Bequests, Inheritances, and Family Traditions

by

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Abstract

Do "family traditions" influence bequest behavior? If an individual *receives* an inheritance from his parents, is he more likely to *give* a bequest to his children, even after controlling for the boost in wealth conferred by the inheritance? Partly due to the paucity of data, few studies to date have analyzed bequests *in conjunction with* inheritances. We draw upon the U.S. Health and Retirement Survey, one of the few data sets with comprehensive information on both bequests and inheritances. We find that receipt of inheritances and intended bequests are positively and significantly related (both behaviorally and statistically) even after controlling for a host of household characteristics, most importantly household net worth. We define "family traditions" and we indicate how they differ from other channels of influence. Our explanation of the nuances of traditions hinges on measuring the flexibility of bequest plans when wealth or other circumstances change. We find corroborating evidence that the propensity to bequeath out of wealth differs depending upon whether current wealth is large or small *relative to* inheritances received.

Keywords: Inheritances; Family traditions; Bequests; Wealth

JEL classification: A14; D10; I30; J13; J14; J26

1. Introduction

How important might "family traditions" be in affecting bequests? Consider two individuals who have the same net worth and who are alike in all other relevant respects, except that the first inherited half of his wealth, whereas the second inherited nothing at all. Will the first individual be more likely to leave a larger bequest? This question is important because bequest behavior matters for many aspects of economic behavior: the drive to acquire an estate could motivate wealth accumulation (Kotlikoff and Summers, 1981), for instance, and the reaction of bequests to public redistribution of income could conceivably dilute the effectiveness of the redistribution (Barro, 1974).

In spite of their importance, the factors that motivate bequests remain imperfectly understood. Much of the received literature has focused on pitting the altruism hypothesis against the alternative of exchange. In this paper we approach the question of what determines bequest behavior from a fresh angle by investigating how, other things being equal, the receipt of an inheritance affects the propensity to bequeath. The existence and strength of such putative "family traditions" matters for a variety of issues pertinent to bequests, including the strength of the "crowding out" of private intergenerational transfers by public transfers, the persistence over time in the stratification of dynastic wealth, and the sensitivity of bequests to tax policy.

The logic of how family traditions influence each of these issues is simple and intuitive, and hinges on the hysteresis that traditions create, which in turn renders bequests less sensitive to changes in income and prices. Consider, for example, responses to tax policy: much like a smoker habituated to nicotine, a bequeathing parent with a tradition to uphold would be less sensitive to changes in taxes than his less tradition-bound counterpart.

Despite the potential significance of family traditions in explaining bequest behavior, there is very little empirical work on this topic. The main reason could be data limitations: most data sets with information on intergenerational transfers contain detailed information either on inheritances received or on bequests given, but not on both.¹ In this paper we propose to fill this gap by using the U.S. Health and Retirement Survey (HRS), a large, detailed panel study of households designed to study the economic life of households from midlife to death. The HRS contains information that is ideal for tackling the role of family traditions in bequest behavior.

We find a large, significant, and robust effect of inheritances on expected bequests. The correlation between bequests and inheritances persists after controlling for a host of covariates commonly implicated in bequest behavior. We sketch a framework for exhibiting the logic of family traditions, and we examine the framework's predictions for the wealth effects of bequests. We predict differing propensities to bequeath out of wealth, depending on how much wealth the household has in relation to the inheritances that it has received. We find evidence consistent with this prediction. Households whose stock of bequeathable wealth falls short of their inheritance appear to have a much higher propensity to bequeath out of wealth than households whose wealth well exceeds their inheritance.

The primary upshot of the logic and evidence that we present is that economists might do well to consider not just the typical parent-child dyad, but also a threegeneration world in which a parent's transfers to his child depends, at least in part, on how his own parents treated him.

2. Bequests, inheritances, and traditions

The "traditions" approach is pertinent to each of the three leading issues in the literature on intergenerational transfers: the "crowding out" issue raised in the seminal papers of Becker (1974) and Barro (1974); the role of intergenerational transfers in wealth

¹ Prominent exceptions are French surveys: the 1992 CNAV ("Caisse Nationale d'Assurance Vieillesse") survey and the French INSEE 1992 wealth survey, which have been analyzed by several researchers. For example, Arrondel, Masson and Pestieau (1997) find that intergenerational transfer patterns tend to be correlated from one generation to another. Arrondel and Masson (2001) report on a variety of complex constellations of empirical transfer patterns that occur in three generations. Jellal and Wolff (2002) have used the 1992 CNAV to investigate how one generation's inherited tastes in consumption preferences and in the propensity for transfers impact those of the next generation.

accumulation, first identified in Kotlikoff and Summers' (1981) classic paper; and the influence of tax policy on intergenerational transfers (Altig and Davis, 1992; Gale and Scholz, 1994).

Crowding Out

Much of the interest in intergenerational transfers in the past three decades or so has been fueled by the specter of "crowding out" - the idea that the impact of public income redistribution can be neutralized by offsetting adjustments in private transfers. Barro (1974) emphasized the intertemporal aspects of crowding out: debt-financed fiscal policy need not raise the consumption of current generations, but could instead simply prompt increased bequests, so as to leave the intergenerational distribution of consumption unchanged. Becker (1974) emphasized the cross-sectional aspects of crowding out: a boost in public aid to the poor need not increase the consumption of the poor, because the aid could prompt reductions in private transfers to the poor, leaving the distribution of consumption unchanged.

It is quite straightforward to illustrate how family traditions can weaken (or even cancel out) these neutrality results. Consider a simple variant of the Becker's (1974) model, in which an altruistic parent cares about his consumption and about his child's felicity (c_p and $V(c_k)$, respectively), as well as about the size of the bequest, *B*, that the child will receive relative to the value of the inheritance, *I*, that the parent received from his own parent. (For simplicity's sake and in order to allow us to concentrate on essentials, we assume that the child has no child of his own; there are merely two generations.)

The parent's utility function is

$$U = U(c_p, V(c_k), f(B-I)).$$
⁽¹⁾

Assume that (1) is quasi-concave and increasing in each of its arguments. The budget constraints of the parent and of the child are, respectively,

$$c_p = Y_p + I - B, \tag{2}$$

and

$$c_k = Y_k + B,\tag{3}$$

where Y_i , i = p, k, denotes the non-transfer income (wealth, say) of the parent, p, and of the child, k. With this simple framework, it is easy to show that crowding out is attenuated in the presence of family traditions: the so-called "transfer derivative," which measures the effect on bequests of a one dollar increase in Y_p matched by a one dollar reduction in Y_k , $\partial B/\partial Y_p - \partial B/\partial Y_k$, is less than unity. Indeed for certain parameterizations of (1), the transfer derivative (and therefore crowding out) can be zero.²

Adjacent Complementarity

Family traditions imply a dynastic version of the "adjacent complementarity" concept emphasized in the habit models of Becker and Murphy (1988) and Becker (1992). Leaving aside the obvious income effect of an increase in *I* on *B*, equations (1), (2) and (3) imply that with total parental income, $Y_p + I$, held constant, $\partial B/\partial I > 0$. The parent inherits more than just funds; the parent inherits a habit of giving, since the marginal utility of bequests rises with *I*. Such complementarity implies that giving begets giving, generating heterogeneity across dynasties in the propensity to bequeath lifetime resources.

Taxes and Other Economic Forces

Despite the somewhat chaotic state of the empirical literature on private transfer behavior, there is an emerging consensus that bequests and gifts are not as sensitive to incomes and prices as mainstream models of private transfer behavior predict. For

² To illustrate: were (1) to be given by $U = \ln(c_p) + \alpha \ln(c_k) + \phi \ln(B - I)$, where α is the weight that the parent attaches to the felicity his child gains from consumption, the transfer derivative approaches zero as the utility-maximizing value of *B* approaches *I*. In a way, equation (1) can be considered as a variation on a theme introduced by Andreoni (1989).

example, the response of bequests and gifts to the recipient's income is nowhere near the magnitude implied by the standard altruistic model. Furthermore, individuals do not appear to take full account of tax incentives when deciding the mode and amount of their transfers to children and relatives (see, for example, Poterba, 2001; McGarry, 2001).³

The family traditions approach explains the apparent inelasticity of bequests with respect to taxes. The argument parallels the one that we have delineated with respect to crowding out. Imagine that bequests are taxed at the rate τ , and, for the sake of illustration, suppose that $f(\cdot)$ in (1) is now $f((1-\tau)B-I)$, so that parents care about their after-tax bequests. It is easy to see that the absolute value of $\partial B/\partial \tau$ falls when the marginal utility of traditions looms large (that is, when the utility maximizing value of $(1-\tau)B$ is close to I). For instance, if f were a log function, then it would follow that $\partial B/\partial \tau = 0$ when $(1-\tau)B = I$.⁴ In this case, tax considerations take a back seat in view of the desire to uphold the family tradition.

Traditions, Goals and the Marginal Propensity to Bequeath

It is easy to imagine how traditions might affect the parent's marginal propensity to bequeath out of his wealth, Y_p . A parent who cares about upholding a family tradition but whose wealth happens to be low relative to his inherited wealth might be expected to have a relatively large value of $\partial B/\partial Y_p$ compared to his counterpart who has the wherewithal to easily match or exceed what has been bequeathed to him.⁵

³ These authors emphasize the choice of transferring via bequests versus inter-vivos gifts, and find that households often forego substantial sums of money by failing to choose the giving patterns that would minimize their tax liability.

⁴ More recently, Bernheim, Lemke and Scholz (2004) have entered the tax-effects debate by emphasizing that households may need to balance tax minimization against other exigencies such as uncertainty about health care needs or the desire to use bequests to exert leverage over child behavior. Our line of reasoning is in the same vein, but the hypothesized concerns of parents about family traditions represent a completely different rationale for the impact of taxes on private transfers.

⁵ For example, if $f(\cdot)$ were a sigmoid function with f' attaining a maximum in the neighborhood of B = I, then $(\partial^2 B / \partial Y_p \partial I) > 0$ when $B^* < I$, whereas $(\partial^2 B / \partial Y_p \partial I) < 0$ when $B^* >> I$, where B^* denotes the desired bequest.

Policy Impact in the Short and Long Run

Once traditions are taken into account, there is an important distinction between shortrun and long-run responses to prices, incomes, or policy changes.⁶ Consider the recent passage in the U.S. House of Representatives of a bill to repeal the inheritance taxes by 2010. Advocates of the bill argue that estate taxes have a dampening effect on the propensity to bequeath family businesses and other assets to children, and that repealing the tax would stimulate these transfers *and* induce the kind of behavior that facilitates such transfers. But if traditions play an important role in private transfer behavior, the short-run impact on behavior of the repeal of the estate tax could be inconsequential. On the other hand, as initial small changes in giving beget subsequent changes in giving by later generations, initial small responses snowball into larger ones down the road. A "traditions" approach implies that the initial response to a change in estate tax policy might be a poor predictor of the eventual policy effect in the long-run steady state

3. An empirical inquiry

3.1 The data

The HRS is particularly useful for analyzing family traditions since it contains both retrospective questions about private transfers received, and prospective questions about intentions to make private transfers. The HRS employs state-of-the-art methods to measure household wealth, a variable that has been found difficult to calculate, yet plays a crucial role in our analysis of the interplay between inheritances and bequests.

Further, the HRS is a panel. Our empirical work uses more than a decade's information from 6 bi-annual waves, the first of which was released in 1992. In addition to the detailed modules on household balance sheets, labor market activity, family life, and private transfers, which are all pertinent to our empirical work, the HRS also contains a unique set of experimental modules used for random subsets of respondents. Some of these modules contain information directly relevant to the motivation for private transfers, and a recent study (Cox and Soldo, 2004) shows that by providing direct

⁶ This point parallels the one made by Becker and Murphy (1988) in the context of habits and addictions.

information on nuances in the motivation for private transfers, these "point-blank" questions can helpfully complement a more standard empirical work.

An ongoing, longitudinal survey of households of pre-retirement age, Wave 1 of the HRS (the 1992 wave) conducted interviews with 12,652 respondents from 7,702 U.S. households. It contains special modules of questions on specific issues for sub-samples (usually around 10 percent) of respondents. The HRS provides extensive information on demographic characteristics, family structure, transfers, income, net worth, physical health, and other personal and household characteristics related to the decision to retire. Since the HRS is primarily concerned with pre-retirement behavior, it targets respondents who are in their fifties. What makes the HRS particularly useful for our purposes is that it contains information both about planned bequests and about past inheritances.

To focus exclusively on actual inheritances rather than on expected inheritances, we restrict our attention to respondents with no living parents. Further, since we are interested in those who might be motivated to bequeath to their children, we confine our sample to respondents with at least one descendent. These restrictions, along with few others - described in Appendix Table 1 - result in a sample of about 2,100 households. Our empirical analysis draws on responses provided to questions pertaining to intentions to bequeath; we do not know whether the intentions were matched by action. Yet for our purposes, it is intentions that count, not realized behavior. The event of a bequest being made cannot reveal to us the reason for leaving the bequest. At most, we could establish a statistical relationship with the actual experience.

3.2 The relationship between inheritances and bequests

Those HRS households who inherited are more likely to expect to bequeath which, in and by itself, is not all that surprising; having received renders it more affordable to give. However, it turns out that wealth is not the sole determinant of this propensity: a positive relationship between past inheritance and planned bequests holds up even after controlling for wealth. Prior to considering the effect of wealth and other

Table 1. Past inheritances and future bequests				
	All households (n=2,096)	Inheritors (n=507)	Non-inheritors (n=1,589)	
Intend to bequeath	39.9	53.8	35.5	
Do not intend to bequeath	60.1	46.2	64.5	
Total	100.0	100.0	100.0	

household characteristics, we depict basic patterns in Table 1; we display the percentages of households who plan to leave a bequest by whether or not they inherited.

Source: Authors' calculations from Wave 1 of the HRS.

Nearly 40 percent of the respondents answered "yes" when asked "Do you [and your husband/wife/partner] expect to leave a sizeable inheritance to your heirs?" Among the sample of inheritors, however, a much larger fraction - 54 percent - answered yes when asked this question, compared to the 36 percent who answered yes among non-inheritors.⁷ Figure 1 (panel (a)) illustrates these numbers, along with alternative bequest measures - each of which corroborates the pattern of a positive relationship between bequests and inheritances.

The first of these bequest alternatives, depicted in panel (b) of Figure 1, is the subjective importance that respondents attach to leaving a bequest. The "subjective importance" measure is valuable in light of the fact that *expecting* to leave a bequest need not necessarily indicate a bequest motive in the sense of *intending* to leave a bequest. An individual might attach little value to leaving a bequest yet still expect to leave one merely because of a reasonable expectation of dying prior to consuming all his assets, thereby leaving an "accidental bequest" (Davies, 1981; Hurd, 2003). Fortunately, the first

⁷ Respondents chose from gradations of "yes" and "no": yes, definitely; yes, probably; yes, possibly; probably not; no, definitely. In the interest of simplicity we report yes's versus no's. However, we obtain equivalent results with the full gradation of responses, and these results are contained in our working paper (Cox and Stark, 2005).

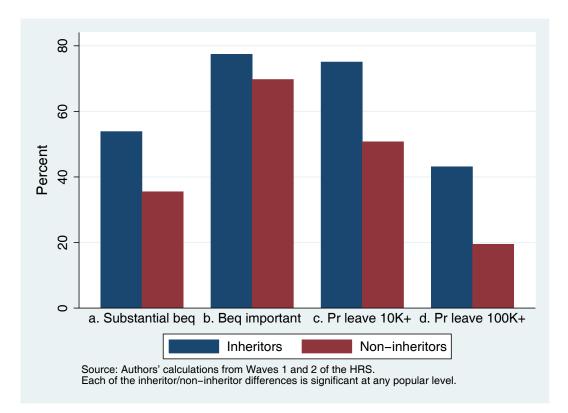


Figure 1. Intended bequests and importance of bequests, inheritors vs. non-inheritors

wave of the HRS contains a question that pertains directly to bequest motives by gauging the importance that respondents attach to leaving a bequest. Specifically, respondents were asked: "Some people think it is important to leave an inheritance to their surviving heirs, while others don't. Do you (both) feel it is very important, somewhat important, or not at all important, (or do you differ in how important it is)?" Panel (b) of Figure 1 contrasts the responses to this question for inheriting and non-inheriting respondents.⁸ A higher proportion of inheritors than non-inheritors stated that leaving a bequest was important: 77 percent versus 70 percent.

⁸ Again, for the sake of brevity, we create a binary yes/no variable; corroborative disaggregated results are available in Cox and Stark (2005b). Only 2.5 percent of the respondents reported disagreeing with their spouse about the importance of leaving a bequest, and we left these respondents out of panel (b) of Figure 2. Expecting to leave a bequest and attaching importance to leaving a bequest are highly, though not perfectly, correlated; the correlation between the raw ordinal measures is 0.36. Less than one in eight households planning to leave a substantial bequest considered leaving a bequest "not at all important."

Additional corroborative evidence of the correlation between inheritances and bequests comes from alternative measures of bequest intentions that the HRS began to collect in the second wave of the survey. In that wave, as well as in subsequent ones, respondents were asked to use a number from 0 to 100 to indicate the chances that they would leave a bequest worth \$10,000 or more, and likewise for the chances that they would leave a bequest worth \$100,000 or more. In addition to changing the wording, the HRS expanded the number of respondents in the household who were asked about bequest intentions. Not everyone was interviewed about bequests in Wave 1, only the person designated to provide information about household finances (the so-called "financial respondent"). This procedure was changed in Wave 2, when the spouse of the financial respondent was queried separately about his or her intent to bequeath.

Panels (c) and (d) in Figure 1 display responses to the Wave 2 questions: they reinforce the already-reported findings of inheritor/non-inheritor differences in bequest behavior and portray large differences in the subjective probabilities of leaving a bequest between the two groups.⁹ For example, the reported chances of leaving a bequest of \$100,000 or more was, on average, more than twice as large for inheritors as for non-inheritors (43 percent versus 19 percent).

Could the patterns in Figure 1 be just an artifact of wealth differences? Receiving an inheritance places a household in a better position to bequeath. If this were the only driving force, inheritor/non-inheritor differences in the propensity to leave a bequest would largely disappear once net worth is controlled for. As Figure 2 shows, that is not the case, however.

Panels (a), (b), and (c) of Figure 2 are a diagrammatic representation of a nonparametric regression of the four variables for bequest intention used in Figure 1 on household net worth, separately for inheritors and non-inheritors.¹⁰ Each of these three

⁹ The unit of observation in panels (c) and (d) of Figure 2 is the household; individual responses are averaged within households.

¹⁰ Figure 2 is produced from Cleveland's (1979) local regression method (LOWESS) of the binary variable for bequest intention on the hyperbolic sine of net worth. The hyperbolic sine function

panels suggests that the stronger intent to bequeath among inheritors is not merely a manifestation of wealth; inheritor/non-inheritor differences persist even after controlling for net worth. (In panel (c), the upper pair of curves pertains to the probability of bequeathing \$10,000 or more; the lower pair pertains to the probability of bequeathing \$100,000 or more.) Aside from a couple of reversals at the extremes of the wealth distribution, the inheritors' (wider) curve lies throughout above the non-inheritors' (thinner) curve in panels (a), (b), and (c) of Figure 2.¹¹

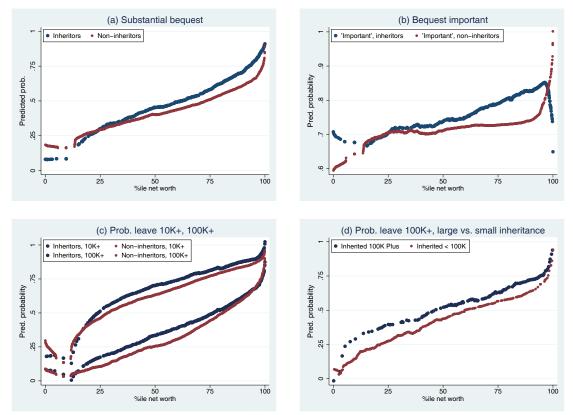


Figure 2. Inheritor/non-inheritor differences in bequests plotted against net worth (LOWESS estimates)

 $h(z) = \ln(z + (z^2 + 1)^{\frac{1}{2}})$ is similar to a logarithm, except that it can be applied to negative values. For easier interpretation, the Figure is drawn with net worth expressed in percentiles rather than in logs.

¹¹Linear-regression analogs of the estimates in Figure 2 indicate that the positive inheritance effects conditional upon wealth are significant at any customary level. Indeed, the estimated effect of having inherited remains positive, large, and statistically significant after controlling for a host of other covariates implicated in bequest behavior, as discussed in the next section.

Does the amount of inheritance matter for bequest intentions?

So far, we have shown that *having inherited* is positively associated with the propensity to bequeath. We next investigate inheritance *amounts*. We find that the size of the intended bequest is related to the size of the inheritance: respondents who received large inheritances (\$100,000 or more) were more likely to plan to give large bequests (\$100,000 or more) compared to their counterparts who inherited less than \$100,000. Further (and as before), this result appears not to be simply the outcome of being able to afford giving a larger bequest by dint of having received a larger inheritance, since net worth is controlled for. The results are displayed in panel (d) of Figure 2, which was obtained as follows. We use the information from Waves 1 and 2 of the HRS in which financial respondents who inherited money were asked to report the size of the inheritance and the year in which it was received. We adjust for price inflation by expressing all inheritance values in 1991 dollars. We also impute interest payments of 3 percent per year and add them to the inheritance amount. We then contrast the subjective probability of leaving a large bequest (worth \$100,000 or more) for households who received a large inheritance (\$100,000 or more) versus those who received a smaller one (less than \$100,000). Of the 1,472 households who inherited, a third (482) received an inheritance of \$100,000 or more. Because of the obvious connection between net worth and the probability of leaving a large bequest, we again employ the nonparametric regressions of bequest intentions on net worth. Panel (d) of Figure 2 shows quite clearly that for any given level of net worth, the subjective probability of leaving a bequest worth \$100,000 or more is higher for inheritors who received a bequest worth \$100,000 or more, than for inheritors who received a bequest worth less than \$100,000.

Other Covariates

Our results are robust to the addition of other covariates. The non-parametric regressions reported above control only for net worth, and clearly there are other variables that conceivably influence intended bequests. For example, Smith (1999) and Hurd and Smith (2001) use the HRS and Asset and Health Dynamics of the Oldest Old (AHEAD) data to explore bequest behavior, and they consider a variety of potential determinants of bequests in addition to wealth, including birth cohort, health, education, number of

children, income, and demographic variables (race, ethnicity, and sex). We estimated regressions specified with a similar set of covariates, but we also included - while these earlier studies did not - past inheritances. Our basic result - that having inherited increases the propensity to bequeath - is unaffected by the inclusion of these additional controls.

The main results from the consideration of these controls are exhibited in panels (a) through (d) of Figure 3, which show that the propensity to bequeath remains positively associated with having inherited. Panel (a) of Figure 3, for instance, is the conditional analog of the unconditional histogram in panel (a) of Figure 1; like its unconditional counterpart, it indicates that having inherited is positively associated with the propensity to leave a sizeable bequest. Likewise, panel (b) of Figure 3, which depicts the importance attached to leaving a bequest, corroborates the qualitative pattern depicted in panel (b) of Figure 1. Finally, panels (c) and (d) in Figure 3 are the conditional analogs of those in Figure 1. Like panels (c) and (d) in Figure 1, they show that the basic finding - inheritors are more likely to intend to bequeath than non-inheritors - holds up after introducing the standard set of controls commonly used in the recent literature.

Each of the regressions upon which the panels in Figure 3 are derived indicates that the positive relationship between past inheritances and bequest measures is significant at the 0.01 level. (These regressions are reported in Appendix Tables 2 and 3.) Further, the magnitudes are rather large. For instance, panel (d) of Figure 3 indicates that the percentage of those leaving a bequest greater than \$100,000 is more than twice as large for inheritors than for non-inheritors.

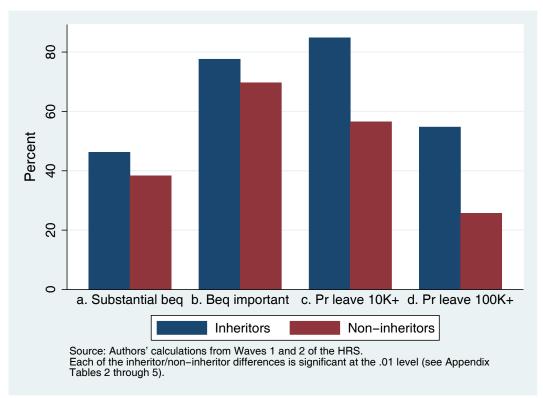


Figure 3. Intended bequests and importance of bequests, inheritors vs. non-inheritors, conditional on economic and demographic covariates

Dollar Values of the Inheritance-Bequest Relationship

How do conditional differentials such as those depicted in Figure 3 translate into dollar values? We estimate that the average predicted expected bequest from Wave 2 of the HRS for households who inherited is roughly one-third larger than for those who did not.

This estimation took some doing, since Wave-2 HRS measures of intended bequests are expressed in terms of subjective probabilities rather than dollars. Partly for convenience and partly for the sake of devising a dollar-denominated measure of intended bequests, we recorded the responses to the bequest-probability question ("What are the chances that you (or your husband/wife/partner) will leave an inheritance totaling \$10,000 (\$100,000) or more?" and converted them to dollar values, using information from the distribution of inheritances from the HRS sample. (We describe our methods in detail in Appendix I - The construction of dollar values for intended bequests.)

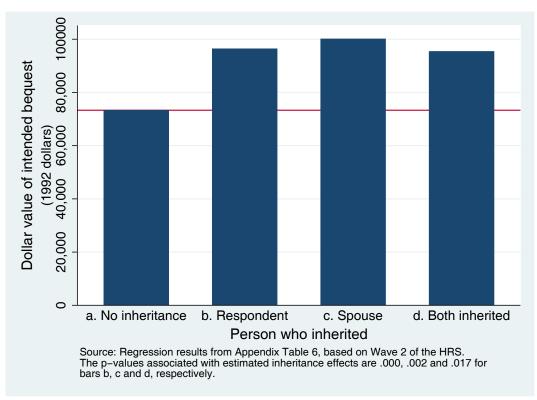


Figure 4. Dollar amounts of intended bequests, inheritors vs. non-inheritors, Conditional on economic and demographic variables

We compare panels (a) and (b) in Figure 4: panel (a) shows the predicted dollar value of intended bequests (at sample means) for non-inheritors - \$73,313 – and further shows the corresponding value for respondents who inherited - \$96,408 - a figure nearly one-third larger. The exact source of the inheritance - be it the respondent's parents, the spouse's parents, or both - appears to matter little for the estimated dollar impact on intended household bequests (Figure 4, panels (b) and (c) and Appendix Table 6). In each instance, and conditioning on the standard list of controls, having inherited is associated with a substantially larger intended bequest.

This finding suggests that the inheritance-bequest connection is driven by channels of influence beyond, say, genetically driven correlations in personality or temperament. Barring any sort of extreme assortative mating, we might expect that if a heritable temperament were the sole impetus to the inheritance-bequest relationship, then inheriting from one's own parents would have a stronger impact on the propensity to bequeath than inheriting from a spouse's parents. If anything, Figure 4 suggests that inheriting from a spouse's parents has a slightly larger impact on the propensity to bequeath (though the difference is not statistically significant).

The pattern depicted in Figure 4 is reinforced upon an examination of separate regressions for samples of husbands and wives in a SURE regression of intended bequests on the covariates discussed above plus dummies indicating whether the inheritance was received from parents or in-laws (regression results are reported in Appendix Table 7). The positive association between inheritances and intended bequests does not appear to depend much upon the source of the inheritance: for instance, the estimated intended bequest of husbands who inherited from their parents is nearly identical to that of husbands who inherited from their in-laws; the same is true for wives. These results are depicted in Figure 5.

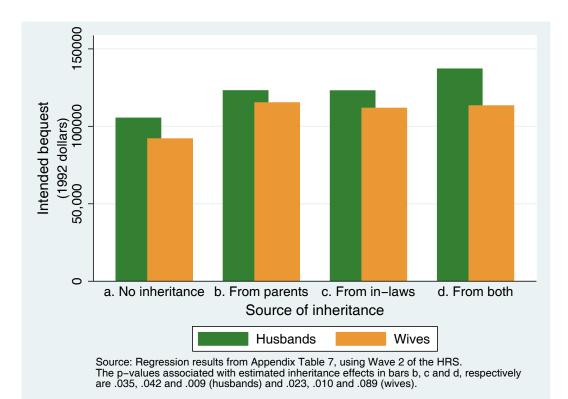


Figure 5. Source of inheritance and intended bequests: husbands and wives separately, by inheritance status

Evidence from the HRS Panel

So far, our analyses have been based upon cross sections from Waves 1 and 2 of the HRS. We now turn our attention to panel-based descriptive work, adding information

from Waves 3 (fielded in 1996) through Wave 6 (from 2002). (We do not dwell too much on Wave 1 at this juncture because in that wave intended bequests were measured differently than in subsequent waves.)

What do panel estimates, controlling for the host of time-varying covariates discussed earlier, suggest about the relationship between intended bequests and the receipt of inheritance? We estimated a fixed-effects regression for the sample of HRS financial respondents. The results are reported in Appendix Table 8. The main conclusion from this regression is that having recently inherited is associated with an upward revision in intended bequests, though the revision appears exaggerated in the wave immediately following the event of inheritance. The results are displayed in Figure 6. Having inherited in the current wave (conditional on net worth, income, and the other covariates included in Appendix Table 8) is associated with an upward revision in intended bequests of \$11,000 (the mean intended bequest is a little over \$90,000). The Figure suggests, though, that the partial correlation between revisions in intended bequests and inheritance tends to diminish the further back in time the inheritance was received.

Is the association between intended bequests and inheritance durable, or is it merely transitory? Our estimates suggest that, despite the early attenuation, there exists a lasting effect. The estimated bequest-inheritance relationships from having inherited in a wave prior to the current one (depicted in the lower line in Figure 6) is significantly different from zero, and takes on a value of a little over \$5,000.

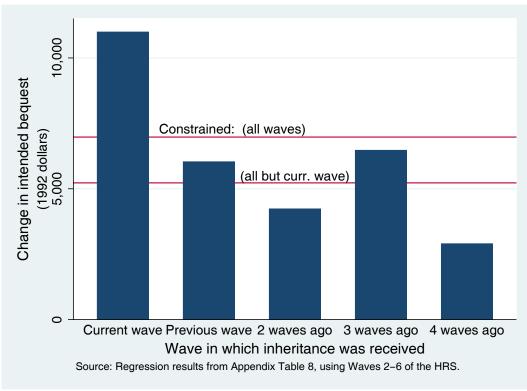


Figure 6. Effects of inheritance on intended bequests-panel evidence

Differential Propensities to Bequeath out of Wealth by Inheritance-Wealth Relationships

In our discussion of the logic of family traditions, we considered possible differences in propensities to bequeath out of wealth, depending on the relationship between bequeathable wealth and the value of the inheritance received. One way to recapitulate this logic is to imagine three types of households:

- "Strivers:" those whose bequeathable wealth is less than the value of their inheritance.
- "Standard bearers:" those whose bequeathable wealth exceeds the value of their inheritance.
- "Traditionless:" those who never received an inheritance.

These terms are coined primarily for pedagogical purposes and should not be taken too literally; they are meant to reflect the variation in the predicted difference in the sensitivity of intended bequests, depending on whether bequeathable wealth exceeds or falls short of the value of the inheritance received. Recall from our discussion in section 2 that if upholding a tradition matters for a utility maximizing parent, then such a goal could imply increasing returns to bequeathing for those who as yet lack the wherewithal to attain it, but diminishing returns to those who likely will surpass the "family-tradition" benchmark. Accordingly, we would expect the propensity to bequeath out of additional wealth for these households (to whom we refer as "standard bearers") to be lower than the propensity to bequeath out of additional wealth of other households. Conversely, households who have not yet acquired the wealth necessary for adherence to the tradition (to whom we refer as "strivers") will be expected to have a higher marginal propensity to bequeath. (For instance, we could think of the extreme case in which all that the parent cares about is abiding by the tradition, such that in the neighborhood of the value of the inheritance, and beyond, bequests become wealth inelastic.)

We estimated a simple pooled cross-section, time series random effects regression of intended bequests on a quadratic function of household net worth for three distinct sub-samples of households: those whose net worth is less than the value of their inheritance ("Strivers"); those whose net worth exceeded the value of their inheritance ("Standard Bearers"); and those who never received an inheritance ("Traditionless"). The estimated bequest - net worth relationships are depicted in Figure 7. Consistent with the logic of family traditions, Figure 7 depicts a steeper bequests/net worth profile for "Strivers" than for "Standard Bearers," with the profile of the "Traditionless" inbetween. Additional details on the marginal propensity to bequeath out of net worth for these three sub-samples are provided in Figure 8, where we mark the value of the estimated marginal propensity to bequeath at median net worth values for the three groups. There are large differences: "Strivers" have a marginal propensity to bequeath of 0.42; "Standard Bearers" have a propensity of 0.11, and the propensity of "Traditionless," is 0.31.

Fixed effects estimates

We replicated the calculations depicted in Figures 7 and 8 using a fixed effects specification for intended bequests. (The results from the fixed effects regression are

provided in Appendix Table 9.) The results - shown in Figure 9 - mirror those depicted in the earlier Figures: namely, "Strivers" have the highest propensity to bequeath out of net worth, "Standard Bearers" have the lowest propensity to bequeath, and "Traditionless" have a propensity to bequeath that is in-between.

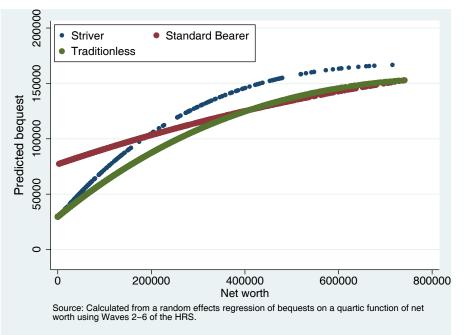


Figure 7. Intended bequests and net worth: respondents whose net worth exceeds their inheritance versus respondents whose net worth does not; non-inheritors included as well

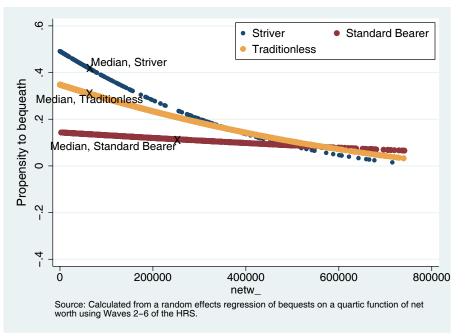


Figure 8. Propensity to bequeath out of net worth: strivers, standard bearers, and traditionless

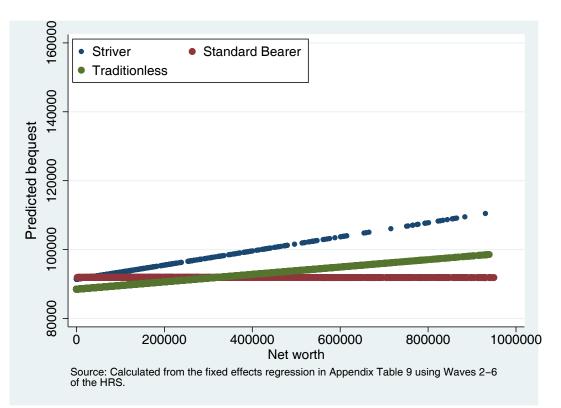


Figure 9. Intended bequests and net worth: strivers, standard bearers, and traditionless

"Point-Blank" Information from a Special Module in the HRS

When respondents from a special module of the HRS were asked whether they agree or disagree with the statement "I do for my children what my parents did for me," two-thirds agreed. This "point blank" approach to inferring motivation for behavior has considerable virtue in that it is exceedingly direct and simple, and is consistent with the "family traditions" approach to intergenerational transfer behavior.

The aforementioned information comes from a special module of the 2000 Wave (Wave 5) of the HRS, called "Benevolence and Obligation," which directly queries respondents about how they see their role as familial helpers, and what their concerns and motivations are for providing help to relatives. Like all experimental modules in the HRS, this one too consists of a random subset of all core self interviews in a given wave. In 2000, about one in 12 households was assigned "Benevolence and Obligation," and

only one person from the household answered the module questions.¹² The percentage distribution of the responses of the 418 respondents is: 65 percent agreed, 24 percent disagreed, and the remainder 11 percent were neutral.

4. An application of the "family traditions" approach to charitable bequests

In a *dynamic* economy, the reason why the wealthy are more likely to give to charity than the less wealthy is not that the wealthy are wealthy. It is that the wealthy are more likely to have obeyed the family traditions "constraint" and are therefore freer to engage in charitable giving.

Compare the wealthy in Europe with the wealthy in the U.S. Two features stand out. First, the wealthy in Europe are less likely to give to charity than the wealthy in the U.S. Second, the wealthy in Europe are more likely to have their wealth originate in family firms. "The family traditions" effect provides a connection and an explanation. On average, the wealthy in the U.S. are more likely to have accumulated their fortunes in their own lifetime. On average, the wealthy in Europe are more likely to have inherited their wealth. Consequently, when it comes to the free disposition of wealth, the wealthy in Europe are more constrained by the mandate of "the family traditions" effect than their counterparts in the U.S. In a recent illuminating article based on a study by Thomson Financial commissioned by *Newsweek*, the magazine writes "Far more than Americans, Europeans consider it a tremendous failure to pass on a company worth less than when they inherited it." (*Newsweek International*, April 12, 2004, p. 45.)¹³

The July 31, 2004 issue of *The Economist* magazine ran a special report on philanthropy. Inter alia, the report makes the following disjoint observations: "on both sides of the Atlantic ... more and more people have more money than they want to leave

¹² There were 11 other special modules in the 2000 wave of the HRS, including modules about economic and social altruism. No respondent answered more than one module.

¹³ Thomson Financial was asked to compare the performance of family firms with the performance of nonfamily firms in Europe over a 10-year period ending in December 2003. The main finding of the study is that companies with public ownership and family control outperform non-family companies.

to their kids;" "volunteering turns out to be particularly high in [several European countries]. In America, the balance between gifts of time and cash is more equal ... than in most of Europe;" " as the size of estates rises, the proportion going to heirs shrinks and the share left to charity increases;" "Could it be that today's rich think that [bequeathing] too much money harms their children? (pp. 48-50)." Although the report explains each observation separately, it falls short of providing a unifying reasoning. Our approach can provide such a reasoning.

The notion that "people have more money than they would like to leave to their kids" is questionable: it is unclear apriori why the *additional* money that people have should not be bequeathed to their children. Our approach suggests that it is not "more money" *as such* that prompts the giving (to charity) as opposed to bequeathing but, rather, that it is the composition by source of the available money wherein a higher fraction does not originate in inheritances. Given our perspective, perhaps the quote could be re-written: "people have more money than they *feel bound to leave* to their kids."

Indeed, a reason for volunteering being more prevalent in Europe than in the U. S. is that because of the higher incidence of wealth in Europe being a "dynastic wealth," given the inclination or the desire to give to others than to one's children, people in Europe are more constrained by their legacy of inheritance in bequeathing to others than to their children than people in the U.S.

Our reasoning further implies then that the often-quoted main reason for Americans giving more to charities than Europeans may not be the "kinder tax treatment" in the U.S.

Our approach also enables us to shed a different light on the observation that "as the size of estates rises, the proportion going to heirs shrinks." Our approach suggests that it is intertemporal variation, not cross-sectional variation, which accounts for the shifting of the relative weights. It is the rise in the size of the estates *over time* - which gives rise to a "surplus" of bequeathable wealth over inherited wealth - that facilitates a larger allocation to charitable giving, rather than a perception that "bequeathing too much may harm children."

5. Concluding remarks

Our work suggests that the past is a prologue, in the sense that there exists a strong and robust relationship between inheritances received and intended bequests. While our investigation broaches several facets of the inheritance-bequest connection, there are several avenues for future research, based upon our approach.

For instance, our exposition of the logic of family traditions is silent on the onset and evolution of these traditions. Is it the receipt of inheritance *per se*, or is it some other earlier experience that leads to tradition gaining a foothold? Furthermore, casual evidence suggests that there is more to the bequest story than merely "keeping up with the Joneses." An individual whose parents were too poor or too stingy to give much may be keen to reverse unsatisfactory familial patterns, a behavior that would run against the grain of the approach propounded in this paper.

These, and no doubt other related nuances, point nonetheless to the potential richness of our "traditions approach" for studying intergenerational transfers. Our results strongly suggest that researchers and policymakers should pay more attention to possible behavioral linkages between generations, and to the long-term implications of such linkages for one-time policy changes such as recent changes in the tax treatment of inheritances in the U.S. As we have already noted, much of the existing literature on bequests has focused on distinguishing between the alternative motives of altruism versus exchange. We contend that our "family traditions" approach has the potential to open up new and different veins of inquiry.

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Appendix I: The construction of dollar values for intended bequests

In the earlier part of our empirical work we discussed bequest measures that are expressed in terms that are not easy to value: concepts such as "leaving a significant bequest" or "attaching importance to leaving a bequest" are impossible to translate into dollar terms. The subjective probability measures associated with leaving a bequest of a particular size are more closely tied to dollar values, but they too are unwieldy for summarizing expected bequests. Accordingly, we combine the subjective probability measures with the distribution of actual inheritances received in order to construct a rough summary measure of the dollar value of expected bequests. An important caveat should be added at the outset. We are not seeking to gauge the actual distribution of expected bequests; to do so would require a procedure much more involved than the one we describe below. (See, for example, Hurd and Smith (2002).) Instead, we seek to construct an easy-to-interpret cardinal measure of expected bequests that is formulated in dollar terms. A good reason for doing this is to have in hand a bequest measure that can be adjusted for inflation once we proceed to the panel analysis. Another reason is to provide a measure that serves to indicate rough orders of magnitude of the impact of various covariates on expected bequests.

One may ask whether using the distribution of inheritances to assign dollar figures to bequests is not really mixing apples and pears. For instance, if an individual shares his father's bequest of \$50,000 equally with his sister, the individual's inheritance is only \$25,000. On the other hand, if the individual's wife also inherits (say, \$30,000) then the total (household) inheritances would be \$55,000. Only in an economy comprised of married couples with two children in stationary, steady-state equilibrium, would the distribution of inheritances match the distribution of bequests. To repeat, our use of the distribution of inheritances is only an expedient, and in future work we contemplate using a distribution of actual bequests to formulate imputed expected bequests.

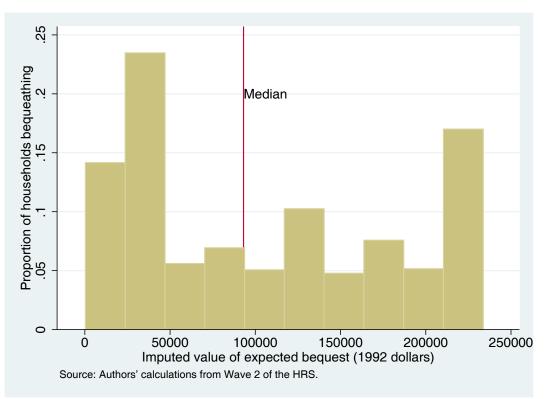
Our measure is constructed as follows. Define P^{10+} and P^{100+} as the reported probabilities of leaving a bequest of \$10,000 or more, and of \$100,000 or more,

respectively. Define I_{med}^{10-100} as the median value of inheritances that are between \$10,000 and \$100,000 and I_{med}^{100+} as the median value of inheritances over \$100,000. Our imputed dollar value of expected bequests is calculated as

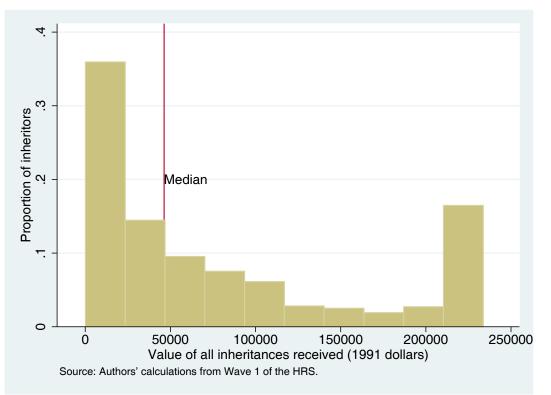
$$B_{DOLLAR} = P^{10+} \cdot I_{med}^{10-100} + P^{100+} \cdot (I_{med}^{100+} - I_{med}^{10+}).$$

Appendix Figure 1 displays the size distribution of B_{DOLLAR} , and Appendix Figure 2 shows the size distribution of inheritances. For comparison purposes, the inheritances in Appendix Figure 2 are top-coded at I_{med}^{100+} , which is \$233,700. The value of I_{med}^{10-100} is \$35,400.

The distributions in Appendix Figures 1 and 2 clearly differ. Part of the reason for the uneven distribution of imputed bequests in Appendix Figure 1 stems from the tendency of respondents to bunch their reported subjective probabilities at round numbers such as 50 percent or 100 percent. The median imputed expected bequest (among those expecting to leave a non-zero bequest) is \$93,100, about double the median inheritance of \$46,300.



Appendix Figure 1. The distribution of imputed bequests among households with non-zero expected bequests



Appendix Figure 2. The distribution of inheritances received

Appendix II: Appendix Tables

Appendix Table 1. Selection criteria for Wave 1	household sample
Initial sample size	7,607
Reason households are dropped:	
Have living parents Missing information on number of living parents Have no children	4,840 137 280
Missing information on bequest intentions Missing information on bequest importance	280 34 12
Respondent information provided by proxy	35 28
Spouse information provided by proxy Missing information on past inheritances	135
Neither respondent nor spouse age eligible Spouses have separate residences	1 1
Remaining number of households	2,098

Source: Authors' calculations from Wave 1 of the HRS.

	Estimated coefficient	Asymptotic t-value	Variable mean
Explanatory variable			
Net worth (000's) Household income (000's) Pension wealth (000's) Soc. sec. wealth (000's) Resp. or Sp. retired (1=yes) No worker in hh (1=yes) Two workers in hh (1=yes) HW has pension (1=yes) HH has DC pension (1=yes) Years of education, Resp. Married (1=yes) Cohabiting (1=yes) Separated (1=yes) Divorced (1=yes) Widowed (1=yes) Female respondent (1=yes) Age of respondent Max. life expectancy, age 70 Max. life expectancy, age 80 Resp. health exclnt. (1=yes) Resp. health v. good (1=yes) Resp. health fair (1=yes) Sp. health fair (1=yes) No. of kids No. of nigh-income kids No. of high-income kids No. of kids within 10 miles Rec'd inheritance (1=yes) Constant	0.0011 0.0052 0.0004 0.0009 0.1068 -0.2469 -0.1616 0.0137 0.0900 -0.0202 -0.3222 -0.0181 0.0457 -0.0817 0.1529 -0.1209 -0.1209 -0.0117 0.0013 0.0015 0.0670 0.1017 0.0966 -0.0511 0.1437 0.1499 0.2116 0.1303 -0.0457 0.0066 -0.0713 -0.0382 0.0228 0.2265 0.3245	$\begin{array}{c} 6.97\\ 3.66\\ 1.55\\ 1.08\\ 1.15\\ -2.92\\ -1.67\\ 0.16\\ 1.20\\ -1.62\\ -1.24\\ -0.05\\ 0.20\\ -0.40\\ 0.72\\ -1.79\\ -1.48\\ 0.83\\ 1.14\\ 0.50\\ 0.83\\ 1.14\\ 0.50\\ 0.81\\ 0.83\\ 1.14\\ 0.50\\ 0.81\\ 0.83\\ 1.14\\ 0.50\\ 0.81\\ 0.83\\ 1.14\\ 0.50\\ 0.81\\ 0.80\\ -0.41\\ 0.75\\ 0.83\\ 1.21\\ 0.71\\ -1.24\\ 0.14\\ -1.69\\ -0.94\\ 0.86\\ 3.09\\ 0.62\\ \end{array}$	171.6937.4965.94112.900.220.270.190.660.3611.460.520.010.070.220.150.5457.9368.8147.680.170.260.290.170.100.140.160.093.630.681.081.231.250.241.00
Dependent variable mean Pseudo R-squared Number of observations		0.404 0.115 2,027	

Appendix Table 2. Probit estimates of intent to bequeath on economic and demographic variables in addition to past inheritances

Source: Authors' calculations using Wave 1 of the HRS.

	Estimated coefficient	Asymptotic t-value	Variable mean
Explanatory variable			
Net worth (000's) Household income (000's) Pension wealth (000's) Soc. sec. wealth (000's) Resp. or Sp. retired (1=yes) No worker in hh (1=yes) Two workers in hh (1=yes) HH has pension (1=yes) HH has DC pension (1=yes) Years of education, Resp. Married (1=yes) Cohabiting (1=yes) Separated (1=yes) Divorced (1=yes) Widowed (1=yes) Female respondent (1=yes) Age of respondent Max. life expectancy, age 70 Max. life expectancy, age 80 Resp. health exclnt. (1=yes) Resp. health fair (1=yes) Resp. health fair (1=yes) Sp. health fair (1=yes) No. of kids No. of low-income kids No. of high-income kids No. of high-income kids No. of kids within 10 miles Rec'd inheritance (1=yes) Constant Dependent variable mean	$\begin{array}{c} 0.0004\\ -0.000\\ 0.0003\\ -0.0007\\ -0.0631\\ 0.0069\\ -0.0528\\ -0.0110\\ 0.0299\\ -0.0013\\ -0.0446\\ 1.0377\\ -0.0279\\ -0.0108\\ -0.0348\\ -0.0724\\ 0.0155\\ 0.0016\\ -0.0133\\ 0.0753\\ 0.0016\\ -0.0133\\ 0.0753\\ 0.0016\\ -0.0133\\ 0.0753\\ 0.0801\\ -0.0086\\ -0.0380\\ -0.0592\\ 0.0932\\ 0.0345\\ 0.0671\\ -0.0909\\ -0.0969\\ -0.1536\\ 0.0132\\ 0.2493\\ -0.3301\\ \end{array}$	$\begin{array}{c} 2.75 \\ -0.03 \\ 1.18 \\ -0.88 \\ -0.66 \\ 0.08 \\ -0.52 \\ -0.12 \\ 0.38 \\ -0.10 \\ -0.17 \\ 2.02 \\ -0.13 \\ -0.05 \\ -0.17 \\ -1.05 \\ 1.86 \\ 0.34 \\ 1.14 \\ -0.10 \\ 0.61 \\ 0.68 \\ -0.07 \\ -0.19 \\ -0.32 \\ 0.53 \\ 0.18 \\ 1.76 \\ -1.96 \\ -2.21 \\ -3.65 \\ 0.52 \\ 3.19 \\ -0.61 \\ 0.716 \end{array}$	$\begin{array}{c} 169.57\\ 37.38\\ 65.85\\ 111.92\\ 0.22\\ 0.27\\ 0.18\\ 0.66\\ 0.36\\ 11.46\\ 0.51\\ 0.01\\ 0.08\\ 0.23\\ 0.15\\ 0.54\\ 57.92\\ 68.81\\ 47.64\\ 0.17\\ 0.26\\ 0.29\\ 0.17\\ 0.26\\ 0.29\\ 0.17\\ 0.26\\ 0.29\\ 0.17\\ 0.26\\ 0.29\\ 0.17\\ 0.26\\ 0.29\\ 0.17\\ 0.26\\ 0.29\\ 0.17\\ 0.26\\ 0.29\\ 0.17\\ 0.26\\ 0.29\\ 0.17\\ 0.26\\ 0.29\\ 0.17\\ 0.26\\ 0.29\\ 0.17\\ 0.09\\ 0.14\\ 0.16\\ 0.09\\ 3.63\\ 0.68\\ 1.09\\ 1.22\\ 1.25\\ 0.24\\ 1.00\\ \end{array}$
Pseudo R-squared Number of observations		0.028	

Appendix Table 3. Probit estimates of the importance of bequeathing on economic and demographic variables in addition to past inheritances

Source: Authors' calculations using Wave 1 of the HRS.

	Estimated coefficient	Asymptotic t-value	Variable mean
Explanatory variable			
Net worth (000's) Income (000's) Pension wealth (000's) Soc. sec. wealth (000's) Resp. or Sp. retired (1=yes) No worker in hh (1=yes) Two workers in hh (1=yes) HH has pension (1=yes) HH has DC pension (1=yes) Married (1=yes) Divorced/Sep. (1=yes) Widowed (1=yes) Female respondent (1=yes) Age of Respondent Max. life expectancy, age 70 Max. life expectancy, age 80 Resp. health exclnt. (1=yes) Resp. health exclnt. (1=yes) Resp. health fair (1=yes) Resp. health fair (1=yes) Sp. health fair (1=yes) Number of kids No. of low-income kids No. of high-income kids No. of high-income kids No. of kids within 10 mi. Rec'd inheritance (1=yes)	0.0007 0.0009 0.0025 0.0640 -0.0519 0.025 0.2679 -0.0614 -0.2929 -0.0016 0.1090 -0.2939 -0.0174 0.0036 0.0000 0.6870 0.5983 0.4524 0.3031 0.0739 0.1137 0.1152 0.0897 -0.0464 -0.0397 -0.0465 0.00111 0.2827 0.7395	$\begin{array}{c} 6.67\\ 1.42\\ 3.60\\ 3.96\\ 0.90\\ -0.82\\ 0.03\\ 4.08\\ -0.87\\ -1.54\\ -0.01\\ 0.68\\ -3.42\\ -2.49\\ 3.20\\ 0.05\\ 5.93\\ 5.80\\ 4.55\\ 2.96\\ 0.52\\ 0.90\\ 0.92\\ 0.69\\ -2.56\\ -1.22\\ -1.39\\ 3.27\\ 0.54\\ 4.92\\ 1.73\\ \end{array}$	189.09 42.70 74.62 115.92 0.27 0.34 0.18 0.45 0.24 0.55 0.27 0.15 0.89 56.46 66.85 46.43 0.13 0.29 0.31 0.17 0.08 0.16 0.16 0.10 3.50 0.32 0.72 1.46 1.18 0.25 1.00
Dependent variable mean Pseudo R-squared Number of observations		0.594 0.158 1,783	

Appendix Table 4. Two-limit Tobit estimates of the effects of inheritances on subjective probability of making a bequest of \$10,000 or more

Source: Authors' calculations using Wave 1 of the HRS. Note: The term 'Respondent' refers to the person in the household who answered the family-related questions (the so-called 'Section E' Respondent) in the first two waves of the HRS. The dependent variable is the section E Respondent's subjective probability of leaving a bequest of \$10,000 or more.

	Estimated coefficient	Asymptotic t-value	Variable mean
Explanatory variable			
Net worth (000's) Income (000's) Pension wealth (000's) Soc. sec. wealth (000's) Resp. or Sp. retired (1=yes) No worker in hh (1=yes) Two workers in hh (1=yes) HH has pension (1=yes) HH has DC pension (1=yes) Married (1=yes) Divorced/Sep. (1=yes) Widowed (1=yes) Female respondent (1=yes) Age of Respondent Max. life expectancy, age 70 Max. life expectancy, age 80 Resp. health exclnt. (1=yes) Resp. health fair (1=yes) Resp. health fair (1=yes) Sp. health fair (1=yes) Number of kids No. of low-income kids No. of high-income kids No. of high-income kids No. of kids within 10 mi. Rec'd inheritance (1=yes) Constant	0.0007 0.0025 0.0015 -0.0119 0.0140 -0.1896 0.1852 -0.0180 -0.1877 0.0801 0.0812 -0.2715 -0.0215 0.0011 0.0019 0.7184 0.6123 0.3762 0.2615 0.4234 0.3881 0.3529 0.0835 -0.0455 -0.0179 -0.0455 -0.0179 -0.0490 0.0967 -0.0222 0.2910 0.0930	$\begin{array}{c} 7.83\\ 3.90\\ 2.55\\ 2.30\\ -0.16\\ 0.20\\ -2.41\\ 2.74\\ -0.25\\ -0.83\\ 0.43\\ 0.42\\ -2.91\\ -2.86\\ 0.86\\ 1.67\\ 5.19\\ 4.73\\ 2.96\\ 1.96\\ 2.71\\ 2.67\\ 2.43\\ 0.54\\ -2.17\\ -0.43\\ -1.60\\ 4.33\\ -0.95\\ 5.07\\ 0.20\\ \end{array}$	189.09 42.70 74.62 115.92 0.27 0.34 0.18 0.45 0.24 0.55 0.27 0.15 0.89 56.46 66.85 46.43 0.13 0.29 0.31 0.17 0.08 0.16 0.10 3.50 0.32 0.72 1.46 1.18 0.25 1.00
Dependent variable mean Pseudo R-squared Number of observations		0.274 0.190 1,783	

Appendix Table 5. Two-limit Tobit estimates of the effects of inheritances on subjective probability of making a bequest of \$100,000 or more

Source: Authors' calculations using Wave 1 of the HRS. Note: The term 'Respondent' refers to the person in the household who answered the family-related questions (the so-called 'Section E' Respondent) in the first two waves of the HRS. The dependent variable is the section E Respondent's subjective probability of leaving a bequest of \$100,000 or more.

Explanatory variable	Estimated coefficient		Variable mean
Net worth (000's) Income (000's) Pension wealth (000's) Soc. sec. wealth (000's) Resp. or Sp. retired (1=yes) No worker in hh (1=yes) Two workers in hh (1=yes) Hw has pension (1=yes) HH has DC pension (1=yes) Married (1=yes) Divorced/Sep. (1=yes) Widowed (1=yes) Female respondent (1=yes) Age of Respondent Max. life expectancy, age 70 Max. life expectancy, age 70 Max. life expectancy, age 80 Resp. health exclnt. (1=yes) Resp. health fair (1=yes) Resp. health fair (1=yes) Sp. health fair (1=yes) Number of kids No. of low-income kids No. of high-income kids No. of high-income kids No. of high-income kids No. of kids within 10 mi. Only Resp. inher (1=yes) Both R&S inher (1=yes) Constant	77.75 53.05 51.18 127.04 2551.40 2375.91 -9583.63 13906.05 -2765.27 2309.53 1654.48 -9001.34 -1386.84 58.01 79.77 47686.85 34681.01 17103.10 12410.85 22825.71 14191.61 10147.56 -11617.40 -1757.74 160.28 -3586.20 5134.35 -1809.77 23094.74 26813.17 22113.75 87407.02	14.50 2.43 4.59 3.25 0.57 0.59 -1.93 3.36 -0.62 -0.65 0.24 0.17 -2.62 -3.30 0.81 1.23 6.92 5.60 2.89 2.06 2.61 1.82 1.29 -1.37 -1.55 0.08 -2.22 4.14 -1.41 5.81 3.14 2.38 3.28	$188.95 \\ 43.37 \\ 75.71 \\ 116.05 \\ 0.28 \\ 0.34 \\ 0.18 \\ 0.46 \\ 0.24 \\ 0.55 \\ 0.27 \\ 0.15 \\ 0.52 \\ 57.68 \\ 66.78 \\ 46.36 \\ 0.14 \\ 0.27 \\ 0.30 \\ 0.18 \\ 0.08 \\ 0.18 \\ 0.08 \\ 0.18 \\ 0.08 \\ 0.18 \\ 0.08 \\ 0.18 \\ 0.08 \\ 0.18 \\ 0.08 \\ 0.18 \\ 0.08 \\ 0.18 \\ 0.00 \\ 1.17 \\ 0.19 \\ 0.03 \\ 0.03 \\ 1.00 $
Dependent variable mean		79,131	
R-squared Number of observations		0.419 1,800	

Appendix Table 6. OLS estimates of the effects of inheritances on intended bequests

Source: Authors' calculations from Wave 2 of the HRS.

	Husb	Husbands Wives		Variable	
Explanatory variable	Coeff.	t-val.	Coeff.	t-val.	mean
Net worth (000's) Husband's inc (000's) Wife's inc (000's) Husb retired (1=yes) Wife retired (1=yes) Husb. working (1=yes) Wife working (1=yes) Husb has pens (1=yes)	$\begin{array}{r} 79.97 \\ 582.50 \\ 438.70 \\ 7999.34 \\ 10901.12 \\ -1998.37 \\ -1226.84 \\ -4454.58 \end{array}$	8.34 5.02 1.62 0.84 1.17 -0.22 -0.16 -0.66	62.34 391.23 350.88 8105.52 -7605.14 7242.12 -16137.70 2370.17	6.28 3.25 1.25 0.82 -0.79 0.77 -2.03 0.34	$267.27 \\ 30.50 \\ 11.13 \\ 0.28 \\ 0.16 \\ 0.64 \\ 0.53 \\ 0.45 \\ 0.45 \\ 0.45 \\ 0.51 \\ 0.53 \\ 0.53 \\ 0.55 \\ 0.5$
Wife has pens (1=yes) Husband's age Wife's age H's life exp, 70 W's life exp, 70 H's life exp, 80	-2905.48 -757.05 727.63 301.72 14.36 -216.83	-0.37 -0.77 0.83 1.91 0.09 -1.56	4602.61 576.12 -541.69 177.03 134.53 -202.55	0.56 0.56 -0.60 1.08 0.79 -1.41	0.33 58.15 55.67 63.75 64.75 37.04
W's life exp, 80 H's hlth exlnt (1=yes) H's hlth v gd (1=yes) H's hlth gd (1=yes) H's hlth fr (1=yes) W's hlth exlnt (1=yes) W's hlth v gd (1=yes) W's hlth gd (1=yes) W's hlth fr (1=yes)	-14.15 26865.08 25092.29 5643.18 9743.90 22571.66 21741.72 11988.35 -8062.92	-0.11 1.48 1.44 0.34 0.57 1.34 1.38 0.78 -0.48	$\begin{array}{c} 295.43\\ 50765.53\\ 41597.77\\ 42352.27\\ 18546.19\\ 11216.25\\ 11237.51\\ -9183.72\\ -15412.64\end{array}$	2.12 2.71 2.31 2.43 1.05 0.65 0.69 -0.58 -0.88	40.26 0.18 0.29 0.16 0.16 0.37 0.33 0.10
No. of poor kids No. of mid-inc. kids No. of hi-inc. kids No. of kids in 10 mi. Only H inher (1=yes) Only W inher (1=yes) Both H&W inher (1=yes) Constant	-3002.92 -1401.54 -9021.43 3742.59 -7323.29 17694.70 17618.89 31727.56 32309.01	$\begin{array}{c} -0.48 \\ -0.33 \\ -3.08 \\ 1.73 \\ -2.83 \\ 2.11 \\ 2.03 \\ 2.62 \\ 0.56 \end{array}$	-13412.84 -2074.88 -4275.43 7170.56 -1258.19 19764.83 23272.87 21330.28 -14145.84	$\begin{array}{c} -0.88\\ -0.47\\ -1.41\\ 3.20\\ -0.47\\ 2.28\\ 2.59\\ 1.70\\ -0.24 \end{array}$	$\begin{array}{c} 0.10\\ 0.23\\ 0.72\\ 1.65\\ 1.16\\ 0.15\\ 0.14\\ 0.07\\ 1.00\\ \end{array}$
Dependent variable mean R-squared Number of observations	112,	834 0.349 649		868 0.291 549	
Estimated husband-wife co Chi-squared statistic for				0.42 113.26	

Appendix Table 7. Intended bequests of husbands versus wives: SURE estimates of the effects of inheritances from parents versus in-laws

Source: Authors' calculations using Wave 2 of the HRS.

Appendix Table 8. The importance of leaving a bequest: Fixed effects estimates of the effects of economic and demographic variables in addition to past inheritances

	Estimated coefficient		Variable mean
Explanatory variable	000111010110	o varao	
Net worth (000's) Household income (000's) R or sp. retired (1=yes) No worker in hh (1=yes) Two workers in hh (1=yes) Married or cohabiting (1=yes) Divorced or separated (1=yes) Widowed (1=yes) Max life expectancy, age 70 R health excellent (1=yes) R health excellent (1=yes) R health fair (1=yes) R health fair (1=yes) Sp. health fair (1=yes) No. of low-income kids No. of middle-income kids No. of high-income kids No. of kids within 10 miles Year 1996 (1=yes) Year 2000 (1=yes) Year 2000 (1=yes) Year 2002 (1=yes) Inherited this wave (1=yes) Inherited 1ast wave (1=yes) Inherited 2 waves ago (1=yes) Inherited 4 waves ago (1=yes) Constant	8558.413 8442.035 38.026 8545.380 6728.350 4608.464 3172.842 5499.215 4798.066 3396.890 3149.615 52.102 -122.771 954.392 327.124 659.558 -1300.824 -1158.385 -5405.277 10996.396 6038.060 4232.459 6476.113	$\begin{array}{c} 0.13\\ 0.53\\ 1.11\\ 0.03\\ -2.18\\ 0.51\\ 1.02\\ 1.00\\ 3.38\\ 3.01\\ 2.63\\ 1.92\\ 1.42\\ 1.53\\ 1.44\\ 1.06\\ 1.01\\ 0.06\\ -0.22\\ 1.95\\ 0.60\\ 0.60\\ -1.06\\ -0.91\\ -3.95\\ 3.64\\ 2.19\\ 1.41\\ 1.95\\ 0.81\\ 8.43\\ \end{array}$	$\begin{array}{c} 284.73 \\ 51.61 \\ 0.39 \\ 0.36 \\ 0.22 \\ 0.63 \\ 0.22 \\ 0.14 \\ 80.99 \\ 0.15 \\ 0.31 \\ 0.30 \\ 0.17 \\ 0.11 \\ 0.21 \\ 0.18 \\ 0.08 \\ 0.20 \\ 0.67 \\ 1.35 \\ 1.02 \\ 0.22 \\ 0.18 \\ 0.19 \\ 0.18 \\ 0.19 \\ 0.18 \\ 0.02 \\ 0.03 \\ 0.03 \\ 0.02 \\ 0.02 \\ 1.00 \end{array}$
Dependent variable mean		90,426	
R-squared Number of respondents Number of observations		0.009 4,017 16,262	

Source: Authors' calculations from Waves 2-6 of the HRS.

	Estimated coefficient		Variable mean
Explanatory variable			
Household income (000's) R or sp. retired (1=yes) No worker in hh (1=yes) Two workers in hh (1=yes) Married or cohabiting (1=yes) Divorced or separated (1=yes) Widowed (1=yes) Max life expectancy, age 70 R health excellent (1=yes) R health v. good (1=yes) R health fair (1=yes) R health fair (1=yes) Sp. health fair (1=yes) Sp. health excellent (1=yes) Sp. health v. good (1=yes) Sp. health dair (1=yes) Sp. health fair (1=yes) Sp. health fair (1=yes) No. of low-income kids No. of high-income kids No. of high-income kids No. of kids within 10 miles Year 1998 (1=yes) Year 2000 (1=yes) Year 2000 (1=yes) Inherited this wave (1=yes) Inherited 1ast wave (1=yes) Inherited 2 waves ago (1=yes) Inherited 3 waves ago (1=yes) Net worth times striver Net worth times std. bearer Net worth times traditionless Constant	$\begin{array}{c} 15.481\\ 906.779\\ 1005.966\\ -2253.629\\ 5490.701\\ -2510.692\\ -2401.975\\ 40.110\\ 6842.693\\ 4721.656\\ 1312.161\\ -514.657\\ -7154.052\\ -4693.130\\ -6424.782\\ -2262.502\\ -1349.922\\ 425.347\\ 726.672\\ 144.553\\ -1068.710\\ -107.900\\ -4183.638\\ 13614.295\\ 8106.572\\ 7242.330\\ 6737.599\\ 4521.227\\ 20.515\\ -0.043\\ 10.727\\ 82138.845\end{array}$	$\begin{array}{c} 1.60\\ 0.55\\ 0.58\\ -1.09\\ 0.50\\ -0.24\\ -0.23\\ 2.97\\ 1.98\\ 1.52\\ 0.45\\ -0.19\\ -1.61\\ -1.15\\ -1.65\\ -0.60\\ -0.96\\ 0.60\\ 1.14\\ 0.22\\ -0.86\\ -0.08\\ -2.94\\ 3.80\\ 2.22\\ 2.23\\ 1.90\\ 1.19\\ 1.63\\ -0.01\\ 2.66\\ 7.58\end{array}$	$\begin{array}{c} 47.70\\ 0.44\\ 0.38\\ 0.22\\ 0.64\\ 0.20\\ 0.14\\ 79.05\\ 0.14\\ 79.05\\ 0.14\\ 0.32\\ 0.30\\ 0.17\\ 0.11\\ 0.23\\ 0.19\\ 0.09\\ 0.18\\ 0.67\\ 1.38\\ 0.99\\ 0.25\\ 0.$
Dependent variable mean		91,171	
R-squared Number of respondents Number of observations		0.013 2,771 9,801	

Appendix Table 9. Intended bequests: Fixed effects estimates of net worth effects for strivers versus standard bearers