# ACTUAL AND ANTICIPATED INHERITANCE RECEIPTS

Norma B. Coe and Anthony Webb*

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Center for Retirement Research at Boston College
Hovey House
140 Commonwealth Avenue
Chestnut Hill, MA 02467
Tel: 617-552-1762  Fax: 617-552-0191

* Norma B. Coe is a research economist at the Center for Retirement Research (CRR) at Boston College.  Anthony Webb is a research economist at the CRR.  The research reported herein was pursuant to a grant from the U.S. Social Security Administration (SSA), funded as part of the Retirement Research Consortium (RRC).  The opinions and conclusions expressed are solely those of the authors and do not represent the opinions of SSA, any agency of the federal government, the RRC, or Boston College.  The authors would like to thank Christopher Sullivan for exceptional research assistance.  All errors are the authors'.

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**Center for Retirement Research at Boston College**
Hovey House
140 Commonwealth Avenue
Chestnut Hill, MA 02467
phone: 617-552-1762 fax: 617-552-0191
e-mail: crr@bc.edu
www.bc.edu/crr

*Affiliated Institutions:*
The Brookings Institution
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**Abstract**

Using data from the *Health and Retirement Study*, we compare actual inheritances received during the period 1994 to 2004 with the amounts that, in 1994, households anticipated receiving within 10 years. We find little evidence of systematic forecasting errors. The factors affecting inheritance receipt also affect expectation formation. Although the distribution is highly skewed, inheritances are generally modest in amount and uncorrelated with lifetime income, and therefore have almost no effect on various measures of inequality. We find no evidence that households anticipating receipt of an inheritance save less than that of similar households, although this could reflect unobserved heterogeneity in tastes for saving.

**Introduction**

The average household accumulates very little financial wealth during its working life. In 2007, by age 55-64, the mean non-pension financial wealth of the median 10 percent of households amounted to only $29,600, while defined benefit and defined contribution pension wealth amounted to $122,100 and $50,500, respectively (Munnell, Golub-Sass, and Muldoon, 2009). However, these figures only represent what is in the name of the household and ignore the present value of anticipated inheritances. Earlier work by Hurd and Smith (2002) calculates that between 1993 and 1995, the mean bequest of individuals in the *Asset and Health Dynamics of the Oldest Old* (AHEAD), a panel born before 1924, was a substantial $104,500. However, the distribution of the amounts that these households left as bequests was highly skewed, with many leaving little or nothing and a few leaving large amounts.

The extent to which these transfers will affect boomers' financial preparedness for retirement will depend on the financial well-being of the receiving households. The impact will be small if most inheritances are received by those already well-prepared for retirement. But for many households, even a small inheritance would represent a large percentage increase in financial wealth. Furthermore, calculations of financial preparedness may overstate the percent of households that are saving sub-optimally if households rationally under-save in anticipation of receipt of an inheritance.

Using *Health and Retirement Study* (HRS) data on current wealth and actual and anticipated inheritance receipts, we first identify predictors of the receipt of an inheritance over a 10-year period from 1994. We find that the probability of receipt is positively correlated with an individual's own and parental socioeconomic status, and with whether the individual has any surviving parent, the latter reflecting a pattern whereby inheritances pass from the deceased to the surviving spouse and then to their children.[1]

We then consider whether households form realistic expectations regarding both the likelihood of receiving an inheritance and the anticipated amount, in particular, whether forecasts are

[1] Individuals are not asked to identify the source of anticipated inheritances. Individuals receive, and presumably also anticipated, inheritances from persons other than their parents.

unbiased and vary appropriately both in cross-section and in panel with factors identified as affecting the actual probability of receipt. We show that individuals slightly overestimate the probability of receipt and understate the amount receivable, but that expectations otherwise generally vary appropriately with predictors of receiving an inheritance. We find no evidence that particular socioeconomic groups systematically over- or underestimate the probability of receipt.

We calculate the amount and distribution of the financial and total wealth of households entering retirement and then recalculate household wealth inclusive of the present values of actual and anticipated inheritance receipts. Although both actual and anticipated receipts are highly concentrated among households in the upper portion of the wealth distribution, their inclusion has little effect on measured wealth inequality. An arguably better approach, and one that does not depend on possibly tenuous assumptions about the way in which households might have behaved in the absence of the inheritance, is to calculate the impact of inheritances on inequalities in the lifetime resources otherwise available to the household, namely the present value of lifetime earnings. We find little relationship between inheritance receipts and lifetime incomes, which could mean that the inclusion of receipts would result in a substantial reduction in inequality. But this lack of correlation is almost precisely offset by the increase in inequality resulting from the highly unequal distribution of inheritances within each income decile, resulting in inheritances having little net effect on inequality of lifetime resources.

We find that most actual and anticipated receipts are concentrated among households that are better prepared for retirement. This finding is in apparent violation of the life-cycle model of savings behavior that postulates that households anticipating the receipt of an inheritance should save less than other similar households. However, we cannot rule out an intergenerational correlation in unobservable factors, such as thriftiness, that are in turn correlated with wealth accumulation.

The remainder of the paper is organized as follows. Section 1 reviews previous research. Section 2 presents the data. Section 3 presents our results, and Section 4 concludes.

## 1. Previous research

Wolff (2003) surveys the literature on the contribution that bequests make to household wealth accumulation. Important contributions include Kotlikoff and Summers (1981), who argued that life-cycle saving is a relatively small component of household wealth, and Modigliani (1988), who in contrast argued that the share of private wealth received by transfer was less than one quarter. Both Modigliani (1988) and Wolff (2003) raise an important methodological issue, namely whether inherited wealth should include the capitalized earnings thereon during the lifetime of the recipient. Modigliani argues against this treatment on two grounds: first, exclusion conforms to the generally accepted treatment of saving as income minus consumption, and second, we cannot assume that the increment to the recipient's wealth will exactly equal the amount received, plus the return thereon. According to the life-cycle hypothesis, an inheritance receipt should, in many cases, result in an increase in consumption, so that the increment to wealth will be less than the sum of the inheritance plus capitalized earnings.

Wolff (2003) also contains analyses of inheritances drawn from the 1989-1998 *Survey of Consumer Finances*. In 1998, 20.3 percent of households reported receiving any inheritance, gift, or other wealth transfer. As Wolff acknowledges, this percentage may be depressed by recall error, as evidenced by Gale and Scholz (1994) finding that households are more likely to report making than receiving a transfer. In 1998, 66 percent of all wealth transfers came from parents, 21 percent from grandparents, 9 percent from other relatives, and 3 percent from other sources. Among recipients, the mean and median present values of wealth transfers were $256,900 and $54,500, respectively. These amounts include an assumed 3 percent real return during the period from receipt to 1998.

The literature also distinguishes between the impacts of inheritances on inequality of wealth, income, and lifetime earnings. Wolff (2003) found that wealth transfers as a share of household wealth declined with both income and wealth. He also presents calculations showing that wealth transfers as a percent of lifetime income decline monotonically from 51.4 percent for households in the lowest lifetime earnings quintile to 1.6 percent for households in the top 5 percent.[2] While

[2] A weakness of this calculation is that it excludes taxes and government transfers that tend to equalize lifetime resources. It also excludes other intergenerational transfers, such as education expenditures.

illustrative, these facts only measure one of the ways inheritances can impact inequality, by examining interdecile differences. But inheritances may nonetheless increase inequality if receipts are highly unequally distributed within each decile. In addition, the potentially large measurement error in calculating lifetime income based on repeated cross-sectional data means that it is unwise to conclude from a simple tabulation of decile averages that inheritances reduce inequalities in lifetime resources. Finally, the ideal calculation must take into account the relevant counterfactual. For example, we cannot calculate the impact of inheritances on the distribution of wealth by simply subtracting either inheritance receipts (or inheritance receipts plus investment returns) from that wealth. Instead, we must consider the counterfactual of how much wealth the recipient households might have accumulated had inheritances been subject to confiscatory taxation.

## 2. Data

We use data from the *Health and Retirement Study*, a panel of over 7,000 individuals born between 1931 and 1941 and their spouses of any age. Individuals have been interviewed every two years from 1992. The latest available data is for 2006. In each wave, the financial respondent in each household was asked about inheritances received. From 1994 onward, both the respondents and their spouses were asked about anticipated receipts.

### *2.1 Data on receipts*

In 1992, financial respondents were asked whether the household had ever received a large amount of money or property from an inheritance, trust fund, or an insurance settlement. In 1994 and subsequent interviews, they were asked whether there had been any such receipts since the last interview. They were asked the amounts of the three largest receipts and whether the source was an inheritance or something else. Those unable to give a precise amount were led through a series of unfolding brackets to determine the range within which the amount lay. Those receiving an inheritance were also asked from whom it was received.[3]

[3] The specific wording of the opening question in the 2004 sequence is, "People sometimes receive large amounts of money or property in the form of an inheritance, a trust fund, an insurance settlement, and so on. Since [year and month of financial respondent's last interview] [have/Have] you (or your [husband/wife/partner]) (ever) received money or property in the form of an inheritance, a trust fund, or an insurance settlement?" Those who answer yes are then asked to identify the source and amount of up to three receipts, being asked, "What was the (next) largest lump sum. Was it from an inheritance, a trust, an insurance settlement, or what?"

The level of item non-response was quite low. To illustrate, 8.1 percent of 2004 participants stated they had received money from the above sources since their last interview; 90.5 percent stated that they had not; and 1.4 percent either refused to answer the question, did not know, or were not asked. Among those receiving money, 66.5 percent identified the source of the largest such receipt as an inheritance or payment from a trust, and only 0.8 percent either did not know or refused. Of those who identified the source as an inheritance or trust, 83.1 percent gave a precise dollar amount, 9.4 percent gave partial information, and 7.5 percent were unable to identify the amount.

We assume that households that did not know whether they received an inheritance during the past two years received nothing.[4] We impute missing sources and dollar amounts using hot deck imputation. The wording of the question makes no reference to intervivos receipts, and we hypothesize that respondents would likely interpret it as excluding such receipts.[5]

*2.2 Data on anticipated receipts*

Starting in 1994, individuals, excluding those interviewed by proxy, were asked to assess on a scale of zero to 100 the probability that they would receive an inheritance in the next 10 years.[6] In 2006, the wording was changed slightly to make clear that the individual should include inheritances he expected his spouse to receive, but exclude bequests from one spouse to the other.[7] Individuals who assessed the probability of receipt at greater than zero were then asked,

[4] We conjecture that if a household had received a significant inheritance during the past two years, it would likely remember. We therefore believe our approach is preferable to the alternative of imputing based on covariates. We hypothesize that there may be greater under-reporting of inheritances received in the more distant past, so that an analysis of successive waves' responses may yield a more accurate measure of lifetime receipts than obtained from a question asked at only one point in time.

[5] Gale and Scholz (1994) estimate that about one-third of all transfers occur intervivos. Research has yet to establish at what points in the life cycle households receive such transfers. On the one hand, these transfers might be made when the recipient is young, to help with education, house purchases and similar expenses. But they might also be received at older ages as part of the recipient's parents' Medicaid and estate planning.

[6] The specific wording of the 1994 question was, "And how about the chances that you will receive an inheritance within the next 10 years?"

[7] The specific wording of the 2006 question was, "[Not counting anything you might give or leave to each other,] [what/What] are the chances that you (or your [husband/wife/partner]) will receive an inheritance during the next 10 years?"

"About how large do you expect that inheritance to be." If they were unable to specify a precise amount, they were asked whether it fell within various ranges.

There was a low level of non-response to the question asking about the probability of receipt. For example, in 1994, 55.5 percent of interviewees answered zero, 34.9 percent gave some non-zero probability, and only 9.6 percent either didn't know or refused to answer the question. Although there was a much higher level of non-response – 40.7 percent in 1994 – to the question asking about the anticipated amount, most individuals were able to at least provide a range within which the anticipated inheritance was expected to lie. We impute missing dollar amounts using hot deck imputation.

*2.3 Sample size*

The 1994 wave of the HRS comprises 7,227 households containing one or more individuals born between 1931 and 1941. We discard 346 households in which no member provided an estimate of the probability of receiving an inheritance,[8] leaving 4,708 couples and 2,173 single individuals. Of these, 35 couples and 97 singles had a zero sampling weight, yielding a final sample of 4,673 couples and 2,076 singles. We compare the amounts households reported in 1994 that they anticipated receiving over the subsequent 10 years with the amounts actually received during that period. In 30.7 percent of households, receipt data is missing, usually for only one wave. We impute missing receipt data using the death of a surviving parent, and parental and the individual's own education as covariates.

A complication arises in that inheritance receipts are observed at the household level. In the case of households that acquired a new member between 1994 and 2004 – for example, by remarriage – we cannot identify whether the inheritance was received by the 1994 respondent or by his new spouse. There are only 488 households in our 1994 sample that acquired new members between 1994 and 2004, of whom only 73 received inheritances.[9]

[8] This would occur if the individual was interviewed by proxy, or if he simply refused to answer the question.

[9] Inheritance receipts are recorded at the household level. If a single individual marries, we include inheritances received by his or her spouse. If a couple separates, we include inheritance received by both prior to remarriage, those received by the husband at any time, and those received by his new wife after remarriage. If a wife remarries, we exclude inheritances received by her and her new husband after remarriage.

## 3. Results

In section 3.1, we analyze data on actual receipts and identify correlates with both the likelihood of receipt and the dollar amount received. In section 3.2, we analyze anticipated inheritances. We show that household responses are predictive of subsequent receipts and vary in panel with changes in factors shown to affect the actual probability of receipt. In section 3.3 we consider the impact of inheritances on the distributions of wealth and lifetime resources. In section 3.4, we consider whether households make systematic forecasting errors. In section 3.5, we test one of the predictions of the life-cycle model, namely that the consumption of non-liquidity-constrained households should not respond to anticipated inheritance receipts.

### *3.1 Who received an inheritance?*

We first present descriptive statistics for married couples and single individuals, considering separately lifetime inheritance receipts and inheritances received during the 10-year period 1994-2004. An analysis of data on inheritances received over the lifetime enables us to learn about the extent to which inheritances have contributed to the wealth of households entering retirement. An analysis of inheritances received during the 10-year period ending 2004 enables us to compare expectations with outcomes.[10]

Of our sample of 4,673 married couple households, 34.1 percent received one or more inheritance at any time and 20.8 percent during the 10-year period 1994-2004. The mean and median total amounts received at any time were $124,416 and $50,305, respectively. Conditional on receiving anything, the mean and median received between 1994 and 2004 were $110,323 and $ 44,000, respectively.[11]

The first two columns of Table 1A compare married couple households that received an inheritance at any time prior to 2004 with those who had not received one. The third and fourth columns compare married couple households that received an inheritance between 1994 and

[10] While we do not observe the entire lifetime of the respondents, only 26.2 percent of inheritances received during 1994-2004 were from sources other than parents. In 2004, only 20.1 percent of households had one or more living parent, so analyzing inheritances received up to 2004 likely captures most of the inheritances these households will ever receive.

[11] All amounts are stated in 2004 dollars and are calculated using 1994 HRS sample weights.

2004 with those that did not receive one during the same period. Table 1B provides similar data for single individuals.

There are significant and substantial differences in a variety of measures of socioeconomic status between these groups. Those receiving inheritances are better educated, as are their parents. They have fewer siblings, are less likely to be members of minority groups, and report better health. The median wealth of those who report receiving an inheritance during the subsequent 10 years is also substantially greater, whereas the life-cycle hypothesis would lead us to expect it to be lower, holding everything else constant.

We further investigate the above relationships by first estimating a probit model for married couples in which the dependent variable takes the value of one if either spouse reports receiving an inheritance between 1994 and 2004, zero otherwise. In the model, we include for each spouse, education, parental education, ethnicity, self-reported health status, income, parental age, relative to the average, whether both parents are dead, and number of siblings.[12] We also include household income and variables indicating whether the household provides informal care to one or both parents of either spouse and whether the parents cannot be left alone for one hour or more. We also estimate a similar model for single individuals. The probit marginal effects are reported in columns 2.1 of Table 2A (married couples) and Table 2B (single men and women combined). A positive coefficient indicates a higher probability that either spouse reports a non-zero probability of receiving an inheritance.

In the married couple model, the probability of receiving an inheritance decreases by 4.4 and 6.2 percentage points if the husband and wife have no living parent. The coefficients on parental ages relative to the average are all positive and significant, presumably reflecting the greater likelihood that older parents will die within the next 10 years.

[12] Our parental age variable measures parental age relative to the averages for surviving mothers and fathers of married men and women and single individuals, as appropriate. If a parent is not alive, the variable takes the value of zero.

The individual's own, spouse's, and parental education; number of siblings; and income are indicators of socioeconomic status, and are generally significant in the couples model but tend to lose significance in the singles model. Having a parent who cannot be left alone for an hour or more reduces the probability of receipt by 12.8 percent in the couples model – possibly reflecting the impact of long-term care costs on parental wealth – but loses significance in the singles model.

We then estimate OLS models on a) all households, and b) those households attaching a positive probability to receiving an inheritance. The dependent variable is the natural log of the dollar amount received, the natural log of zero being set to zero. Columns 2.2 of Table 2A (married couples) and Table 2B (single men and women combined) report coefficients and standard errors on a model estimated over both recipients and non-recipients. The patterns are similar to that in the probit model, with education, income, relative age, number of siblings, and having no living parents all significant in the couples model estimated over both recipients and non-recipients, but most of these variables lose significance in the singles model and in the models estimated over only recipients.

*3.2 Who expected to receive an inheritance during the period 1994 to 2004?*

Of the 11,224 individuals in our 1994 sample, 38.5 percent assessed the probability of receiving an inheritance during the subsequent 10 years to be greater than zero. Figure 1 shows the distribution of responses. There is considerable bunching at focal points, and 8.4 percent of individuals estimated the probability at 100 percent.

There was some disagreement between husbands and wives as to the likelihood of receiving an inheritance. In 21.8 percent of married households, we only have responses from one of the spouses. Of those households where both provide a valid answer, 42.4 percent both reported the probability at zero. In 15.5 percent of the households, the husband reported the probability at zero and the wife reported it at greater than zero. In 12.6 percent of the households, the reverse

was true, and in the remaining 29.5 percent, both husband and wife reported it at greater than zero.[13]

On average, households appear to be somewhat optimistic about their chances of receiving an inheritance. The mean household self-reported probability of receiving an inheritance is 22.4 percent, compared with the 19.1 percent that actually received an inheritance. But they are somewhat pessimistic as to the amount. The mean and median dollar amounts households expect to receive, conditional on receiving anything, are $79,290 and $25,000, respectively. These compare to the mean and median amounts actually received, reported above, of $102,397 and $42,001, respectively.[14]

Although the aggregate statistics indicate that household's forecasts are, on average, only somewhat biased, they tell us little about the ability of households to predict whether they will receive an inheritance. We do not expect individual households to perfectly predict inheritance receipt over a 10-year time horizon. For example, they may be certain of receiving an inheritance at some time, but the timing will depend on the uncertain date of death of the donor. However, we do expect forecasts to be correlated with actual inheritance receipt.

Figure 2 shows the percentages of households receiving an inheritance, analyzed by the self-reported probability of receiving an inheritance, and demonstrates that self-assessed probability

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[13] One possible explanation for the discrepancies is that some husbands and wives are interpreting the question as requiring an estimate of the probability that they personally will receive the inheritance. If this is the case, then the individual self-reported probabilities will underestimate the probability that one or both spouses receive an inheritance. As explained in Section 2, the wording of the inheritance question changed in 2006 to make clear that respondents were required to estimate the probability of the household receiving an inheritance. To test whether individuals were interpreting prior years' questions differently from that asked in 2006, we estimated the following model:

$y_{it} = X_{it}B + a_t + u_{it}$,

where $y_{it}$ is the response of individual *i* at time t, and $a_t$ is a vector of dummy variables indicating whether the response is from a particular wave. None of the wave dummies was significant, and we conclude that the discrepancies between the husbands' and wives' responses reflect uncertainty and reporting error. In subsequent analyses, we take the household's estimate of the probability of receiving an inheritance as the average of the husband's and wife's responses. The husband and wife might legitimately have different beliefs if they had different information sets or interpreted information differently. Alternatively, they might share the same beliefs, but report those shared beliefs with error.

[14] This might reflect a failure to adjust for future investment returns or the abnormally high stock and housing market returns enjoyed over much of the period.

has some predictive power. Among those estimating their probability of receiving an inheritance at zero, 8.9 percent actually received an inheritance, compared with 53.4 of those estimating the probability at 91-100 percent. The data suggest that households that are more likely to receive an inheritance exhibit overconfidence. In four of the top five deciles, those reporting probabilities in the range of 51-90 percent, less than 50 percent of the households actually received an inheritance. Some of this may reflect focal-point bias. In results available from the authors on request, we compare individuals reporting a 100 percent probability with those reporting an 81 to 99 percent probability. The former are much more likely to give answers of 100 percent to questions asking about the probabilities of other events and are also less highly educated.

We find that the self-assessed probability of receiving an inheritance varies appropriately with the receipt of an inheritance from a parent and the death of a surviving parent. The average probability of receipt drops from 48.9 to 23.6 percent following the receipt of an inheritance, and from 33.9 to 21.3 percent following the death of a surviving parent.

*Model of self-assessed probability of receipt*

We estimate a probit model for married couples in which the dependent variable takes the value of one if either spouse reports a non-zero probability of receiving an inheritance, zero otherwise. We include all the control variables used in the probit model of actual receipts. We also estimate a similar model for single individuals.

Columns 3.1 of Table 3A (married couples) and Table 3B (single men and women combined) report probit marginal effects and associated standard errors. As previously, a positive coefficient indicates a higher probability that either spouse reports a non-zero probability of receiving an inheritance.

Many of the variables that are significant in the receipts model are also significant in the expectations model. In the married couple model, the probabilities of a household assessing its chance of receipt at greater than zero decrease by 23.7 and 13.3 percentage points if the husband and wife have no surviving parent, respectively. These effects are substantially greater than the

effects on the actual probability of receipt, an issue to which we return when we examine forecasting errors.[15]

As in the receipts model, households with parents who cannot be left alone for an hour or more are significantly and substantially less likely to report anticipating an inheritance. The number of siblings is negative and significant for couples, presumably reflecting a correlation between family size and parental socioeconomic status and wealth accumulation, but not for singles. The coefficient on the age of the husband or single individual is negative and statistically significant, possibly reflecting the lower average probability of older individuals surviving long enough to receive an inheritance.

We then estimate an OLS model where the dependent variable is the average of the husband's and wife's self-assessed probabilities of receiving an inheritance, normalized to a scale of zero to one. Column 3.2 of Table 3 reports coefficients and standard errors. The results are broadly consistent with the probit results. The effects on self-assessed probability of receipt of the husband and wife having no surviving parent are 15.6 and 12.9 percent, respectively.

*Model of anticipated dollar amount*

We estimate OLS models for the amount of the anticipated inheritance on a) all households, and b) those households attaching a positive probability to receiving an inheritance.[16] The dependent variable is the natural log of the anticipated dollar amount, the natural log of zero being set to zero. Fewer of the explanatory variables are significant in the model estimated on the sample of households attaching a positive probability to receipt. We conclude that observable characteristics have more of an impact on whether households expect to receive an inheritance than on the anticipated amount.[17]

[15] The magnitudes of these effects are also not comparable with those in the receipts model because we are measuring the effect on moving from a zero to any positive probability of receipt.

[16] In the latter case, we include couples where one spouse reports a positive and the other a zero probability of receipt. In all cases, we take the average of the husband's and wife's dollar estimates.

[17] The effect of imputing missing amounts is unclear. If individuals who do not provide dollar amounts are simply unable to convey their expectations to the interviewer, then imputation will reduce the explanatory power of our model. But it could actually increase it; our imputation algorithm provides more precise estimates than those the household is capable of making.

*3.3 What effect do inheritances have on inequality of wealth and lifetime resources?*

We first consider the impact of inheritances on the distribution of wealth. For our initial analysis, we sort our sample into deciles by 1994 total and financial wealth.[18] We calculate mean total or financial wealth in each decile. We then add either actual or anticipated inheritances received during the subsequent 10 years. In the case of actual inheritances, we discount receipts by a 3 percent real rate of interest. Anticipated inheritances equal the expected dollar amount multiplied by the probability of receipt. As households were not asked to estimate when they expected to receive their bequest, we do not attempt to apply time discounting to anticipated receipts.

Figures 3A and 3B show the impact of actual receipts on the distribution of financial (upper panel) and total (lower panel) wealth.[19] The solid bars show mean 1994 wealth in each wealth decile excluding bequests, and the shaded bars show mean wealth in each decile inclusive of the present value of bequests received over the subsequent 10 years. Although households in the upper parts of both wealth distributions received larger inheritances than those lower down the wealth distribution, their inheritances represented smaller proportions of existing wealth. A similar pattern emerges in Figures 4A and 4B, which show the distribution of anticipated inheritances.

We then make a series of calculations of the impact of actual and anticipated inheritance receipts on the distribution of financial and total wealth. Inequality is customarily measured by the Gini coefficient:

$$G(S) = 1 - \frac{2}{n-1}\left(n - \frac{\sum_{i=1}^{n} i y_i}{\sum_{i=1}^{n} y_i}\right) ,$$

[18] We use RAND HRS data. Financial wealth is defined as the sum of balances in checking and money market accounts, CDs, stocks, bonds, and IRAs. Total wealth includes any secondary residence.

[19] For consistency with the other figures, we calculate all values in 2004 dollars.

where there is a sample of $n$ observations each with wealth $y_i$ indexed on non-decreasing order. A value of one occurs when there is perfect inequality, with all the wealth in the society owned by a single household. A value of zero is obtained when there is perfect equality.

We first calculate Gini coefficients for 1994 financial and total wealth, the values being 0.786 and 0.645, respectively. The numbers decline slightly to 0.771 and 0.641 once actual inheritances received during the period 1994-2004 are included and to 0.758 and 0.638 once anticipated inheritances are included. We conclude that the inclusion of actual or anticipated inheritances in household wealth has little effect on inequality. On average, the inheritances received by wealthy households represent a smaller proportion of their existing wealth. The inclusion of inheritances would substantially reduce wealth inequalities if every household in each wealth decile received the average inheritance for households in that decile. However, inheritance receipts are highly unequal within each wealth decile.

We then calculate Gini coefficients for 2004 financial and total wealth, the values being 0.855 and 0.686, respectively. When we exclude inheritances received between 1994 and 2004, the coefficients decline to 0.805 and 0.670, respectively.[20] This analysis suggests that inheritances modestly increase wealth inequality, assuming that inheritances are saved and not consumed. This is a reasonable assumption for life-cycle savers receiving an unanticipated inheritance shortly before 2004. But it may not be true in other cases. A non-liquidity-constrained household behaving in accordance with the predictions of the life-cycle model would choose to consume a perfectly anticipated inheritance over its entire lifetime. Its wealth will be lower before and higher immediately after receipt than that of an equivalent household that correctly believes it will never receive an inheritance. In contrast, the wealth of a household saving mainly for precautionary reasons will increase on receipt of an inheritance, but will then decline to its original level, so that the receipt has no long-run effect on the household's wealth. The true measure of the impact of inheritances on each household's wealth is obtained by comparing the wealth of the recipient with that of the equivalent non-recipient. In the above example, the long-run effect of inheritances will have been to increase wealth inequality.

[20] We divide the wealth of married households by an equivalence scale of 1.7, and use 1994 HRS household-level weights. We further assume that financial and total wealth cannot be less than zero, and exclude real investment returns from our calculation.

Given the above issues, an arguably better measure of the distributional impact of inheritances is their percentage impact on the lifetime resources available to the household. In the absence of inheritances. and ignoring taxes and government transfers, lifetime resources equal the present value of the household's labor market earnings at age 50, $\sum_{t=18}^{t=65} B^{t-50} W_t$, where $W_t$ is the household's real wage at time t, and $B$ is a discount factor, assumed to be 0.97. We calculate a Gini coefficient for lifetime earnings, add the age 50 present value of inheritances, and recalculate the Gini coefficient.

We calculate real wages using the restricted HRS Social Security earnings records. These records are available to calendar year 2003 for 2,305 of the 6,749 households in our sample. We assume that individuals who have not yet retired continue to work until age 63, the average retirement age for the HRS birth cohort, and project earnings using the methodology of Bosworth, Burtless, and Steuerle (1999). We then sort households by lifetime income decile.[21] We observe the dates and amounts of inheritance receipts up to 2006. As we are measuring the impact of inheritance receipt on lifetime resources we calculate inheritance receipts in age 65 present value terms using the CPI and a 3 percent real interest rate. We do not include anticipated or projected receipts. Undiscounted anticipated receipts are relatively small, with a mean of only $12,372, reflecting the fact that by 2004 few of this birth cohort have surviving parents, so including anticipated receipts would not significantly affect the results.

Table 4 shows our results. Lifetime income averages $110,308 in the bottom decile and $4,084,727 in the top decile. In dollar terms, there is almost no relationship between inheritance receipts and lifetime income. But receipts as a percentage of income decline from 29.2 percent in the bottom decile to 1.1 percent in the top. From this standpoint, inheritances equalize the distribution of lifetime resources available to the household. But as with the wealth analysis, this is going to be offset by the highly unequal distribution of inheritance receipts within each

[21] We again use an equivalence scale of 1.7 to convert the incomes and inheritances of single individuals to married couple equivalents.

lifetime income decile. As a result, the inclusion of inheritances actually increases the lifetime income Gini coefficient by a small amount, from .342 to .361.

*3.4 Forecasting errors*

We now consider whether households make systematic forecasting errors. We first create a forecasting error variable $I - E_r$, where $I$ is an indicator variable taking the value one if the household received an inheritance between 1994 and 2004, and $E_r$ is the household's estimate of the probability of receipt, expressed as a decimal. A positive value indicates that the household received an inheritance that was to some extent unexpected. A negative value indicates that the household failed to receive an expected inheritance. We estimate an OLS model with forecasting error as our dependent variable, and the same control variables used in our previous models. A positive and statistically significant coefficient on an explanatory variable indicates that the socioeconomic characteristic in question is associated with excessive pessimism. A negative value indicates that it is associated with excessive optimism. We expect coefficients to lack statistical significance if households do not make systematic forecasting errors.

Tables 5A and 5B report our results. We find the coefficients on the dependent variables do indeed generally lack statistical significance. There is no evidence that particular socioeconomic groups are prone to systematic bias. But the coefficients on the variables indicating that the husband and wife have no surviving parent are positive and significant, indicating that households with no surviving parent understate the probability of receipt. Further investigation reveals that the inheritances received by these households are almost invariably reported as coming from deceased parents. We conclude that the positive coefficient likely reflects a combination of reporting error and the exclusion from anticipated, but not from actual receipts of assets that were in the process of being legally transferred to the household.

*3.5 Do households that anticipate receiving an inheritance save less and consume more than other similar households?*

According to the life-cycle model of savings behavior, a non-liquidity-constrained household that perfectly anticipates receipt of an inheritance at some future date will not adjust its consumption on receipt of that inheritance. It will choose to enjoy greater consumption in

periods both before and after receipt of the inheritance, and will accumulate less wealth prior to receipt than an otherwise identical household that correctly anticipated that it would not receive an inheritance. But households may be uncertain of the timing and amount of receipt. Assuming constant relative risk-aversion utility, the resolution of uncertainty regarding the amount of the inheritance will result in an increase in consumption. Households that attach some probability to receiving an inheritance will accumulate more wealth than those that are certain of receipt, but less than those who are certain they will not receive an inheritance.

Since we showed that there is no systematic forecasting error, we estimate a model in which the dependent variable is the natural log of 1994 wealth, and include two different measures of inheritance expectations as explanatory variables. Column 6.1 in Tables 6A (married couples) and 6B (single men and women) report the results of OLS regressions in which log 1994 financial assets is the dependent variable and the self-assessed probability of receipt is included on the right-hand side. Column 6.2 report the results of similar regressions in which the right-hand side instead includes the log of the expected receipt, the expected amount multiplied by the probability of receipt, with the log of zero being set to zero, and an indicator variable for the household reporting a positive expectation of receiving an inheritance.

In contrast with the predictions of the life-cycle model, households that expected to receive an inheritance actually save more than other similar households. The same is true for households that anticipate receiving larger inheritances. However, these findings do not necessarily violate the life-cycle model. They may reflect intergenerational correlation in tastes or aptitude for savings. For example, parents who invested in stocks over their lifetime may both accumulate greater wealth and reduce their children's barriers to stock market participation. Another potential explanation is that households anticipating the receipt of an inheritance may already have received greater assistance from their parents than other similar households, for example, with college tuition, house purchases, and so on.

## 4. Conclusions

We find evidence that individuals are slightly optimistic in their probability of receiving an inheritance on average. However, the estimates of the probability of receipt and the dollar

amount receivable vary appropriately with the predictors of actual receipts. In addition, we find little evidence that households generally, or even particular household types, make systematic forecasting errors.

Although inheritances are received by those already well-placed for retirement, they have little impact on wealth inequality as measured by Gini coefficients. But the present value of lifetime earnings is a better measure of the resources available to the household. We show that there is little correlation between inheritance receipts and lifetime earnings. One might therefore expect that the inclusion of inheritance receipts would substantially reduce inequality. In fact, it has little effect, because this lack of correlation is offset by the highly unequal distribution of inheritance receipts within each lifetime income decile.

The life-cycle model of savings behavior postulates that households anticipating receipt of an inheritance should accumulate less wealth prior to receipt than other similar households. In contrast, we find that households anticipating receipt actually accumulate greater wealth than other observably similar households. We conjecture this might reflect unobserved intergenerational correlation in tastes for saving or asset allocation.

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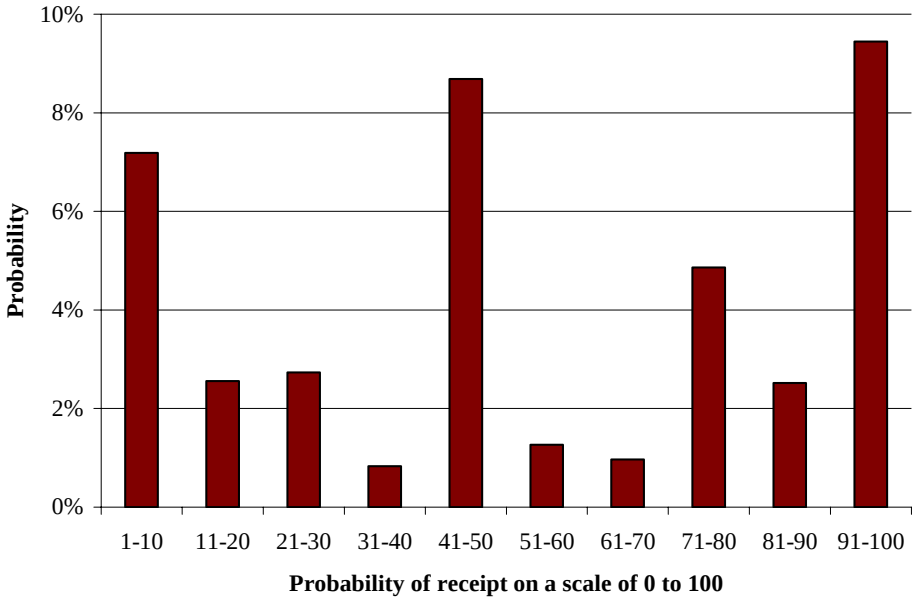
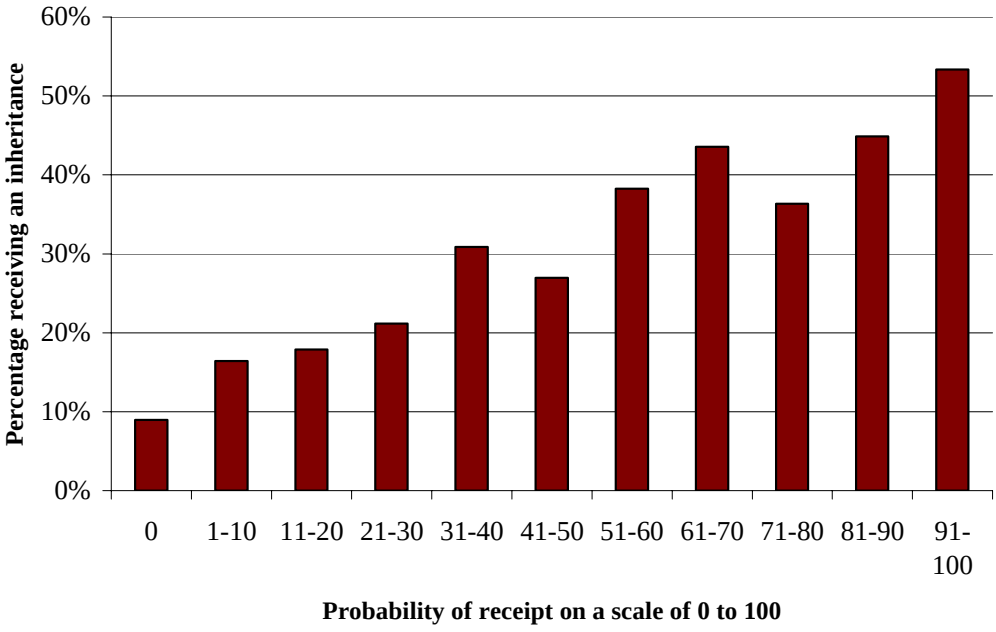
Figure 1. *Distribution of Subjective Assessments of Probability of Inheritance Receipt*



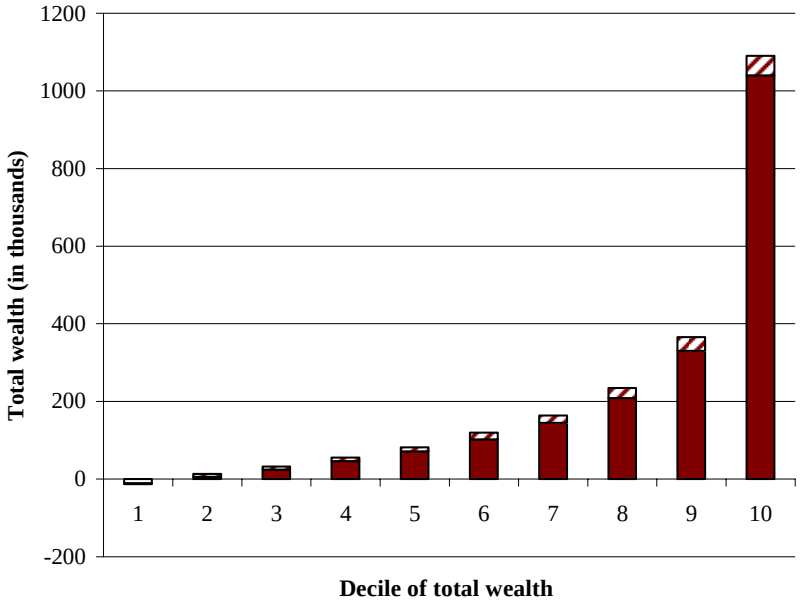

Source: Authors' calculations from HRS data.

Figure 2. *Inheritance Receipt 1994-2004, by 1994 Self-Assessed Probability of Receipt*



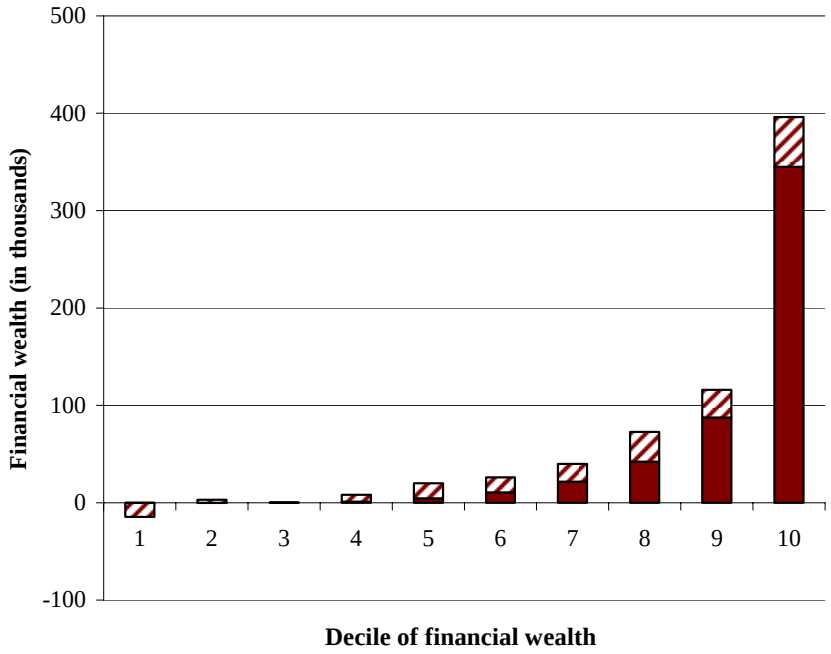

Source: Authors' calculations from HRS data.

Figure 3A. *Impact of Inheritance Receipt on 1994 Financial Wealth, by Decile*



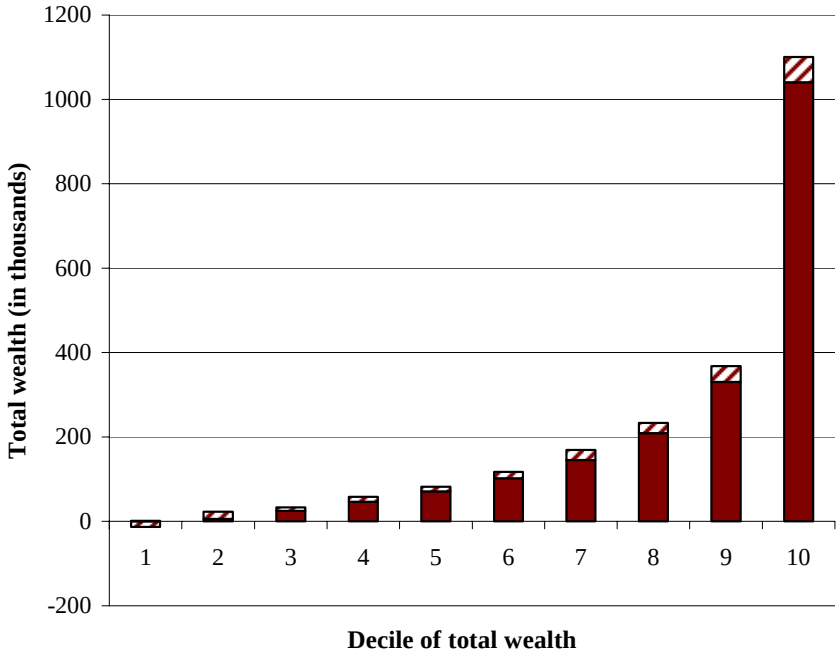

Note: The solid line shows the mean financial wealth of households sorted into financial wealth decile. The shaded line shows the financial wealth after the addition of inheritances received. All values are in 2004 dollars.
Source: Authors' calculations from HRS data.

Figure 3B. *Impact of Inheritance Receipt on 1994 Total Wealth, by Decile*




Note: The solid line shows the mean total wealth of households sorted into total wealth decile. The shaded line shows the total wealth after the addition of inheritances received. All values are in 2004 dollars.
Source: Authors' calculations from HRS data.

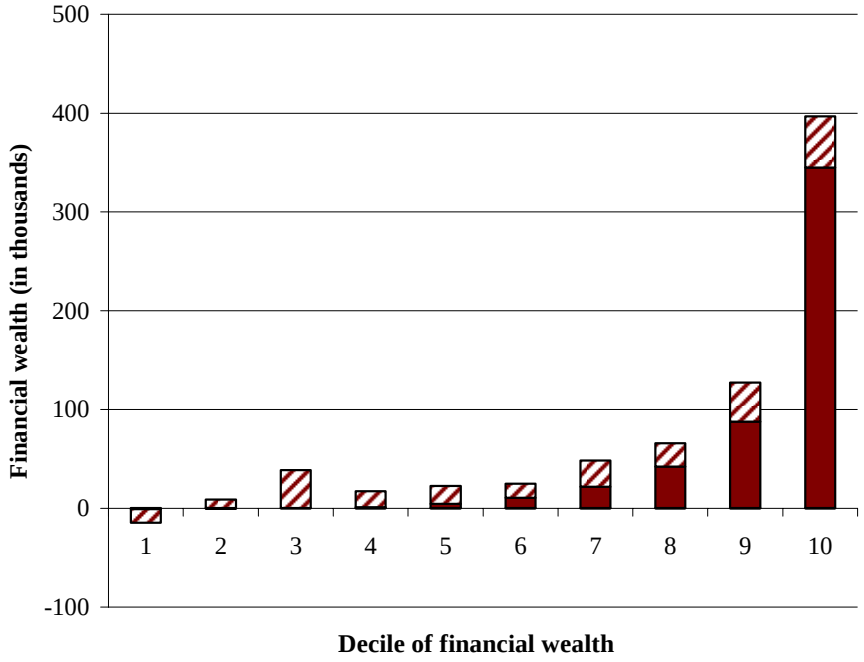
Figure 4A. *Impact of Anticipated Inheritance Receipt on 1994 Financial Wealth, by Decile*




Note: The solid line shows the mean financial wealth of households sorted into financial wealth decile. The shaded line shows the financial wealth after the addition of anticipated inheritances. All values are in 2004 dollars.

Source: Authors' calculations from HRS data.

Figure 4B. *Impact of Anticipated Inheritance Receipt on 1994 Total Wealth, by Decile*




Note: The solid line shows the mean total wealth of households sorted into total wealth decile. The shaded line shows the total wealth after the addition of anticipated inheritances. All values are in 2004 dollars.
Source: Authors' calculations from HRS data.

**Figure 5**

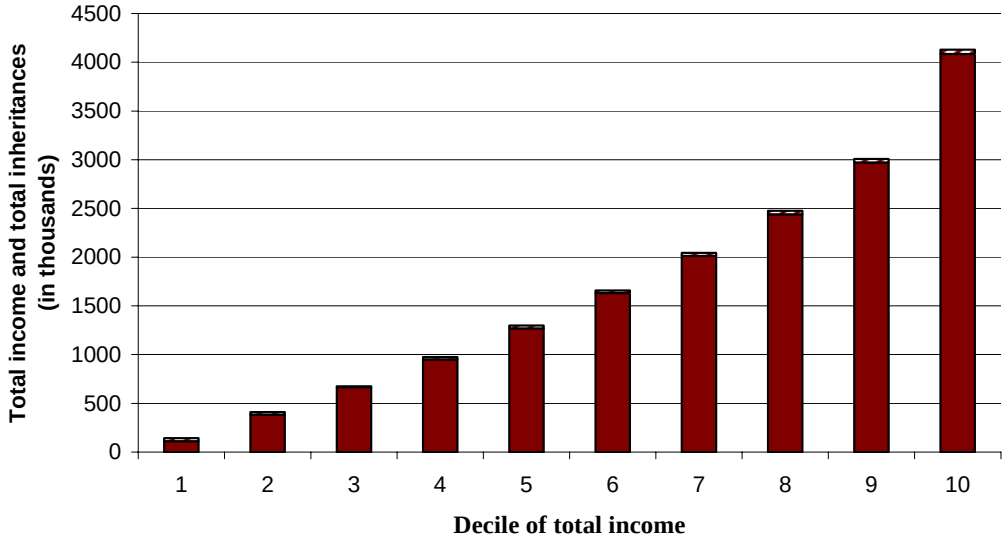


**Table 1A.** ***Comparison of Recipients with Non-recipients of Inheritances - Married Couples***

| | Receipts at any time | | | Receipts 1994-2004 | | |
|---|---|---|---|---|---|---|
| | Recipients | Non-recipients | t-Statistic | Recipients | Non-recipients | t-Statistic |
| Own education: | | | | | | |
| Less than high school | 0.04% | 0.02% | 12.77 | 0.04% | 0.01% | 9.22 |
| High school | 0.49 | 0.52 | 2.15 | 0.44 | 0.53 | 4.17 |
| Some college | 0.47 | 0.31 | -11.86 | 0.52 | 0.33 | -11.41 |
| Wife's education | | | | | | |
| Less than high school | 0.02 | 0.10 | 11.58 | 0.02 | 0.09 | 8.71 |
| High school | 0.59 | 0.64 | 1.92 | 0.58 | 0.63 | 2.46 |
| Some college | 0.38 | 0.24 | -10.57 | 0.40 | 0.26 | -9.24 |
| Husband's father's education | | | | | | |
| Less than high school | 0.51 | 0.57 | 4.27 | 0.49 | 0.57 | 4.89 |
| High school | 0.25 | 0.21 | -3.55 | 0.24 | 0.22 | -2.76 |
| Some college | 0.17 | 0.08 | -10.11 | 0.20 | 0.09 | -9.50 |
| Black | 0.02 | 0.10 | 13.09 | 0.02 | 0.09 | 8.91 |
| Hispanic | 0.02 | 0.08 | 10.94 | 0.02 | 0.07 | 7.70 |
| Both parents dead in 1994 | 0.59 | 0.59 | -0.01 | 0.50 | 0.61 | 6.14 |
| Spouse - both parents dead in 1994 | 0.48 | 0.50 | 1.10 | 0.38 | 0.52 | 7.29 |
| Probability of receiving an inheritance 1994-2004 | 0.37 | 0.18 | -19.60 | 0.45 | 0.19 | -24.49 |
| Number of siblings | 2.34 | 2.86 | 7.37 | 2.32 | 2.77 | 5.60 |
| Median 1994 income | $56,200 | $42,000 | 143.81 | $60,400 | $43,590 | 124.85 |
| Median 1994 net worth | 137,647 | 75,000 | 259.82 | 135,882 | 83,235 | 127.08 |
| Anticipated dollar amount, conditional on expecting | 75,319 | 41,573 | -5.96 | 80,628 | 44,684 | -5.59 |
| Mean amount received | 124,416 | 0 | -30.54 | 110,323 | 0 | -33.89 |
| Median amount received | 50,305 | 0 | 4700 | 44,000 | 0 | 4700 |

Notes: 4,673 married couples in 1994 wave of HRS. HRS sample weights. All amounts in 2004 dollars. Income is total household income in 1994, net worth is total assets minus debts.

Source: Authors' calculations from HRS data.

**Table 1B.** ***Comparison of Recipients with Non-recipients of Inheritances - Single Men and Women***

| | Receipts at any time | | | Receipts 1994-2004 | | |
|---|---|---|---|---|---|---|
| | Recipients | Non-recipients | t-Statistic | Recipients | Non-recipients | t-Statistic |
| Education: | | | | | | |
| Less than high school | 0.03% | 0.01% | 7.40 | 0.02% | 0.01% | 5.93 |
| High school | 0.52 | 0.59 | 2.51 | 0.54 | 0.58 | 1.33 |
| Some college | 0.45 | 0.27 | -8.41 | 0.44 | 0.29 | -5.95 |
| Father's education | | | | | | |
| Less than high school | 0.45 | 0.56 | 4.00 | 0.44 | 0.55 | 3.10 |
| High school | 0.26 | 0.19 | -4.03 | 0.26 | 0.20 | -3.38 |
| Some college | 0.20 | 0.09 | -7.58 | 0.22 | 0.10 | -6.13 |
| Black | 0.05 | 0.21 | 11.80 | 0.05 | 0.19 | 7.94 |
| Hispanic | 0.03 | 0.09 | 4.39 | 0.03 | 0.08 | 3.07 |
| Both parents dead in 1994 | 0.56 | 0.60 | 1.90 | 0.39 | 0.62 | 6.90 |
| Probability of receiving an inheritance 1994-2004 | 0.33 | 0.12 | -13.33 | 0.45 | 0.13 | -16.28 |
| Number of siblings | 2.18 | 2.97 | 7.22 | 2.33 | 2.83 | 4.16 |
| Median income | $25,000 | $15,500 | 75.90 | $25,800 | $16,500 | 55.01 |
| Median net worth | 103,325 | 33,000 | 101.94 | 103,325 | 37,000 | 49.89 |
| Anticipated dollar amount, conditional on expecting | 80,630 | 101,666 | 1.18 | 82,358 | 97,148 | 0.80 |
| Mean amount received | 110,315 | 0 | -19.20 | 86,903 | 0 | -23.56 |
| Median amount receiced | 43,879 | 0 | 2200 | 34,415 | 0 | 2200 |

Notes: See Table 1A. 2,076 single men and women in 1994 wave of HRS.

Source: Authors' calculations from HRS data.

**Table 2A.** ***Models of Inheritance Receipts 1994-2004 - Married Couples***

| | Received ANY inheritance 1994-2004 | | | Log dollar amount received, conditional on receiving anything | | | Log dollar amount received, entire sample | | |
|---|---|---|---|---|---|---|---|---|---|
| | Probit marginal effect | | Standard error | Coefficient | | Standard error | Coefficient | | Standard error |
| | | | 2.1 | | | 2.2 | | | 2.3 |
| Own education | | | | | | | | | |
| Less than high school | -0.067 | ** | 0.020 | 0.038 | | 0.284 | -0.310 | ** | 0.155 |
| Some college | 0.024 | | 0.016 | 0.244 | ** | 0.120 | 0.448 | ** | 0.175 |
| Wife's education | | | | | | | | | |
| Less than high school | -0.085 | ** | 0.026 | -0.418 | | 0.428 | -0.318 | * | 0.167 |
| Some college | 0.005 | | 0.015 | 0.261 | ** | 0.112 | 0.237 | | 0.182 |
| Father's education | | | | | | | | | |
| Less than high school | 0.020 | | 0.017 | -0.060 | | 0.126 | 0.235 | | 0.203 |
| Some college | 0.059 | ** | 0.026 | 0.053 | | 0.153 | 0.902 | ** | 0.313 |
| Not known | 0.007 | | 0.030 | 0.186 | | 0.230 | 0.152 | | 0.288 |
| Mother's education | | | | | | | | | |
| Less than high school | -0.023 | | 0.016 | -0.190 | | 0.120 | -0.345 | * | 0.193 |
| Some college | 0.042 | * | 0.025 | 0.010 | | 0.145 | 0.541 | * | 0.316 |
| Not known | -0.036 | | 0.028 | -0.671 | ** | 0.258 | -0.526 | * | 0.282 |
| Excellent or very good health | 0.020 | | 0.013 | 0.249 | ** | 0.107 | 0.264 | * | 0.138 |
| Spouse - excellent or very good health | 0.018 | | 0.013 | -0.152 | | 0.105 | 0.175 | | 0.143 |
| Black | -0.098 | ** | 0.022 | 0.279 | | 0.389 | -0.714 | ** | 0.181 |
| Hispanic | -0.089 | ** | 0.036 | -0.649 | | 1.001 | -0.574 | ** | 0.250 |
| Log income | 0.036 | ** | 0.008 | 0.224 | ** | 0.074 | 0.272 | ** | 0.047 |
| Age of household head in 1994 | -0.001 | | 0.001 | 0.015 | | 0.014 | -0.016 | | 0.013 |
| Both parents dead in 1994 | -0.044 | ** | 0.014 | -0.293 | ** | 0.115 | -0.625 | ** | 0.152 |
| Spouse - both parents dead in 1994 | -0.062 | ** | 0.013 | -0.369 | ** | 0.111 | -0.726 | ** | 0.141 |
| Mother's relative age | 0.006 | ** | 0.002 | 0.021 | | 0.015 | 0.077 | ** | 0.019 |
| Father's relative age | 0.006 | ** | 0.003 | -0.017 | | 0.027 | 0.064 | ** | 0.029 |
| Spouse's mother's relative age | 0.002 | * | 0.001 | -0.009 | | 0.010 | 0.026 | | 0.016 |
| Spouse's father's relative age | 0.005 | ** | 0.002 | 0.001 | | 0.014 | 0.063 | ** | 0.023 |
| Number of siblings | -0.006 | ** | 0.003 | -0.132 | ** | 0.030 | -0.085 | ** | 0.026 |
| Number of siblings missing | -0.089 | ** | 0.031 | -1.213 | ** | 0.396 | -0.810 | ** | 0.314 |
| Spouse - number of siblings | -0.011 | ** | 0.003 | -0.134 | ** | 0.027 | -0.137 | ** | 0.027 |
| Spouse - number of siblings missing | -0.072 | ** | 0.028 | -0.357 | | 0.384 | -0.913 | ** | 0.309 |
| Parent cannot be left alone | -0.128 | ** | 0.025 | -0.344 | | 0.321 | -1.492 | ** | 0.317 |
| Constant term | -- | | -- | 7.943 | # | | 1.261 | | 0.936 |

Notes: Same total sample as in Table 1A, N = 4,673. The first and second columns report marginal effects from probits estimated using household-level analysis weights, computed at sample means of righthand-side variables; Huber-White standard errors, and significance at 90 (*) and 95 percent (**) levels. The dependent variable is a dummy taking the value one if the household reports receiving an inheritance between 1994 and 2004, zero otherwise. The third and fourth columns report coefficients and standard errors from an OLS model in which the dependent variable is the log of the dollar amount received, conditional on receiving anything. Columns five and six report similar results for the whole sample, treating the log of zero as zero.

Source: Authors' calculations from HRS data.

**Table 2B.** ***Models of Inheritance Receipts 1994-2004 - Single Men and Women***

| | Received ANY inheritance 1994-2004 | | | Log dollar amount received, conditional on receiving anything | | | Log dollar amount received, entire sample | | |
|---|---|---|---|---|---|---|---|---|---|
| | Probit marginal effect | | Standard error | Coefficient | | Standard error | Coefficient | | Standard error |
| | | | 2.1 | | | 2.2 | | | 2.3 |
| Own education | | | | | | | | | |
| Less than high school | -0.106 | ** | 0.019 | 0.270 | | 0.743 | -0.715 | ** | 0.176 |
| Some college | 0.000 | | 0.020 | 0.812 | ** | 0.243 | 0.194 | | 0.244 |
| Father's education | | | | | | | | | |
| Less than high school | -0.032 | | 0.023 | -0.403 | | 0.274 | -0.410 | | 0.287 |
| Some college | 0.019 | | 0.032 | 0.054 | | 0.365 | 0.448 | | 0.475 |
| Not known | -0.039 | | 0.029 | -0.042 | | 0.396 | -0.483 | | 0.349 |
| Mother's education | | | | | | | | | |
| Less than high school | -0.004 | | 0.022 | 0.099 | | 0.289 | -0.062 | | 0.260 |
| Some college | 0.049 | | 0.035 | 0.127 | | 0.373 | 0.711 | | 0.470 |
| Not known | -0.021 | | 0.037 | -0.714 | | 0.477 | -0.168 | | 0.344 |
| Excellent or very good health | 0.029 | | 0.018 | -0.207 | | 0.226 | 0.275 | | 0.198 |
| Black | -0.077 | ** | 0.019 | -0.407 | | 0.553 | -0.717 | ** | 0.193 |
| Hispanic | -0.050 | | 0.050 | -1.090 | | 1.022 | -0.506 | | 0.410 |
| Log income | 0.007 | | 0.005 | 0.007 | | 0.059 | 0.071 | * | 0.043 |
| Age in 1994 | -0.001 | | 0.003 | -0.048 | | 0.038 | -0.018 | | 0.031 |
| Both parents dead | -0.079 | ** | 0.019 | -0.540 | ** | 0.240 | -0.975 | ** | 0.212 |
| Mother's relative age | 0.003 | | 0.002 | 0.034 | | 0.033 | 0.041 | | 0.031 |
| Father's relative age | 0.011 | ** | 0.004 | -0.052 | | 0.047 | 0.138 | ** | 0.054 |
| Number of siblings | -0.006 | | 0.004 | -0.076 | | 0.054 | -0.064 | * | 0.035 |
| Number of siblings missing | -0.105 | ** | 0.023 | -0.262 | | 0.531 | -1.206 | ** | 0.284 |
| Parent cannot be left alone | 0.059 | | 0.043 | -0.811 | * | 0.415 | 0.524 | | 0.516 |
| Constant term | -- | | -- | 13.214 | | 2.287 | 2.850 | | 1.844 |

Notes: See Table 2A. Same total as sample in Table 1B, N=2,076.
Source: Authors' calculations from HRS data.

**Table 3A.** ***Models of Anticipated Inheritance Receipt 1994-2004 - Married Couples***

| | Reports positive probability of receiving inheritance | | | Probability of receiving an inheritance | | | Log anticipated dollar amount, conditional on expecting something | | | Log anticipated dollar amount, entire sample | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Probit marginal effect | | Standard error | Coefficient | | Standard error | Coefficient | | Standard error | Coefficient | | Standard error |
| | | | 3.1 | | | 3.2 | | | 3.3 | | | 3.4 |
| Own education | | | | | | | | | | | | |
| Less than high school | -0.061 | ** | 0.028 | -0.033 | ** | 0.011 | 0.144 | | 0.171 | -0.895 | ** | 0.191 |
| Some college | 0.029 | | 0.021 | 0.029 | ** | 0.012 | 0.269 | ** | 0.108 | 0.749 | ** | 0.191 |
| Wife's education | | | | | | | | | | | | |
| Less than high school | -0.049 | | 0.033 | -0.032 | ** | 0.013 | 0.395 | * | 0.231 | -0.337 | | 0.229 |
| Some college | 0.025 | | 0.021 | 0.050 | ** | 0.012 | 0.072 | | 0.104 | 0.026 | | 0.193 |
| Father's education | | | | | | | | | | | | |
| Less than high school | -0.002 | | 0.023 | -0.011 | | 0.013 | -0.085 | | 0.114 | -0.023 | | 0.212 |
| Some college | -0.026 | | 0.033 | 0.004 | | 0.019 | 0.076 | | 0.147 | 0.032 | | 0.307 |
| Not known | 0.040 | | 0.037 | -0.028 | | 0.018 | 0.028 | | 0.185 | -0.267 | | 0.313 |
| Mother's education | | | | | | | | | | | | |
| Less than high school | -0.044 | ** | 0.022 | -0.026 | ** | 0.013 | -0.050 | | 0.113 | -0.498 | ** | 0.202 |
| Some college | -0.001 | | 0.032 | 0.013 | | 0.019 | 0.325 | ** | 0.148 | 0.287 | | 0.310 |
| Not known | -0.101 | ** | 0.037 | -0.049 | ** | 0.018 | 0.063 | | 0.209 | -1.064 | ** | 0.308 |
| Excellent or very good health | 0.052 | ** | 0.017 | 0.043 | ** | 0.009 | 0.046 | | 0.094 | 0.455 | ** | 0.151 |
| Spouse - excellent or very good health | 0.024 | | 0.017 | 0.009 | | 0.010 | 0.013 | | 0.090 | 0.447 | ** | 0.156 |
| Black | 0.038 | | 0.036 | -0.073 | ** | 0.014 | 0.169 | | 0.205 | -0.169 | | 0.293 |
| Hispanic | -0.033 | | 0.051 | -0.084 | ** | 0.017 | -0.239 | | 0.399 | -0.998 | ** | 0.347 |
| Log income | 0.020 | ** | 0.008 | 0.019 | ** | 0.003 | 0.123 | ** | 0.049 | 0.146 | ** | 0.063 |
| Age of household head in 1994 | -0.008 | ** | 0.002 | -0.003 | ** | 0.001 | 0.017 | | 0.011 | -0.060 | ** | 0.015 |
| Both parents dead | -0.237 | ** | 0.017 | -0.156 | ** | 0.010 | -0.525 | ** | 0.100 | -2.528 | ** | 0.167 |
| Spouse - both parents dead | -0.133 | ** | 0.017 | -0.129 | ** | 0.009 | -0.288 | ** | 0.094 | -1.116 | ** | 0.151 |
| Mother's relative age | 0.003 | | 0.002 | 0.003 | ** | 0.001 | 0.001 | | 0.011 | 0.034 | | 0.022 |
| Father's relative age | 0.008 | ** | 0.004 | 0.004 | * | 0.002 | -0.019 | | 0.018 | 0.050 | | 0.035 |
| Spouse's mother's relative age | 0.002 | | 0.002 | 0.002 | * | 0.001 | -0.003 | | 0.010 | 0.019 | | 0.017 |
| Spouse's father's relative age | 0.001 | | 0.003 | 0.006 | ** | 0.001 | 0.006 | | 0.013 | 0.043 | * | 0.024 |
| Number of siblings | -0.011 | ** | 0.004 | -0.009 | ** | 0.002 | -0.088 | ** | 0.023 | -0.104 | ** | 0.030 |
| Number of siblings missing | 0.034 | | 0.050 | -0.034 | | 0.026 | -0.252 | | 0.410 | -0.465 | | 0.389 |
| Spouse - number of siblings | -0.019 | ** | 0.004 | -0.014 | ** | 0.002 | -0.074 | ** | 0.026 | -0.185 | ** | 0.030 |
| Spouse - number of siblings missing | -0.073 | * | 0.041 | -0.038 | * | 0.022 | -0.297 | | 0.248 | -1.021 | ** | 0.354 |
| Parent cannot be left alone | -0.157 | ** | 0.053 | -0.092 | ** | 0.032 | -0.088 | | 0.337 | -1.263 | ** | 0.522 |
| Constant term | -- | | -- | 0.431 | | 0.067 | 8.345 | | 0.852 | 8.459 | | 1.194 |

Notes: Same total sample as in Table 1A, N = 4,673. The first and second columns report marginal effects from probits estimated using household-level analysis weights, computed at sample means of righthand-side variables; Huber-White standard errors, and significance at 90 (*) and 95 percent (**) levels. The dependent variable is a dummy taking the value one if either spouse reports a non-zero probability of receiving an inheritance between 1994 and 2004, zero otherwise. The third and fourth columns report coefficients and standard errors from an OLS model in which the dependent variable is the average of the husband's and wife's estimates of the probability of receipt, evaluated on a scale of zero to one. The fifth and sixth columns report coefficients and standard deviations from an OLS model in which the dependent variable is the log of the anticipated dollar amount, conditional on anticipating anything. Columns seven and eight report similar results for the whole sample, treating the log of zero as zero.

Source: Authors' calculations from HRS data.

**Table 3B.** ***Models of Anticipated Inheritance Receipt 1994-2004 - Single Men and Women***

| | Reports positive probability of receiving inheritance | | Probability of receiving an inheritance | | Log anticipated dollar amount, conditional on expecting something | | Log anticipated dollar amount, entire sample | |
|---|---|---|---|---|---|---|---|---|
| | Probit marginal effect | Standard error | Coefficient | Standard error | Coefficient | Standard error | Coefficient | Standard error |
| | | 3.1 | | 3.2 | | 3.3 | | 3.4 |
| Own education | | | | | | | | |
| Less than high school | -0.174 ** | 0.033 | -0.053 ** | 0.015 | 0.172 | 0.438 | -1.155 ** | 0.258 |
| Some college | 0.086 ** | 0.029 | 0.063 ** | 0.020 | 0.128 | 0.159 | 0.891 ** | 0.291 |
| Father's education | | | | | | | | |
| Less than high school | -0.054 | 0.034 | -0.031 | 0.024 | -0.155 | 0.187 | -0.541 | 0.333 |
| Some college | 0.026 | 0.048 | 0.032 | 0.035 | 0.065 | 0.227 | 0.402 | 0.493 |
| Not known | -0.092 ** | 0.045 | -0.053 * | 0.030 | -0.095 | 0.415 | -0.875 ** | 0.443 |
| Mother's education | | | | | | | | |
| Less than high school | -0.040 | 0.032 | -0.042 * | 0.021 | -0.262 | 0.169 | -0.512 * | 0.309 |
| Some college | 0.019 | 0.049 | 0.028 | 0.035 | -0.009 | 0.255 | 0.193 | 0.492 |
| Not known | -0.047 | 0.056 | -0.022 | 0.034 | 0.138 | 0.653 | -0.426 | 0.490 |
| Excellent or very good health | 0.102 ** | 0.026 | 0.040 ** | 0.016 | 0.080 | 0.151 | 0.940 ** | 0.239 |
| Black | -0.012 | 0.041 | -0.037 * | 0.020 | -0.044 | 0.383 | -0.205 | 0.355 |
| Hispanic | -0.083 | 0.077 | -0.063 ** | 0.023 | -0.317 | 0.632 | -0.445 | 0.557 |
| Log income | -0.003 | 0.006 | -0.002 | 0.004 | 0.029 | 0.039 | -0.015 | 0.054 |
| Age in 1994 | -0.012 ** | 0.004 | -0.005 ** | 0.002 | -0.049 ** | 0.022 | -0.127 ** | 0.036 |
| Both parents dead | -0.263 ** | 0.026 | -0.199 ** | 0.017 | -0.493 ** | 0.159 | -2.673 ** | 0.257 |
| Mother's relative age | 0.004 | 0.003 | 0.007 ** | 0.003 | 0.000 | 0.021 | 0.044 | 0.035 |
| Father's relative age | 0.003 | 0.006 | 0.007 | 0.005 | 0.045 * | 0.026 | 0.059 | 0.065 |
| Number of siblings | -0.006 | 0.005 | -0.007 ** | 0.003 | -0.102 ** | 0.035 | -0.089 ** | 0.044 |
| Number of siblings missing | -0.059 | 0.066 | -0.028 | 0.039 | 0.407 | 0.485 | -0.498 | 0.606 |
| Parent cannot be left alone | -0.103 ** | 0.044 | -0.120 ** | 0.037 | -0.183 | 0.271 | -1.275 ** | 0.544 |
| Constant term | -- | -- | 0.643 | 0.151 | 13.013 | 1.329 | 12.849 | 2.159 |

Notes: See Table 3A. Same total sample as in Table 1B, N = 2,076.

Source: Authors' calculations from HRS data.

**Table 4.** ***Lifetime Income and Inheritance Receipts by Lifetime Income Decile***

| | Average present value of: | | |
|---|---|---|---|
| income decile | Lifetime income | Inheritance receipts | income and inheritance receipts |
| 1 | $110,308 | $32,262 | $142,570 |
| 2 | 385,268 | 23,757 | 409,025 |
| 3 | 665,047 | 10,719 | 675,766 |
| 4 | 949,525 | 25,184 | 974,709 |
| 5 | 1,269,412 | 29,873 | 1,299,285 |
| 6 | 1,630,626 | 27,050 | 1,657,676 |
| 7 | 2,013,428 | 31,258 | 2,044,686 |
| 8 | 2,439,681 | 36,430 | 2,476,111 |
| 9 | 2,971,545 | 36,827 | 3,008,372 |
| 10 | 4,084,727 | 44,141 | 4,128,868 |

Notes: Total sample: N=2,305. 1994 HRS sample weights. All amounts are in 2004 dollars. Lifetime income is discounted to age 50. Married household wealth is divided by a 1.7 equivalence scale to make it comparable to single households.

Source: Authors' calculations from HRS data.

**Table 5A.** ***Models of Forecasting Errors 1994-2004 - Married Couples***

| | Receipt minus estimated probability of receipt | | |
|---|---|---|---|
| | Coefficient | | Standard error |
| Own education | | | |
| Less than high school | -0.003 | | 0.017 |
| Some college | 0.006 | | 0.018 |
| Wife's education | | | |
| Less than high school | -0.006 | | 0.020 |
| Some college | -0.036 | * | 0.018 |
| Father's education | | | |
| Less than high school | 0.034 | | 0.021 |
| Some college | 0.074 | * | 0.030 |
| Not known | 0.038 | | 0.029 |
| Mother's education | | | |
| Less than high school | -0.002 | | 0.019 |
| Some college | 0.037 | | 0.031 |
| Not known | 0.009 | | 0.029 |
| Excellent or very good health | -0.021 | | 0.014 |
| Spouse - excellent or very good health | 0.011 | | 0.015 |
| Black | 0.000 | | 0.020 |
| Hispanic | 0.032 | | 0.027 |
| Log income | 0.005 | | 0.005 |
| Age of household head in 1994 | 0.002 | | 0.001 |
| Both parents dead | 0.103 | * | 0.015 |
| Spouse - both parents dead | 0.066 | * | 0.014 |
| Mother's relative age | 0.004 | * | 0.002 |
| Father's relative age | 0.002 | | 0.003 |
| Spouse's mother's relative age | 0.001 | | 0.002 |
| Spouse's father's relative age | 0.000 | | 0.002 |
| Number of siblings | 0.003 | | 0.003 |
| Number of siblings missing | -0.037 | | 0.037 |
| Spouse - number of siblings | 0.003 | | 0.003 |
| Spouse - number of siblings missing | -0.039 | | 0.035 |
| Parent cannot be left alone | -0.048 | | 0.036 |
| Constant term | -0.310 | | 0.099 |

Notes: Same total sample as in Table 1A, N = 4,673. The first and second columns report coefficients from an OLS model estimated using household-level analysis weights; Huber-White standard errors, and significance at 90 (*) and 95 percent (**) levels. The dependent variable is the difference between an indicator of whether an inheritance is received between 1994 and 2004 and the average probability of receipt as reported in 1994. The third and fourth columns report coefficients and standard errors from an OLS model in which the dependent variable is the difference between the inheritance amount received between 1994 and 2004 and the anticipated dollar amount, in 2004 dollars.

Source: Authors' calculations from HRS data.

**Table 5B.** ***Models of Forecasting Errors 1994-2004 - Single Men and Women***

| | Receipt minus estimated probability of receipt | | |
|---|---|---|---|
| | Coefficient | | Standard error |
| Own education | | | |
| Less than high school | -0.027 | | 0.021 |
| Some college | -0.058 | * | 0.025 |
| Father's education | | | |
| Less than high school | -0.004 | | 0.029 |
| Some college | 0.006 | | 0.048 |
| Not known | 0.008 | | 0.039 |
| Mother's education | | | |
| Less than high school | 0.036 | | 0.027 |
| Some college | 0.036 | | 0.048 |
| Not known | 0.009 | | 0.042 |
| Excellent or very good health | -0.008 | | 0.021 |
| Black | -0.034 | | 0.026 |
| Hispanic | 0.017 | | 0.047 |
| Log income | 0.009 | * | 0.005 |
| Age in 1994 | 0.004 | | 0.003 |
| Both parents dead | 0.113 | * | 0.022 |
| Mother's relative age | -0.004 | | 0.003 |
| Father's relative age | 0.008 | | 0.006 |
| Number of siblings | 0.001 | | 0.004 |
| Number of siblings missing | -0.087 | * | 0.047 |
| Parent cannot be left alone | 0.192 | * | 0.050 |
| Constant term | -0.398 | | 0.196 |

Notes: See Table 5A. Same total sample as in Table 1B, N = 2,076.

Source: Authors' calculations from HRS data.

**Table 6A.** ***Models of Wealth Accumulation - Married Couples***

| | Impact of expected dollar amount | | | Impact of probability of receipt | | |
|---|---|---|---|---|---|---|
| | Coefficient | | Standard error | Coefficient | | Standard error |
| | | | 6.1 | | | 6.2 |
| Own education | | | | | | |
| Less than high school | -1.307 | ** | 0.213 | -1.294 | ** | 0.213 |
| Some college | 0.698 | ** | 0.139 | 0.689 | ** | 0.140 |
| Wife's education | | | | | | |
| Less than high school | -1.601 | ** | 0.272 | -1.623 | ** | 0.271 |
| Some college | 0.505 | ** | 0.139 | 0.550 | ** | 0.139 |
| Great health | 1.087 | ** | 0.125 | 1.109 | ** | 0.125 |
| Spouse's great health | 0.574 | ** | 0.123 | 0.561 | ** | 0.124 |
| Black | -2.308 | ** | 0.210 | -2.345 | ** | 0.208 |
| Hispanic | -1.462 | ** | 0.269 | -1.494 | ** | 0.269 |
| Log income | 0.730 | ** | 0.077 | 0.742 | ** | 0.077 |
| Age of household head in 1994 | 0.118 | ** | 0.012 | 0.116 | ** | 0.012 |
| Probability of receipt | 0.612 | ** | 0.189 | -- | | -- |
| Log expected receipt | -- | | -- | 0.059 | ** | 0.019 |
| Expect inheritance | -- | | -- | -0.424 | | 0.185 |

Notes: Same total sample as in Table 1A, N = 4,673. The first (third) and second (fourth) columns report coefficients and standard errors from an OLS model estimated using household level analysis weights; Huber-White standard errors, and significance at 90 (*) and 95 percent (**) levels. The dependent variable is the natural log of 1994 financial assets.

Source: Authors' calculations from HRS data.

**Table 6B.** ***Models of Wealth Accumulation - Single Individuals***

| | Impact of expected dollar amount | | | Impact of probability of receipt | | |
|---|---|---|---|---|---|---|
| | Coefficient | | Standard error | Coefficient | | Standard error |
| | | | 6.1 | | | 6.2 |
| Education | | | | | | |
| Less than high school | -2.351 | ** | 0.307 | -2.343 | ** | 0.306 |
| Some college | 1.985 | ** | 0.239 | 1.964 | ** | 0.238 |
| Great health | 1.369 | ** | 0.222 | 1.348 | ** | 0.223 |
| Black | -2.794 | ** | 0.223 | -2.789 | ** | 0.221 |
| Hispanic | -1.797 | ** | 0.383 | -1.777 | ** | 0.382 |
| Log income | 0.317 | ** | 0.058 | 0.314 | ** | 0.057 |
| Age in 1994 | 0.099 | ** | 0.032 | 0.107 | ** | 0.032 |
| Probability of receipt | 0.859 | ** | 0.354 | -- | | -- |
| Log expected receipt | -- | | -- | 0.250 | | 0.105 |
| Expect inheritance | -- | | -- | -1.890 | | 1.059 |

Notes: See Table 6A. Same total sample as in Table 1B, N = 2076.

Source: Authors' calculations from HRS data.

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