Incentives, Charitable Donations and the Estate Tax: Clarifications

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ABSTRACT

As an incentive for charitable donations, economists remain divided over the importance of the federal estate tax. The conventional view is that the financial incentive of the tax deductibility of such donations is the driving force for their creation, and that eliminating the tax will result in their severe decline. A recent study by Beranek et al. (2010), finds evidence that contradicts this view. However, the role of financial incentives in the estate allocation decision is closely examined below. A model embodying the essential financial relationships in our estate tax system is examined, and we find that net monetary benefits from donations to heirs are negative or zero. This finding supports the belief that altruism and wealth are the principal drivers of charitable donations, not deductibility of estate taxes and wealth.

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I. INTRODUCTION

It is generally agreed that two broad motives govern the division of estates between heirs and charities: The desire to care for loved ones and altruism. To the family we distribute not only financial assets and real estate but collectibles and heirlooms. Normally, this bond is so strong that loved ones are given powerful preference in distributions. But to encourage charitable donations, the estate-tax law allows donations to be deducted from the taxable estate. We label benefits of deductibility financial benefits from donations.

Economists dispute the importance of deductibility in charitable giving. Recent research supporting the tax's importance include Auten and Joulfaian (1996), Joulfaian (2000) who provides further support, Bakija et al. (2003) who continue the tradition; in addition to reinforcing these results, Bakija and Gale (2003) provide an extensive review of this literature. These efforts have produced the prediction that a reduction in estate-tax rates reduces donations, which can be labeled the conventional view.

Highlighting these results is the conclusion: If the tax were eliminated, declines in donations are predicted to range from 12 percent (Joulfaian, 2000) to 45 percent (Clotfelter and Schmalbeck, 1996). The rationale: A rate reduction reduces tax-deductible benefits, and hence donations decline. Beranek et al. (2010), using a different model, however, find significant indirect evidence that contradicts this view, which they find not only counterintuitive, but inconsistent with generally accepted axioms of economic theory.

Supporting the claim that estate taxes are important to donations is a pervasive belief (especially among estate planners, charities and some economists) that deductibility provides incentives (presumably financial benefits) to taxpayers to make donations. To dispense with the myth that our results are well known we cite Brookings Economists Bakija and Gale (2003) who find the positive correlation between size of estates and estate taxes supportive of "the estate tax's stimulative effects on charitable bequests (because of improved incentives)," italics provided. The intuitively held belief that there are no economic benefits from donations is a far cry from a rigorous proof.

Put in another way, there is an implicit belief among some economists that merely recognizing the existence of charitable giving as a foregone outlay, a sunk cost, is sufficient to prove that net taxpayer benefits from donations are negative or zero. This notion is proven false.

We examine the extent to which the estate receives financial benefits from the estate tax. Even though the taxpayer maximizes utility, we study a model that measures net financial benefits to heirs separate from utility maximization. Such information is not only useful to the taxpayer in reaching a utility maximizing allocation; it helps resolve the question of whether there are net monetary benefits to the taxpayer.

The model is conditional on taking taxpayer lifetime charitable decisions as given. Clearly, gifts at death and those while living are interrelated in a complex way. (Joulfaian, 2006) studies this problem in a restricted way and finds a possible impact on capital gains.) But the practice of separating lifetime decisions from bequests follows a tradition in this area which can generate useful insights (i.e., Auten and Joulfaian, 1996).

Our model captures the essential properties of the financial aspects of the taxpayer's estate allocation decision. Its crux is that net financial benefits to the taxpayer, or the estate, are the difference between monetary benefits of the donation, and the opportunity costs of foregoing the benefits of distributing the donated funds instead to heirs. This quantity is also net donation benefits accruing to heirs. Hence, net benefits from a donation are the same quantity whether evaluated from the view of heirs or the taxpayer, and since by definition the taxpayer is the estate, the view of the estate. It is demonstrated that net benefits decrease with increases in the estate-tax rate. According to deductible-incentive advocates, this result is not supposed to take place.

II. THE ROLE OF DEDUCTIBILITY

The issue of deductibility arose when earlier investigators predicted from econometric estimates that repeal of the estate tax would reduce charitable giving. To help rationalize this result, the behavioral explanation of deductibility was offered. While verbalized in various forms its essence is: Deductibility reduces the taxpayer's net outlay on the donation, thus enabling more resources for either additional giving or heir distribution, a taxpayer benefit. This adds to the attractiveness of donations and hence they tend to increase with the existence of an estate tax. Likewise, increases in estate-tax rates add to the attractiveness of donations and, according to the conventional view, contribute an upward push to donations; from which it follows that a reduction in rates reduces them; leading to the conclusion that the estate tax is important to maintain donations (see, for example, Bakija and Gale, 2003).

A. Monetary Benefits of Deductibility to the Estate

Taxpayer utility from a donation is a function of altruism that is linked to the donation plus the monetary benefits the payer derives from the tax-deductible donation. Utility obtained from each donation or heir distribution, is a subjective notion. Its maximization in the estate allocation process has been well studied and does not concern us. But monetary benefits from the donation, however, can be assessed objectively and are what we study.

B. The Model

Assume a tax deductible system where a taxpayer's marginal estate-tax rate is t. The taxpayer allocates one dollar of his estate to charity. Under current laws, the immediate financial benefit to the estate from that donation must be t because the donation is deducted from one dollar leaving a net outlay from the estate of $(1-t)$. Hence, the net outlay plus t must equal the gross donation of \$1, or $(1-t)+t=1$.

We now evaluate the donation-to-heir distribution process. Even though t, the gross financial benefit, can be allocated to either further donations or to heirs, at this point we assume they, or t, are distributed to heirs. If so, the estate must pay a tax rate t on the heir distribution t, which yields the tax t^2 because heirs receive the benefit t. While the utility from the altruistic act of donating the original \$1 is a benefit to the taxpayer; it is not a financial benefit. Similarly, the utility the taxpayer enjoys from allocating the $1 instead to heirs benefits the taxpayer, but it, too, is not a financial benefit. At this point, we repeat, t represents the financial benefit to heirs from the $1 donation.

If t is transferred to heirs, the tax of t^2 must be subtracted from the benefit t leaving to heirs the net sum of

$$t(1-t) \tag{1}$$

gross taxpayer or heir benefit from transmitting the sum t to heirs, all of which stems from the initial $1 donation.

However, if the initial dollar is awarded to heirs instead, heirs receive

$$(1-t) \tag{2}$$

The ability to transmit the quantity (1- t) leads to a financial benefit to heirs. Hence, equation (2) may be viewed as the opportunity cost to heirs of awarding the initial $1 to charities instead of to heirs.

Net monetary benefits to heirs from the initial $1 donation, followed by distributing (1 – t) to heirs, must be equation (1), gross heir benefits, less equation (2), the opportunity cost to heirs of the $1 donation, or

$$B = t(1-t) - (1-t) = (1-t)(t-1) \tag{3}$$

which is zero or negative for $0 \leq t \leq 1$. Equation (3) informs us that B is negative or zero for positive values of t less than or equal to 1, which provides the answer to the question: What are the net financial benefits to heirs from donations? They are negative or zero.

Moreover, as can be verified the first derivative of B, $(2(1-t),$ is negative or zero. Therefore B becomes smaller with t. Net monetary benefits of donations decrease with t, which is not predicted by conventional viewers. How this property of declining net benefits with increasing t is translated into donation behavior depends on individual utility functions.

A fundamental theorem is also clear: Monetary benefits from a $1 donation can never exceed monetary benefits from allocating the same sum directly to heirs. Alternatively, the distribution of the dollar directly to heirs yields greater financial benefits to heirs (but not necessarily greater utility to the taxpayer) than donation of the sum to charity. This theorem is neutral with respect to the effect of changes in t on donations. However, since B is negative or zero, the effect of changes in t on utility is expected to be minimal, or non-existent.

Further, since the analysis assumed a marginal tax rate of t, it applies to both progressive and proportional tax systems.

C. The Fundamental Theorem in General

Instead of distributing the t dollars of benefits to heirs, consider donating them to charity. In this case we replicate the previous analysis. Without loss of generality, $1 is again donated to charity and we emerge again, unsurprisingly, with equations (1), (2) and (3). The reader discerns that if this process of recycling the financial benefits to charity instead of to heirs is replicated indefinitely, the same result holds: We are always lead to equation (3) which provides that net financial gain to the taxpayer is negative or zero for $0 \le t \le 1$.

The reader is reminded that we are not seeking an optimal allocation of the estate, only the magnitude of monetary benefits from donations. In other words, if the taxpayer at any stage in the analysis maximizes utility by donating financial benefits to charities, that fact is irrelevant to the validity of the theorem: Financial benefits to the taxpayer from deductible donations are either negative or zero. Finally, since the theorem applies to a given dollar from the estate, it applies to all dollars in the estate.

III. THE ROLE OF UTILITY

If maximizing B were a valid decision making criterion, taxpayers would always opt for heir distributions over charitable donations, for there is no apparent net financial benefit to heirs from the $1 donation instead of giving it directly to heirs. Clearly, to justify charitable donations utility from altruistic features of the donation must be present. If utility from altruism is zero, voluntary donations would not occur. Even if monetary benefits from donations are less than those from direct heir distributions, the utility from the donation's altruistic properties can be sufficient to exceed the utility from distributing the sum to heirs, yielding the classic necessary condition for a donation.

IV. THE FINANCIAL-INCENTIVES HYPOTHESIS

The financial-incentives hypothesis suggests that taxpayers favor more donations with increases in tax rates. Conversely, they reduce donations as rates decline. However, if the marginal utility of altruism from the proposed donation is sufficiently high, donations can be forthcoming. But this decision will get no help from the negative or zero net financial benefits of donations. To the rational taxpayer utility drives this choice, not financial benefit.

Moreover, the hypothesized importance of financial benefits is inconsistent with data from the Center on Philanthropy at Indiana University (2006). Out of a sample of 945 wealthy households (the only relevant population segment since modest estates are exempt from taxation), 56.1 percent stated that if the estate tax were eliminated (which implies that rates are reduced) they would not alter planned donations, while 29.5 percent said they would increase them. Only 5.5 percent indicated a decline.

These data are incompatible with the forecast of the financial-incentive hypothesis because actual taxpayers, as provided by the data, are ready to increase donations as rates decline. And comparing the 29.5 percent that would increase donations to the 5.5 percent that would reduce them yields a high probability that elimination of the tax would increase, instead of decrease total charitable giving. While mindful that people may not actually behave as they indicate, these data, coupled with the failure of our model to show net financial benefits from donations, provide impressive evidence in support of the hypothesis that financial incentives are not important.

V. CONCLUSIONS

This note clarifies the conditions under which financial incentives are a factor in the charitable donation decision. The model developed captures the essence of the taxpayer's decision in allocating an estate between charities and heirs. The definition of net benefits from donations to the estate, or taxpayer, or heirs, is gross benefits from donations less the opportunity cost of heir distributions. But since this quantity is always negative or zero, it answers the question of whether there are such benefits. This also demonstrates that there are no net financial benefits to heirs from charitable donations, only possible increases in taxpayer utility. Further, as t increases net heir benefits from donations decline. It also leaves altruism and wealth as the primary driver of charitable giving. For purposes of public policy, officials may be less concerned about a severe drop in donations should estate tax rates decline, even to zero.

The implication of the financial-incentive hypothesis that as t declines donations decline, is inconsistent with the empirical results of Beranek et al. (2010) where they find that a tax-rate reduction increases, rather than decreases donations. It is also inconsistent with data from the Center on Philanthropy, op. cit. Our conclusions share a strong degree of theoretical and empirical credibility. Finally, the allocation between heirs and donations depends ultimately on incentives that stem from the heart, rather than non-existent monetary benefits from charitable donations.

REFERENCES

Auten, G., and D. Joulfaian, 1996, "Charitable Contributions and Intergovernmental Transfers." *Journal of Public Economics,* 59, 55-68.

Bakija, J.M., and W.G. Gale, 2003, "Charitable Giving and the Estate Tax." *Tax Notes*.

Bakija, J.M., W.G. Gale, and J.B. Slemrod, 2003, "Charitable Bequests and Taxes on Inheritances and Estates: Aggregative Evidence from Across States and Time." *American Economic Review,* 93, 366-370.

Beranek, W., D.R. Kamerschen, and R.H. Timberlake, 2010, "Charitable Donations and the Estate Tax: A Tale of Two Hypotheses." *American Journal of Economics and Sociology,* 69, 1054-1078.

Clotfelter, C.T., and R.L. Schmalbeck, 1996, "The Impact of Fundamental Tax Reform on Nonprofit Organizations." *Economic Effects of Fundamental Tax Reform*, 211-246.

Center on Philanthropy, Indiana University, 2006, "Bank of America Study of High Net-Worth Philanthropy, Initial Report."

Joulfaian, D., 2005, "Choosing Between Gifts and Bequests: How Taxes Affect the Timing of Wealth Transfers." *Journal of Public Economics,* 89, 2069-2091.

Schervish, P.V., and J.J. Havens, 2003, "Gifts and Bequests: Family or Philanthropic Organizations?" in *Death and Dollars: The Role of Gifts and Bequests in America*, A. H. Munnell and A. Sudden, ed.: Washington, DC: Brookings Institution Press.