Balancing Work and Family Responsibility: Provision of Transfers from Late-Middle-Aged Working Adult Children to Their Elderly Mothers

By

Ching-yi A. Shieh

Department of Sociology University of Maryland College Park, MD 20742

cshieh@socy.umd.edu

Paper submitted for PAA 2005 annual meeting presentation

Balancing Work and Family Responsibility: Provision of Transfers from Late-Middle-Aged Working Adult Children to Their Elderly Mothers

Many social scientists and demographers have documented the dramatic change in the U.S. population caused by the long-term decline in fertility and mortality. Over the past few decades, the number of Americans age 65 or older has grown in proportion to the entire population, and the size of this age group continues to expand. Researchers estimate that by 2030, when the baby boomers are between 65 and 85 years old, the ratio of elderly to working age adults will increase to 36% (Curran, McLanahan and Knab, 1998). This unprecedented aging phenomenon poses multiple challenges to the society as a whole. In particular, the question of who should be responsible for the wellbeing of the elderly becomes increasingly significant.

In addition to the state, the institutions of the market and the family are also major providers of care to senior citizens. In contemporary American society, family members provide the majority of elder care because state benefits tend to be insufficient and market services are usually costly. Since the spouses and siblings of seniors have similar levels of morbidity and mortality, adult children usually play a key role in providing assistance to senior citizens.

There are reasons to believe that adult children's provision of support has a great impact on older mothers' wellbeing. Demographically women live longer than men. Unlike their male counterparts who usually acquire support from spouses, women spend longer years playing caregiving roles and eventually receive care from their adult children (Dwyer, 1995; Moen, Dempster-McClain, and Williams, 1992). Women's longer life expectancy is often accompanied with chronic health conditions and functional limitations (Smith and Kington, 1997), which increase their needs for laterlife support.

Although social norms implicitly mandate that adult children should be responsible for their elderly parents' wellbeing, the intergenerational transfer process breaks down when adult children do not have ability to contribute. In contemporary U.S. society, most working age adults' income comes from paid jobs. Despite the convergence of labor force participation for men and women over the past decades, women's caregiving duties do not significantly decrease as a result of their long work hours. While employed adult sons can use monetary transfers to replace their caregiving hours, it is more common for working adult daughters to balance their job and family responsibility simultaneously. In a society where the majority of women are in the labor force, adult daughters and daughters-in-law are subject to a greater role conflict than their male counterparts.

Using the 1992 and 1996 Health and Retirement Study, the goal of this project is to incorporate gender norms and adult children's labor force participation constraints to understand the causes of the gendered division of transfer exists. A portion of my comprehensive study of these patterns, this paper focuses on monetary and time transfers to non-coresident mothers. The study sample includes only married adult children making it possible to assess the effects that spouses have on the transfer practices. The results suggest that the gendered division of transfer practices is a by-product of the gendered labor force structure, where men's wage advantages allow them to use money as their transfer tokens, whereas women who lack sufficient financial resources to fully satisfy their mothers' needs use time transfers as a supplement. When

women are paid the same as men, they are more likely to use monetary transfers to replace their time contribution, an effect that holds over time.

Literature review

Intergenerational transfers involves three elements—parent-child coresidence, time transfers, and monetary transfers. These transfer "capitals"—the term adopted by Soldo (1996)—are usually complementary to each other, and transfer resources often flow between both generations. Moreover, the incidence and amount of transfers of money and time depend not only on parent's needs, but also adult children's ability to give transfers (Boaz, Hu, and Ye, 1999). The main foci of this study are the monetary and time transfers from adult children to their non-coresident mothers.

Gendered social norms, labor force structure, and adult children's ability

In the intergenerational transfer literature, the preference hypothesis posits that cultural norms expect adult children of particular sex carry more filial duties than the other (Lin et al, 2000). It is often taken for granted that daughters should be the primary caregivers for their parents because, by nature, women are more caring and loving than men. Women themselves often think their sense of obligation to look after their elders is a necessity, rather than an option. Statistical evidence shows about three-quarters of all informal caregivers of the elderly are women: 29% are daughters and 23% are wives, yet only 8% are sons and 13% are husbands (cited from Ettner, 1992). Numerous studies suggest that daughters spend a considerable amount of time helping their elderly parents (Aronson, 1992; Matthews and Rosner, 1988; Silverstein, Parrot, and Bengtson, 1995; Weinick, 1995; Wolf, Freedman, and Soldo, 1997). Men usually spend less time

on caregiving tasks, unless paid services are unaffordable or no female family members are available to help with caregiving (Matthews and Rosner, 1988; Wolf, Freedman, and Soldo, 1997).

In *A Treatise on the Family*, Becker argues that men and women are assigned different tasks based on the principle of maximizing the wellbeing of the family. By this logic, family members with greater earning potential, who are usually the husbands, should engage in paid work, whereas wives should spend their time on household chores and caregiving tasks (Becker, 1991). Paralleling Becker's utility maximization argument, the concept of "family adaptive strategies" raised by Moen and Wethington (1992) states that "families mobilize and modify their plans and behaviors as their circumstances change". This theoretical construction suggests that macro structural barriers have a significant effect on the household decision-making process.

A gendered opportunity structure has the effect of pushing women into the family sphere as the caregivers because women are not as advantaged as their male counterparts in the labor market. The gender composition of occupations has an influential effect on women's earnings (Macpherson and Hirsch, 1995). Women engage in female-typed jobs are paid less because social forces sort men and women into different career tracks, with male-dominated occupations having higher material rewarding. Controlling for the human capital factor does not explain away the pay gap between men and women (England et al., 1996; Tomaskovic-Devey, 1993; Wood, Corcoran, and Courant, 1993). Furthermore, because women are more likely than men to join the labor force intermittently, and are less likely than their male coworkers to get promotions and on-the-job-traning, there are substential pay differences between the sexes (Barron, Black, and Loewenstein, 1993; Blau, Ferber, and Winkler, 1998; Maume, 1999, Tomaskovic-Devey, 1993).

It is not surprising that men's ability to provide monetary transfers and women's ability to give time transfers are directly related to the gendered labor force structure. This structure endows men and women with different "abilities" by providing men with higher wages to purchase elderly-care services to replace their "precious time", yet compelling women to either give up their paid job outside the home or to make efforts to be a paid worker and caregiver simultaneously. In this context, whether one should provide monetary or time transfer to their older parents has new significance. For men, the financial transfer is "almost a substitution" for their time transfers. The high opportunity cost of job turnover provides a legitimate reason for men to fully concentrate on their paid jobs and delegate family responsibilities to their wives, sisters, or elderly care professionals. Women, on the other hand, have to use time transfers as a "supplement" to their monetary transfers. While the disparity of labor force participation between both sexes has decreased tremendously, and dual-earner families have become more common in the U.S. society, it is rare for employed women to forgo caregiving duties completely. With their economic disadvantages in the labor market, purchasing full elderly-care services is often too expensive. Thus, women with family duties may choose to forgo their wages, or make efforts to balance their full-time job and caregiving responsibilities simultaneously. Either way, women sacrifice their own career development, earning potential, and leisure time.

Other factors affecting adult children's ability

Other factors that may affect adult children's transfer-giving ability include age, race, educational attainment, and number of children under age 18.

The age of the adult child providing the support affects transfer-giving ability. Compared to younger adult children, adult children of older ages tend to have better ability to provide monetary transfers to their parents because of their secure employment status. Older spouses are more likely to have poor health and functional limitations. When spouses are in poor health, adult children may have to transfer part of their resources to their spouses, which may reduce adult children's ability to provide support to their elderly parents.

Race also affects transfer-giving ability. Compared to white adult children, black adults are less likely to provide monetary transfer to their parents. There is reason to believe that smaller monetary transfers from black adult children to their parents are associated with economic hardships. Studies indicate that the racial composition of the labor market creates a wage gap between the whites and blacks, with the wage rate significantly lower in the occupations with high densities of black workers (Hirsch and Schumacher, 1992; Tomaskovic-Devey, 1993). Moreover, the high unemployment rate among the inner-city black population also reduces their ability to provide financial transfers to their parents (Browne, 2000; Johnson, 1995). After controlling for adult children's socio-economic status, the likelihood of black adult children to provide financial transfers to their parents becomes similar to that of whites (Taylor, 1988; Wong, Capoferro, and Soldo, 1999). On the other hand, empirical studies show that blacks and Hispanics have higher filial responsibility expectations than do whites, and the difference is only marginally attenuated by controls for sociodemographic and other factors (Burr and Mutchler, 1999; Lee, Peek, and Coward, 1998). Hence, minority elders are more likely to receive time transfers from their adult children (Chatters and Taylor, 1993; Taylor, 1988).

Adult children with higher educational attainment usually have better earning potential. Because higher wages allow adult children to use financial transfers as their key transfer tokens (Couch, Daly, and Wolf, 1999), their incidence and amount of monetary transfer may increase. Adult children who are not well educated usually occupy the lower strata of the occupational hierarchy, and may offer more time rather than financial transfers.

Finally, in their 1999 study, Couch et al. found that having more children under age 18 significantly decreases adult children's monetary contribution to their elderly parents, yet there is no significant evidence to suggest that they use time transfers as supplement (Couch, Daly, and Wolf, 1999).

Factors affect parents' needs

Factors affecting parents' needs for intergenerational transfers include parents' age, educational attainment, and marital status. Parents' need is highly correlated to their age. Because advancing age is associated with degrading health and functional conditions, older parents are more likely to obtain time transfers from their adult children (Boaz, Hu, and Ye, 1999; Dwyer, 1995; Pezzin and Schone, 1999). Parents' socioeconomic status often plays a decisive role in their economic wellbeing, which may directly affect their receipt of monetary transfers. Elders' years of education, although not precisely reflecting their actual financial situation, serves as a proxy to

evaluate financial needs. Parents with higher educational attainments may have betterpaid life-long jobs before they retired and accumulate more wealth over their lifetime. Thus, their needs for monetary transfers are low. Furthermore, parents' education may also affect their receipt of time transfer. Since better-educated individuals tend to have a better ability to monitor their own health conditions, parents with higher educational attainment usually need less instrumental assistance from their adult children (Pampel and Hardy, 1994; Smith and Kington, 1997). Lastly, unmarried mothers may receive more monetary and time transfers from their adult children (Eggebeen, 1992; Roan and Raley 1996). However, once elderly mothers' economic status and health are considered, unmarried elders with secure income and fewer functional constraints may demand fewer transfers from their adult children.

Conceptualization and hypotheses

Because of gender norms and women's disadvantages in the labor force, adult daughters have more constraints on providing monetary transfers to their mothers than do adult sons. Thus, adult daughters use time transfer to supplement their smaller monetary transfers. Adult sons, who usually "pay a higher price" to forgo their wage, will use monetary resources instead of time transfers. However, if adult daughters are paid the same as their male coworkers, their transfer options expand. Parents' needs and the involvement of other family members in the transfer process also affect adult children's provision of transfers to their senior mothers.

This study hypothesizes that (1) In general, adult sons are more likely than adult daughters to provide monetary transfers, whereas adult daughters tend to give more

time to their mothers. (2) However, higher wages encourage adult daughters to increase the amount of monetary transfers, and decrease the amount of time transfers.

Data

To examine these relationships, the Health and Retirement Study (HRS) data is used for the statistical analyses. The HRS was first collected in 1992, and surveys were subsequently conducted every other year since. For this project, I use the 1992 (the first wave) and the 1996 (the third wave) data.

The first wave of HRS contains information of 7,607 respondents aged 51-61 in 1992. For currently married respondents, spouse records are also available (n=4,950 spouses). Conducting intergenerational transfer studies using the HRS has several merits over other data sets. First, this data includes sufficient cases of the 1931 to 1941 birth cohort, and allows me to examine how late-middle-aged adult children balance their work and family responsibility. Since adult children of this birth cohort belong to the "forerunner generation" encountering elderly caregiving responsibility, and many women in this age group have labor force participation experiences, the HRS provides a good opportunity to investigate how adult daughters' labor force participation and life course constraints can play a role in their elderly care outcomes.

Second, the HRS has very detailed information in monetary and time transfers, including transfer incidence and amounts, as well as source and direction of transfers. In addition to the respondents' characteristics, parents', spouses', and siblings' characteristics are also available in the dataset. This feature allows me to asses the influence of the support network on the incidence and quantity of transfers. This is a very critical aspect of intergenerational transfer research because support from spouses and siblings will help to alleviate adult children's constraints.

The third advantage of using HRS to conduct this research is one can trace the transfer variations over time because this is panel data. To proceed with my longitudinal analyses, the 1996 HRS (the third wave data) is merged with the 1992 records if adult children's biological mothers continued to survive in 1996. Besides the 1992 and 1996 HRS, this study also uses the 1990 Census data as a reference to calculate people's wage by occupational categories. Please refer to the variable and measurement section for details.

Sample

To be eligible for this study, the adult children should between age 51 and 61, married, employed and have a non-coresidence biological mother surviving in year 1992. Self-employed adult children and adult children in the armed forces are excluded from the analyses because their wages are less likely to be affected by the market. Excluding adult children with stepparents is necessary because stepparents usually have different parent-child relations with the late-middle-aged adult children, which may have different effect on their receipt of transfers. The 1996 sample contains follow up cases of the 1992 adult children. Nevertheless, adult children in 1996 are allowed to dropout from the labor force, experience marital disruptions, and coreside with the studied parents—as long as their mothers survived in 1996.

The 1992 sample contains 2776 adult children, which is comprised by 1470 adult sons and 1306 adult daughters. In 1996, only 958 adult sons and 914 adult

daughters stay in the sample, a total of 1872 adult children remain in the follow up study. The numbers of adult sons are greater than the numbers of adult daughters in both 1992 and 1996 samples. Keep in mind one of the sample selection criteria is adult children must be working for pay in 1992. The HRS collects data on individuals at their late employment years, that is, age 51 to 61. Since adult daughters tend to dropout or retire from the labor force earlier than adult sons, it is very reasonable that fewer adult daughters are included in this study.

Variables and measurements

Dependent variables

The 1992 and 1996 HRS first asks adult children whether they had provided more than 500 dollars of monetary transfers and more than 100 hours of time transfers to their mothers in the past 12 months. If the answers are positive, the actual amounts of monetary and time transfers are recorded subsequently. In this study, both transfer incidence and transfer amount from adult children to their non-coresident mothers are evaluated. In 1992 and 1996, the transfer incidence variables are coded as 1 if adult children provided monetary or time transfers to their mothers, and 0 if otherwise. Logistic regressions are used to test for hypotheses.

The monetary and time transfer amounts in 1992 are examined by Tobit regressions, using 500 dollars and 100 hours as the censoring points. In 1996, whether the transfer amounts have increased over time become the dependent variables of the study. If monetary or time transfer amounts have increased during the four-year period,

these variables are coded as 1, and 0 if otherwise. Again, logistic regressions are used to examine the relationships between the dependent and independent variables.

Explanatory variables

The explanatory variables to assess the incidence and amount of transfers are adult children's sex, percent personal wage compared to 1990 Census the same occupation male workers' mean wage, and work hours. These variables are constructed as follows:

- Adult children's sex: This is a dichotomized variable, adult daughter=1, and 0 if otherwise.
- Adult children's percent personal wage compared to 1990 Census the same occupation male workers' mean wage: following steps are used to create this variable:
 - (1) Include the 1990 Census data. Employed individuals age 51 to 61 are grouped into 16 occupational categories that consistent with the occupational categories provided by the HRS (excluding self-employed and arm forces). Male's mean wage is calculated by each occupational category.
 - (2) Identify HRS adult children's personal wage and occupation.
 - (3) Generate a variable, "percent personal wage compared to 1990 Census the same occupation male workers' mean wage" via the formula:

1992 HRS adult children's personal wage by occupationX 1001990 Census male's mean wage by occupationX 100

The variable created by these procedures generates values from zero to 1413, indicating that adult children's personal wage ranges from zero to 1413% of the male's average wage in the labor force by occupation. When the percentages equal or greater than 100, it means adult children earn equal or more than male workers' average wage. Conversely, when the percentage are less than 100, the smaller the numbers are, the greater the wage differentials between the adult children and the labor market.

- Adult children's work hours: A value=1 is given if adult children work full time (35 hours or longer), 0=otherwise.
- 4. Interaction term of adult children's sex and adult children's wage rate: This is an interaction term created by multiply adult children's sex, and percent personal wage compared to 1990 Census the same occupation male workers' mean wage.
- 5. Interaction term of adult children's sex and adult children's work hours: This is an interaction term created by multiply adult children's sex, and whether adult children work full time.

Control variables

In addition to the explanatory variables, following variables from 1992 data are included as controls:

 Spouses' characteristics and transfer involvements: Including spouses' work status (working=1), spouses' age relative to adult children (spouses older than the adult children=1), spouses' health (good health=1), and spouses' amount of time transfer to their mothers-in-law in the past year (spouses' actual time transfer amount, ranging from zero to 1946 hours).

- 2. Sibling's sex and transfer involvements: Including number of brothers (a numerical variable ranging from zero to 13), number of sisters (a numerical variable ranging from zero to 13), siblings gave any monetary transfer to mothers (siblings ever gave monetary transfers=1), and siblings gave any time transfer to mothers (siblings ever gave time transfers=1).
- 3. Adult children's ability: In addition to adult children's labor force participation experiences, following characteristics of the adult children may also affect their ability to provide transfers: adult children's age (a numerical variable ranging from 51 to 61), race (non-Hispanic white, non-Hispanic black, and others), educational attainment (less than high school, high school graduate, some college, and college and above), household assets (total amount of household assets in natural-log form), adult children's health (good health=1), and number of financially dependent children (number of children under age 18).
- 4. Mothers' needs: Mothers' needs are defined by followings (from adult children's perspective): age (age 80 and above= 1), have at least one ADL limitation (=1), coreside with other people (=1), still married (=1), educational attainment¹ (completed more than high school education=1), economic well-being (financially better-off than the adult children=1).

¹ While HRS provides information regarding elderly mothers' years of schooling, significant percentage of missing values are found in the dataset (please see Table 1 for details). To assess the effects of these missing values, a missing flag on mothers' education is included in the multivariate analysis.

Preliminary findings

Descriptive analysis

Table 1 presents weighted descriptive statistics for the independent variables used in this project. 46.55% of the study sample are adult daughters. As the Table shows, adult sons earn much more than adult daughters in the labor market. Using 1990 Census male workers' mean wage as the baseline (by occupation and standardized as 100), adult sons on average earn 36.81% more than the baseline population, whereas adult daughters receive wages that are 19.5% less than their male counterparts in the same occupation. Adult sons are also more likely than adult daughters to work full time (69.70% and 64.75%, respectively).

The fact that women tend to marry older men is reflected in this sample. Slightly more than 48% of adult daughters reported that their husbands are older than themselves, yet only 11% of the adult sons married older wives. This, in turn, creates an effect on the spousal dynamics. For adult sons, having younger wives means their spouses are more likely to stay in the labor force (58.70%) and having good health (74.68%). Conversely, adult daughters' husbands are less likely to work for pay (51.84%) and to have good health conditions (55.60%). Wives of the adult sons also contribute longer hours to their mothers-in-law than husbands of adult daughters (8.65 hours vs. 0.43 hours, respectively). Apparently, the gendered practice of time transfers not only applies to the individual adult sons and daughters, it also penetrates into the spousal relationship. Interestingly, siblings of the adult daughters seem to be more likely to share the monetary and time transfer burdens than those of the adult sons, although the causes underlining this phenomenon is not clear at this point.

Adult children in this study are 51 to 61 years of age, with adult sons slightly older than adult daughters. The racial composition of this sample is about 85% whites, 8% blacks, and 7% all others Adult sons are better educated, having more household assets, and are more likely to have good health than adult daughters. However, on average adult daughters have more financially dependent children than adult sons.

Examinations of mothers' needs show that about 48% of the mothers are age 80 and above, and 10% of them have at least one ADL limitation. Close to 60% of these mothers are currently living with someone else, and 20% still maintain a intact marriage with adult children's biological fathers. Mothers of adult sons are better educated than those of adult daughters. Finally, from the adult children's perspective, 30% of these mothers are financially better off than adult children themselves.

[Table 1 about Here]

Table 2 presents the weighted descriptive analysis results on transfer incidences and transfer amounts from adult children to their mothers in 1992 and 1996. The results are shown by the year of study.

Incidence and amount of monetary transfers

As Table 2 shows, in 1992, more adult daughters than adult sons had given \$500 dollars or more to their parents. While about 10% of adult daughters ever provided monetary resource to their mothers, only 2.88% of adult sons ever did so. The descriptive statistics on amounts of monetary transfer also demonstrate a very similar pattern. Compared to adult sons, daughters gave more money to their mothers. When all adult children are considered (including adult children who never gave a monetary transfer, ever gave transfer but under \$500, and ever gave transfer equal or greater than

\$500 in 1992), the t-test result indicates that adult daughters' average amount of monetary contribution is significantly higher than that of the adult sons' (p<=.05). Once we focus the analysis on adult children who had given \$500 or over, however, the transfer differential between adult sons and daughters no longer significant.

In 1996, a greater percentage of adult daughters than adult sons had given at least \$500 to their mothers (11.03% vs. 7.12%, respectively). Compared to the 1992 data, one can find that adult children's monetary transfer incidence has increased after the four-year interval. 9.04% of the adult children offered more than \$500 to their mothers in 1996, up from 6.19% in 1992. Besides the transfer incidence, the amount of transfer also expanded. In 1992, among adult children who had given at least \$500 transfers, the average amount of money to the mothers is \$2496. But in 1996, this money amount has increased to approximately 3015 dollars. Since mothers' needs rise with their advancing ages, this result reveals that adult children would responds to their mothers' increasing needs and provide more support over time.

Incidence and amount of time transfers

The lower panel of the Table 2 summarizes the descriptive analysis results for the incidence and amount of time transfers. In 1992, adult daughters are more likely to be the transfer giver than their male counterparts. Indeed, only a very low percentage of adult sons had ever provided time transfers to their parents—only 0.33% of elderly mothers acquired time transfers from their adult sons. This figure is much higher for adult daughters (7.91%). Adult daughters also give much greater amounts of time transfers than adult sons, when cases of transfer amounts under 100 hours are also included in the analysis (t-test p<=.001). When transfer cases under 100 hours are

excluded from the study, however, t-test finds no significant difference on adult sons and daughters' transfer amounts.

Compared to 1992, the time transfer incidence in 1996 increased. This is mostly due to adult sons' greater participation in the time transfer practices, which may be a response to their aging parents' needs. While in 1992 only 0.33% of adult sons ever provided time transfers to their mothers, this number becomes 3.89% after four years. The percentage of adult daughters' time transfer incidence is literally unchanged from 1992 to 1996, yet their transfer amounts are still greater than that of the adult sons'. As expected, adult daughters continue to provide longer hours of time transfers than adult sons in 1996. When transfers under 100 hours are also considered, significant differences in time transfer amounts can be found between adult daughters and sons. Table 3 provides more details regarding adult sons and daughters changes in transfers from 1992 to 1996. Greater proportions of adult daughters than adult sons increased their monetary and time contributions in the four-year interval.

[Table 2 and Table 3 about Here]

Multivariate analysis

Here, I only briefly summarize the multivariate analysis results in 1992. A further analysis and discussions on the 1996 results will be provided if this paper is accepted for presentation.

Monetary transfer

Based on Table 4-1, adult children's labor force participation has a decisive effect on adult children's monetary transfer outcomes. Adult children's sex is a key factor in this regard (p<=.001). Adult daughters' monetary transfer ability is associated

with their paid work experiences. The lower likelihood of providing monetary transfer, and the smaller amount of monetary contribution of the adult daughters, can both be explained by their disadvantages in the labor force. When adult daughters' wage rates increase, their monetary transfer amount escalate remarkably ($p \le .001$).

In addition to the labor force participation experiences, adult children's transfer behaviors are also strongly influenced by their family members' characteristics. Adult children's spouses may either compete for the household financial resources with their parents-in-law, or help adult children to fulfill their monetary transfer obligations. Spouses' advancing age is negatively related to adult children's transfer amount ($p\leq=.001$). In this case, spouses are competing for the resources with their mothers-inlaw because their own needs also increase with the aging processes. Spouses' health exhibits a similar pattern ($p\leq=.001$). When spouses are in good health, adult children do not have to divide their resources to satisfy both their parents' and spouses' needs. Next, spouses' time contribution also shows that spouses' caregiving involvement can significantly reduce adult children's amount of monetary transfer ($p\leq=.001$). When spouses spend longer hours helping their mothers-in-law, adult children can spend less money paying for the market services. Hence, adult children are using their spouses' time transfer as a substitution for their own monetary transfer.

Siblings' assistance is also important. The fact that siblings involvements significantly decreases adult children's monetary transfers clearly suggests that siblings' efforts can alleviate adult children's monetary transfer burden ($p \le .001$). Having more brothers does not reduce adult children's amount of transfer. Instead, it encourages adult

children to provide greater amount of money to their mothers ($p \le .001$). Having more sisters, however, trims down adult children's monetary transfer burdens ($p \le .001$).

Adult children's ability can offer only a partial explanation for their incidence and amount of transfer. White adult children usually have higher earning potential, hence their greater contributions compared to non-whites are not at all surprising $(p \le 0.001)$. However, according to the study, adult children with higher transfer ability do not necessary give more money to their mothers. And in some cases, even with limited support-giving ability, adult children may still provide large transfers. For instance, adult children with less than high school education, and adult children with more financially dependent children, tend to give relatively high levels of monetary transfers in spite of their lower ability. From a stratification perspective, these less-welloff adult children who had given large amount of transfer may suffer from multiple hardships due to their economic constraints. The combination of lower income prospects and high transfer duties may create a dilemma in their daily lives. This "poorer adult children give greater amount of transfer" phenomenon cannot be explained away even when mothers' needs are also controlled in the regression models. Perhaps some of the variation can be explained by adult children's transfer motivation.

Undoubtedly, mothers' needs are critical factors to trigger adult children's monetary transfer. Transfer amount is positively related to mothers' age . When mothers live with someone else and are financially better off than the adult children, the transfer amount decreases (p<=.01 and p<=.001, respectively). Lastly, mothers with longer years of education (therefore better economic wellbeing) tend to receive a greater amount of money from their children (p<=.001).

Time transfer

The time transfer discrepancy between adult daughters and adult sons is influenced by cultural practices as well as the labor force economy. All else being equal, adult daughters are more likely to give time transfers, and their transfer amounts are far greater than that of the adult sons (p<=.001). Daughters are designated as the ideal caregivers to their mothers—among adult children who provided more than 100 hours of time transfer in the previous year, on average, adult daughters spent 447 hours longer than the adult sons (p<=.001). However, adult daughters with higher wage rates have a lower amount of time transfers to their mothers (p<=.05). As is suggested in the literature, this study confirms the argument that adult daughters are major caregivers, and while adult daughters who are better paid in the labor force somewhat reduce the amount of time transfers to their mothers, there is little evidence to suggest that adult daughters who work longer hours reduce their amount of time transfer. Women's labor force participation does not free them from family responsibilities, yet improvements in women's wages play a significant role in alleviate adult daughters' caregiving duties.

When spouses work for pay, are older than adult children, and have good health, adult children are less likely to give time transfers to their mothers. However, spouses' work status is positively related to adult children's amount of time transfer ($p \le .001$). This is probably because working spouses cannot share substantial amount of caregiving duties with adult children so they have to provide greater amount of time transfers to their mothers on their own. Furthermore, spouses also compete for the time resources with their mothers-in-law. Adult children with older spouses may need to divide their caregiving time so that their spouses and mothers can both receive the quantity of time transfers they need. Hence, when adult children's spouses are older, elderly mothers receive a lower amount of time transfers from their adult children $(p \le .001)$. The amount of time transfers from adult children's spouses to their elderly mothers-in-laws has an interesting effect on adult children's transfer behaviors. The likelihood of adult children to give time transfers to their mothers increases with their spouses' time contribution (p<=.001), yet when spouses provide greater quantity of assistance, adult children reduce the amount of their own transfers (p<=.001).

Having more brothers or sisters means individual adult children may have more potential sources of support, and hence the incidence of time transfer diminishes $(p \le 0.001)$ for brothers and $p \le 0.01$ for sisters, respectively). Nevertheless, adult children with several brothers do not necessarily decrease the amount of time transfers. Among adult children who had given 100 hours or more in time transfers, having one more brother is associated with 51 hours increase in time contributions ($p \le 0.01$). It is likely that other brothers may provide monetary resources to supplement the time transfers of adult children who perform major caregiving services, and exempt themselves from the large amount of time transfer duties to their mothers. Thus, brothers tend to play a complementary role in the time transfer dynamics. This sort of situation does not apply to the adult children-sisters dyads. Moreover, when siblings are involved in time transfers, the incidence for adult children to give time resources to their mothers also increase (p<=.001). Siblings' time transfer involvement can ease adult children's time transfer duties remarkably. If there is any sibling giving time transfers to the mother, adult children can decrease more than 500 hours of caregiving works on their own part $(p \le 0.01)$. This phenomenon also indicates that most of caregiving chores tend to

concentrate on specific adult children. This does not imply that other adult children are not helpful or lack of concern on their mother's wellbeing. Instead, siblings may develop a caregiving strategy together and use monetary resources to compensate for their time transfer duties if they are not the major caregiver to their mothers.

An examination of adult children's ability demonstrates that time transfer incidence and transfer amounts are very different concepts. Older adult children are less likely to provide time transfers ($p \le .001$), yet among adult children who ever gave transfers, advancing age is associated with greater amount of time transfers ($p \le .001$). Apparently adult children have coping strategies to fulfill their own and their mothers' needs. Older-aged adult children may not give transfers to their mothers because they have to take their personal needs into accounts. Nevertheless, since many mothers of the older adult children are the oldest-old, these mothers' needs are high and their adult children cannot just forgo their caregiving responsibilities. Therefore, it is not surprising that older adult children may indeed spend longer hours taking care of their mothers. Compared to other racial/ethnicity groups, black adult children are the most likely to give time transfers ($p \le .001$), followed by the whites ($p \le .001$). In spite of this, both black and white adult children tend to give smaller amount of time to their mothers than adult children of other races.

Educational attainment has a non-linear effect on adult children's provision of time transfer. Using high school graduate as the reference category, the results show that adult children with less than high school education are more likely to spend time in the caregiving tasks (p<=.001), followed by college graduate and adult children with some college education. Yet when transfer amount is concerned, it seems that high

school graduated adult children spend longest hours on their elderly mothers, and the transfer hour decreases with advancing years of schooling. Compared to the high school graduates, better educated adult children often have greater opportunity costs in the labor force, and therefore they may shorten their transfer hours in order to maintain their advantages in the labor market. Yet there is an exception--the most disadvantaged group in the labor force, the less than high school educated individuals tend to give the smallest amount of time transfer of all (p<=.001).

Having a greater amount of household assets increases the chances to achieve a transfer (p<=.001), although the transfer magnitude is unclear at this point. Surprisingly, adult children with good health are less likely to give transfer (p<=.05), and good health of the adult children is associated with a decrease in transfer amounts (p<=.001). Number of financially dependent children shows adult children's ability is one of the factors affecting their provision of time transfer. Having more financially dependent children significantly reduce the amount of transfer given by the adult children (p<=.001). In short, adult children's ability can only provide limited explanations on their time transfer practices. In some cases, parents' needs and adult children's motivation may be a more powerful tool to interpret their time transfer behaviors.

An analysis of mothers' needs demonstrates that adult children's time transfer incidences are highly correlated with their mothers' later-life needs. When mothers are older than age 80 and have at least one ADL limitation, they are more likely to receive time transfers from their adult children (p<=.001). Conversely, mothers who are better educated, and hence may have lower needs, are less likely to acquire time transfers (p<=.001). There are two exceptions found in this study. When mothers coreside with other people, and are still married to adult children's fathers, adult children are also more likely to give time to their mothers (p<=.001). Again, adult children's transfer motivation may be important in this regard. But high transfer incidence doesn't imply the transfer amount is equally substantial. Because mothers have other potential sources of support when they live with others, adult children's time transfer labor can somehow be off-set by the involvement of others. The rate of substitution is significant—adult children could reduce about 106 hours of time transfer if someone else live with their mothers (p<=.001). Finally, although mothers' intact marriage may be associated with less support needs, it ensures a better quality of relationship between mothers and their adult children. Hence, it is positively correlated with the amount of time transfers provided by the adult children (p<=.001).

	Sons (n=1470)	Daughters (n=1306)	Total (n=2776)
Adult children's labor force participation			
% Personal wage compared to Census 1990 the same occupation male workers' average wage	136.81	80.50	110.59
Work full time (35 hours+)	69.70%	64.75%	67.39%
Adult children female			46.55%
Spouses' characteristics			
Working for pay	58.70%	51.84%	55.50%
Older than the adult child	11.02%	48.07%	28.27%
Have good health	74.68%	55.60%	65.80%
Amount of time transfer to mother-in-law in the past year	8.65	0.43	4.26
Siblings' intergenerational transfer involvement			
Number of brothers	2.03	2.06	2.04
Number of sisters	2.14	2.19	2.16
Siblings gave any monetary transfer to mothers	1.33%	11.33%	5.99%
Siblings gave any time transfer to mothers	2.19%	13.43%	7.43%
Adult children's ability			
Age	55.00	54.78	54.90
Race			
White	85.85%	83.23%	84.63%
Black	6.58%	9.33%	7.86%
Other	7.34%	7.18%	7.27%
Educational attainment	10.540/	15.0(0)	17 2 40/
Less than high school High school graduate	18.54%	15.96%	1/.34%
Some college	20.88%	24 05%	22 36%
College and above	28.34%	21.28%	25.05%
Household assets	296048.41	246457.22	272962.04
Have good health	91.50%	90.95%	91.25%
Number of financially dependent children	0.04	0.59	0.29
Mothers' needs			
Age 80 and above	48.88%	46.67%	47.85%
At least one ADL limitation	10.80%	9.79%	10.33%
Live with other people (other than the studied adult children)	58.96%	58.76%	58.87%
Still married to adult children's biological fathers	19.52%	20.92%	20.17%
High school graduate and above	47.83%	42.62%	45.41%
High school graduate and above missing flag	4.16%	3.93%	4.05%
Financially better-off then the studied adult child	29.21%	29.72%	29.45%

Table 1: Weighted descriptive statistics of independent variables (a)

Source: Author's analysis using Health and Retirement Study 1992. Note (*a*): Information based on adult children's perspectives. All adult children in the study sample are age 51 to 61, working for pay, married, and not living with their biological mothers in 1992.

Type of transfer	1992 (n=2776)	t-test 1996 t-1 (n=1872)	test
Monetary transfer	(ii _ (i)	(1 10/2)	
Ever gave \$500 or more			
From both adult sons and daughters	6.19%	9.04%	
From adult sons only	2.88%	7.12%	
From adult daughters only	9.99%	11.03%	
Average amount of transfer, including transfers under 500 dollars			
From both adult sons and daughters	155.52	272.94	
From adult sons only	65.08	209.54	
From adult daughters only	259.37	339.15	
Average amount of transfer, only transfers equal or more than 500 dollars			
From both adult sons and daughters	2495.95	3015.22	
From adult sons only	2221.51	2939.08	
From adult daughters only	2586.90	3066.58	
<u>Time transfer</u>			
Ever gave 100 hours or more			
From both adult sons and daughters	3.86%	5.52%	
From adult sons only	0.33%	3.89%	
From adult daughters only	7.91%	7.23%	
Average amount of transfer, including transfers under 100 hours			
From both adult sons and daughters	27.07	37.71	
From adult sons only	0.39	26.86	
From adult daughters only	57.70 *	** 49.04 +	
Average amount of transfer, only transfers equal or more than 100 hours			
From both adult sons and daughters	696.70	675.26	
From adult sons only	118.66	682.59	
From adult daughters only	724.44	671.14	

Table 2: Adult children's provision of transfers to their mothers in 1992 and 1996By adult children's sex, weighted statistics

Source: Author's analysis using Health and Retirement Study 1992 and 1996. Note: t-test significant *<=.05, **<=.01, ***<=.001

	Money	Time
Incidence: Ever gave transfer in 1992 and 1996		
Both adult sons and daughters		
NO in 1992, NO in 1996 ()	88.52%	92.32%
NO in 1992, YES in 1996 (- +)	6.40%	4.62%
YES in 1992, YES in 1996 (+ +)	2.63%	0.91%
YES in 1992, NO in 1996 (+ -)	2.44%	2.15%
Adult sons only		
NO in 1992, NO in 1996 ()	92.05%	96.11%
NO in 1992, YES in 1996 (- +)	5.82%	3.89%
YES in 1992, YES in 1996 (+ +)	1.31%	0%
YES in 1992, NO in 1996 (+ -)	0.83%	0%
Adult daughters only		
NO in 1992, NO in 1996 ()	84.84%	88.37%
NO in 1992, YES in 1996 (- +)	7.02%	5.38%
YES in 1992, YES in 1996 (+ +)	4.01%	1.85%
YES in 1992, NO in 1996 (+ -)	4.13%	4.40%
Amount: Changes in amounts from 1992 to 1996		
Both adult sons and daughters		
The Same: about same amounts given in 1992 and 1996	88.44%	91.05%
Increase: 1996 transfer amount >1992 transfer amount	7.96%	6.05%
Decrease: 1996 transfer amount < 1992 transfer amount	3.60%	2.90%
Adult sons only		
The Same: about same amounts given in 1992 and 1996	91.85%	95.37%
Increase: 1996 transfer amount >1992 transfer amount	6.63%	4.63%
Decrease: 1996 transfer amount < 1992 transfer amount	1.52%	0%
Adult daughters only		
The Same: about same amounts given in 1992 and 1996	84.87%	86.53%
Increase: 1996 transfer amount >1992 transfer amount	9.36%	7.53%
Decrease: 1996 transfer amount < 1992 transfer amount	5.77%	5.93%

Table 3: Changes in provision of monetary and time transfers from 1992-1996,weighted statistics

_

Source: Author's analysis using Health and Retirement Study 1992 and 1996.

		n=2/16
	Transfer incidence	Transfer amount
Adult children labor force participation		
% Personal wage compared to Census 1990 the	-0.006***	9.999***
same occupation male workers' average wage	(0.0005)	(1.463)
Adult children work full time (35 hours+)	0.016	-748.237**
	(0.074)	(249.850)
Adult children female	-0.302***	-1295.450***
5	(0.080)	(277.479)
Adult children female*Adult children wage rates	0.008***	-9.987***
	(0.0001)	(1.852)
Adult children female*Adult children work hours	0.090	986.100***
	(0.088)	(299.343)
Spouses' characteristics		
Working for nav	-0 292***	679 295***
to onling for puy	(0.052)	(178, 727)
Older than the adult children	0 292***	-1036 700***
	(0.045)	(157,288)
Have good health	-1 087***	2746 947***
	(0.054)	(189 137)
Amount of time transfer to mothers-in-law in the	0.001***	-3 553***
past year	(0.0001)	(0.533)
Siblings' intergenerational transfer involvement		
Number of brothers	0 072***	210 106***
Number of biomers	-0.073	(29, 422)
Number of sisters	(0.011)	(36.433)
Number of sisters	(0.021)	(22.082)
Siblings gave any monotory transfer to mothers	(0.010)	(32.082)
Sidnings gave any monetary transfer to mothers	(0.044)	-0197.840°
	(0.044)	(170.301)
Adult children's ability		
Age	0.010	36.914
	(0.006)	(23.563)
Race		
White	-0.701***	2338.099***
	(0.058)	(200.154)
Black	0.271***	-272.013
	(0.072)	(244.013)
Other (Reference category)		

Table 4-1: Monetary transfer incidence and transfer amounts from adult children
to their mothers in 1992, weighted multivariate statistics using logistic
regression (a) and Tobit regression (b)
n=2776

	II 2770, continued	
	Transfer	Transfer
	incidence	amount
Educational attainment		
Less than high school	-0.292***	3051.257***
C C	(0.061)	(221.793)
High school graduate (Reference category)		
Some college	0.411***	-1312.530***
	(0.050)	(165.441)
College and above	0.911***	-2136.480***
	(0.047)	(161.516)
Household assets, logged	0.133***	-114.520***
	(0.008)	(25.175)
Have good health	0.093	14.143
	(0.064)	(219.390)
Number of financially dependent children	-0.090***	446.991***
	(0.026)	(88.172)
Mothers' needs		
Age 80 and above	-0.068	466.912***
	(0.040)	(135.430)
At least one ADL limitation	0.371***	-1214.170***
	(0.054)	(185.378)
Live with other people	-0.199***	-466.442**
	(0.046)	(156.742)
Still married to adult children's biological fathers	0.542***	-211.667
	(0.049)	(167.924)
High school graduate and above	-0.054	1115.200***
	(0.040)	(136.041)
High school graduate and above missing flag	0.100	-828.583**
	(0.101)	(322.176)
Financially better-off then the studied adult children	-0.278***	-971.512***
	(0.047)	(156.013)

Table 4-1: Monetary transfer incidence and transfer amounts from adult children
to mothers in 1992, weighted multivariate statistics using logistic
regression (a) and Tobit regression (b)n=2776, continued

Source: Author's analysis using Health and Retirement Study 1992.

Note: (a): Dichotomized dependent variable on whether adult children ever gave \$500 or more to their mothers.

(b): Numerical dependent variable on monetary amount transferred to mothers, censoring at \$500.

*<=.05, **<=.01, ***<=.001. Standard errors presented in parentheses.

		n=2776
	Transfer incidence	Transfer amount
Adult children labor force participation		
% Personal wage compared to Census 1990 the	0 0009	0.006
same occupation male workers' average wage	(0,0006)	(0.186)
Adult children work full time (35 hours+)	-0.341	122.279*
	(0.205)	(51,181)
Adult children female	2.878***	446.948***
	(0.206)	(52.148)
Adult children female*Adult children wage rates	0.002**	-0.493*
<i>,</i> 8	(0.001)	(0.230)
Adult children female*Adult children work hours	-0.317	29.670
5	(0.212)	(54.669)
Spouses' characteristics		
Working for pay	-1 362***	254 606***
, or any for put	(0.087)	(24,586)
Older than the adult children	-0 653***	-116 401***
	(0.071)	(21 197)
Have good health	-0.207*	33.257
	(0.086)	(25,509)
Amount of time transfer to mothers-in-law in the	0.159***	-0.202***
past year	(0.008)	(0.044)
Siblings' intergenerational transfer involvement		
Number of brothers	-0 147***	51 407***
	(0.017)	(5 427)
Number of sisters	-0.048**	3,503
	(0.016)	(4 792)
Siblings gave any time transfer to mothers	2 364***	-531 881***
	(0.059)	(20.434)
Adult children's ability		
Age	-0 072***	17 495***
	(0.010)	(3.297)
Pace		
White	0 937***	-401 961***
white	(0.112)	$(37 \ 934)$
Black	0.991***	-447 498***
DIWK	(0.130)	(44 387)
Other (Reference category)		

Table 4-2: Time transfer incidence and transfer amounts from adult children to
mothers in 1992, weighted multivariate statistics using logistic regression
(a) and Tobit regression (b)n=2776

	n=2776, continued	
	Transfer	Transfer
	incidence	amount
Educational attainment		
Less than high school	1.150***	-467.542***
č	(0.075)	(25.295)
High school graduate (Reference category)		
Some college	0 232**	-223 944***
Some conege	(0.082)	(25, 472)
College and above	0 849***	-368 268***
	(0.073)	(24.394)
Household assets, logged	0.142***	-4.291
, 20	(0.011)	(3.241)
Have good health	-0.186*	-230.261***
C	(0.089)	(33.036)
Number of financially dependent children	0.138***	-91.026***
	(0.030)	(9.784)
Mothers' needs		
Age 80 and above	0.404***	26.682
	(0.059)	(18.659)
At least one ADL limitation	0.391***	7.662
	(0.083)	(29.227)
Live with other people	0.315***	-106.253***
	(0.074)	(23.666)
Still married to adult children's biological fathers	0.518***	85.752***
	(0.080)	(26.000)
High school graduate and above	-0.258***	-27.074
	(0.059)	(19.265)
High school graduate and above missing flag	0.011	122.902**
	(0.121)	(41.245)
Financially better-off then the studied adult children	0.024	-21.002
	(0.070)	(24.006)

Table 4-2: Time transfer incidence and transfer amounts from a	adult children	to
mothers in 1992, weighted multivariate statistics usin	g logistic regi	ression
(a) and Tobit regression (b)		
	0776	, -

Source: Author's analysis using Health and Retirement Study 1992.

Note: (a): Dichotomized dependent variable on whether adult children ever gave 100 hours or more to their mothers.

(b): Numerical dependent variable on monetary amount transferred to mothers, censoring at 100 hours.

*<=.05, **<=.01, ***<=.001. Standard errors presented in parentheses.

		n=1872
	Money	Time
Adult children labor force participation		
% Personal wage compared to Census 1990 the	-0.0002	-0.003***
same occupation male workers' average wage	(0.0002)	(0.0004)
Adult children work full time (35 hours+)	-0.050	0.502***
· · · · · · · · · · · · · · · · · · ·	(0.055)	(0.081)
Adult children female	-0.393***	0.479***
0	(0.076)	(0.093)
Adult children female* Adult children wage rates	0.002***	0.004***
,	(0.0001)	(0.0005)
Adult children female* Adult children work hours	0.556***	-0.695***
5	(0.076)	(0.098)
Spouses' characteristics		
Working for nav	0.076	0 227***
working for puy	(0.045)	(0.054)
Older than the adult children	-0.093*	0.003
	(0.099)	(0.051)
Have good health	-0.286***	-0 404***
	(0.050)	(0.058)
Amount of time transfer to mothers-in-law in the	0.001**	0.006***
past year	(0.0006)	(0.0004)
Siblings' intergenerational transfer involvements		
Number of brothers	0 069***	0 047***
Number of brothers	(0.00)	(0.047)
Number of sisters	(0.007)	-0.056***
Number of sisters	(0,000)	(0.012)
Siblings gave any monetary transfer to mothers	1 93/1***	0.585***
Storings gave any monetary transfer to motions	(0.051)	(0.066)
<u> </u>	(0.001)	(0.000)
Adult children's ability	0 027***	0 077***
Age	-0.032***	0.077
	(0.007)	(0.008)
Race		
White	-0.556***	-0.069
	(0.059)	(0.080)
Black	0.507***	0.250*
	(0.073)	(0.103)
Other (Reference category)		

Table 5-1: Monetary and time transfer incidence from adult children to their mothers in 1996, weighted multivariate statistics using logistic regression (a)

	n=	=1872, continued
	Money	Time
Educational attainment		
Less than high school	-0.358***	-0.441***
-	(0.060)	(0.069)
High school graduate (Reference category)		
Some college	0.083	-0.234***
C C	(0.046)	(0.054)
College and above	0.446***	0.276***
	(0.044)	(0.055)
Household assets, logged	0.129***	0.045***
	(0.009)	(0.010)
Have good health	0.301***	0.362***
	(0.071)	(0.085)
Number of financially dependent children	0.075**	0.066*
	(0.024)	(0.030)
Mothers' needs		
Age 80 and above	-0.053	0.386***
	(0.037)	(0.045)
At least one ADL limitation	-0.166**	-0.080
	(0.057)	(0.068)
Live with other people	0.076	-0.083
	(0.043)	(0.052)
Still married to adult children's biological fathers	0.171***	0.028
	(0.048)	(0.058)
High school graduate and above	0.141***	0.118**
	(0.037)	(0.044)
High school graduate and above missing flag	0.673***	0.015
	(0.084)	(0.115)
Financially better-off then the studied adult children	-0.070	0.127*
	(0.045)	(0.053)

Table 5-1: Monetary and time transfer incidence from adult children to their mothers in 1996, weighted multivariate statistics using logistic regression (a)

Source: Author's analysis using Health and Retirement Study 1992 and 1996.

Note: (a): Dichotomized dependent variables on whether adult children ever gave \$500 or more, and ever gave 100 hours or more, to their parents in 1996.

(b): All independent variables are from 1992 data to avoid endogeneity.

*<=.05, **<=.01, ***<=.001. Standard errors presented in parentheses.

		n=1872
	Money	Time
Adult children labor force participation		
% Personal wage compared to Census 1990 the	0.0004	-0.004***
same occupation male workers' average wage	(0.0002)	(0.0004)
Adult children work full time (35 hours+)	-0.063	0.660***
	(0.057)	(0.077)
Adult children female	-0.213**	0.338***
5	(0.078)	(0.090)
Adult children female* Adult children wage rates	0.0008*	0.005***
<i>v</i> 0	(0.0004)	(0.001)
Adult children female* Adult children work hours	0.468***	-0.575***
5	(0.079)	(0.094)
Spannag' abayantaviation		~ /
Working for nov	0 121*	0 165**
working for pay	(0.121)	(0.051)
Older then the adult shildren	(0.046) 0.224***	(0.031) 0.122*
Older than the adult children	-0.234	-0.123
Have good health	(0.040) 0.217***	(0.030)
nave good health	(0.052)	-0.272
Amount of time transfer to methods in law in the	(0.032)	(0.033)
Amount of time transfer to motifers-in-law in the	(0.005)	(0.004)
past year	(0.0003)	(0.0003)
Siblings' intergenerational transfer involvement		
Number of brothers	0.063***	0.012
	(0.010)	(0.011)
Number of sisters	-0.013	-0.060***
	(0.009)	(0.011)
Siblings gave transfer to mothers	1.316***	0.340***
	(0.055)	(0.069)
Adult children's ability		
Age	-0.015*	0.049***
C C C C C C C C C C C C C C C C C C C	(0.007)	(0.007)
Dago		× /
White (b)	0 703***	0.142
	(0.058)	(0.142)
Black	0.030	0.002j 0.485***
DIACK	$(0.2)^{4}$	(0.103)
Other (Reference category)	(0.072)	(0.105)
(itereference cutegory)		

Table 5-2: Amount of monetary and time transfer increased from 1992 to 1996,weighted multivariate statistics using logistic regression (a)

	n=1872,	
continued		
	Money	Time
Educational attainment		
Less than high school	-0.549***	-0 404***
	(0.065)	(0.067)
High school graduate (Reference category)		
Some college	0 105*	0 022
	(0.046)	(0.050)
College and above	0 298***	-0 292***
	(0.046)	(0.054)
Household assets, logged	0.082***	0.049***
	(0.009)	(0.009)
Have good health	0.431***	-0.050
	(0.077)	(0.072)
Number of financially dependent children	0.090***	-0.100**
	(0.025)	(0.031)
Mothers' needs	()	()
Age 80 and above	-0.053	0.558***
	(0.038)	(0.043)
At least one ADL limitation	-0.260***	-0.142*
	(0.062)	(0.065)
Live with other people	0.263***	-0.085
	(0.045)	(0.050)
Still married to adult children's biological fathers	0.254***	0.097
	(0.051)	(0.056)
High school graduate and above	0.150***	0.089*
	(0.039)	(0.042)
High school graduate and above missing flag	0.386***	-0.129
	(0.095)	(0.114)
Financially better-off then the studied adult children	0.026	-0.088
	(0.047)	(0.052)

Table 5-2: Amount of monetary and time transfer increased from 1992 to 1996, weighted multivariate statistics using logistic regression (a)

Source: Author's analysis using Health and Retirement Study 1992 and 1996.

Note: (a): The dependent variable is coded as 1 if the transfer amount had increased from 1992 to 1996, 0 if otherwise. (b): All independent variables are from 1992 data to avoid endogeneity.

+<=.10, *<=.05, **<=.01, ***<=.001. Robust standard errors presented in parentheses.

Reference

- Aronson, Jane. 1992. "Women's Sense of Responsibility for the Care of Old People: But Who Else is Going to Do It?" *Gender and Society*, Vol. 6, No. 1, pp: 8-29.
- Barron, John M., Dan A. Black and Mark A. Loewenstein. 1993. "Gender Differences in Training, Capital, and Wages." *The Journal of Human Resources*, Vol. 28, No. 2, pp. 343-364.
- Becker, Gary. 1991. A Treatise on the Family. Cambridge, MA: Havard Unversity Press.
- Blau, Francine D. 1998. "Trends in the Well-being of American Women, 1970-1995." Journal of economic Literature, Vol. 36, No. 1, pp: 112-165.
- Boaz, Rachel F., Jason Hu, and Yongjia Ye, 1999. "The Transfer of Resources from Middle-aged Children to Functionally Limited Elderly Parents: Providing Time, Giving Money, Sharing Space." *The Gerontologist*, Vol. 39, No. 6, pp. 648-657.
- Browne, Irene. 2000. "Opportunities Lost? Race, Industrial Restructuring, and Employment among Young Women Heading Households." *Social Forces*, Vol. 78, No. 3, pp. 907-929.
- Burr, Jeffrey A. and jan E. Mutchler. 1993. "Nativity, Acculation, and Economic Status: Explanations of Asian American Living Arrangements in Later Life." *Journal of Gerontology: Social Sciences.*" Vol. 48, No. 2, S55-S63.
- Chatters, Linda M. and Robert Taylor. 1993. "Intergenerational Support: The Provision of Assistance to Parents by Adult Children." In James S. Jackson, Linda Chatters and Robert J. Taylor (eds.) *Aging in Black America*. CA: Sage Publication.
- Couch, Kenneth A, Mary C. Daly and Douglas A. Wolf. 1999. "Time? Money? Both? The Allocation of Resources to Older Parents." *Demography*, Vol. 36, No. 2, pp. 219-232.
- Curran, Sara, Sara McLanahan and Jean Knab. 1998. "Ties That Bind: Marital History, Kinship Ties and Social Support among Older Americans." Paper presented at the Annual Meeting of the Population Association of America.
- Eggebeen, David J. 1992. "Family Structure and Intergenerational Exchanges." *Research* on Aging, Vo. 14, No. 4, pp. 427-477.
- England, Paula, Lori L. Reid, and Barbara S. Kilbourne. 1996. "The Effect of the Sex Composition of Jobs on Starting Wages in an Organization: Findings from the NLSY." *Demography*. Vol. 33, No. 4: 511-521.

- Ettner, Susan L. 1995. "The Impact of Parent Care on Female Labor Supply Decisions." *Demography*, Vol. 32, pp: 63-80.
- Hirsch, Barry T. and Edward J. Schumacher. 1992. "Labor Earnings, Discrimination, and the Racial Composition of Jobs." *The Journal of Human Resources*, Vol. 27, No. 4, pp. 602-628.
- Johnson, Colleen. 1995. "Cultural Diversity in the Late-Life Family" in Rosemary Blieszner and Victoria H. Bedford (eds). *Handbook of Aging the Family*. CT: Greenwood Press.
- Lee, Gary R, Chuck W. Peek, and Raymond T. Coward. 1998. "Race Differences in Filial Responsibility Expectations among Older Parents." *Journal of Marriage and the Family*, Vol. 60, No. 2, pp. 404-412.
- Lin, I-fen, Noreen Goldman, Maxine Weinstein, Yu-hsuan Lin, Tristan Gorrindo, and Teresa Seeman. 2000. "Children's Provision of Support to Their Elderly Parents in Taiwan." Paper presented at the Population Association of America 2000 annual meeting, Los Angeles, California.
- Macpherson, David A. and Barry T. Hirsch. 1995. "Wage and Gennder Composition: Why Do Women's Job Pay Less?" *Journal of Labor Economics*, Vol. 13, No. 3, pp: 426-471.
- Matthews, Sarah H. and Tena Tarler Rosner. 1988. "Shared Filial Responsibility: The Family as the Primary Caregiver." *Journal of Marriage and the Family*, Vol. 50, pp: 185-195.
- Maume, David J. 1999. "Occupational Segregation and the Career Mobility of White Men and Women." *Social Forces*, Vol. 77, No. 4, pp. 1433-1459.
- Moen, Phyllis, Donna Dempster-McClain, and Robin M. Williams, Jr. 1992. "Successful Aging: A Life-Course Perspective on Women's Multiple Roles and Health." *American Journal of Sociology*, Vol. 97, No. 6, pp: 1612-1638.
- Pampel, Fred C. and Melissa Hardy, 1994. "Status Maintenance and Change During Old Age." Social Forces, Vol. 73, No. 1, pp: 289-314.
- Pezzin, Liliana and Barbara S. Schone. 1999. "Parental Marital Disruption and Intergenerational Transfers: An Analysis of Lone Elderly Parents and Their Children." *Demography*, Vol. 36, No. 3, pp. 287-297.

- Roan, Carol L. and R. Kelly Raley. 1996. "Intergenerational Coresidence and Contact: A Longitudinal Analysis of Adult Children's Response to Their Mother's Widowhood." *Journal of the Marriage and the Family*, Vol. 58, No. 3, pp: 708-717.
- Silverstein, Merril, Tonya M. Parrott, and Vern L. Bengtson. 1995. "Factors That Predispose Middle-Aged Sons and Daughters to Provide Social Support to Older Parents." *Journal of Marriage and the Family*, Vol. 57, no. 2, pp: 465-475.
- Smith, James P. and Raynard Kington. 1997. "Demographic and Economic Correlates of Health in Old Age." *Demography*, Vol. 34, No1, pp. 159-170.
- Taylor, R. 1988. "Aging and Supportive Relationships among Black American." In Jackson (ed.) *The Black American Elderly*. New York: Springer Publishing.
- Tomaskovic-Devey, Donald. 1993. "The Gender and Race Composition of Jobs and the Male/Female, White/Black Pay Gaps." *Social Forces*, Vol. 72, No. 1, pp. 45-76.
- Weinick, Robin M. 1995. "Sharing a Home: The Experiences of American Women and Their Parents over the Twentieth Century". *Demography*, Vol. 32, No. 2, pp. 281-297.
- Wolf, Douglas A., Vicky Freedman, and Beth Soldo. 1997. "The Division of Family Labor: Care for Elderly Parents." *Journal of Gerontology: Social Science 52B*, pp: 102-109.
- Wong, Rebeca, Chiara Capoferro, and Beth J. Soldo. 1999. "Financial Assistance from Middle-Aged Couples to Parents and Children: Racial-Ethnic Differences." *Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*, Vol. 54B, No. 3, pp: S145-S153.
- Wood, Robert G., Mary E. Corcoran and Paul N. Courant. 1993. "Pay Differences among the Highly Paid: The Male-Female Earnings Gap in Lawyers' Salaries." *Journal of Labor Economics*, Vol. 11, No. 3, pp. 417-441.