

# The Reconfigured Sandwich: A Fresh Look at Support from the Middle Generation

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## ABSTRACT

Since the 1980s, demographers have been aware of the potential emergence of a "sandwiched" generation—individuals caught between providing support to older parents while also supporting dependent children – but most studies have found only limited evidence of sandwiched caregiving in the U.S. In this paper, we use recent data from the Health and Retirement Study to take a fresh look at the concept of sandwiched caregiving for women ages 51-69 in 2008-2010. In addition to updating past trends in the flow of time and money to parents and children, we also use psychosocial measures from the HRS Leave Behind Questionnaire (LBQ) to contextualize those transfers within a larger model of family solidarity. Taken together, these analyses help to reframe the topic of sandwiching to provide a richer, updated understanding of what family life is like for those in the middle of multiple generations.

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Since the 1980s, demographers have been increasingly aware of the potential emergence of a "sandwiched" generation—individuals caught between providing assistance or support to older parents while also caring for or supporting their children. Although estimates have varied, most studies have found only limited evidence of sandwiched caregiving in the United States (Pierret 2006; Grundy and Henretta, 2006; Wiemers and Bianchi, 2013). For example, Pierret (2006) found that only 9% of women in their forties and early fifties in the National Longitudinal Survey of Young Women had substantial time or money support obligations to both parents and children in the late 1990s. Similarly, in their study of financial and housing support provided by women in the Panel Study of Income Dynamics, Wiemers and Bianchi (2013) found that only about 3% of women in the middle provided either type of support to both older and younger generations in 2007. Different definitions of samples and measures make comparisons difficult, but the fact remains that only a small minority of middle aged women are heavily burdened by caring for multiple generations. That said, there are numerous reasons why the burdens of sandwiched caregiving may be on the increase.

Because the risk of being sandwiched between two needy generations depends on both the longevity of the older generation as well as the age differences between generations, it is not surprising that earlier generations, which experienced shorter life expectancies and were spaced more closely together due to earlier ages at childbearing, would not overburden the middle generation. That is, fewer parents raising children had elderly parents of their own, and fewer adult children of elderly parents still had dependent-age children needing their support. However, given recent demographic trends toward later childbearing (due to later first births as well as increasing numbers of second families formed through remarriage (Cherlin and Furstenberg 1994) or post-divorce cohabitation (Bumpass, Raley & Sweet 1995), the resulting

larger age differences between parents and children may mean that more middle aged adults will be simultaneously juggling the care needs of dependent children as well as aging parents.

Moreover, the fact that younger cohorts now take longer to transition to adulthood and establish independence from their parents' support only extends their potential reliance on their parents to later ages (Settersten and Ray, 2010). At the older end of the life course, continued increases in longevity suggest that many more adults will survive to advanced ages when frailty and disability are more common (Minino et al. 2011). For all of these reasons, it is likely that both older and younger generations may place increasing demands for support on more recent cohorts reaching middle age.

In this paper, we use data from the Health and Retirement Study (HRS) to take a fresh look at the concept of sandwiched caregiving in the United States. The HRS is one of the best sources of data for studying these issues because it includes rich longitudinal information about flows of support to aging parents as well as to children and grandchildren. The periodically refreshed samples of adults over age fifty allow us to now explore sandwiching among baby boom cohorts as they reach this period of the life course. We start by asking whether recent cohorts of middle aged American women are more likely than earlier cohorts to be sandwiched between the needs of older and younger generations. That is, are they more likely to be “structurally sandwiched” between living parents (or parents-in-law) and living children? And perhaps more importantly, are they now more likely to be called upon to provide support to multiple generations? This initial examination of trends in sandwiched caregiving should provide an indication of whether women are now more burdened by the needs of others than in the past.

We then examine a range of factors influencing the flow of intergenerational support from women in the middle. Following prior studies, we consider both the needs of each generation and their ability to support themselves and others. We extend this body of research by also considering how the nature and strength of intergenerational ties, often conceptualized as family solidarity, help to influence patterns of giving and sharing between generations. Our analysis makes use of unique new data on family solidarity from the HRS Psycho-social supplement which, starting in 2006, has been included in a Leave-Behind Questionnaire (LBQ) for alternating half-samples of the HRS. We use this information to examine the ways in which latent forms of solidarity (e.g., emotional closeness, opportunities for contact) help to shape the actual flow of support within multigenerational families.

## **Background**

Relatively few studies have focused explicitly on sandwiched care in 3-generation families, and those that have are often difficult to compare because they use different sample populations, different definitions of sandwiching and different measures of support. Most studies focus on middle aged women, defined variously from ages 45-56 (Pierret, 2006), ages 55-69 (Grundy and Henretta, 2006), ages 40-59 (Pew, 2013), and ages 45-64 (Wiemers and Bianchi, 2013). Women are typically defined as “sandwiched” between generations if they have at least one living parent (sometimes also including parents-in-law) and at least one living child (sometimes defined as under age 18, but more often including children of all ages).

Evidence of sandwiched support is usually defined as having provided some combination of financial support, care or assistance (i.e., time), or housing in a recent period (typically in the past year or two), to both parents and children. Whereas Pierret (2006) examined all three forms

of support (money, time and housing), Grundy and Henretta (2006) looked at time and money, Wiemers and Bianchi (2013) looked at money and housing, and Wong, Capoferro and Soldo (1999) only looked at money transfers. The types of care provided to parents and children also differ depending on the source of data, though care to parents typically includes both personal care and help around the house or with errands; help to children is defined more variably, sometimes including errands and chores (as in the NLS-YW) but more often limited to looking after grandchildren (as in the HRS). The threshold amounts of financial transfers and care provided also vary across studies, though the typical minimum amounts are at least \$200 or \$500 of financial support or 100 hours of care in the past year (or two).

In spite of the many measurement differences between studies, a number of basic findings appear to be consistent across studies. As noted above, few women are heavily burdened by giving to both parents and children, though growing numbers of women are facing the potential squeeze between two generations (Pierret, 2006; Wiemers and Bianchi, 2013). Wiemers and Bianchi (2013) estimate that the percentage of PSID women ages 45-64 with at least one parent (or parent-in-law) and one child increased from 54% in 1988 to 64% in 2007, with the increase driven primarily by the rising longevity of the parent generation (a trend that is likely to continue). Consistent with the broader literature on intergenerational transfers, support from sandwiched parents flows more toward children than toward parents, especially when considering financial transfers and coresidence (Bianchi et al, 2008). Sandwiched parents tend to give more money to their children than to their parents (Wong, Capoferro and Soldo, 1999; Pierret, 2006; Wiemers and Bianchi, 2013), and they are also more likely to provide housing for their children (Wiemers and Bianchi, 2013). These last patterns are consistent with larger trends showing greater increases over time in coresidence with adult children than with older parents

and the growing financial dependency of adult children on their parents (Kahn, Goldscheider and Garcia-Mangano, 2013; Sironi and Furstenberg, 2012).

Many studies of sandwiched transfers are descriptive and do not attempt to draw inferences about the motivations or explanations for different giving patterns (Pierret, 2006; Pew, 2013; Wiemers and Bianchi, 2013). An exception is a study by Grundy and Henretta (2006) which asked whether the demands from adult children and older parents compete with each other, or instead elicit a level of support indicative of the degree of solidarity enjoyed by the family. Their analysis, based on data from the 1998 HRS, found little evidence of intergenerational competition, whereby giving to one generation would reduce the odds of giving to the other; rather, they found that giving time or money to one generation increased the odds of giving to the other generation. They interpret their findings to reflect the strength of family ties or solidarity underlying intergenerational exchanges, and they suggest that families that are more tight-knit will be more engaged in intergenerational exchanges of support. We build on these ideas in the present analysis.

Exchanges of instrumental support (e.g., time, money and housing) are typically viewed as an important dimension of family solidarity or cooperation which helps to meet the needs of family members (Swartz, 2009; Bianchi et al., 2008). Based on the early work of Bengtson and others (Bengtson and Schrader, 1982; Bengtson and Roberts, 1991), theories of family solidarity consider both *latent* types of solidarity (such as affectual solidarity [e.g., warm feelings] or normative solidarity [e.g., feelings of obligation toward family]) as well as *behavioral* forms of solidarity (such as associational solidarity [e.g., the frequency of contact] or functional solidarity, which is demonstrated by exchanges of instrumental support). In an effort to test these ideas about the underlying dimensions of family solidarity, Silverstein, Bengtson and Lawton (1997)

conducted a latent class analysis of survey data on family relations. They found that family solidarity can be well represented by three underlying dimensions: *affinity* (representing the emotional and psychological closeness of family), *opportunity structure* (representing the opportunities for family togetherness by way of family structure, physical proximity, and frequency and forms of contact), and *functional support* (representing the flow of instrumental support between family members). Most family relations, however, are not congruent across these dimensions of solidarity with only a minority of family relationships showing high values on all three. Instead, Silverstein et al. (1997) found support for 5 underlying “types” of family relationships reflecting different combinations: *tight-knit* (high on all dimensions), *sociable* (close ties and frequent contact, but no exchange of instrumental support), *intimate but distant* (close emotional ties, but not much contact or instrumental support), *obligatory* (close contact and support, but little emotional closeness) and *detached* (little contact, closeness or support).

Subsequent research in the family solidarity paradigm has explored the ways that various dimensions of solidarity may support and encourage others. Of particular interest is the way that latent forms of solidarity such as affinity or opportunity structure may shape or be shaped by behavioral forms of solidarity like transfers. Parrott and Bengtson (1999) found that warm relationships in the past predicted more support for children in the present; those same warm relationships do not predict more support for parents, however. In another study, Silverstein, Conroy and Gans (2012) found that a stronger positive correspondence in the filial norms of adult children and their older mothers (referred to by the authors as “moral capital”) was associated with greater support provided by children.

These dimensions of intergenerational solidarity and the ways that they influence each other may be of even greater importance in sandwiched generations. Caught between multiple

needs, it is possible that shifting affinities and feelings of closeness may shape giving and sharing behaviors even more strongly. In order to better understand the choices and decisions people make when confronted with the needs of multiple generations, we incorporate rarely used measures of family solidarity into our models of intergenerational transfers of support. Building on the findings of Grundy and Henretta (2006), we ask whether the affinity between generations as well as the nature of intergenerational contact influence the patterns of support within multigenerational families.

In summary, we update trends in structural sandwiching and sandwiched support in order to assess whether recent cohorts of middle aged American women (and their partners, if any) are indeed more likely to be sandwiched between parents and children, and to shoulder a heavier burden of support than in the past. We also explore the factors that shape the flow of support to parents and children within multigenerational families, focusing on the role of intergenerational ties and family solidarity. As described below, we utilize new psychosocial data from the Health and Retirement Study's Leave Behind Questionnaire which offers new opportunities to study these issues.

### **Data and Methods**

The data for this study are drawn from the 1998, 2008, and 2010 waves of the Health and Retirement Study (HRS). The HRS is a nationally representative longitudinal study of the population over age fifty, with interviews every two years starting in 1992. Refresher samples of adults ages 51-56 have been added every six years (in 1998, 2004 and 2010), in order to include those who have "aged into" the sample population. The refreshing process allows the sample to stay robust, although it does vary over the years, aging and dipping in size in years when the study does not refresh its sample as participants already involved in the study either grow older,



drop out or die. The HRS interviewed 21,384 respondents in 1998, 17,217 respondents in 2008, and 22,034 respondents in 2010.

The fact that 1998 and 2010 were both "refresher" years for the HRS contributed to our decision to include those two years as our samples for examining trends in sandwiching over time, as they both represent waves of data with a large sample of women who are comparatively young for the study overall. This strategy ensured a sufficient number of women in their early 50s, who are an important part of our study and of any inquiry into sandwiched caregiving (see Pierret 2006 for a full discussion of the sensitivity of sampling frame to results about the importance of sandwiched caregiving). The year 2010 has the additional benefit of being the most recent year for which RAND files containing cleaned data are available.

### Sample Criteria

The sample for our analysis is limited to women, in part to be consistent with most prior studies of sandwiched transfers, but also because many of the HRS questions about transfers specifically ask whether "you or your partner" have given various forms of support. Hence, even with data from male respondents, we would not have separate estimates of men's and women's transfers for married respondents who make up the majority of the sample. Although some studies have looked only at couples' behavior, we chose to not limit our focus to married or coupled adults in this first stage of our project. In 1998 and 2010, there were 12,423 and 12,803 women included as HRS respondents, respectively.

We further restrict the sample to women between the ages of 51 and 69, a broader age range than in most studies, but not without potential bias. The lower limit of age 51 imposed by the HRS is a potentially important limitation to our study as it excludes the experiences of some

women who may face the competing demands of children and parents at younger ages. This is especially relevant for women with lower socioeconomic status who are more likely than other women to have had children at younger ages and to have parents who experience declining health at younger ages as well. However, this wide range of ages allows for a broader range of family configurations reflecting the recent trends in slower transitions to adulthood, delayed childbearing, and longer (and healthier) life expectancy. As noted above, every study of sandwiched caregiving uses a different age range, depending on data availability, so there does not appear to be one best choice. In 1998, there were 6840 women between the ages of 51 and 69 who provided data to the HRS, while in 2010 there were 6738. When we restrict our focus to women who are sandwiched between living parents (or parents-in-law) and children (of any age), the sample is reduced to 2936 women in 1998 and 2630 women in 2010.

Whereas the first part of the analysis presents trends between 1998 and 2010 in the likelihood of being sandwiched and providing support to parents and children, the second part of the analysis examines the factors associated with the flow of support (time and money) from structurally sandwiched women, paying special attention to the impact of family solidarity, only measured in the HRS since 2006. Hence, we are unable to estimate our multivariate analysis for 1998, and focus instead on transfers measured in 2010.

Because the HRS questions about time and money transfers are asked about support provided in the past two years, we structure our analysis so that the independent variables are all measured in 2008, temporally prior to the period to which the 2010 transfer questions refer. Given this limitation, the sample for this portion of the analysis is restricted to women who were ages 51-69 in 2008 and who also provided data in both 2008 *and* 2010. By defining age and sandwiching based on 2008 data, we realize that the 2010 transfer questions will be answered by

women when they are ages 53-71, and that a small number will no longer be sandwiched between 2 generations (typically because the last living parent will have died since the 2008 interview). However, because the transfer questions refer to the period between 2008 and 2010, they reflect behaviors that are largely confined to our target window of ages 51-69 (except for the very oldest respondents), and they also reflect the period surrounding the death of the last surviving parent (for those who lost their parent). Hence, rather than further constraining our already small sample size by imposing age and sandwiching restrictions for both 2008 and 2010, we chose to rely on the 2008 restrictions.

The final limitation to our sample, and perhaps the most critical, reflects the inclusion of family solidarity measures from the Leave Behind Questionnaire (LBQ), a psychosocial module that was first pre-tested for the HRS in 2004 and then, starting in 2006, has been included in each subsequent wave for alternating half-samples of the HRS. This means that the first half-sample received the LBQ in 2006 and again in 2010, and the second half-sample received it in 2008 and 2012. As suggested by its name, the LBQ is a questionnaire that is left behind for respondents to complete and return after the regular interview is completed. In 2008, the response rate for the LBQ was approximately 80% (Smith et al 2013). The fact that the LBQ is only administered to a half-sample each year, and only 80% of that half-sample then completed and returned it, means that our working sample is reduced significantly to a total size of 502 women who were between the ages of 51 and 69 in 2008, who had at least one living parent (or parent-in-law) and one living child at that time, who were also respondents to the LBQ in that year, who reported on transfers of time and money in 2010, and who had non-missing values on all variables in the analysis. Although a rather small sample, we have been very intrigued by the strength of the findings that have been produced empirically.

## Variables

### *Dependent variables*

We measure the flow of support across generations using variables that track the transfers of money and time to parents and children. We have not included coresidence as a dependent variable at this stage of the analysis, in part because we have rich data on both time and money transfers which are not always available in other studies (e.g., Wiemers and Bianchi, 2013), and which are complicated enough to model both separately and in combination. Moreover, we structured our analysis on the models in Grundy and Henretta (2006), which controlled for coresidence with parents or children. We recognize that sharing housing is an important form of intergenerational support, and in future analyses, we will attempt to incorporate it along with money and time into a more comprehensive set of transfer measures.

We measure money and time transfers to parents using three separate questions. The financial transfer question asks if respondents or their partners have given at least \$500 to a parent in the last two years. Time transfers to parents are measured using two questions that ask respondents about time in the past two years that either they or their partners have spent helping parents with (1) personal care (such as drinking, eating or bathing), or (2) chores, errands, or transportation. If a respondent reports having helped a parent with either personal care or chores for at least 100 hours over the last two years, she was considered to have helped her parents by sharing her time. The time transfer questions only ask whether respondents or their partners have given this amount of time to the respondent's parent, but it cannot detect any transfers given by a respondent to her parents-in-law. In order to correct for this, and to produce a more thorough

measure of time shared across generations, we incorporated data from spouses, allowing us to also include any time shared with parents-in-law by respondents (and their spouses).

Transfers to children were measured using responses to two questions. Financial transfers to children are measured the same way as for parents, and are based on a question asking if respondents or their partners have given any of their children help totaling \$500 or more over the last two years. The measure of time shared with children was quite different than the comparable measure for parents, and only reflects time spent performing childcare for grandchildren. If a respondent has spent at least 100 hours caring for grandchildren over the last two years, she is considered to have helped her children by sharing time. Unfortunately, this necessarily excludes a wide range of help that middle-aged parents often provide to adult children, including transportation, errands, housework, and repairs (Kahn, McGill and Bianchi, 2011).

The distributions on the dependent variables for our final analytic sample are summarized in Table 1 which shows the cross-classification of transfers of time and money to parents and children. The marginals show the percentages of sandwiched women who gave parents (or children) neither time nor money, money only, time only, or both time and money. Cell percentages refer to the women who gave different combinations of support to parents, children or both (e.g., 8.17% gave time to parents and money to children). Overall, we can see that most women gave time or money to someone, with only 19.32% giving nothing to anyone. Women were more likely to help children (62.35%) than parents (54.38%), and they were more likely to give money than time to children (44.43% vs. 36.66%)<sup>1</sup>, and more likely to give time than money to parents (47.61% vs. 16.73%).

**Table 1 about here**

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<sup>1</sup> Time transfers are calculated by adding the percentages giving time only and time and money; and money transfers are the sum of the percentages giving money only and time and money.

### *Independent variables*

Our multivariate models predicting sandwiched care include a range of demographic, socio-economic and health controls reflecting the needs and abilities of women to provide support, as well as a series of measures reflecting different aspects of family solidarity. Demographic controls include age (measured categorically in roughly 5-year age groups), race (measured dichotomously distinguishing whites and non-whites), and marital status (measured categorically distinguishing married or partnered women from those who are separated or divorced, widowed or never married).

Women's ability to provide support to others may be constrained by their personal resources indicated by their socioeconomic status (measured by educational attainment [coded categorically] and household income [measured continuously and then logged]) as well as their health status (measured categorically by an indicator of disability). Following Grundy and Henretta (2006), we measure disability based on two questions: respondents were categorized as having *no disability* if they had no difficulty climbing several flights of stairs or walking several city blocks; they were coded as having *some disability* if they had difficulty in either of those measures of mobility; and they were coded as having *serious disability* if they had difficulty either climbing one flight of stairs or walking one city block.

The main focus of our analysis is on the ways in which family solidarity helps to shape the flow of functional support within families. We utilize the unusually rich information from the LBQ to gain insight into the inner workings of families and the intergenerational ties that hold them together. We organize this information around two of the underlying dimensions of family solidarity highlighted by Silverstein, et al. (1997): opportunity structure and affinity. Because of the design of the LBQ, many of these measures only reflect ties with children,

leaving us with regrettably little information about the physical and emotional closeness to parents.

The potential opportunities for family togetherness are shaped by the size and structure of families (measured by the number of living parents and parents-in-law, the number of living children, and the presence of children under age 25 who would be assumed to need more support than older children), the proximity of kin (measured as whether the respondent lives within 10 miles of a child, and whether she lives in the same household as a parent or a child), and the degree of contact between generations (measured as the frequency of visits, phone calls and emails or letters with children, each coded on a scale of 1 to 6, where 1 equals less than once per year and 6 equals 3 or more times per week). Although coresidence is often thought of as a form of functional support, it can also be a proxy for close proximity and contact, both of which are relevant to flows of time and money.

Affinity or emotional closeness between generations is measured by 2 indices reflecting relationships with children. The first index measures how much respondents feel their children act as emotional support for them, and it is based on summed responses to 3 questions: "how much do your children really understand the way you feel about things?", "how much can you open up to (your children) if you need to talk about your worries?", and "how much can you rely on (your children) if you have a serious problem?". Each variable is coded from 1 to 6, where higher values mean greater emotional support, and the resulting index has an alpha of 0.82. The second affinity index reflects how much respondents feel that their children are needy or unreliable; it is based on responses to 2 questions reflecting "how often do (children) make too many demands on you?" or "let you down when you are counting on them?". Higher values

mean children are needier and less reliable, suggesting a lack of independence or maturity which may then be reflected in parental transfers of support. The alpha value for this index is 0.63.

Although our outcome measures of time and money support are indicators of functional support to parents, children, or both, we follow Grundy and Henretta (2006) and control for whether the type of support in question was given to the other generation. In other words, in the model predicting time provided to parents, we control for whether time was provided to children, and vice versa. This allows us to test whether generations compete with each other for support or if instead families showing greater functional solidarity to some members do so for all members.

Distributions and means on the independent variables for our sample of structurally sandwiched women are presented in Table 2. Not surprisingly, most sandwiched women are white (86.25%), married (76.49%), and have at least a high school degree (88.45%). Over forty percent have more than one living parent or parent-in-law, and 8.76% currently live with a parent. Over half have three or more children, half live within 10 miles of a nonresident child, one-fifth have at least one child under age 25, and over one-in-four have a child (of any age) living in their home. Sandwiched women maintain frequent contact with their children with in-person visits as well as frequent phone and email communication.

### **Table 2 about here**

The multivariate analysis will examine how these and other covariates influence the flow of intergenerational support from women in the middle of multigenerational families. First, however, we start by looking at trends over time in the likelihood of being structurally sandwiched between parents and children, and then within these families, we examine trends in the flow of time and money support between generations.



## Results

*Are recent cohorts of middle-aged women more likely than earlier cohorts to be sandwiched between the needs of parents and children?* Table 3 shows trends in structural sandwiching of women ages 51-69 between 1998 and 2010 based on the HRS. By the end of this 12 year period, almost half of all women in this age group (47.82%) had living parents and children, an increase of over 3 percentage points since 1998. The increase in “sandwiching” is clearly linked to the greater survival of parents as evidenced by the declining number of mothers who have no living parents (from 50.12% to 44.51%), and the increase in the small number of childless women who have living parents (from 1.99% to 3.77%). The strong impact of the rising longevity of parents is consistent with recent findings based on PSID data (Wiemers and Bianchi, 2013).

The separate distributions on the numbers of living parents and children in Table 3 show that the ‘availability’ or presence of parents and children are trending in opposite directions. Whereas the percentage of women without any parents declined from 53.77% to 48.64%, and more women now have two or more living parents, (rising from 15.43% to 20.21%), we also see slight increases in the number of childless women (from 5.48% to 7.67%) and sizable declines in the number of women with 3 or more kids (from 60.86% to 51.25%). These demographic shifts are likely to reflect delays and declines in fertility, the aging of the baby boom and baby bust generations and the steady increase in longevity in recent decades. Continued declines and delays in fertility can be seen for the next generation in the declining numbers of grandchildren for this age group of women. In sum, although not a dramatic increase, the rising proportion of

middle-age women who are sandwiched between the needs of parents and children is noteworthy, especially as the estimate approaches 50%.

**Table 3 about here**

*Are women who are sandwiched between two generations now more likely to be called upon to provide support?* Table 4 shows trends in the transfer of time and money to parents and children from structurally sandwiched women ages 51-69 in 1998 and 2010. Transfers to parents and children are cross-classified, as in Table 1, in order to show all possible giving combinations of time and money. Unlike Table 1, however, the distributions for 2010 in Table 4 are not restricted to the analytic sample for the regressions which utilizes data from the 2008 LBQ half-sample along with the 2010 transfer information. Instead, Table 4 is based on the larger, refreshed samples of structurally sandwiched women in the 1998 and 2010 waves of the HRS.

**Table 4 about here**

In spite of the increasing numbers of women who have living parents and children, it does not appear that the burden of caring has increased over time, and in fact, the likelihood of supporting two generations concurrently appears to have declined slightly from 33.88% in 1998 to 32.32% in 2010<sup>2</sup>. Nonetheless, about 1-in-3 women who have living parents and children are supporting both generations with either money or time.

Comparing the marginals for the two years, it is clear that children are more likely than parents to receive money transfers from the middle generation in both years, though the gap has narrowed as parents became more likely over time to receive financial support from the middle (from 14.51% to 18.52%) while children became slightly less likely (from 45.51% to 44.27%)<sup>3</sup>.

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<sup>2</sup> These percentages are the tally of the 9 cells in Table 4 presenting gifts of time, money or time and money, to both parents and children.

<sup>3</sup> These percentages are the sum of money and time & money for parents or children.

Upon closer examination, we can see that the overall decline in financial gifts to children reflects declines in the women who only gave money gifts, and increases in those who gave both money and time (i.e., childcare). Compared with financial transfers, the provision of care to parents and children remained more stable over time, with about 60% of women providing assistance to at least 1 generation, and 18% providing care to both generations in both years. Keeping in mind that our measure of time transfers for children is an underestimate because it only reflects caring for grandchildren, it is interesting that in both years, women in the middle are about equally likely to provide care to parents (40%) and grandchildren (38-40%)<sup>4</sup>.

Overall then, the fear of a rapidly expanding burden of support on the sandwiched generation appears to be unfounded. Although the proportion of middle aged women who are sandwiched between generations has increased to almost 50%, the proportion who are helping both generations with either time or money has not increased and instead it appears to have declined slightly to about 32% in 2010. The middle generation has increased its financial support of older and younger kin, though it remains to be seen whether this is a temporary response to the Great Recession. Whereas only about 1-in-10 women provides financial support to both generations, almost 1-in-5 women give their time to both parents and grandchildren<sup>5</sup>. These numbers are not insignificant, and as the base of structurally sandwiched women increases, the proportion of all women who will be helping others will increase as well.

### ***Multivariate Results***

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<sup>4</sup> These percentages are the sum of time and time & money for parents and children

<sup>5</sup> These percentages giving time are the sum of the “time” and “time & money” categories for gifts to parents and children. The same goes for money transfers.

In the second part of our analysis, we explore the factors that shape the transfer of time and money support from the sandwiched generation to their parents and children. As described above, we consider a range of explanatory variables including demographic, socioeconomic and health controls reflecting the ability of women in the middle to provide support to others. We also consider a series of new measures from the LBQ reflecting the strength of intergenerational ties as measured by several aspects of family solidarity including the opportunities for family contact, the affinity or emotional closeness between generations, and the flow of support to other generations.

As explained in the data section, we use explanatory variables measured in 2008 to predict 2010 reports of time and money transfers in the previous two years. Therefore, our sample is limited to women ages 51-69 in 2008, who were structurally sandwiched between parents and children in 2008, who were part of the 2008 LBQ half-sample, and who also answered the transfers questions in the 2010 HRS interview. Our final sample size is 502.

The analysis is structured in two parts: we first use simple logistic regression to model the likelihood of providing support to parents or to children. We look at time and money support separately as well as together. These models allow us to see how different factors influence the decisions to give different types of support (time and money) to different recipients (parents and children). The second part of the analysis uses multinomial regression to model the likelihood of being a sandwiched provider (i.e., giving to both parents and children) versus giving to only one generation or to neither.

Table 5 shows odds ratios from logistic regression models predicting time and money help to parents and children by middle-aged women who are structurally sandwiched between parents and children. The six models reflect the one-way flows of each form of support (time,

money or either) upwards (towards parents) or downwards (toward children). Although money transfers are defined the same way for parents and children (at least \$500 in the past year), time transfers are defined as 100 or more hours of different types of care depending on the recipient: care for parents refers to either personal care or help with errands, transportation etc., whereas time transfers for children, refer only to caring for grandchildren.

### **Table 5 about here**

Looking first at the provision of care (time), the lack of any significant effects of the demographic controls or socioeconomic or health resources suggests that sandwiched women help their family regardless of their own personal characteristics which would reflect their ability to provide support. In other words, women are equally likely to provide care to parents and grandchildren whether they are rich or poor, white or nonwhite, married or unmarried, or disabled or not.

The provision of care to both parents and children is significantly related to several aspects of the structure and proximity of family members. Not surprisingly, sandwiched women are more likely to provide care and support to parents who live with them than to those who live elsewhere ( $p < .001$ ). And they are more likely to provide childcare to grandchildren when they have more children ( $p < .001$ ) (suggesting a potentially larger number of grandchildren in need of care), and when they see their adult children more frequently ( $p < .001$ ), suggesting greater proximity and closer ties. It is interesting that mothers' feelings about their children matter, but not necessarily as we expected. Having emotionally supportive children does not increase the odds that mothers will provide childcare: mothers provide care regardless of how close they feel to their children. However, having needier, less reliable children does elicit more support.

The results for transfers of money suggest a different pattern. Financial support to parents and children is highly related to the financial resources of the donor (middle) generation: sandwiched women with higher household incomes are more likely to help parents and children financially ( $p < .05$  and  $p < .001$ , respectively), and giving to one generation is strongly and positively related to giving to the other (i.e., those who can give do give) ( $p < .001$ ). The fact that women's education is positively related to financial transfers to children ( $p < .10$ ) but not to parents suggests a socioeconomic motivation for helping children (i.e., perhaps as an investment), but a more general sense of obligation to supporting parents in need; though not significant, it appears that better educated women are less likely to provide financial support to parents, probably because their parents do not need it. In contrast, nonwhite women are significantly more likely than white women to provide financial support to parents ( $p < .01$ ), perhaps reflecting the great financial needs among nonwhite parents, or cultural variation in normative expectations about family support.

Women are more likely to provide financial support to children with greater needs: this can be seen in the strong positive effects of having children under age 25 ( $p < .01$ ), who are presumably more financially dependent on their parents, especially if they are still in school or have not yet established themselves financially. The impact of children's needs can also be seen in the positive and significant effect of the "children as needy" scale ( $p < .05$ ): parents are more likely to give financial help to children who are needier or less reliable or mature. Again, we see that having mutually supportive relationships with children is unrelated to the flow of financial support. It is unclear why sandwiched women who provide housing to their own parents (or in-laws) are more likely to provide financial support to their own children ( $p < .05$ ), unless perhaps the grandparents encourage greater generosity. It is interesting that women who are in frequent

email contact with their own children (suggesting close ties but less physical proximity) are significantly less likely to provide financial support to their parents ( $p < .001$ ); this could reflect socioeconomic differences between families, if women who use email to communicate with their kids are more affluent and also have more affluent parents (who may not need financial support).

The final models summarize the determinants of providing any help (time or money) to parents and to children. Although most findings are consistent with the models run separately for time and money support, several additional findings stand out. First, divorced women are significantly more likely than married women to help both parents and children ( $p < .05$  and  $p < .10$ , respectively). It is possible that divorced women are simply more engaged in exchanges of support in their families because they lack the security and support of a spouse. A similar argument could be made to explain the greater likelihood of nonwhites than whites to provide any support to parents ( $p < .10$ ): greater disadvantage may lead kin to rely more on each other to share resources (Stack, 1974).

In sum, we find that socioeconomic resources of sandwiched women matter more for providing financial support than for providing care to both parents and children. However, family structure and the physical location of generations matter more for the provision of care: families with greater opportunities for contact and togetherness give more time and assistance to each other. In addition, the needs of children are also important, as indicated by the positive effects of the “children as needy” scale on both time and money transfers: when children are demanding yet unreliable, parents are more likely to provide both time and money support. It is noteworthy however, that having warm and supportive relationships with children is not related to the flow of instrumental support.

The last part of the analysis focuses on sandwiched caregiving to both older and younger generations. We ask: *what distinguishes women who provide time or money support to multiple generations from those who do not?* We use multinomial logistic regression with a 3-outcome dependent variable representing the number of generations receiving the respondent's time or money support: 1) sandwiched support (to both parents and children), 2) support 1 generation only (to parents or children), or 3) support neither generation.<sup>6</sup> The multinomial results, presented in Table 6, show the contrasts between sandwiched givers (the omitted outcome category) and either non-givers or givers to only 1 generation. As above, we first consider time transfers, then money transfers, and finally any support (time or money).

Keeping in mind that we are now predicting “not being sandwiched” (by either giving to no one or to only 1 generation), the general pattern of results in Table 6 is very similar to what we found in Table 5, which predicted giving time or money support to parents or children. In interpreting Table 6, it is useful to think of the contrast between sandwiched support and “no transfers” as the more extreme distinction compared with the contrast between giving to 1 versus 2 generations. Many of the factors that were important predictors of transfers to parents or to children are also important in distinguishing sandwiched givers from others. Whereas the provision of care to multiple generations is more responsive to indicators of family solidarity (especially family structure and contact), than to resources, the opposite is true for sandwiched financial support. Providing money transfers to both parents and children is strongly related to the economic resources of the middle generations (i.e., income), and also reflects the needs of recipients, especially children (e.g., the presence of children under age 25, children living in the

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<sup>6</sup> We also ran a four outcome model distinguishing parents- only and children-only as recipients of support, but the results were no more informative than the results based on the 3-outcome model.



home, and children who are needy or immature). Helping multiple generations financially is also significantly more common among nonwhites than among whites, suggesting both greater levels of need within nonwhite families as well as potentially different norms governing intergenerational support.

**Table 6 about here**

### **Summary and Conclusion**

This paper has taken a fresh look at the flow of support within multigenerational families from the perspective of the middle “sandwiched” generation. We started by asking whether recent cohorts of middle aged women were increasingly likely to be squeezed between the needs of parents and children. We found that by 2010, almost half of all women in their fifties and sixties had living parents and children, an increase of 3% since 1998. The rising longevity of the parent generation more than compensated for the declines in fertility across cohorts. In spite of the modest increase in “structural” sandwiching, we found little change over time in the burden of support for sandwiched women. In both 1998 and 2010, about one-third of women in the middle provided either time or money support to both parents and children. As the pool of sandwiched women increases, the total number of women engaged in supporting multiple generations will increase as well. What this does not say is whether the actual burden of providing support to either generation will increase, if government entitlement programs for seniors are scaled back or if young adults continue to find it increasingly difficult to get a foothold in the labor market.

We then examined factors that shape the flow of time and money support from the sandwiched generation to their parents and children. We found that financial support is more influenced by resources and needs, both of the provider (e.g., income) and the recipient (e.g.,

children's young age and neediness). In contrast, caregiving support is more influenced by aspects of family solidarity including family structure and the physical location of generations. Families with greater opportunities for contact and togetherness give more time and assistance to each other. However, we also found that having supportive emotional ties between mothers and children was unrelated to time or money transfers; this suggests that parents give when necessary to whoever needs their support, regardless of the closeness of the emotional ties. And, in fact, when children show annoying signs of emotional neediness, by making too many demands or being unreliable, they are significantly more likely to get both time and money support from their mothers.

What do these findings suggest about flow of support within families? There are differences in what motivates giving to parents and children, and one of the things we are implicitly studying when we study sandwiching is how motives and resources sit in balance relative to each other. Giving to children is mostly about investing in the future, with the assumption that as long as parents have the resources available, they will share them with their children. When we introduced measures of affinity, we asked whether parents' positive feelings about their children encouraged their giving patterns, but it does not appear to be the case. Having supportive relationships with children does not increase the flow of support from mothers, and if children are demanding and unreliable, parents are even more likely to provide support.

Giving to parents appears to be more about normative obligations (i.e., to repay old debts), and most people feel the obligation to help their parents. Public policies have been instrumental in keeping the sandwiched generation from becoming overly burdened. Social Security and Medicare arose as families were shrinking in size due to lower fertility, but

lengthening into beanpoles because of rising longevity, and so we have a situation now where, theoretically, a smaller group of children should be beneficiaries of the resources of their immediate families who are also freed up from having to worry about supporting their parents' generation. If the policy commitment to seniors wanes, then the impact will be felt within families as relatives scramble to provide the supports that are needed. The balance between motives and resources will have to change.

As with all studies, this one is not without its limitations. First, our choice to examine time and money transfers using 2010 data from the HRS places our analysis smack in the middle of the Great Recession, with its incumbent financial strains and dislocations. Although our results may be of questionable generalizability, they provide a glimpse into the ways that families responded to financial pressures during this period. The next step will be to compare patterns of intergenerational support before, during and after the peak of the recessionary period.

A second limitation related to the HRS reflects our use of data from the Leave Behind Survey: although the LBQ gave us access to new measures of family solidarity, the small sample size receiving the LBQ at each wave is a serious limitation. In future analyses, we plan to replicate our study with the other half-sample (in either 2006, 2010 or both) in order to model patterns of transfers throughout the period surrounding the Great Recession. Our measures of solidarity were informative and added richness to the analysis; however, they were much more focused on ties to children than to parents, especially with respect to needs. We plan to explore additional HRS measures on parental resources and emotional ties earlier in life in order to bring a more balanced view of family needs and ties. Finally, we realize that family ties and giving patterns are very much intertwined and evolve over time; we look forward to examining how

flows of instrumental support between generations may help to shape the nature and strength of emotional ties later in life.

## References

- Bengtson, Vern L. and Robert E. L. Roberts. 1991. "Intergenerational Solidarity in Aging Families: An Example of Formal Theory Construction". *Journal of Marriage and Family* 53(4): 856-870.
- Bengtson, Vern L., and Sandi S. Schrader. 1982. "Parent-Child Relations." Pp. 115–185 in *Handbook of Research Instruments in Social Gerontology, vol. 2*. Edited by David J. Mangen and Warren A. Peterson. Minneapolis: University of Minnesota Press.
- Bianchi, S. M., V. J. Hotz, K. McGarry, and J. A. Seltzer. 2008. "Intergenerational Ties: Theories, Trends, and Challenges." In A. Booth, N. Crouter, S. Bianchi, and J. Seltzer (eds.) *Intergenerational Caregiving*. Washington DC: Urban Institute Press.
- Bumpass, Larry, R. Kelly Raley, and James A. Sweet. 1995. "The Changing Character of Stepfamilies: Implications of Cohabitation and Nonmarital Childbearing". *Demography* 32(3): 425-436.
- Cherlin, Andrew and Frank F. Furstenberg, Jr. 1994. "Stepfamilies in the United States: A Reconsideration". *Annual Review of Sociology* 20: 359-381.
- Grundy, Emily, and John C. Henretta. 2006. "Between Elderly Parents and Adult Children: A New Look at the Intergenerational Care Provided by the 'Sandwich Generation'". *Ageing and Society* 26: 707-722.
- Kahn, J.R., Goldscheider, F. and Garcia-Mangano, J. 2013. "Growing Parental Economic Power in Parent–Adult Child Households: Coresidence and Financial Dependency in the United States, 1960–2010." *Demography* 50:1449–1475 .
- Kahn, J.R., McGill, B.D. and Bianchi, S.M. 2011. "Help to family and friends: Are the gender differences at older ages?" *Journal of Marriage and Family* 73:77-92.
- Miniño AM, Murphy SL, Xu J, Kochanek KD. 2011. *Deaths: Final Data for 2008*. National Vital Statistics Reports, 52 (10). Hyattsville, MD: National Center for Health Statistics.
- Parrott, T.M. and Bengtson, V.L.. 1999. "The Effects of Earlier Intergenerational Affection, Normative Expectations, and Family Conflict on Contemporary Exchanges of Help and Support." *Research on Aging* 21(1): 73-105.
- Pierret, Charles R. 2006. "The 'Sandwich' Generation: Women Caring for Parents and Children." *Monthly Labor Review* (September 2006): 3-9.
- Pew Research Center. 2013. The Sandwich Generation: Rising Financial Burdens for Middle-Aged Americans. <http://www.pewsocialtrends.org/2013/01/30/the-sandwich-generation/January>.

- Settersten, Richard A. Jr. & Barbara Ray. 2010. "What's Going on with Young People Today? The Long and Twisting Path to Adulthood." *Future of Children* 20(1):19-42.
- Silverstein, M. , Bengtson, V. L. and Lawton, L. 1997. "Intergenerational Solidarity and the Structure of Adult Child–Parent Relationships in American Families." *American Journal of Sociology*, 103(2):429-60.
- Silverstein, M., Conroy, S.J. and Gans, D. 2012. "Beyond solidarity, reciprocity and altruism: Moral capital as a unifying concept in intergenerational support for older people." *Ageing and Society* 32(7):1246-1262.
- Sironi, M. and Frank .F. Furstenberg. 2012. "Trends in the economic independence of young adults in the United States: 1973-2007." *Population and Development Review* 38(4):609-630.
- Smith, Jacqui, Gwenith Fisher, Lindsay Ryan, Philippa Clarke, Jim House and David Weir. 2013. "Psychosocial and Lifestyle Questionnaire 2006-2010: Documentation Report Core Section LB". Ann Arbor, Michigan: University of Michigan Survey Research Center Institute for Social Research. Retrieved from <http://hrsonline.isr.umich.edu/sitedocs/userg/HRS2006-2010SAQdoc.pdf>.
- Stack, Carol.1974. *All Our Kin*. Basic Books, NY.
- Swartz, Teresa T. 2009. "Intergenerational family relations in adulthood: Patterns, variations and implications in the contemporary United States." *Annual Review of Sociology* 35:191–212.
- Wiemers, Emily and Bianchi, Suzanne M. 2013. "Sandwiched between aging parents and boomerang kids in two cohorts of American women." Paper presented at the 2013 annual meeting of the Population Association of America. Also available as Working Paper 2014-16, Department of Economics, University of Massachusetts, Boston.
- Wong. R., Capoferro, C and Soldo, B.J. 1999. "Financial Assistance From Middle-Aged Couples to Parents and Children: Racial-Ethnic Differences." *Journal of Gerontology:Social Sciences* 54B(3):S145-S153.

**Table 1.** Transfers of time and money to parents and children in 2010, Health and Retirement Study, final 2008/2010 sample (N=502)

<b>Percentage giving to parents</b>					
<b>Percentage giving to children</b>	No transfer	Time	Money	Time & money	Total by row
No transfers	19.32	14.74	1.99	1.59	37.65
Time	9.56	6.77	0.80	0.80	17.93
Money	11.16	8.17	2.59	3.78	25.70
Time & money	5.58	7.97	1.39	3.78	18.73
<b>Total by column</b>	<b>45.62</b>	<b>37.65</b>	<b>6.77</b>	<b>9.96</b>	<b>100.00</b>

**Table 2.** Distributions on Covariates for Structurally Sandwiched Women Ages 51-69 Who Completed the 2008 LBQ and Participated in the 2010 Wave, Health and Retirement Study, N=502

	% / Mean	S.D.
<b>Demographic Controls</b>		
Age	58.97	4.869
51-54	18.13%	
55-59	42.43%	
60-64	21.91%	
65-69	17.53%	
Race - Nonwhite	13.75%	
Marital Status		
Married or partnered	76.49%	
Separated or divorced	14.34%	
Widowed	8.37%	
Never Married	0.80%	
<b>Socioeconomic and Health Resources</b>		
Education		
Less than high school	11.55%	
High school or some college	65.54%	
College graduate or higher	22.91%	
Average annual household income (000s \$)	86.66	100.83
Disability Level (climbing stairs, walking)		
None	57.17%	
Some	29.28%	
Much	13.55%	
<b>Family Solidarity</b>		
<i>Opportunity Structure: Family Structure</i>		
Number of parents or parents-in-law alive		
One	58.17%	
Two	31.47%	
Three or more	10.36%	
Number of children alive		
One	7.57%	
Two	34.06%	
Three or more	58.37%	
Have at least one child aged less than 25 yrs	22.91%	
<i>Opportunity Structure: Proximity</i>		
Have at least one parent or parent-in-law coresident	8.76%	
Have at least one child coresident	28.49%	
Live within 10 miles of at least on nonresident child	53.21%	
<i>Opportunity Structure: Contact (items coded 1=&lt;once/yr to 6=3+/wk)</i>		
Frequency of visits (mean)	4.08	1.391



Frequency of phone calls (mean)	5.27	0.944
Frequency of emails or letters (mean)	3.33	1.885
<i>Affinity (items coded 1=not at all to 4=a lot)</i>		
<u>Children act as a source of emotional support (summative index)</u>	9.69	2.182
Children understand how R feels about things	3.13	0.817
Can rely on children when faced with a serious problem	3.45	0.817
Can open up to children about worries	3.12	0.897
<u>Children act as a source of need (summative index)</u>	3.79	1.492
Children make too many demands	1.95	0.901
Children let R down when she is counting on them	1.84	0.907

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**Table 3.** Trends in Structural Sandwiching, All Women ages 51-69, Health and Retirement Study, 1998 and 2010

	HRS 1998 N=6840	HRS 2010 N=6738	Change between 1998-2010
<b><u>Sandwiched Between Parents and Children</u></b>			
No parents or children alive	3.44	3.90	0.46
Parents, no children	1.99	3.77	1.78
Children, no parents	50.12	44.51	-5.61
Both parents and children alive	44.46	47.82	3.36
<b><u>Numbers of Parents, Children &amp; Grandchildren</u></b>			
Number of living parents or parents-in-law			
0	53.77	48.64	-5.13
1	30.79	31.15	0.36
2	11.64	14.39	2.75
3+	3.79	5.82	2.03
Number of living children			
0	5.48	7.67	2.19
1	8.83	11.96	3.13
2	24.84	29.12	4.28
3+	60.86	51.25	-9.61
Number of grandchildren			
0	19.88	26.50	6.62
1 or 2	18.36	17.67	-0.69
3 to 6	32.78	30.39	-2.39
7+	28.65	24.87	-3.78

**Table 4.** Transfers of time and money to parents and children among structurally sandwiched women in 1998 and 2010, Health and Retirement Study

**(a) Among all structurally sandwiched women aged 51-69 in 1998**

**n=2936**

<b>Percentage giving to children</b>	<b>Percentage giving to parents</b>				<b>Total by row</b>
	No transfer	Time	Money	Time & money	
No transfers	22.00	10.25	1.63	1.63	35.52
Time	9.71	7.12	1.02	1.12	18.97
Money	13.11	8.28	2.62	2.66	26.67
Time & money	7.77	7.25	1.29	2.52	18.84
Total by column	52.59	32.9	6.57	7.94	100.00

**(b) Among structurally sandwiched women aged 51-69 in 2010**

**n=2630**

<b>Percentage giving to children</b>	<b>Percentage giving to parents</b>				<b>Total by row</b>
	No transfer	Time	Money	Time & money	
No transfers	20.72	10.57	2.85	2.40	36.54
Time	9.51	6.20	1.79	1.60	19.09
Money	12.00	6.88	2.51	2.24	24.00
Time & money	9.16	5.97	1.18	3.95	20.27
Total by column	51.86	29.62	8.33	10.19	100.00

**Table 5.** Odds Ratios from Logistic Regressions Predicting 2010 Transfers by Type of Transfer and Recipient, Structurally Sandwicheed Women Ages 51-69, Health and Retirement Study, N=502

	<u>Time Transfers</u>		<u>Money Transfers</u>		<u>Any Transfers</u>	
	Parents	Children	Parents	Children	Parents	Children
<b>Demographic Controls</b>						
Age (51-54)						
55-59	1.21	1.22	0.81	1.75 <sup>†</sup>	1.12	1.47
60-64	1.56	1.20	0.66	1.79 <sup>†</sup>	1.29	1.37
65-69	1.57	0.88	0.93	1.43	1.41	1.17
Race (white)						
Nonwhite	1.20	1.28	2.80**	1.44	1.74 <sup>†</sup>	1.67
Marital Status (Married)						
Separated or divorced	1.54	1.7	1.05	1.48	2.07*	1.90 <sup>†</sup>
Widowed	0.79	1.59	0.77	1.62	0.76	1.51
Never Married	0.54	0.55	0.61	0.79	0.29	1.50
<b>Socioecon. &amp; Health Resources</b>						
Education (less than high school)						
High school or some college	0.98	1.57	0.90	1.75	0.86	1.80
College graduate or higher	1.13	1.02	0.75	2.16 <sup>†</sup>	0.80	2.35*
Household Income (logged)	1.03	1.05	1.44*	1.62***	1.19	1.39**
Disability Level (none)						
Some	0.87	0.89	0.65	1.35	0.74	1.02
Much	0.77	1.05	1.07	0.73	0.69	0.65
<b>Family Solidarity</b>						
<i>Opportunity: Family Structure</i>						
No. of parents alive (one)						
Two	0.94	1.26	0.68	1.01	0.81	1.26
Three or more	1.18	1.11	0.57	1.20	1.08	1.27
No. of children alive (one)						
Two	1.11	2.88*	0.82	0.71	1.39	0.94
Three or more	0.75	2.79***	0.79	0.56	0.96	1.04
At least one child < 25 yrs	0.94	0.63	0.83	2.62***	0.82	1.66 <sup>†</sup>
<i>Opportunity: Proximity</i>						
At least one parent cores.	8.43***	0.52	1.22	2.68*	6.57***	1.24
At least one child cores.	1.06	1.14	0.91	0.87	0.98	1.08
W/in 10 mi of nonres. child	0.73	1.23	0.63	1.07	0.60*	1.19
<i>Opportunity: Contact</i>						
Frequency of visits	1.01	1.38***	0.99	1.09	1.04	1.30**
Frequency of phone calls	1.21	1.02	1.07	1.11	1.25 <sup>†</sup>	1.01
Frequency of emails/letters	1.03	0.96	0.75***	1.03	0.97	0.94
<i>Affinity</i>						
Children – emotional support	0.98	1.03	1.03	0.98	0.98	1.03
Children – needy	1.15	1.14 <sup>†</sup>	1.07	1.20*	1.10	1.16 <sup>†</sup>
<i>Other Transfers</i>						
Help kids w/ same resource	1.52*	---	3.11***	---	1.29	---
Help parents w/same resource	---	1.48 <sup>†</sup>	---	3.37***	---	1.30

<sup>†</sup>  $p \leq 0.10$  \*  $p \leq 0.05$  \*\*  $p \leq 0.01$  \*\*\*  $p \leq 0.001$

**Table 6.** Odds Ratios from Multinomial Logistic Regressions Predicting Sandwiched Transfers to Both Parents and Children (versus No Transfers or Transfers to Parents or Children) by Type of Transfer, Health and Retirement Study, N=502

	<u>Time Transfers</u>		<u>Money Transfers</u>		<u>Any Transfers</u>	
	No Transfer	Parents <i>or</i> Children	No Transfer	Parents <i>or</i> Children	No Transfer	Parents <i>or</i> Children
<b>Demographic Controls</b>						
Age (51-54)						
55-59	0.71	0.91	0.69	0.95	0.60	0.74
60-64	0.55	0.79	0.86	1.27	0.57	0.65
65-69	0.74	1.12	0.54	0.49	0.61	0.65
Race (white)						
Nonwhite	0.64	0.89	0.23***	0.38*	0.31*	0.60
Marital Status (Married)						
Separated or divorced	0.38*	0.63	0.57	0.71	0.27**	0.50
Widowed	0.74	0.63	0.71	0.80	1.04	0.70
Never Married	--- <sup>1</sup>	--- <sup>1</sup>	0.99	0.30	0.00	3.10
<b>Socioecon. &amp; Health Resources</b>						
Education (less than high school)						
High school or some college	0.64	0.62	0.53	0.63	0.70	0.83
College graduate or higher	0.83	0.78	0.50	0.69	0.50	0.84
Household Income (logged)	0.92	1.00	0.42***	0.67 <sup>†</sup>	0.59**	0.85
Disability Level (none)						
Some	1.31	1.08	0.92	0.92	1.37	1.04
Much	1.17	0.75	1.03	0.78	2.25 <sup>†</sup>	1.26
<b>Family Solidarity</b>						
<i>Opportunity: Family Structure</i>						
No. of parents alive (one)						
Two	0.93	1.23	1.30	1.08	1.04	0.95
Three or more	0.64	0.31*	1.14	0.94	0.96	0.48 <sup>†</sup>
No. of children alive (one)						
Two	0.27 <sup>†</sup>	0.31 <sup>†</sup>	1.97	2.07	0.70	0.97
Three or more	0.21*	0.23*	2.35	1.72	0.96	1.16
At least one child < 25 yrs	1.59	1.03	0.39*	0.62	0.92	0.59
<i>Opportunity: Proximity</i>						
At least one parent cores.	0.21*	1.19	0.40	0.93	0.15*	0.43 <sup>†</sup>
At least one child cores.	0.89	1.26	1.97	2.78*	0.61	2.19**
W/in 10 mi of nonres. child	0.98	0.65	1.42	1.21	1.49	1.04
<i>Opportunity: Contact</i>						
Frequency of visits	0.71*	0.81 <sup>†</sup>	0.90	0.94	0.75*	0.85
Frequency of phone calls	0.86	1.07	0.92	1.09	0.80	0.85
Frequency of emails/letters	1.01	1.02	1.31**	1.26*	1.05	1.12 <sup>†</sup>
<i>Affinity</i>						
Children – emotional support	0.98	0.95	0.99	1.00	1.00	1.02

Children – needy	0.79*	1.00	0.75*	0.83	0.79*	0.91
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<sup>†</sup>  $p \leq 0.10$  \*  $p \leq 0.05$  \*\*  $p \leq 0.01$  \*\*\*  $p \leq 0.001$   
<sup>1</sup>Due to small sample size, the never married coefficients did not return informative data for this model