and at different real wealth levels, and examines whether differences in the time-pattern of charitable bequests across groups matches up with the differences in time-pattern of incentives across these groups. Unlike time-series analysis, this approach makes it possible to control for any factors, whether observed or unobserved, that changed in the same way for everyone over time. Unlike cross-sectional analysis, this approach makes it easier to disentangle the effects of incentives from the effects of wealth, because the variation in tax rates comes from differences in tax law across time and states, rather than from the fact that at a point in time wealthier people are in higher tax brackets.

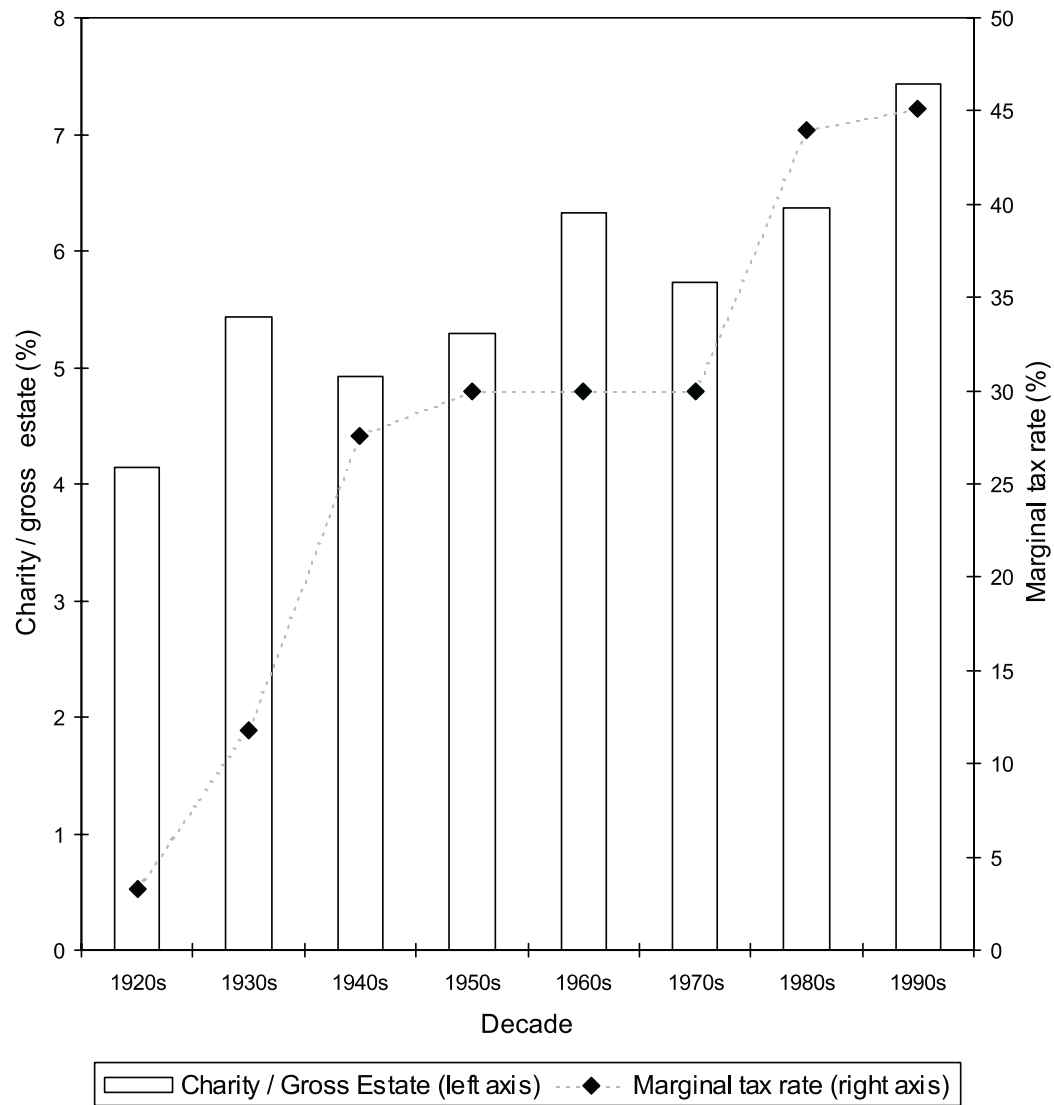
In collaborative work with Slemrod, we have undertaken a research project relying on this approach (Bakija, Gale, and Slemrod 2003). We employ a tax calculator that computes combined federal and state inheritance and estate taxes for any year, state, or wealth level, using a unique data set of federal estate tax returns from 1924 through 1998. Early estimates from this project focus on estate tax return data aggregated by real wealth range, marital status, state, and year and examine the behavior of widowed decedents, who provide about 61 percent of all charitable bequests. We estimate that among this population, a 1 percent increase in the price of giving reduces charitable bequests by 2.1 percent, and a 1 percent increase in after-tax wealth increases charitable bequests by 1.6 percent.

Thus, each of the three types of evidence finds that the sensitivity of charitable bequests to price is close to, and usually greater than, the sensitivity to after-tax wealth. This result, combined with the progressivity of the tax, implies that charitable bequests can be expected to decline significantly if the estate tax were repealed, since repeal would create relatively large increases in the price of giving and relatively smaller increases in after-tax wealth.

Putting an exact number on the size of the decline is a useful exercise, but should be interpreted with caution. Joulfaian calculates that for an individual whose price and before- and after-tax net worth are equal to the average for all filers in his sample, estate tax repeal would reduce charitable bequests by 12 percent. For a variety of technical reasons, however, this calculation probably underestimates the change in aggregate charitable bequests.⁵

⁵The bias arises because Joulfaian calculates the average estate tax rate by (effectively) weighting observations by wealth, but calculates the marginal tax rate as a simple unweighted average. A more consistent approach would calculate a wealth-weighted marginal tax rate. This measure would be significantly higher than the unweighted marginal rate, because high-wealth households face higher marginal tax rates. Using the weighted marginal estate tax rate would imply that repeal would generate a bigger increase in the price of giving than Joulfaian calculates, and therefore a bigger decline in charitable bequests.

Figure 1
Charitable Bequests as a Percentage of Gross Estates vs. Marginal Estate Tax Rate on Average Gross Estate, All Filers, by Decade



Source: Authors' calculations based on data from IRS Statistics of Income.
Notes: Marginal estate tax rate is a decade average of annual rates calculated at mean gross estate among all filers. Decade averages from 1950s through 1980s are based on a subset of years for which data were available.

Duke University professors Charles Clotfelter and Richard Schmalbeck (1996) simulate the effect of repeal by applying a set of estimates from the previous cross-sectional studies to a set of individuals representative of the different types of people filing estate tax returns. They calculate that estate tax repeal would reduce aggregate charitable bequests by between 24 percent and 45 percent. Using a similar but more detailed simula-

tion approach, the estimates from our paper with Slemrod imply that estate tax repeal would cause widowed filers to reduce charitable bequests by 37 percent. This reduction would amount to \$3.6 billion in 2001, or 22 percent of charitable bequests made by all filers. If other types of filers were equally responsive, the decline would be \$6 billion. Both our simulation and Clotfelter and Schmalbeck conservatively assume that

nontaxable filers would be unaffected by repeal. To the extent that filers are nontaxable because they make large charitable bequests, repeal could reduce their giving as well.

As noted above, the estate tax also affects incentives to give to charity while alive. Research on this question has relied exclusively on cross-sectional variation in tax rates, and finds that lifetime giving would decline under estate tax repeal. Treasury economists Gerald Auten and Joulfaian (1996) use data on 1982 estate tax returns matched to the 1981 income tax returns for the decedents and their children. They find that higher estate tax rates are associated with higher lifetime contributions while alive, even after controlling for wealth. Repeal would reduce charitable giving in the last year of life by about 12 percent among people who would otherwise have to file estate tax returns. If annual charitable donations while alive by people likely to face the estate tax is well-approximated by the \$42 billion given by people with incomes above \$200,000 (who represent roughly the top 2 percent of the household income distribution), and giving throughout life is similarly sensitive to giving in the last year of life, this would imply a \$5 billion decline in annual charitable donations through this channel.

Since this estimate is based on giving in the last years of life, one might suspect that it overstates the sensitivity of giving to estate tax rules. However, in a different paper, Joulfaian (2001) finds that charitable giving in the last 10 years of life is even more responsive to the estate tax. He uses data from income tax returns for 1987-96 and estate tax returns for decedents who died between 1996 and 1998. His estimates of the determinants of charitable bequests are similar to previous cross-sectional estimates. Based on averages in the data, he estimates that repeal would reduce combined charitable bequests and charitable donations in the last 10 years of life by between 13 percent and 31 percent. As noted above, a simulation approach would likely suggest a larger impact.⁶

V. Caveats

Although almost all research implies that estate tax repeal would significantly reduce charitable bequests and charitable giving while alive, the findings should be viewed with caution. As noted, there are difficult statistical issues associated with the estimates. In addition, none of the estimates are based on time periods when no estate tax existed. As a result, the parameter estimates may not be valid over a large change in tax rates, even holding related behavior constant. Outright repeal could also change related behavior. It would convey an explicit message that charitable giving at death is no longer encouraged. It would remove some

⁶Congressional Budget Office economists Pamela Greene and Rob McClelland (2001) use data from the Health and Retirement Study and estimate expected estate tax rates based on information on current wealth, age, subjective life expectancy, and different assumptions about asset growth rates. They provide further evidence that the charitable donations of elderly people are sensitive to expected estate tax rates.

of the need to do tax planning prior to death. The elimination of the charitable deduction would eliminate a major selling point for charities. As a result, the aggregate effects could be larger than previous estimates suggest.

Another issue is that the estimates hold pretax wealth constant, but to the extent that repeal raised aggregate wealth and income, charitable giving during life and at death would rise. Some perspective on this issue is appropriate, though. First, it would require enormous increases in wealth to offset the basic results found above. Even increases bordering on 10 percent would not overturn the conclusion that repeal would reduce charitable giving. Second, the impact of estate tax repeal on wealth accumulation is by no means certain. Although we do not review the literature here, both theory and evidence indicate that the effect is ambiguous (Gale, Hines, and Slemrod 2001). Third, even if there were an increase in wealth, it is not obvious that charitable bequests would rise. Currently, the effective estate tax rate is zero on wealth accumulated for the purposes of giving to charity. That rate would not change under repeal, which would simply make other uses of estates tax-free as well.

Boston College researchers Paul Schervish and John Havens (2003) advocate a new model of charitable giving. In their model, people have a hierarchy of preferences: As resources rise, people first take care of themselves and their family, then their friends, and only after those needs are met do they turn to the needs of broader, nonprofit organizations. Schervish and Havens draw two conclusions. First, increases in wealth should generate more than proportional increases in charitable giving. This conclusion is consistent with the data shown in table 1 and elsewhere, but it does not distinguish their approach from conventional approaches. Second, because preferences are hierarchical in their model, households do not address charitable concerns until they have fully addressed their preferences relating to family and friends. Once their wealth is sufficient to focus on charity, the other preferences are no longer a matter of concern. As a result, they say, charitable contributions depend on values, not on tax policy.

This supposed second implication is flawed. Empirically, households do not have purely hierarchical preferences. Many low-income households make charitable contributions. Many wealthy people continue to seek out new personal or family consumption even as they make large donations. Even if the hierarchy of preferences were exact, tax subsidies for charity would affect the wealth level at which people switched from addressing other preferences to charitable concerns. Most importantly, as a purely logical matter, to say that values matter for choices does not imply taxes are irrelevant. People always make choices (that is, express their values) subject to constraints and incentives (which depend on taxes). Observed behavior — like charitable giving — depends on the interaction among values, constraints, and incentives, not on one in isolation of the others.

Schervish and Havens also claim that repeal would actually raise charitable bequests, based in part on a

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survey of individuals with net worth exceeding \$5 million who indicated that they expect to allocate 16 percent of their estate to charity, 47 percent to heirs, and 37 percent to taxes. Given their druthers, however, the respondents would prefer to devote just 9 percent to taxes, 64 percent to heirs, and 26 percent to charity. Taken at face value, the results suggest that reducing the estate tax by more than three-quarters (from 37 percent of estate to 9 percent) would induce an increase of more than 60 percent in charitable bequests (from 16 percent of the estate to 26 percent).

One should not take the results at face value, though. First, the results refer to intentions rather than actions. The econometric literature, based on actual behavior, is replete with studies showing that actual contributions among living people and among decedents are sensitive to tax rates. Second, it seems implausible that these individuals would have to devote 37 percent of their estate to taxes. For estate tax returns filed in the year 2000, for example, the average tax rate even among taxable returns with gross estate in excess of \$20 million was just 20 percent. These concerns raise serious questions about the reliability of the recorded answers.

VI. Conclusion

Estate tax repeal would have significant deleterious effects on charitable bequests and charitable giving during life. Although estate tax reform will raise many issues, the impact on the nonprofit sector should be a central part of the debate.

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