

## **Introduction**

Families rely on each other for many types of support. While economists have focused on cash transfers, the transfer of time help is likely to play at least as important a role. Time transfers, particularly in the form of caring for children and elderly parents, are likely to be related to geographic proximity among family members, although wealthier or better educated families may be able to deliver care from a distance. Financial transfers may be more likely when distances are greater as they substitute for time transfers. The extent to which families rely on one another for care and financial assistance and the relationship between transfers and geographic proximity will be increasingly important questions as aging baby boomers seek care from children who are likely to be single parents or dual-career couples and children seek financial and time support as they combine dual careers with family life.

This paper examines the evolution of geographic proximity over the life-cycle. I focus on how the history of geographic proximity relates to transfers from parents to children and from children to parents and examine the relationship between transfers received and transfers given asking three related questions:

- 1) How does geographic proximity among family members evolve over the life course?
- 2) How do transfers received and transfers given at different points in the life cycle relate to one another?
- 3) What is the relationship between family histories of geographic proximity and transfers of time and money among family members?

I use the Panel Study of Income Dynamics [PSID] which allows me to trace geographic proximity and transfer behavior among family members over the life-cycle. I examine the way in which geographic proximity evolves from the time a child leaves home to the time his or her parent may require care and relate geographic proximity among families to transfers of time and money. The PSID is unique in its ability to examine the evolution of geographic proximity and intergenerational relationships over the life course. Evidence of transfers among family members is not consistently available in the PSID. However, the 1988 Time and Money Transfer Supplement has been used extensively to examine transfers among families. A new module, the Wealth Transfer Module, is available in 2007 and allows for an analysis of transfers and intended transfers between parents and children twenty years on.

## **Related Literature**

Distinguishing between motivations behind intergenerational transfers has dominated the literature on intergenerational transfers. The two most commonly posed motivations are altruism, in which parents give financial transfers to children because they care about their children's happiness; and exchange, in which parents give transfers to children because they demand services that only children can provide and in exchange for these services provide financial transfers (Becker, 1974; Bernheim et al., 1985; Cox, 1987; Altonji, Hayashi, and Kotlikoff, 1997 amongst others). Although strict tests of the altruism model have been largely rejected (Cox, 1987; Altonji Hayashi and Kotlikoff, 1992; 1997), most analyses show that inter vivos transfers seem to be compensatory and

related to liquidity constraints while bequests are more likely equally divided (McGarry and Schoeni, 1995; Wilhelm, 1996; McGarry, 1999). Cox and Stark (1996; 2005) argue in favor of an alternative motivation in which adults care for their own aging parents in front of their children to increase the probability that their children will care for them as they age. Because the demonstration effect relies on the presence of children it implies that parents have an incentive to make investments in their children that promote fertility, like providing assistance for a down payment on a house.

Geographic proximity makes time transfers less costly among family members and money transfers to family members who live far apart may substitute for time transfers. Cox and Stark (2005) find that living closer to a parent increases the probability of receiving a housing transfer from a parent and find that children who receive help with housing from their parents move less far away from parents than children who do not receive help with housing. Using PSID data, Schoeni (1997) finds that children who live closer to their parents receive fewer financial transfers but more time transfers from parents and that they give more time help to parents. His analysis suggests that families substitute money for time when distances are large. Altonji, Hayashi, and Kotlikoff (1996) examine the 1988 PSID Time and Money Transfer module using fixed effects models and find that transfers of time are much more likely when families live close to one another but that money transfers do not relate to distance. These relationships between transfers and distance do not consider past proximity in examining transfers of time and money. Konrad et. al. (2002) and Rainer and Siedler (2009) develop non-cooperative models of caring for aging parents in which siblings play a game that determines how close they live to their parents. They find evidence consistent with their theoretical predictions that children with siblings live farther from parents than only children. However, they do not examine transfers explicitly and their analysis does not include transfers from parents to children, only likely transfers from children to parents.

### **Data and Empirical Analysis**

I use the PSID geocoded data along with files matching parents with children to construct proximity histories for families. I match these histories to the PSID 1988 Time and Money Transfer Supplement and the 2007 Wealth Transfer Module to document the relationship between proximity and transfers and the relationship between transfers received in 1988 and anticipated transfers twenty years on in 2007. I use the same sample as Altonji, Hayashi and Kotlikoff (1996) who create a matched sample of parents and children in the 1988 Time and Money Transfer supplement. Their matched sample contains approximately 3000 children and 1600 parents.

This paper first traces the full proximity history of the parents and children in the matched sample. I follow children in the sample as they leave home and establish independent households. I examine whether there is evidence of children moving closer to parents when they are likely to either give or receive care. In particular, I focus on how proximity relates to spells of unemployment, the birth of a child, a divorce, and the onset of illness, to document the relationship between life transitions and proximity. I do not interpret these relationships as causal but they provide a descriptive basis for the analysis. These life events represent times when support from family members is likely to be important.

The second part of the paper analyses the relationship between transfers in 1988 and 2007. I examine whether children who reported receiving transfers from parents in 1988 are more likely to anticipate transfers in 2007. I also examine whether the relationship between transfers received and transfers given depends on the presence of grandchildren. In particular, I am interested in whether children who received time and money transfers from parents early in their adult lives, either in the form of childcare for young children or in the form of financial support while starting a career, are more likely to foresee giving care to their parents as they age.

I explore whether these relationships differ by the gender of the child and the gender of the parent. Cox and Stark (2005) find gender differences in transfers of money from parents to children tied to housing. They find the single mothers are more likely to make such transfers and that all parents are more likely to make housing transfers to sons than daughters. They interpret the gender effects as supporting a demonstration mechanism because single mothers are the most likely to require care and supporting the marriage of sons is more important than supporting the marriage of daughters because sons are most likely to lose custody of children in a divorce making a demonstration effect impossible. I explore whether similar gender differences exist with respect to care for grandchildren. Grandchild care is similar to a financial transfer tied to housing—parents may promote fertility by living in close proximity to children and providing child care services. If a demonstration effect explains these transfers I would expect similar gender differences with respect to childcare as Cox and Stark (2005) find in housing transfers. The relationship between transfers received and transfers given sheds light on how successful parents are in using transfers to children early in life to extract transfers later in life.

The final part of the paper examines the relationship between proximity histories and the transfers of time and money in 1988 and 2007. I examine whether children with longer histories of proximity to parents receive larger transfers than those with shorter histories of proximity. I also examine differences in the relationship between proximity history and time transfers and the relationship between proximity history and money transfers. In cross-sectional analysis, distance is negatively related to time transfers and positively related to financial transfers suggesting that financial transfers may substitute for time transfers as distance increases. However, proximity histories may reveal a different relationship between transfers and proximity. Those children who live farther from parents and receive financial transfers may have lived closer to parents in the past providing at least suggestive evidence of an exchange motivation for transfers from parents to children. This paper provides a basic exploration of how transfers and geographic proximity evolve over the life course. It is largely descriptive in nature but has the potential to shed light on the motivations behind time and money transfers and geographic proximity among family members.

## References

- Altonji, Joseph, Fumio Hayashi, and Laurence Kotlikoff. 1997. "Parental Altruism and Inter Vivos Transfers: Theory and Evidence." *Journal of Political Economy* 105(6): 1121-1166.

- , 1996. "The Effects of Earnings and Wealth on Time and Money Transfers between Parents and Children." In Sharing the Wealth: Demographic Change and Economic Transfers Between Generations, Andrew Masson and Goerges Tapinos eds., Oxford: Oxford University Press: 306-357.
- , 1992. "Is the Extended Family Altruistically Linked? Direct Tests Using Micro Data." *American Economic Review* 82(5): 1177-1198.
- Becker, Gary. 1974. "A Theory of Social Interactions." *Journal of Political Economy* 82(6): 1063-1093.
- Bernheim, B. Douglas, Andrei Shleifer, and Lawrence H. Summers. 1985. "The Strategic Bequest Motive." *Journal of Political Economy* 78(6): 1045-1076.
- Cox, Donald. 1987. "Motives for Private Income Transfers." *Journal of Political Economy* 95(3): 508-546.
- , and Oded Stark. 1996. "Intergenerational Transfers and the 'Demonstration Effect'." *Mimeograph*. Boston College: Chestnut Hill, MA.
- , 2005. "On the Demand for Grandchildren: Tied Transfers and the Demonstration Effect." *Journal of Public Economics* 89: 1665-1697.
- Konrad, Kai, Harald Künemund, Kjell Erik Lommerud and Julio Robelo. 2002. "Geography of the Family." *American Economic Review* 92(4): 981-998.
- McGarry, Kathleen. 1999. "Inter vivos Transfers and Intended Bequests." *Journal of Public Economics*. 73: 321-351.
- , and Robert Schoeni. 1995. "Transfer Behavior in the Health and Retirement Study: Measurement and the Redistribution of Resources within the Family." *Journal of Human Resources* 30: S184-S226.
- Rainer, Helmut and Thomas Siedler. 2009. "O Brother, Where Art Thou? The Effects of Having a Sibling on Geographic Mobility and Labour Market Outcomes." *Economica* 76: 528-556.
- Schoeni, Robert. 1997. "Private Interhousehold Transfers of Money and Time: New Empirical Evidence." *Review of Income and Wealth*. 43(4): 423-448.
- Wilhelm, Mark. 1996. "Bequest Behavior and the Effect of Heirs' Earnings: Testing the Altruistic Model of Bequests." *American Economic Review* 86(4): 874-892.