
Transfer Behavior in the Health and Retirement Study

Measurement and the Redistribution of Resources within the Family

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A B S T R A C T

Recent work by a number of economists has opened a debate about the role played by intergenerational transfers. Using the new Health and Retirement Study (HRS), we are better able to address the issues involved. Contrary to the current literature on bequests, we do not find that parents give transfers equally to all children. Rather, we find that in the case of inter-vivos transfers, respondents give greater financial assistance to their less well off children than to their children with higher incomes. Financial transfers to elderly parents are also found to be negatively related to the (potential) recipient's income. These results hold both for the incidence of transfers and for the amounts. In addition, we allow for unobserved differences across families by estimating fixed effect models and find our results to be robust to these specifications. A comparison of the HRS transfer data to other survey data demonstrates that the HRS is potentially quite useful for research on transfer behavior.

I. Introduction

This paper has two goals. The first is to examine the quality of the Health and Retirement Study (HRS) data. Specifically, we are interested in the information obtained on interhousehold assistance given by the HRS respondents

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to their children and parents. We will examine these data in comparison with other surveys that collect similar information. This analysis has general applicability to those examining information on transfers regardless of the data set examined.

One of the important characteristics of the HRS data is that assistance given by the respondent to *each* child and *each* elderly parent is ascertained. The second objective of this paper takes advantage of this characteristic to determine how resources are redistributed within families. Specifically, we examine whether parents give greater financial assistance to their adult children who have the lowest incomes. Similarly, we determine whether adult children give greater financial and time assistance to their less wealthy parents or parents-in-law. With respect to transfers to parents we also look for differences in the provision of financial versus time assistance.

We seek to understand the redistributive aspects of transfers because they have implications as to the appropriateness of alternative models of transfer behavior. The relationship between transfers and the recipient's income is in the forefront of the debate on the motivation behind such transfers. One theory hypothesizes an altruistic motive wherein donors care about the well-being of the potential recipients (Barro 1974; Becker 1974). The primary competing hypothesis argues that transfers are a form of exchange and represent payments to the recipient for the provision of services (Cox 1987). Under the altruism model we would expect that the (potential) recipient's income would be negatively related to transfers, with family members giving more to less well off relatives. In the exchange model, the amount of transfers received may be either positively or negatively related to the recipient's income, with the direction of the relationship depending on the elasticities of supply and demand for services. In fact, the exchange model predicts that transfers received may actually increase in response to an increase in the (potential) recipient's income because he now demands greater compensation to provide the same amount of service. The exchange model therefore makes no testable prediction about the effect of the recipient's income. Thus, while it is possible to discredit the altruism model by failing to observe a negative relationship between income and transfers, the exchange model cannot be so easily disproved.

The motivation behind the transfer of resources is important in assessing the impact of government programs. As discussed by Barro (1974), if individuals have altruistic motives for transferring resources to the subsequent generation, then there is no difference between issuing bonds and taxing individuals to pay the government's debts. Furthermore, the presence of an altruistic motive reduces the effectiveness of government assistance programs because of the potential for crowding out of familial assistance. For example, friends and family of an unemployed person may give less assistance if the government provides the unemployed person with more generous Unemployment Insurance (Schoeni 1992).

Several studies (Wilhelm 1991; Menchik 1988; Tomes 1981, 1988; Kessler and Masson 1988) have tested the motivation for transfers by examining bequest behavior. The altruism model predicts that parents should leave a greater inheri-

tance to their less well off children. In a recent study, Wilhelm (1991) finds that parents tend to give equal bequests to their children, thus casting doubt on altruism as a motive. Additional studies have tested this model by estimating the effect of recipient's income on the dollar value of inter-vivos transfers received (Cox 1987; Cox and Rank 1992; Lee, Parish, and Willis 1994; Altonji, Hayashi, and Kotlikoff 1992a; Dunn, 1994); here again the altruism model predicts a negative effect. These studies do not find consistent results; some (Cox 1987; Cox and Rank 1992) find positive effects while others (Altonji et al. 1992a; Dunn 1994) find negative effects. One test of the altruism model examines the relationship between the coefficients on the donors' and the recipients' incomes. Altonji, Hayashi, and Kotlikoff (1994) reject altruism because the required conditions are not met. We will return to this point later. Altonji, Hayashi and Kotlikoff (1992b) use a third approach and test the altruism model by examining whether the income of adult siblings influences one's own consumption even when one's own income is controlled for. If perfect altruism exists, then siblings should consume based on total family income rather than solely on their own income. Altonji et al. (1992b) find that siblings' income has only a small effect on own consumption and, as a result, they reject the altruism model.

Like most previous studies of transfers, this study examines the effects of the recipient's income on the amount of assistance received. However, unlike those studies we explore the implications of the altruism model by examining transfers *within* the extended family.¹ That is, we examine within-family differences in transfer behavior and therefore determine directly whether parents give more to less well off children when unobserved differences in family generosity are controlled for.² Estimation based on a sample of all families and separate analyses for two-, three-, and four-child families show a strong negative correlation between transfers and the recipient's income. The analysis of transfers to parents corroborates this evidence. Our study of parents also suggests that the provision of time assistance is based on the need for care rather than on the financial status of the recipient.

The paper begins with a discussion of the data examined. Transfers reported in the HRS are then compared with transfers reported in other surveys. We concentrate our comparisons on transfers reported in the supplement to the 1988 Panel Study of Income Dynamics (PSID), because the questions of income transfers are similar and the PSID has been used frequently in recent studies of transfers. A description of transfer behavior towards children, including multivariate analyses, is presented, with concentration on the effects of the (potential) recipients' income. This is followed by a similar discussion of transfers to the respondents' parents. A final section summarizes and concludes.

1. An exception is the recent paper by Dunn (1994), which also examines a fixed family component. However, Dunn does not have information on all children in the family, as we do with the data examined here.

2. Behrman, Pollak, and Taubman (1990) also examine sibling differences in cash assistance received using the 1982–1984 PSID. However, as we discuss below, there is evidence that transfers in the PSID were underreported by as much as fivefold in the years they examine.

II. Data

We focus our discussion of transfers on results from two large data sets: the Health and Retirement Survey (HRS) and the 1988 Panel Study of Income Dynamics (PSID). The 1988 PSID transfer data have been analyzed in several studies (Hill, Morgan, and Herzog 1993; Altonji et al. 1992a; Schoeni 1992, 1993). Other data sets which have been used to address this issue include the Survey of Consumer Finances (SCF) (Gale and Scholz 1991), the National Survey of Families and Households (NSFH) (MacDonald 1990; Silverstein and Waite 1992; Cox and Rank 1992), and the National Longitudinal Survey of Youth (NLSY) (Rosenzweig and Wolpin 1990, 1992). The HRS and the PSID have several advantages over most other data sets: they allow transfers to be examined in a family context because they contain detailed information on both the (potential) donor and the (potential) recipient, including some measure of both income and wealth of each party. Additionally, the two data sets collect information on time as well as financial assistance whereas the others, with the exception of the NSFH, do not. Thus, while we will mention other data sets, the majority of our comparisons will be drawn between the PSID and the HRS.

A. The HRS

The HRS is a new panel survey with the first interviews begun in 1992. The HRS sampled individuals born between January 1, 1931, and December 31, 1941, and their spouses or partners. The sample is ideal for our study of transfers because it is members of this age group who are thought to make up the majority of transfer givers, providing assistance to both parents and children (Schoeni 1993; Hill et al. 1993).

With respect to children, respondents are asked about the provision of financial assistance.³ For parents, assistance both in the form of financial transfers as well as time help is measured. Specifically, respondents are asked:

"Have you [or your (husband/partner)] given (your child/any of your children) financial assistance totaling \$500 or more in the past 12 months?"
(underline appears in questionnaire).

The same question is asked with regard to parents, along with an additional question about the provision of time assistance:

"How about another kind of help: Have you [or your (husband/partner)] spent 100 or more hours in the past 12 months helping your [your(husband's/partner's)] parent(s) (or stepparents) with basic personal needs like dressing, eating and bathing?"
(underline appears in questionnaire).

3. Both gifts and loans are included in this measure and no information is available to differentiate the two. MacDonald (1990) uses the NSFH, which does separate gifts from loans, and finds that the effects of the covariates are similar for the two outcomes. In fact, he pools the two types of transfers for his primary analyses. Furthermore, Martin and Martin (1978) find that transfers that are originally given as loans are seldom repaid and pressure to do so is minimal.

Note that this question refers only to certain types of care. We will return to this point later. After these questions, those who reported transfers are asked the amount in dollars or hours. The questions about assistance to relatives are asked once for each respondent-spouse pair. For couples, the questions are administered to the female partner, the assumption being that she is more knowledgeable about the couples' children and parents or parents-in-law. In addition to information on transfers, she provides fairly detailed demographic and income information for each child and somewhat less information for each parent (See Tables 5 and 9).

We divide our empirical investigation into two separate analyses: financial transfers from respondents to their children, and transfers of both time and money from the respondents to their parents. In each case we limit our discussion to interhousehold transfers.⁴ We restrict our sample of children further by limiting our attention to those who are 18 and over. Because we exclude children living at home, most (98.9 percent) of those in our sample are already 18 or older. However, this additional restriction allows us to ignore child support payments and other legal requirements of support which may or may not be voluntarily paid, and which in either case differ from what is typically considered to be an intergenerational transfer. When this restriction is eliminated there is no change in the substantive results, nor is there a significant change with the imposition of tighter age restrictions, such as limiting the sample to those 25 and older, or 30 and older. The estimates for alternative samples are discussed in footnote 27 and shown in the appendix table.

There are 17,859 children in the sample, of whom 3,661 live with a respondent and 14,198 live elsewhere. Restricting the sample to children 18 years of age and over reduces the total number to 16,678, with 2,639 living at home and 14,039 living elsewhere.

The incidence and amount of transfers differ by living arrangement. Table 1 reports the number and proportion of children in each category whose parents report giving them transfers.⁵ Focusing on children age 18 and over, 30.3 percent of those who are living with their parents are reported to have received financial assistance from their parents, while 13.8 percent of those who live away from

4. It is not obvious how transfers within a household are to be measured. The HRS question explicitly asks for assistance "excluding shared housing and food." Thus, actual financial transfers are separated from transfers in-kind. However, the in-kind transfers need to be given a dollar value if transfers are to be compared across coresident and non-coresident siblings. A parent may give less in the way of specific dollar transfers to a child living at home than to one living away from home, even if he is intending to help the two equally, because the child living at home derives a benefit from the in-kind transfer of food and shelter. The evaluation of shared food or housing is difficult. Without more specific geographical information it is impossible to impute a reasonable rental value for children (parents) living with the respondents. Even if an evaluation could be made, a child living at home may or may not pay rent or purchase his own food. Because we have no information on these contributions a clear picture of intrahousehold transfers is difficult to obtain. We do, however, test whether the estimates of the incidence equation are sensitive to the omission of intrahousehold transfers. We find that our conclusions are unchanged by the inclusion of these respondents (see footnote 22 for the relevant estimates).

5. In this and subsequent tables, the frequencies are computed using the unweighted data, and the means and percentages are weighted. The multivariate analyses in Section 4 are also based on unweighted data.

Table 1*Incidence and Magnitude of Transfers to Children and Parents: HRS*

	Number of Cases	Proportion Receiving from Respondent	Mean Amount Received*	Standard Error of Mean
<i>Cash transfers to all children</i>				
Those living at home	3,661	25.1%	\$4,728	213
Those not living at home	14,198	20.4	\$3,023	130
Total	17,859	21.5	\$3,553	112
<i>Cash transfers to children 18+</i>				
Those living at home	2,639	30.3	\$4,979	237
Those not living at home	14,039	13.8	\$3,061	135
Total	16,678	16.4	\$3,616	119
<i>Cash transfers to parents</i>				
Those living at home	240	16.8	\$2,128	226
Those not living at home	5,603	6.7	\$2,125	226
Total†	5,843	7.1	\$2,126	204
<i>Time transfers to parents</i>				
Those living at home	249	24.9	2,642 hours	311
Those not living at home	5,627	4.5	656 hours	51
Total†	5,876	5.4	1,028 hours	81

* Means are over positive values.

† Number of cases differ because of missing values on transfers.

their parents receive such transfers. The mean dollar value of transfers for those who receive a nonzero amount is \$4,979 for children at home and \$3,061 for children living away from home. Similar differences are observed when those under 18 are included.

While only 13.8 percent of children in our restricted sample receive a financial transfer, a much larger proportion of households give money to at least one child. Of those households who had a child/children living outside of the home, 29 percent (not shown) report giving some money to their children.

The numbers for transfers to the respondent's parents are similar. From a sample of 5,843 elderly parents, we select the 5,603 who do not live with the respondent.⁶ For those parents living with the respondent, 16.8 percent receive financial transfers and 24.9 percent were helped through the transfer of hours. For

6. Throughout the paper we will use the word parent to refer to parent-couples where a parent-couple is defined as a parent (biological or adoptive) and his or her spouse. Thus an individual whose own parents are divorced will have two parent-couples in addition to the number of parent-couples of his spouse (if any). We combine transfers to each member of the parent-couple to a single value.

parents not living with respondents, the figures are 6.7 percent and 4.5 percent, an even greater change across living arrangements than for children. The dollar amount transferred for those receiving a positive amount is \$2,128 for parents at home and \$2,125 for parents not at home, a surprisingly small difference. However, the respective hours transferred, again averaged over positive values, are 2,642 and 656. The large number of hours spent helping parents who live with the respondent (an average of 7.2 hours per day) suggests that the living arrangement may be a result of the parent's need for constant care.

B. The PSID

The PSID is an ongoing panel survey begun in 1968. (See Hill [1992] for a detailed discussion of the data.) While the HRS is restricted to respondents of a certain age, the PSID is not. When appropriately weighted, the PSID is representative of the entire U.S. population. In several of the analyses below, we will attempt to replicate the HRS sampling scheme by restricting the PSID sample to those households in which the head or spouse is between the ages of 51 and 61.

In the PSID, the question regarding private monetary transfers given to others asks:

"During 1987, did (you or your family living there) give any money toward the support of anyone who was not living with you at the time?"

The amount of assistance given and the relationship to the person helped is then recorded. The PSID also asks about time help given to parents, and the question asked is:

"In 1987, did (you/your family living there) spend a lot of time helping your parents? About how many hours in 1987 did you(your/your family living there) spend helping them?"

In addition to the information on private transfers, the households interviewed are asked to provide information regarding each of the head's parents and, if there is a spouse, each of the spouse's parents. This information includes the parents' net wealth, education, health, distance in miles from respondent's residence, and marital status.

The 1988 PSID sample consists of 7,114 households. Restricting to those households in which the head or spouse is 51–61 reduces the sample size to 1,042. When we further restrict to those with a living non-coresident parent, the sample size falls to 598. Throughout the paper we will call this sample the restricted sample.

Table 2 reports transfers of money and time to parents in the HRS and the restricted sample of the PSID. We find that while only 7.1 percent of HRS respondents report that they helped their parents in the form of time, 33.3 percent of PSID respondents did so.⁷ The mean amounts transferred were 704 hours in the

7. The family weights are used in calculating the descriptive statistics for the PSID.

Table 2
Transfers to Non-Coresident Parents Reported in the PSID and HRS

Type of Transfer	PSID		
	HRS	PSID Censor*	HRS Censor*
<i>Time help</i>			
Proportion giving	7.1%	33.3%	24.9%
Mean hours given	704 hours	429 hours	554 hours
<i>Financial assistance</i>			
Proportion giving	9.2%	5.2%	2.1%
Mean dollars given	\$2,501	\$910	\$1,943

* PSID censors are \$0 and 0 hours. HRS censors are \$500 and 100 hours.

HRS versus 429 in the PSID. Assuming that the underlying populations represented by the samples are the same, this difference may arise for several reasons. First, the HRS asks about transfers of 100 hours or more while the PSID does not. If we restrict the PSID transfers to those of 100 or more we still find large differences, with 24.9 percent giving help for a mean amount of 554 hours. A second and more important reason these data differ is that the HRS asks about help with "basic personal needs like dressing, eating and bathing." The PSID asks about help in any form. There are many other types of valuable assistance which can be provided to elderly parents including housework, help with errands, and managing financial concerns; these transfers will be missed in the HRS.

The exchange motive for transfer behavior would predict that services rendered to the parent, such as providing help with basic personal needs, are reimbursed either through inter-vivos transfers or as a bequest. The transfer of other types of time help is crucial to testing these hypotheses. It is in this respect that the PSID has an advantage over the HRS. However, it is an item which can be easily rectified in future waves of the HRS.

Because the questions on time help are very different across the surveys, the more meaningful comparison is made between financial transfers. The average amount of financial assistance given to parents in the two surveys is quite different, with the HRS having a mean amount given of \$2,501 and the PSID only \$910. However, because of the selection process in the HRS, which restricts transfers to those of \$500 or more, we would expect a higher mean in that survey. If we impose the \$500 limit on the PSID data, mean transfers in the PSID increase to \$1,943 (in 1991 dollars). However, the proportion reporting transfers of \$500 or more is 9.2 percent in HRS and only 2.1 percent in the restricted PSID sample. Even without the imposition of the \$500 censor, only 5.2 percent of the PSID respondents report to be making transfers to parents. The discussion below examines the effects of survey design as one possible explanation for the observed differences.

III. Comparison of Data on Private Transfers

The differences between the frequency of transfers observed in the PSID and the HRS suggest that reported transfers may be especially sensitive to survey design. Evidence from other surveys suggests a similar conclusion. For example, two surveys which report very low levels of financial assistance are the annual core of the PSID and the National Longitudinal Survey (NLS). In both of these surveys the question on financial assistance received from friends or relatives is administered after income from all other sources is obtained. In the NLSY the transfer question asks, "Did respondent receive financial aid from relatives in past year?" Only 4.9 percent of the sample report receiving such assistance. The annual core section of the PSID asks about "help from friends or relatives in the past year." Here, as in the NLSY, the proportion of all households reporting such help is small, between 4 and 7 percent per year. Similarly, when the HRS respondents are asked about "financial support on a regular basis from friends or relatives," approximately 2.5 percent report the receipt of such transfers.⁸

Other surveys which contain alternative question designs obtain very different levels of transfers. The 1988 supplement on transfers in the PSID included alternatively worded questions on transfers: "During 1987, did (you/your family living there) receive any loans, gifts, or support worth \$100 or more from a friend or relative, besides parents, who was not living with you at the time?" In addition, they ask the amount received from *each* of the respondent's parent-couples (including parents-in-law). With this change, the proportion of PSID households reporting the receipt of cash transfers jumped to 20 percent. In the NSFH, which asks "During the past five years have you (or your husband/wife/partner) received a gift or loan worth more than \$200 at any one time from anyone not living with you at that time (not including help to purchase a first home)," 24 percent of respondents answer yes.⁹ Apparently more detailed probing and questioning can uncover substantially more transfers.¹⁰ Although these samples differ in sev-

8. This low number is likely due in part to the age of the sample. Those in this age group (aged 51–61) are on average the donors rather than the recipients of financial transfers.

9. Without knowing the correlation in transfer receipt across years it is difficult to compare the NSFH reports with the PSID reports. However, it is likely that while they are positively correlated over time, the correlation is not perfect, and the proportion receiving transfers in any given year is therefore less than 24 percent.

10. A separate issue which we do not address is whether transfers given are more or less likely to be reported than transfers received. For some parent-child matches in the PSID, the adult child reports the amount received and their parent, who is also interviewed in a separate household, reports the amount given. Altonji et al. (1992a) have compared these reports and find that they often do not correspond. They conclude that the mismatch is due to differences in the wording of the questions pertaining to transfers given versus transfers received. Because of these differences in questioning, one cannot infer that respondents are more likely to report assistance given than help received. Unfortunately neither the parents nor the children of HRS respondents are interviewed, so we cannot examine the validity of reports within families. Furthermore, since the HRS respondents were born between 1931 and 1941 (or are married to individuals from this cohort) we are unable to collect any information regarding the reported receipt of transfers made by the HRS respondents to their parents or children. We note, however, that HRS respondents report the receipt of transfers only very infrequently. The lack of

eral respects, even in supposedly comparable samples (for example, the 1988 PSID and earlier waves of the same survey) significant differences exist in the reporting of transfer behavior. These differences can arise for several reasons. First, the censoring point of transfers is quite different across surveys. Most surveys which collect information on transfers ask only about transfers which were above a given level. For example, the HRS asks about assistance of \$500 or more, and the NSFH asks about help of \$200 or more. In addition, the time frame over which transfers can be received differs across surveys. The NSFH asks about transfers over the past five years, while others, including the PSID, NLS, and HRS, ask about transfers over just the past year.

Second, as discussed above in relation to the 1988 PSID, in some surveys there are multiple questions about transfers. For example, in the 1988 PSID, respondents are asked several questions about financial transfers received. They are asked to identify separately transfers received from non-parents and from each living parent-couple. Therefore, they could be asked five separate questions about financial transfers received. In the earlier years of the PSID a single question on financial transfers received was asked, as is the case in the NLS. Moreover, respondents in the 1988 PSID are asked only once about financial transfers given to friends and relatives. The HRS asks three questions about gifts made to others: money given to children, money given to parents, and money given to anyone else outside the household. The frequency of questioning and the separate questions for transfers specifically to parents may be the reason the HRS frequency is higher than the PSID, as reported in Table 2.

To demonstrate the potential importance of these dimensions of survey design, we focus on one particular issue: the effect of the censoring point on the estimate of transfers. Specifically, we use the PSID to examine the implications of the \$500 and the 100 hour cutoff points which are used in the HRS. In the PSID, cash assistance given to others is not censored, although cash assistance received is censored at \$100. With respect to hours, the PSID asks respondents whether they gave "a lot of time." The censoring point is therefore left to the discretion of the respondent, but we operationalize this by assuming it is 0.¹¹

To determine the extent to which censoring points in the HRS may cause misleading conclusions, the HRS cutoff points (\$500 and 100 hours) are imposed on the restricted sample of the PSID. In Figures 1-3 we report the distribution of financial transfers to children, financial transfers to parents, and time transfers to parents, respectively, for the PSID (both censored and uncensored) and the HRS.¹² For the PSID, a sizable portion of the financial transfers to children is less than \$500. If all transfers of less than \$500 were simply excluded from the

assistance received could stem from the age of the sample, or alternatively from the reluctance to report assistance received versus assistance given. Finally, in a nationally representative sample, the average amount of transfers given should equal the average amount received; however, because the HRS is restricted to a narrow age-range, such a comparison would not be a valid test of misreporting. We leave this question to future work.

11. A substantial proportion of respondents reported transfers close to 0 hours; in the sample analyzed, 8 percent of all time help given to parents was for less than 25 hours a year.

12. Note that there exist a few cases in the HRS for which reported transfers are below the censoring points. Apparently these cases were reported and coded even though they were below the limit.

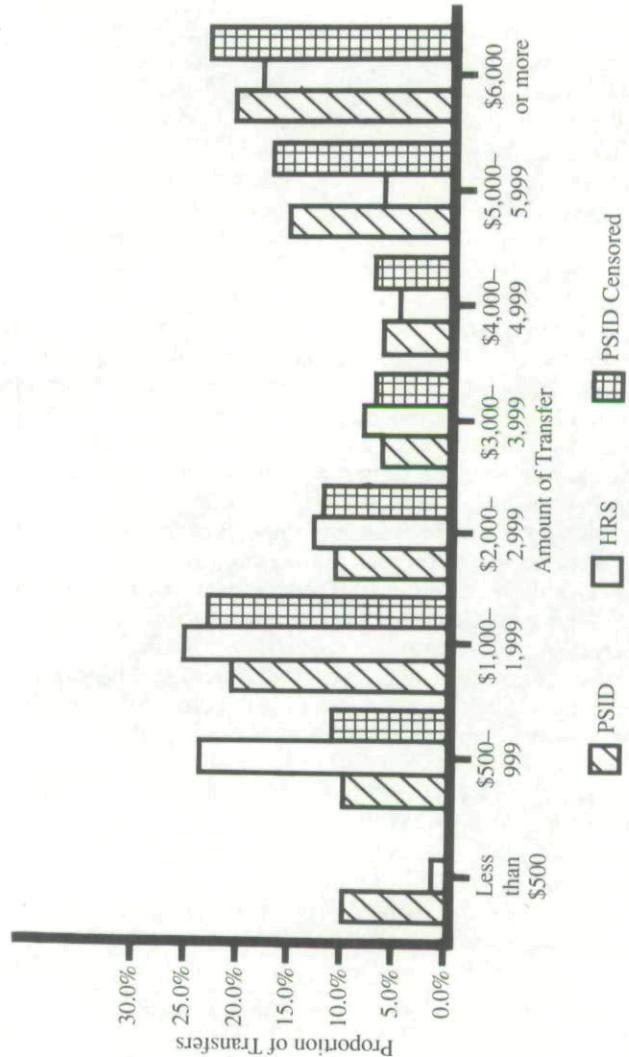


Figure 1
Distribution of Financial Transfers to Children, HRS vs PSID

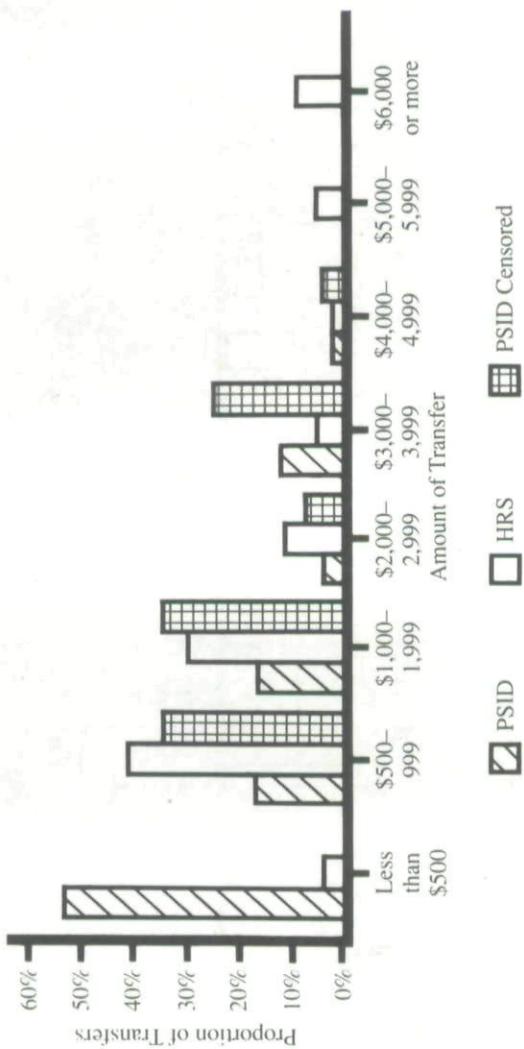


Figure 2
Distribution of Financial Transfers to Parents, HRS vs PSID

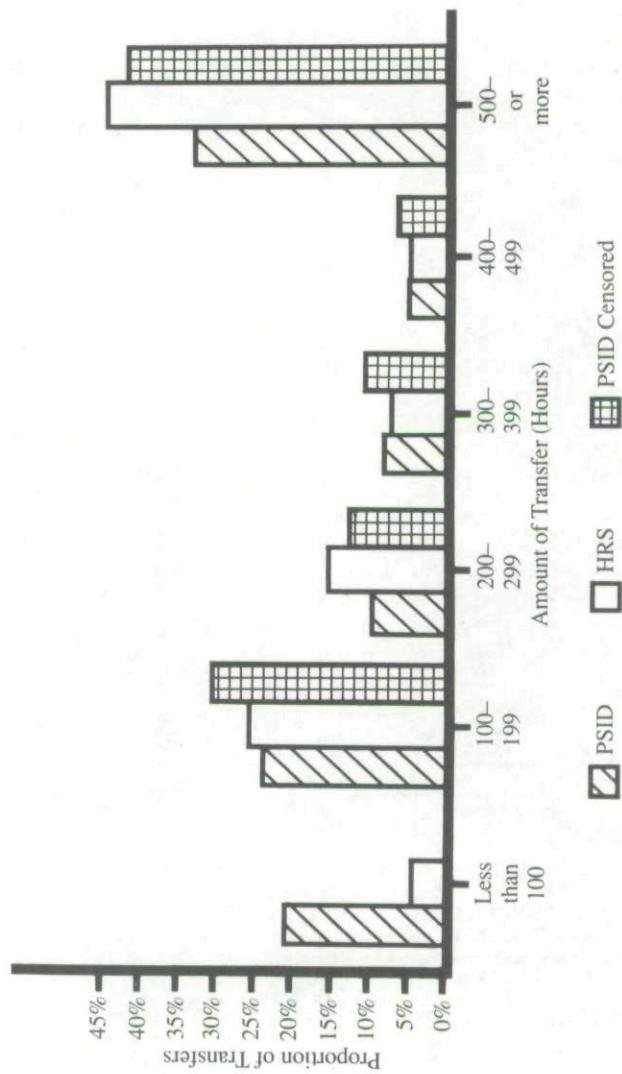


Figure 3
Distribution of Time Transfers to Parents, HRS vs PSID

HRS, appropriate statistical methods could be used to deal with this censoring. However, a comparison of the censored PSID and the HRS data suggests that this is not the case. Across most categories the distributions for the HRS and the PSID are comparable. However, the large spike at \$500-\$999 in the HRS is not matched in the PSID. It appears that respondents who give less than \$500 may inflate their answers to the \$500 minimum rather than report giving no assistance to their children. If all PSID transfers of less than \$500 are added to the \$500-\$999 totals, thus simulating this "rounding up," the two distributions are quite similar. We therefore suggest that HRS respondents may inflate actual transfers to reach the \$500 minimum. Indeed, 17 percent of all transfers in the HRS are for exactly \$500, while in the PSID only 3.0 percent of the transfers greater than or equal to \$500 are exactly equal to \$500.

Conducting the same experiment for transfers given to parents produces dissimilar results (Figure 2), though we might expect respondents to feel less pressure to report a transfer to parents than they do for children. A substantial proportion of transfers in the PSID (54 percent) are below \$500 and again the censored PSID distribution compares more favorably with the HRS.

The disparity in the type of time help collected by the two surveys leads us to expect that the two distributions will not be comparable for this type of transfer. Figure 3 reports the distribution of time assistance for each of the three samples. Despite our prior beliefs, the distributions (though not the total amounts) are surprisingly close. Combining all PSID reports of transfers below the HRS censors of \$500 and 100 hours suggests that substantial amounts of time and cash assistance are not being recorded in the HRS simply because of the height of the censoring points.

The censoring point may also influence inferences which are drawn about the differences between those who do and do not participate in transfer networks. To demonstrate this effect, the characteristics of those households in the PSID making transfers less than the HRS censor and those making transfers which would be captured in the HRS are presented (Table 3). We find that those who make cash transfers under \$500 are more likely to be black, to have fewer years of schooling, and to have lower incomes.

The last step of the analysis of the effects of censoring is to examine whether the censoring influences the estimates of covariates in a transfer regression. Here we use the PSID to estimate a logit model of whether time help was given to parents.¹³ Identical models are estimated for whether time help was given, using both the PSID's censor and the HRS's 100-hour censor. Because the sample size is so small for the 51-61 year old subsample, we omit the age restriction for this analysis, but we retain the restriction that the respondent have a non-coresident living parent ($N = 5,217$). Several of the coefficient estimates are indeed affected by the censoring (Table 4). Specifically, there is a negative relationship between parental education and the probability of transfers when the censor of 100 hours is used. The effect becomes insignificantly different from zero when the censoring is 0 hours. The coefficients on marital status, age, parental wealth, and number

13. We focus on parents in the PSID because we do not have sufficiently rich information on non-coresident children to explore a substantive model.

Table 3
Characteristics of Respondents, by Amount of Transfers for 51–61-Year-Olds, 1988 PSID

Characteristic	Money to Children		Money to Parents		Time to Parents	
	Less than \$500 (N = 13)	\$500 or More (N = 86)	Less than \$500 (N = 16)	\$500 or More (N = 15)	Less than 100 Hours (N = 44)	100 or More (N = 139)
Total family income	\$35,423 (122,029)	\$59,287 (217,775)	\$45,263 (100,282)	\$76,438 (236,625)	\$44,124 (121,012)	\$53,269 (282,650)
Head's schooling	10.5 years (8.37)	13.7 years (14.42)	10.97 years (18.60)	14.20 years (13.28)	11.81 years (15.87)	12.64 years (13.10)
Head black	8.8% (1.23)	6.3% (1.11)	11.95% (1.59)	1.82% (0.65)	5.60% (1.00)	9.42% (1.38)
Head female	5.8% (1.01)	16.6% (1.88)	0.83% (0.45)	21.94% (2.00)	9.66% (1.28)	17.35% (1.80)

Sample: Households with head or spouse 51–61 years old. Standard deviation reported in parentheses.

Table 4

Logit Analysis of Whether Time Help Given to Parents, Censoring at 0 and 100 Hours, 1988 PSID (N = 5,217)

Respondent's Characteristics	Censor = 0 Hours		Censor = 100 Hours	
	Coefficient	Standard Error	Coefficient	Standard Error
Race				
White (omitted)				
Black	-0.0206	0.0715	0.0111	0.0803
Other	-0.0505	0.2241	-0.0384	0.2551
Age	-0.0488***	0.0169	-0.0666***	0.0184
Age squared	0.0005**	0.0002	0.0007***	0.0002
Years of schooling	-0.0194	0.0131	0.0016	0.0148
Household income quartile				
1st (lowest)				
2nd	-0.2808***	0.0880	-0.2356**	0.0972
3rd	-0.3010***	0.0973	-0.2896***	0.1088
4th	-0.5177***	0.1099	-0.4622***	0.1242
Marital status				
Married	0.0796	0.0992	-0.0704	0.1103
Never married (omitted)				
Widowed	0.2330	0.2153	0.4003*	0.2257
Divorced/separated	-0.1422	0.1076	-0.1619	0.1194
Number of parent-couples	0.1909***	0.0396	0.1247***	0.0446
Head's father's education				
Missing	-0.0320	0.1253	0.0835	0.1382
Less than high school	0.0818	0.0750	0.0845	0.0849
High school (omitted)				
More than high school	-0.1436	0.1197	-0.3795***	0.1459
Head's married parent's net wealth				
In debt	-0.4328**	0.1905	-0.3459	0.2237
Just break even	0.2004	0.1585	0.1466	0.1783
\$0-24,999	-0.0232	0.1675	0.0219	0.1894
\$100,000-249,999 (omitted)				
Greater than \$249,999	-0.3568***	0.1265	-0.2469*	0.1476
These parents not alive	0.2004*	0.1089	0.1874	0.1245
Constant	0.4690	0.3826	0.0469	0.4238
Mean of dependent variable	0.365		0.235	

*, **, and *** denote significance at the .10, .05, and .01 level, respectively.

of living parent-couples also appear to be somewhat sensitive to the censoring, though the differences are not statistically significant.

While the HRS is apparently quite effective in measuring the transfers it intends to capture, a significant amount of information is being lost by the censoring scheme. Determining the appropriate cutoff point is not a trivial exercise. Certainly we are not interested in transfers which are of no economic significance to

either the donor or the recipient, yet to individuals with different income and wealth levels, different amounts of money may be considered meaningful. However, what is even more important than capturing all significant transfers, is getting an accurate accounting of those which are being measured. To deal with these issues, we propose two changes in the survey. First, we suggest lowering the \$500 cutoff somewhat, perhaps to \$100 (as in the PSID) to capture transfers made in poorer families.¹⁴ Second, to avoid the problem of "rounding up" which appears to be serious (see Figure 1), we would like to see the implementation of a two-stage questioning procedure already discussed by the HRS steering committee.¹⁵ In the first question, respondents would simply be asked if they gave any transfers to a child. In the second, they would be asked if any of these transfers were over \$500, and if so, their amount. This routine adds only one additional question, yet we believe it has the potential to reduce substantially the rounding up problem.

In addition to the missed or incorrectly recorded financial transfers, a substantial proportion of time assistance is unrecorded because of the survey's focus on help with "basic personal needs." As evidenced by the PSID, other forms of time assistance are quite prevalent. Fortunately, in the regression context the coefficient estimates do not appear to be affected dramatically, though we would caution future researchers to treat carefully this censoring in that it may lead to inaccurate inferences regarding differences in social support among subgroups.

IV. Redistribution of Resources Through Familial Transfers

We now turn our attention exclusively to transfer behavior reported in the HRS. Again, we consider transfers to children and parents separately. In this section, a series of descriptive results which are free of any functional form specification are discussed followed by multivariate analyses of the incidence and magnitude of transfers. Our analyses explicitly examine transfers *within* the family by using a family fixed effect. Throughout these sections, the effects of the relative economic positions of family members in determining transfer behavior are emphasized.

A. Transfers to Children

Descriptive results

The mean values of the variables to be used in the subsequent analyses are reported in Table 5 for our entire sample of respondent-child pairs (respondents with children over the age of 18 who do not live in the respondent's home), and separately by whether or not a transfer is given. Each respondent-child pair is counted as an observation. Thus, a respondent with four adult children, none of

14. We note that the HRS has already modified the questionnaire to address this problem.

15. We thank Michael Hurd for bringing this suggestion of his to our attention.

Table 5

Characteristics of Respondents and Their Children, by Transfer Status of Child: HRS

	Didn't Receive Cash (N = 9,459)		Received Cash (N = 1,596)		All Children (N = 11,055)	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
<i>Child's characteristics</i>						
Age	31.195	4.794	28.754	4.731	30.829	4.847
Male	0.503	0.443	0.491	0.453	0.501	0.445
Own their home	0.497	0.443	0.365	0.436	0.478	0.444
Currently married	0.651	0.423	0.497	0.453	0.628	0.430
Live within 10 miles	0.396	0.434	0.420	0.447	0.400	0.436
Total income						
Less than \$10,000	0.126	0.294	0.220	0.375	0.140	0.309
\$10,000–24,999	0.303	0.408	0.365	0.436	0.313	0.412
\$25,000 or more	0.443	0.440	0.376	0.439	0.433	0.441
Missing	0.127	0.296	0.040	0.177	0.114	0.283
Completed schooling						
Less than high school	0.119	0.287	0.073	0.236	0.112	0.281
High school	0.471	0.442	0.367	0.437	0.455	0.443
More than high school	0.410	0.436	0.559	0.450	0.432	0.441
Working full-time	0.753	0.382	0.711	0.411	0.746	0.387
Not working/missing	0.176	0.338	0.173	0.343	0.176	0.338
Currently in school	0.060	0.210	0.152	0.325	0.074	0.232
Has at least one child	0.648	0.423	0.510	0.453	0.627	0.430
<i>Respondent's characteristics</i>						
Age	57.356	4.404	58.100	4.685	58.003	4.652
Race						
White	0.808	0.349	0.873	0.302	0.818	0.343
Black	0.125	0.293	0.082	0.249	0.118	0.287
Other	0.067	0.221	0.045	0.188	0.064	0.217
Highest grade completed	11.735	2.850	13.173	2.572	11.951	2.848
Total household income	39,141	33,952	62,009	58,514	42,569	39,154
Wealth	234,980	387,379	391,511	693,042	258,441	447,404
Head or spouse not employed	0.214	0.363	0.132	0.307	0.201	0.357
Head/spouse in poor/fair health	0.317	0.413	0.203	0.365	0.300	0.408
Marital status						
Married	0.798	0.356	0.809	0.356	0.800	0.356
Divorced	0.129	0.298	0.135	0.310	0.130	0.299
Widowed	0.067	0.222	0.051	0.199	0.065	0.219
Other	0.005	0.064	0.005	0.066	0.005	0.065
Number of living parents	1.047	0.867	1.205	0.927	1.071	0.877
Number of children	4.155	1.856	3.151	1.526	4.004	1.840

whom live at home, will contribute four observations to the sample. The table confirms what we would expect with respect to the relationship between the potential donor's income and the likelihood of a transfer being made: those children receiving transfers have parents who are better off financially (as measured by either income or wealth). The children receiving transfers are on average younger, less likely to own a home, to be married, or to have children of their own.¹⁶ They are also more likely to be in school and to have more years of schooling. From the table it is also apparent that respondents making transfers are significantly more likely to be white. As was demonstrated earlier, the racial differences may be exaggerated because of the minimum limit on reported transfers. The preceding analysis showed that in the PSID, nonwhites were more likely to give transfers below the \$500 limit and are therefore more likely to be missed in the HRS. Respondents giving transfers to their children are more educated on average and have fewer potential recipients (that is, fewer children living away from home). When examining the financial status of the recipient we see that children receiving assistance are in fact financially worse off than their nonrecipient counterparts.

To examine the relationship between the income of the child and the amount of the transfer he receives in more detail, we look *within* the household. Looking only at households with more than one child, we assign each child a ranking based on his relative position among his sibling(s) in terms of income and a separate ranking based on the amount of transfers received. For example, in a family with three children, if the first child had the largest income and received the least amount of transfers, he would have an income ranking of 1 and a transfer ranking of 3. We then look at the correlation between the two rankings. If parents give to all children equally, there would be no correlation between the two numbers; regardless of his income, each child receives the same amount, and any deviation will be random. If parents endeavor to equalize the incomes of their children, then the correlation should be negative; children with a low income ranking will have a high transfer ranking. Finally, if parents favor one child and provide that child with more schooling and better opportunities and continue to favor him with more transfers, the correlation between the child's income rank and transfer rank will be positive. Combining all families with two or more children who make at least one transfer, the correlation is -0.157 and is significant at the 1 percent level. For families of size 2, 3, and 4, the correlations are -0.307 , -0.097 , and -0.119 .¹⁷ This statistic provides a first hint that altruism may play an important role in interhousehold transfers.

As discussed in Section I, many analyses of bequests have found amounts to be evenly divided among heirs. We analyze this question in the context of *inter-vivos* transfers by examining the proportion of children receiving transfers within the same family (Table 6, Panel A). The number of eligible recipients (children aged

16. This last result may suggest that money is transferred directly to grandchildren once grandchildren are born, rather than to the respondent's children. We will explore this possibility in future work with the Asset and Health Dynamics Survey which collects information on financial assistance to both children and grandchildren.

17. The correlation across families of different sizes is positively biased. To avoid this bias, the correlation specific to each family size is also calculated.

Table 6

*Characteristics of Interhousehold Transfers to Adult Children and Parents,
by Number Living Away from Home*

Panel A—Financial Transfers to Children**Noncoresident Children 18 or Older**

	1	2	3	4	5	≥6	Total
Number of respondents	915	1,309	976	611	369	472	4,652
Proportion giving to children	0.25	0.31	0.32	0.31	0.28	0.26	0.29
Of those families giving to at least one child							
Proportion of children receiving	1.00	0.69	0.50	0.39	0.29	0.28	0.59
Proportion giving same to all children	1.00	0.14	0.05	0.04	0.00	0.01	0.07*
Mean amount to each child	3,229	2,270	1,900	871	621	640	1,894
Of those children receiving, proportion receiving same amount	1.00	0.37	0.29	0.27	0.20	0.10	0.30

Panel B—Financial and Time Transfers to Parents**Noncoresident Parent-Couples**

	1	2	3	4	Total
Number of respondents	1,928	1,099	387	81	3,495
<i>Financial assistance</i>					
Proportion giving to parents	0.08	0.10	0.11	0.14	0.09
Of those giving to a parent					
Proportion of parents receiving	1.00	0.63	0.42	0.58	0.78
Mean amount to each parent	2,335	1,182	910	1,275	1,703
Of those parents receiving, proportion receiving same amount	1.00	0.20	0.03	0.00	0.14
<i>Time assistance</i>					
Proportion giving to parents	0.06	0.08	0.09	0.05	0.07
Of those giving to a parent					
Proportion of parents receiving	1.00	0.57	0.38	0.25	0.75
Mean amount to each parent	676	340	233	276	425

* This value is based on families with more than one child.

18 or over and living away from home) is tabulated along the top of the table. The values for the entire sample are listed in the right-most column. We analyze the distribution of transfers for each family size by calculating various descriptive statistics. The second row in the table gives the proportion of families that report some positive flow of transfers to adult children. The proportions are similar across all family sizes, reaching a maximum of 32 percent for three-child families and a minimum of 25 percent for families with one eligible child. Overall, approximately 29 percent of families are observed to make an interhousehold transfer to an adult child.¹⁸

The remainder of the table examines only those families that actually make a transfer to a child. The first row in this section gives the proportion of children receiving a transfer (conditional on at least one child receiving such a gift). For families with just one eligible child, the conditional probability is of course 1.0. For families with two children, the conditional probability drops to 0.69, implying that in two-child families, on average, 69 percent, or 1.38 children, receive a transfer in any given year. The proportions decline monotonically across the table though the expected number of children receiving a transfer follows no apparent pattern. Overall, parents who give transfers do so to approximately 59 percent of their children. This observation is not consistent with the empirical analysis of bequests in which inheritances are given equally among heirs (Menchik 1988; Wilhelm 1991). It is consistent with an altruistic motive wherein parents may transfer more money to some children than others. If parents are transferring resources to only some children, they may possibly be basing the transfer decision on the child's need.

The next row in Table 6 shows explicitly that equal transfers to all children are the exception rather than the rule. Overall, only 7 percent of parents giving a transfer to at least one child give the same amount to all children. The proportion receiving the same amount decreases as the number of children increases, as we would expect if parents were not making a concerted effort to equalize transfers. Even among siblings who do receive positive transfers, the proportion of identical transfers is small. The final row shows that overall only 30 percent of those siblings who receive transfers, receive identical amounts.

The interpretation that parents are basing transfers on a child's need should, however, be treated with caution. The statistics reported here are based on transfers in a single year. Parents may very likely give different amounts to different children in any given year but transfer the same amount to each child over the child's lifetime. Life-cycle events such as schooling, marriage, and buying a home may significantly affect the timing of transfers.¹⁹ The multivariate analyses below will attempt to control for these factors and others.

18. Soldo and Hill (1993) find a greater percentage of families making a transfer to a child, but they include transfers to all children whereas we require children to be at least 18 years old and living apart from the respondent. As we showed in Section II.A, transfers to children living at home are more prevalent.

19. The HRS asks respondents whether any of the money given to children was given specifically to purchase a home or for school. Of those receiving a transfer, 12 percent or 213 children receive funds for the purchase of a home, and 20 percent or 367 receive funds for school. Only 15 children receive

Transfers may be correlated with life stages such as purchasing a home and attending school because young children are liquidity constrained. Under the altruistic hypothesis, parents wish to transfer the most to the least well off child. To that end, it would be prudent for parents to withhold resources until they learn more about each child's lifetime income, thus postponing transfers until a time near the parent's death. Given that we observe a sizable number of transfers among the relatively young parents in the HRS, if the altruism model is to hold, there must be some mechanism inducing early transfers. A plausible hypothesis is that parents assist children periodically over time because the child faces liquidity constraints. The child may be able to afford additional schooling or a home based on his potential lifetime income, but he is unable to borrow sufficiently against future earnings. To ease the child's liquidity constraint, parents provide transfers earlier than they would otherwise choose. (See Cox and Jappelli [1990] and Altonji et al. [1994] for a discussion of this point.)

Multivariate results

We now explore the relationship between transfers and the characteristics of the recipient and donor in greater detail. It is assumed that donors of interhousehold transfers determine a (latent) amount of desired transfers of money and time. The desired amount depends on a set of observed and unobserved characteristics of the respondent and his family members (that is, the potential recipients). Of central importance to this study is the effect of the (potential) recipient's income. The unobserved differences between families are modeled as fixed effects and family differences in transfer behavior are examined.

When examining transfers to children, the covariates included in the model are the child's age, sex, income, highest grade completed, whether or not he owns a home, is married, lives within 10 miles of the respondent, currently works, attends school, or has children. Also included are characteristics of the respondent's household: the head's (male in a couple) race, the household's income, wealth, and marital status,²⁰ whether anyone in the household is not working (thereby potentially having free time to spend with children or parents) or is in less than good (fair or poor) health. We also include a variable for the number of the respondent's parents (and in-laws) who are alive, the thought being that respondents may offer less help to children if they also have parents to assist, or they may offer less assistance to their children if the grandparents are transferring resources to children.²¹ Finally, we include a variable for the number of potential

money for both reasons in the year in question. The mean value of transfers also differs significantly if either of these specific reasons is cited for the transfer. The mean of those transfers which are used to buy a home is \$7,443 compared to \$2,315 for those which are not. The mean value for school transfers is \$4,243 versus \$2,633 for nonschool transfers.

20. Marital status is controlled for by a simple married/unmarried dummy variable. More finely defined categories were not supported by the data.

21. This possibility suggests that perhaps gifts to parents and children should be modeled simultaneously. We will explore this issue in future work, though the number of living parents does not have a significant coefficient in our models, nor does the number of children enter significantly in the estimation of transfers to parents.

child recipients (that is, the number of non-coresident children aged 18 and over). Additional siblings, like grandparents, provide competition for the parent's limited resources and, as shown in Table 6, may reduce the probability of a transfer as well as the amount.

We begin by estimating a logit model with the dependent variable equal to one if a transfer is made to that child and zero otherwise. The coefficient estimates are presented in Table 7.²² In this most basic specification the child's income, as measured by the four categorical variables used by the survey, is negatively related to the probability of a transfer and significantly different from zero at the 1 percent level. Thus, after controlling for a number of observed characteristics of the parent-child pair (such as parent's income), the better off a child is financially, the less likely he is to get help from his parents. This result is not surprising since both exchange and altruism models predict a negative relationship. The probability of receiving a transfer decreases from 0.17 to 0.09 as one moves from the lowest to the highest income category.²³ The large negative coefficient on the missing income category is interesting. It suggests that parents who know little about their child's financial status are less likely to provide assistance.²⁴

There is also a positive and monotonic relationship between a parent's income and wealth and the probability that the child receives a transfer. The variables representing the three highest wealth quartiles are all significantly different from the lowest wealth quartile at the 1 percent level and are large relative to other coefficients. The upper three respondent income quartiles are also large and significantly different from the lowest income quartile at conventional levels.

Children who are older, who own a home, who are married, and who are currently employed are significantly less likely to receive transfers. Children who live within 10 miles of their parents, who are in school, who have high levels of schooling, or who have children of their own are significantly more likely to receive financial assistance. Here, home ownership is likely serving as a proxy for the child's wealth. As with income, altruism suggests that, *ceteris paribus*,

22. In addition to the versions presented here, we estimated these specifications using the family as the unit of analysis rather than the respondent-child pair. We estimated equations for both the total amount respondents reported giving to children (with number of children as a right-hand-side variable) and the average amount transferred per child. The implications of the estimates are unchanged.

23. The estimates presented in this section are based on *non-coresident* children aged 18 and over. However, we also estimated the logistic model with both coresident and non-coresident children included in the sample. In this specification, shared housing was treated as a transfer along with cash assistance. The estimates change somewhat, but the substantive results hold. Specifically, the coefficient estimates on the three income categories (less than \$10,000, \$25,000 and over, and missing) were 0.1296, -0.4703, and -0.6727, respectively. The last two coefficients continue to be statistically significant at the 0.01 level, while the first coefficient is significant only at the 0.15 level. The differences in the probability of transfer by income category are somewhat smaller than when coresident children are not included. The probability of a child in the lowest category receiving a transfer is six percentage points higher than that for a child in the upper income category. The difference for the sample excluding coresident children is eight percentage points.

24. Alternatively, in keeping with our finding that well-off children receive fewer transfers, it may be that parents of the highest-income children are reluctant to report the child's income. Such a phenomenon is observed in many surveys with respect to a respondent's own income, though it is less likely here with income reported in categories, and with the highest income category beginning at a rather modest amount.

parents transfer less to wealthy children, and thus less to children with housing wealth than to those without. Children with older parents (as measured by the age of the head) are also more likely to receive financial transfers. Surprisingly, children with married parents (even if the spouse is not the child's natural parent) have a lower probability of receiving assistance than do children whose parents are not married. Controlling for income and wealth, a married couple has fewer resources per person, and can therefore afford to transfer less. Blacks have a significantly lower probability of making a transfer. In confirmation of Table 6, a greater number of other children in the family (siblings of the [potential] recipient) significantly lowers the probability of a transfer.

We next turn to a discussion of the relationship between these variables and the actual amounts transferred (also Table 7). Previous studies have found different income effects depending on the estimation method. Specifically, some studies have found negative effects using a tobit model (Cox and Raines 1985; Altonji et al. 1992a; Schoeni 1993) while others have estimated a positive effect when using a generalized tobit model (Cox 1987; Cox and Rank 1993). The advantage of the generalized tobit specification is that it allows the direction of the income effect to differ in the incidence and amount equations.²⁵

Here we specify a linear equation and estimate it by ordinary least squares (OLS). We choose this specification in part because of the possibility of heteroskedastic errors. In the presence of heteroskedasticity, estimation of a tobit model leads to inconsistent estimates whereas the OLS estimates remain consistent. We therefore prefer to report the OLS estimates though the conclusions drawn from our estimate of a tobit specification are identical.

In general we expect the same relationships to hold between the right-hand-side variables and the amount of transfers that held in the logit equation. We find that a child's income is negatively related to the amount received. Controlling for other factors, high-income children get less in the way of transfers than lower-income children. The coefficient implies that moving from the lowest to the highest income category (a change of at least \$15,000) corresponds to a decrease in the expected (annual) value of transfers of \$419. This result, while not contradicting the exchange hypothesis because it predicts either positive or negative effects, is consistent with an altruistic motive.²⁶

The age of the child is negatively related to the size of the transfer, as is the number of siblings. Again we find that the respondent being in the upper income quartile has a significant positive effect on transfer behavior, as does being in the upper wealth quartile. Whereas the child's owning a home decreased the probability of transfer receipt, in this specification it increases the expected amount. This difference may be due to the impact of transfers made specifically for the purchase of a home. In footnote 19, we saw that these transfers are large and not uncommon. A similar effect is apparently operating with respect to the upper most schooling category. Schooling beyond the high school level and current enrollment are both associated with an increased probability of receiving a transfer,

25. We attempted to estimate a generalized tobit model; however, appropriate exclusion restrictions could not be found, and identification based solely on functional form was not satisfactorily identified.

26. We discuss the implications of the magnitude of the point estimates below.

Table 7
Logit, OLS, and Fixed Effect Analyses of Financial Assistance Given to Children (N = 11,055)

	Logit		OLS		Fixed Effect	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
<i>Child's characteristics</i>						
Total income						
Less than \$10,000	0.237**	0.0947	163.42*	94.42	143.03**	67.3
\$10,000–24,999 (omitted)	-0.482***	0.0754	-255.18***	70.98	-253.67***	52.9
\$25,000 or more	-0.979***	0.1354	-171.99*	93.22	-213.71**	109.1
Missing						
Age						
Less than 25	0.368***	0.0883	286.11***	95.17	301.66***	63.9
25–30 (omitted)	-0.300***	0.0700	-133.94**	65.54	-61.81	44.8
30 or older	-0.075	0.0604	58.43	56.46	15.82	37.1
Male						
Own their home	-0.280***	0.0738	144.11**	66.54	11.21	45.2
Currently married	-0.320***	0.0734	-73.02	68.99	-16.36	46.8
Live within 10 miles	0.237***	0.0606	49.68	56.35	70.37*	41.9
Education						
Less than high school	-0.025	0.1125	4.38	91.09	-10.81	65.3
High school	0.176**	0.0696	296.77***	64.97	144.94***	50.3
More than high school	-0.198*	0.1067	-151.80	109.20	-35.86	72.9
Working full-time	-0.102	0.1175	-48.31	118.25	-28.87	78.2
Not working/missing	0.410***	0.0992	305.65***	110.97	346.65***	76.4
Currently in school	0.254***	0.0739	-63.40	68.34	70.4	45.8
Has at least one child						

Respondent's characteristics

Age						
Less than 51	-0.453**	0.1996	-132.27	166.31		
51-61	0.170**	0.0854	95.36	75.95		
Older than 61						
Race						
White (omitted)	-0.220**	0.0923	-66.97	79.12		
Black	0.032	0.1295	102.29	107.59		
Other	0.064***	0.0119	30.02***	10.11		
Highest grade completed						
Household income quartile						
1st (lowest)	0.234*	0.1199	-35.31	89.28		
2nd	0.663***	0.1221	132.09	98.40		
3rd	0.964***	0.1293	273.25**	110.01		
4th						
Wealth quartile						
1st (lowest)	0.482***	0.1108	-63.14	83.20		
2nd	0.623***	0.1162	6.28	92.54		
3rd	0.900***	0.1215	506.66***	101.90		
4th	-0.346***	0.0880	-131.12*	79.73		
Currently married						
Head or spouse not employed	-0.065	0.0920	-45.03	77.56		
Head/spouse in poor/fair health	-0.076	0.0743	21.09	64.32		
Number of living parents	-0.022	0.0318	-60.02**	30.49		
Number of children	-0.236***	0.0176	-72.43***	13.63		
Constant	-2.054***	0.2452	428.31***	214.10		
<i>F</i> -statistic (model)			12.3*	14.1*		
Chi-squared (model)	1,311*					
Number of observations	11,055					
Mean of dependent variable	0.144					
					10,245	
					450	0

One-child families are dropped in the fixed effect analyses. *, **, and *** denote significance at the .10, .05, and .01 level, respectively.

and in the OLS specification are associated with a larger dollar value. As was the case with transfers for the purpose of purchasing a home, transfers to help finance schooling are larger on average than other transfers. The causality is, however, not clear.²⁷ The number of children in the family significantly reduces the size of the transfer, confirming the descriptive results reported in Table 6. We note also that race does not have a significant effect on the size of the transfer.

It could well be argued that unobserved factors associated with transfers, such as closeness of families, the importance that families place on money, and the ability to achieve financial success, might also be correlated with a child's income. Parents who take a greater interest in their children's success might offer them financial assistance as well as help them to launch a successful career and earn a greater than average income. Alternatively, highly successful parents, who are likely to have successful children, may substitute monetary gifts for actual time spent with children. In either of these two cases, the unobserved components in the regression would be positively related to the child's income, causing our estimated coefficients on income to be biased toward zero.

Because we have multiple observations per family we are able to control for these and other unobserved family effects. In the final set of estimates in Table 7 we report the results of a fixed effect model. Although we lose the variables particular to the respondent because they are identical across potential recipients, we are able to examine the effect of this procedure on our variable of interest, the income of the child.

After controlling for familial generosity and other unobserved family effects, we find that the child's income is still negatively related to the magnitude of transfers received.²⁸ The difference in the expected transfer between the highest and lowest income categories is now \$397 compared to \$419 in the OLS specification. The effects of education drop substantially when we control for the family effect; the difference between those with less than high school and those with more than high school is reduced from \$292 to \$134. This is consistent with the hypothesis that families which care more about education and help finance their children's education also continue to give them more financial assistance when they are adults.

Our reported results combine families of different sizes. If these families differ in their transfer behavior for unobserved reasons, then pooling them would lead

27. Because children in school are likely to have lower incomes and transfers targeted for schooling are likely to be larger on average (see footnote 19), one might wonder whether the negative correlation between income and transfer is simply picking up this schooling effect. To test this hypothesis we estimate the models over four more restrictive samples. We first exclude all those currently enrolled in school, then those enrolled in school or who received a transfer specifically for schooling, those younger than age 25, and finally those younger than age 30. The age restrictions reduce the number in the sample who are currently enrolled. The estimated coefficients on income are reported in Appendix Table A. We find no change in the sign of the coefficients on the income dummy variables, though we do find a change in the significance level of the lowest income category. We therefore believe that our main results are not driven by schooling transfers.

28. Note that there is sufficient variation in children's earnings within the family even though there are only three income categories for children. Looking at children of respondents who report at least one transfer, approximately 42 percent are in families in which the reported income of siblings shows some variation across categories.

to biased parameter estimates. We therefore reestimate each of our specifications separately for two-, three-, and four-child families.²⁹ In Table 8 we report the estimates of the income coefficients for the logit, OLS, and fixed effect models. In this framework we are also able to estimate a fixed effect logit model (Chamberlain 1980). The results are approximately the same for each family size, although our estimates are less precise than with the combined sample. In all cases the negative relationship between the size of the transfer and the (potential) recipient's income continues to hold.

A final point should be made with regards to the estimates of the effect of income on financial transfers. If parents are initially transferring some positive amount to a child and the parent's income increases by \$1 while the child's income decreases by \$1, then the parent will transfer an additional dollar to the child. Thus, in this framework, the coefficient on the parent's income less the coefficient on the child's income should equal one (Cox and Rank 1992; Altonji et al. 1994). The regressions presented here cannot be used as a test of this prediction because they are based on an entire sample and not restricted to positive transfers. Furthermore, the income variables are categorical, making interpretation somewhat more difficult. However, in a conditional OLS regression estimated over positive transfers (not reported), we do not find coefficients which sum accordingly.

B. Transfers to Parents

Descriptive Results

Our discussion of transfers to parents parallels that of transfers to children. The difference between the two sections concerns the type of transfers measured. Financial transfers to elderly parents are measured in the same way as transfers to children. However, respondents are also asked about time spent helping parents.

Tables 9 and 10 show the means of the variables separately by whether the elderly parent received a transfer or not. We construct separate tables for the receipt of financial and time assistance. Looking first at the transfer of dollars we see that, as was the case with children, respondents who make the transfers are better off than those who do not. They have higher levels of both income and wealth. The recipients are worse off financially, being less likely to own their own home and more likely to have their financial situation categorized as somewhat or very poor. They are also less likely to be male or to be married. In contrast to our earlier result with children, a higher proportion of families in which transfers take place are black than white.

In Table 10, the differences between those who get and do not get a transfer of hours are less strong than the differences in the financial dimension. In this case donors and recipients are financially worse off. Recipients are also older and again less likely to own a home or to be married.

The redistribution of resources towards parents is examined in Table 6, Panel

29. We exclude one-child families because we cannot estimate a fixed effect model with only one observation per family.

Table 8
Effects of Child's Income on Financial Assistance Received, by Number of Children: Logit, Fixed Effect Logit, OLS and Fixed Effect Estimates

	Logit		Fixed Effect Logit		OLS		Fixed Effect	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
<i>Number of children = 2 (N = 2,278)</i>								
Total income								
Less than \$10,000	0.383*	0.197	0.271	0.539	274.1	329.0	238.3	247.9
\$10,000–24,999 (omitted)	-0.477***	0.141	-1.973***	0.388	-564.2**	221.7	-579.0***	174.5
\$25,000 or more	-0.941***	0.281	-0.820	0.753	-326.4	318.5	-360.0	387.3
Missing								
<i>Number of children = 3 (N = 2,343)</i>								
Total income								
Less than \$10,000	0.197	0.209	0.694*	0.369	325.0	284.1	316.2	205.6
\$10,000–24,999 (omitted)	-0.363**	0.147	-0.187	0.257	-235.9	192.7	-20.6	152.3
\$25,000 or more	-0.806***	0.262	-0.485	0.620	-130.2	266.8	-338.3	301.6
Missing								
<i>Number of children = 4 (N = 1,944)</i>								
Total income								
Less than \$10,000	0.269	0.229	0.618*	0.335	159.3**	80.6	267.7***	92.4
\$10,000–24,999 (omitted)	-0.735***	0.203	-0.679**	0.281	-101.8*	61.7	-103.0	74.7
\$25,000 or more	-1.436***	0.394	-0.418	0.775	-112.9	81.2	52.9	157.7
Missing								

* , **, and *** denote significance at the .10, .05, and .01 level, respectively.

Table 9

Characteristics of Respondents and Their Parents, by Financial Transfer Status of Parent

	Didn't Receive Cash (N = 3,440)		Received Cash (N = 288)		All Parents (N = 3,728)	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
<i>Parent's characteristics</i>						
Age	78.264	6.361	78.786	6.416	78.302	6.366
Own their home	0.692	0.419	0.518	0.437	0.679	0.423
Currently married	0.340	0.430	0.195	0.347	0.330	0.426
Single male	0.090	0.260	0.050	0.191	0.087	0.256
Single female	0.570	0.450	0.755	0.377	0.583	0.446
<i>Financial situation</i>						
Excellent	0.198	0.362	0.023	0.130	0.186	0.352
Good	0.383	0.441	0.155	0.316	0.367	0.436
Fair	0.264	0.400	0.370	0.423	0.271	0.403
Somewhat poor	0.090	0.260	0.239	0.373	0.101	0.272
Very poor	0.053	0.203	0.214	0.359	0.064	0.222
Missing	0.012	0.100	0.000	0.000	0.011	0.096
Live within 10 miles	0.378	0.440	0.361	0.421	0.377	0.439
<i>Respondent's characteristics</i>						
Total household income	54,198	49,694	67,061	54,584	55,124	50,171
Wealth	317,667	564,681	461,615	624,393	328,031	570,422
Age						
Less than 51	0.045	0.189	0.043	0.178	0.045	0.188
51-61						
Older than 61	0.103	0.276	0.159	0.320	0.107	0.280
Race						
White	0.879	0.296	0.743	0.382	0.870	0.305
Black	0.098	0.270	0.180	0.336	0.104	0.276
Other	0.023	0.136	0.077	0.234	0.027	0.146
Currently married	0.866	0.309	0.832	0.327	0.864	0.311
Highest grade completed	12.896	2.512	13.641	2.616	12.950	2.526
Head or spouse not employed	0.126	0.301	0.098	0.260	0.124	0.298
Head/spouse in poor/fair health	0.232	0.383	0.198	0.349	0.229	0.381

B, as it was for children. Respondents can have up to four parent-couples (including in-laws), as shown in the top row of the table. Fewer respondents make dollar transfers to parents than to children, and even fewer make transfers of time. On average, only 9 percent of the households report giving money to one or more parents, compared to the 29 percent of respondents assisting children, and just 7 percent give their time.³⁰ Conditional on one parent receiving a transfer of money, however, the proportion receiving transfers is slightly higher than for children. The mean total dollar value transferred to parents is about half as much as the

30. As discussed above, only specific forms of care are measured. Evidence from the PSID suggests that more general time assistance is much more prevalent.

Table 10

Characteristics of Respondents and Their Parents, by Time Transfer Status of Parent

	Didn't Receive Time (N = 3,530)		Received Time (N = 198)	
	Mean	Standard Deviation	Mean	Standard Deviation
<i>Parent's characteristics</i>				
Age	78.123	6.366	81.605	5.604
Own their home	0.684	0.421	0.580	0.441
Currently married	0.339	0.429	0.153	0.321
Single male	0.085	0.253	0.124	0.294
Single female	0.575	0.448	0.723	0.400
<i>Financial situation</i>				
Excellent	0.185	0.352	0.197	0.355
Good	0.371	0.438	0.296	0.408
Fair	0.274	0.404	0.220	0.370
Somewhat poor	0.100	0.271	0.121	0.291
Very poor	0.059	0.214	0.166	0.332
Missing	0.012	0.098	0.000	0.000
Live within 10 miles	0.366	0.437	0.567	0.442
<i>Respondent's characteristics</i>				
Total household income	55,591	50,578	46,513	41,650
Wealth	329,949	578,408	292,634	402,031
Age				
Less than 51	0.046	0.191	0.019	0.122
51-61				
Older than 61	0.104	0.276	0.169	0.334
Race				
White	0.870	0.305	0.869	0.301
Black	0.103	0.276	0.111	0.281
Other	0.027	0.148	0.019	0.122
Currently married	0.866	0.309	0.818	0.344
Highest grade completed	12.938	2.526	13.166	2.524
Head or spouse not employed	0.122	0.296	0.162	0.329
Head/spouse in poor/fair health	0.228	0.380	0.252	0.387

Table 11*Financial and Time Assistance Given to Parents, by Respondent's Income*

	Income Quartile			
	1st (lowest)	2nd	3rd	4th
Percent giving only time	5.9%	9.1%	5.5%	6.8%
Percent giving only cash	4.5%	7.9%	10.7%	11.6%
Percent giving both	0.6%	1.1%	1.2%	1.3%
Percent giving any assistance	11.0%	18.1%	17.4%	19.7%

total for children, but the average amounts per individual are close: \$1,894 per child versus \$1,703 per parent. The number of hours received on average, 425, appears to be extremely high, especially considering that none of these parents lives with the respondent. The level is due no doubt to the rather high minimum of 100 hours and the type of care reported.

Because transfers to parents can be in either of two forms, money or time, we look at the propensity of giving each type and the propensity of giving both. Of those respondents with at least one non-coresident parent, 85 percent give neither money nor time, 6 percent give money alone, 8 percent give just time, and only 1 percent give both (not shown).

Because few respondents are giving both hours and financial assistance, we ask whether the choice of help differs by some observable characteristic of the respondent. An obvious dimension to examine is the respondent's household income. Table 11 reports the percentage of respondents giving hours or financial assistance by income quartile. For respondents in the lowest quartile, little of either type of assistance is provided: only 11 percent give any type of assistance. Across the other three quartiles, the prevalence of total transfers is similar, ranging from 17.4 to 19.7 percent, but there is a marked shift from hours to dollars as income increases. In the second quartile, 9.1 percent of respondents provide hours alone and 7.9 percent only income. In the highest quartile, the percent assisting their parents by the transfer of hours falls to 6.8 percent and the percent transferring income increases to 11.6 percent, perhaps indicating that more well-to-do respondents substitute purchased care for that which they could offer themselves if their time were less valuable.

Multivariate Analyses

We run the same types of regressions for parents that we do for children. Now, however, we estimate equations both for the transfer of hours and dollars.³¹

31. In the regression analysis presented below, we do not model the joint decision of gifts of time and money, but rather we treat them separately. The resulting estimates are consistent though we lose efficiency by ignoring any correlation in the error terms. However, we do not expect substantial changes

Because the information collected for the respondents' parents is not identical to that gathered for children, the equations differ somewhat. We have fewer variables describing the respondent's parents. We use the age of the parent, marital status (dummy variables for single male, single female, with married couple as the omitted category), whether he owns a home, and the respondent's report of the parent's financial status. We also include the number of siblings of the respondent because siblings may be an alternative source of assistance for the elderly parent.

Beginning again with the logit model (Table 12), we find that parents who are worse off are more likely to receive financial transfers.³² It is difficult to measure the magnitude of the effect because the categories are subjective evaluations of financial status rather than genuine measures of income or wealth. Respondents who are better off, either in terms of income or wealth, are more likely to make transfers. Surprisingly, given the results for transfers to children, blacks are significantly *more* likely to make transfers to parents relative to whites. This result, however, is consistent with results reported by Silverstein and Waite (1992). The number of siblings is significant and negatively related to the probability of a transfer: the more children, the less likely it is that any particular one of them will make a transfer, though the probability of receiving a transfer from at least one child could of course increase. Relative to married couples, single women (widows) are significantly more likely to receive assistance, and single men are less likely, though this latter effect is not significantly different from zero.

The estimates from the OLS specification (Table 12) are again similar to the logistic model: more dollars are transferred to less well off parents and greater transfers are made by wealthier children. In the OLS regression, the income quartile of the respondent is not a significant predictor of the amount of the transfer, and no clear trend in the magnitude is evident. Other respondent characteristics, with the exception of the married dummy variable and the highest wealth quartile, are not significant.

The estimates for the fixed effect model lead to the same conclusions: those in worse financial shape are more likely to receive cash transfers. Comparing the OLS and fixed effect models, the change in the expected transfer in moving from the highest to the lowest financial category is greater for the fixed effect version (\$645 versus \$784), though again it is impossible to quantify a change from one category to the other. Thus it appears that the coefficients were biased towards zero to some extent. Other demographic characteristics of the potential recipient

in these estimates because the correlation in the residuals of OLS estimated regressions for money and time is only .0318 and is not significant at the 5 percent level.

32. As with children, we also experimented with including coresident parents in the sample. Because there are so few such parents, the estimates are not materially altered. The coefficients on the (potential) recipient's income become 1.83, 1.00, -0.62, and -1.07 for the financial categories excellent, good, somewhat poor, and very poor (fair omitted). All estimates are significant at the 1 percent level. As was the case with transfers to children, the differences in the probability of a transfer by category are somewhat mitigated by adding coresident parents, but the changes are small.

are now significant. Older parents receive lower transfers, as do those who own a home. Surprisingly, when controlling for unobserved effects, single males now receive more financial assistance than do married couples. Living near the respondent is also positively related to the amount of assistance.

The results for the transfer of time are somewhat different (Table 13). In the logit model there is no clear monotonic relationship between a recipient's income and the probability of a transfer. Also, the donor's income and wealth are not significant predictors of this probability. The only variables in addition to the recipient's income which offer any predictive power are the recipient's age, marital status, and location, as well as the schooling level of the respondent. The effect of age is likely being driven by the type of care being measured. Only parents in poor health ought to need assistance with bathing, dressing, and eating. Age is likely to be correlated with health status (which is not observed in the data) and therefore to affect the incidence of transfers. The coefficients on the dummy variables denoting single male or single female are positive and significant, indicating a significant difference in the probability of transferring time to single versus married parents. The presence of a spouse implies that there exists a person other than the respondent available to provide help with basic personal needs. However, there is no significant difference between male and female single parents. Living nearby to a respondent is correlated with a significant increase in the probability of assistance, though it is likely that location is endogenous to the provision of assistance.

Looking at the equations for the amount of time assistance, the expected number of hours transferred is significantly higher for the somewhat poor and even higher for the very poor. The results here, as with the logistic specification, show no trend with respect to the income and wealth of the respondent. Age of the elderly parent is again positively related to the transfer, likely because it is associated with the need for assistance. Living within 10 miles of a parent also increases hours transferred. The availability of an individual in the respondent's household who does not work has no impact on the provision of care. We had expected that time availability would make the transfer of hours in these households less costly, and therefore more prevalent than in households where all (both) members work. In a related vein, having a spouse would increase the total number of hours a household has to transfer and would therefore be expected to increase the number of hours spent assisting parents. However, the coefficient on married is insignificant.

The estimates for the fixed effect model again confirm what is found for the OLS. Specifically, with respect to the transfer of hours, the income effect is not monotonic and it is large for the very poor relative to all others.

To take into account the fact that respondents with a different number of parents may behave differently with respect to transfer behavior, we repeat all the estimation results for a sample of two-parent families and include a fixed effect logit model. In Table 14 we report the income coefficients from each equation. The results for the full sample continue to hold. For financial transfers, the negative income effect is strong, while the results are mixed for the transfer of time.

Table 12
Logit, OLS, and Fixed Effect Analyses of Financial Assistance Given to Parents

Covariates	Logit		OLS		Fixed Effect	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
<i>Parents' characteristics</i>						
Financial situation	-2.6090***	0.4037	-188.28**	85.289	-351.32***	126.926
Excellent	-1.3546***	0.1954	-73.88	69.731	-299.94***	101.444
Good						
Fair (omitted)						
Somewhat poor	0.7963***	0.1783	114.45	99.355	108.43	149.867
Very poor	1.4356***	0.2006	456.43***	120.234	420.93**	179.986
Missing	-16.7880	2.122	-154.59	255.004	-442.22	447.357
Age	0.0052	0.0099	-4.60	4.188	-17.21***	6.176
Own their home	0.0397	0.1461	-97.284	63.265	-153.15*	92.788
Single male	-0.3176	0.3265	103.49	106.539	185.72	138.665
Single female	0.3659***	0.1769	69.700	64.489	49.01	88.676
Lives within 10 miles	-0.1175	0.1413	105.94*	56.517	139.88	90.122
<i>Respondent's characteristics</i>						
Household income quartile						
1st (lowest)	0.6469**	0.3268	101.06	108.775		
2nd	0.9647***	0.3269	-0.27	110.603		
3rd	0.9726***	0.3391	68.333	116.483		
4th						

Wealth quartile						
1st (lowest)	0.0653	0.2714	78.455	95.709		
2nd	0.4253	0.2686	54.208	97.933		
3rd	1.0078***	0.2794	185.077*	103.985		
4th						
Age						
Less than 51	-0.0752	0.3457	52.512	132.711		
51-61 (omitted)						
Older than 61	0.5786***	0.2032	120.50	93.748		
Race						
White (omitted)						
Black	1.1500***	0.1745	6.54	79.876		
Other	1.5520***	0.3051	199.40	168.104		
Currently married	-0.6719***	0.2017	-174.72**	86.087		
Years schooling	0.1009***	0.0276	14.212	11.000		
Number of siblings	-0.0817***	0.0303	-18.832	11.998		
Head/spouse not employed	-0.3527	0.2518	-122.81	92.104		
Head/spouse in fair/poor health	-0.0654	0.1719	-19.012	69.227		
Constant	-4.1730***	0.9356	411.53	376.699		
F-statistic (model)			2.56***	2.44***		
Chi-squared (model)	422.1					
Number of observations	3,728		3,728	1,853		
Mean of dependent variable	0.077		176	0		

One-parent families are dropped in the fixed effect analyses. *, **, and *** denote significance at the .10, .05, and .01 level, respectively.

Table 13
Logit, OLS, and Fixed Effect Analyses of Time Assistance Given to Parents

Covariates	Logit		OLS		Fixed Effect	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
<i>Parents' characteristics</i>						
Financial situation						
Excellent	0.3983*	0.2404	7.353	12.176	15.095	22.187
Good	0.0788	0.2114	8.561	9.955	16.045	17.754
Fair						
Somewhat poor	0.3935	0.2619	30.672**	14.185	20.822	26.185
Very poor	1.1690***	0.2558	80.668***	17.165	124.312***	31.456
Missing	-15.055	1.318	-20.425	36.406	-303.945***	78.200
<i>Age</i>						
Own their home	0.0591***	0.0122	1.486**	0.598	1.035	1.085
Single male	-0.0020	0.1658	3.488	9.032	-12.223	16.228
Single female	0.7172**	0.2996	9.623	15.210	-14.895	24.226
Lives within 10 miles	0.6485***	0.2185	7.077	9.207	3.918	15.500
<i>Respondent's characteristics</i>						
Household income quartile						
1st (lowest)						
2nd	0.3277	0.2793	15.712	15.529		
3rd	-0.1632	0.3022	1.389	15.790		
4th	0.0330	0.3173	2.919	16.630		

Wealth quartile				
1st (lowest)	-0.0003	0.2579	15.351	13.664
2nd	-0.1747	0.2669	2.115	13.981
3rd	-0.3798	0.2927	6.690	14.846
4th				
Age	-0.4744	0.5243	-2.044	18.947
Less than 51				
51-61	0.2860	0.2203	27.449**	13.384
Older than 61				
Race				
White				
Black	0.1973	0.2145	13.507	11.404
Other	0.0581	0.4793	-0.387	23.999
Currently married	-0.1402	0.2198	0.325	12.290
Years schooling	0.0725**	0.0312	0.149	1.570
Number of siblings	-0.0506	0.0348	-0.463	1.713
Head/spouse not employed	0.0286	0.2343	-6.392	13.149
Head/spouse in fair/poor health	0.1311	0.1870	5.529	9.883
Constant	-9.3268***	1.1178	-132.812**	53.780
F-statistic (model)			2.75*	1.52***
Chi-squared (model)	135.9			
Number of observations	3,728		3,728	1,853
Mean of dependent variable	0.0531		32.4	0

One-parent families are dropped in the fixed effect analyses. *, **, and *** denote significance at the .10, .05, and .01 level, respectively.

Table 14
Effects of Parents' Financial Situation on Transfers Received by Parents, for Two-Parent Families (N = 1,658)

Covariates	Logit		Fixed Effect Logit		OLS		Fixed Effect	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
<i>Financial assistance</i>								
Financial situation								
Excellent	-2.816***	0.741	-4.610***	1.529	-248.0**	97.21	-387.1***	143.5
Good	-1.277***	0.296	-1.957***	0.646	-217.8***	79.02	-357.2***	115.0
Fair								
Somewhat poor	0.765***	0.285	3.438**	1.428	96.52	120.0	93.3	174.5
Very poor	1.322***	0.301	1.767	1.136	429.9***	134.0	473.8**	205.9
Missing	-14.82	1.335	-15.72	20,001	-222.8	330.9	-532.4	527.5
<i>Time assistance</i>								
Financial situation								
Excellent	0.611	0.385	0.594	0.644	9.67	16.87	18.15	25.15
Good	-0.245	0.352	0.795	0.624	7.99	13.71	21.02	20.22
Fair								
Somewhat poor	0.7425*	0.401	0.460	0.621	26.34	20.83	22.78	30.59
Very poor	1.727***	0.373	1.447**	0.691	110.5***	23.25	136.9***	36.09
Missing	-15.59	3.716	-13.95	1,414	-14.04	57.43	-380.8***	92.44

, **, and *** denote significance at the .10, .05, and .01 level, respectively.

V. Summary

The objective of this paper has been twofold: evaluate the quality of the first wave of the Health and Retirement Survey, and determine how transfers are distributed within families. With regards to the first objective, we believe that data from the HRS will be extremely valuable in assessing family support networks. HRS respondents are of the age at which individuals are most likely to provide assistance, both to their parents and their children. Transfers are reported to each parent and child of the respondent, and demographic and economic information describing these relatives is collected. Finally, transfers *within* the household are ascertained, although they were not the focus of this study. Our only notes of caution pertain to the limits on the amount of assistance, \$500 or 100 hours, and the type of time help ascertained. With respect to the latter, we recommend that the question be expanded to measure types of time assistance other than help with basic personal needs. We further caution users of other surveys to pay particular attention to the amount of prompting with respect to transfer questions.

As far as the second objective is concerned, the results suggest that parents give more to their less well off children and elderly parents. In methods free from functional form, we find that the correlation between a child's rank within the family in terms of his income is negatively related to his rank in terms of transfers. In the regression analysis, over a number of specifications we find a negative relationship between income and transfers. In our strongest test, which is estimating a fixed effect model, we continue to observe this relationship. However, it is also found that the restrictions on the incomes of donors and recipients implied by the strict altruistic model do not hold. We leave to future work a further investigation of this point.

Table A
Coefficient Estimate of Child's Income in Fixed Effect Model with Various Samples

Child's Income	Sample 1: 18 or Older and Not at Home	Sample 2: Sample 1 and Not in School	Sample 3: Sample 2 and No Schooling Transfers	Sample 4: 25 or Older and Not at Home	Sample 5: 30 or Older and Not at Home
Total income					
Less than \$10,000	143.0*** (56.30)	75.4 (55.76)	57.7 (49.80)	141.6** (55.62)	91.67 (62.30)
\$10,000–24,999 (omitted)					
\$25,000 or more	–253.7*** (44.20)	–217.9*** (42.98)	–187.1*** (38.50)	–144.1*** (40.93)	–148.1*** (44.67)
Observations	10,245	9,578	9,393	8,822	5,576

Each regression includes all covariates in Table 7 except that the indicator variable for current school enrollment is not included in the analysis of sample 2. Standard errors reported below coefficients estimate. *, **, and *** denote significance at the .10, .05, and .01 level, respectively.

References

- Altonji, Joseph G., Fumio Hayashi, and Laurence Kotlikoff. 1992a. "The Effects of Income and Wealth on Time and Money Transfers between Parents and Children." Mimeo, March.
- . 1992b. "Is the Extended Family Altruistically Linked? Direct Evidence Using Micro Data." *American Economic Review* 82(5):1177-98.
- . 1994. "Parental Altruism and Inter Vivos Transfers: Theory and Evidence." Mimeo, February.
- Andreoni, James. 1989. "Giving with Impure Altruism: Applications to Charity and Ricardian Equivalence." *Journal of Public Economics* 97(6):1447-58.
- Barro, Robert J. 1974. "Are Government Bonds Net Wealth?" *Journal of Political Economy* 82(6):1095-1117.
- Becker, Gary. 1974. "A Theory of Social Interactions." *Journal of Political Economy* 82(6):1063-93.
- Behrman, Jere, Robert Pollak, and Paul Taubman. 1990. "The Wealth Model: Efficiency in Education and Distribution in the Family." Institute for Economic Research Working Paper no. 90-16. Seattle: University of Washington.
- Chamberlain, Gary. 1980. "Analysis of Covariance with Qualitative Data." *Review of Economic Studies* 47:225-38.
- Cox, Donald. 1987. "Motives for Private Income Transfers." *Journal of Political Economy* 95(3):509-46.
- Cox, Donald, and Tullio Jappelli. 1990. "Credit Rationing and Private Transfers: Evidence from Survey Data." *The Review of Economics and Statistics* 72(3):445-54.
- Cox, Donald, and Fredric Raines. 1985. "Interfamily Transfers and Income Redistribution." *Horizontal Equity, Uncertainty, and Economic Well-Being*, eds. Martin David and Tim Smeeding. Chicago: NBER and University of Chicago Press.
- Cox, Donald, and Mark Rank. 1992. "Inter-Vivos Transfers and Intergenerational Exchange." *Review of Economics and Statistics* 74(2):305-14.
- Dunn, Tom. 1994. "The Distribution of Intergenerational Income Transfers across and within Families." Mimeo.
- Gale, William G., and John Karl Scholz. 1991. "Intergenerational Transfers and the Accumulation of Wealth." Mimeo, May.
- Hill, Martha S. 1992. *The Panel Study of Income Dynamics: A User's Guide*. Sage Publications.
- Hill, Martha S., James Morgan, and Regula Herzog. 1993. "Intergenerational Aspects of Family Help Patterns." Paper presented at the 1993 Population Association of America Annual Meetings.
- Kessler, Denis, and Andre Masson (1988). *Modelling the Accumulation and Distribution of Wealth*. New York: Oxford University Press.
- Lee, Yean-Ju, Bill Parish, and Robert J. Willis. 1994. "Sons, Daughters, and Intergenerational Support in Taiwan." *American Journal of Sociology* 4:1010-41.
- MacDonald, Maurice. 1990. "Family Background, the Life-Cycle, and Interhousehold Transfers." Mimeo.
- Martin, Elmer P., and Joanne Mitchell Martin. 1978. *The Black Extended Family*. Chicago: University of Chicago Press.
- Menchik, Paul L. 1988. "Unequal Estate Division: Is It Altruism, Reverse Bequests, or Simply Noise?" In *Modelling the Accumulation and Distribution of Wealth*, eds. Denis Kessler and Andre Mason, 105-16.
- Rosenzweig, Mark, and Kenneth Wolpin. 1990. "Intergenerational Support and the

- Life-Cycle Incomes of Parents and Children: Co-Residence and Intergenerational Financial Transfers." Mimeo, April.
- _____. 1992. "Inequality among Young Adult Siblings, Public Assistance Programs, and Intergenerational Living Arrangements." Mimeo, March.
- Schoeni, Robert. 1992. "Another Leak in the Bucket? Public Transfer Income and Private Family Support." Population Studies Center Research Report 92-249, University of Michigan.
- _____. 1993. "Private Interhousehold Transfers of Money and Time: New Empirical Evidence." RAND Labor and Population Program Working Paper, DRU-443-NICHD.
- Silverstein, Merrill, and Linda Waite. 1992. "Race and Gender Differences in Giving and Receiving Social Support over the Life-Course." Mimeo, March.
- Tomes, Nigel. 1981. "The Family, Inheritance, and the Intergenerational Transmission of Inequality." *Journal of Political Economy* 89(5):928-58.
- _____. 1988. "Inheritance and Inequality within the Family: Equal Division among Unequals, or Do the Poor Get More?" In *Modelling the Accumulation and Distribution of Wealth*, eds. Denis Kessler and Andre Masson. New York: Oxford University Press.
- Wilhelm, M. O. 1991. "Bequest Behavior and the Effect of Heirs' Earnings: Testing the Altruistic Model of Bequests." Paper presented at the 1991 Population Association of American Annual Meetings.

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