

# Why do Family and Friends Matter in a Welfare State? Some Evidence from Germany

Sumon Kumar Bhaumik

## **Abstract:**

Economists have long claimed that inter-household monetary transfers are motivated either by altruism, namely, to protect friends and family from adverse consumption shocks, or by strategic motives aimed at eliciting *quid pro quo* at the time of need of the donors. A logical extension of this line of argument is that if a welfare state protects the residents of the country against adverse economic shocks, private transfers will not be observed. This, however, is not the case, indicating that inter-household transfers can be motivated by life course events like marriage that do not necessarily translate into consumption shocks. Further, anecdotal evidence suggests that friends and family make transfers even if they do not require reciprocation as such. This paper addresses this paradox that has been ignored by the largely economic literature on inter-household transfers. Using data on common 763 individuals from the 1996 and 1997 rounds of the German Socio-Economic Panel, this paper shows that life course events like marriage and childbirth indeed affect the probability of receiving transfers and the amount of such transfers significantly. Further, both the aforementioned probability and amount of private transfers increase most if at least one parent of a potential recipient is alive. The results encourage a search for explanations of inter-household transfers that lie beyond the pale of stylized economic models.

## Contact information:

School of Management and Economics  
Queen's University Belfast  
25 University Square  
Belfast BT7 1NN  
UK

Email: [s.bhaumik@qub.ac.uk](mailto:s.bhaumik@qub.ac.uk)

Phone: +44 28 9097-3273

Fax: +44 28 9097-5126

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# **Do Family and Friends Matter in a Welfare State? Some Evidence from Germany**

## **1. Introduction**

It is generally observed that groups of households involving friends and (extended) family are related to each other by way of inter-household and inter-generational transfers of money, time and assets. Economists have examined all such transfers in some detail. Researchers have, for example, explored the allocation of time and money by children to elderly parents (Couch, Daly and Wolf, 1999; Kolodinsky and Shirey, 2000), and the parents' rationale for passing on bequests to their children (Abel, 1987; Bernheim, 1991).

The dominant hypothesis in the context of inter-household monetary transfers, the genesis of which lay in the seminal paper of Barro (1974), is that groups of households are altruistically related to each other (Altonji, Hayashi and Kotlikoff, 1992). Rational utility-maximizing consumers do not appreciate fluctuations in their consumption level, and adopt strategies that minimize such fluctuations, i.e., they indulge in consumption smoothing. Altruistic links with each other allow households to insure themselves against income shocks that can lead to significant fluctuations in their consumption stream (Fafchamps and Lund, 2003).

The logical implication of the "altruism" postulate is that if a household is protected from income (and, hence, consumption) shocks by way of government institutions like social security, or if there is an active market for insurance from which the household can buy appropriate cover by paying an affordable premium, it is less likely to be a part of a mutually-dependent social network of family and friends. If the elderly people in a household receive government pension, for example, these

people are less likely to receive private transfers of money from their children. Similarly, public support for poor households can reduce the extent of monetary support these households receive from their social networks. This phenomenon of crowding out of private transfers by public transfers is clearly testable, and, indeed, it has been tested in various institutional contexts; e.g., Malaysia (Lillard and Wills, 1997), Peru (Cox, Eser and Jimenez, 1998), South Africa (Jensen, 2003) and the United States of America (Cox and Jacobson, 1995). Most of these studies find evidence in favour of altruism, namely, that public transfers (partially) crowd out private transfers.

However, in most of these countries the ability of the state to insure their residents against adverse income-consumption shocks is limited, either on account of fiscal incapacity or by design. For example, social security cover against unemployment and illnesses is widely believed to be inadequate in the United States, while fiscal pressures in lesser developed countries like Peru and South Africa make generous social security packages infeasible. It is hardly surprising, therefore, that in these countries private transfers can and do often play a welfare augmenting role by having significant impact on the consumption levels of households (Maitra and Ray, 2003). In other words, in the absence of significant public cover against adverse income-consumption shocks, social networks in the form of friends and extended family matter.

Would friends and family continue to matter in a welfare state where the residents are adequately protected against income-consumption shocks? The answer to this question has significant implications for social aspects of life in the welfare states of Western Europe. It has long been argued by sociologists that with industrialisation and economic prosperity a large number of the traditional functions

of the family (e.g., childcare) have been transferred to the “industry” (Nimkoff, 1942). Arguably, if the state insures its residents significantly against unanticipated shocks, thereby eliminating (or minimizing) the role of private transfers as an avenue for social interactions, inter-household bonds would be further weakened. This, in turn, can have significant implications for, among other things, care of elderly people, a major economic and social issue in the rapidly aging societies of Western Europe.

Data as well as anecdotal evidence suggest that the welfare state has not eliminated social interaction in the form of inter-household monetary transfers. Why, however, should private transfers continue to flow in these countries? In part, they can be explained by alimony payments and payment for child support in the aftermath of divorces. Private transfers may also become relevant in the context of market failure (e.g., credit markets), and may manifest intergenerational transfer of wealth rather than efforts to smooth consumption. Evidence from the United States, for example, suggests that first time home owners are often recipients of private transfers, and such transfers have significant impact on both their savings behaviour and the quality of the homes that these recipients buy (Engelhardt and Mayer, 1998). Research using Italian household data finds evidence in favour of the proposition that private transfers constitute a complex intergenerational credit arrangement (Cigno, Giannelli and Rosati, 1998). Analysis of data from France indicates that it is easier for a person to become self-employed if his/her parents are wage workers and are, therefore, able to reduce the child’s liquidity constraints (Laferrere, undated). Clearly, social network in the form of friends and family continue to matter.

Can we conclude, therefore, that, in a welfare state, interaction among friends and family in the form of monetary transfers is limited to only to strategic interactions like those involving intergenerational credit agreement, or to situations where

institutional and/or (credit) market failure makes inter-household monetary transfers important to sustain certain types of economic activity? This line of argument is not inconsistent with the research on inter-household monetary transfers (Becker, 1974; Bernheim, Shleifer and Summers, 1992; Cox and Stark, 1994; Pezzin and Schone, 2000), and adds credence to the perception of humans as “rational” economic agents who act in their own (consumption-related) interests. The problem, however, is that this line of argument does not take into account other possible (human) motives for inter-household transfers. Yet, anecdotal evidence suggests that incidents of private transfers often coincide with life course events like marriage and childbirth<sup>1</sup> that have as much sociological implications for households as economic implications.<sup>2</sup>

This paper addresses this heretofore ignored aspect of inter-household transfers, namely, the relevance of friends and family in a welfare state, and the role of life course events in inspiring inter-household transfers, using cross-section data from Germany, a country that is noted for its strong publicly funded welfare system. The prior of this research is that friends and family continue to matter in welfare states not only to sustain consumption and to facilitate events like purchase of (or moving

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<sup>1</sup> Indeed, private transfers are usually sporadic, as opposed to being continual. The transfers from children to elderly people in developing countries are often an exception to this “rule.” In the absence of publicly funded social security provisions, and in the absence of life cycle savings, a large section of the elderly population in such countries may require continual transfers from their children for survival (Nugent, 1985). In those contexts, the stylised empirical analysis that does not take into account life course events may be more appropriate.

<sup>2</sup> Note that the rationale for providing support during or immediately after such life course events may differ significantly across events (Henretta *et al.*, 1997). For example, parents may provide substantial help during a normative life course event like marriage partly because altruism, but also partly because of intangible factors like “status” and “prestige” of the household. On the other hand, in the case of non-normative events like sickness, transfers may be induced not only by altruism but also by an urge on the part of the potential donors to insure themselves against adverse events in the future by strengthening pillars of social institutions like social obligation and reciprocation. However, a detailed discussion of the motives associated with the different forms of transfer lies outside the scope of the paper.

into) new homes, but also for demographic life course events like marriage and childbirth. The stylised econometric specification for examining the determinants of private transfers has been modified to suit the context of post-unification Germany. In keeping with the literature, a probit model is used to examine the factors that affect the probability of receiving private transfers in a welfare state, and a Tobit model – with and without correction for possible selection bias – is used to examine the determinants of the quantity of private transfers received by an average household. The empirical results are consistent with the priors.

The structure of the rest of the paper is as follows: The econometric specifications for the probit and Tobit analyses are discussed in Section 2. The data are described in Section 3. The regression results are reported and discussed in Section 4. Section 5 concludes.

## **2. Determinants of Inter-household Transfers**

Economic theory suggests that inter-household transfers are most likely to be observed when the income of the recipient household (or the household to which the recipient individual belongs) is not sufficient to sustain some acceptable level of consumption. In other words, household income is the key determinant of both the probability of receiving private transfers, and the amount of transfers received by the household.<sup>3</sup> The stylized literature, therefore, models the probability of receiving private transfers, and the determinants of the amount of such transfer, as follows:

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<sup>3</sup> It can be argued that income *per se* does not determine the need for transfers, and that, therefore, the probability of receiving transfers as well as the amount of transfers received depends on the income per member of the recipient household. A more sophisticated view takes into account the fact that adults and children do not have the same level of consumption such that the *adult equivalence* of a child is less than unity (Deaton and Muellbauer, 1980). Hence, the appropriate proxy for a household's need for transfers is possibly its *per adult equivalent* income, as opposed to overall income.

- If the focus of the analysis is the determinants of the probability of receiving transfers, the stylised approach involves the use of a probit model, with the dependent variable having a value of zero or one, for transfers received and not received, respectively. Hence, if *TRANSDUM* represents the dummy dependent variable, the specification is

$$\text{TRANSDUM} = \gamma_0 + \gamma_1 \text{INCOME} + \Gamma'X + e \quad [1]$$

where *INCOME* refers to the household income of the (potential) recipient, and *X* corresponds to the values of the other variables determining the probability of a transfer.

- The relationship between the magnitude of transfer and its possible determinants, on the other hand, is explored using of a Tobit model.<sup>4</sup> If the amount of transfers received by the households is given by *TRANSFER*, the specification for the Tobit equation is

$$\text{TRANSFER} = \beta_0 + \beta_1 \text{INCOME} + B'Z + u \quad [2]$$

where *Z* corresponds to the values of the other variables determining the amount of private transfers. However, if a household has a high probability of receiving a transfer then the magnitude of the transfer it receives is also likely to be high (Jurges, 1999). Hence, it is usually prudent to estimate the Tobit model after correcting for selection bias (Cox, 1990).

In the stylized literature, the variables constituting *X* and *Z* include household characteristics, characteristics of individuals receiving the transfer (or those of the

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<sup>4</sup> The rationale for using a probit model with transfer (1) and no transfer (0) as the binary dependent variable is obvious. The case for use of a Tobit model is more subtle. It can be argued, for example, that a transfer is made by a donor if the act of making the transfer pushes her utility beyond some unobserved threshold. If *u* denotes utility, and *u\** denotes the threshold level of utility, we can argue that a transfer is observed if *u* > *u\**, and not otherwise. In other words, the distribution of transfers is (left) censored, and hence the appropriate econometric formulation for its analysis is the Tobit model.

head of the recipient household), as well as “other” characteristics like the location of households within a country. Ideally, the regression specification should include characteristics of both donors and recipients (Lillard and Willis, 1997). However, few data sets provide information about both these sets of individuals or households, and hence, it is stylized to use the characteristics of only the donors (Cox and Jakubson, 1990; Cigno, Giannelli and Rosati, 1998) or only the recipients (Cox, Eser and Jimenez, 1998; Cox, Hansen and Jimenez, 2004), as appropriate, if matched information about both donors and recipients are unavailable.

By and large, three groups of variables are used in the literature that explores the determinants of inter-household transfers (Bhaumik and Nugent, 2000). Aside from household income, the financial position of a recipient household is captured using variables like home ownership and ownership of other assets. In addition, education of the recipient individual or that of the head of the recipient household is used as a proxy for the so-called *permanent income*, i.e., the individual or household’s long term earning potential. The stylized specification also takes into account demographic factors like the age and gender of the recipient individual or those of the household head, and the number of children in the household. Some studies also take into account the social network of the household, usually by controlling for parents, siblings and children who live outside the household. Finally, the specification controls for location of the recipient individual or household, either by distinguishing between urban and rural locations of residence, or by distinguishing among different regions of residence within a country.<sup>5</sup>

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<sup>5</sup> Some specifications also include the employment and marital status of individual recipients or those of the head of the recipient household. But employment status can be highly correlated with income, and marital status with both age and observed life course events, and this indeed in the case in the context of the data used for this paper.

This paper argues that, in addition, a specification used to examine the determinants of private transfers should take into account life course events. Illness, marriage and childbirth are the most common and well-recorded life course events. In light of earlier evidence relating incidence of private transfers to purchase of real estate (Engelhardt and Mayer, 1998), the specification should also take into consideration the event of moving into a new home, wherever possible. Finally, given that divorces often result in mandated private transfers in the form of alimony and child support, it would be prudent to also control for divorces.

The data are discussed in the next section.

### **3. Data**

Much of the research in the context of “altruism” and inter-household transfers has been undertaken using cross-section data; see, for example, Ravallion and Dearden (1988), Cox, Eser and Jimenez (1998), Cigno, Giannelli and Rosati (1998), Bhaumik and Nugent (2000), Fafchamps and Lund (2003), and Cox, Hansen and Jimenez (2004). In keeping with this literature, therefore, this paper uses data from the 1996 and 1997 rounds of the German Socio-Economic Panel (GSOEP).<sup>6</sup> The focus of the analysis is private transfers during 1996. Hence, information about age, education etc was obtained from the 1996 survey. However, since GSOEP reports information about transfers, income, and life course events were as retrospective data, based on a

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Hence, these two variables are not used in the specifications for the probit and Tobit analyses.

<sup>6</sup> The first GSOEP survey was conducted in West Germany in 1984, and East German households were added to the sample in 1992. Each year, the respondents are asked a core set of questions which include queries about demographic features of the households, income and social security benefits of the household members, their education, health and labour market performance, and expectations about the future (Haisken-Denew and Frick, 2000). The approximate number of households included in the survey during a year is about 6,800, the number of individuals in each survey being about 13,000.

one-year recall period, information about transfers, marriage, childbirth etc in 1996 was obtained from the 1997 survey.

The GSOEP provides a wealth of information about the possible determinants of transfers. Specifically, it provides information about the years of education, as well as household income and other measures of financial viability of individual respondents like home ownership, size of a household' home, and ownership of liquid financial assets. It also provides demographic information like age, gender, and the number of children, as well as information about the existence of extended families of individuals, namely, parents and siblings. The data also provides information about the location of both the residence and workplace of the respondents, namely, East or West, which is important in the context of post-reunification Germany. Importantly, it provides information about events like marriage, childbirth, divorce and illness in the lives of the respondents, information that is crucial for the empirical exercise undertaken in this paper. Finally, the data provides information about monetary transfers.

One shortcoming of the data is that it does not allow matching recipients and donors of private transfers. Specifically, the survey asks the respondents whether they transferred money to certain categories of people during the recall period, namely, parents/parents-in-law, children/ children-in-law, separated/divorced spouse, other relatives, and unrelated persons. On the other hand, while each respondent is asked whether or not she received private transfers during the recall period, she is not required to identify the sources of such transfers. However, as discussed earlier, this is also a problem with other widely used data sets that have been used for empirical investigation of inter-household transfers. Hence, the problem associated with

matching donors and recipients is not a significant shortcoming of the GSOEP data set.

A preliminary examination of the data indicates that private transfers in Germany are largely downstream, i.e., they flow from generation  $t$  to generation  $t+1$ . Indeed, of the 4169 common adult respondents to the 1996 and 1997 questionnaires, only 67 reported transfers to parents or parents-in-law, while 390 reported transfers to children or children-in-law. In other words, given the paper's focus on the relationship between inter-household transfers and the life course events of the recipients, it is reasonable to focus on the 18-40 age group, who are most likely to receive downstream transfers, in the context of Germany. However, since a large number of the adults in the 18-25 age group are students, such that transfers to them may merely represent financial support provided to students by their parents, it would be further prudent to restrict the sample for this study to the 25-40 age group.

Further, all the 77 reported recipients of inter-household transfers in the 25-40 age group belong to the lowest income quartile. They constitute over 10 percent of the respondents in that quartile, but just over 2.5 percent of the overall sample. An examination of the other rounds of the GSOEP indicates that the incidence of private transfers does not significantly vary across years, i.e., 1996 is not an abnormal year from the viewpoint of private transfers. A meaningful estimation of probit and Tobit models typically requires that at least 8-10 percent of the observations belong to either the transfer (one) or the no transfer (zero) category. Since the focus of the paper is the relationship between life course events and inter-household transfers, which is

anyhow more likely among lower income households, the sample was restricted to the lowest income quartile of the 25-40 age group, yielding a sample of 763 individuals.<sup>7</sup>

INSERT Table 1 about here.

The descriptive statistics for the potential recipients, reported in Table 1, indicate that, on average, the household income of the recipients, net of taxes and private transfers, but including public transfers, are about 17 percent lower than that of non-recipients. In other words, it can be hypothesised that the coefficient of net household income in the probit and Tobit estimations would be negative. This is unlikely to change if per adult equivalent income of the recipients' households is used instead of overall household income. Location of residence and work can also be expected to have a significant impact on the incidence of transfers. However, the exact nature of this impact is difficult to predict; while people living or working in the West are likely to be more affluent and hence less in need for private transfers, they are also likely to have more affluent friends and family who can afford to make such transfers.

Further, while age, gender and number of children in the household may or may not matter, existence of parents is likely to have a positive impact on the probability of receiving private transfers. Almost all of those who received transfers

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<sup>7</sup> This *ad hoc* restriction on the income of the individuals, which results in the use of the people in the bottom 25 percent of the income distribution for the analysis, is likely to sharpen the relationship between transfers and life course events; to that extent the estimation might be vulnerable to selection bias. However, a probit analysis of all individuals in the 25-40 age group, nor reported in the paper, indicates that while the events that influence transfers for the average lower income household are quite different from the events that matter for the average household, life course events remain significant determinants of inter-household transfers irrespective of the sample used for the analysis.

have at least one parent alive, the probability of having at least a live parent is 14 percentage points lower among non-recipients. This is consistent with the prior that in Germany parents are perhaps the single most important source of transfers.

More importantly, however, it is evident that recipients of private transfers during the recall period experienced higher incidence of marriage, moving into new homes and childbirth than the non-recipients. In other words, we can expect a vindication of our null hypothesis that inter-household transfers are significantly motivated by life course events like marriage and childbirth that have significant sociological implications over and above the economic implications.

### **3. Regression Results**

Table 2 reports the probit estimates of the determinants of the probability of receiving transfers. The analysis takes into consideration four different specifications. Overall household income is used as an explanatory variable for the specifications reported in columns (1) and (2), while per adult equivalent income is used for the specifications reported in columns (3) and (4).<sup>8</sup> Further, the specifications reported in columns (1) and (3) use a dummy variable indicating whether or not the household to which an individual belongs owns its own home, while those reported in columns (2) and (4) use the size of the households' homes as an indicator of their wealth or financial status. The regression results are remarkably robust across the specifications, and have goodness-of-fit measures in the 0.15-0.18 range which are very reasonable for such cross-section analyses.

INSERT Table 2 about here.

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<sup>8</sup> For simplicity, this paper assumes that the *adult equivalent* of a child (i.e., someone younger than 18) is 0.5.

The probit results indicate that, as expected, high income, whether overall household income or its per adult equivalent, reduces the probability of receiving private transfers, as does home ownership. Similarly, in keeping with the priors, existence of at least one live parent significantly increases the probability of receiving transfers. While there was no prior about the impact of gender on the probability of receiving transfers, given the stylized observation that men have higher *de facto* earning capabilities than women with similar attributes (Stanley and Jarrell, 1998), the result that males are less likely to receive private transfers than females is not surprising.

However, it is not obvious as to why this probability varies positively with the (years of) education of the potential recipients. One possible explanation, one that relies heavily on the prior about the role of parents in making private transfers in Germany, is that parents who bear the cost associated with higher educational attainment are benevolent in general, and hence are also willing to provide private transfers more readily. Alternatively, if one makes the reasonable assumptions that the educational attainments of people belonging to a social network are highly correlated, and that education is a good proxy for the earning potential of individuals, the positive sign of the education variable may simply indicate the greater ability of the recipient's friends and family to make private transfers.

Similarly, while it is easy to explain why residence in the West, and therefore access to better labour market, and hence financial, opportunities reduces the probability of receiving transfers, it is less obvious as to why working in the East reduces the probability of receiving transfers. A probable explanation is that, under the reasonable assumptions that an individual working in the East is a native of

(former) East Germany, and that the social network of such a person are also largely East Germans, the negative impact of working in the East on the probability of receiving transfers highlights the relatively low ability of East German social networks to make private transfers.

Importantly, however, the probit analyses indicate that events play an important role in determining the probability of transfers received by individuals/households.<sup>9</sup> Marriage is the single most important life course event, and adds significantly to the probability of receiving private transfers, after the specification controls for all other factors influencing the probability of inter-household transfers. There is also some evidence of childbirth and real estate related moves resulting in private transfers. However, it is not easy to explain why illness, captured by the number of hospital visits, results in a lower probability of receiving transfers. In Germany an individual with some form of illness is covered by a social safety net comprising of free medical treatment, paid sick leave, generous unemployment benefit etc. But illness significantly reduces the probability of occurrence of life course events with the possible exception of death, such that a plausible explanation for this result is that the lower probability of receiving transfers associated with illness indirectly manifests the impact of life course events on the aforementioned probability.

INSERT Table 3 about here.

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<sup>9</sup> A Wald test rejects the null hypothesis that the coefficients of *all* the events included in the specifications are simultaneously equal to zero, at the 1 percent level of significance.

The coefficient estimates obtained from a Tobit analysis of the amount of transfers received are reported in Table 3. The chi-square statistics obtained from the maximum likelihood estimation process, and the associated p-values, indicate that the specifications used for the analysis explain interpersonal variations in the amount of monetary transfers received reasonably well. These results are consistent with those obtained from the probit analysis of the incidence of private transfers, discussed earlier. The amount of transfers received decreases with the overall as well as the per adult equivalent income of the households and home ownership,<sup>10</sup> and increases with the education of the recipient. People residing in the West and working in the East receive less in the form of transfers, as do males. An individual is likely to receive more in transfers if at least one parent is alive. Finally, life course events significantly influence the amount of transfers received.

The Tobit results clearly indicate that having at least one live parent and the event of marriage are the two most important determinants of the amount of private transfers received by an individual. Indeed, except for working in the East, which possibly captures a paucity of friends and family who can make significant transfers, no other explanatory variable has nearly as much influence on the amount of private transfers. Further, life course events like marriage and childbirth, as well as the act of moving into a new home have a much greater impact on the amount of private transfers than factors like age, gender and education. Clearly, friends and family continue to matter even after the state provides social security cover to insure individuals against adverse economic events. More importantly, an individual's social bonds with friends and family are renewed and strengthened not only during

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<sup>10</sup> The values of transfers and both the overall and per adult equivalent measures of transfers were scaled down by a factor of 1000 to ensure that the magnitudes of these variables are consistent with those of the other variables.

economic events like acquisition of real estate, but also during life course events like marriage and childbirth that have significant sociological implications for a person.

INSERT Table 4 about here.

Finally, in keeping with the literature, this paper takes into consideration the possibility that the Tobit analysis may suffer from selection bias, namely, that people who are more likely to receive transfers also receive greater amounts as private transfers. In order to correct for the selection bias, the probit and the Tobit equations are estimated jointly using maximum likelihood methodology. The coefficient estimates obtained for the selection bias corrected Tobit equation are reported in Table 4. It should be noted that identification of the probit-Tobit system requires that the two specifications differ by at least one variable (Maddala, 1983). It is assumed that age is more likely to have an impact on the probability of receiving transfers than on the amount of the transfer itself. Hence, the age variable was dropped from the Tobit specification.

The Tobit estimates corrected for possible selection bias are consistent with the probit and uncorrected Tobit estimates. Once again, income varies inversely with the amount of private transfers received, while education varies positively with such transfers. As before, working in the East is negatively related to the amount of the transfers received. Finally, life course events like marriage and childbirth, as well as economic events like move to a new home, continue to have significant impact on the amount of private transfers received by individuals. Importantly, existence of at least one live parent and the life course event of marriage continue to be the most important determinants of the amount of transfers.

## 5. Concluding Remarks

Inter-household monetary transfers remain an integral part of human lives in all kinds of societies, ranging from the traditional to the very modern. Economists have attempted to explain this phenomenon in two different ways. One view is that individuals and households are linked by bonds of altruism such that if an individual or a household experiences shocks that affect his/her/its consumption significantly, friends and family provide monetary transfers to ensure that adverse effects of these shocks on consumption are minimized (Altonji, Hayashi and Kotlikoff, 1992). The alternative view is that human beings act strategically and private transfers are undertaken merely to ensure direct reciprocation from the recipients as and when the donor requires assistance (Becker, 1974; Bernheim, Shleifer and Summers, 1992), and indirect reciprocation from those who witness such transfers by way of establishment of a social norm (Cox and Stark, 1994).

Such “rational” behavior on the part of human beings as individuals or (collectively) as households imply that if they are protected, by and large, from significant adverse economic shocks by, for example, the state, inter-household interaction in the form of monetary transfers would be reduced and, in the limit, cease to exist. However, even in welfare states like Germany private transfers are observed and recorded. Some of these transfers may be mandated by alimony and child support, and some others may exist to ease liquidity constraints and alleviate the problems associated with missing or imperfect credit markets (Cigno, Giannelli and Rosati, 1998; Engelhardt and Mayer, 1998). But some others may well manifest the desire of individuals and households to establish or renew social bonds during life course events like marriage and childbirth that are not strictly economic *needs*, especially in

the context of a welfare state where children are not viewed as sources of old-age support.

Using data from the 1996 and 1997 rounds of the GSOEP, and a modified version of the stylized econometric specification (Bhaumik and Nugent, 2000) that suits the context, this paper argues that this indeed is the case; both the probability of receiving private transfers as well as the amount of such transfers is significantly influenced by life course events like marriage and childbirth. Indeed, marriage has a much greater impact on the amount of the transfers than economic and demographic variables like education, wealth (e.g., home ownership) and gender, as well as economic events like acquisition of real estate.

It is also interesting to note that the aforementioned probability and amount of transfers increase dramatically if at least one parent of a potential recipient is alive. A casual examination of the data also indicated that people in Germany are most likely to make transfers to their children. However, given that in a welfare state like Germany the parents are protected from economic shocks by old-age social security and health benefits, and given that the children are also shielded from adverse economic shocks to a significant extent by way of unemployment benefits etc, it is difficult to explain downstream transfers from parents to children using strictly economic rationale, whether altruistic or strategic.

These results indicate that there is reason to look beyond the pale of economic rationale to explain the incidence and the amount of inter-household transfers. Such transfers need not be motivated by economic *needs* on the part of the recipients. Further, the *quid pro quo* of a private transfer need not be reciprocation by the beneficiaries of such transfers; *quid pro quo* could be in the form of enhancement of prestige on account of a child's opulent wedding, or just the pleasure of giving to a

friend or member of the extended family. There is more to life than consumption-based theories of economic “rationality.”

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**Table 1**  
**Descriptive Statistics**

	All		Recipient		Non-recipient	
	$\mu$	$\sigma$	$\mu$	$\sigma$	$\mu$	$\sigma$
<b>Transfers</b>						
pvtrrn96	975.86	3905.92	9669.91	8233.26	0.00	0.00
<b>Household characteristics</b>						
Household income (DM)	23258.19	8990.41	19497.52	10259.30	23680.31	8744.55
Per adult equivalent income (DM)	13913.14	8804.02	9815.25	5201.00	14367.14	9004.40
Education (years)	11.95	2.58	12.40	2.81	11.90	2.55
Home-ownership (dummy)	0.19	0.40	0.09	0.29	0.21	0.40
Size of home (sq. meters)	74.35	33.74	71.35	29.14	74.69	34.22
Liquid assets (dummy)	0.75	0.43	0.70	0.46	0.75	0.43
<b>Location</b>						
Work in the East (dummy)	0.16	0.37	0.05	0.22	0.18	0.38
Live in the West (dummy)	0.27	0.44	0.14	0.35	0.28	0.45
<b>Individual characteristics</b>						
Age (year)	31.75	4.18	30.78	3.96	31.86	4.19
Male (dummy)	0.50	0.50	0.36	0.48	0.51	0.50
Number of children	0.28	0.68	0.31	0.75	0.28	0.67
Parent(s) alive (dummy)	0.86	0.35	0.99	0.11	0.84	0.36
Sibling(s) alive (dummy)	0.82	0.39	0.86	0.35	0.81	0.39
<b>Demographic and other events</b>						
Number of hospital visits	0.16	0.46	0.10	0.35	0.17	0.47
Marriage (dummy)	0.02	0.15	0.06	0.25	0.02	0.13
Divorce (dummy)	0.01	0.11	0.01	0.11	0.01	0.11
Childbirth (dummy)	0.05	0.21	0.08	0.27	0.04	0.20
Moving into new home (dummy)	0.04	0.20	0.08	0.27	0.04	0.19
<b>Number of observations</b>						
	763		77		686	

Note: 1.  $\mu$  = mean  
2.  $\sigma$  = standard deviation

**Table 2**  
**Determinants of Probability of Receiving Transfers (Probit)**

	(1)	(2)	(3)	(4)
Constant	- 1.40 * (0.79)	- 1.46 * (0.81)	- 1.42 * (0.80)	- 1.30 (0.82)
<b>Household characteristics</b>				
Household income (DM)	- 0.3E-04 *** (0.7E-05)	- 0.2E-04*** (0.7E-05)		
Per adult equivalent income (DM)			- 0.6E-04 *** (0.1E-04)	- 0.5E-04 *** (0.1E-04)
Education (years)	0.05 ** (0.02)	0.05 ** (0.02)	0.06 ** (0.02)	0.06 ** (0.02)
Home-ownership (dummy)	- 0.35 (0.22)		- 0.52 ** (0.23)	
Size of home (sq. meters)		- 0.8E-04 (0.00)		- 0.003 (0.002)
Liquid assets (dummy)	- 0.07 (0.15)	- 0.10 (0.15)	- 0.03 (0.15)	- 0.06 (0.15)
<b>Location</b>				
Work in the East (dummy)	- 0.59 ** (0.25)	- 0.59 ** (0.25)	- 0.59 ** (0.25)	- 0.61 ** (0.25)
Live in the West (dummy)	- 0.34 * (0.18)	- 0.37 ** (0.18)	- 0.41 ** (0.18)	- 0.45 ** (0.18)
<b>Individual characteristics</b>				
Age (year)	- 0.23 (0.01)	- 0.02 (0.01)	- 0.03 * (0.01)	- 0.03 * (0.01)
Male (dummy)	- 0.31 ** (0.14)	- 0.32 ** (0.14)	- 0.30 ** (0.14)	- 0.31 ** (0.31)
Number of children	0.05 (0.10)	0.05 (0.10)	- 0.006 (0.10)	0.008 (0.10)
Parent(s) alive (dummy)	1.16 *** (0.41)	1.27 *** (0.43)	1.34 *** (0.42)	1.41 *** (0.43)
Sibling(s) alive (dummy)	0.12 (0.19)	0.13 (0.19)	0.17 (0.17)	0.17 (0.19)
<b>Demographic and other events</b>				
Number of hospital visits	- 0.44 ** (0.21)	- 0.46 ** (0.21)	- 0.38 * (0.21)	- 0.42 ** (0.20)
Marriage (dummy)	0.76 ** (0.21)	0.71 ** (0.35)	0.84 ** (0.35)	0.73 ** (0.35)
Divorce (dummy)	- 0.31 (0.62)	- 0.27 (0.62)	- 0.03 (0.66)	- 0.05 (0.66)
Childbirth (dummy)	0.51 * (0.30)	0.54 * (0.30)	0.26 (0.30)	0.33 (0.30)
Moving into new home (dummy)	0.38 (0.28)	0.39 (0.28)	0.58 * (0.31)	0.55 * (0.30)
Log likelihood	- 211.78	- 213.10	- 200.59	- 202.44
Chi-square (Prob > chi-square)	75.57 (0.00)	72.94 (0.00)	97.96 (0.00)	94.26 (0.00)
McFadden adjusted R-square	0.15	0.14	0.19	0.18
Number of observations	763	763	763	763
Number of transfers	77	77	77	77

Note: 1. The figures within parentheses are standard errors.  
2. \*\*\*, \*\* and \* indicate significance at the 1%, 5% and 10% levels, respectively.

**Table 3**  
**Determinants of Amount of Transfers (Tobit)**

	(1)	(2)	(3)	(4)
Constant	- 26.79 ** (13.44)	- 28.64 ** (13.96)	- 27.05 ** (13.21)	- 25.97 ** (13.75)
<i>Household characteristics</i>				
Household income (DM)	- 0.56 *** (0.12)	- 0.53 *** (0.12)		
Per adult equivalent income (DM)			- 1.05 *** (0.19)	- 1.01 *** (0.19)
Education (years)	1.05 ** (0.43)	1.01 ** (0.43)	1.18 *** (0.43)	1.13 *** (0.43)
Home-ownership (dummy)	- 7.12 * (3.84)		- 9.47 ** (3.82)	
Size of home (sq. meters)		0.0007 (0.03)		- 0.04 (0.03)
Liquid assets (dummy)	- 0.95 (2.53)	- 1.55 (2.55)	- 0.39 (2.48)	- 0.94 (2.51)
<i>Location</i>				
Work in the East (dummy)	- 11.24 ** (4.45)	- 11.36 ** (4.47)	- 10.78 ** (4.34)	- 11.34 *** (4.36)
Live in the West (dummy)	- 6.02 ** (3.06)	- 6.68 ** (3.08)	- 6.88 ** (3.02)	- 7.78 ** (3.05)
<i>Individual characteristics</i>				
Age (year)	- 0.34 (0.29)	- 0.39 (0.30)	- 0.44 (0.29)	- 0.44 (0.29)
Male (dummy)	- 3.97 * (2.35)	- 4.14 * (2.38)	- 3.54 (2.34)	- 3.84 * (2.37)
Number of children	1.13 (1.64)	1.12 (1.67)	0.18 (1.58)	0.46 (1.61)
Parent(s) alive (dummy)	20.58 *** (7.37)	23.23 *** (7.76)	22.81 *** (7.31)	24.71 *** (7.68)
Sibling(s) alive (dummy)	1.97 (3.12)	2.32 (3.18)	2.92 (3.13)	3.01 (3.18)
<i>Demographic and other events</i>				
Number of hospital visits	- 7.86 ** (3.40)	- 8.24 ** (3.58)	- 6.36 ** (3.25)	- 7.10 ** (3.29)
Marriage (dummy)	15.67 *** (5.50)	14.77 *** (5.55)	16.54 *** (5.36)	14.78 *** (5.41)
Divorce (dummy)	- 5.94 (10.10)	- 5.13 (10.22)	- 0.87 (10.17)	- 1.17 (10.38)
Childbirth (dummy)	8.60 ** (3.72)	9.22 * (5.07)	4.02 (3.53)	5.29 (3.59)
Moving into new home (dummy)	6.37 (4.67)	6.54 (4.68)	8.98 * (4.81)	8.84 * (4.78)
$\sigma$	16.90 *** (1.62)	17.09 *** (1.64)	16.34 *** (1.56)	16.59 *** (1.58)
<i>Log likelihood</i>				
Log likelihood	- 457.34	- 459.22	- 446.44	- 449.06
Chi-square (Prob > chi-square)	85.24 (0.00)	81.47 (0.00)	100.54 (0.00)	95.73 (0.00)
Number of observations	763	763	763	763
Number of transfers	77	77	77	77

Note: 1. The figures within parentheses are standard errors.  
2. \*\*\*, \*\* and \* indicate significance at the 1%, 5% and 10% levels, respectively.

**Table 4**  
**Determinants of Amount of Transfers (Tobit with correction for selection bias)**

	(1)	(2)	(3)	(4)
Constant	- 28.87 * (15.86)	- 30.21 *** (9.69)	- 32.01 ** (11.88)	- 29.71 *** (10.51)
<i>Household characteristics</i>				
Household income (DM)	- 0.52 *** (0.12)	- 0.46 *** (0.10)		
Per adult equivalent income (DM)			- 0.91 *** (0.21)	- 0.84 *** (0.19)
Education (years)	1.08 ** (0.44)	0.76 ** (0.34)	1.09 ** (0.43)	0.89 ** (0.32)
Home-ownership (dummy)	- 5.43 (5.20)		- 7.10 (4.81)	
Size of home (sq. meters)		0.03 (0.03)		- 0.02 (0.04)
Liquid assets (dummy)	- 1.11 (2.42)	- 2.15 (2.28)	- 1.14 (2.23)	- 1.63 (2.18)
<i>Location</i>				
Work in the East (dummy)	- 10.93 ** (4.49)	- 12.31 *** (4.18)	- 11.34 *** (3.80)	- 12.09 *** (3.37)
Live in the West (dummy)	- 4.49 (3.01)	- 5.32 * (2.90)	- 4.56 (3.04)	- 5.69 ** (2.94)
<i>Individual characteristics</i>				
Male (dummy)	- 3.28 (2.68)	- 2.66 (1.96)	- 1.92 (2.76)	- 1.90 (2.43)
Number of children	1.00 (1.80)	0.58 (1.55)	0.23 (1.61)	0.11 (1.50)
Parent(s) alive (dummy)	16.75 (12.34)	18.88 ** (7.31)	19.39 ** (7.70)	20.08 *** (7.01)
Sibling(s) alive (dummy)	2.60 (2.92)	3.07 (2.95)	3.29 (3.01)	3.32 (2.53)
<i>Demographic and other events</i>				
Number of hospital visits	- 6.55 (3.76)	- 6.65 (5.10)	- 4.97 (3.65)	- 5.34 (3.65)
Marriage (dummy)	12.32 ** (5.28)	11.04 ** (4.28)	11.82 *** (3.99)	10.53 ** (4.17)
Divorce (dummy)	0.72 (13.93)	0.97 (49.56)	3.83 (15.33)	3.28 (14.73)
Childbirth (dummy)	8.85 * (4.66)	8.56 * (4.89)	3.78 (4.54)	4.70 (4.13)
Moving into new home (dummy)	6.00 (4.64)	4.06 (4.25)	7.34 (4.80)	6.16 * (3.72)
$\sigma$	12.80 *** (1.23)	12.76 *** (1.08)	12.42 *** (1.18)	12.46 *** (1.12)
Log likelihood				
	- 432.45	- 432.40	- 421.97	- 423.55
Number of observations				
	763	763	763	763
Number of transfers				
	77	77	77	77

Note: 1. The figures within parentheses are standard errors.  
2. \*\*\*, \*\* and \* indicate significance at the 1%, 5% and 10% levels, respectively.