**The Correlation Between Subjective Parental Longevity and Intergenerational Transfers**

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***Abstract***: Are parental financial transfers to adult children correlated with subjective parental longevity? Despite rapid and continuing increases in life expectancy, no previous study has looked at transfers in relation to parents' opinions of how long they will live. This paper uses the subjective survival probability data included in the Health and Retirement Study to examine this potential correlation for a select group of unmarried older parents. I find no relationship between subjective longevity and reported actual transfers. For *mothers* only, I consistently find modest positive correlations between subjective longevity and anticipated *future* inter vivos transfers and bequests. For *fathers*, I find a non-linear relationship between subjective longevity and anticipated future inter vivos transfers. I discuss the potential reasons for these descriptive results and some further questions that arise from them. [1]

[1] Many thanks to Professors Donald Cox and Peter Gottschalk of Boston College and Professor Kathleen McGarry of UCLA for their comments and advice. Thanks also to Professor I-Fen Lin of Bowling Green State Univerisity for her comments on this paper as a discussant at the Population Association of America Conference, 2009.

Is there any correlation between a parent's subjective longevity and financial transfers given to adult children? Are trends in longevity at all correlated with actual transfers, anticipated bequests or anticipated inter vivos transfers?

The trends in longevity are clear. The life expectancy for American men and women aged 55 increased by around 15% between 1960 and 1990. (Wise, 1997). The US Census Bureau (2002) predicts that life expectancy at birth will increase from 77 years for men in 2002 to 81 years for men in 2025, and from 80 to 84 for women over the same timeframe.

While this paper does not attempt to pin down any causal relationship between subjective longevity and transfers, it is important to understand the patterns observed in the data because of the implications for related issues in family economics. For example, if the data were to show that parents who expected to live longer consistently gave less to their children than parents who expected shorter life spans, that might lead us to consider the implications for intra-family elder care. Transfers are strongly correlated with the services rendered by children to elderly parents. (The positive correlation between past financial transfers to children and caregiving provided to elderly parents is shown by Henretta, et al (1997) and Koh and MacDonald (2006)). If the group that will be living longer is giving less, there could be implications for the plans the United States must put in place to deal with the explosive growth of the elderly population over the next 40 years. The population of Americans aged 65 and older is expected to increase from 35 milllion in 2000 to over 80 million in 2050. (Knickman and Snell, 2002) Though these policy implications cannot be addressed in this paper, they provide motivation for the question and are a logical next step this research could take.

To date, no research has examined subjective longevity and intergenerational transfer behavior. Very few papers have used data on “subjective survival probability” (or a person’s own estimate of their probability of achieving a given age, hereinafter referred to as “SSP”), for any empirical study. Longevity is obviously crucial to certain theoretical models, such as lifecycle models of consumption and savings. Actuarial life tables have been employed by many researchers in estimating these and other types of models. There are studies showing that people with reasons to expect a shorter lifespan, such as poor health, increase their consumption levels (Lillard and Weiss 1997). Another branch of the literature has looked at increases in longevity and the demand for nursing home care and other types of elder care. But none of these studies have asked how parental expectations of lifespan might be correlated with whether or not, and how much, people give to their children.

This paper provides a first descriptive step in answering this question. It very simply documents the stylized facts for a select group of older parents to determine whether any correlations exist between subjective life expectancy and transfers made in the past or anticipated in the future. To do this it takes advantage of a unique question in the Health and Retirement Study - “What are the chances that you will live to be age 85 or more?” - and uses data on actual transfers given and future anticipated bequests and transfers to uncover the trends. The sample used is a select subset of parents, consisting of unmarried (separated, divorced, widowed or never-married) mothers and fathers. This subset is used in order to avoid confounding transfers from married couples to their children, but the results of the paper must be interpreted in light of the unique characteristics of the sample.

What I find is that while there are modest unconditional positive correlations between SSP and the incidence and amount of transfers given by ***mothers***, conditioning on other key covariates such as income, education and health results in no meaningful correlation between these variables for mothers or fathers. I also find that:

(1) There are both unconditional and conditional positive correlations between SSP and the likelihood of giving a large transfer or bequest in the future for ***mothers***.

(2) While there are unconditional correlations for ***fathers*** between SSP and the likelihood of future transfers and bequests, conditioning upon other covariates results in no correlation for bequests, and a non-linear relationship between SSP and future inter vivos transfers.

(3) In addition to these differences, there are other gender differences in the patterns of giving between unmarried mothers and unmarried fathers, such as unmarried fathers overall giving more to their children, more often.

## LITERATURE REVIEW

Subjective survival probability has been established as representing a meaningful measure of a person's expected lifespan, and has been used in various research contexts to date. (For background on the use of all types of subjective probabilities in the economics literature in particular, and especially on the renewed interest in including subjective questions in surveys, see Manski (2004).)

The validity of using SSP data was first established by Daniel Hamermesh (1985). Hamermesh, using a sample of 650 white male economists, showed that people's subjective survival probabilities in 1985 reflected recent changes in actuarial life tables, but the distribution of the subjective probabilities was flatter and had greater variance than the actuarial tables themselves. In a strongly stated conclusion to his paper, Hamermesh asserted that "empirical studies of life-cycle saving, investment in human capital and labor supply ignore changing life expectancy and its effects on subjective horizons and survival probabilities at the expense of realism."

Ten years later, Hurd and McGarry (1995) used SSP data from a more representative sample, the Health and Retirement Study (HRS), to again show the validity of this type of survey question. Wave 1 of the HRS asked respondents to evaluate, on a scale of 0 to 10 (in later waves changed to a scale of 0 to 100), their probability of living to ages 75 and 85. Hurd and McGarry found that the responses aggregated to population probabilities and covaried with other variables, such as income and health-related behaviors like smoking, in the same way that the actual outcomes covary with these variables. They, like Hamermesh, asserted that there is great potential in the use of subjective survival probability data to help social scientists to understand decision-making under uncertainty.

Of course, there are also questions that are raised in the use of this data. Lillard and Willis (2000) looked at a wide variety of subjective probability questions in the HRS, including subjective survival probability, to examine how portfolio and asset choices are affected by probabilistic thinking. (The motivation for this work was the political debate about individuals having more choice in the determination of their pension asset investments.) One of their key conclusions was that focal point answers in subjective probabilities such as 0%, 50% or 100% actually reflect uncertainty about the true probability. In the most recent wave of the Health and Retirement Study, specific questions addressing this issue have been asked as follow-ups to those respondents who give focal point answers.

One of the other subjective questions in the HRS, which I also employ in this study, is the subjective probability of leaving a bequest. Smith (1999) established the validity of the subjective bequest responses, showing that they covaried in reasonable ways with other predictors of bequests. Hurd and Smith (2002) used subjective bequest probabilities combined with information on actual bequests obtained from HRS "exit" interviews to predict patterns of bequests for the generation just ahead of the baby-boomers.

Empirical work employing the SSP data from the HRS is just starting to emerge. Hurd, Smith and Zissimopolous (2004) found a relationship between SSP and retirement and Social Security uptake, with people with very low subjective survival probabilities of living to age 85 retiring and claiming Social Security benefits earlier, as opposed to delaying their claims and increasing their Social Security annuitization. Scholz, Seshadri and Khitatrakun (2006) modeled optimal savings behavior, using HRS lifetime income data, and then regressed deviations from "optimal saving" on a number of variables, including SSP. They did not find any relationship between deviations from the optimal behavior and a person's subjective probability of living to age 75 or 85. (This might be expected given Hurd and McGarry's (1995) findings that the HRS subjective survival probabilities reasonably approximate the life cycle tables upon which Scholz, Seshadri and Khitatrakun base their optimal savings estimates.) Bloom, et al (2006) showed an effect of increased subjective survival probability on household wealth accumulation, with no effect on length of working life. To do this they used an instrumental variables approach to avoid reverse causality issues and problems with focal points and measurement errors. The respondents' parents' current age or age at death was the instrument employed.

Like the above papers, this paper also uses the SSP data to help understand decision-making of a different type: whether or not and how much money to transfer to adult children. There is a large intergenerational transfers literature, but many questions remain about the motivations for both inter vivos transfers and bequests and the factors affecting transfers besides the well-studied income and wealth effects. The descriptive patterns I find, particularly the differences between mothers and fathers, highlight some potentially fruitful directions for future research.

## Correlation vs. Causality

An important issue in a study such as this is the difference between correlation and causality. Parents' expectations of their own longevity are correlated with all types of unobservable personal traits that could very well affect their relationships, both financial and otherwise, with their children. This does not mean that causality does not exist, but assuming causality could lead to very erroneous conclusions if the relationship is simply spurious. Below I will outline not only the potential causal channels, but just as importantly, the potential spurious channels through which a relationship between these variables might be observed.

Perhaps the most intuitive causal channel supposes that a person who thinks they will have a long lifespan saves more to finance more retirement years. Very simply, a longer expected life could lead to more saving and less giving to children.

A less simple causal channel, but one with interpretations that would be meaningful to researchers studying intergenerational transfers, comes from considering the lifecycle model of savings and consumption, in which the issue of a person's own belief about his or her longevity is crucial. In this model, transfers to children could potentially be lumped into either consumption or savings, depending upon the parent's motivation for giving the transfer. On the one hand, for an altruistic parent a transfer could be considered a "consumption" good – expenditures on the child raise the parent's current utility. On the other hand, a parent who gives in the hopes that a child will provide physical, economic or emotional support as the parent ages (e.g. an "exchange" motivation) might consider a transfer to a child a method of "saving." In the first case, a *shorter* life expectancy would be related to a parent consuming more in the present, and thus giving more to the child. In the second case, a *longer* life expectancy would be related to a parent saving more by giving more to the child. If we were to observe a positive or negative sign on the correlation between SSP and transfers, we might be tempted to conclude something about the nature of the motivation for transfers.

The first problem in interpreting a correlation between SSP and transfers as causal, however, is that causality could go in either direction. Does having a higher SSP result in more financial transfers to children, or do financial transfers to children result in a parent having a higher SSP? Receiving transfers from their parents might cause recipient children to give more care and attention to their parents, which leads to greater parental well-being. An underlying exchange relationship would result in a positive correlation between transfers and SSP, with the causal effect due to the transfers.

The next problem is that any correlation could simply be spurious. For example, a person's subjective longevity might be correlated with unmeasured lifetime income. Those believing in a high probability of living to age 85 might also be expecting to work for more years than those who anticipate dying younger, and this increase in expected lifetime ***income*** might have an effect on intergenerational transfers, not the difference in subjective longevity per se. Alternatively, parents with optimistic outlooks might somehow be more generous, resulting in those with higher SSPs coincidentally giving more to their children.  As a final example, financial transfers from parent to child could be the result of negative situations in the life of the child – job loss, death of a spouse, illness or addiction – all of which could cause stress on the parent and decrease parental well-being and thus SSP, resulting in a negative correlation between SSP and transfers. In all these examples, the correlations would be caused by unobservable factors.

While causality cannot be determined in a study such as this one, the correlations, if interpreted with caution, can still inform us of the trends in intergenerational transfers we might expect to observe as longevity increases.  In the next sections I will explain why the Health and Retirement Study provides the best data available for a descriptive analysis of this question, and outline the empirical approach to the data.

## DATA

The Health and Retirement Study (HRS) is a panel dataset examining respondents who were between the ages of 51 and 61 at the first wave of the study in 1992, along with their spouses.   The purpose of the study is to survey older Americans as they move into retirement in order to capture a wide variety of information regarding their health, finances, retirement planning, family relationships, social support and use of Social Security, Medicare and other public and private benefits.  The study applies "direct" measurement to expectational issues, such as longevity, age at retirement, adverse health events, the macroeconomic environment respondents anticipate facing in the future, and their ability to count on benefits such as Social Security.  (For more information, see

Juster and Suzman 1995.) The children of respondents predominantly fall in the age range of 20 to 30 years old, when they are likeliest to be given inter vivos transfers by their parents. (Schoeni 1997)

The main subsample used is the 1,860 unmarried (separated, divorced, widowed, or never-married) respondents who have at least one child, and who answered the HRS Wave 1 question:

> *"Using any number from zero to ten where 0 equals absolutely no chance and 10 equals absolutely certain, what do you think are the chances you will live to be 75 or more? To 85 or more?"*

This sample includes 1,353 mothers and 507 fathers with an average age of 55.5 and with an average of 3.3 children. Using these parents, I examine the correlation between ***aggregate*** transfers, or the sum of all transfers given by the parent to all his or her children, and SSP. (I use the age 85 probability response rather than the age 75 probability because the higher age incorporates information regarding the younger age and provides a better proxy for the actual subjective lifespan.) For simplicity's sake and because the correlative patterns are the same, I limit my discussion to aggregate transfers summed across all children, although I also examined the 6,480 ***matched*** parent-child pairs, which allowed me to control more completely for the characteristics of the recipient child. (Results available upon request.)

The other subsample used is the group of 1268 unmarried mothers and 461 unmarried fathers in Wave 2 who responded to the questions regarding the likelihood of future bequests and transfers detailed below.

## Outcome variables

There are three outcome variables examined in this study: (1) incidence and amount of actual transfers given in the first five waves, (2) the likelihood of future bequests to family members, and (3) the likelihood of future transfers to friends and family members. The actual transfer questions in Wave 1 are:

> *"(Not counting any shared housing or shared food,) have you given (your child/any of your children) financial assistance totaling $500 or more in the past 12 months?"* and,
>
> *"About how much money did that assistance amount to altogether in the past 12 months?"*

After Wave 2 the timeframe for the question was either since the last survey, or in the last two years, if the respondent did not participate in the previous wave. The censoring of the data at $500 should be kept in mind in interpreting the results. No observations were included for those children who were co-residing with their parents, although if the child was co-residing in some waves, and living independently in other waves, the data was included from those waves in which the child was living independently.

For the analysis below, transfer incidence takes the value of 0 if no transfer was given, and 1 if a transfer is received. Transfer amount is in logs, with a transfer amount of 0 represented by "0."

The future bequest and transfer questions were asked in Wave 2. They are:

*"What are the chances that you will leave an inheritance totaling $10,000 or more?"*,

*"What are the chances that you will leave an inheritance totaling $100,000 or more?"*, and

*"What are the chances that you will give financial help totaling $5,000 to grown children, relatives or friends over the next ten years?"*

All of the above questions were answered on a scale of 0 to 100. The bequests could include the value of property and assets. The future financial help could include college tuition help but not include shared housing or food.

## Control variables

The control variable of interest is the subjective survival probability, which in Wave 1 is given on a scale of 0 to 10, but in subsequent waves is given on a scale of 0 to 100. To allow for better comparison across waves, I transform the Wave 1 responses to the 0 to 100 scale used in future waves. The other control variables are those variables typically found in transfer estimations, such as income, wealth, education level, age, number of children and an indicator for the respondent being black. I also include indicators for the respondent's subjective health assessment. Health is correlated with SSP, and could be related to giving in a variety of ways. Parents in poor health may give more to their children in exchange for children's attention or caregiving services, for example.

The control variables describing the respondent's children include the ***mean*** age of the children, the percentage of children who are male, and the number of children who live within 10 miles of the respondent. In the transfers literature, parents are consistently shown to give more to younger children, while the gender of the child may also factor into giving by the parent. (In the matched parent-child sample that I run using the same HRS data, daughters consistently receive more transfers from their unmarried parents of either gender. These results are available upon request.) A child who lives closer is often assumed to give more non-monetary help to his or her parents, which may prompt more transfers from the parent.

The detailed descriptions of the control variables are below.

**Subjective Survival Probability.** The respondent's opinion of his probability of living to age 85, ranging from 0 to 100 (transformed in Wave 1 from a 0 to 10 scale.)

**Log Income**. Income includes earnings, unemployment, worker's comp, pensions, annuities, SSI, welfare, capital income, disability income, other income and income of other household members, MINUS transfers from family members

**Log Net Worth**. Net worth includes both housing and non-housing equity. If net worth is negative, it equals negative the log of the absolute value of net worth.

**Marital Status Variables**. While all of the respondents are unmarried, I include indicators for the respondent's marital status within the unmarried category – "divorced," "separated," "widowed," and "never-married, with "divorced" being the omitted category- because these different marital states could carry different implications for the relationship between parent and child

**Health Variables.** In the survey, the health variable is a categorical variable ranging from 1 to 5, with 1 being "excellent", 2 "very good," 3 "good," 4 "fair," and 5 "poor." 3 or "good" health is the omitted category.

**Age**. Age is given in years.

**Kids' mean age**. This is the average age for all the children of the respondent.

**Black**. Equals 1 if respondent is black, 0 otherwise.

**Number of Biological Kids**. This number does not include foster, step or adopted children.

**Education Variables.** The categories are "less than high school graduate," "high school graduate," "some college," "college graduate," and "graduate education." "Less than high school graduate" is the omitted category.

**Number of Kids<10 miles**. Provides the number of non co-resident children living within 10 miles of the respondent.

**Percent of Kids Male** – Percentage of biological children who are male.

## METHODS

### Actual Transfers

In analyzing the correlation of SSP with actual transfers given, I use three different specifications, taking advantage of the rich cross-sectional data available, and the panel nature of the dataset:

(1) A cross-section of Wave 1 respondents, using only Wave 1 reports of transfers given in the last 12 months.
(2) A cross-section of Wave 1 respondents, using their Wave 1 SSP responses and the aggregate data on transfers given across Waves 1 through 5.
(3) A panel of respondents in Waves 1 through 5.

The first cross section provides the simplest look at the correlation, both unconditional and conditional, between SSP and giving across respondents. I do a probit analysis of transfer incidence and an OLS projection of transfer amount if a transfer is given, on the covariates to get the conditional correlations.

I conduct the same probit and OLS analyses on the second cross-sectional specification, which takes advantage of a longer time horizon in which transfers might be given while still allowing the variation in covariates across respondents, such as education level and number of children, to drive the correlation results.  Transfers from parents to adult children are not usually given at regular intervals – parents may give one year, and not give again for many years. Aggregating across a 9 or 10 year timeframe presents a better picture of who gives and who does not. One problem with doing this, however, is that not all respondents in Wave 1 participated in all 5 waves. There was some overall attrition, and some respondents are missing one or two interim waves, reappearing later in the panel. A respondent who does not participate in one wave, and reappears in later waves may or may not report all the transfers made since the last wave, and a respondent who participates in 3 waves and then goes missing is less likely to report a transfer than one who participates in all 5 waves.

I deal with this issue in three ways. I include a categorical variable in both the probit and OLS analyses which identifies how many waves the respondent participated in. In the OLS projection of transfer amounts, I control for the fact that the sum of transfer amounts for Waves 1 through 5 will be higher for those who participated in more waves by summing the transfers and dividing by the number of waves the parent participated in, giving a per wave average transfer. And, for robustness' sake, I re-run all the analyses using only the respondents who participated in all five waves. I only report here the results for the larger sample, including attrition. The key results of this study are robust to the samples with and without attrition.

The third specification, using the panel of Waves 1 to 5, allows me to observe the "within" respondent correlation of SSP and transfers, picking up on how the variation in

SSP for a respondent across waves might be correlated with that respondent's variation in giving across waves. Comparing across people with different SSPs in a cross section may give us one correlation, but comparing within people at different points in time, holding observable and unobservable characteristics of a certain person equal (such as underlying personality), reveals how individual movements in SSP may be correlated with giving. For this specification, I use a linear probability model – OLS with fixed effects – for the incidence of a transfer, as well as for the conditional correlation of transfer amount with SSP for transfers greater than zero.

### Anticipated Bequests and Transfers

Analysis of the expectational questions (the probability of leaving a bequest of $10,000 or greater, the probability of leaving a bequest of $100,000 or greater, and the probability of providing financial help to a friend or family member over the next 10 years of $5,000 or more), involves a simple cross section of Wave 2 responses. For these future anticipated transfer measures, I analyze the correlation with SSP in three ways. First, I show the simple unconditional correlations. Then, I use non-parametric estimation which drops the assumption of any functional form. This involves a simple smoothing function, regressing the likelihood of a bequest or transfer (*y*) on SSP (*x*), and using a weighted average of the predicted *y's* in the neighborhood of a given *x* to draw the relationship between to draw the relationship between *y* and *x*. Finally, I use OLS to examine the conditional correlations between SSP and the three anticipated transfer variables, first assuming a linear relationship, and then including SSP-squared to test for a non-linear relationship.

I should note that throughout this examination of longevity and transfers, I examine mothers and fathers separately. Giving by unmarried mothers and fathers in the HRS is quite different. (See Appendix Table A1) Unmarried fathers are about 20% more likely than unmarried mothers to provide a financial transfer to at least one of their children during the 5 waves of the survey included here, and give about 80% more when a transfer is given. (This result for fathers does not hold when fathers are married or remarried. For example, remarried fathers have been shown to give less and less often than remarried mothers to their biological children of a former relationship (Way 2009).) I divide the sample by gender to help provide any insight into these differences.

## RESULTS

### Descriptive Statistics

**Subjective Survival Probability.** Figure 1 shows the Wave 1 distribution of responses to the subjective survival probability question in the sample described above. It shows, for example, that about 270 of the women and about 150 of the men believed they had "0" probability of living to age 85. There is some clustering of the responses, for both women and men, at 0, 5 and 10, and the SSP responses are divided almost 50/50 along the response of 5. Hurd and McGarry (1995) note that this clustering could be due to the coarseness of the scale offered (a very optimistic person might round a 95% SSP up to 100% and answer "10"), but more likely is due to misunderstanding or the inability to evaluate the question properly. They conclude that despite this clustering, and some other inconsistencies noted in their paper, the responses still act like probabilities and aggregate to reasonable approximations of the life tables.

**Other Variables: Outcome and Control.** People who believe they will have a longer lifespan may have different characteristics, than people who believe they will have a shorter lifespan. They may be healthier, or richer, or have fewer children, and these differences could drive any differences observed in the giving patterns of people with higher or lower SSPs. Dividing the sample into "High SSP" respondents -those who respond that their probability of living to age 85 is "5" (50%) or higher- and "Low SSP" respondents -those who respond "4" (40%) or lower- is a simple way to compare the characteristics of respondents as they relate to SSP. (The patterns are the same for mothers and fathers, so I combine parents in this descriptive look at the data.)

Table 1 shows that High SSP respondents give transfers to their children at a higher rate, but there is no significant difference in the amount of money they give when a transfer is given. High SSP respondents have higher mean income and wealth, they are more likely to have at least some post-secondary education and they are more likely to be black. (Actuarially, blacks are less likely to live to age 85 than whites, and this inconsistency between the self-reported survival probability and actual probability is noted and discussed in Hurd and McGarry (1995).) High SSP respondents' self-reported health status is better than Low SSP respondents. They are also more likely to be female, and are slightly younger than their Low SSP counterparts.[2] Their children are less likely to be married, less likely to have children of their own and less likely to live within 10 miles of their parents than children of Low SSP respondents. Their children are also more likely to have an income of over $25,000 per year and are more likely to have some post-secondary education.

These two groups are not significantly different, however, when it comes to their marital status (divorced, separated, widowed or never-married), their number of children and their children's mean age.

## Subjective Survival Probability and Actual Transfers Given

**Unconditional Correlations.** Table 2 shows the unconditional correlations between the SSP in Wave 1 and transfers given in Waves 1 through 5. There is a positive correlation between mothers' SSP and the incidence of a transfer (0.108), and a positive correlation with the transfer amount (0.075). There is no significant correlation between fathers' SSP and giving.

**Conditional Correlations.** Next, I condition the correlations upon the respondent characteristics found in Table 1 and some mean characteristics of the respondent's children. For mothers, the correlation coefficient between SSP and transfer

[2] While the age difference between High and Low SSP groups is not large, it is significant, and it is the opposite of what some economists might expect. While one might expect that for older people the probability of living to age 85 would be higher because one is already closer to that age than a younger person, in this sample the opposite is true. There is a negative correlation between age and SSP for both women (-0.051, significant at 10% level) and men (-0.093, significant at 5% level). It may be that for this 51 to 61 year-old age group, the type of updating to the probability of living to age 85 that happens from year to year is more affected by negative health shocks than by the perceived success of having survived another year.

incidence drops dramatically in magnitude once other covariates have been taken into account. (Table 3) In the first two specifications, the coefficients on SSP are insignificant. In the panel specification, the coefficient for SSP is negative, rather than positive, but with a very small magnitude, ( -.0005), and is only significant at the 10% level. Because the panel gives us the "within" estimates, this tells us that as a mother's SSP changes from wave to wave, increases in her SSP are correlated with very slight decreases in the incidence of giving. (A 10 point increase in SSP on a scale of 0 to 100 would be correlated with a 0.5% decrease in the probability of giving a transfer.) This is the only specification in which SSP has a negative coefficient, and it is only significant at the 10% level.

Mothers' conditional correlation between SSP and the ***amount*** of a transfer if one is given is positive and significant in the second specification (transfers aggregated across 5 waves) but the magnitude is very small. (Table 4) In this case, a 10 point increase in SSP is correlated with a 3% increase in transfer amount given.

For fathers, only the first specification results in a marginally significant conditional correlation between SSP and the incidence of a transfer, and the magnitude is very small. A 10 point increase in SSP would be correlated with a 1% increase in the likelihood of a transfer. There is no correlation with the amount of a transfer.

Inclusion of SSP squared to test if there is a non-linear relationship between SSP and transfers results in no significant coefficients for either incidence or amount of transfers.

## Subjective Survival Probability and the Probability of Future Giving

The above analysis shows that that SSP and actual transfers given have almost no correlation, holding income, education, health and other variables constant. What about SSP and the probability of future transfers?

**Unconditional Correlations.** All of the unconditional correlation coefficients between SSP and the probability of future bequests and transfers are around 0.11, (Table 5) except for the correlation between SSP and a father giving a bequest of over $100,000, which is lower at about 0.05. What the correlations tell us is that people who expect to live longer also predict a higher probability that they will give away money. The cross-currents driving this result could be many, particularly the effects of income and wealth, which are highly correlated with longevity. I will control for these variables below.

It is important to note that these variables are highly correlated with each other, and with actual transfers given, so when we find very similar correlations between them and SSP, we should not read too much into that consistency. Table 5 shows the correlation matrix for all of the variables, with the unconditional correlations between SSP in Wave 2 and the actual and future transfer measures highlighted. Some of the correlations between the expectational variables are very high, because in a sense, all these variables represent different versions of the same underlying question – "What is the probability that a) you will have assets you do not require for your own consumption, and b) you will give them to someone else?"

**Non-parametric Estimation.** Using non-parametric estimation, a pattern emerges for mothers. Figures 2a, 2b and 2c reveal that for mothers, there is a consistent, positive co-movement between SSP and the probability of a bequest or transfer, which peaks at an SSP of about 80, and then becomes negative in all three graphs. For fathers, the shapes of the non-parametric curves are not nearly as consistent across the three expected transfer measures and show potential non-linearities, particularly in the cases of a bequest of $100,000 or more, or a future transfer of $5,000 or more.

**Conditional Correlations: OLS.** Using OLS, a similar pattern emerges. For mothers, the conditional correlations between SSP and expected future transfers (Table 6) continue to be significant, and are a similar magnitude to the unconditional correlations. (The addition of a squared term does not result in any significant results for SSP, so the relationship is most likely linear.) This means that when controlling for income, wealth, health, education, and other covariates, a higher SSP is moderately correlated with an unmarried mother's probability of leaving a bequest. For example, a mother who believes there is a 50% chance of living to age 85 would be predicted to report her probability of leaving a bequest of over $10,000 to be about 4.5 points higher than a mother who believes there is no chance of living to age 85, all else equal. These 4.5 points represent almost 10% of the mean response to the question for mothers, who on average report 48.8 (on a scale of 0 to 100) as their chance of leaving such a bequest. (See Appendix Table A1 for the means of all these responses.) As far as leaving a bequest of $100,000 or greater, the 4.3 point predicted difference between a mother with an SSP of 50 and a mother with an SSP of 0 represents about 22% of the mean of 17.4. For giving a transfer of greater than $5,000 in the next 10 years, the same predicted difference would be 3.9 points or about 18% of the mean of 21.4.

Fathers show no conditional correlation between SSP and expected bequests. They do however show a very significant positive non-linear relationship between SSP and the probability of providing a financial transfer of $5,000 or more in the specification which includes

SSP-squared. Holding all else equal, a father with an SSP of 50 would be predicted to have about a 15 point higher probability of giving a future transfer than one with an SSP of 0. This represents about 45% of the mean response of 33 for fathers. The coefficients on SSP and SSP-squared show that holding all else equal, at an SSP of 54 a father's predicted probability of giving a transfer would be at its maximum.

## DISCUSSION AND CONCLUSION

The interpretation of these results should be done keeping two things in mind. The first is that there is a select subsample being analyzed here, with different characteristics, on average, than those we would find in the population of older parents as a whole. For example, 58% of the mothers and 83% of the fathers are separated or divorced and not remarried. 5% of the mothers and 4% of the fathers report they were never-married, which for parents born in the 1930's and early 1940's would have been an unusual situation. These marital status categories are correlated with other characteristics that make this sample potentially different than married parents, for example.

The other factor that must be considered is the previously discussed issue of causality. The effect on transfers of an exogenous shock to SSP cannot be determined from this study, and potential future directions that may get us closer to understanding that effect are mentioned below.

With those considerations in mind, the results of this study could be summarized by saying that while a parent's expectation of his or her own longevity is not correlated with current giving to children, a mother's longevity expectation is positively correlated with the likelihood of giving to children in the future, both during life and at death. For fathers, those who are most uncertain of whether or not they will live to age 85, responding that the likelihood is around 50%, think it most likely they will give to family or friends while living.

Why might SSP be positively correlated with expected future bequests and transfers for mothers? And why might the case be different for fathers?

Imagine first that the relationship between SSP and mothers' expected bequests and transfers is spurious. These correlations are simply the result of a causal relationship between some unobserved characteristic that is correlated with SSP, which impacts anticipated giving. A higher SSP could be correlated with higher lifetime expected earnings, for example, and maybe mothers take this into account in thinking about their ability to make a bequest or provide a transfer in the future. Another channel for this correlation could be a sense of optimism. Having an optimistic personality could lead someone to think they have a high probability of living to age 85, and a high probability of being able to give to their children.

Say, on the other hand, that the relationship between SSP and anticipated transfers and bequests is causal. The longer a mother expects to live, the more she anticipates providing money to her children in payment for future needed services, such as companionship or help around the house.

Understanding the causal channel is important both for understanding the dynamics of aging female households, and for understanding the different male/female motivations in giving. (Remember that unmarried fathers give more overall, regardless of SSP.) One way to properly identify an empirical model and thus determine causality would be to find a suitable instrumental variable for SSP. Perhaps using the respondent's parents' ages as was done in Bloom, et al (2006), would be an option, but there are surely others. Another potential future step would be to look at more recent waves of the HRS to see if the predictions parents made about their transfers and bequests were borne out, and if, for example, those mothers who had a higher SSP actually did end up giving more transfers later in life.

Taking a broader look at future directions, it is important to consider these descriptive mother/father differences in the context of other mother/father differences, noted here and in other papers. (See Cox (2003) for a review of the research and other insights on gender differences in intergenerational transfers.) Even controlling for income and wealth, unmarried fathers give more and more often, and say they are more likely to give future bequests and transfers than unmarried mothers are. If one considers Table 4, which shows the conditional correlations for the amount of a transfer if one is given, the income and wealth coefficients for fathers are higher than for mothers, but education levels are strongly positively correlated with transfer amount ***and*** with future intended bequests (Table 6) for mothers only.

As the baby-boomers save (or not) for significantly longer lifespans than their parents, it does not appear that their longevity expectations are related to how much they currently give to their children. For mothers, a longer life expectancy may even be related to future increased giving. This is evidence that at least one type of family financial relationship is not being significantly impacted by these drastic demographic changes in aging, although more study in this area should be done, especially as the baby-boomers hit retirement age in increasing numbers.

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**Table 1. Sample Characteristics by Low and High SSP**

| Parent's Characteristics | Full Sample n=1860 | Low SSP n=937 | High SSP n=923 | t-test |
|---|---|---|---|---|
| Male | 0.27 | 0.30 | 0.24 | 2.98** |
| Divorced | 0.50 | 0.49 | 0.51 | -0.79 |
| Separated | 0.15 | 0.15 | 0.15 | -0.33 |
| Widowed | 0.30 | 0.32 | 0.28 | 1.56 |
| Never Married | 0.04 | 0.04 | 0.05 | -0.94 |
| Health[a] | 2.90 | 3.24 | 2.55 | 11.86** |
| Age | 55.5 | 55.6 | 55.3 | 2.08* |
| Black | 0.33 | 0.25 | 0.38 | -4.75** |
| Income | $25,974 | $24,043 | $28,545 | -3.32** |
| Net Worth | $92,028 | $77,679 | $105,251 | -2.43* |
| Biological Children | 3.30 | 3.35 | 3.30 | 0.99 |
| % male children | 0.51 | 0.52 | 0.50 | 1.58 |
| Mean age children | 29.4 | 29.4 | 29.1 | 1.30 |
| Ed less than H.S. | 0.37 | 0.40 | 0.32 | 3.73** |
| High School Ed | 0.33 | 0.35 | 0.31 | 1.89[†] |
| Some College | 0.17 | 0.15 | 0.20 | -2.84** |
| College Ed | 0.05 | 0.04 | 0.07 | -2.71** |
| Grad School Ed | 0.07 | 0.05 | 0.10 | -3.70** |
| Prob live to 85 | 4.40 | 1.41 | 7.32 | -73.90** |
| Transfer to any child | 0.48 | 0.45 | 0.53 | -3.44** |
| Mean transfer to all children | $2424 | $2012 | $2782 | -1.34 |
| Child's Characteristics | n=6480 | n=3140 | n=3010 | |
| Male | 0.50 | 0.51 | 0.49 | 1.14 |
| Age | 29.6 | 29.5 | 29.4 | 0.86 |
| Married | 0.48 | 0.49 | 0.46 | 2.42* |
| Has a child | 0.61 | 0.63 | 0.59 | 3.28** |
| <10 mile from parents | 0.47 | 0.49 | 0.44 | 3.80** |
| Income <10K | 0.23 | 0.23 | 0.22 | 0.89 |
| Income 10K to 25K | 0.37 | 0.38 | 0.36 | 1.52 |
| Income >25K | 0.34 | 0.33 | 0.36 | -2.03* |
| Ed less than H.S. | 0.20 | 0.22 | 0.18 | 3.69** |
| High School Ed | 0.47 | 0.28 | 0.46 | 1.83[†] |
| Some College | 0.18 | 0.17 | 0.19 | -2.26* |
| College Ed | 0.12 | 0.11 | 0.13 | -3.18** |
| Grad School Ed | 0.03 | 0.03 | 0.04 | -2.76** |
| Transfer received | 0.25 | 0.22 | 0.29 | -6.05** |
| Amt of transfer received | $1419 | $1224 | $1588 | -1.34 |

*Note*: Data from Wave 1 of Health and Retirement Study, 1992, except transfer data which is summed across Waves1-5 and reported per wave. Low SSP is an SSP of 4 or lower. High SSP is an SSP between 5 amd 10.

[a]Categorical variable from 1 to 5, with 1=excellent health.

[†]Amount of transfer given/received if the parent gave or child received a transfer

[†] p<.10, *p<.05, **p<.01

**Table 2. Unconditional Correlations – SSP Wave 1 and Transfers Wave 1-5**

| | Mothers | | Fathers | |
|---|---|---|---|---|
| | Corr. | *p* value | Corr. | *p* value |
| SSP and transfer incidence in any wave | 0.108<br>*n=1353* | 0.000 | 0.042<br>*n=507* | 0.351 |
| SSP and transfer amount per wave if transfer>0 | 0.075<br>*n=630* | 0.004 | 0.009<br>*n=281* | 0.878 |

*Note*: SSP is from Wave 1 (1992). Transfer data is summed across Waves1-5 and divided by number of waves respondent participated.

**Table 3. Incidence of a Transfer to Non-Coresident Child/Children**

| | Mothers | | | | | | Fathers | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | dProbit – (1) | | dProbit- (2) | | OLS – (3) | | dProbit – (1) | | dProbit – (2) | | OLS - (3) | |
| Covariates | dF/dx | z | dF/dx | z | Coef | t | dF/dx | z | dF/dx | z | Coef | t |
| SSP (0 to 100) | 0.001 | 1.33 | 0.001 | 1.31 | -0.0005$^{\dagger}$ | -1.85 | 0.001$^{\dagger}$ | 1.81 | 0.000 | 0.29 | 0.000 | 0.78 |
| Log income | 0.040** | 3.83 | 0.038** | 3.63 | 0.010* | 2.48 | 0.030$^{\dagger}$ | 1.81 | 0.001 | 0.08 | 0.009 | 1.27 |
| Log net worth | 0.020** | 4.41 | 0.001 | 0.24 | 0.009* | 2.53 | 0.027** | 3.15 | 0.013** | 2.85 | 0.008 | 1.18 |
| Separated | -0.027 | -0.67 | -0.082$^{\dagger}$ | -1.70 | | | 0.078 | 1.18 | -0.005 | -0.08 | | |
| Widowed | -0.033 | -1.20 | -0.079* | -2.36 | | | 0.122 | 1.63 | 0.071 | 0.96 | | |
| Never-married | -0.087 | -1.48 | -0.138* | -1.99 | | | 0.282* | 2.02 | 0.053 | 0.40 | | |
| Excellent health | -0.032 | -0.87 | -0.031 | -0.66 | 0.018 | 0.69 | 0.135* | 1.93 | -0.043 | -0.58 | -0.005 | -0.12 |
| Very good health | 0.007 | 0.21 | 0.031 | 0.73 | 0.037$^{\dagger}$ | 1.90 | 0.117$^{\dagger}$ | 1.80 | -0.015 | -0.21 | 0.006 | 0.17 |
| Fair health | -0.046 | -1.28 | -0.060 | -1.38 | -0.001 | -0.03 | 0.001 | 0.02 | -0.174* | -2.34 | -0.022 | -0.53 |
| Poor Health | -0.102* | -2.33 | -0.154** | -3.00 | -0.034 | -1.04 | -0.038 | -0.42 | -0.115 | -1.33 | -0.089 | -1.51 |
| Age | -0.002 | -0.56 | -0.009 | -1.61 | -0.008 | -0.81 | 0.001 | 0.16 | 0.000 | 0.00 | 0.027 | 1.27 |
| Black | -0.026 | -0.93 | -0.076* | -2.27 | | | -0.041 | -0.68 | 0.027 | 0.45 | | |
| # Biological kids | 0.002 | 0.26 | -0.004 | -0.39 | | | 0.018 | 1.35 | 0.004 | 0.29 | | |
| High school | 0.052 | 1.56 | 0.175** | 4.69 | | | 0.167* | 2.57 | 0.119$^{\dagger}$ | 1.94 | | |
| Some college | 0.126** | 2.99 | 0.253** | 5.45 | | | 0.205** | 2.72 | 0.180* | 2.51 | | |
| College education | 0.190** | 3.07 | 0.386** | 5.87 | | | 0.225* | 1.96 | 0.214* | 2.03 | | |
| Graduate education | 0.381** | 5.82 | 0.406** | 6.26 | | | 0.278** | 2.81 | 0.192* | 2.11 | | |
| # Kids < 10 miles | 0.006 | 0.57 | 0.030* | 2.34 | | | 0.020 | 0.99 | 0.049* | 2.37 | | |
| % Kids male | -0.007 | -0.80 | -0.075 | -1.63 | | | -0.018 | -1.09 | -0.018 | -0.25 | | |
| Kids' mean age | -0.009** | -3.20 | 0.005 | 1.48 | 0.001 | 0.29 | -0.023** | -4.57 | -0.014** | -2.77 | -0.002 | -0.55 |
| # of Waves | | | 0.093** | 7.95 | | | | | 0.101** | 6.64 | | |
| Wave 2 | | | | | 0.096** | 3.59 | | | | | 0.038 | 0.69 |
| Wave 3 | | | | | 0.018 | 0.38 | | | | | -0.109 | -1.06 |
| Wave 4 | | | | | -0.002 | -0.02 | | | | | -0.148 | -1.02 |
| Wave 5 | | | | | 0.021 | 0.24 | | | | | -0.258 | -1.37 |
| Constant | | | | | 0.582 | 1.07 | | | | | -1.232 | -1.03 |
| N | 1354 | | 1353 | | 6087 | | 510 | | 507 | | 2120 | |
| Groups | | | | | 2122 | | | | | | 901 | |
| Pseudo $R^2$ | 0.1611 | | 0.1647 | | | | 0.1907 | | 0.1592 | | | |
| $R^2$ | | | | | 0.0638 | | | | | | 0.0210 | |
| Within | | | | | 0.0218 | | | | | | 0.0198 | |
| Between | | | | | 0.0887 | | | | | | 0.0237 | |
| $Chi^2$ | 257.17 | | 307.81 | | | | 128.25 | | 110.97 | | | |
| Prob >$chi^2$ | 0.0000 | | 0.0000 | | | | 0.0000 | | 0.0000 | | | |
| F | | | | | 6.77 | | | | | | 1.88 | |
| Prob>F | | | | | 0.000 | | | | | | 0.0289 | |

Note: Specification (1) – Conditional correlation of transfer given to any non-coresident biological child in Wave 1, with SSP and other covariates from Wave 1.
Specification (2) – Conditional correlation of transfer given to any non-coresident biological child in any of Waves 1 through 5, with SSP and other covariates from Wave 1. Specification (3) – Panel analysis HRS Waves 1-5: OLS with fixed effects finding conditional correlation of transfer given to any non-coresident biological child with SSP and other covariates

$^{\dagger}$ p<.10, *p<.05, **p<.01

## Table 4 –Log Transfer Amount if Transfer is Given to Non-Coresident Child/Children

| | Mothers | | | | | | Fathers | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | OLS – (1) | | OLS- (2) | | OLS– (3) | | OLS – (1) | | OLS – (2) | | OLS – (3) | |
| Covariates | Coef. | t | Coef. | t | Coef. | t | Coef. | t | Coef. | t | Coef. | t |
| SSP | 0.001 | 0.57 | 0.003$^{\dagger}$ | 1.66 | -0.001 | -0.36 | -0.001 | -0.64 | 0.001 | 0.46 | -0.002 | -0.92 |
| Log income | 0.088* | 2.16 | 0.053 | 1.17 | 0.026 | 0.89 | 0.177** | 2.98 | 0.173** | 3.34 | 0.028 | 0.79 |
| Log net worth | 0.037 | 1.60 | 0.011 | 1.09 | 0.033 | 1.30 | 0.084* | 2.34 | 0.044* | 2.49 | 0.140** | 3.30 |
| Separated | 0.180 | 0.99 | 0.293 | 1.49 | | | -0.002 | -0.01 | 0.018 | 0.08 | | |
| Widowed | 0.132 | 1.14 | 0.242$^{\dagger}$ | 1.92 | | | 0.254 | 1.14 | -0.062 | -0.24 | | |
| Never-married | 0.653* | 2.04 | -0.033 | -0.10 | | | 0.280 | 0.72 | 0.156 | 0.32 | | |
| Excellent health | 0.078 | 0.51 | 0.242 | 1.46 | 0.020 | 0.15 | 0.226 | 1.12 | 0.347 | 1.41 | 0.174 | 0.90 |
| Very good health | 0.190 | 1.41 | 0.168 | 1.13 | -0.015 | -0.14 | 0.047 | 0.24 | -0.016 | -0.07 | 0.086 | 0.56 |
| Fair health | 0.171 | 1.03 | -0.055 | -0.31 | -0.372** | -3.02 | 0.417 | 1.57 | 0.205 | 0.71 | 0.565** | 2.92 |
| Poor Health | 0.047 | 0.19 | 0.121 | 0.51 | -0.506* | -2.34 | 0.168 | 0.43 | -0.296 | -0.87 | 0.296 | 0.83 |
| Age | 0.015 | 0.82 | 0.011 | 0.55 | -0.012 | -0.20 | 0.000 | 0.01 | 0.034 | 1.08 | -0.082 | -0.98 |
| Black | -0.167 | -1.35 | -0.265* | -2.00 | | | -0.015 | -0.08 | -0.196 | -0.94 | | |
| # Biological kids | 0.016 | 0.50 | 0.031 | 0.74 | | | -0.011 | -0.28 | -0.116* | -2.05 | | |
| High school | 0.321* | 2.09 | 0.502** | 3.23 | | | 0.067 | 0.30 | 0.340 | 1.41 | | |
| Some college | 0.437* | 2.52 | 0.747** | 4.19 | | | 0.078 | 0.30 | 0.391 | 1.41 | | |
| College education | 0.333 | 1.58 | 0.704** | 3.07 | | | 0.246 | 0.71 | 0.139 | 0.35 | | |
| Graduate education | 0.545** | 2.78 | 1.333** | 5.93 | | | 0.257 | 0.88 | 0.689* | 2.01 | | |
| # Kids < 10 miles | -0.079$^{\dagger}$ | -1.77 | -0.050 | -1.03 | | | 0.011 | 0.14 | 0.104 | 1.26 | | |
| % Kids male | 0.023 | 0.59 | -0.553** | -3.22 | | | 0.014 | 0.26 | -0.173 | -0.66 | | |
| Kids' mean age | -0.005 | -0.40 | -0.008 | -0.61 | -0.009 | -0.72 | -0.031* | -2.05 | -0.048** | -2.67 | 0.007 | 0.31 |
| # of Waves | | | -0.089$^{\dagger}$ | -1.70 | | | | | -0.166** | -2.71 | | |
| Wave 2 | | | | | -0.378* | -2.42 | | | | | -0.082 | -0.35 |
| Wave 3 | | | | | 0.525$^{\dagger}$ | 1.85 | | | | | 0.671 | 1.59 |
| Wave 4 | | | | | 0.494 | 1.24 | | | | | 0.601 | 1.03 |
| Wave 5 | | | | | 0.423 | 0.82 | | | | | 0.955 | 1.27 |
| Constant | 4.970** | 4.89 | 5.396** | 4.84 | 7.917* | 2.46 | 5.580 | 3.81 | 4.840** | 2.83 | 10.322* | 2.21 |
| | | | | | | | | | | | | |
| N | 374 | | 630 | | 1965 | | 189 | | 381 | | 873 | |
| Groups | | | | | 1027 | | | | | | 479 | |
| R-squared | 0.1232 | | 0.1575 | | 0.1444 | | 0.2214 | | 0.2498 | | 0.1198 | |
| Within | | | | | 0.1303 | | | | | | 0.1113 | |
| Between | | | | | 0.1527 | | | | | | 0.1100 | |
| Adj. R-squared | 0.0735 | | 0.1284 | | | | 0.1287 | | 0.1890 | | | |
| F | 2.48 | | 5.41 | | 10.66 | | 2.39 | | 4.11 | | 3.67 | |
| Prob>F | 0.0005 | | 0.0000 | | 0.0000 | | 0.0014 | | 0.0000 | | 0.0000 | |

Note: Specification (1) – Conditional correlation of log of total transfer amount ( if transfer was given) to any non-co resident child in Wave 1, with SSP and other covariates from Wave 1. Specification (2) – Conditional correlation of log of total mean transfer per wave (if transfer was given) to any non-co resident child in any of Waves 1 through 5, with SSP and other covariates from Wave 1. Specification (3) – Panel analysis HRS Waves 1-5: OLS with fixed effects finding conditional correlation of log of total transfer amount (if transfer was given) to any non-co resident biological child, with SSP and other covariates

† p<.10, *p<.05, **p<.01

## Table 5. Correlation Matrix – Wave 2 SSP and Transfer Variables

| | Mothers | | | | | Fathers | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Measures | SSP | Trans given | Beq >10K | Beq >100K | Trans >5K | SSP | Trans given | Beq >10K | Beq >100K | Trans >5K |
| SSP | 1.0000<br>*n=1274* | | | | | 1.0000<br>*n=463* | | | | |
| Transfer given | 0.0595<br>*n=1274* | 1.0000<br>*n=1563* | | | | 0.0544<br>*n=463* | 1.0000<br>*n=605* | | | |
| Bequest >10K | 0.1088<br>*n=1266* | 0.2619<br>*n=1471* | 1.0000<br>*n=1471* | | | 0.1263<br>*n=458* | 0.2176<br>*n=535* | 1.0000<br>*n=535* | | |
| Bequest >100K | 0.1197<br>*n=1268* | 0.2024<br>*n=1555* | 0.5440<br>*n=1465* | 1.0000<br>*n=1555* | | 0.0513<br>*n=461* | 0.2142<br>*n=600* | 0.5851<br>*n=534* | 1.0000<br>*n=600* | |
| Transfer >5K | 0.1203<br>*n=1265* | 0.3273<br>*n=1478* | 0.4245<br>*n=1462* | 0.3826<br>*n=1474* | 1.0000<br>*n=1478* | 0.1173<br>*n=458* | 0.3038<br>*n=536* | 0.4889<br>*n=528* | 0.4499<br>*n=534* | 1.0000<br>*n=536* |

Note: Variables are the following (all from HRS Wave 2): **SSP** - Probability from 1 to 100 of living to age 85. **Transfer given**- Having given a child a monetary transfer between Waves 1 and 2. **Bequest>$10K** - Probability from 1 to 100 of leaving a bequest of $10,000 or greater. **Bequest>100K** - Probability from 1 to 100 of leaving a bequest of $100,000 or greater. **Transfer>5K** - Probability from 1 to 100 of giving financial help of $5,000 or more to a friend or family member in the next 10 years.

All of the above correlations are significant, except for the correlation between Father's SSP and Transfer Given and the correlation between Father's SSP and the probability of giving a bequest of over $100,000.

**Table 6. Conditional Correlation of SSP with Probability of Bequests and Future Transfers – Mothers**

| | Probability of Bequest >10K | | | | Probability of Bequest >100K | | | | Probability Transfer >$5K | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | OLS | | OLS | | OLS | | OLS | | OLS | | OLS | |
| Covariates | Coef. | t | Coef. | t | Coef. | t | Coef. | t | Coef. | t | Coef. | t |
| SSP (0 to 100) | 0.089** | 2.50 | -0.066 | -0.57 | 0.085** | 2.73 | 0.086 | 0.84 | 0.077* | 2.54 | 0.017 | 0.17 |
| SSP squared | | | 0.002 | 1.39 | | | 0.000 | -0.01 | | | 0.001 | 0.64 |
| Log income | 0.877 | 1.57 | 0.904 | 1.61 | 0.451 | 0.91 | 0.451 | 0.91 | 0.497 | 1.04 | 0.508 | 1.06 |
| Log net worth | 4.643** | 13.37 | 4.673** | 13.44 | 2.265** | 7.44 | 2.265** | 7.42 | 1.695** | 5.71 | 1.707** | 5.74 |
| Separated | 1.181 | 0.30 | 1.139 | 0.29 | 2.324 | 0.67 | 2.324 | 0.67 | 10.368** | 3.06 | 10.341** | 3.05 |
| Widowed | 0.604 | 0.25 | 0.590 | 0.25 | 2.488 | 1.19 | 2.489 | 1.19 | 1.744 | 0.85 | 1.735 | 0.85 |
| Never-married | 3.318 | 0.62 | 3.467 | 0.65 | 4.091 | 0.87 | 4.090 | 0.87 | 2.196 | 0.48 | 2.245 | 0.49 |
| Excellent health | 9.605** | 2.78 | 9.608** | 2.78 | 11.669** | 3.85 | 11.669** | 3.85 | 5.450† | 1.85 | 5.449† | 1.85 |
| Very good | 3.271 | 1.11 | 3.511 | 1.19 | 3.447 | 1.33 | 3.445 | 1.32 | 6.888** | 2.72 | 6.985** | 2.76 |
| Fair health | -3.689 | -1.12 | -3.893 | -1.18 | 0.591 | 0.20 | 0.592 | 0.20 | 1.923 | 0.68 | 1.843 | 0.65 |
| Poor Health | -11.934** | -2.98 | -12.281** | -3.06 | -2.708 | -0.78 | -2.706 | -0.77 | -5.187 | -1.51 | -5.307 | -1.55 |
| Age | -0.171 | -0.55 | -0.168 | -0.54 | -0.091 | -0.33 | -0.091 | -0.33 | -0.860** | -3.21 | -0.858** | -3.21 |
| Black | -1.329 | -0.52 | -1.580 | -0.62 | -1.048 | -0.47 | -1.046 | -0.47 | -1.026 | -0.47 | -1.121 | -0.51 |
| # Biological | -0.279 | -0.38 | -0.291 | -0.39 | -0.041 | -0.06 | -0.041 | -0.06 | -0.594 | -0.93 | -0.599 | -0.94 |
| High school | 10.386** | 3.62 | 10.424** | 3.63 | 4.224† | 1.68 | 4.223† | 1.68 | 3.356 | 1.37 | 3.366 | 1.37 |
| Some college | 17.344** | 4.92 | 17.483** | 4.96 | 12.692** | 4.11 | 12.690** | 4.10 | 11.392** | 3.78 | 11.446** | 3.79 |
| College | 21.599** | 4.33 | 22.110** | 4.42 | 22.233** | 5.06 | 22.229** | 5.04 | 11.041* | 2.59 | 11.236** | 2.63 |
| Graduate | 19.462** | 3.92 | 19.566** | 3.94 | 23.649** | 5.44 | 23.648** | 5.43 | 21.793** | 5.14 | 21.826** | 5.14 |
| # Kids < 10 | -0.774 | -0.84 | -0.768 | -0.84 | -0.157 | -0.20 | -0.157 | -0.20 | -0.592 | -0.75 | -0.590 | -0.75 |
| % Kids male | -0.307 | -0.38 | -0.258 | -0.32 | -0.402 | -0.57 | -0.402 | -0.57 | -0.425 | -0.62 | -0.404 | -0.59 |
| Kids' mean age | -0.357 | -1.46 | -0.368 | -1.50 | -0.294 | -1.37 | -0.294 | -1.37 | -0.296 | -1.42 | -0.300 | -1.44 |
| Constant | 10.884 | 0.66 | 12.642 | 0.76 | -4.145 | -0.29 | -4.158 | -0.29 | 51.704** | 3.66 | 52.395** | 3.70 |
| Observations | 1054 | | 1054 | | 1053 | | 1053 | | 1050 | | 1050 | |
| R-squared | 0.3753 | | 0.3765 | | 0.2391 | | 0.2391 | | 0.2067 | | 0.2039 | |
| Adj. R-squared | 0.3632 | | 0.3638 | | 0.2244 | | 0.2236 | | 0.1881 | | 0.1877 | |
| F | 31.03 | | 29.67 | | 16.22 | | 15.43 | | 13.15 | | 12.54 | |
| Prob>F | 0.0000 | | 0.0000 | | 0.0000 | | 0.0000 | | 0.0000 | | 0.0000 | |

Note: Data from HRS Wave 2. † p<.10, *p<.05, **p<.01

**Table 7. Conditional Correlation of SSP with Probability of Bequests and Future Transfers – Fathers**

| | Probability of Bequest >10K | | | | Probability of Bequest >100K | | | | Probability Transfer >$5K | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | OLS | | OLS | | OLS | | OLS | | OLS | | OLS | |
| Covariates | Coef. | t | Coef. | t | Coef. | t | Coef. | t | Coef. | t | Coef. | t |
| SSP (0 to 100) | 0.083 | 1.33 | -0.203 | -0.97 | 0.005 | 0.08 | -0.018 | -0.09 | 0.063 | 1.01 | 0.544** | 2.67 |
| SSP squared | | | 0.003 | 1.44 | | | 0.000 | 0.12 | | | -0.005* | -2.48 |
| Log income | 1.639† | 1.68 | 1.585 | 1.63 | 1.862† | 1.95 | 1.857† | 1.94 | 2.493** | 2.67 | 2.605** | 2.80 |
| Log net worth | 5.955** | 8.37 | 6.123** | 8.50 | 4.722** | 6.54 | 4.736** | 6.47 | 2.075** | 2.94 | 1.775* | 2.50 |
| Separated | -8.075 | -1.46 | -8.574 | -1.55 | -10.325† | -1.87 | -10.359† | -1.87 | -5.794 | -1.06 | -5.019 | -0.92 |
| Widowed | 1.536 | 0.29 | 1.446 | 0.27 | 1.001 | 0.19 | 0.993 | 0.19 | -0.926 | -0.18 | -0.845 | -0.16 |
| Never-married | -19.008† | -1.67 | -18.632 | -1.63 | -3.267 | -0.28 | -3.240 | -0.28 | -17.662 | -1.56 | -18.254 | -1.63 |
| Excellent health | 2.213 | 0.42 | 2.077 | 0.39 | 12.611* | 2.35 | 12.599* | 2.34 | 5.700 | 1.08 | 5.914 | 1.13 |
| Very good | 0.095 | 0.02 | 0.231 | 0.05 | 10.870* | 2.20 | 10.881* | 2.20 | 6.809 | 1.40 | 6.631 | 1.38 |
| Fair health | -9.810 | -1.61 | -10.316† | -1.69 | 0.761 | 0.12 | 0.724 | 0.12 | -4.605 | -0.76 | -3.920 | -0.65 |
| Poor Health | -1.475 | -0.18 | -3.723 | -0.45 | -6.088 | -0.76 | -6.258 | -0.77 | -11.062 | -1.41 | -7.632 | -0.96 |
| Age | -0.955† | -1.70 | -0.964† | -1.72 | -0.289 | -0.51 | -0.289 | -0.51 | 0.428 | 0.77 | 0.442 | 0.80 |
| Black | 7.785 | 1.57 | 8.422† | 1.69 | 4.417 | 0.88 | 4.466 | 0.89 | 10.521* | 2.14 | 9.438† | 1.93 |
| # Biological | -2.412* | -1.99 | -2.246† | -1.85 | -1.286 | -1.05 | -1.273 | -1.03 | -1.224 | -1.02 | -1.464 | -1.22 |
| High school | 7.381 | 1.51 | 7.508 | 1.53 | -1.947 | -0.39 | -1.938 | -0.39 | 9.050† | 1.86 | 8.825† | 1.82 |
| Some college | 10.785† | 1.94 | 11.039* | 1.99 | 5.399 | 0.96 | 5.417 | 0.96 | 11.981* | 2.17 | 11.692* | 2.13 |
| College | 15.371 | 1.54 | 16.693† | 1.66 | 6.828 | 0.67 | 6.932 | 0.68 | 17.464† | 1.75 | 15.209 | 1.53 |
| Graduate | 11.383 | 1.62 | 11.774† | 1.68 | 8.433 | 1.18 | 8.459 | 1.19 | 21.176** | 3.03 | 20.556** | 2.96 |
| # Kids < 10 | 0.515 | 0.29 | 0.728 | 0.40 | 1.968 | 1.08 | 1.985 | 1.08 | 1.292 | 0.72 | 0.941 | 0.53 |
| % Kids male | 0.891 | 0.61 | 0.678 | 0.46 | -0.041 | -0.03 | -0.057 | -0.04 | -0.493 | -0.34 | -0.173 | -0.12 |
| Kids' mean age | 0.247 | 0.65 | 0.256 | 0.68 | -0.573 | -1.51 | -0.573 | -1.51 | -1.120** | -3.00 | -1.121** | -3.03 |
| Constant | 34.681 | 1.12 | 37.482 | 1.21 | -4.840 | -0.16 | -4.618 | -0.15 | -11.884 | -0.39 | -16.919 | -0.56 |
| Observations | 352 | | 352 | | 354 | | 354 | | 353 | | 353 | |
| R-squared | 0.3791 | | 0.3830 | | 0.3078 | | 0.3078 | | 0.2446 | | 0.2583 | |
| Adj. R-squared | 0.3416 | | 0.3437 | | 0.2662 | | 0.3640 | | 0.1991 | | 0.2113 | |
| F | 10.10 | | 9.75 | | 7.40 | | 7.03 | | 5.37 | | 5.49 | |
| Prob>F | 0.0000 | | 0.0000 | | 0.0000 | | 0.0000 | | 0.0000 | | 0.0000 | |

Note: Data from HRS Wave 2. † p<.10, *p<.05, **p<.01

**Figure 1**

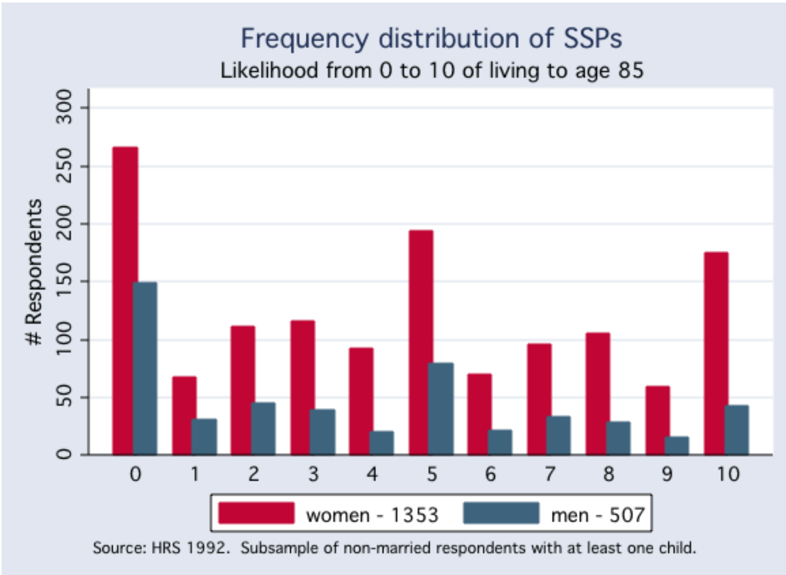
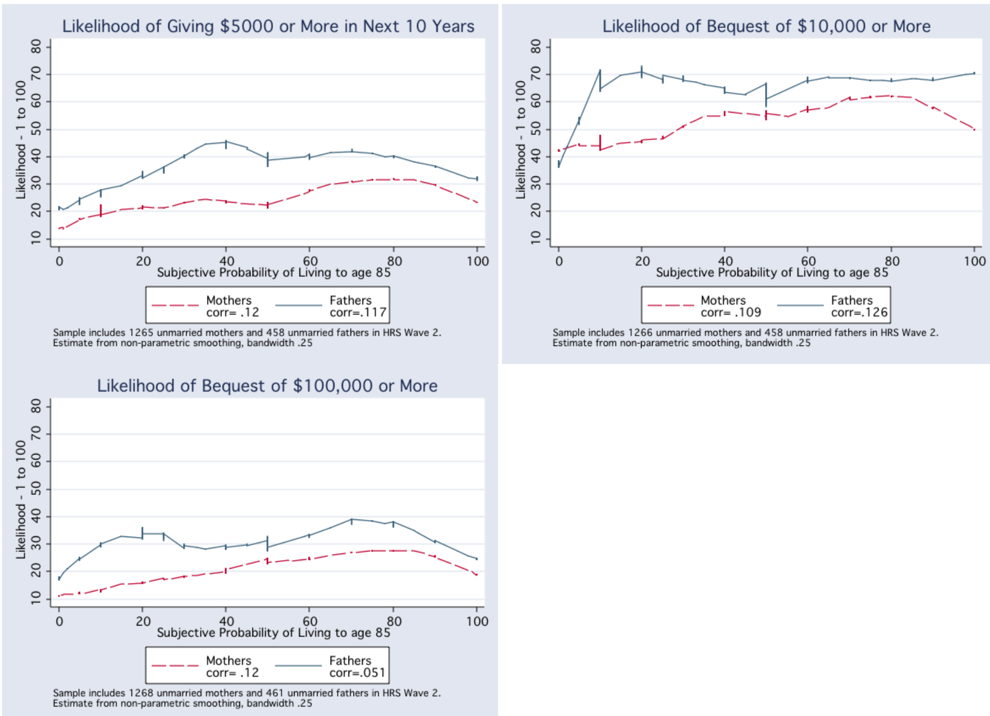

Frequency distribution of SSPs
Likelihood from 0 to 10 of living to age 85
# Respondents
0
50
100
150
200
250
300
0
1
2
3
4
5
6
7
8
9
10
women - 1353
men - 507
Source: HRS 1992. Subsample of non-married respondents with at least one child.

**Figure 2**


Likelihood of Giving $5000 or More in Next 10 Years
Likelihood - 1 to 100
Subjective Probability of Living to age 85
Mothers corr= .12
Fathers corr=.117
Sample includes 1265 unmarried mothers and 458 unmarried fathers in HRS Wave 2.
Estimate from non-parametric smoothing, bandwidth .25
Likelihood of Bequest of $10,000 or More
Likelihood - 1 to 100
Subjective Probability of Living to age 85
Mothers corr= .109
Fathers corr=.126
Sample includes 1266 unmarried mothers and 458 unmarried fathers in HRS Wave 2.
Estimate from non-parametric smoothing, bandwidth .25
Likelihood of Bequest of $100,000 or More
Likelihood - 1 to 100
Subjective Probability of Living to age 85
Mothers corr= .12
Fathers corr=.051
Sample includes 1268 unmarried mothers and 461 unmarried fathers in HRS Wave 2.
Estimate from non-parametric smoothing, bandwidth .25

**Appendix Table A1. Means of Actual and Anticipated Transfers, by Parent's Gender**

| | Mothers | | Fathers | | |
|---|---|---|---|---|---|
| Measure | Mean | SD | Mean | SD | t-test |
| Wave 1 | | | | | |
| Transfer Incidence | 0.457<br>*n=1418* | 0.498 | 0.545<br>*n=528* | 0.498 | -3.482** |
| Transfer Amt (per wave) | $1,948<br>*n=648* | $4,929 | $3,493<br>*n=288* | $13,471 | -2.560* |
| Wave 2 | | | | | |
| Probability of bequest >10K | 48.8<br>*n=1471* | 44.2 | 58.7<br>*n=535* | 43.4 | 3.089** |
| Probability of bequest>100K | 17.4<br>*n=1555* | 33.0 | 24.1<br>*n=600* | 42.0 | 2.774** |
| Probability of transfer>5K | 21.4<br>*n=1478* | 32.3 | 33.0<br>*n=557* | 38.1 | 5.000** |

Note: Transfer Incidence is a 0/1 variable with 1 indicating that a parent gave to at least one of their children in waves 1 through 5. Transfer Amount is the sum of transfers given to any children across Waves 1 through 5, divided by the number of waves the parent participated in, giving a per wave average transfer. The Wave 2 probabilities are on a scale of 0 to 100.
*p<.05, **p<.01

**Appendix Table A5. Mean Responses to SSP and Parental Transfer Questions – Wave 2**

| | Mothers | | Fathers | |
|---|---|---|---|---|
| Measures | Mean | SD | Mean | SD |
| SSP | 47.3 | 32.0 | 42.8 | 30.7 |
| | *n=1274* | | *n=463* | |
| Transfer given | .338 | .473 | .368 | .479 |
| | *n=1563* | | *n=605* | |
| Probability of bequest >10K | 48.8 | 44.2 | 58.7 | 43.4 |
| | *n=1471* | | *n=535* | |
| Probability of bequest>100K | 17.4 | 33.0 | 24.1 | 42.0 |
| | *n=1555* | | *n=600* | |
| Probability of transfer>5K | 21.4 | 32.3 | 33.0 | 38.1 |
| | *n=1478* | | *n=557* | |