Intergenerational Ties: Alternative Theories, Empirical Findings and Trends, and Remaining Challenges

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Introduction

Relationships between parents and children are legitimately the province of diverse academic disciplines including the social sciences, humanities, and biological sciences. One need only to compare the plot in Shakespeare's *King Lear* with the exchange model offered by economists to see how broad based is the interest in intergenerational transfers and how similar are the underlying concerns. However, despite this widespread interest, the sharing of ideas and principles about caring and exchange in families has been hampered by discipline-specific language and methodologies. These structures make it difficult to view directly the similarities and differences across disciplines in the questions asked and the frameworks used to understand these behaviors. It is similarly difficult to compare what has been learned by the various approaches and to draw broad conclusions that span disciplines.

In this chapter we provide an overview of the various approaches to examining intergenerational relationships, the behaviors that characterize these relationships, and reasons for variation in intergenerational ties. We focus on relationships between parents and adult children although we recognize explicitly that these relationships cannot be understood without considering what happens earlier in life. However, in couching our discussion in terms of caring and exchange between adult kin, we provide valuable insights into how intergenerational relationships play out when both parties are (at least potentially) independent and participating in the decision process. The chapter emphasizes economic and sociological approaches. Developmental and attachment processes are central to intergenerational relationships but beyond the scope of this chapter.

Understanding intergenerational relationships is becoming increasingly important as the demographic, social, and economic environments facing families are transformed. Already we

have seen sweeping changes in numerous factors affecting family behaviors: More women than ever before are employed in the labor force, they are having fewer children, and having them at later ages. Cohabitation and childbearing outside of marriage have increased. Divorce rates are high, and the prevalence of stepfamilies formed by marriage or cohabitation means that families can include a wide array of biological and social relationships. At the same time, increases in life expectancy contribute to a rise in the number of three- and four-generation families. On the policy front, changes in Social Security, Medicare and Medicaid programs are likely in the near future and these changes will necessarily affect the distribution of resources across generations.

These demographic changes raise new questions about the definition of family and familial obligations. Just who is part of the modern family and who should help family members in need? Childbearing outside of marriage and divorce weakens ties between nonresident parents and children, but cohabitation, remarriage, and the increase in multi-generation families introduce new kin and quasi-kin into the family picture. Similarly, members of a household may not be members of the same legal family, as in the case of some cohabiting couples, and family members need not live in the same household to share significant emotional and material bonds. These issues make it difficult even to define what is meant by family and how broadly familial obligations are spread.

The changes mentioned above have very different implications for women's and men's family experiences. For example, because of the high rates of divorce and out of wedlock births, men are increasingly likely to live apart from their young children and may therefore have weaker ties than women to their offspring later in life. In contrast, women are now more likely to be single mothers, often relying on their extended kin, especially their own mothers, to fulfill their parenting obligations. Despite the importance of these demographic changes, the literature

is lacking even basic descriptive information about many of these new intergenerational relationships and how families function in light of the changes.

We divide our discussion of these issues into four sections. In the first section, we note the alternative theories that have been put forth to explain the ties between generations. In doing so, we attempt to compare and contrast the ways in which different disciplines approach the topic. Our focus and terminology coincide primarily with the ideas advanced in the economic and sociology literatures, although the ideas span multiple fields. We find that although the emphasis of each discipline is somewhat different, there is much common ground. In section 2, we discuss the empirical patterns that have been found in previous work with a focus on three main forms of assistance to kin: co-residence, time assistance, and financial transfers. In section 3, we discuss the changing demographic and policy contexts, considering how each interact with familial behavior. We conclude, in section 4, with a discussion of the theoretical, statistical, and data collection issues and challenges to improving our understanding of generational ties.

1. How and Why are Generations Connected? Theoretical Perspectives

A number of perspectives, explanations, and models of intergenerational behavior have been put forth by various disciplines. Although these ideas differ in numerous respects, there are clear camps into which many of them can be placed. The first is the idea that intergenerational relationships are based on self-interested behavior with transfers made with the expectation of some form of reciprocity or exchange. The second posits that behavior is based on caring or altruistic preferences on the part of the individual making the transfer. Economists refer to these competing ideas as exchange and altruism, although terms like reciprocity and caring appear frequently in other disciplines. Within these broad categories there are several related models which we briefly note. As we argue, none of these ideas is likely to explain all behaviors, but rather, we

expect that they all play a role in comprising the complicated relationships observed among family members.

Our catalogue of ways of thinking about what motivates and influences intergenerational relationships, outlined below, is intended as a brief overview of the existing literature and a starting point for further theoretical development and integration across disciplines. We encourage researchers interested in these issues to pursue this goal.

1.1 Perspectives on Family Behaviors

The most dominant model of family decision-making in economics assumes that one member—the head—makes all decisions and does so in the best interest of the family members (Becker, 1974, 1991). Although this *unitary* model has provided a useful theoretical foundation for understanding family dynamics, it is predicated on assumptions that are difficult to reconcile with the realities of social behavior. Any decision that involves negotiation between two individuals with divergent preferences or goals—e.g., the decision to divorce or leave the nest—can be difficult to place into the framework of a unitary family or household. Moreover, the empirical predictions of the unitary model have been rejected in a wide array of settings. The more recent theoretical literature on the family instead has turned to highlighting the individuality of each family member. In these latter *collective* models of the family (Chiappori 1988; McElroy and Horney 1981, Alderman, et al. 1995), family members—spouses, parents, offspring (siblings), and kin in general—are viewed as having their own preferences and their own sources of "power" relative to others in the family. This power guides their bargaining, or interactions, with other family members with respect to the allocation of resources and consumption decisions. This framework also has been increasingly used to characterize the interactions between generations and includes both cooperative and non-cooperative behavior (Bergstrom 1997).

In related literature in sociology, family relationships can be guided by cooperation or conflict. In cooperative models, families are characterized as exhibiting solidarity along a number of dimensions—affection, emotional support, their willingness to provide material resources and care for each other—and this solidarity helps them function as cohesive units to fulfill member needs (Bengtson 2000). In contrast to this idea of solidarity and cooperation, as far back as William Goode's classic work, *World Revolution and Family Patterns* (1963), scholars have recognized that parents and children, husbands and wives, adult children and elderly parents sometimes hold different interests, that individual family members vary in their ability to achieve their goals in part because power differentials exist among actors in the family, and that social networks within and outside the family can affect the "winner" in these contests.

Conflict perspectives on family behavior often align with "quid-pro-quo" models of exchange. Solidarity models of the family share more affinity with altruistic motivations for family behavior. But, the congruence is not perfect: altruistic actors, such as the parents of a young adult child or the adult children of a frail elderly mother, may encounter resistance when they do what they believe is in the best interest of those for whom they care. Conversely, when all parties understand and accept the rules for exchange and all parties benefit from the exchange, self-interested behavior may occur under conditions of minimal conflict.

Understanding intergenerational ties requires theory about individuals' motivation for behavior as well as an appreciation of the larger context that surrounds generational interactions. We provide perspective on the larger demographic and policy context later in this chapter.

1.2 Exchange and Reciprocity

The exchange model views the interaction between family members much like the interactions between any two parties: each member has his/her own objectives (preferences) and re-

sources (sources of power) and each member can potentially improve his/her well-being by engaging in trades of different goods and services so as to maximize individual well-being. From this perspective, elderly parents "buy" the care and attention of their offspring with promises to provide the latter with bequests and/or other transfers (Bernheim et al. 1985). Transfers need not be reciprocated at the same time they are made, but could be "paid-back" at a much later date and in very different currencies. Care for elderly parents, for example, could be given in response to resources received long ago, perhaps in return for parental investment in schooling, help with a down payment on a home, or care for a young grandchild, or in response to expected compensation as with the bequest example.

In its simplest form, the parties involved in the transaction exchange goods and services, subject to the "comparative advantage" of each family member in producing, or supplying, these items. In this context, the "price" of services provided to parents will depend on the opportunity cost of their children's time, with services purchased from high-income children being more costly on a per hour basis than those purchased from children with lower time costs. Thus, in the context of interactions between elderly parents and their adult children, one would expect the child with the lowest opportunity cost of time to be the most likely to provide services to the parent. However, because the total amount transferred depends on both the price per hour and the number of hours provided, the total transfer of a high-income child (price x quantity) could actually be greater than that from a low-income child despite the provision of fewer hours of care by the high-income child.

In sociology, the idea of reciprocal or quid-pro-quo behavior is nearly identical to that found in economics; individuals engage in actions that maximize their personal rewards and minimize their costs (Cook and Rice 2003). They do this either by a "backward looking" strategy

where they base future exchanges on the reinforcement and information they have obtained from prior exchanges (Homans 1961) or via a "forward looking" strategy where decisions are based primarily on expected future benefits from engaging in a particular exchange (Blau 1964). In repeated interactions, such as occur in families, actors have considerable information from the outcomes of prior exchanges on which to base predictions about likely outcomes from future exchanges. Actors also develop perceptions about the "fairness" of ongoing exchanges and come to overlay ongoing exchange relationships with an emotional response (Lawler and Yoon 1998; Molm et al. 2000). Hence, repeated exchanges in families may have both rational and emotional aspects that need to be incorporated into theoretical predictions about intergenerational exchanges.

A motive for interactions between generations that is closely related to maximizing (future) well-being is the provision of insurance against unforeseen events, such as accidents or loss of one's job, and the related provision of credit. While markets do exist for most types of insurance and credit, families may play a crucial role in providing these services because of the problems of adverse selection[1] and moral hazard[2] that can plague such markets. Kotlikoff and Spivak (1981) examine the role of families in providing members with substitutes for market annuities, i.e., insurance against outliving one's resources. The private annuity market is well-known to be inefficient due to the presence of adverse selection and Kotlikoff and Spivak show that even small families have the potential for significantly improving the well-being of their members by

[1] Adverse selection refers to the phenomenon where those who are at higher risk, in ways unknown to the insurer, are more likely to purchase coverage. Because the insurer is unaware of the higher risk (or simply unable to price the policy based on this) the risky individual gets a good deal. In the annuity market, those who purchase annuities live significantly longer than those who do not buy this type of insurance. This selection increases the cost of the insurance and may make it an unattractive option for many.

[2] Moral hazard refers to the situation where an insured party alters her behavior because she is covered by insurance. An individual who loses a job may stay unemployed longer because of unemployment insurance. Parents might be better positioned to monitor behavior than a private provider of unemployment insurance.

sharing the longevity risk. In their example, children promise to provide for their parent if the parent lives longer than expected and exhausts her savings. Conversely, if the parent dies sooner than anticipated, the children reap the benefit of the parent's unspent resources in the form of a bequest. With respect to credit, a parent may be better able to judge the credit worthiness of a child just starting out on his own than would a formal lending institution (or be better able to enforce repayment) and, thus, be able to make a mutually advantageous loan (Cox 1990). These behaviors are a type of exchange in that both parties can benefit. The parent can receive a higher return on the loan than she might through other investments and the child can receive a lower interest rate than he would from a bank.

A key issue in these simple characterizations of exchange-based interactions between parents and children (or any other family members for that matter) is the extent to which kinship plays a role in the exchange. Certainly there are numerous relationships in life wherein reciprocal behavior occurs. Therefore, it is not obvious why, for example, parents should rely on their children to provide care when these services may be obtained from other providers, e.g., nursing homes or hired help. It is possible that transactions for such services may be fraught with problems of adverse selection and/or moral hazard, as in the annuity market, or there may be difficulties in finding such services or assessing the quality of service providers outside the family. This later issue may be especially important with respect to services such as caring for a cognitively impaired parent or for an infant. In this context, parents may choose to engage in transactions (exchanges) with family members whom they feel they can "trust." In addition, children, knowing the preferences and needs of their parents, may be able to provide such services more efficiently than "outsiders." As in the case of the parental loan discussed above, families may be better able to enforce reciprocity than would the private sector.

In this vein, the exchange processes may be viewed as rooted in normative principles that obligate repayment of a debt, financial or otherwise (Silverstein 2005). Terms like "enforceable trust" and the idea that intergenerational relationships carry with them a social obligation that is "owed," suggest that families do have power to ensure reciprocal transfers beyond what the market itself might produce.

A related idea in social psychology is the concept of a "support bank" (Antonucci 1990)—a reserve of gifts or goodwill that is produced and consumed over the life course. Parents invest early by transferring resources to their children and withdraw these resources later after they have built up their reserve. In effect, children owe their parents and "good children," who have internalized the notion of filial responsibility, provide a return to these investments.

1.3 Altruism or Caring Behavior

Despite the likely importance of this self-interested behavior, ties between family members would be expected to differ from those between unrelated individuals for reasons other than market efficiency. As emphasized in the work of Becker (1974, 1991), family members have a unique set of motivations and bonds that guide their interactions, namely they "care" about one another and one another's well-being. Such altruistic feelings can motivate a parent to finance a child's education and thereby improve the child's future well-being—even if there is no "repayment" from the child—or motivate a child to care for his frail mother despite no possibility of a bequest.

This model is often couched in terms of parents being the donor and children being the recipient, perhaps because the majority of transfers in the United States appear to flow "downstream." It can, however, be "two-sided" if each party cares about the other, or can operate in the opposite direction with the child as the donor or caregiver. In following the common terminol-

ogy, we will tend to speak of transfers from parents to children.

In the formal specification posited by economists, the utility function, or well-being, of the parent (donor) depends upon the well-being of the child (recipient) such that $U_p = U(C_p, U_k(C_k))$ where C_k is the consumption of the child and C_p the consumption of the parent. This structure does not require that the parent put equal weight on her own consumption and that of her child, but rather allows for there to be a "weight" or scaling factor attached to the child's well-being. An altruistic parent chooses the amount to transfer to her child—and, thus, the parent consumes what income remains—so as to maximize U_p. As a result, the parent will allocate her resources to equalize the marginal utility of her consumption with the (weighted) marginal utility of her daughter's consumption.

There are several predictions or implications that follow from this model of family decision-making. First, children that are poorer—i.e., have fewer of their own resources—will receive larger transfers from their parents than children who are, themselves, better off. This compensatory action by parents accords with an intuitive notion of the consequences of having altruism guide intergenerational interactions. But, there also are additional, less intuitive, predictions from the simple altruism model of family decision-making:

(i) The altruism model implies that the family, through the parent, will choose the consumption levels of its members as a function of the family's *total income*, i.e., the distribution of incomes across family members will have no effect on these consumption outcomes. This is sometimes referred to as the *income pooling* restriction of the altruism model.

(ii) The desire of the altruistic parent (donor) to equalize the marginal utilities of consumption across family members implies that, all else equal, an exogenous increase in the income of children (recipient) will *reduce* the *amount* of the transfer provided by the parent (donor).

We refer to this as the *transfer-recipient income* prediction.

(iii) An increase of $1 in the income of the parent (donor), accompanied by a decrease of $1 in the income of the child (recipient) will result in a $1 increase in the amount of the transfer. This latter prediction is referred to as the *transfer-income derivative* restriction.

As we discuss in Section 2.5, a number of studies have attempted to test these implications of altruism with alternative data sets and in alternative settings.

As with models of reciprocity, this simple altruism model is applicable to a wide variety of transfers. Because well-being depends on many factors, a parent can increase a child's happiness by transferring cash, providing time assistance and/or providing in-kind transfers, such as shared housing or food. Even less easily quantified commodities, such as attention or good parenting behavior, can be provided to benefit the child. The choice of the specific transfer currency (or currencies) will depend on the preferences or tastes of the donor and recipient—i.e., how much different types of assistance are valued or how much disutility or unhappiness their provision implies—and the relevant prices. An adult child wishing to provide assistance to a frail elderly parent can do so herself or can hire a professional caregiver. A child with a high cost of her time, i.e., a high wage, would likely find it more cost effective to purchase professional care for a needy parent while a low-income child might be better off reducing hours of paid work and providing the care herself. As well, the parent may have preferences for care coming from different sources and, thus, would receive different benefits from each type of care.[3]

Because the value of additional units of any commodity—dollars, time, or goods and services—is assumed to decline with the amount of the item the individual has (decreasing marginal utility), this model predicts that more resources will be directed to those who are less well off,

[3] For instance, some evidence suggests that older mothers prefer children to provide help with tasks such as grocery shopping and financial help but that they are willing to have non-family members provide personal care (Brody and Schoonover 1986).

individuals who value the transfer the most. This prediction follows from the formal model and it agrees with our intuition: an altruistic or caring parent would provide more help to the child who needs it more, implying a negative relationship between the resources of the child and the magnitude of the transfer.[4]

1.4 The Interaction of Altruism and Exchange and Extensions

It is certainly plausible to assume that the interactions of family members may be guided by both altruism and exchange. In a carefully developed model, Cox (1987) presents an exchange model in which the parent is altruistic toward her child but also values the service or good the child can provide. If provision of the service lowers the utility of the child—say, the child dislikes providing care or caregiving takes time away from paid work and is costly in that sense—the parent will want to compensate the child in some way, offsetting the negative effect of caregiving.

Similarly, one can imagine other variants of these basic models. Related to the idea of exchange is the "demonstration effect" model recently developed by Cox and Stark (2005). In this model, an adult child, who only cares about her own well-being, may choose to care for an elderly parent in the hope of instilling in her own child the belief that one ought to care for one's parents, and thus increasing the probability that she herself will be looked after in her old age. In effect, she cares for her parent with the expectation of receiving care in return, albeit from her own child rather than the parent. Although intriguing and possibly important in certain contexts, the model is fairly new and has been subject to little formal testing. Some difficulties are readily apparent. For example, the model cannot explain why adult children with no children of their own would provide care for a parent, and yet the literature, while somewhat mixed on this topic,

[4] More specifically, the model predicts that if a parent is making transfers to say, each of her two children, then the marginal utilities of consumption will be equalized across children.

suggests that single children are no less likely to provide care than their married siblings (Logan and Spitze 1996).

This idea of a "demonstration effect" in economics is similar to social learning theories (Bandura 1977) that have been prominent in developmental psychology and the notion of "role modeling" in sociology. The supposition is that by "modeling" certain types of behavior, parents increase the likelihood that children will imitate these behaviors and eventually come to internalize the idea that they "should" behave in this manner. In sociology, there has been increased attention to children's agency in socialization processes. An interesting empirical question is under what circumstances "demonstration effects" are an effective strategy for establishing an obligation and under what conditions they are resisted or rejected.

Variants on the basic altruism model also exist. An altruistically minded parent, rather than caring about the child's overall happiness, might care about what the child actually consumes. Here, a parent might provide resources to finance a college education, but not to buy a new car, or be willing to give the child the down payment on a home, but not fund a trip around the world. This model is referred to as a paternalistic model (Pollak 1984).

A second variant on the altruism model has been termed the "warm glow model." Here the parent enjoys giving, not because of the improved well-being of her child, but simply because the act of giving makes her happy (Andreoni 1989). This "warm glow" from giving a transfer could be internal, or could be due to the praise or adulation the parent receives from others. The idea that a "warm glow" could come from social "applause" begins to connect economic theories to more sociological theories of norms and identities. That is, if an individual is motivated by the opinions of others, the social network in which the individual is embedded becomes relevant along with shared notions of appropriate behavior within that social network. It then be-

comes a relatively short step to considering the role of culturally approved and sanctioned norms of behavior, which individuals internalize, and the role these norms might play in setting the context for understanding intergenerational obligations.

1.5 Role of Norms, Obligations and Social Identities

When discussing motivations such as altruism and its related warm glow model, the theories are silent as to the origin of the altruism. Why do family members care for one another or feel an obligation to assist one another? To address these issues, sociologists have moved outside these formal theories to investigate the roles of norms and social identities.

Norms are a core concept in theories about the family in general and intergenerational relationships in particular (Mason 1983; Smith 1989; Mason 1991; Rossi and Rossi 1990). Although difficult to define, norms are perhaps best thought of as social understandings about how individuals ought to behave, in this case, how family members ought to behave toward each other. Norms obligate certain actions, set binding constraints on individuals, and proscribe widely recognized and accepted rules for behavior (Rossi and Rossi 1990: 158).

Such norms help explain why family relationships are special (Finch 1989) and the ways in which family relationships differ from relationships with non-kin. For instance, as evidenced later in this volume, norms may explain why individuals are willing to give more money to family members than to strangers in need (Nock et al., this volume). Norms also may explain why parents treat all of their children equally with respect to bequests but not with respect to *inter vivos* transfers or support and emotional closeness (McGarry 1999; Pillemer and Suitor, this volume; Wilhelm 1996). Norms also may account for why individuals in the United States report feeling greater obligations to parents and children than they do to aunts and uncles or cousins (Rossi and Rossi, 1990; Nock et al., this volume). The specific attributes of these obligations

may vary across cultural contexts—e.g., in a matrilineal kinship system the mother's brother has father-like responsibilities to his sister's children—or historical periods—e.g., when children "owe" more to parents than parents owe to children as in Caldwell's theory of wealth flows (Caldwell 2005).

Despite the centrality of norms for intergenerational relationships, they are often inadequately conceptualized and measured. Measurement is difficult because norms arise from social interactions (Pollak and Watkins 1993; Mason 1991) and, thus, the social group to which the individual belongs is obviously paramount. However, individuals typically belong to several social groups—e.g., family of origin, family of procreation, workplace, clubs, etc.—and may face conflicting rules about how to behave. Furthermore, as individuals age, they may move through several different social groups, resulting in exposure to changing sets of norms over time. Thus, it is not only individuals' current reference groups that matter, but also the varied experiences they have throughout life that affect their understanding of intergenerational obligations.

To study the potential importance of social norms, it can be useful to examine situations where there is a disruption from what is viewed as normal—situations where the "routinized" or normal experience has been dislodged. Rossi and Rossi (1990) give the example of co-residence with one's 10 year-old child. It is universally normative in the United States to expect such co-residence, and, indeed there could be legal sanctions against a parent who did not provide adequate shelter for a 10 year-old child. However, among some immigrant groups, it might be considered perfectly acceptable—indeed normative—for parents to leave a 10 year-old child in the home country in the care of another relative. Even in the United States, the norms of co-residence with children become much less clear once children reach age 18. Many parents offer co-residence to young adult children but the norms are less universal and the obligation certainly

not legally binding.

Stepfamilies formed after divorce and nonmarital cohabitation are examples of kin or quasi-kin relationships in which the commonly accepted rules about responsibilities to relatives are still evolving. The lack of consensus about how to behave in these family relationships is one indication that these are incomplete institutions (Cherlin 1978; Nock 1995). Examining how individuals adapt to these situations and how these quasi-kin relationships develop may help us understand how norms are formed and affect the behavior of individuals. While making studies of intergenerational ties more difficult, these expanded definitions of family also provide an opportunity to address some fundamental concepts.

Another example in which norms come into play is the co-residence of adult children and elderly parents. Since World War II, there has been a large increase in the United States in independent living among the elderly (Kobrin 1976; Michael et al. 1980; Costa 1999; McGarry and Schoeni 2000). Yet, when an elderly widowed mother has a serious health crisis and can no longer live alone, it is often her adult children who must choose a course of care. They must decide, with or without the mother's involvement, whether she will live with one of her children and which one, or move to an institution. Models based on either altruism or exchange consider the economic opportunity costs of the possible caregivers and the potential for a child to be reimbursed for the care. Omitted from these analyses are the norms under which decisions are made, factors such as what is expected of children in a particular society or whether more distant kin will play an important role. Our predictions about the frequency and variation in the likelihood of co-residence would thus be improved by knowing whether the social setting is one in which being a "good adult child" requires taking one's parent into the household and whether the setting has strong, gender-differentiated norms about daughters' and sons' responsibilities.

Variation in patterns of co-residence by racial groups, for example, is not sufficiently explained by differences in the economic resources of adult children and parents (Coward et al. 1996; Hernandez 1989; Hofferth 1984; Laditka and Laditka 2001) but likely depends on variation in norms and internalized meanings of filial obligation across groups as well as differences in economic resources.

Finally, these norms, and their attendant meanings and identities for individuals, imply an element of social control. Individuals who violate these norms are likely to face some cost or penalty for doing so. In the example of co-residence with a parent, a child may allow her elderly mother to live with her not only because she feels obligated to do so as part of being a good daughter but also because the cost of violating this expectation outweighs other potential costs, such as the loss of privacy or tension in the child's marriage that may arise from co-residence.

1.6 The Evolutionary Biology Perspective on Intergenerational Exchange

Although norms likely play a key role in driving intergenerational relationships, an alternative explanation that has its roots in biology has recently begun to receive attention. As Cox (this volume) argues, much human behavior may be motivated by a desire to ensure the survival of one's genes. With respect to intergenerational transfers, this evolutionary perspective hypothesizes that the older generation invests in the younger generation to further their own genetic line rather than out of concern for the happiness or well-being of their offspring. In particular, parents will care for their children to ensure that they are healthy and survive to reproductive age and, in more modern times, invest in their schooling so that they will be successful and have children of their own. This investment by parents in the survival of their genes need not stop with the next generation, but ought to carry on to later generations as well. For example, Cox and Stark (2005) posit that parents can use cash transfers to "purchase" grandchildren. If adult chil-

dren are delaying childbearing until they can afford a home, for example, a parent might hasten the process by providing funds for the home's purchase.

Interestingly, and perhaps most controversially, the evolutionary perspective also predicts differences in the ties between mothers and fathers and their children. Because ties are based on the desire of an individual to pass along her genetic material, the strength of the tie depends on the strength or certainty of a genetic link. A mother is always certain that the child to whom she gave birth is her own child, and thus half of the child's genes are hers. A father, however, may be less certain of his paternity. In this model then, a mother has greater incentive to invest in her child and the ties between mother and child will be stronger than those between a father and his purported child. Similarly, ties to a grandchild born of a daughter will be stronger than ties to the child of a son. In principle, these predictions are testable and provide a way of validating the evolutionary model.

A major weakness of the evolutionary model is its failure to predict transfers that flow upstream to elderly individuals. Once an individual's capacity for reproduction has been exhausted, the species no longer needs the individual to survive. One could argue that the presence of a member of the older generation assists in the survival of the younger generation and there is thus incentive to prolong the life of the grandparent (Lee 1997). However, younger family members regularly assist elderly individuals who are far too infirm or cognitively impaired to provide any assistance whatsoever to the young.

1.7 Concluding Observations on Alternative Models of Intergenerational Ties

The various perspectives described above provide some interesting predictions concerning interactions of all types between generations, as well as a framework with which to examine familial behavior. Common sense and a moment of introspection, however, will tell us that no

one model will be applicable for all individuals or all situations. As individuals move through life, for example, different needs may dominate, affecting the salience of various behaviors. Privacy, shown to be greatly valued by elderly individuals in the United States, may be less important for younger individuals just starting out, who seek companionship and have not yet grown accustomed to having their own home. In economic terms, this change in preferences affects the price or value an individual is willing to place on independent living. Individuals who do not have children of their own are unlikely to be inspired to certain behaviors by the desire to demonstrate for their progeny by example, whereas those with children may find that the possibility of a demonstration or role modeling effect provides strong motivation. Similarly, past experience, happenstance, culture, and social norms likely also play a role in determining the relative importance of alternative motives and behaviors.

The majority of empirical studies—some of which are discussed below—have failed to find convincing evidence in support of a single model of behavior. We argue here that focusing on one model paints too narrow a picture and we encourage the reader to keep in mind the possibility that the different models outlined in this section (and in the other chapters in the volume) may be relatively more or less important in different types of families, in different contexts or cultures, and at different points in the life course. Yet despite the multiplicity of motives, identifying when a particular model is operating and why it is are important for understanding intergenerational behavior in general, and more specifically, the impact and appropriateness of various public policy measures.

2. What We Know about Intergenerational Ties

The bulk of demographic research on intergenerational relationships has concentrated on

three types of ties: co-residence, transfers of time or caregiving, and financial support.[5] Here we outline the patterns observed for co-residence, the provision of time assistance (primarily home health care) and financial assistance. These behaviors are related, although the nature of the relationship is not always clear. Assistance provided through one form of support may be either a substitute or complement for some other type. For example, financial assistance from a child to a parent may pay for a caregiver, indicating that cash and time help are substitutes. Conversely, an elderly parent who is very infirm might receive both co-residence and caregiving help from her child, in which case the transfers are complements. Similarly, families that are close emotionally may exhibit several of these behaviors and support may flow in multiple directions. Unfortunately, only a few studies examine transfers in more than a single currency (Freedman, Wolf, Soldo, and Stephen 1991; Boaz, Hu, and Ye 1999; Schoeni 1997; Hogan and Eggebeen 1995) and, thus, we know relatively little about the interaction of the various types of transfers. In contemplating the areas in which future research efforts might be most productively employed, we encourage scholars to consider the joint determination of multiple forms of transfers as well as transfers flowing in each direction.

2.1 Co-Residence

Co-residence can facilitate intergenerational support in numerous dimensions. The arrangement may be an alternative to financial support, as in the case of a parent providing room and board for an adult child struggling to make ends meet. It may improve the efficiency of the provision of care, as, for example, in the case of an adult child caring for an elderly parent or of a grandparent caring for a grandchild. Co-residence also likely increases the emotional support the parties can provide for each other and may thus strengthen family ties, or conversely, lead to ad-

[5] Other research examines various forms of emotional support. We readily acknowledge the importance of attachment and emotional ties, but focus here on the more readily quantified types of support in demographic studies.

ditional stresses in a relationship resulting from loss of privacy or autonomy.

Much of the existing literature has been limited primarily to documenting the extent of co-residence and describing which characteristics of the family are correlated with a propensity to co-reside. Many of these studies of co-residence have focused on the living arrangements of the elderly. We provide a brief summary of what we do know from this literature.

- There was a dramatic decline in elderly individuals and couples who co-resided with their children over the 20th century in the United States (Costa 1997; McGarry and Schoeni 2000; Ruggles 2005). Economists have explained this by focusing on the role of increases in income, citing the sharp rise in Social Security benefits and general economic conditions throughout the 20th century that have made independent living more feasible—and concluding that independence is preferred to co-residence.
- Co-residence of elderly parents with children—and support for co-residence—is higher among minority groups (blacks and Hispanics) (Burr and Mutchler 1999; Coward et al. 1996, Freedman, Wolf, Soldo, and Stephen 1991; Hernandez 1989; and Hofferth 1984) and immigrants (Cohen and Casper 2002) than among native-born whites.
- Having a spouse reduces the likelihood that elderly parents reside with one or more of their children (Boaz, Hu and Ye 1999), suggesting that co-residence of an elderly parent with adult children does not occur until one parent dies.
- Health problems of the elderly parent can precipitate co-residence with children, just as deteriorating health of the parent also triggers the transition out of co-residence and into an institutional arrangement (Choi 2003).
- It can sometimes be difficult to sort out who is helping whom and co-residence may indeed benefit both parties. For example, until quite old ages, multigenerational families often reside

in the home of the parent rather than the adult child. Similarly, parents share their home more often with adult children who are single parents than with those who are married (Cohen and Casper 2002), with unmarried sons more than daughters, and with unemployed more than employed children. These patterns all suggest that support flows from parents to children (Choi 2003).

- In the past decade, there has been increased interest in arrangements in which grandparents and grandchildren co-reside, either with or without the middle generation. Much of this research stems from recent welfare reform legislation with new requirements that teenage mothers live with a parent or guardian. There also has been an increase in grandparents raising grandchildren, most often in situations where there are problems experienced by the parent generation (Casper and Bryson 1998; Pebley and Rudkin 1999). One study in this area, hints at the potential importance of the "demonstration effect" discussed earlier; Goldscheider and Lawton (1998) find that the experience of having lived with grandparents is later correlated with an individual's commitment and support for providing residential support for aging parents.
- Co-residence is more common among low income families, suggesting that finances play a crucial role. It is, however, difficult to disentangle the effect of income from other factors that may be correlated with the decision to co-reside. Although such endogeneity is probable with respect to many explanatory variables, it is perhaps most problematic with respect to income because income and living arrangements are so likely to be jointly determined. A number of studies of the living arrangements of the elderly have attempted to surmount this "endogeneity problem" by analyzing how living arrangements change in response to exogenous changes in government benefits (Costa 1997, 1999; McGarry and Schoeni 2000). These stud-

ies conclude that privacy is a normal good; individuals with more resources choose to live alone. Other factors that may be potential determinants of independent living among the elderly, such as changes in fertility and social norms, appear to play a much smaller role.[6]

Living with family members can reduce costs in two important ways. The first is through the returns to scale embedded in a shared living arrangement—the old saying that "two can live as cheaply as one," while not quite true, is close to the mark. The second is through the more direct route of income pooling or sharing. The extent to which income is pooled or shared among household members has been of particular interest to economists. Although little attention has been paid to income pooling in intergenerational households, a good deal of work has examined pooling within nuclear families. Even in these cases, where the decision makers are husbands and wives, researchers have shown significant differences in household expenditure patterns that depend on which spouse controls the resources. These patterns suggest that income is not completely shared and different individuals prefer to spend money on different goods.[7] Based on these conclusions, one might imagine that income pooling within extended families is even less likely.[8] Unfortunately, little data exist which allow one to measure consumption and income pooling within the household although it remains an important avenue for future work.

2.2 Time Assistance

The provision of time assistance is obviously very much tied to the decision to live together, as a shared residence vastly improves the efficiency of providing care. Yet despite the ef-

[6] This contrasts with conclusions in earlier work that changes in attitudes were the primary factors driving the move to independent living (Ruggles 1994; Kobrin 1976).

[7] Thomas (1990) shows that greater unearned income in the hands of the mother results in more nutrient intake by children and greater survival probability for children than income in the hands of the father. Similarly, Lundberg et al. (1997) show that when welfare benefits are given to the mother rather than the father, more money is spent on children (but see Hotchkiss 2005).

[8] This lack of income pooling does not mean that individuals are not altruistic or that they do not share to some extent. The altruism model allows the donor to value her own utility more than that of the recipient.

ficiency gain, studies have shown substantial time transfers are made even among non-co-resident family members. In fact, families provide a much larger portion of in-home care of the elderly than is provided by paid caregivers or caregiving organizations.[9] In this section, we examine home health care provided to elderly parents, as well as some limited data on help with chores. We also investigate briefly the provision of childcare by family members other than the child's own parents. Certainly assistance is provided over a wide spectrum of other tasks as well, but few large-scale studies examine help outside of these dimensions. Studies also vary in how time assistance is measured, the types of help considered, and the time period in which help is observed, for instance in the past month or past year. Yet existing literature provides this broad-brush picture of the provision of time assistance among family members:

- For elderly individuals needing assistance with activities of daily living (ADLs and IADLs), the most likely caregiver is the spouse:[10] among the frail elderly over age 70, spouses comprised 27 percent of all primary caregivers and 67 percent of primary caregivers for married individuals (McGarry 1998). Wives are more likely to be caregivers than are husbands, largely because women tend to both marry older men and outlive their husbands.
- Children were the next most common assistant: 20.5 percent of caregivers for the elderly were non-co-resident children and another 11.3 percent were co-resident children. The unbalanced sex-ratio holds among children as well; 70 percent of non-co-resident children who are providing care are female (McGarry 1998). Spitze and Logan (1990) find the key to receiving help is to have at least one daughter.

[9] In a sample of individuals age 70 and over, just over 13 percent of primary caregivers were paid for their time (McGarry 1998).

[10] Studies examining caregiving typically begin by defining a sample of needy elders—those having difficulty with what are termed activities of daily living or ADLs which include: dressing, bathing, feeding, toileting, getting in and out of bed, walking across a room. IADLs (instrumental activities of daily living) include such tasks as cooking, managing money and using a telephone.

- Adult children with more education and higher wages are less likely to provide assistance to elderly parents with ADLs and IADLs than are children with less education or lower wage rates (Coward and Dwyer 1990; Henretta, Hill, Li, Soldo and Wolf 1997; Laditka and Laditka 2001). Gender and socioeconomic differences in adult children's caregiving propensities may be intertwined. If the opportunity cost of a daughter's time is less than that of a son's, economic theory predicts that the daughter will provide the care. Because women's wage rates have historically been lower than men's, they would have traditionally had the lower cost of time. Similarly, if women have left the labor market to raise children, they would be less likely to be in the labor force and face a lower opportunity cost of their time. For these latter explanations, the recent rise in women's labor force participation and the increase in the ratio of female to male wages would be expected to result in a decline in the fraction of caregivers who are female.
- As with co-residence, transfers of time may go in both directions: conditioning on the existence of a living child, 23 percent of elderly parents give help to children and 38 percent receive help with household chores from children (Freedman, Wolf, Soldo and Stephen 1991). Here, too, there may be gender differences, with divorced or never married daughters with children especially likely to have contact with and receive help from parents (Spitze et al. 1994). Grandparents, usually grandmothers, often provide child care for grandchildren. For example, grandparents are the primary child care providers for preschoolers with working mothers for 14 percent of married mothers and one quarter of unmarried mothers (Casper and Bianchi 2002).

2.3 Financial Assistance

Much of the research examining financial assistance has focused on transfers from par-

ents to children and vice versa.[11] As any parent may attest, even after children are grown and living on their own, a substantial amount of money flows downstream. Estimates about how commonly transfers occur and the amount of money transferred depend, in part, on how survey questions are posed, for instance whether the question asks about all transfers or only transfers above a certain amount). The following highlights major findings on the provision of financial assistance within families:

- Gale and Scholz (1994) estimate annual flows of *inter vivos* cash transfers between family members of $63 billion (in 1986 dollars). $41.2 billion of this amount was transferred directly with 80 percent flowing to children and 12 percent to grandchildren.[12] An additional $105 billion was transferred through bequests.[13]
- McGarry and Schoeni (1995) found that nearly 30 percent of parents in their fifties made a cash transfer of $500 or more to at least one of their children, while 9 percent made a transfer to one or more of their parents. Conditional on giving, average amounts of these transfers were large: $3,500 for each child who received a transfer and $2,100 for each parent. Even among parents 70 years old or older, transfers to children were common with 25 percent of these elderly parents making a transfer of $500 or more to at least one of their children.
- Among elderly parents aged 65 and over, 18.7 percent report giving money to a child, while only 11.9 percent of elderly parents receive money from a child; conditioning on the existence of a living child, 24.3 percent of elderly parents give financial support to offspring

[11] Very few studies examine the magnitude and explanations for transfers between siblings. For valuable exceptions see White and Riedmann (1992) and Eriksen and Gerstel (2002). We know of no work that examines transfers between more distant relatives such as aunts and uncles and their nieces or nephews. Some surveys have attempted to measure transfers from "anyone outside the household," but these typically find that such transfers are rare.

[12] The remainder was transferred through financial instruments, such as life insurance policies and trusts.

[13] Of course, *inter vivos* transfers can be made in many years while bequests are made just once so the total transferred between the two methods may look very different from the annual figures.

while only 15.4 percent receive it (Freedman, Wolf, Soldo, and Stephen 1991).

- Among children aged 19 and over, 15 percent receive regular financial assistance from an older parent, while 8.8 percent give older parents financial assistance (Freedman, Wolf, Soldo, and Stephen 1991).
- Financial factors are important. The economic status of children affects the type and amount of assistance provided. For example, an increase in children's wage rate, that is, an increase in the opportunity cost of time, increases financial transfers and decreases time transfers (Zissimopoulos 2001; Couch, Daly, and Wolf 1999).
- Transfers are negatively related to the incomes of the recipients, although their responsiveness to income is smaller than would be predicted by the altruism model (Altonji, Hayashi and Kotlikoff 1997; McGarry and Schoeni 1995, 1997).
- In contrast to the compensatory nature of *inter vivos* transfers, bequests are nearly always divided equally among children (Wilhelm 1996; McGarry 1999), a result that contradicts *both* the altruism and exchange models.

2.4 Summary of Empirical Patterns of Intergenerational Transfers

The empirical trends and evidence presented above look at assistance at a point in time or at broad trends based on examination of repeated cross sections. Studies suggest that there are numerous ties between generations with assistance provided in many ways. However, almost nothing is known about the persistence of assistance to or from particular family members (for an exception, see Szinovacz and Davey, 2006). In the case of home health care, it is important to know for how long, on average, a parent receives care, and what fraction of care is contributed by each child. Does care progress from informal familial support to paid home care to institutionalization? Or is it more common for a family to rely on a particular form of care? In transfers

made in the other direction, we do not know how the provision of child care affects the labor supply of older women or their daughters, whether this care represents a hardship, or whether they themselves receive utility from spending time with a grandchild. In terms of cash assistance, we do not know whether transfers are made repeatedly to the same children.

Even when examining behavior at a point in time, our understanding falls far short of the ideal. Some empirical patterns, however, are clear. We know that transfers between family members appear to be compensatory—more cash and co-residence is provided to those members who have lower income. We know that more cash assistance flows from parents to children than vice versa, and we know that caregiving is predominantly provided by women. In no case, however, is the motivation for transfers clear. Understanding the motivation will help us understand what we can expect from families when the political, demographic and economic environments change.

2.5 Distinguishing between Altruism and Exchange: Empirical Strategies and Challenges

A number of empirical studies have attempted to distinguish between the two most prevalent theoretical motives for intergenerational transfers, altruism (or caring) and exchange (or reciprocity). In this section, we briefly discuss the strategies that have been used, some of their limitations, and two recent studies that use direct measures of parents' motives for such transfers to aid in distinguishing between these alternative theories.

Recall from Section 1.3 that the altruism model makes strong predictions about the sharing of resources within families and the responsiveness of transfers to changes in the incomes of the donors and recipients. These predictions provide straightforward means of testing the validity of the model. Such tests, when implemented, appear to discredit the altruism model. For example, Altonji, Hayashi and Kotlikoff (1992) use consumption data on family members in the Panel

Study of Income Dynamics (PSID) to test the implication of the altruism model that family members—including parents and their adult, non-coresident children—pool their incomes and thus that, "the distribution of consumption is independent of the distribution of resources" (p. 1177). We referred to this in Section 1.3 as prediction (i). The results strongly reject this restriction. In a similar vein, Altonji, Hayashi and Kotlikoff (1997) employ a test of the magnitudes of the derivatives of transfer amounts with respect to the incomes of the parent and child. As we noted earlier, another prediction of the altruism model is that an increase in the income of the parent (donor) of one dollar accompanied by an identical decrease in the income of the child (recipient) will be met by a one dollar increase in transfers (prediction (iii)). Altonji et al. find that although the effects of an increase in the parent's income are in the predicted direction, the magnitudes are far too small to be consistent with altruistic behavior. In short, the strict implications of the economic version of the altruism model do not appear to be supported by the data.

While the results from these direct tests cast doubt on the validity of altruism as the primary motive for transfers between family members, implicitly suggesting a greater role for the exchange motive, a closer look at these studies illustrates some of the inherent difficulties in devising credible tests of such models. We briefly note some of these difficulties.

First, the data requirements for conducting such tests and distinguishing between models are daunting. One must have data on transfers between parents and children (or donors and recipients), as well as their incomes, and/or measures of consumption for both parties. Only a small number of existing data sources meet these requirements and many only interview one generation, relying on that generation's "proxy" reporting for information on the income and characteristics of the other generation.

Second, as Cox (1987) notes, it is necessary (at the very least) to have data on both the

existence of a transfer and the amount, as the altruism and exchange models generate the same predictions with respect to the effect of changes in recipient (child) income on the *probability* of a parental transfer but potentially differing effects for the magnitudes. Few existing data sets provide information on actual amounts of parental transfers, as well as their incidence, and the measurement of such amounts is prone to error.

Third, almost all of the existing strategies for distinguishing between altruistic and exchange motivations for intergenerational transfers are restricted to financial transfers. But, as the discussion in the preceding sections has made clear, transfers can be made in various choices of currencies and the items exchanged can be transferred at very different times. A parental investment in a child's schooling, for example, could be repaid in home health care decades later. The data requirements for such examinations are extraordinary, requiring time series data on family transfers and measurement of transfers of time, cash, co-residence, and goods in-kind. To our knowledge no one data source can meet all of these requirements.

Finally, all of these tests either presume that the incomes of parents and children are exogenous with respect to transfer decisions or devise estimation strategies that account for the endogeneity of income. It is difficult to believe that children do not respond, in some way, to the prospect of receiving support from a parent, perhaps by being more selective in choosing a job, or foregoing extra effort at work. Benefits received from public transfer programs depend directly on the amount of other income received, including transfers. Finally, concerns inevitably exist with respect to the robustness of methods to control for endogeneity, suggesting that unbiased estimates of the income effects are difficult to obtain.

In short, while there are important theoretical distinctions between exchange and altruistic motives for intergenerational transfers, devising credible ways to distinguish between them

empirically remains an ongoing challenge. However, two recent studies represent promising new directions for assessing alternative models of intergenerational transfers.

One promising avenue is to make use of direct reports from parents about their motives for transferring resources to their children. For example, Light and McGarry (2004) utilize responses of respondents in the National Longitudinal Surveys (NLS) of Mature Women and Young Women to questions about the motives behind their planned bequests to their children, along with detailed information on their children and how they plan to divide their estates among their children. In essence, Light and McGarry use the responses of parents to these motive questions to supplement more "conventional" data on (planned) bequests and children's attributes to assess the relative importance of altruism and exchange. At the same time, the use of self-reported information on transfer motives must be interpreted with caution. Responses to such questions may well represent *ex post* rationalizations of behavior rather than true, underlying, motivations for it. Nonetheless, the use of direct measures of parents' motivations for their transfers represents a promising approach to devising more informative strategies for distinguishing between alternative theories of such transfers.

A related, but distinct, strategy involves the use of direct measures of the preferences of family members concerning the degree of altruism toward their kin and/or the degree of "trust" between family members in conjunction with measures of within-family transfers. Social psychologists have a long history of developing such measures and, more recently, economists have extended this work by formulating "incentivized games" in which subjects—usually college students in laboratories—are given "endowments" of money which they allocate between themselves and another subject. How they allocate their endowments provides a measure of the subject's altruistic preferences. In a recent paper, Hamoudi and Thomas (2006) present results from

a field experiment using families from the Mexican Family Life Survey (MxFLS) in which the subjects play these and other games. In this study, members of MxFLS households played "trust" games with members of their own families, other members of their village, and strangers from distant villages. Using family members' allocation of their endowments in these various games as measures of altruism, Hamoudi and Thomas (2006) analyzed the relationship between altruism and various forms of intergenerational transfers, such as whether adult children co-resided with their parents, the probability of adult children receiving financial transfers, and various indicators of the health status of children in the family. While this study does not propose explicit strategies for distinguishing between altruism and exchange motives, it provides an excellent illustration of how preferences, such as altruism, might be measured in the field and combined with survey data on actual transfers to improve our understanding of what motivates intergenerational transfers.

3. Changing Contexts and Intergenerational Support

Intergenerational transfers obviously do not occur in a vacuum but depend on the prevailing demographic, political, economic, and social conditions. Social norms influence how generations relate to one another, laws govern the exchange of financial resources through taxes and obligatory support, and economic institutions, such as public transfer programs, interact with familial support. In our attempt to understand intergenerational familial ties, it is imperative that patterns and trends be viewed with an eye towards the environment in which the agents act.

3.1 The Changing Demographic Context

The patterns we described in the preceding section are influenced by the demographic environment in which the agents function, an environment that is changing rapidly. America and the entire developed world is facing a much talked about aging of the population due to increases

in life expectancy and declines in fertility. Projections are that in the United States the fraction of the population age 65 and over will increase from 12 percent in 2003 to 20 percent in 2030 (He et al. 2005). Total fertility rates now hover around 2.0, a figure just below replacement rate of 2.1 (National Center for Health Statistics 2002), which suggests that future generations of elderly are likely to have fewer children on whom they can rely for care.

Along with having fewer children, women are more likely to be working outside the home and earning their own incomes (Casper and Bianchi 2002). As we noted previously, various studies have shown that income in the hands of the mother rather than the father results in different spending patterns, with mothers appearing to direct more resources to children. At the same time, more children have working mothers and spend at least part of their pre-school lives in some form of non-parental child care. This care may be provided by other family members, such as grandparents, potentially strengthening family ties. Working women also are less likely to be able to provide care for an elderly parent. Because women have been the primary caregivers, this trend could imply a shift to a more equal division of caregiving between sons and daughters or to the use of more paid care.

Less widely discussed are other changes affecting the composition of the family. Children are increasingly likely to be born outside of marriage, with the fraction of children born to unmarried mothers increasing from 3.8 percent in 1940 to 35.7 percent in 2004 (Ventura and Bachrach 2000; Hamilton et al. 2005). Children born to single mothers may have weaker ties to their fathers and paternal grandparents, a situation that could potentially be offset by stronger ties to maternal kin, particularly their maternal grandmothers (Nelson 2006; Bianchi 2006). The effect of out-of-wedlock births is further complicated by the rise in cohabitation. In recent years, approximately 40 percent of non-marital births were to cohabitating couples (Bumpass and Lu

2000), suggesting that the father may be very much in the picture early in children's lives even if the parents are not legally married.

Divorce probabilities also remain at approximately 50 percent, but are even higher for some groups, such as blacks and less educated individuals (Raley and Bumpass 2003). Divorce is likely to put greater distance between fathers and their children and will likely curtail contact with children even when those children are adults themselves (Cooney and Uhlenberg 1990).

Finally, cohabitation, as a precursor or alternative to legal marriage, has become increasingly common—not only among young adults but also among older persons (Waite 1995; Bumpass and Sweet 1989, 1995). This phenomenon increases the likelihood that children will have "quasi" step-grandfathers and grandmothers as well as the probability that adult children will interact and perhaps incur obligation to (or support from) the partners of their elderly parents late in life (Hagestad, 2000).

A direct consequence of these trends in the incidence of alternative unions and in fertility is an enormous growth in step- or blended families, with a substantial increase in the percentage of children who have experienced a step-family. The rise in step-families increases the number of individuals with whom the typical individual has some familial connection, but, at the same time, suggests that these ties are likely to be weaker and less clearly defined (Ganong and Coleman 1999). How these changes affect familial support is still very much an open question.

All these factors—increased life expectancy, lower fertility, less specialization of women in the home, and more family disruption—combine to greatly alter the context for intra- and intergenerational caregiving and exchange.

3.2 Familial Support and Public Policy

Along with the changing demographics, there have been important changes over time in

social welfare programs and legal institutions that are likely to affect intra- and intergenerational ties and interactions. For example, the United States just marked the tenth anniversary of welfare reform, a set of policies that brought sweeping changes to the provision of public support for low-income families. The future will necessarily bring substantial changes to the Social Security, Medicare, and Medicaid programs as the country struggles with its aging population and rising health care costs. How these changes are implemented and how families respond will in large part determine the success of these policies.

3.2.1 The Policy Environment

Public policy can affect family ties directly by mandating support between family members. The legal requirement for parents to support a child to adulthood and court-ordered child support payments are examples of such policies. Perhaps surprisingly, the laws governing these family obligations have changed over time and the changes have not been unidirectional. The former Old Age Assistance programs (OAA) operated by the individual states, often contained "relative responsibility" clauses that required adult children to provide support for their elderly parents. When necessary, this requirement could be enforced by court action. These relative responsibility rules were eventually omitted entirely from the federal Supplemental Security Income program (SSI) that replaced OAA. More recently, welfare reform legislation has redirected policy towards encouraging greater reliance on family, with requirements that single under-aged mothers live with a parent or guardian if they are to receive public support. States also have increased their efforts to ensure that non-custodial parents make required child support payments and have changed strict rules that cut public support dollar for dollar with child support payments.

The effects of many of these changes in public policy on the incidence and intensity of

family transfers would seem obvious at first blush. For example, by increasing the resources of a recipient, public transfers would seem to displace or "crowd out" familial assistance. Yet, on closer inspection, the effects are less clear. As we have noted, there are important differences between the altruistic and exchange models with respect to the predicted effects of changes in the incomes of either the donor or the recipient on the incidence and amount of family transfers. In the next section, we discuss the results of some of the research that has attempted to tease out the effect of public policies on familial support.

3.2.2 Empirical Evidence

There is a growing body of research examining the relationship between changes in the generosity of public support programs and changes in familial transfers. Although the results are still far from conclusive, analyses of broad trends over time consistently point to a negative relationship between public support programs and family transfers, i.e., evidence of crowding out. However, at the same time, analyses of individual public programs has found little, if any, evidence of such crowding.

Consider the effect of the expansion and increases in the generosity of the Social Security program. There is compelling evidence that the growth of the Social Security program during much of the 20th century, lead to an enormous decline in the propensity of the elderly to live with adult children (Michael, Fuchs, and Scott 1980; Schwartz, Danziger and Smolensky 1984; McGarry and Schoeni 2000). Other work suggests that recent cutbacks in public support may have similarly affected living arrangements with low-income mothers becoming increasingly likely to reside with a cohabitating partner or family member throughout the 1990s as welfare benefits were being reduced (Haider and McGarry, forthcoming).

In contrast to these significant effects on living arrangements, studies examining crowd-

ing out of cash transfers have failed to find evidence of such a trade-off. Rosenzweig and Wolpin (1994) find that increases in income from public assistance programs affect cash transfers from parents to children to the same extent as do increases in the transfer recipient's income more generally, but that the responsiveness of parental transfers to changes in either source of income is small. Altonji, Hayashi and Kotlikoff (1997) investigate the responsiveness of parental transfers to a child's income regardless of source and also find that changes in transfers are on the order of pennies on the dollar, again suggesting that the amount of crowding out is likely to be small. Recent work examining the potential crowding out of familial assistance by the unemployment insurance program, however, finds much greater responsiveness, with a dollar of unemployment insurance reducing family support by approximately 40 cents (Schoeni, 2002). This result is far from a complete crowding out by public assistance but is obviously an important effect when considering the well-being of the recipient.

The responsiveness of private caregiving to the public provision of care seems to fall somewhere in between that estimated for living arrangements and that for cash transfers. Pezzin, Kemper and Reschovsky (1996) find little, if any, effect of free (or very low cost) home health care for the infirm elderly on the number of hours of assistance provided by informal caregivers. However, the study did find relatively large effects on the chance that the elderly individual lived independently instead of in a shared household or a nursing home.

Taken together, these results suggest that public programs do not completely replace cash transfers among family members but that they may affect other dimensions of assistance, particularly shared living arrangements. They also demonstrate that changes in public programs likely affect a much broader set of individuals than those targeted by the specific legislation. The growth of Social Security has freed many adult children from the need to provide for elderly par-

ents and in this sense serves as a transfer program to both the young and old. Medicaid, which covers the cost of much nursing home care, similarly relieves the children of poor elderly persons from the obligation of paying for a parent's care or providing it themselves. In this case, if the elderly individual is still receiving care, the transfer is largely one to the younger generation. Medicare works similarly. By providing a large transfer to the elderly who are receiving benefits valued at much more than was paid into the program, it frees up resources for the elderly to use in other forms of consumption. Some of these resources may eventually be bequeathed or given as *inter vivos* gifts to their children.

Finally, we note that even if public programs do crowd out family support through a particular currency, it may well be that families respond by changing the type of assistance provided. For example, a child whose parent becomes eligible for Medicaid coverage of home health care may reduce the time she spends caring for the parent but increase financial transfers or gifts to that parent, perhaps in response to an increase in the time the child herself can spend in the labor market. These interactions are obviously extremely complicated and assessing their relative importance places tremendous demands on the data. However, if we are to create a complete picture of familial assistance, it is necessary that we consider the interaction between public and private support in not just one, but in many dimensions.

4. Conclusions

As we have noted, the changing demography of U.S. families raises new questions about relationships within and between generations. In many cases these changes are likely to be a double-edge sword. For example, while increases in life expectancy mean more multi-generation families and thus an extended kin network, the concurrent declines in fertility mean a smaller number of children on whom elderly individuals can rely for support, as well as a decline in the

number of siblings with whom a child can share parental caregiving responsibilities (Bengtson 2000). Divorce and nonmarital childbearing distance children from their biological fathers (Cooney 1994; Pezzin and Schone 1999), but lead to new types of kin relationships formed by cohabitation and remarriage and thus to increases in the number of family members who could potentially provide support (Wachter 1998). Changes in women's labor force participation and expectations about greater equity in women's and men's family responsibilities also alter the costs of providing care and possibly ideas about who is a preferred caregiver.

These changes pose challenges to families and will likely lead to shifts in the patterns of behavior we have become accustomed to seeing. Observing how families adapt to these new environments will potentially provide those of us in the research community with a powerful tool to deduce the motives behind family ties. For example, stepchildren do not have biological ties to a stepparent. Whether stepparents invest in these children, provide for them financially or receive care from them, will help us identify the importance of the evolutionary model. Changes in the opportunity cost of a daughter's time will similarly help us assess the role of exchange in family transfers.

Not only are families changing, but the data we have to analyze these relationships is growing as well. In the past several decades we have seen substantial investment in new data sets—such as the Health and Retirement Study which focuses on older Americans, the 1997 National Longitudinal Survey (NLS97) and the continuation of other surveys such as the Panel Study of Income Dynamics (PSID) and other National Longitudinal Survey (NLS) cohorts—which are providing rich data on intergenerational family relationships. New surveys in other countries—such as the Family Life Surveys in several developing countries (Malaysia, Indonesia and Mexico) and the Gender and Generations project in Europe—are helping us understand how

families behave in different economic and social environments. These surveys are continually providing new and better quality data and helping researchers explore complicated family relationships. The recent surge across disciplines in articles examining familial transfers is evidence of the importance of newly available data.

Despite this progress, we believe there is still substantial scope for improving the measurement of transfers in survey data. Surveys—such as the PSID, which by their nature provide a long panel and links to many, if not all, members of the immediate family—could prove enormously useful were they to improve their measures of transfers and the nature of other interactions between family members. Similarly, the Health and Retirement Study (HRS)—which contains relatively complete information on time help, cash transfers and co-residence, and information on all children and caregivers—could easily be improved if the sample design were altered so that the younger cohorts included a substantial number of children of the older respondents. This overlapping cohort design would permit an examination of transfers from the perspectives of both donors and recipients with complete information on both parties to the exchange.

Theory and research on relationships involving repeated exchanges, such those between parents and children, would benefit from attention to how changes in socio-emotional health and cognitive processes, e.g., memory, affect transfers and caregiving decisions (National Research Council 2006). Unfortunately, prospective, longitudinal data with information on cognitive, social, and economic characteristics of individuals and their families are extremely rare. A prominent exception is the Wisconsin Longitudinal Survey (WLS) which has followed high school graduates for 50 years. Yet like the HRS, it lacks essential information about both sides of parent-child or grandparent-grandchild relationships. Only the children themselves can report about the quality of their relationships with their parents, their perception of what parents have given

them as a gift or a loan, and what they think they owe their parents as good children. Conclusions drawn from this study also are somewhat limited by the unique nature of the sample and its lack of representativeness of the larger U.S. population.

Obtaining reports about family relationships from more than one family member raises issues beyond the costs of survey time and money, particularly the difficulty involved with dealing with conflicting reports. There are a number of studies that suggest differences in information reported by parents and children. For instance, Goldscheider, Thornton, and Yang (2001) find that mothers expect to give less for college than children expect to receive. Goldscheider and Goldscheider (1993) showed that young adult children and parents both estimated that children would move out sooner than they did—but parents' estimates were closer to the actual timing of the move than children's. Parents and children also differ in their reports about the amounts of transfers (Freedman et al. 1991), although a general finding is that donors are more likely than recipients to report a transfer. Research using external validation criteria may improve question wording to elicit more accurate responses. Of particular concern for theories about caregiving to older parents is the finding from a small Midwestern study that adult children describe their parents as being in worse health than their parents report (Cicirelli 2000). Children's understanding of their parents' needs and resources is an important component of processual models of caregiving.

A more serious concern for studying intergenerational processes is that studies that attempt to interview multiple respondents in the same family have much greater success interviewing additional family members with whom the original respondent has a good relationship than when the original respondent reports a poor relationship with the other person. Response rates for additional family respondents also are higher when they live with the original respondent

than for those who live in separate households (Dykstra et al. 2004). Methodological work to learn more about the reasons for other family members' non-participation—the original respondent's refusal to provide contact information, inadequate contact information for the second family member, or that person's refusal to participate—will help investigators develop ways to reduce this type of bias.

Combining information about family members who live together as well as those who live apart is a difficult enterprise for conceptual as well as practical reasons. Family members who live together share time and material resources. Co-residence facilitates frequent interaction, which has the benefit of intimacy and more effective monitoring of adults or children who need care, but co-residence also entails a loss of privacy. Family members who live apart also may transfer money, make payments to third parties on behalf of their kin, e.g., paying medical bills, and devote time to providing care. But figuring out how to compare the extent of within-household to between household transfers has posed difficulties in studies of nonresident fathers' participation in childrearing and in studies of relationships between parents and adult children. The meanings of behaviors sometimes depend on the setting in which they occur. For instance, having a casual conversation about a grade on a school project or a medical test has less import and may communicate information more effectively among those who live together because the situation is less stressful than if the conversation occurs between people who do not see each other every day. Similarly, it is difficult to quantify the resources that are transferred within the household because some of what is shared are public goods, and because the costs and benefits of the loss of privacy are evaluated on a different, and hard to determine, metric than financial transfers.

Efforts to learn more about what family membership means to individuals and how this

meaning is negotiated, would benefit from a closer collaboration between ethnographic and survey researchers. Ethnographic studies of the process in which information is transmitted about what is and what is not desirable can help survey researchers do a better job of developing questions about kin obligations in families with complex biological and social ties. For instance, Linda Burton (2006) is studying kinship networks with complicated social ties, multi-partner fertility networks or social networks in which one or both members of a couple have biological children with other partners and care for other children. Children in these networks ask their adult caregivers how they are related to the other children to whom the person is providing care. The contexts in which children pose these questions and how the questions are answered provides a unique opportunity to study how children learn about who is in their family and what they can expect from them.

Understanding intergenerational relationships in U.S. families requires a recognition of new types of families, the dynamic policy environment, and a willingness to draw on insights about intergenerational relationships from research in other countries. Although our discussion has focused on economic and sociological perspectives, theory and research on intergenerational relationships in those fields would benefit from integration with insights on the processes of human development and attachment. These difficult challenges for researchers parallel the complex challenges of contemporary families who care for their members, exchange resources to enhance member well-being, and struggle to adapt to changes in their social, political and familial environments.

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