Stability and Change in Financial Transfers from Adult Children to Older Parents*

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RÉSUMÉ

Nous avons cherché à identifier l'ampleur et les facteurs prédictifs de l'évolution longitudinale de l'aide financière aux parents des descendants adultes et des réseaux de transferts pendant une période de deux ans. Les analyses s'appuient sur les données regroupées de l'Étude de la Santé et de la Retraite (1994–2000), utilisant les familles dans lesquelles les descendants adultes ont au moins un, mais pas plus de quatre frères et sœurs, qui ont fourni un soutien financier aux parents pendant deux ans. Certains changements dans le réseau d'aide surviennent dans environ 40 pour cent de ces familles au cours de la période de deux ans. Quand le changement se produit, il s'agit le plus souvent de la cessation du soutien par un enfant, suivie par l'addition d'un nouvel enfant au réseau, alors que l'échange de soutien aux enfants est relativement rare. Le changement reflète la capacité de la progéniture avant tout à fournir des soins et le fardeau créé par les besoins des parents. Cependant, la taille et la composition du réseau adulte-enfant et du groupe de soutien initial jouaient un rôle important aussi bien. Les résultats soulignent le caractère dynamique et systémique des réseaux financiers intergénérationnels.

ABSTRACT

We sought to identify the extent and predictors of longitudinal changes in adult children's financial assistance to parents and in transfer networks over a two-year period. Analyses rely on pooled data from 1994 to 2000 of the Health and Retirement Study, using families in which adult children with no more than four siblings financially supported parents over two years. Change in the help network occurred in about 40 per cent of these families over the two-year period. When change occurred, it most commonly involved cessation of support by a child, followed by addition of another child to the network, whereas exchange of supporting children was relatively rare. Change reflected children's ability to provide care and the burden created by parents' needs. However, the size and composition of the adult-child network and of the initial support group also played an important role. Results highlight the dynamic and systemic nature of intergenerational financial networks.

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Despite growing recognition that support for older adults is embedded within multiple contexts (Campbell & Martin-Matthews, 2003; Davey, 2008; Davey, Janke, & Savla, 2005) and provided by multiple family members (Davey, 2008; Ingersoll-Dayton, Neal, Ha, & Hammer, 2003; Pillemer & Suitor, 2006), most available research is static and fails to recognize changes over time in support networks or in the participation of specific

support providers such as adult children. Likewise, most research has considered predictors of support from individual children (Couch, Daly, & Wolf, 1999; McGarry & Schoeni, 1995; Silverstein, Conroy, Wang, Giarrusso, & Bengtson, 2002), but not predictors pertaining to the composition of the adult-child network other than the number of adult children (Couch et al., 1999; Pezzin, Pollak, & Steiberg Schone, 2008; Wong, Capoferro, & Soldo, 1999).

We address both limitations in past research by assessing change in adult children's provision of financial supports to parents over a two-year period both at the adult child and at the family system (parent) levels using data from the US National Institutes of Health–funded Health and Retirement Study (HRS http://hrsonline.isr.umich.edu/). It is important to note that our analyses focus on the dynamics within the adult-child group and are not concerned with parents' entire financial support networks as these networks may include individuals other than adult children. Rather, we focus on whether and under what circumstances specific adult children provide continuous financial support over time, stop support, start support late, or fail to provide any financial support.

Literature Review and Hypotheses

Explanations of financial transfers between adult children and older parents have been dominated by microeconomic and rational choice theories (Altonji, Hayashi, & Kotlikoff, 1997; Cox & Rank, 1992; Henretta, Hill, Li, Soldo, & Wolf, 1997; McGarry, 1999; Silverstein et al., 2002). Although much of this literature has focused on transfers from parents to children, the predominant models for financial transfers from and to parents are similar. They focus on two main motivations for support, namely, altruism (needs) and reciprocity (past or future transfers). It is not clear, however, whether altruism or reciprocity can adequately address changes over time in support networks. Altruism, which focuses foremost on parents' needs, may account for the extent to which support is continuous over time and how much support is provided altogether, but it provides little basis for predicting which specific children will provide support over time. Past or expected future transfers to specific children (reciprocity) may provide an incentive for these children to provide more continuous support than children without such prospects or past supports from parents, but we lack the data to test this assumption.

The distributive justice framework may be better suited to address the distribution of support among adult children and their relative participation in parental support over time. Deutsch (1975) distinguished three main distributive justice values: equity, equality, and need/ability. *Equity* refers to the input/output ratio in regard to costs and rewards. Applied to children's financial support to parents, it would imply that each child's contribution reflects the cost of his/her support to the parent and the rewards he or she may gain from such supports. Rewards and costs may not only be economic but can also be psychological or social – for instance, when children derive satisfaction or social status from helping their parents. Deutsch (1975) suggested, however, that equity values mainly govern "cooperative relations in which economic productivity is a primary goal" (p. 143). We also lack data to adequately test equity.

The second value, *equality*, mandates equal contributions by all. If equality were the dominant value, we would expect all children to contribute equally to their parents' support and to do so over time. Yet, as Deutsch (1975) suggested, this distributive justice value may not be applicable to parent-child relationships but rather prevail among social relations such as friendship.

The third distributive justice value, *need/ability*, reflects the principle "from each according to his ability, to each according to his need" (Deutsch, 1975, p. 144) and is most applicable to "cooperative relations in which the fostering of personal development and personal welfare is the common goal" (p. 143). This value may thus be most relevant for family relationships. Need as motivation for support is akin to the altruism perspective and posits that children will give to parents based on parents' needs. Ability to help parents financially will be determined by children's economic resources and obligations. We distinguish between absolute and relative resources. *Absolute resources* refer to the amount of economic resources available to each child, whereas *relative resources* refer to children's resources in relation to each other. Each child's absolute economic resources derive, on the one hand, from their financial situation and, on the other hand, from their financial obligations such as support of dependent children. Long-range support to parents may lead to resource depletion especially if parents' needs are great or children's resources limited (Boaz, Hu, & Ye, 1999). The importance of children's relative resources is in line with the motto "from each according to his/her ability." It implies that adult children will be more prone to financially support parents if their siblings' ability to help parents financially is even more limited than their own. Net of other financial obligations and children's absolute resources, such ability would be reflected in children's relative financial resources compared to those of their siblings.

In line with this theoretical framework, we distinguish among three sets of factors that may influence changes in children's support provision: (a) motivation and

resource exhaustion related to parents' support needs, (b) children's absolute ability to provide support, and (c) children's relative ability to provide support.

Parental Support Needs

Previous HRS-based analyses indicate that financial help tends to flow to parents with lower income or wealth and to widowed and divorced mothers (Couch et al., 1999; Johnson & Lo Sasso, 2001; McGarry & Schoeni, 1995; Pezzin et al., 2008; Wong et al., 1999). These studies further suggest that parent care needs and financial needs overlap, so that more financial support flows to parents in poor health than to healthy parents (Couch et al., 1999; Johnson & Lo Sasso, 2001).

How such needs influence the stability of children's financial supports over time is not clear. We suggest that support to particularly needy parents will tend to exhaust children's resources and thus encourage switching of support provision among children. Based on this assumption, we expect that *change will be more likely when parents' economic resources are low, they are single, older, and require care as well as financial help* (hypothesis 1).

Parents' need for support from any one child will also be contingent on how many children they have. Parents with many children will be less dependent on supports from any one child, either because several children contribute simultaneously or because support obligations may be shifted from one child to another over time. Previous research is fairly consistent in suggesting that sibship size influences individual children's involvement in support. Specifically, HRS respondents appear to be less likely to provide financial assistance to parents if they have more siblings (Boaz et al., 1999; McGarry & Schoeni, 1995), although Couch (Couch et al., 1999) found a tendency in the opposite direction. Availability of siblings and thus alternate support providers should be particularly important for network stability because opportunities for exchange of support providers increase with sibship size. *We thus expect less continuity in adult children's financial support to parents the larger the sibship* (hypothesis 2).

Absolute Ability

Children's ability to support their parents financially rests mainly on children's economic resources and their other financial obligations. Earlier analyses using the HRS (Boaz et al., 1999; Couch et al., 1999; McGarry & Schoeni, 1995; Pezzin et al., 2008; Wong et al., 1999) show, for example, that higher-income households are more likely to provide financial assistance to parents than lower-income households. Lacking direct measures of income for all adult children in our sample (we only have income information for respondents but not their siblings), we rely on other indicators traditionally associated with economic resources: (a) marital status, (b) education, (c) employment status, and (d) home ownership. Considerable evidence suggests that married people have more household wealth than single people (Angel, Jimenénez, & Angel, 2007; Karamcheva & Munnell, 2007; O'Rand & Henretta, 1999). Consequently, unmarried adult children may find it particularly difficult to provide continuous financial support to parents. Similarly, children with higher education, who own homes, and who are employed are likely in a better position to help parents continuously than children lacking these characteristics.

In addition, children's financial ability to provide financial help to parents may be contingent on competing financial obligations and expectations concerning future transfers and bequests especially to their own offspring. Thus, children who have dependents in the household or who have children and grandchildren may be less inclined to financially support parents continuously than children without such obligations (Couch et al., 1999; Wong et al., 1999).

On the basis of the absolute ability hypothesis, we predict that stability in financial support to parents will be less likely among *children who are unmarried, do not own a home, have lower education, and are not employed* (hypothesis 3). In regard to competing obligations, we expect *more stability among children who have no dependents or grandchildren (we do not test for adult children's children as nearly all children are parents)* (hypothesis 4).

Relative Ability

The motto "from each according to his/her ability" speaks foremost to individuals' relative ability in relation to each other. In line with this argument, children's support to parents should not only depend on their absolute economic resources but also, or perhaps foremost, on how well off they are in relation to their siblings. Thus, children who are financially better off should be more involved in financial support to parents than their worse-off siblings and provide such support on a more continuous basis. We consequently hypothesize that *children who are financially better off than their siblings will provide more continuous support and siblings who are worse off will provide support more sporadically* (hypothesis 5).

Controls

Although our theoretical framework focuses on distributive justice values, we recognize that other factors may influence children's financial supports to parents and control for such factors in our analyses. Obligation

to help parents financially may, for instance, be tied to gender. Whereas women are typically assigned caregiving roles (Campbell & Martin-Matthews, 2003), men are still viewed as main providers, and sons may thus feel more obligated than daughters to provide financial help to parents. However, previous support for this assumption is relatively meager, partly because several previous studies on children's financial transfers to parents present analyses that are restricted to married children (Wong et al., 1999) or conducted separately by gender (Couch et al., 1999). One of the few studies testing gender effects found that gender had no significant influence on financial supports (Pezzin et al., 2008).

Children's age or birth order may play a role as well. Age is linked to income and consumption in two ways. First, individuals accumulate economic resources over their lifetime, at least up to old age. Second, consumption needs are generally quite high for young individuals, especially those with dependent children. Thus, older adult children may be in a better economic position to support their parents continuously than younger adult children. In addition, parents may look to their oldest or first-born children for support. Whereas, some research supports these supposition and demonstrated that older adult children are more likely to help parents financially (McGarry & Schoeni, 1995), other studies found more support on the part of younger children (Davey et al., 2005).

In addition, some research suggests that indicators of structural solidarity (e.g., co-residence, geographical proximity) are linked to other forms of intergenerational solidarity such as instrumental supports. However, they seem more important for care and help with household chores than for financial exchanges (Davey et al., 2005).

Methods

Sample

We used data from waves 2–5 (1994–2000) of the HRS, which consists of respondents aged 51–61 at baseline and their spouse, regardless of spouse's age ($n = 12,652$ respondents, 7,702 households). An additional HRS cohort was added in 1998, so that sample size increased after 1998. Selection of households was based on a multistage area probability design oversampled for minorities and Florida residents. The response rate was over 80 per cent. For further details, see Juster and Suzman (1995).

Our analyses relied on HRS respondents' answers to this question: "Not counting shared housing or shared food, did (you/your sibling(s)) give financial help to your (parent(s)) amounting to ($100/$500) or more

(since the previous wave interview/in the past two years)?" The question referred to $100 over a time frame of one year in wave 2 and to $500 over a time period of two years or since the previous interview in all subsequent waves. Because we only considered families in which support was given over two waves, this change in wording should have had minimal effects on results. Furthermore, we controlled for data wave used in the analyses. Follow-up questions asked which parent received help and which adult child provided help. Because we studied changes within the adult-child financial support network over time, our subsample had to meet two criteria: (a) parents must have received financial support from at least one adult child (the HRS respondent or one of his/her siblings) over two consecutive waves, and (b) respondents must have had at least one sibling but not more than four siblings. The first criterion was necessary to study changes within the adult-child financial support network over time; the second criterion was required because single-child families could not switch financial support among adult children. We also restricted the subsample to respondents with no more than four siblings because detailed information on siblings is only available for four siblings.

To obtain this subsample, we began by identifying individuals who reported that they or their siblings provided financial assistance to their parents. We then identified cases in which parents received assistance over two consecutive waves from at least one adult child. The unit of analysis is each two-wave financial assistance episode. For example, a parent who received financial assistance from any adult child during the two-year period before the 1994 interview (wave 2 data) *and* received help during the period between the 1994 and the 1996 interviews (wave 3 data) constitutes one assistance episode. If the same parent also received financial support between 1996 and 1998 (wave 4 data), then the wave 3 and wave 4 support constitutes another assistance episode. We pooled data over waves and parents. Thus, each two-wave assistance period for each parent constitutes one observation. The same parents or adult-child networks can be represented multiple times in the sample if adult children either provided financial assistance to more than one parent or provided financial assistance to the same parent over several consecutive waves.

We conducted analyses at two levels, the adult child level and the parent level. The parent-level analyses focus on parent characteristics and network composition variables as predictors, whereas the adult child-level analyses focus on child characteristics as predictors. For the parent-level analyses, data provided by HRS respondents for the parents were merged with aggregated data concerning financial

support from adult children as well as characteristics of the adult-child support network (e.g., number of adult children). *Change* refers to alterations in the adult-child support network: for example, whether *any* adult child stopped or entered the support network after time 1.

The resulting subsample consists of 1,064 financial support occasions nested in 611 households at the parent level. Each support occasion represents financial help to one parent over a two-year period. We could also have considered more than two waves simultaneously. First, however, the sample sizes diminished rapidly as we extended our selection criteria to three or more waves (see Table 1). Second, we believe it is essential to understand shorter-term dynamics of financial care networks prior to extending analyses to longer time frames.

For the analyses assessing changes in financial support by individual children (child level), we treated each of the adult children (including the respondent adult child) as a separate case. We selected only cases where at least one adult child (but not necessarily the same child) provided support at both time 1 and time 2 and again pooled data over waves. For example, if a parent had three children and at least one of these children provided support at time 1 and the same or another child provided support at time 2, then each of these three children would constitute separate occasions in the sample. This led to a subsample of 3,708 support occasions nested within 628 households at the child level (slightly over three children per parent). For the child-level analyses, we investigated whether each child provided support in either wave and whether such support was continuous across two waves, again pooling data across waves and across parents.

Table 1: Prevalence of financial support to parents and continuity of financial support among parents receiving any financial support (waves 2–5)

	Mothers %	Fathers %
Received financial support	20.1	12.0
Continuity of support across waves		
1 wave	55.5	63.5
2 continuous waves	20.8	20.5
2 non-continuous waves	6.4	5.2
3 continuous waves	6.5	5.0
3 non-continuous waves	3.2	3.1
4 waves	7.7	2.7
n	2,221	638

Note: based on parents alive in each respective wave. Missing data are not imputed.
Percentages may not add to 100% due to rounding.

Measures

Outcomes
Our outcome measures captured changes in financial support from adult children to their parents. The financial support measure was based on the questions: "Not counting shared housing or shared food, did you (and your husband/wife/partner) give financial assistance to your (parent[s]) amounting to ($100 [1992]/$500 [other waves]) or more (since the previous wave interview/in the past 12 months)?" "In the past twelve months (since the previous wave) did any of your brothers or sisters give financial assistance to your parent(s) amounting to $100 [1992] ($500 [other waves]) or more?" Which brother or sister gave such assistance?" In addition, because the HRS also provides a file with information on each of the respondent's siblings, we were able to merge siblings' assistance information to the sibling file (by sibling person numbers) for each wave. A file containing the same information as for siblings was constructed for respondents. We thus obtained an analytical file consisting of information on selected background characteristics and financial assistance for each adult child for each wave. This allowed us to compare whether an adult child provided assistance in both waves, only at time 1, only at time 2, or not at all. For the parent level analyses, the information on each adult child was aggregated to the parent level.

The outcome variable for the parent-level analyses reflects the *type of change* that occurred. We created a variable consisting of four mutually exclusive categories to indicate whether *any* adult child was *added* to the financial network, *dropped* from the financial network, or whether there was an *exchange* in children providing financial assistance (i.e., one commenced and another ceased), with *no change* in the financial support network serving as the reference category.

For the child-level analyses, we measured each child's participation in support over time. These variables consist of four mutually exclusive categories: (a) child started support at time 2 indicating a delayed joining of the network, (b) child stopped support after time 1 indicating cessation of support by the child by time 2, (c) child did not participate in either wave, and (d) continuous support over both waves (the reference category in the analyses).

Predictors
The three major groups of independent variables are *parental support needs*, *children's ability to provide support*, and *selected controls.* To ensure proper causal ordering, we measured all independent variables at the beginning of the assistance episode. The only exception is presence of grandchildren because this variable was

not available for wave 2. In the child-level analyses, parent characteristics and children's race are fixed effects.

Parents' needs were assessed based on their gender (1 = female, 0 = male), age (in years), and marital status (1 = married, 0 = not married). Parent's financial status was only assessed in wave 1 with the question: "Would you say his/her/their financial situation is excellent, good, fair, somewhat poor, or very poor?" We recoded this variable into three categories (low financial status = poor and very poor; medium financial status = fair; and good financial status = excellent and good). "Good" status served as our reference group. Respondents were also asked about their parent's socioeconomic status when the respondent was a child: "Now think about your family when you were growing up, from birth to age 16. Would you say your family during that time was pretty well off financially, about average, or poor?" We created two dummy variables for average (identified as medium financial status and poor (identified as low financial status) with those being well off as reference group.

The availability of alternative support providers was measured differently in our parent and child-level analyses. In the parent-level models, we included number of adult children. At the child level, we used the number of each adult child's siblings providing financial support at time 1. This measure varied for individual children because it partly depended on whether the target child provided support at time 1. In the fixed-effect model, we could not use number of adult children per se because this measure would be the same across all children and thus fall out in the fixed-effects models.

Children's absolute ability to provide support was measured by indicators that reflected children's socioeconomic or financial status (as noted earlier, we have no direct measure of children's income) as well as by competing financial obligations. Indicators of financial status included employment status (1 = does not work, 0 = works), education (in years), marital status (1 = not married, 0 = married), and whether the child owned a home (0 = no, 1 = yes). *Competing obligations* were captured by whether the child had grandchildren (0 = no, 1 = yes) and whether the child had dependents in the household (0 = no, 1 = yes).

Relative ability is based on a question about siblings' financial status compared to the respondent's: "Would you say (his/her) financial situation is better, worse, or about the same as yours?" We created dummy variables for worse off and better off. The financial status of the respondent child, and of other children whose financial status was the same as the respondent's, was coded 0.

Controls
At the parent level we controlled for race/ethnicity and from which waves the pooled data were taken. Race/ethnicity is dummy coded as Black, Hispanic, and Other/Mixed race, with White as the reference group. In addition, we included whether the parent died between waves (a few parents who had died by time 2 still had received financial support between waves).

At the child level, we controlled for child's gender (female = 1, male = 0) and age (years). We also included whether the child co-resided or lived close (within 10 miles) to the parent (1 = yes, 0 = no), provided care with basic needs to the parent (1 = yes, 0 = no), and whether the child was the HRS respondent. The latter serves as control to adjust for potential response bias. Table 2 shows means and standard deviations of all predictors.

Table 2: Descriptive statistics for study variables

Child Level:	M	SD
Absolute ability		
Child does not work	0.27	0.44
Child owns home	0.77	0.42
Child not married	0.27	0.44
Child's education	12.95	2.59
Competing obligations		
Child has grandchildren	0.62	0.49
Child has dependents	0.25	0.43
Relative ability		
Child financially better off	0.24	0.43
Child financially worse off	0.26	0.44
Controls		
Number of siblings providing financial support at time 1	1.31	0.99
Child female	0.53	0.50
Child's age	53.29	7.89
Child lives close to parent	0.36	0.48
Child lives with parent	0.07	0.25
Child provides care	0.12	0.33
Child is respondent	0.29	0.45
Parent Level:		
Parental needs		
Parent female	0.86	0.34
Parent's age	80.88	6.89
Parent married	0.23	0.42
Parent low financial status	0.29	0.45
Parent medium financial status	0.41	0.49
Family low SES	0.29	0.45
Family medium SES	0.65	0.48
Number of siblings	3.49	1.08
Controls		
Parent died between waves	0.24	0.43
Black	0.15	0.36
Hispanic	0.09	0.28
Other race	0.03	0.17

M = mean; *SD* = standard deviation; SES = financial status

Analyses

Longitudinal within-family analyses with survey data pose a number of methodological and modeling issues that must be addressed. These include adjusting estimates and standard errors for the clustered nature of data, handling missing values in multivariate models, and matching theory to data analysis.

Adjustments for Clustered Data

Analyses account for the multistage design of the HRS along with other layers of nesting present (occasion, household, parent). In statistical terms, adjusting for the lowest level of nesting (care-occasion) automatically adjusts for higher levels of nesting. In some contexts, it is of interest to determine the proportion of variance into its constituent elements; here, it is merely a nuisance factor that must be accounted for in the analyses. We performed fixed-effects multinomial logistic regression models with multiple imputations. We know of no existing "out-of-the-box" software package with the facilities to handle all of these issues simultaneously, and so we programmed our analyses ourselves, with a variety of sensitivity analyses to ensure that results did not depend on the routines applied. Analyses were adjusted using the cluster Sandwich estimator (Angrist, 2009; Rogers, 1994), which relaxes the assumption of independent residuals, allowing us to account for the clustered nature of our data to adjust standard error estimates.

Handling Missing Values

Failure to consider issues of missing data can lead to biased results and reduced statistical power (Acock, 2005; Davey & Savla, 2010; Enders, 2010). To address issues of missing data, we followed the recommendations outlined in recent publications (Acock, 2005; Davey & Savla, 2010; Enders, 2010; Schafer & Graham, 2002; White, Royston, & Wood, 2011). Specifically, we used multiple imputations (MI) with chained equations to impute multiple plausible values for unobserved data, creating five complete data sets. Separate imputation equations were developed for each model variable, and imputations were performed in an iterative sequence, beginning with variables having the fewest missing observations (values ranged from 0 to 27% missing across variables in our equations, making listwise deletion ill-advised. Fraction of missing information was generally considerably lower). Each imputed data set was analyzed separately, and the resulting parameter estimates were combined to provide valid parameter estimates and standard errors using standard rules for MI inference.

Matching Theory and Data Analysis

Child-level analyses consisted of fixed-effects multinomial logistic regression models adjusting for non-independence based on household number, parent, and occasion of measurement. These models isolate factors associated with a child's probability of changing support status within a given family. Factors that do not vary across children within the family, both measured and unmeasured, are not evaluated but are implicitly controlled. For the parent-level analyses, we used regular multinomial logistic regressions and adjusted for non-independence of observations by specifying clusters (by household) with robust standard errors.

Results

Distribution of and Changes in Adult Children's Financial Supports to Parents

As Table 1 shows, 20 per cent of mothers and 12 per cent of fathers received financial help from an adult child, averaged across waves. In most instances, such support is short-term, that is, it is reported in only one wave. About one third of mothers and slightly over one quarter of fathers received support over two or more continuous waves. Only a minority of parents received non-continuous support over several waves. This suggests that most financial support to parents is sporadic, but a noteworthy minority especially of mothers requires support over longer time periods.

In line with Deutsch's (1975) argument that equality is less relevant for family relationships than for other social relationships, we found that participation of all children as support providers is quite rare, ranging from 19.5 per cent at time 1 to 15.2 per cent at time 2 (see Table 3). In the majority of families, support provision was restricted to a single child, although the proportion of families with single providers declined considerably as the number of adult children increased. In addition, single providers were more common at time 2, suggesting that support networks tend to shrink over time. Indeed, further computations indicated that a decrease in the number of children providing support was more common (21.8%) than an increase in the number of children providing financial supports (13.3%). However, in the majority of families (64.9%), the number of children providing support was constant over time.

Change in financial support networks (parent level) was quite common in this sample, with 39.8 per cent of adult child support networks experiencing at least some change. Cessation of a child's involvement was the most common type of change (20.7%), followed by the addition of a new child to the support network (12.7%). Exchange of one adult child's involvement for another, requiring two transitions, was somewhat less common (6.4%). If we consider transitions made by individual children (child level), then the great majority falls into two groups – those providing continuous

Table 3: Participation of adult children in financial support to parents, by number of children

Provision of financial support to parents by:	Time 1				Time 2			
	2 children (%)	3 children (%)	4 children (%)	5 children (%)	2 children (%)	3 children (%)	4 children (%)	5 children (%)
Single child	75.5	57.9	54.8	52.9	83.6	65.6	64.2	60.9
Some children	–	17.4	29.5	35.2	–	15.0	24.1	27.2
All children	24.5	24.7	15.7	11.8	16.4	19.4	11.7	11.9
n	1,069				1,069			

Note: percentages may not add to 100 due to rounding. Based on families in which parents receive financial support at time 1 and time 2.

support (37.4%) and those providing no support (43.2%). Just under 12 per cent (11.7%) of children ceased to provide support from time 1 to time 2, whereas 7.7 per cent entered the support network at time 2.

Predictors of Change in Adult-Child Financial Support Networks (Parent Level)

Multivariate analyses at the parent level are shown in Table 4. Results partially support our first hypothesis: that support to high-need parents may exhaust children's resources and thus promote change. If parents have low financial status, some children are more likely to delay support or stop support, suggesting more volatility in children's participation when support is likely

Table 4: Multinomial logistic regressions for change in financial support networks (parent level)

	Any child start vs. no change	Any child stop vs. no change	Exchange vs. no change
Parental needs			
Parent female	–0.012	0.170	0.258
Parent's age	–0.019	–0.015	0.006
Parent married	–0.364	–0.015	–0.117
Parent low financial status	0.615*	0.598*	0.261
Parent medium financial status	0.422	0.289	–0.150
Family low SES	–0.046	0.193	–0.380
Family medium SES	–0.172	0.342	0.548
Number of siblings	0.309**	0.151	0.442**
Controls			
Black	0.103	0.577**	0.387
Hispanic	0.094	0.491	0.426
Other race	–0.896	–0.074	0.659
Parent died between waves	–0.329	0.994**	0.392
Data from waves 2–3	0.111	0.244	0.117
Data from waves 3–4	–0.155	0.037	–0.153
Constant	–1.202	–1.608	–5.068*
χ^2	122.17**		
n	1,064		

* $p < .05$; ** $p < .01$

more burdensome for them. In contrast, parents' SES when the children were young has no effect on change in financial supports. We found no evidence that other indicators of parents' needs (gender, age, marital status) influenced network change.

Our second hypothesis – that change will be more prevalent as the number of children increases – is also supported in Table 4. In families with more children, both children entering the network late and exchange of children providing support were more common than in families with fewer children.

Several of the control variables exerted a significant influence on change in financial support providers. Children were more prone to drop out of the network when parents died between waves. The controls for race/ethnicity indicate that among Blacks and Hispanics, children are more likely to drop out of the network.

Predictors of Change in Children's Support (Child Level)

Predictors of change at the child level are shown in Table 5 and address hypotheses concerning children's ability to provide support (hypotheses 3 through 5). As far as absolute ability is concerned (hypothesis 3), the data provided only meager support for the hypothesis. Children who were not employed were more likely to provide no support as were less-well-educated children. However, none of these variables were significantly related to change in the provision of financial support. Home ownership and marital status had no effect on children's financial supports.

In regard to competing obligations (hypothesis 4), we found that children who were grandparents were more likely to delay financial support or to have provided no support at all than children without grandchildren. This finding supports the hypothesis. In contrast, having dependents in the household was not significantly related to change in financial support.

The data provided clear support for the relative ability hypothesis (hypothesis 5). Children who were financially worse off than their siblings were less likely to provide continuous support and more likely to either

Table 5: Fixed effects multinomial logistic regression models predicting changes in each child's provision of financial support

	Start vs. continue	Stop vs. continue	Not vs. continue
Absolute ability			
Child does not work	0.077	0.094	0.318*
Child owns home	–0.120	0.035	–0.354
Child not married	0.351	0.036	0.148
Child's education	–0.046	–0.038	–0.070*
Competing obligations			
Child has grandchildren	0.547**	0.320	0.474*
Child has dependents	0.060	0.243	0.153
Relative ability			
Child financially better off	–0.792**	0.017	–0.670**
Child financially worse off	1.077**	0.789**	1.998**
Controls			
Child female	0.173	–0.096	0.071
Child's age	–0.003	–0.010	–0.028**
Child gives care to parent	–0.329	–0.302	–1.259**
Number of siblings giving financial support at time 1	–0.108	0.399**	–0.429**
Child lives with parent	–1.153**	–0.370	–1.927**
Child lives close to parent	–0.094	–0.112	–0.170
Child is respondent	–1.746**	–2.342**	–2.723**
Intercept	–1.169**	–1.680**	0.738**
χ^2	1,044.38**		
df	45		
n	3,708		

* $p < .05$; ** $p < .01$
df = degrees of freedom

enter the network late, stop support, or not participate at all. In contrast, children who were better off financially were less likely to delay support or to provide no support.

Several of the control variables exerted a significant influence on change in children's supports. The importance of available supporters is clear from the effect of number of siblings providing support at time 1. The more siblings were involved in support at time 1, the more likely one sibling would drop out of the network and the less likely any sibling would not participate at all, suggesting that in some networks all or most siblings started out sharing support but rarely maintained such shared involvement over time. Older children were less likely to provide no support, suggesting that parents may rely more on their first-born children. In addition, children who co-resided with the parent were less likely to delay entry and to provide no support

than children who lived farther away, but they were as likely to stop support. Children providing care to parents at time 1 were less likely to provide no support, suggesting that care and financial support often go hand-in-hand. We found no effects of gender and geographic proximity other than co-residence. Children who were HRS respondents were significantly more likely to report continuous support to parents, suggesting some response bias in the analyses.

Discussion

With this study, we set out to identify the extent and predictors of change in adult-child financial support networks to older parents and in individual children's financial support of parents. Financial support to parents seems often sporadic as the majority of parents only receive support over one wave. However, a noteworthy minority – especially of mothers – are helped over longer time periods. This suggests that a group of older parents do rely on children for some financial support over extended time periods. In many families, a single child carries such financial support responsibilities, particularly if the sibship is relatively small, but even in larger sibship groups support by all children is relatively rare. This supports the argument that a distributive justice value of equality is seldom used as a basis for adult children's involvement in parental financial support.

Whether these support patterns indicate that the typical flow of financial support from parents to children reverses when parents reach old age, as some earlier research has suggested (Kronebusch & Schlesinger, 1994), remains unclear. Because we lack information on parents' financial transfers to the respondents' siblings, we can only assess support flow from the adult-child respondents to their parents and vice versa. These data (not shown) suggest that such reversal is indeed the case, especially for mothers. Whereas 15 per cent of respondents (averaged across waves 2 through 5 for living parents) reported giving support to mothers (8% for fathers), only 5 per cent reported receiving support from mothers and 6 per cent from fathers. Mutual exchange of supports (i.e., respondents giving and receiving financial support) within each time period was less than 1 per cent for both parents.

The main focus of our analyses was on change in adult children providing financial supports to parents. Change was quite common with close to 40 per cent of all adult-child financial support networks experiencing at least some change, and close to 20 per cent of all children changing their support between waves. Given that most change consists either of a child dropping out of the network or a child being added to the network (but not both simultaneously), it seems that support is

either consolidated among those children more able to carry such financial obligations or spread among a larger number of children, presumably because the initial support group can no longer carry the full burden of support. Support networks tend to shrink over time; that is, it is more common for children to leave the care network than for children to be enter the network. The causes for these changes are not quite clear. It is feasible that there may be an asymmetry in what causes consolidation versus spreading out. For example, consolidation of support (e.g., a single child assumes responsibility from previous multichild support) may occur in times of relative stability or improvement of parental health and financial needs, whereas spreading support across children may occur during or in adjustment to parental health and financial shocks. More detailed work examining the sequence of these events is needed to distinguish these possibilities.

In line with the resource exhaustion hypothesis, our findings indicate that support to parents with low financial status is more volatile than assistance to better-off parents. Thus, situations involving greater burden on adult children seem to encourage change. Exchange of adult children as financial support providers is not associated with change in financial supports. This suggests that support networks among low-income parents expand or contract as circumstances demand. Because we lack information on change in parents' or children's financial situation, it is not clear whether these changes are driven more by parents' or children's situation.

We found some evidence that children's financial ability to provide support influences change in support over time. Most important is children's relative financial status compared to their siblings. Children who are worse off than their siblings are apparently often excused from support obligations, whereas better-off children are not only more likely to be called upon to provide support but to do so on a continuous basis. Because data limitations forced us to rely on rather imprecise indicators of adult children's financial standings, additional research is necessary to assess how adult children share and trade the economic burden of financial assistance to older parents over time. Such research will require detailed income and expenditure information for all adult children.

Other ability factors (employment status, education) primarily distinguish children who provide support from those who do not, but seem to have little effect on whether or not children delay or stop support. The only exception is the presence of grandchildren. Children who are grandparents tend not only to be more prone to provide no support, but they also delay support if they participate in the support network. It is conceivable

that expenditures for grandchildren render these adult children less able to provide support. Alternately, they may be more reluctant to spend their resources on parents rather than save for future bequests.

Consistent with previous research (Boaz et al., 1999; McGarry & Schoeni, 1995), we found that the probability of change in financial support networks is more likely when there are more siblings available to provide assistance. This finding supports our claim that support networks are dynamic and change over time. The child-level analyses further suggest that even though siblings in some networks may start out sharing parental financial support, such sharing is often not maintained over time.

Limitations to the present study are dominated by measurement issues. While the most central constructs identified by the literature are indexed at least to some degree in the HRS, we lacked detailed information both on parents' and adult children's financial situation. Because of these limitations, it is likely that the results present conservative estimates of the effects of children's financial status. Likewise, there was a change in the threshold selected to define financial transfers ($100 in 1992 to $500 in subsequent waves). Our models included dummy variables indexing the year of baseline data, and there were no differences associated with baseline data from 1992. Our analyses focused on within-family comparisons, further reducing the importance of this change in threshold.

Ideally, we would like to be able to consider variables such as stability and change of financial resources or changes in marital/partner status as independent variables in regard to previous theoretical assumptions. Unfortunately, the retrospective nature of the HRS financial support measurement precluded us from being able to disentangle the timing, making inference difficult for analyses which do not impose the kinds of design constraints that we used in the current study. In addition, inclusion of some time 2 predictors may lead to endogeneity problems.

Another limitation pertains to the reliance on the HRS respondents for information about support to parents on the part of their siblings. Previous research showed that siblings often provide divergent descriptions of parental support structures (Lerner, Somers, Reid, Chiriboga, & Tierney, 1991). We consequently controlled for respondent status in the analyses, but this does not eliminate potential underreporting of support for the respondent's siblings. Indeed, our analyses indicate that respondents are more prone to report continuous support for themselves than for their siblings.

Our research has important implications for policy and practitioners. Specifically, the findings raise concerns

about the ability of future generations to adequately support parents. If, as our findings suggest, larger sibling groups allow adult children to distribute the burdens of support and to add or drop helpers as needed, expected declines in fertility and thus in the number of adult children available for support to parents (Szinovacz, 2007) are likely to reduce the flexibility of support networks. In addition, the delay in childbearing age will result in a decline in the average age of the adult children who support parents. These children seem less able than older sibling groups to financially support parents over lengthy time periods, most likely because of simultaneous financial responsibility for their own children. As a result, future cohorts of parents may be more likely to go without needed assistance, or future cohorts of adult children may bear substantially larger financial burdens. These trends take on added significance in view of potential future cuts in retirement benefits. However, having fewer children may also enable parents to save more for the retirement years, thus reducing their need to rely on their children for financial supports. Parents with fewer children may further be able to invest more in their children's education, thus raising their future financial prospects and, implicitly, their ability to support parents financially in later life. Once later waves of the HRS (i.e., those covering retirees of the baby boom cohorts) become available, it will be possible to assess cohort changes in intergenerational transfer patterns.

Despite considerable progress during the past decades, research on intergenerational transfers has remained static and focused on the support provided by individual family members. Research that views intergenerational transfers dynamically and from a family perspective can contribute substantially to our knowledge of intergenerational support structures and pathways. Such research not only yields considerably different estimates of the propensity of intergenerational supports than studies based on cross-sectional analyses or on individual helpers (Davey, 2008; Szinovacz, 2007), but it also offers more insights into the complex negotiations about the distribution of support responsibilities among family members. More research along these lines will be necessary to face the challenges posed by changing demographics and shrinking old-age welfare programs.

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