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Time: New Empirical Evidence**

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Robert F. Schoeni

RAND

Santa Monica, California 90407

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Private Interhousehold Transfers of Money and Time: New Empirical Evidence

Within the family, workers are born, goods are produced, tastes are formed, decisions to work are made, and resources are redistributed. This paper investigates the last of these roles, that is, the transfer of resources (money and time help) among family members and friends.¹ We are interested in private transfers because, first, they provide a means through which individuals can transmit their well-being to others. Second, private transfers have potential consequences for the effectiveness of government redistribution policies.² For example, if publicly provided benefits to an individual become more generous, then that individual's family members and friends may respond by decreasing the amount of private assistance they give to the individual. If public transfers merely supplant private transfers, then, in the extreme, public transfers do nothing to alter the income of a program participant, they only increase the income of family members or friends who would have otherwise provided greater private support.

Third, intergenerational flows of resources within the family have been identified as one determinant of fertility.³ The greater the flows of resources from children to parents, the higher will be desired fertility. As flows begin to reverse direction, going from parents to children, fertility will fall. Thus, understanding private transfers, particularly intergenerational transfers, may allow us to better explain and predict changes in fertility. Fourth, private transfers may be one mechanism through which families transmit inequality across generations.⁴ Wealthy families may give larger intergenerational transfers, leading to persistent inequities. At the same time, families may give compensatory transfers to their least wealthy members, which would mitigate inequality.

Fifth, economists have been interested in intergenerational transfers because of the role they may play in determining savings and in the accumulation of wealth.⁵ The Life Cycle Model of Savings claims that savings are accumulated primarily for retirement, not for intergenerational transfers. The proportion of wealth due to private transfers has been empirically analyzed, with a wide range of estimates being identified.⁶

Finally, private transfers are tangible markers or symbols of the way in which individuals feel and act towards each other. Even if tangible private transfers are not, in some sense, large, they may be correlated with important intangible transfers.

¹Unless otherwise indicated, throughout the paper private transfers will refer to interhousehold transfers of money and time.

²See Barro (1974), Becker (1981), Roberts (1984), Bernheim and Bagwell (1988), and Bergstrom (1989).

³See Caldwell (1976).

⁴See Becker and Tomes (1979), Behrman, Pollack, and Taubman (1990), Menchik (1980), and Tomes (1981).

⁵See Modigliani (1988) and Kotlikoff (1988) for overviews.

⁶Kotlikoff and Summers' (1981) estimates range from 45 to 80 percent, while most other estimates are less than 25 percent. A consensus has yet to emerge regarding the accuracy of these estimates.

Although there are several reasons for examining transfers, we know very little about them. Indeed, we do not even have a solid understanding of how large or frequently they are received or given. This study begins to fill this void. It starts with a synthesis of previous empirical studies of private transfers of money and time. A new data set on private transfers, a supplement to the 1988 Panel Study of Income Dynamics (PSID), is discussed in section II. In section III the PSID data are analyzed. A concluding section synthesizes the new results and the earlier findings in an attempt to establish a group of "stylized facts" regarding private interhousehold transfers.

I. Previous Empirical Analyses

I begin by examining the frequency and magnitude of interhousehold transfers, and then I analyze the determinants of private transfers of time and money. In doing so I concentrate on studies of large nationally representative data sets, although some evidence from ethnographic studies and other more selective samples is incorporated.

Frequency and Magnitude of Private Interhousehold Transfers

One of the first empirical studies of private interhousehold transfers was conducted by Cox and Raines (1985) using a data set from the President's Commission on Pension Policy (PCPP).⁷ Cox and Raines (1985) find that monetary transfers are made frequently and for non-trivial amounts. Sixteen percent of the family units gave monetary transfers for an annualized average of \$2,081 in 1979 dollars for those giving. Eighteen percent reported receiving a monetary transfer during the same period. The mean amount received in annualized terms is \$2,753 for those receiving transfers. For the entire sample, both those receiving and not receiving private transfers, income received as private transfers account for 1-2 percent of total family income, on average.

MacDonald (1990), using the 1988 National Survey of Families and Households (NSFH)⁸, is able to analyze gifts, loans, and first home assistance separately and finds that they are received by 16.8, 11.5,

⁷In 1979, 4,605 families reported information regarding private monetary transfers given to and received from individuals outside the immediate family in the past eight months. Those individuals who were considered to be part of the immediate family were the respondent, the respondent's spouse, and any children under 18 years old who usually lived at home. One major shortfall of the survey is that it did not collect information on the person with whom the transfer was made other than that person's relationship to the respondent. Furthermore, as Cox and Raines (1985) report, of the 6,384 randomly selected dwelling units, 13 percent were vacant or not accessible. Of the remaining dwelling units, 35.5 percent refused to be interviewed, and data from about 141 were judged unusable. Thus, the original sample of 6,384 dwelling units was reduced by about 46 percent. Such a large reduction in sample size may lead to problems of selective non-reporting by certain families (e.g. the wealthy who wish to conceal their earnings) resulting in misleading conclusions. Also note that in their sample there may be multiple families within a single dwelling unit

⁸The NSFH consists of a sample of 13,017 adults who reported private transfers given to and received from anyone over a five year period who was not living with them at the time the transfer was made. Eggebeen and Hogan (1990) also analyze these data. They identify four types of transfers: monetary and material support (gifts and loans), child care, household assistance, and companionship and advice. For each of these four types of transfers, the incidence of support given and received are reported separately; they do not investigate the magnitude of monetary transfers. One of the advantages of the NSFH is that it reports transfers of gifts, loans, first home aid, and inheritance separately. Another advantage of this data set is that it contains information on parental characteristics. Given that transfers are most often received from parents, this allows one to investigate the effects of donor's characteristics, which will be discussed in section III.

and 2.8 percent of the respondents, respectively.⁹ The mean amount received for those receiving transfers in each category is \$5,592, \$6,334, and \$11,381, respectively. Therefore, the mean of the total amount received from all three types of transfers is \$1,986 for the entire sample, both those receiving and not receiving transfers, which is \$397 in annualized 1987 dollars.¹⁰ This is smaller than the comparable amount reported in the PCPP data set as analyzed by Cox and Raines (1985). The mean amount received for the entire sample in the PCPP is \$798 if expressed in 1987 dollars.¹¹ The respondents report that they give transfers more frequently than they receive them, with 19.5 percent making transfers. Also, the amount they report giving, \$7,081 in total, is larger than the amount they report they receive.

Moon (1983) does not find as active support networks in her analysis of the 1978 Panel Study of Income Dynamics (PSID). She finds that only 9.8 percent of the sample gave a private transfer to an individual outside the household for an average of \$1,536 during 1977.¹² At the same time, 8.4 percent received a transfer for a mean of \$1,936 for those receiving a transfer, or \$163 for the entire sample. This amount is \$316 if expressed in 1987 dollars, which is similar to the annualized amount of \$397 found by MacDonald (1990) in the NSFH data.¹³ Gale and Scholz (1991) analyze the Survey of Consumer Finances¹⁴ which asked whether money transfers of \$3,000 or more were given or received between 1983 and 1985.¹⁵ They find that 10 percent gave a transfer for a mean transfer of \$16,202 for those who gave. Only 5.3 percent reported receiving a transfer for an average of \$14,860.¹⁶

Using the 1980 PSID, Morgan (1984) considers private interhousehold transfers of money and time assistance in an emergency over a five year period. Transfers of money are reported as occurring slightly more frequently than transfers of time assistance; 22 percent received money transfers while 29 percent gave them, and 15 percent received time help and 28 percent gave time help. Morgan also analyzes data from the 1974 PSID on time spent helping friends, neighbors, and relatives. He estimates that, on average, 83 hours of assistance were given per family in the U.S. for a total of 7 billion hours of assistance.

⁹The NSFH over sampled blacks, Puerto Ricans, Chicanos, single parents, persons with step-children, cohabiting persons, and newlyweds. MacDonald (1990) does not indicate whether he uses the sample weights in calculating the descriptive statistics.

¹⁰I annualize this amount by simply dividing by the number of years transfers could have been received, which is five.

¹¹The average annual percent change in the consumer price index from 1980-1987 is used as the inflator, and it is 6.14.

¹²She uses the sample weights for the PSID in calculating the statistics reported here.

¹³The annual price inflator used in the analysis is the average annual change in the consumer price index from 1977-1987, which is 6.83.

¹⁴The Survey of Consumer Finances, which consists of 4,262 households who were interviewed in 1983 and 2,872 households who were reinterviewed in 1986, is an over sample of high-income households. The sample weights were used to calculate the statistics reported here.

¹⁵If transfers of this magnitude were made, the amount of the transfer and the relationship of the participant to the head of the household were recorded.

¹⁶Comparisons between the results from this study and the results from studies using other data are not easily made because these data are censored at \$3,000.

Much of the research on private transfers has focused on their importance as a source of support for the elderly. Shuchman (1989) uses the 1980 PSID and finds that those elderly who live with a family member receive about two-thirds of their resources from family members, while those who live elsewhere receive only about one-third of their resources from family members.¹⁷ For those elderly who do not live with a family member, she estimates that they receive an annual average of \$261 in private family transfers. But for those receiving transfers, which is 13.7 percent of the sample, the average amount received is \$1,951. Using the Hebrew Rehabilitation Center-National Bureau of Economic Research (HRC-NBER) Child Survey, Kotlikoff and Morris (1989) also investigate support for the elderly.¹⁸ They find that 13.1 percent of all elderly live with their children, and monetary support in the form of regular monthly payments is reported rarely; only 3.3 percent of the elderly report that they receive monetary transfers and 5.1 percent give them.

Goldscheider and Goldscheider (1989) examines a data set from Rhode Island.¹⁹ One-eighth of all children received monetary transfers from parents sometime since leaving home while more than one-third of the children contributed financially to their parents while still living at home. She finds few cases of two-way giving, and more than 50 percent did not report transfers in either direction.

Rosenzweig and Wolpin (1990) analyze transfers of money and coresidence from parents to their young adult children using the National Longitudinal Surveys (NLS)²⁰ and find that 33 percent of whites and 15.5 percent of blacks ever received a private monetary transfer, while 7.1 percent of whites and 23.2 percent of blacks ever received a government welfare transfer.²¹ The average parental monetary transfer and the average government transfer for whites who receive a transfer of the given type are \$3,144 and \$1,609, respectively.²² Whites are twice as likely as blacks to receive a private transfer while living apart from their parents, and given they receive a transfer, the amount they receive is twice as large as blacks. Furthermore, monetary transfers account for 3.2 percent and 1.3 percent of total family income for whites and blacks, respectively.

¹⁷Included as a family transfer is the sum of cash transfers from relatives, the value of housework (valued at \$5 per hour), and the value of imputed annual rent.

¹⁸The HRC-NBER Child Survey was administered to one child of each respondent from the HRC-NBER Elderly Survey. For those elderly with multiple children, the child interviewed was the one the elderly parent recommended.

¹⁹The data consists of 3,345 households in Rhode Island that were interviewed between 1967-1969. In 1979, and 2,156 of these households were interviewed again. The members of these households who were children in the first wave were 16-35 years of age by the time the second interview was administered.

²⁰They restrict their sample to young men who were 14-17 at the time of the 1966 interview, who were at least 18 at the time of any of the survey years used, and who subsequently ever resided apart from both parents. This sample consists of 579 white men and 242 black men. Using all survey responses for each man, they retain 3,529 observations for whites and 1,234 for blacks. In calculating the descriptive statistics, they do not use the sample weights.

²¹The NLS asks respondents to report the amount of monetary transfers they (and their spouse) received from relatives in the past 12 months along with the relationship of the relative. Also, Rosenzweig and Wolpin (1990) do not state which income is included as welfare income.

²²All dollar amounts for their study are in 1985 dollars.

The distribution of monetary transfers is highly skewed. For the NLS, Rosenzweig and Wolpin (1990) report that the standard deviation of private transfers is almost twice its mean for those receiving transfers. The largest 10 percent of monetary transfers analyzed by Cox and Raines (1985) account for 55 percent of the total amount of dollars transferred.²³ Gale and Scholz (1991) report that in the SCF the largest 25 percent of transfers received represent 68 percent of the total amount received.

An alternative form of transfer is bequests, and several studies have analyzed bequests to test theories of transfers.²⁴ In Cox and Raines' (1985) data, bequests are received by just .8 percent of the respondents in the single year, and they account for only 25 percent of the total amount of transfer dollars received. MacDonald (1990) reports similar magnitudes with the NSFH; bequests are received by 1.4 percent of the respondents over the five year period, and they account for 19.2 percent of the total amount of private transfers received.

In sum, although the surveys which have collected information on private transfers differ, some consistent observations do arise. Interhousehold transfers of money are received by 10-20 percent of households in a given year for an average of about \$2,000 in 1987 dollars for recipients. The distribution of money transfers is wide, and they are about 50 percent larger than the amount of bequests in the aggregate.

Characterizing Participants of Private Interhousehold Transfers

The direction of the relationship between recipient's income and the amount of money assistance received has been identified as a test of the altruism model, with the altruism model predicting that as the income of a recipient increases, *ceteris paribus*, the amount of private transfers received will decrease (Becker, 1981). Cox (1987) and Cox and Rank (1991) have analyzed this relationship empirically. Using a two-stage estimation procedure which allows the direction of the effect of income on the incidence of private transfer receipt to be different from the direction of the effect on the amount of private transfers received, they estimate a positive relationship between these two variables. Specifying a Tobit model of transfers, which does not allow the directions of the two effects to differ, Cox and Raines (1985) find that the respondent's income is negatively related to the amount of transfers received.²⁵ The findings of Cox (1987) and Cox and Rank (1991) are corroborated by those of MacDonald (1990) who finds a positive relationship between the respondent's income and the amount of money received.²⁶

²³Cox and Raines (1985) don't report variances of transfers.

²⁴See Menchik (1980), Tomes (1981), and Wilhelm (1991).

²⁵In Cox's (1987) and Cox and Raines' (1985) multivariate analyses of the PCPP, only characteristics of the respondent are available in the data; therefore, characteristics of the individual with whom the respondent made monetary transfers are not included. However, using the NSFH, Cox and Rank (1991) are able to control for parent's income.

²⁶MacDonald (1990) uses a two-stage estimation procedure. He specifies a Probit model for whether a transfer is received, and then he uses the inverse mills ratio in estimating the amount received for recipients. He excludes life-course events (divorce, marriage, births, home-leaving, non-work and non-school spells). Furthermore, he estimates a Tobit regression as an alternative to the two-stage procedure and does not find consistently positive effects of recipient's income.

Gale and Scholz (1991) find that recipients are wealthier and have higher income than the sample as a whole, though they are less wealthy and have lower income relative to those giving transfers.

Rosenzweig and Wolpin (1990) analyze the effects of income on the incidence of transfer receipt. Their point estimates imply that a \$5,000 increase in the adult child's earnings reduces the probability of co-residing by 11.1 percent and reduces the probability of receiving a monetary transfer while not residing at home by 10.9 percent.

In a recent paper, Altonji *et al.* (1992) examine the effects of the respondent's income and of the respondent's parent's income on private transfers using the 1988 PSID. Specifying a Tobit model, they find that the respondent's income has a negative effect on the amount of transfers received from parents. This persists whether income is measured as annual income or permanent income, with the effect of permanent income being slightly larger.

In sum, income positively influences the amount of money transfers received if a two-stage estimation technique is used, and the effect persists when the income of parents is controlled. If money transfers are specified as a Tobit model, the effect of higher income is to reduce the amount of money received.

Most studies have found that those with more years of schooling both give and receive greater amounts of money transfers. MacDonald (1990) shows that the mean amount of money transfers received per recipient for those who have less than a high school education is \$2,721, while those with 17 or more years receive \$12,294. Controlling for income, Cox and Raines (1985) estimate that an increase of one year in donor's years of schooling is associated with a \$199 increase in monetary transfers given.

A popular belief about black families is that they have a more active support network than white families. However, with regard to interhousehold assistance, most recent studies have not found support for this belief. MacDonald (1990) shows that, among recipients, whites receive \$3,500 more than Mexican-Americans, and Mexican-Americans receive \$700 more than blacks. And the differences between blacks and whites persist when he controls for socioeconomic status. Silverstein and Waite (1992) also analyze the NSFH and find that emotional and instrumental support is more likely to be received by whites. However, Moon (1983) finds that families with non-white heads are more likely to receive and give transfers of money. But, she does find that the dollar amount of transfers is smaller for non-whites.

Most studies have found that monetary transfers flow primarily from the old to the young. Cox and Raines (1985) find that monetary transfers given to younger generations account for 64 percent of the total dollar amount of transfers. About 27 percent are to the same generation, while 9 percent of monetary transfers are from younger to older generations. MacDonald (1990) finds that giving money is most common for those 44 years of age or older and least common for those under age 30. The most

frequent donors are those aged 45-59. But for those who give, average giving is highest for those aged 59 or more. Gale and Scholz (1991) also find that the probability of giving money increases with age, peaking at ages 55-64. The probability of receiving peaks at ages 35-44, with the elderly very unlikely to receive money transfers. Similarly, studies by Moon (1983) and Taylor (1986) find that young families are more likely to receive assistance.²⁷ In addition, Taylor (1986) finds that the negative relationship with age is mitigated for those who have children, and he concludes that, at least in black families, having children may play an important role in attracting support from the extended family.

Marital status has been found to be important in some previous studies, but with no consistent pattern of results. As estimated by Cox and Raines (1985), married couples receive smaller transfers, and they are not any more likely than others to give transfers. MacDonald (1990) finds that there is a decrease in the amount of money transfers received following a recent divorce or an out-of-wedlock birth.

Several studies restrict analyses to transfers from parents to children. MacDonald (1990) reports that the individual from whom the respondent most commonly receives transfers is a parent, with 17 percent of the respondents reporting that they received a gift or loan from a parent sometime during the five year period analyzed. Only 3.3 percent received a transfer from a sibling and 3.3 percent received one from a non--relative. Similarly, with the SCF data set Gale and Scholz (1991) estimate that monetary transfers received from parents account for 84 percent of the total amount of transfer dollars received.

Most of the theories of private transfers posit that the characteristics of both the potential donor and potential recipient are important. Although most data sets contain characteristics of the respondent, few data sets contain information regarding the person with whom the transfer was made. However, some data sets do have information regarding the respondent's parents. Because, as noted above, a large share of private transfers are given from parents to adult children, many studies have been restricted to parent-child transfers to take advantage of having information regarding both the potential donor (i.e. parent) and the potential recipient (i.e. adult child). MacDonald's (1990) is one such study. His cross-tabulations show that the mean amount of transfers received is twice as large for those whose fathers have 16 years of schooling instead of 12, and the positive association persists when the income and education of the respondent are controlled. Cox and Rank (1991) find that parent's income positively influences the amount of money received by adult children even when controlling for the adult child's income. Similarly, Rosenzweig and Wolpin (1990) find that a rise in parental income by \$5,000 increases the probability that the adult child will receive a monetary transfer while living outside the home by 2.2 percent and decreases the probability of co-residence by 2.5 percent. Using the 1988 PSID, Altonji *et al.* (1992) also find that parent's income positively influences the amount of money received by adult children. One of the advantages of the 1988 PSID data set is that it contains information regarding the

²⁷Taylor (1986) analyzes the National Survey of Black Americans, and the form of assistance is "help" of any kind.

respondent's parents' income, as well as other information concerning the parent. In section III, the effects of parental characteristics such as their net wealth, education, and distance to adult child's home will be explored using these data.

Two ethnographic studies provide a contextual backdrop for analyses of private transfers. In *The Black Extended Family*, Martin and Martin (1978) describe the mutual aid system as a major function of the black extended family; without it, they posit, the extended family structure may not survive. Transfers of money within these families are made on either a regular basis, on an emergency basis, or on a periodic basis. When a regular cash transfer is made it is usually given to the dominant family figure who is often called the "Momma." Momma acts as a linchpin---she redistributes any money given to her to those whom she feels are most in need. Martin and Martin (1978) also observe that money that is given originally as a loan is often not paid back and little pressure is applied to borrowers to do so.²⁸ Stack's (1975) participant observation of a (anonymous) low-income black community in a Midwestern city also provides additional contextual evidence of support networks. Stack (1975) characterizes transfers as exchanges or "swaps." Individuals give assistance to their family members and friends because they expect themselves to be in need in the future.

In sum, the studies to date have found that those who receive greater monetary transfers are more likely to be white, higher educated, younger, have a young child, and to have recently purchased a home. Income is negatively related to whether a monetary transfer is received. But, several studies have found that the amount of money received is positively related to income. Those giving monetary transfers are older, wealthier, and have higher income than others. These results and the new findings in section III will be synthesized, with a group of "stylized facts" given in the concluding section. Before turning to the new findings, the data which are analyzed are discussed in section II.

III. The Data: 1988 Panel Study of Income Dynamics

The data which receive primary attention in this paper come from a supplement to the 1988 PSID which investigates private interhousehold transfers.²⁹ The question regarding private parental monetary transfers asks, "During 1987, did (you or your family living there) receive any loans, gifts, or support worth \$100 or more from your parents?"³⁰ Furthermore, the PSID asks about transfers with each of the respondent's parents and parents-in-law. With regard to time help, the question asked is: "About

²⁸Furthermore, co-residence and time assistance are other important forms of resource transfers. The former is most often given when the individual is in dire straits, and the latter is given when the individual is ill or has children.

²⁹Throughout the paper the term "household" will refer to the nuclear family which consists of the PSID respondent and his/her family living there. Thus, the respondent's parents, children, siblings, or any other relative not living in the respondent's household are not considered to be part of the respondent's "household." This unit of analysis is technically referred to as a PSID "family unit," as defined in the PSID User's Guide. For clarity in exposition, "household" is used instead of "family unit."

³⁰Underscore included in questionnaire. Unfortunately the data do not report loans and gifts separately. However, there is some evidence that loans are seldom repaid. Transfers of money to parents are very infrequent. Only 3 percent of the households report having received a transfer from an adult child. Furthermore, Martin and Martin (1978) find that transfers that are originally given as loans are seldom repaid and pressure to do so is minimal.

how many hours in 1987 did they [your parents] spend helping (you/your family living there)?" Respondents are also asked to report the amount of transfers given to parents in both time and money.³¹ Finally, transfers of money and time with other relatives and with friends are each reported.

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.³²

Combined with the information collected annually, the PSID data on private transfers have several advantages over data available from other surveys:

- Demographic and income characteristics of both the donor and the recipient are available for parental transfers. Furthermore, the information regarding the parents is extensive.
- Data on transfers of money and time assistance are collected.
- Data on both whether a transfer was made and the magnitude of the transfer are collected.
- In households where there is a spouse, transfers are recorded to and from the spouse's parents. Furthermore, characteristics of the spouse's parents are ascertained.
- The PSID has an extensive set of socioeconomic information on the household being interviewed and the individuals within the household.
- Transfers given and transfers received are reported; however, the questions for money given and received are slightly different (See footnote 35).
- Because it is a panel study, the PSID has information for more than one year, though the reliable data on private transfers are only available in 1988.

III. Empirical Analysis

Interhousehold transfers are a source of well-being and therefore are important to examine in their own right. Understanding the extent to which households are linked by interhousehold transfers is also important for determining the applicability of theories of neutralization of public redistribution programs. If altruism is motivating transfers, then the existence of operative links among all households implies neutralization of marginal changes in the distribution of wealth. Bernheim and Bagwell (1988) have examined this theory, as have Barro (1974) and Becker (1981). However, if operative links do not exist, redistribution may not be neutral, as shown by Bergstrom, Blume, and Varian (1984). Therefore, it is important to analyze the pervasiveness of private transfers and determine the characteristics of those

³¹The question regarding monetary transfers *given* is different from that for monetary transfers *received*. It asks: "In 1987, did (you/your family living there) give any money toward the support of anyone who was not living with you at the time?" Also, transfers given to parents are recorded as being to either the spouse's parents or the head's parents. If, for example, the head's parents are not living together, it cannot be determined if the transfer was given to the head's father or the head's mother.

³²However, the information is reported by the adult child.

who are isolated from resource sharing networks. It should be noted, however, that if transfers are not altruistically motivated, then neutralization may not result even when there are strong links. One alternative motivation is exchange, as presented by Cox (1987, 1991).

Two sample selections were made for the analyses below. First, households in which the head changed between 1987 and 1988 were eliminated, which consisted of 492 cases. This is done to insure that private transfers that were made in 1987 and reported in 1988 are attributed to the correct household head. Second, if the head of the household and the head's parents or parents-in-law live in the same household, the observation is dropped. This reduces the sample size by 420, leaving 6,202 households. The question regarding transfers with non-parents conditions on the transfer being with someone outside the household, i.e. it asks about interhousehold transfers. The question regarding transfers with parents does not make this condition. Thus, in order to restrict attention to interhousehold transfers, this second selection is made. Additional selections are made for some of the analyses, and these selections are identified when the results of those analyses are discussed. Robustness to these selections are also examined.

Frequency and Magnitude of Private Interhousehold Transfers

Table 1 reports household income in 1987 broken down by source of income. The mean household income from all sources is \$35,414. Fifty-two percent of total household income is derived from labor income of the head of the household, while 15 percent is attributable to labor income of the spouse. The mean amount of private *inter vivos* transfers received in 1987 is \$398 for the entire sample and \$2,104 for the 19 percent receiving them. This compares favorably with MacDonald's (1990) annualized estimate of \$397 in 1987 dollars which was based on the NSFH. Moon's (1983) estimate with the 1978 PSID, which is \$316 in 1987 dollars, is also similar.

Private transfers are small relative to labor income. Relative to public transfers, however, private transfers are received frequently and are sizable. Aid to Families with Dependent Children (AFDC) is received by 2.83 percent while 2.76 percent receive Supplemental Security Income (SSI). Moreover, the mean amount received from these two sources is \$88 and \$87, respectively. In fact, on average across the entire sample, the amount received from private transfers is greater than the total amount received from SSI, AFDC, Unemployment Insurance (UI), and Workers Compensation (WC). However, the average amounts of SSI, AFDC, and WC conditional on receipt from the respective program are each larger than the average amount of private transfers received conditional on receipt.

Several studies (Tomes, 1981; Menchik, 1980, 1988; Wilhelm, 1991; Kotlikoff, 1988; Modigliani, 1988) have analyzed bequests to test theories of private transfers and theories of savings. Table 1 shows that *inter vivos* transfers are 28 percent larger than bequests. However, although bequests are received by less than 2 percent of respondents in a given year, when a bequest is received it is quite large, with an average

of over \$17,000. Both bequests and *inter vivos* transfers are highly variable. This is due, in part, to the large proportion of people who do not receive transfers in a given year and in part to the fact that there are a small number of very large transfers.³³

Table 2 reports the proportion of respondents with each type of transfer (i.e., money given, money received, time help given, and time help received) and the mean amount transferred. Moreover, it reports the relationship to the head of the household of the person with whom the transfer was made. Monetary transfers are given by 13 percent for an average of \$291 for the entire sample. As was shown in Table 1, monetary transfers are reported being received much more frequently; 20 percent of the households received a transfer in 1987 and the mean amount received for the entire sample is about \$400.^{34,35} Assistance in the form of time help is made more frequently; 28 percent of the respondents receive time help for an average of 332 hours per year for those receiving help. Time transfers are reported as being given more often than received (33 percent give), and the amount given, conditional on giving, is higher (354 hours are given).

Parents are the most common source of private transfers; over three-fourths of transfer dollars received are received from parents, and almost three-fourths of time help received is received from parents. Transfers of either form are received relatively infrequently from siblings, other relatives, and non-relatives, which corroborates the findings of Gale and Scholz (1991).

The amount of private transfers varies widely. For those receiving money assistance, the smallest amount reported is \$100³⁶ and the largest is \$89,000, with a mean of \$2,095 and standard deviation of \$5,438. The most common transfer reported is \$500. Time help also has a wide distribution. The mean number of hours received for recipients is 298 hours and the standard deviation is 573.

Barro (1974) and Becker (1981) show that if all households are altruistically linked, either directly or indirectly through intermediary households, redistribution may be completely neutralized. Attempting to address this issue empirically, I first look more closely at the extent to which there are resource transfers between households, and then I analyze the magnitude of the transfers. In Table 3, the

³³For the remainder of the study, private transfers will refer to *inter vivos* transfers and not bequests.

³⁴The calculations reported in Table 2 are slightly different than those in Table 1 because in Table 1 we restrict the analysis to those households with positive household income. This reduces the sample by 37 cases, and the results reported in Table 1 are not sensitive to this selection.

³⁵In the aggregate for a representative cross-section, the mean amount of money given to other households should equal the mean amount received from other households. Differences in the reported amounts may exist for at least two reasons. The first is that transfers received include loans and gifts, while transfers given do not explicitly include loans, and loans and gifts cannot be separated in the data. The second is that a separate question regarding monetary transfers received is asked explicitly about each parent and all other relatives. Thus, if the respondent's own parents are alive and married and the respondent's spouse's parents are both alive and divorced, then the respondent will be asked to answer the question concerning money received in four separate places during the survey—one time for each parent or set of parents and one time regarding the amount received from all other relatives and friends. Monetary transfers given are lumped into one question about transfers given to anyone, which has presumably led to underreporting of money transfers given.

³⁶Only transfers of \$100 or more were collected.

proportion of households participating in each form of transfer and various combinations of each is reported. As was shown in Table 1, 20 percent of the households receive monetary transfers. At the same time, 13.3 percent give money transfers, 28.4 percent receive time transfers, and 33.2 percent give time transfers. Over 30 percent participated in some form of money transfer in the single year 1987, with only 2.2 percent simultaneously giving and receiving money transfers. Time transfers were more frequent, with 46 percent either giving or receiving time help. Time help is also more frequently given and received by the same household in a given year; 16 percent both give and receive time help. In general, households appear to be fairly well linked, with almost 60 percent of the households either receiving or giving money or time assistance during the single year 1987.

Some households give transfers to, or receive transfers from, more than one household within the same time period. This may extend the chains of private assistance across more households. For example, in the simplest case only one household in the population gives transfers, but that one household gives transfers to every other household. In the data, some households do give transfers to or receive transfers from more than one person. For those receiving money transfers, on average, they receive from 1.35 different people. One household in the sample received money transfers from 11 different people during 1987, while most received money from just one person. The mean number of people to whom money was given is 1.49. Time help is similar, with households giving time help to 1.25 different people and receiving time help from 1.27 different people, on average.

Additional evidence on the extent of family ties is given in Table 4 which presents the extent to which households receive money from more than one parent-household, where a parent-household is a household in which a parent or parent-in-law of the respondent lives. Thus, for a respondent whose own parents are both living and married, and whose in-laws are both living but divorced, the number of parent-households would be three. Of those with one living parent-household, 24.7 percent received a money transfer from that parent-household in 1987. Of those with two parent-households, 18.6 percent received a transfer from only one of the two parent-households and 7.5 percent received from both parent-households. Of those with three parent-households, 18.9 percent received from only one parent-household, 6.9 percent received from exactly two parent-households, and 2.7 received from all three parent-households. Finally, for those with four parent-households, 34.2 percent received transfers from exactly one parent-household, 4.4 percent received from two parent-households, and 1.7 percent received from three parent-households; none of the respondents received transfers from all four parent-households. Thus, not all transfer relationships are characterized by simple dyads, households give and receive from multiple people.

Although the analyses tend to suggest that households are fairly well linked, it may be that transfers are motivated by exchange and not altruism. If so, the neutralization results of Barro (1974) and Becker (1981) may not hold. One exchange which could take place and can be measured in the data is money

for time. Nine percent of the households simultaneously received money and gave time assistance during 1987, as shown in Table 3.³⁷ Only 3.5 percent simultaneously gave money and received time help. Therefore, at most 12.5 percent of the households can be characterized by a money-for-time exchange relationship. However, these results should be interpreted cautiously. The time period over which the analysis is conducted is restrictive. If money or time is received in 1987, the reciprocal transfer may not be made in the same period; time assistance may be received in one period and paid for in the next. For example, Stack (1975) finds that although transfers in low-income black families are given with the intent of receiving a reciprocal transfer, individuals rarely make exchanges simultaneously. This type of exchange behavior would not be captured in these data. On the other hand, a one year time period for transfers may also be too broad. For example, if a child is in need of assistance during one month, a parent may respond by giving money assistance. But, if later in the same year the parent is in need, the child may respond by giving altruistically motivated time assistance. This would appear to be an exchange of money for time over the year even though both transfers were altruistically motivated. Moreover, money and time assistance are not the only forms of transfers, which leads to an underestimate of the extent to which households are linked. It also implies that money and time may be exchanged for other goods, not just each other.

In sum, there is a substantial degree of interaction among households. In the single year 1987, 31 percent either gave or received a monetary transfer and 46 percent either gave or received a time transfer. Fifty-nine percent participated in some kind of interhousehold transfer, implying that society may be well-linked across households. This is important for understanding the extent to which public transfers crowd out private transfers.³⁸

Although there are some differences across data sets, it appears that private interhousehold transfers of money are received by 15-20 percent of households in a given year. The amount received for those receiving them is about \$2,000 (in 1987 dollars). On average for the entire sample, they account for 1-3 percent of total household income and are 20-50 percent larger than bequests. They are highly skewed and have a standard deviation more than 5 times their mean. Time assistance is received more often,³⁹ with 30 percent of the households receiving time help for an average of about 100 hours for the entire sample. The majority of transfers are between parents and children. Other forms of support such as coresidence and in-kind transfers have not been addressed. Even ignoring these other forms of

³⁷Note that the person to whom the time help was given may not be the same person from whom the money was received, and we can't exactly tell in the data.

³⁸It should also be noted that the PSID is only representative of those living in a household. The homeless is one large and growing group of individuals who are not represented in the PSID and who are also most often isolated from familial support networks. To the extent that these people are not included in the data, these findings overestimate the degree to which society is linked through non-government transfers. Furthermore, if some transfer relationships are simple dyads, with no interaction across dyads, then the high incidence of transfers may not be indicative of a well-linked society.

³⁹The exception being for help in emergency situations as reported by Morgan (1980).

assistance, support networks across households appear to be pervasive, with almost 60 percent of all households either giving or receiving time or money assistance in the single year 1987.

Characterizing Participants of Private Interhousehold Transfers

We now turn to the multivariate analysis. The fact that a large share of respondents do not report private transfers in a given year complicates the analysis in some familiar ways. For transfers given, it is assumed that respondents, in optimizing their own utility, determine a latent amount of desired transfers given. For some, they prefer to receive transfers rather than give; however, they can't force others to give them transfers. Thus, the amount of transfers they give is censored at zero. This is described by equations (1a) and (1b) where F^* is the (latent) amount of desired transfers, and X is a set of regressors to be discussed below.

$$F_i^* = \beta_x' X_i + u_i \quad (1a)$$

$$F_i = \begin{cases} F_i^* & \text{if } F_i^* > 0 \\ 0 & \text{otherwise} \end{cases} \quad (1b)$$

Assuming that u is distributed normally, a Tobit model is specified and estimated by maximum likelihood procedures. Transfers received by the respondent are simply transfers that were given by someone else; therefore, the Tobit model is specified for transfers received as well.⁴⁰ In addition, a Probit model is specified for whether each type of transfer is experienced.⁴¹ Thus, determinants of eight dependent variables are examined: whether received money, whether gave money, whether received time, whether gave time, amount of money received, amount of money given, amount of time received, and amount of time given. No attempt is made to examine the simultaneous decision of time and money transfers---they are examined separately.⁴² Additional studies may find interesting trade-offs in the form of support.⁴³

The estimated effect of a change in an explanatory variable on the latent amount of transfers (F^*) in the Tobit model is β_x . The estimated effect on the expected value of the actual amount of transfers ($E[F]$) is $\beta_x \Phi(\cdot)$, where $\Phi(\cdot)$ is the cumulative normal distribution function. For the discussion below, the effects will be evaluated at the (weighted) proportion participating in the given form of transfer, P , i.e.

⁴⁰Altonji *et al.* (1992), Behrman, Pollak, and Taubman (1990) and Cox and Raines (1985) also posit a Tobit model of monetary transfers received. We will also report Heckman-Lee selection correction models as well.

⁴¹The survey question regarding monetary transfers received asks about transfers greater than or equal to \$100. For money given, however, the censoring is at zero, as it is for time given and received. The likelihood function for the Tobit model is modified slightly when the censoring is at 100 instead of zero. The point estimates are very similar in the two cases; therefore, the estimates discussed are those which use zero as the lower bound.

⁴²However, the ordinary least squares versions of the Tobit regressions in Table 7 were estimated and the correlation between the errors in all equations were calculated. The pair-wise correlations were never greater, in absolute value, than .065.

⁴³For examples, see Ghosh (1988) for money versus time and Rosenzweig and Wolpin (1990) for coresidence versus money.

$\Phi(.) = P$.⁴⁴ The effect of a change in X on the expected value of participating in a transfer (P) when the Probit model is specified can be expressed as:

$$\frac{dE[P_i]}{dX_i} = \phi(\beta'_x X_i) \beta_x \quad (2)$$

where $\Phi(.)$ is the normal density function. The effects discussed below are evaluated at the mean value of the explanatory variables (the X s) and the estimated coefficients. For example, in Table 6 the coefficient estimate of annual earnings in the Probit equation for money received is $-0.030 \cdot 10^{-4}$, and the density evaluated at $\beta'_x X$ is .2697. Equation (2) implies that a \$10,000 increase in annual earnings reduces the probability of receiving a transfer by $.2697 \cdot (.030 \cdot 10^{-4} \cdot 10000) = .0084$ percentage points, which is a modest effect.

Probit and Tobit regressions in Tables 6 and 7, and the mean and standard deviation of each regressor are reported in Table 5. The explanatory variables will be discussed in turn. Before turning to these results, however, it should be noted that the analyses in Tables 6 and 7 were re-executed excluding observations for which money transfers given or received are greater than \$10,000. Given that the mean amount of money received for the entire sample is \$400, these are very large transfers. The sensitivity of the results to these 70 outliers is examined and discussed in conjunction with the results which do not eliminate the outliers. In general, coefficient estimates for the Tobit models for time transfers and the coefficient estimates in the Probit models for time and money do not change substantially. The coefficient estimates in the equation describing the amount of money transfers are reduced by one-fourth to three-fourth when the outliers are excluded.

Controlling for the respondent's education and parental wealth and education, total annual earnings of the head and spouse, which accounts for almost 70 percent of total household income, negatively influences the amount and incidence of money transfers received, and it positively influences money given. This is consistent with findings by Altonji *et al.* (1992) and Cox and Raines (1985). The magnitude of this effect is small, however, with a \$10,000 increase in annual earnings associated with a \$130 decline in the (latent) amount of transfers received and a \$240 rise in the (latent) amount of money transfers given. Annual earnings are negatively related to time assistance, both given and received, but the relationship is statistically significant only in the time given equation. The point estimates imply that a \$10,000 increase in annual earnings is associated with a drop in the (latent) amount of time help given by 18 hours. The same change in annual earnings reduces the probability of giving a time transfer by

⁴⁴The PSID over sampled low income households with heads whose age was under 60, but when income and age are controlled in the multivariate analyses, the coefficient estimates should generalize to the population as a whole. Thus, the effects of the explanatory variables are evaluated at the weighted proportion participating, not the unweighted proportion. However, the weighted and unweighted proportions do not differ greatly; 20 percent of the weighted sample and 17 percent of the unweighted sample receive money transfers.

.013 percentage points. This is a modest decline given that 33 percent of the respondents give time help.

The specifications reported in Tables 6 and 7 assume a monotonic relationship between annual earnings and private transfers. To determine whether this relationship is not monotonic, annual earnings are coded as a series of nine dummy variables and the models were re-estimated.⁴⁵ The expected values of transfers for each income group are plotted in Figures 1 and 2, where

$$E[F_i|X_i] = \Phi\left(\frac{\beta'X_i}{\sigma}\right)(\beta'X_i + \sigma\lambda_i),$$

and λ is the inverse mills ratio. The predicted probabilities of participating in each form of transfer for each income group are reported in Figures 3 and 4, where $E[P_i] = \Phi(\beta'X_i)$. All of the predicted values are evaluated at the means of all other variables in the regressions.

The amount and incidence of monetary transfers given increase monotonically with annual earnings (Figures 1 and 3), with an exception occurring at the \$72,000-84,000 category. Only 7 percent of those with zero annual earnings are expected to give money assistance while over 20 percent of those earning more than \$84,000 are predicted to give. The expected amount given increases from just under \$300 for those with no labor earnings to over \$900 for the highest earners. However, the amount of monetary transfers received does not follow a similar monotonic pattern (Figure 2). For those with annual earnings of between \$0 and \$60,000, the amount of transfers received decreases with annual earnings in a fairly monotonic fashion. For those with annual earnings greater than \$60,000, however, the relationship is strongly positive. Those households earning \$48,000-60,000 are expected to receive \$250 while those earning more than \$84,000 are expected to receive \$470. Several studies have placed great importance on the sign of the effect of income on money received (Cox, 1987; Cox and Rank 1991; Altonji *et al.* 1992; Lee *et al.* 1992), yet most have only examined this relationship in its monotonic form.⁴⁶ Greater caution should be taken when inferring the motivation of transfers because the relationship between the recipient's income and monetary transfers is not monotonic.

The income measure analyzed in the regressions is annual earnings of the head and spouse in the single year 1987. However, it may be that permanent income is the determining variable for transfers; donors of transfers do not respond to the current level of the potential recipient's income, they respond to permanent income. To capture this notion, the average annual earnings of the head over the past four years is used as a regressor. The regressions reported in Tables 6 and 7 are re-estimated using permanent earnings instead of annual earnings. In addition, permanent earnings and the difference

⁴⁵The categories are: zero earnings, \$1-12,000, 12,000-24,000, 24,000-36,000, 36,000-48,000, 48,000-60,000, 60,000-72,000, 72,000-84,000, and 84,000 or more. Those with annual earnings of \$24,000-36,000 are the reference group.

⁴⁶Altonji *et al.* (1992) do specify a cubic in income.

between current earnings and permanent earnings are included simultaneously. The coefficient estimates on these variables are reported in Table 8. When included individually (columns 1 and 2), in each case the coefficient estimate of permanent earnings is larger (in absolute value) than the corresponding estimate of annual earnings. The largest difference is for the amount of money received (Panel A), where the point estimate of annual earnings is two-thirds the size of the point estimate of permanent earnings.⁴⁷ When permanent earnings and the deviation of current earnings from permanent earnings are included simultaneously, the coefficient estimates are virtually unchanged.

A second theory suggests that a fluctuation in income is more important than the level of income in determining transfer behavior. To test this theory, the difference between annual earnings of the head in 1987 and the average annual earnings of the head from 1984-87 is included as a regressor, with the coefficient estimates reported in Table 8. None of the coefficient estimates are statistically significant, suggesting that the theory does not hold. A third theory suggests that the value of time is important in determining transfer behavior. The average hourly wage of the head is used to capture the effect of the value of time.⁴⁸ The estimates (not shown here) for time given imply that an increase in hourly wages by \$10 decreases the amount of time given by 8 hours during the year.

The amount and incidence of money given and received are positively related to education in the bivariate relationship. The multivariate analyses imply that an increase in education by three years increases the (latent) amount of money received by \$729 and increases the (latent) amount of money given by \$1170. For money transfers received, the coefficient estimate falls from \$243 to \$71, and for money transfers given it falls from \$390 to \$140 when the outliers are excluded. This change is due to the fact that a few very large transfers were made to the well educated. Education is not significantly related to time transfers either given or received in the multivariate analyses.

The family is not the only source of economic assistance, the state provides assistance to the unemployed, the retired, the disabled, and the poor. Some (Becker, 1981) have argued that the provision of assistance by the state displaces or "crowds out" familial support. That is, if individuals are able to draw upon resources from the state, then their family members may respond by giving them less familial assistance. This effect is akin to the income effect examined above. If, *ceteris paribus*, income increases, whether it be from labor earnings, AFDC payments, unemployment compensation, or winning the lottery, family members may respond by decreasing the amount of assistance provided. In addition

⁴⁷Using the 1988 PSID, Altonji *et al.* (1992) estimate regressions of transfers from parents to adult children. Controlling for parental income, they find that a 10 percent increase in the permanent income of an adult child reduces the (latent) amount of transfers received by \$69. In column 2 of Table 9, the estimates imply that a 10 percent increase in permanent income of the recipient (about a \$2,340 increase), is associated with a \$52 reduction in the (latent) amount of transfers received. Thus, similar results are found in the two studies.

⁴⁸Twenty-two percent of the households have heads with non positive hourly wages. No attempt is made to estimate time value for these individuals. Also recall that transfers may be given by anyone in the household, not just the head. Therefore, the time value of other members of the household may also be important and may not be captured by the hourly wage of the head.

to government transfers causing a reduction in the amount of private transfers received, private transfers may influence the amount of government transfers received in three ways: 1) they could affect whether an individual applies, or is eligible for, government assistance, 2) they could affect the weekly/monthly benefit amount received, and 3) they could affect the length of time an individual receives the assistance. Furthermore, the degree of endogeneity of benefit income may depend on which program the benefit was received from. For example, the amount of AFDC benefit received is determined, in part, by the amount of private familial support received--the greater the amount of private assistance the less the amount of AFDC benefit. This is not the case, however, for unemployment benefits.

For the present analysis, the potential endogeneity of government transfers to private transfers is not addressed, though results from models which exclude government transfers as well as other potentially endogenous variables are discussed below. Schoeni (1992, 1993) more closely investigates the endogeneity of government transfers in the context of Unemployment Insurance and AFDC, respectively, where it is found that these programs do crowd out private transfers.

In the regressions reported here, income from AFDC, SSI, Veteran's Benefits, Unemployment Compensation, Worker's Compensation and Social Security are each analyzed. The coefficient estimates suggest that a greater amount of each of the government transfers is associated with a reduction in the amount of private transfers received, both money and time. An exception is for the relationship between Veteran's Administration benefits and the amount of money received. However, the only coefficient which is precisely estimated is that for AFDC in the regression for the amount of time help received. The coefficient estimate suggests that a \$1,000 increase in AFDC benefits is associated with 42 fewer hours of time help received.

The size of the resource sharing network can have important implications for the amount of support given and received. Having more people to draw upon can lead to a greater amount of transfers received. However, the larger the network the more likely it is that there are others who are in need, which may lead to greater transfers given. As was seen in Table 2, the most important members of the resource sharing network are parents, children, and siblings. Furthermore, since parents are primarily providers of assistance, in some families siblings may be 'competitors' in attracting resources from parents. Thus, the number of parents and the number of siblings are expected to have different effects.⁴⁹

⁴⁹The relationship between the size of the potential support network and the amount of assistance can also be conceptualized as a public good problem where, in the case of transfers from parents and parents-in-law to an adult child, the adult child's well-being is the public good. Public good theory suggests interesting relationships between the number of parents and amount of transfers received from all parents and from each parent, and it implies that the provision of private assistance may be inefficient. Though this relationship is analyzed more closely by Schoeni (1992), the results reported here suggest some interesting patterns.

The number of siblings is the total number of siblings of the head and the spouse who are alive, and its mean is 4.9 in the weighted sample. The number of parent-households is the total number of households containing parents and parents-in-law of the respondent.⁵⁰ The mean number of parent-households is 1.2 in the weighted sample. The greater the number of parent-households, the greater the extent of resource sharing, both time and money, and both giving and receiving. Most of the increase in money help received associated with greater numbers of parent-households comes from having one parent-household. The (latent) amount of money received is \$2,339 greater if there exists one parent-household versus none. Having a second parent-household increases the amount of monetary transfers received by an additional \$800, and a third or fourth parent-household increases it by another \$600. Having one parent-household increases the (latent) amount of time help received by 150 hours, while adding a second increases the amount of help by an additional 150 hours. Having a third or fourth parent-household increases time help by just 60 hours.

Those who have a parent-household also give more money and time help. Having one parent-household increases the (latent) amount of dollars and hours given by 2,430 and 378, respectively. However, having a second, third, or fourth parent-household does not substantially alter the amount of money or time assistance given, with the amount of money given actually falling for those with two parent-households relative to those with one parent-household. However, it should be noted that there could be multiple parent-households because of in-laws or because the respondent's parents are divorced. These two cases may have distinct effects, and further analyses of this possibility should be conducted.⁵¹

Having a greater number of siblings reduces the likelihood and amount of assistance received, in both money and time, as estimated in the multivariate analyses. An increase by two in the number of siblings reduces the (latent) amount of assistance received by \$284 and 35 hours. However, if the outliers are excluded, the same change is estimated to alter the amount of money and time received by just \$96 and 26 hours. The number of siblings does not alter the amount given. Only for the case of the incidence of money given does it have a statistically significant effect. The point estimate implies that an increase in the number of siblings by two increases the probability of giving by .004 percentage points; this is a small effect considering that 11.4 percent of the sample give money transfers.

Private support may be received in times of distress such as unemployment or poor health. The data provide support for this theory; the unemployed are more likely to receive money and time assistance, and the (latent) amount of money transfers they receive is \$1,100 more than is received by all others. Those who report themselves in poor health are also more likely to receive time help and are less likely

⁵⁰To reiterate, a respondent whose own parents are alive and married, and whose parents-in-law are alive and divorced, that respondent would have three parent-households.

⁵¹See Furstenberg, Hoffman and Shrestha (1993) for more on this relationship.

to give either time or money than those in excellent health. In addition, controlling for reported health, those households in which the head is disabled receive 180 hours more time assistance than others.

The point estimates imply that the (latent) amount of money received by households in which the head is a student is \$1,377 more than other households, though the estimate is not precise. Those households in which the head has never married are less likely to receive money or time assistance, and receive less of it than those households in which the head is currently married.

Parents may make transfers to their adult child's household because their grandchildren are members of that household. The multivariate estimates imply that households in which there is a young child are more likely to receive money and time help, and the (latent) amount received by these households is 294 hours and \$679 more than others. In addition, controlling for annual earnings, female headed households are more likely to receive both money and time help and less likely to give money. They receive \$1,366 and 219 hours more than male headed households.

When adult children purchase goods such as cars and homes, parents often provide financial assistance to make the purchase. In the present analysis, a control variable for whether the respondent purchased a home in the past year is included. Just under four percent of the respondents did purchase a home between 1987 and 1988, and the purchase is correlated with an increase in assistance of both money and time. However, this effect should be interpreted with caution because the decision to purchase a home may be endogenous to private transfer assistance.

The number of family members living in the household is negatively related to the amount of money and time support given. This may happen for at least two reasons. First, the larger the number of people within the household the greater the need for resources within the household, controlling for income. Secondly, controlling for the number of living siblings and parents, the greater the number of family members who live within the household, the fewer the number of relatives outside the household to whom transfers need be made.

The coefficient estimates reported in Tables 6 and 7 demonstrate a negative relationship between the age of the head of the household and transfers received. To more closely examine whether the relationship is monotonic, these regressions were re-estimated using 5-year age group dummies instead of the quadratic specification. The predicted probabilities of participating in each form of transfer by age are shown in Figures 5 and 6. The expected values of transfers of each type by age are plotted in Figures 7 and 8.⁵² Age is negatively related to transfers received, both money and time, up until ages 55-59 (Figures 5 and 7). Time is expected to be received by almost 50 percent of those who are less than 25

⁵²These values are calculated in the same manner as the expected values calculated to create Figures 1-4, thus the sample means are used.

years old, while just 15 percent of those who are 50-54 are expected to receive time help (Figure 5). Driven partly by the differences in the probabilities of receiving by age, the expected number of hours received falls from over 200 hours for those 25 and younger to just 50 hours for those 50-54 (Figure 7). After age 55-59, transfers of time received then begin to increase steadily with age. However, even the oldest old are not as likely to receive assistance as those under 40. Money transfers received follow a very similar pattern with age (Figures 5 and 7). Both the incidence and amount received decrease with age until ages 55-59, and then they increase modestly with age after that. Those who are less than 25 years old receive \$770, while those who are 55-59 receive \$230, and those who are 75-79 receive \$380.

The relationship between age and the amount of transfers given is not as systematic (Figures 6 and 8). Time help given decreases with age until about ages 50-54, then there is a positive jump in time given for those 55-65. Time help given then decreases quickly with age after that, with those age 75-79 less than half as likely to give time help as those 60-64. The incidence of giving monetary transfers is never lower than 7 percent and never greater than 14 percent for any age. The amount of money given increases with age until ages 65-69, though not monotonically, and it then drops.

The PSID contains information regarding the respondent's parents. Because the majority of transfers are between parents and their adult children, these characteristics are good proxies for characteristics of the person with whom transfers are made. The estimates indicate that the more educated the head's father the more likely money is received and the less likely time and money are given. With regards to parental net wealth, as expected, those with wealthier parents are more likely to receive money and less likely to give money.⁵³ The (latent) amount of money received is \$1,155 greater for those whose parent's net wealth is \$100,000-250,000 as opposed to \$25,000-100,000. The incidence of time help given is not monotonically related to parental wealth; those with the most and least wealthy parents are the least likely to give time assistance.⁵⁴

The distance between the parent's home and the respondent's home may affect money and time transfers in many different ways. The farther away parents live, the more costly it is for them to provide time assistance. Money transfers, however, are equally costly regardless of distance. Therefore, family members may substitute money for time assistance when they live farther apart. Conversely, the choice of location relative to parent's home may be endogenous to familial assistance. Those who choose to live close may do so in order to draw more heavily on familial resource networks. Though endogeneity is not addressed in the estimation, the results are suggestive of some interesting patterns. The variable used is the distance to the head's parent's home as represented by four categories: lives less than 1 mile

⁵³More specifically, the head's married parents' net wealth is used to control for donor's wealth. As mentioned in the description of the data, the head can have as many as four parent-households. The most common type of parent-household is the head's parents who are married, and this is why their wealth is used as the parental wealth control.

⁵⁴If the analysis is restricted to transfers with parents, then the coefficient estimates on the parental wealth variables are more precise, and the effects of own income are slightly larger. No other coefficient estimates change in a substantive way.

away, 1-10 miles away, 10-100 miles away, and more than 100 miles away, with the last category being the reference group. The estimates imply that those living closer to their parents are less likely to receive and give money assistance. On the other hand, those living closer to their parents are more likely to give and receive time assistance. This result suggests that parents and adult children continue to share resources even when they live relatively far from each other. In order to cope with the distance, they may substitute money assistance for time assistance. However, analyses which account for the simultaneous determination of the form of support and location of residence need to be conducted.

As discussed above, government transfer income, the number of siblings, distance to the head's married parents' home, and whether a house was purchased in the past year are each potentially endogenous variables. Although identifying valid instruments for each of these variables is beyond the scope of this analysis, the regressions in Tables 6 and 7 were re-estimated excluding these variables to determine the impact on the coefficient estimates of the remaining variables in the models. The coefficient estimates of these variables do not change in any substantive way when this is done.⁵⁵

IV. Summary

When addressing a problem, researchers often draw upon a group of empirical regularities. These regularities, or "stylized facts," guide the formation of questions and the design of analyses. In some situations these stylized facts have yet to be established, which is the case with private interhousehold transfers. One of the goals of this paper is to identify a group of stylized facts regarding private transfers that will help guide future analyses and survey design. These findings are summarized below.

Monetary transfers are received by 15-20 percent of households in a given year. The amount received is about \$2,000, on average, and is very highly skewed. Transfers received account for 1-3 percent of total household income. Time help is received by 25-30 percent of all households in a year for an average amount of 300 hours for those receiving it.

Most interhousehold transfers are from the old to the young, and more specifically, from parents to their adult children; 75 percent of all transfer dollars received are received from parents. Time help is also most often between parents and children. Unlike monetary transfers, a substantial amount of time transfers is given to parents. In addition, households appear to be well linked, with almost two-thirds of all households participating in interhousehold resource sharing of time or money in a given year.

⁵⁵An exception is the coefficient for whether the head's parents are alive and married. When the potentially endogenous variables are excluded one by one, it is determined that the elimination of the variables for distance to head's married parents' home causes the change in the estimate. However, this change is expected. Without the control for distance, the effect of whether the head's parents are alive and married to each other is not conditioned on where the parents live. By controlling for distance, the effect becomes conditioned on a given distance to the head's married parents' home, and as a result the coefficient estimate changes.

Finally, transfers appear to be influenced by several observed characteristics of households. These effects are summarized as follows.

•*Income.* Controlling for parental characteristics such as net wealth and education, annual earnings appear to be negatively related to monetary assistance received and time assistance given, while they are positively related to monetary transfers given. However, the relationship with the amount of money received is not monotonic, with those earning more than \$84,000 receiving money transfers which are almost twice as large as those who earn \$48,000-60,000. In addition, some studies using a Heckman-Lee two-stage procedure and a linear income variable estimate a positive coefficient on recipient's income.

•*Government Assistance.* Government assistance has the expected negative effect on the amount of familial assistance received. However, these estimates are not precise, and endogeneity has not been addressed. The impact of Unemployment Insurance and AFDC are more closely examined by Schoeni (1992, 1993).

•*Race.* There are strong racial differences in the amount and incidence of interhousehold monetary and time transfers given and received, with whites showing greater involvement than blacks on all dimensions except time help given. Controlling for observed characteristics, most importantly income and education, the racial differences in monetary assistance received are reduced, and the differences in time help received are enlarged, with whites receiving \$981 and 84 hours more assistance per year. Although interhousehold transfers are more pervasive in white families, it appears that blacks tend to receive a greater share of their assistance in the form of co-residence.

•*Employment Status.* Students, the disabled, and the unemployed are more likely to receive monetary transfers and receive them for greater amounts than do others. The disabled also receive more time help.

•*Siblings.* Those who have a greater number of siblings receive fewer transfers, with each additional sibling reducing the (latent) amount of assistance received by \$142 and 18 hours.

•*Parents.* Those with a greater number of parent-households are more likely to participate in all forms of transfers, both money and time, and giving and receiving. Most of the effects of the number of parent-households comes from having at least one parent-household. The (latent) amount received by those with one parent-household is \$2,339 and 149 hours greater than the amount received by those who do not have a parent, and the (latent) amount given is \$2,340 and 377 hours greater. Having wealthier parents is associated with larger amounts of money received and smaller amounts given. And those with more educated parents are less likely to give time help. However, a closer examination of the effects of intact versus divorced parents may be fruitful.

•*Health.* Those reporting themselves in poor health receive greater amounts of time help, and they are less likely to give money or time assistance than those in excellent health.

•*Female headed households.* The (latent) amount of help received by female headed households is \$1,366 and 219 hours greater than the (latent) amount received by male headed households.

•*Home Purchase.* Monetary and time transfers received are positively related to whether a home is purchased. However, the choice to purchase a home may be endogenous to familial support.

•*Schooling.* Controlling for income, those with more years of schooling are more likely to participate in transfers of money, both giving and receiving, with an additional year of schooling leading to \$243 more received and \$390 more given.

•*Marital Status.* Relative to those who are currently married, those who are never married are less likely to receive money or time help, controlling for age. Widows, on the other hand, are more likely to receive time assistance than those who are currently married.

•*Young children.* Households with young children are more likely to receive both money and time help, though fertility choices may be endogenous to familial assistance.

•*Age.* Transfers of money and time received decrease with age until ages 55-59, then they begin to increase. But the amounts of money and time received by those 20-29 are still more than twice the amounts received by those 70-79. Monetary transfers given increase with age until about ages 70-75, and then they drop. Time help given decreases modestly with age until ages 45-49. It then increases sharply for those ages 55-65, with those 20-29 and 55-65 equally likely to give assistance. It then decreases rapidly for those 65 and older, with those over 80 only one-third as likely to give help as those 60-64.

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Table 1 - Descriptive Statistics of Household Income by Source of Income for all Households (N=6,165).

| Income Source | Mean for Entire Sample (1) | Coefficient of Variation (2) | Proportion Receiving (3) | Share of Total Income (4) |
|---|----------------------------|------------------------------|--------------------------|---------------------------|
| <u>Total Household Income:</u> | \$35,414 | 0.963 | 100% | 100% |
| <u>Market Income:</u> | | | | |
| Labor Income - Head | 18,346 | 1.339 | 69.05 | 51.80 |
| Labor Income - Spouse | 5,150 | 1.853 | 36.59 | 14.84 |
| Other Income of Head and Spouse | 5,140 | 3.479 | 58.16 | 14.51 |
| Income of Others in the Family Unit | 2,259 | 3.073 | 23.38 | 6.41 |
| <u>Private Transfers:</u> | | | | |
| Inter vivos transfers | 398 | 6.299 | 18.92 | 1.12 |
| Inheritance | 312 | 15.667 | 1.81 | 0.88 |
| <u>Social Insurance:</u> | | | | |
| Social Security | 1,874 | 1.967 | 26.19 | 5.29 |
| Unemployment Compensation | 94 | 5.617 | 5.43 | 0.27 |
| Worker's Compensation | 79 | 10.456 | 2.23 | 0.22 |
| <u>Public Assistance:</u> | | | | |
| Aid to Families with Dependent Children | 88 | 7.091 | 2.83 | 0.25 |
| Supplemental Security Income | 87 | 7.184 | 2.76 | 0.25 |
| Veterans' Pensions | 167 | 7.964 | 3.81 | 0.47 |
| <u>Other Assistance:</u> | | | | |
| Other Welfare | 27 | 11.593 | 1.10 | 0.08 |
| Other Retirement | 1,141 | 3.535 | 15.17 | 3.22 |
| All Other Transfers | 111 | 8.853 | 5.15 | 0.31 |
| Child Support | 130 | 6.335 | 4.41 | 0.37 |

Source of Data: 1988 Panel Study of Income Dynamics. Other notes: The statistics within the table are calculated using the 1988 PSID family weights. Households with non-positive total household income are excluded.

Table 2 - Private Transfers by Relationship to the Head of the Household (N=6,202).

| Monetary Transfers Person with whom transfer was made | Time Transfers (Hours) | | | | | | | |
|--|------------------------|------------|----------------------|---------------|-------------------|------------|----------------------|---------------|
| | Proportion Giving | Mean Given | Proportion Receiving | Mean Received | Proportion Giving | Mean Given | Proportion Receiving | Mean Received |
| <i>Any Individual</i> | 13.3% | \$291 | 20.2% | \$405 | 33.2% | 117 | 28.4% | 93 |
| Parent | 3.1 | 56 | 17.6 | 328 | 24.0 | 82 | 20.3 | 66 |
| Child | 5.3 | 175 | 0.9 | 5 | 3.8 | 10 | 3.5 | 6 |
| Sibling | 1.7 | 14 | 1.7 | 21 | 4.0 | 6 | 3.8 | 6 |
| Other Relative | 1.7 | 30 | 1.6 | 25 | 2.8 | 7 | 1.7 | 3 |
| Non-relative | 2.0 | 11 | 1.5 | 26 | 7.5 | 12 | 7.1 | 10 |

Source of data: 1988 Panel Study of Income Dynamics. Other notes: Means are for the entire sample. The data are weighted using the 1988 family weight.

Table 3 - Pervasiveness of Private Interhousehold Transfers (N=6,202).

| Type of Transfers | Proportion with these transfers | Type of transfers | Proportion with these transfers |
|--|---------------------------------|--|---------------------------------|
| Received Money | 19.5% | Received or Gave Money | 30.6% |
| Gave Money | 13.3 | Received Money or Time | 38.7 |
| Received Time | 28.4 | Received Money or Gave Time | 44.1 |
| Gave Time | 33.2 | Gave Money or Received Time | 38.2 |
| Received and Gave Money | 2.2 | Gave Money or Time | 40.5 |
| Received Money and Time | 9.2 | Received or Gave Time | 45.6 |
| Received Money, Gave Time | 8.5 | Received or Gave Money, or Received Time | 47.4 |
| Gave Money, Received Time | 3.5 | | |
| Gave Money and Time | 6.0 | Received or Gave Money, or Gave Time | 50.5 |
| Received and Gave Time | 16.0 | | |
| Received and Gave Money, and Received Time | 1.1 | Gave Money, or Received or Gave Time | 51.7 |
| Received and Gave Money, and Gave Time | 1.3 | Participated in any form of transfer | 58.7 |
| Gave Money, Received and Gave Time | 2.3 | | |
| Participated in all forms of transfers | 0.9 | | |

Source of data: 1988 Panel Study of Income Dynamics. Other notes: The 1988 family weights are used in the above analyses.

Table 4 - Proportion Receiving Parental Transfers by the Number of Parent-Households and the Number of Parent-Households From Whom Received Transfers

| Number of parent-households from whom received transfers | Number of Parent-Households | | | | | Total N = 6202 |
|--|-----------------------------|---------------|---------------|--------------|-------------|-------------------|
| | 0 N = 1605 | 1 N = 1778 | 2 N = 2174 | 3 N = 573 | 4 N = 72 | |
| None | 100 | 76.3 | 73.9 | 71.6 | 59.7 | 82.3 |
| One | 0.0 | 23.7 | 18.6 | 18.9 | 34.2 | 15.0 |
| Two | 0.0 | 0.0 | 7.5 | 6.8 | 4.4 | 2.7 |
| Three | 0.0 | 0.0 | 0.0 | 2.7 | 1.7 | 0.2 |
| Four | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total | 29.2 | 33.8 | 30.2 | 6.2 | 0.5 | |

Source of data: 1988 Panel Study of Income Dynamics. Other notes: The 1988 Family weights are used in the above analyses.

Table 5 -- Descriptive Statistics of Explanatory Variables in the Regression Analyses (N=6,202).

| Explanatory Variable | Mean | Std. Dev. | Explanatory Variable | Mean | Std. Dev. |
|-----------------------------|-------|-----------|--------------------------------|-------|-----------|
| Earnings of head and spouse | 23416 | (28649) | Marital status change of head: | | |
| Years of schooling, head | 12.42 | (3.202) | Became widowed | .0022 | (.0476) |
| AFDC | 87.97 | (623.5) | Became divorced/separated | .0132 | (.1145) |
| SSI | 86.62 | (624.9) | Became married | .0110 | (.1046) |
| Veteran's Benefits | 166.8 | (1327) | Head female | .2934 | (.4553) |
| Unemploy. Compensation | 93.42 | (527.8) | Head white | .8660 | (.3406) |
| Worker's Compensation | 78.86 | (824.1) | Size of family | 2.506 | (1.403) |
| Social Security | 1879 | (3691) | Age | 48.12 | (17.80) |
| Number of parent-hholds: | | | Age squared | 2633 | (1890.) |
| One | .3121 | (.4633) | Head's parents' net wealth: | | |
| Two | .3027 | (.4594) | These parents don't exist | .7133 | (.4522) |
| Three or more | .0677 | (.2512) | In debt | .0278 | (.1646) |
| Number of siblings | 4.965 | (3.627) | Just break even | .0256 | (.1580) |
| Head is unemployed | .0842 | (.2778) | \$1-24,999 | .0246 | (.1551) |
| Head is disabled | .0238 | (.1527) | \$100,000-250,000 | .1172 | (.3217) |
| Head is a student | .0087 | (.0930) | More than \$250,000 | .0166 | (.1278) |
| Health status of head: | | | Head's father's education: | | |
| Very good | .3209 | (.4668) | Don't know | .0647 | (.2460) |
| Good | .2664 | (.4421) | years | .3858 | (.4868) |
| Fair | .1272 | (.3332) | years | .0943 | (.2923) |
| Poor | .0494 | (.2167) | years | .2045 | (.4034) |
| Child under 3 in household | .1067 | (.3087) | More than 12, no BA | .0776 | (.2675) |
| Bought home in past year | .0352 | (.1843) | BA or more | .1064 | (.3083) |
| Head's marital status: | | | Miles to head's parents: | | |
| Never married | .1443 | (.3514) | Less than 1 mile | .0382 | (.1918) |
| Widowed | .1247 | (.3304) | miles | .0826 | (.2753) |
| Divorced or separated | .1586 | (.3653) | miles | .0728 | (.2598) |

Omitted Categories: Number of parent-households: None; Health status of head: Excellent; Marital status of head: Currently married; Head's parent's net wealth: \$25,000-100,000; Head's father's education: 0-5 years; Distance to head's parents: More than 100 miles. *Other Notes:* The 1988 PSID family weights are used in the above analyses.

Table 6 -- Probit Estimates of the Incidence of Private Transfers (N=6,202).

| Explanatory Variables | Money Received | | Money Given | | Time Received | | Time Given | |
|--------------------------------|----------------|---------------------|--------------------|---------------------|---------------|---------------------|------------|---------------------|
| Earnings of head and spouse* | -.0302 | (2.76) ^x | .0364 | (3.94) ^x | -.0110 | (1.13) | -.0367 | (3.82) ^x |
| Years of schooling, head | .0317 | (3.78) ^x | .0412 | (4.93) ^x | -.0009 | (0.13) | .0018 | (0.27) |
| AFDC* | -.2713 | (1.17) | -.7744 | (1.94) ^z | -.4103 | (1.93) ^z | -.2054 | (0.99) |
| SSI* | -.1134 | (0.35) | -.4898 | (1.18) | -.1182 | (0.46) | -.1608 | (0.63) |
| Veteran's Benefits* | .0688 | (0.50) | .4866 | (3.91) ^x | -.0175 | (0.12) | .1413 | (1.21) |
| Unemployment Compensation* | -.2714 | (0.79) | -.1269 | (0.30) | -.3408 | (1.01) | -.2311 | (0.74) |
| Worker's Compensation* | -.1086 | (0.46) | .1503 | (0.65) | -.2273 | (0.98) | .0710 | (0.37) |
| Social Security* | -.0620 | (0.57) | .3234 ^x | (3.54) | -.0454 | (0.51) | .0570 | (0.70) |
| Number of parent-households: | | | | | | | | |
| One | .4239 | (5.17) ^x | .3041 | (4.08) ^x | .1591 | (2.33) ^y | .4969 | (8.15) ^x |
| Two | .5445 | (5.86) ^x | .2122 | (2.39) ^y | .3575 | (4.58) ^x | .6045 | (8.50) ^x |
| Three or more | .6822 | (6.24) ^x | .3151 | (2.83) ^x | .3513 | (3.69) ^x | .5663 | (6.42) ^x |
| Number of siblings | -.0264 | (4.36) ^x | .0107 | (1.73) ^z | -.0195 | (3.67) ^x | .0037 | (0.77) |
| Head is unemployed | .2729 | (4.38) ^x | -.0756 | (0.96) | .1076 | (1.80) ^z | .1403 | (2.47) ^y |
| Head is disabled | .3089 | (2.34) ^y | -.1282 | (0.85) | .1783 | (1.64) ^z | .0522 | (0.47) |
| Head is a student | .2929 | (1.62) | -.1565 | (0.58) | .0013 | (0.01) | -.3546 | (1.90) ^z |
| Health status of head: | | | | | | | | |
| Very good | -.0156 | (0.30) | -.0070 | (0.12) | -.0152 | (0.31) | .0039 | (0.08) |
| Good | .0168 | (0.29) | .0020 | (0.03) | -.0505 | (0.96) | -.0049 | (0.10) |
| Fair | -.1101 | (1.32) | -.0977 | (1.17) | .1676 | (2.44) ^y | .0302 | (0.46) |
| Poor | .1656 | (1.35) | -.3393 | (2.51) ^y | .3042 | (3.08) ^x | -.2673 | (2.61) ^x |
| Child under 3 in household | .1330 | (2.33) ^y | .0071 | (0.09) | .4044 | (7.60) ^x | .1291 | (2.46) ^y |
| Bought home in past year | .1504 | (1.58) | -.1281 | (1.07) | .0292 | (0.31) | .0504 | (0.56) |
| Head's marital status: | | | | | | | | |
| Never married | -.2114 | (2.17) ^y | .0419 | (0.39) | -.1814 | (2.05) ^y | -.1623 | (1.92) ^z |
| Widowed | -.2068 | (1.58) | .0589 | (0.49) | .2038 | (1.98) ^y | -.1746 | (1.76) ^z |
| Divorced or separated | -.0569 | (0.59) | .1318 | (1.35) | .0451 | (0.53) | -.2379 | (2.95) ^x |
| Marital status change of head: | | | | | | | | |
| Became widowed | .4865 | (1.11) | -.2091 | (0.36) | .4986 | (1.32) | -.8634 | (1.55) |
| Became divorced/separated | .2033 | (1.17) | .2427 | (1.19) | -.3417 | (1.90) ^y | -.1860 | (1.11) |
| Became married | -.1863 | (1.15) | -.1004 | (0.57) | -.1615 | (1.10) | .0754 | (0.55) |
| Head female | .2195 | (2.86) ^x | -.1456 | (1.79) ^z | .2305 | (3.40) ^x | .0708 | (1.07) |
| Head white | .1269 | (2.47) ^y | -.0346 | (0.67) | .1971 | (4.33) ^x | .1075 | (2.50) ^y |
| Size of family | -.0238 | (1.31) | -.0662 | (3.32) ^x | -.0012 | (0.07) | -.0500 | (3.24) ^x |
| Age | -.0490 | (5.01) ^x | .0398 | (3.77) ^x | -.0746 | (9.17) ^x | .0141 | (1.67) ^z |
| Age squared | .0003 | (3.30) ^x | -.0003 | (3.31) ^x | .0005 | (6.95) ^x | -.0002 | (2.77) ^x |
| Head's parents' net wealth: | | | | | | | | |
| These parents don't exist | -.2703 | (3.10) ^x | -.0262 | (0.24) | .0985 | (1.13) | .2447 | (2.92) ^x |
| In debt | -.2765 | (2.22) ^y | -.1716 | (1.07) | -.2599 | (2.20) ^y | -.3003 | (2.62) ^x |
| Just break even | -.2269 | (1.96) ^z | .2328 | (1.75) ^z | -.0571 | (0.53) | .1094 | (1.06) |
| \$1-24,999 | -.2145 | (1.78) ^z | .2666 | (1.92) ^z | -.0288 | (0.25) | .0297 | (0.27) |
| \$100,000-250,000 | .1148 | (1.36) | -.1669 | (1.51) | -.0118 | (0.14) | -.2096 | (2.58) ^x |
| More than \$250,000 | .1456 | (0.92) | -.3141 | (1.33) | -.0344 | (0.21) | -.4115 | (2.54) ^y |
| Head's father's education: | | | | | | | | |
| Don't know | -.1301 | (1.21) | -.1451 | (1.36) | .0117 | (0.13) | -.1781 | (2.12) ^y |
| years | -.0224 | (0.25) | -.0202 | (0.24) | .0009 | (0.01) | -.0282 | (0.41) |
| years | .0671 | (0.67) | -.1301 | (1.26) | .0083 | (0.09) | -.1701 | (2.07) ^y |
| years | -.0061 | (0.65) | -.1881 | (1.96) ^z | .0598 | (0.73) | -.1154 | (1.50) |
| More than 12, no BA | -.0250 | (0.21) | -.3123 | (2.53) ^y | -.0200 | (0.19) | -.2057 | (2.14) ^y |
| BA or more | .3015 | (2.75) ^x | -.1924 | (1.65) ^z | -.0216 | (0.21) | -.2594 | (2.74) ^x |
| Miles to head's parents: | | | | | | | | |
| Less than 1 mile | -.2016 | (1.91) ^z | -.2477 | (1.82) ^z | .5140 | (5.13) ^x | .4989 | (5.08) ^x |
| miles | -.2378 | (2.82) ^x | -.1818 | (1.72) ^z | .3676 | (4.47) ^x | .3085 | (3.81) ^x |
| miles | -.1494 | (1.69) ^z | -.1544 | (1.39) | .2374 | (2.73) ^x | .2017 | (2.35) ^x |
| Constant | .0426 | (0.15) | -2.654 | (8.28) ^x | .9692 | (3.88) ^x | -.8764 | (3.58) ^x |

Omitted Categories: Number of parent-households: None; Health status of head: Excellent; Marital status of head: Currently married; Head's parent's net wealth: \$25,000-100,000; Head's father's education: 0-5 years; Distance to head's parents: More than 100 miles. Other Notes: Absolute value of t-statistics in parentheses. Superscripts denote significance: x = .01, y = .05, z = .10. *Coefficients on earnings of head and spouse and the government transfer variables are multiplied by 10,000.

Table 7 -- Tobit Estimates of the Amount of Private Transfers (N=6,202).

| Explanatory Variable | Money Received | Money Given | Time Received | Time Given |
|--------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Earnings of head and spouse | -.01326 (2.03) ^y | .02395 (3.95) ^x | -.00101 (1.27) | -.00181 (2.67) ^x |
| Years of schooling, head | 243.89 (4.64) ^x | 390.39 (6.74) ^x | -1.1270 (0.19) | -.60139 (0.12) |
| AFDC | -.15897 (1.11) | -.38606 (1.37) | -.04240 (2.50) ^y | -.00410 (0.28) |
| SSI | -.06168 (0.30) | -.16354 (0.57) | -.00327 (0.15) | -.00898 (0.49) |
| Veteran's Benefits | .03753 (0.45) | .29972 (4.11) ^x | -.00169 (0.14) | .00223 (0.24) |
| Unemployment Compensation | -.14203 (0.67) | -.01690 (0.05) | -.02360 (0.87) | .01105 (0.51) |
| Worker's Compensation | -.13995 (0.91) | .11906 (0.77) | -.01603 (0.85) | .00831 (0.64) |
| Social Security | -.05040 (0.73) | .27206 (4.48) ^x | -.00435 (0.58) | .00144 (0.24) |
| Number of parent-households: | | | | |
| One | 2339.9 (4.48) ^x | 2429.5 (4.75) ^x | 146.53 (2.54) ^y | 377.58 (8.48) ^x |
| Two | 3140.4 (5.35) ^x | 1933.0 (3.18) ^x | 313.74 (4.78) ^x | 407.77 (7.89) ^x |
| Three or more | 3742.5 (5.46) ^x | 2474.9 (3.23) ^x | 374.77 (4.79) ^x | 408.40 (6.47) ^x |
| Number of siblings | -142.16 (3.78) ^x | 50.138 (1.17) | -17.786 (4.11) ^x | -1.5135 (.437) |
| Head is unemployed | 1136.6 (3.00) ^x | -343.37 (0.63) | 68.122 (1.45) | 87.866 (2.23) ^y |
| Head is disabled | 1546.2 (1.82) ^y | -1135.5 (1.07) | 179.34 (2.01) ^y | 61.256 (.773) |
| Head is a student | 1377.8 (1.30) | -766.89 (0.41) | 78.639 (0.56) | -93.643 (.709) |
| Health status of head: | | | | |
| Very good | -447.99 (1.44) | 207.70 (0.52) | 20.908 (0.54) | 5.5916 (0.17) |
| Good | 150.43 (0.43) | -47.565 (0.11) | -17.716 (0.42) | 22.263 (0.64) |
| Fair | -511.27 (0.99) | -582.59 (1.01) | 140.12 (2.51) ^y | 31.310 (0.67) |
| Poor | 796.20 (1.01) | -2279.2 (2.43) ^x | 162.92 (1.97) ^z | -137.66 (1.85) ^z |
| Child under 3 in household | 679.64 (1.97) ^y | 159.32 (0.32) | 294.32 (7.19) ^x | 85.369 (2.33) ^y |
| Bought home in past year | 1208.6 (2.15) ^y | -1282.5 (1.52) | 166.09 (2.35) ^y | 52.400 (0.84) |
| Head's marital status: | | | | |
| Never married | -1227.7 (2.04) ^y | -206.64 (0.28) | -142.52 (1.97) ^z | -115.76 (1.92) ^z |
| Widowed | -1348.2 (1.62) | -474.07 (0.57) | 54.918 (0.63) | -171.65 (2.36) ^y |
| Divorced or separated | -532.97 (0.89) | 226.18 (0.33) | 14.182 (0.20) | -197.89 (3.41) ^x |
| Marital status change of head: | | | | |
| Became widowed | 3224.4 (1.18) | 398.35 (0.11) | 342.01 (1.12) | -585.15 (1.41) |
| Became divorced/separated | 1547.6 (1.48) | 2787.9 (2.06) ^y | -193.42 (1.33) | -162.50 (1.34) |
| Became married | 561.01 (0.58) | -426.11 (0.35) | -138.72 (1.15) | 60.211 (0.61) |
| Head female | 1366.6 (2.87) ^x | -761.33 (1.34) | 219.43 (3.94) ^x | 89.617 (1.88) ^z |
| Head white | 920.46 (2.89) ^x | -192.26 (0.51) | 83.158 (2.27) ^y | 30.728 (1.01) |
| Size of family | -127.39 (1.13) | -593.55 (4.27) ^x | .0548 (0.01) | -39.273 (3.57) ^x |
| Age | -182.17 (2.94) ^x | 303.54 (4.19) ^x | -52.369 (7.91) ^x | 12.420 (2.05) ^y |
| Age squared | 1.0591 (1.60) | -2.4323 (3.35) ^x | .39970 (5.96) ^x | -1.7206 (2.72) ^x |
| Head's parents' net wealth: | | | | |
| These parents don't exist | -901.29 (1.71) ^z | -161.96 (0.22) | 69.655 (1.01) | 199.65 (3.34) ^x |
| In debt | -1739.9 (2.25) ^y | -1558.5 (1.37) | -210.90 (2.25) ^y | -155.21 (1.88) ^z |
| Just break even | -1289.3 (1.79) ^z | 1414.9 (1.55) | -55.561 (0.67) | 46.485 (0.65) |
| \$1-24,999 | -820.17 (1.12) | 2051.8 (2.18) ^y | 71.368 (0.84) | 50.085 (0.66) |
| \$100,000-250,000 | 1155.2 (2.31) ^y | -1013.7 (1.34) | -21.544 (0.33) | -55.295 (0.96) |
| More than \$250,000 | 431.10 (0.46) | -624.45 (0.41) | 97.012 (0.80) | -255.59 (2.15) ^y |
| Head's father's education: | | | | |
| Don't know | -725.74 (1.05) | -979.46 (1.32) | -23.503 (0.32) | -136.70 (2.28) ^y |
| years | 46.131 (0.08) | 33.635 (0.05) | 17.880 (0.29) | -30.480 (0.63) |
| years | 649.25 (1.03) | -855.75 (1.20) | -12.250 (0.17) | -78.433 (1.35) |
| years | 265.74 (0.44) | -1218.9 (1.85) ^z | 50.490 (0.76) | -75.478 (1.38) |
| More than 12, no BA | -66.414 (0.09) | -1956.7 (2.32) ^x | -53.744 (0.65) | -176.27 (2.57) ^y |
| BA or more | 1374.8 (2.02) ^y | -1548.7 (1.95) ^z | -1.9984 (0.02) | -200.18 (2.96) ^x |
| Miles to head's parents: | | | | |
| Less than 1 mile | -1073.0 (1.67) ^z | -1446.5 (1.53) | 423.62 (5.51) ^x | 294.72 (4.31) ^x |
| miles | -430.53 (0.85) | -840.05 (1.16) | 319.87 (4.96) ^x | 198.37 (3.42) ^x |
| miles | -191.05 (0.36) | -612.57 (0.81) | 170.37 (2.47) ^y | 155.43 (2.52) ^y |
| Constant | -5143.9 (2.97) ^x | -213959 (9.63) ^x | 428.11 (2.13) ^y | -839.17 (4.83) ^x |

Omitted Categories: Number of parent-households: None; Health status of head: Excellent; Marital status of head: Currently married; Head's parent's net wealth: \$25,000-100,000; Head's father's education: 0-5 years; Distance to head's parents: More than 100 miles. Other Notes: Absolute value of t-statistics in parentheses. Superscripts denote significance: x = .01, y = .05, z = .10.

Table 8 -- Coefficient Estimates on the Income Variables in the Transfer Regression Equations Using Various Specification (N=6,202).

Panel A -- Dependent Variable: Money Received

| Explanatory Variable | Probit* | | | | Tobit | | | |
|--|-------------------------------|-------------------------------|----------------|-------------------------------|-------------------------------|-------------------------------|----------------|-------------------------------|
| | (1) | (2) | (3) | (4) | (1) | (2) | (3) | (4) |
| Earnings in 1987 (Y_{1987}) | -.0290 ^y (2.23) | | | | -.0145 ^z (1.85) | | | |
| Average earnings 1984-1987, (\bar{Y}) | | -.0423 ^x (2.72) | | -.0424 ^x (2.72) | | -.0223 ^y (2.38) | | -.0225 ^y (2.39) |
| $Y_{1987} - \bar{Y}$ | | | .0041 (.17) | .0052 (.20) | | | .0049 (.33) | .0059 (.38) |

Panel B -- Dependent Variable: Money Given

| Explanatory Variable | Probit* | | | | Tobit | | | |
|--|-------------------------------|-------------------------------|----------------|-------------------------------|-------------------------------|-------------------------------|-----------------|-------------------------------|
| | (1) | (2) | (3) | (4) | (1) | (2) | (3) | (4) |
| Earnings in 1987 (Y_{1987}) | -.0588 ^x (4.49) | | | | -.0404 ^z (4.67) | | | |
| Average earnings 1984-1987, (\bar{Y}) | | -.0726 ^x (4.84) | | -.0733 ^x (4.86) | | -.0463 ^y (4.62) | | -.0467 ^y (4.62) |
| $Y_{1987} - \bar{Y}$ | | | .0183 (.69) | .0189 (.77) | | | .0263 (1.45) | .0234 (1.42) |

Panel C -- Dependent Variable: Time Received

| Explanatory Variable | Probit* | | | | Tobit | | | |
|--|------------------|------------------|----------------|------------------|-------------------------------|-------------------------------|-----------------|-------------------------------|
| | (1) | (2) | (3) | (4) | (1) | (2) | (3) | (4) |
| Earnings in 1987 (Y_{1987}) | -.0134 (1.09) | | | | -.0019 ^z (1.92) | | | |
| Average earnings 1984-1987, (\bar{Y}) | | -.0204 (1.42) | | -.0205 (1.42) | | -.0025 ^y (2.11) | | -.0225 ^y (2.11) |
| $Y_{1987} - \bar{Y}$ | | | .0054 (.23) | .0058 (.24) | | | -.0004 (.21) | -.0004 (.20) |

Panel D -- Dependent Variable: Time Given

| Explanatory Variable | Probit* | | | | Tobit | | | |
|--|-------------------------------|-------------------------------|------------------|-------------------------------|-------------------------------|-------------------------------|------------------|-------------------------------|
| | (1) | (2) | (3) | (4) | (1) | (2) | (3) | (4) |
| Earnings in 1987 (Y_{1987}) | -.0410 ^x (3.49) | | | | -.0021 ^z (2.58) | | | |
| Average earnings 1984-1987, (\bar{Y}) | | -.0434 ^x (3.14) | | -.0433 ^x (3.16) | | -.0022 ^y (2.17) | | -.0022 ^y (2.18) |
| $Y_{1987} - \bar{Y}$ | | | -.0323 (1.51) | .0346 (1.55) | | | -.0021 (1.39) | -.0023 (1.42) |

Notes: Absolute value of t-statistic in parentheses. In addition to the explanatory variables listed in the table, each regression includes all the control variables listed in Table 6 except the income variables. Superscripts denote significance: x = .01, y = .05, z = .10. Earnings are those of the head. *The coefficient estimates on the Probit models are multiplied by 10,000.

Figure 1--Predicted Amount of Money and Time Help Given by Income Category. Based on Tobit Regressions which Use Categorical Income and are Evaluated at the Sample Means of All Other Variables.

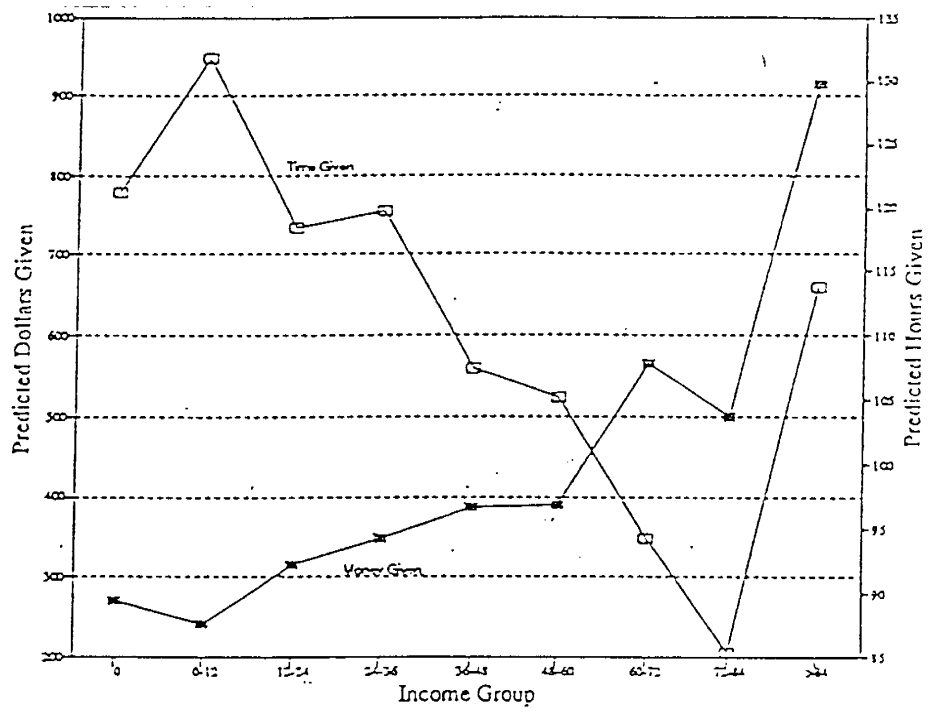


Figure 2---Predicted Amount of Money and Time Help Received by Income Category. Based on Tobit Regressions which Use Categorical Income and are Evaluated at the Sample Means of All Other Variables.

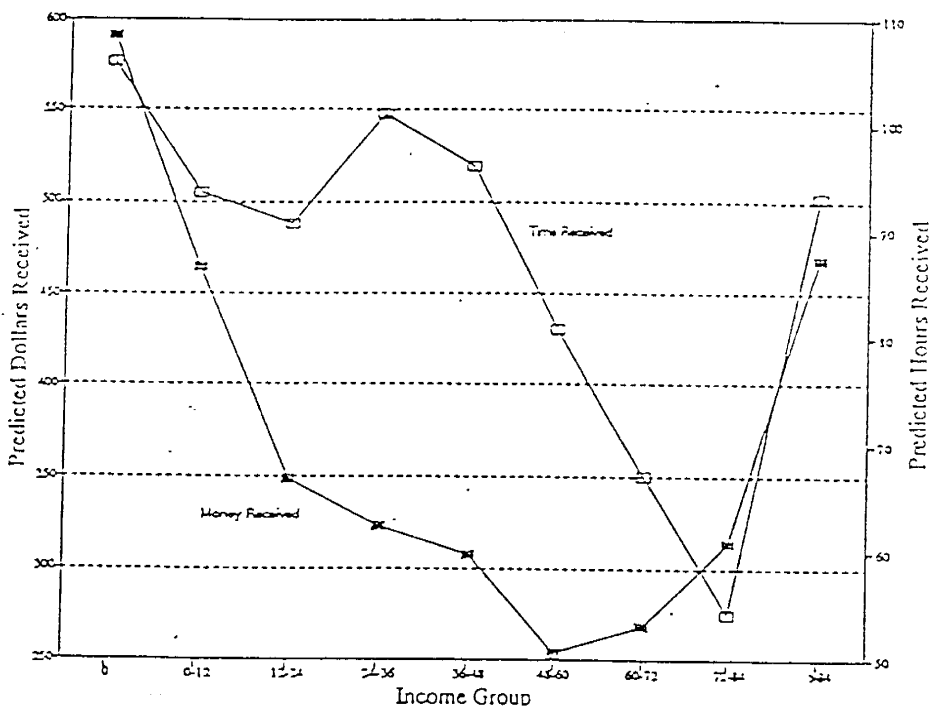


Figure 3--Predicted Proportion Giving Money and Time by Income Category. Based on Probit Regressions which Use Categorical Income and are Evaluated at the Sample Means of All Other Variables.

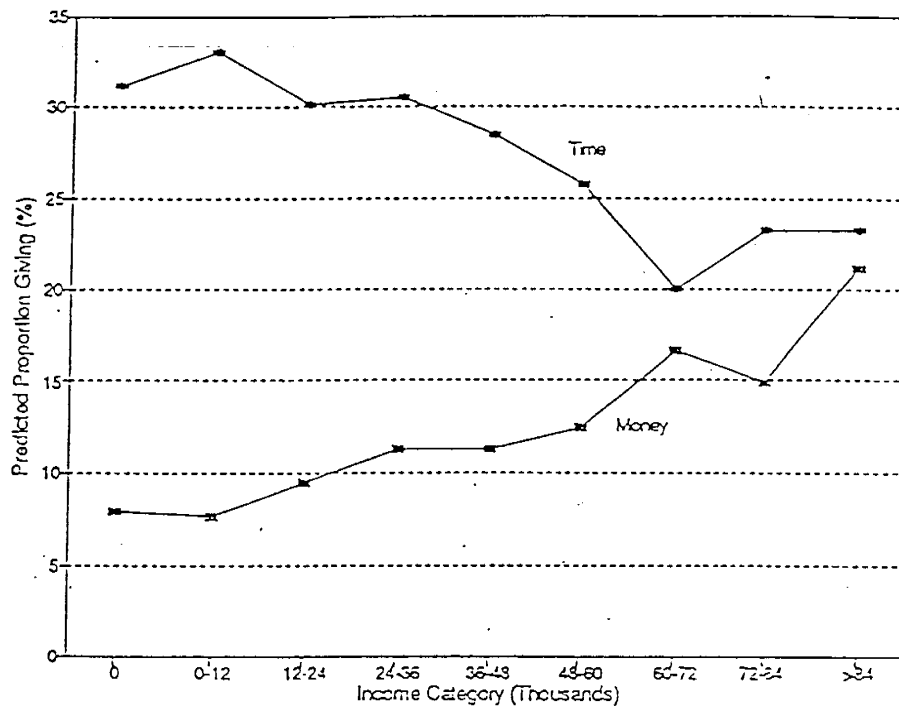


Figure 4--Predicted Proportion Receiving Money and Time by Income Category. Based on Probit Regressions which Use Categorical Income and are Evaluated at the Sample Means of All Other Variables.

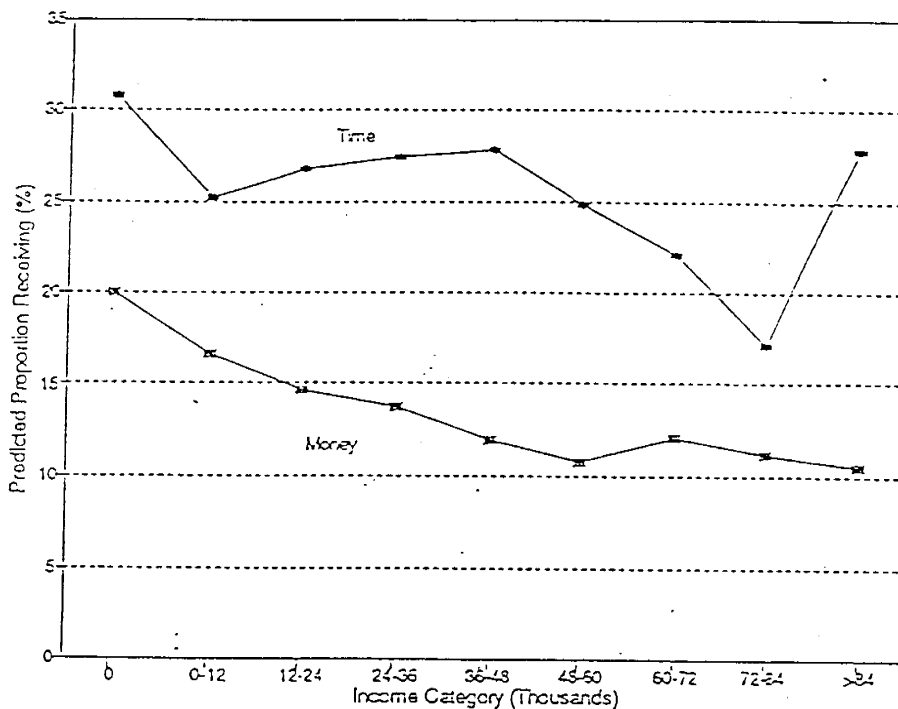


Figure 5--Predicted Proportion Receiving Money and Time by 5-Year Age Cohort. Based on Probit Regressions which Use 5-Year Age Dummies and are Evaluated at the Sample Means of All Other Variables.

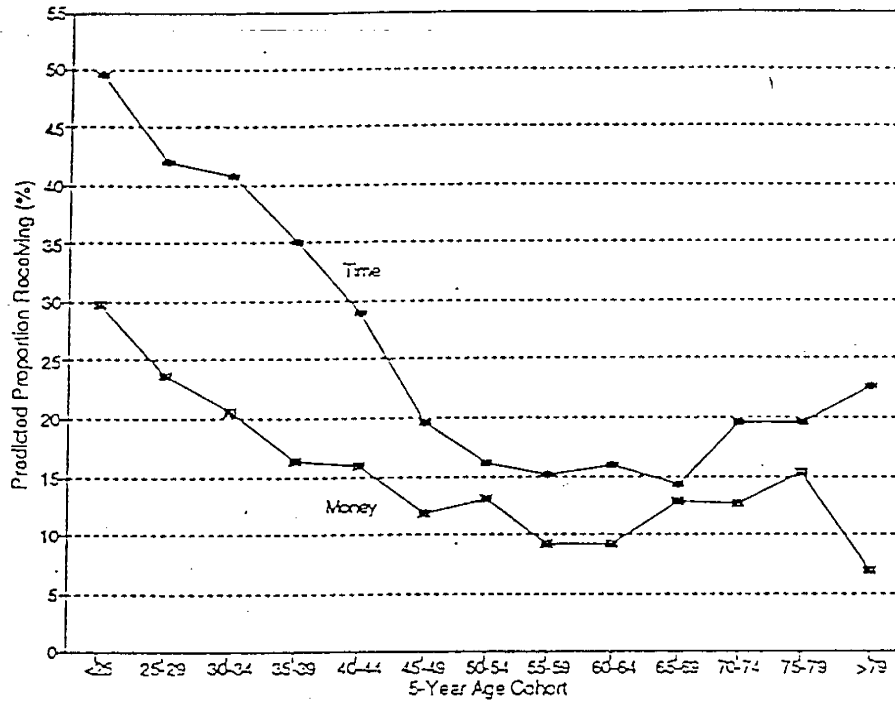


Figure 6--Predicted Proportion Giving Money and Time by 5-Year Age Cohort. Based on Probit Regressions which Use 5-Year Age Dummies and are Evaluated at the Sample Means of All Other Variables.

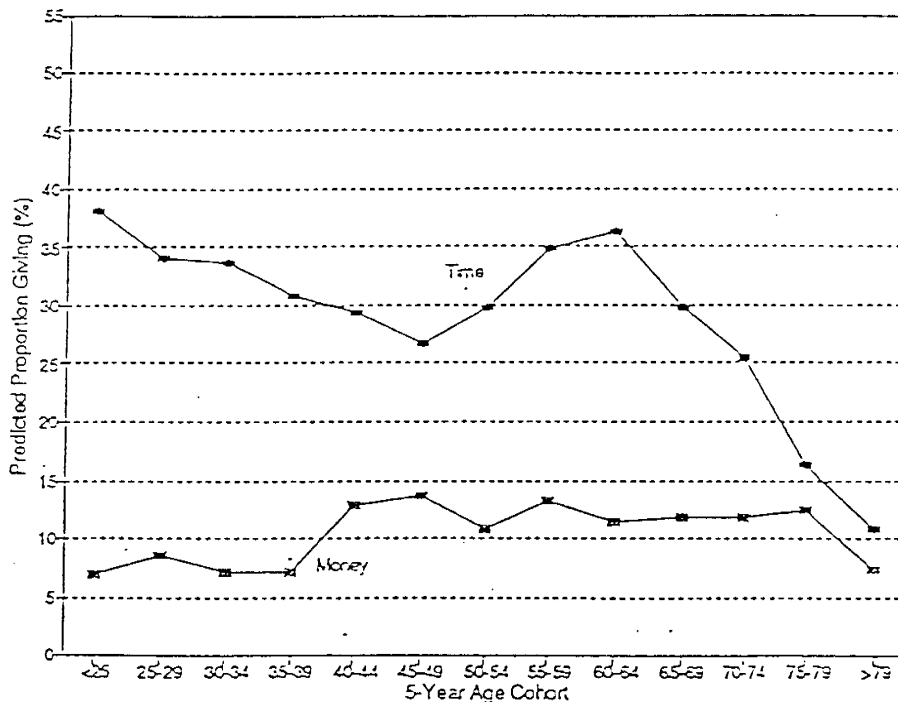


Figure 7--Predicted Amount of Money and Time Help Received by 5-Year Age Cohort. Based on Tobit Regressions which Use 5-Year Age Dummies and are Evaluated at the Sample Means of All Other Variables.

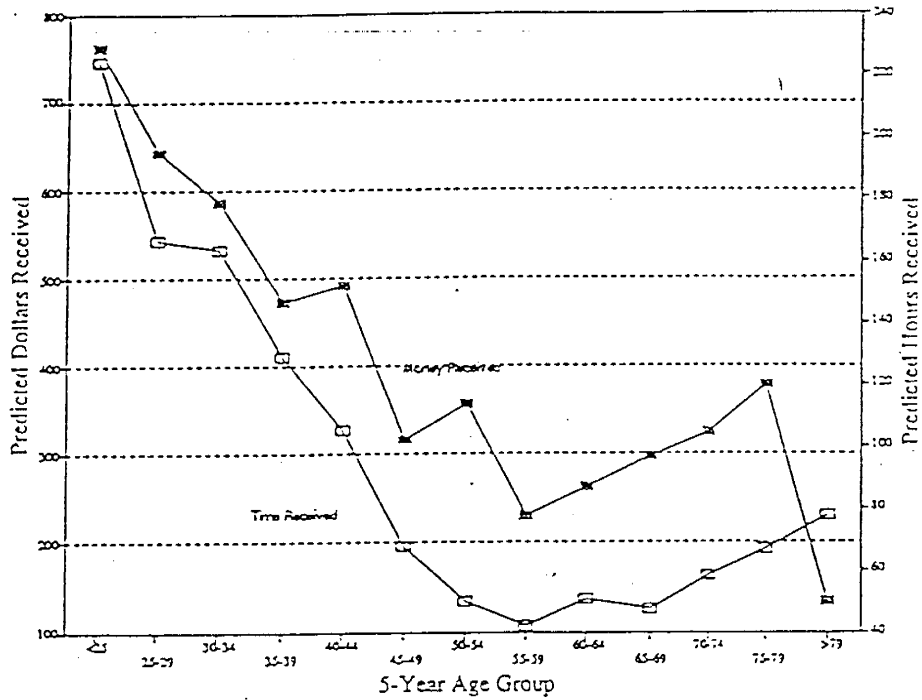


Figure 8--Predicted Amount of Money and Time Help Given by 5-Year Age Cohort. Based on Tobit Regressions which Use 5-Year Age Dummies and are Evaluated at the Sample Means of All Other Variables.



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