Extended Abstract

A Matter of Time Coordination? Adult Children and Spouses' Paid-Work and Time Transfers to Parents

Background

The U.S. society is undergoing a rapid aging process. In addition to savings and welfare, support provided by family members plays an important role in sustaining elders' wellbeing. Literature shows that of the family nexus, spouses and adult children are the preferred sources for help among older adults. The determinants of resources flow from adult children to their parents are also extensively studied. Parents' needs, adult children's ability, quality of parent-child relation, motivations associated with altruism, reciprocity, and rational calculation, are key explanations for upward intergenerational transfers. However, although some attested that adult child's employment and wage rates affect transfer outcomes, assessments on how adult children's work patterns affect their provision of assistance are rare. A quantitative research on how married adult children and their spouses coordinate work schedules and transfers will add new knowledge to the field of demography of aging.

Hypotheses

This project examines how adult children and spouses' paid-work affect their time transfers to parents. It is hypothesized that adult children and spouses coordinate their amounts of assistance based on their work patterns. Four sub-hypotheses are proposed for testing:

1. Work status hypothesis: Working for pay is associated with lower amount of time transfers to parents.
2. Time availability hypothesis: Hours spending on the paid-job have an inverse relationship with the amounts of time transferred to parents.

3. Work flexibility hypothesis: Self-employment allows more flexibility for providing transfers, regardless of total number of hours spent in the work.
4. Time-splitting hypothesis: Having two jobs causes a time-splitting of the children, therefore reduce the amounts of transfers.

Combinations of above work patterns of the adult children and their spouses are investigated to test for the spousal coordination effect.

Data and sample

The Health and Retirement Study (HRS) is a nationally representative panel survey studying older adults' health and economic wellbeing in their later-lives. The first wave of the HRS contains information on 7607 respondents aged 51-61 in 1992, and their spouses, regardless of their age, were also interviewed (n=5045). The follow-up surveys were conducted every two years thereafter. In 1998, new interviews of elders born during wartime (1942-1947, WB sub-sample) and Depression (1924-1930, CODA sub-sample) were incorporated into the study. In 2004, the early baby boomer cohorts (1948-1953, EBB sub-sample) were added into the baseline. The 2008 study is the most recent available data for public-use.

To examine the proposed hypotheses, data from the 1998 to 2008 surveys (the 4^{th} to 9^{th} Waves) are employed. Several sample selection criteria are applied. First, the analytical sample is confined to respondents with living parents in 1998. Second, since the goal of the analysis is to assess the coordination of transfers between adult children and their spouses, only adult children stay married throughout the 10-year study interval are selected. The samples are further divided by parents' gender for a better comparison on father and mothers' receipt of support.

Because transfers are contingent on parents' and adult children's vital statuses, the samples have significant attritions over time. Table 1 summarizes changes of sample sizes by parents' gender and study years. The observation counts are presented before excluding missing

values of the analytical variables. Table 2 summarizes the baseline sample characteristics after excluding missing values in the 1998 analytical variables. All information are justified from adult children's perspective. The sample sizes are n=419 and n=2703 for father's and mother's sample, respectively.

Methodology

Measurements

Dependent Variables

The amounts of time transfers to parents are the dependent variables in this study. There are two types of time transfers being investigated—care-giving time and errand time. The HRS first asks whether the adult children and/or the spouses had spent at least 100 hours helping parents with basic personal needs like dressing, eating, and bathing. This measurement intrinsically reflects the "ADL" or "care-giving" time transfers. If the transfers exceeded the 100-hour threshold, the actual amounts of time are recorded. The transfer amounts from adult children and the spouses are documented separately. Data of time helping with household chores and errand, etc., are collected in identical manner. If the children and/or the spouses provided at least 100 hours assistance in these IADL tasks, the actual amounts of time spent by the adult children and the spouses are recorded.

The transfer incidences and amounts do not demonstrate a normal distribution. The natural logarithm is used to normalize the distributions for all four variables.

Independent variables

In this study, four variables are used to describe adult children's work characteristics: Whether working for pay, weekly work hours, whether self-employed, and whether two-job

owner. These variables correspond to the research hypotheses presented in the previous section, and separate models are constructed to avoid the problem of endogenous estimation. Spouses' work characteristics are captured in the same manner. Interaction terms of adult children and spouses' work characteristics will be included in the final statistical analysis.

Measurements of adult children' characteristics are included for statistical control. These variables include adult children's age, gender, race, education, health, family structure, and household assets. In addition, variables delineating parent's needs, including age, education, marital status, financial wellbeing, as well as health, are also incorporated into the analytical models.

Analytical Strategy

The project uses descriptive and multivariate regression analyses to examine the research question. Since the data are in longitudinal form and the dependent variables involve un-observed left-censoring (at 100 hours), cross-sectional time-series Tobit analyses are performed. The estimations are implemented with randomized intercepts and slopes. Regression results are unweighted.

Preliminary findings

Figure 1 and 2 illustrate the amounts of ADL and IADL time transfers to parents. For married adult children ever spent 100 hours or more to help their parents, it is clear that the total transfer amounts are substantial, especially in the aspect of person-care assistance. Adult children give more help to parents than their spouses. In general, mothers receive more assistance than fathers, and the amounts of transfers increase with time.

Preliminary analysis using the random-effect Tobit regression indicate that, controlling for adult children's gender, age, and race, self-employed adult children and children with two jobs spent longer hours assisting their fathers. Although these effects are merely marginally significant ($p<.10$), it provides some evidence to support the time-flexibility hypothesis. In terms of spouses' transfers, when spouses are dual job owners, their ADL help to mothers-in-law decrease ($p<.05$). Parallel to the time availability hypothesis, spouses with longer work hours provide less IADL assistance to their fathers-in-law.

Table 1: Changes of Sample Sizes by Parent's Gender, 1998-2008

	Father Sample	Mother Sample
1998	1570	3727
2000	1257	2922
2002	959	2340
2004	1588	3354
2006	1221	2694
2008	972	2209

Note: Samples reflect number counts of married adult children with living father/mother in each wave of the survey.

Table 2: Weighted Descriptive Statistics of the 1998 Sample, by Parents' Gender

	Father Sample (N=419)	Mother Sample (N=2703)
Adult child work characteristics		
Work for pay	77.83%	67.97%
Weekly work hours	33.22 (23.33)	28.28 (26.45)
Self-employed	12.71%	14.05%
Two-job owner	10.13%	7.25%
Work characteristics of adult child spouse		
Work for pay	71.89%	66.76%
Weekly work hours	32.29 (24.63)	28.34 (28.12)
Self-employed	12.72%	13.64%
Two-job owner	9.07%	7.22%
Adult child characteristics		
Woman	67.42%	64.53%
Age	52.82 (5.95)	55.98 (6.82)
White	91.18%	91.11%
Years of education	13.77 (2.35)	13.09 (2.87)
Number of household members	2.83 (1.21)	2.75 (1.19)
Number of living children	2.78 (1.53)	2.71 (1.96)
Number of siblings	2.53 (2.30)	3.18 (2.37)
Coreside with the parent	0.93%	3.38%
Good or better health	85.43%	81.43%
Number of ADL difficulties	0.14 (0.53)	0.14 (0.58)
Number of IADL difficulties	0.08 (0.32)	0.10 (0.46)
Household assets	340656.21 (582324.58)	397498.76 (816908.08)
Parent's characteristics		
Age	77.34 (6.78)	76.14 (7.96)
Years of education	10.29 (3.87)	10.43 (3.49)
Married	62.10%	26.91%
Live alone or with spouse only	88.03%	69.95%
Own home	85.29%	73.89%
Financial status better than the adult child	41.94%	15.67%
Has memory-related disease	6.60%	13.76%
Has person care needs	11.43%	19.75%

Note: Standard deviations of the means in parentheses.

Figure 1: Mean Amounts of ADL Time Transfers to Parents, 1998-2008
Adult Children and Spouses Ever Provided 100 Hours or More

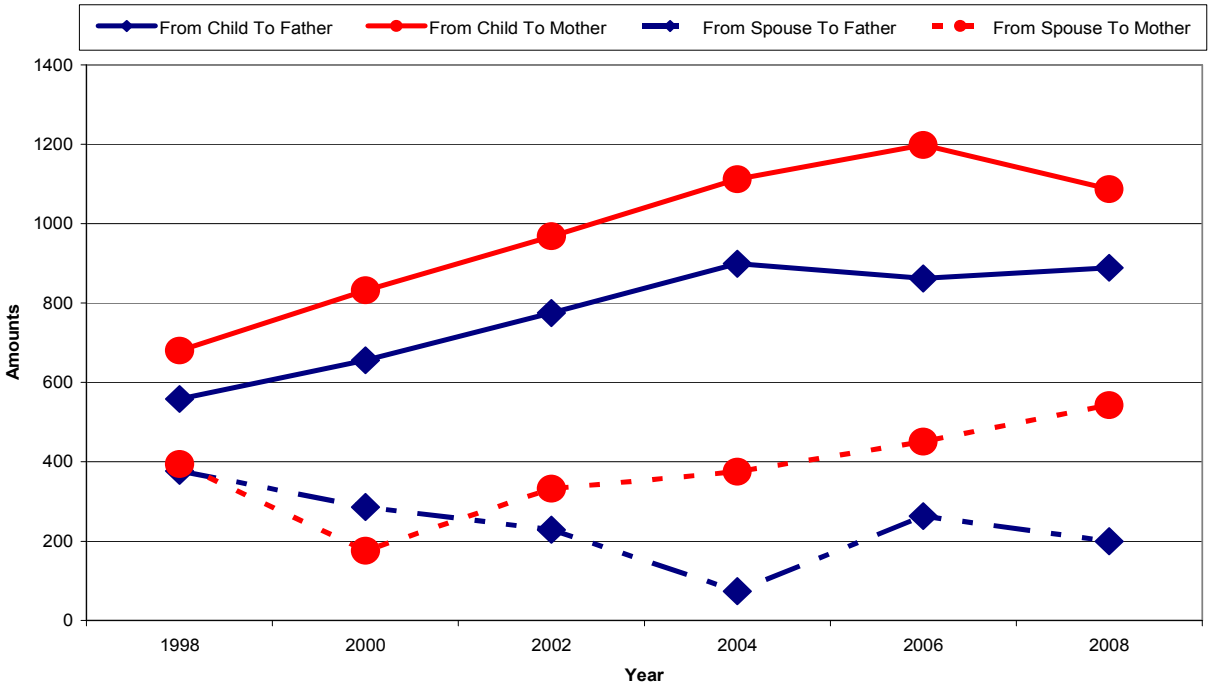

Figure 2: Mean Amounts of IADL Time Transfers to Parents, 1998-2008
Adult Children and Spouse Ever Provided 100 Hours or More