# Sandwiched between Aging Parents and Boomerang Kids in Two Cohorts of American Women 

Emily Wiemers and Suzanne Bianchi

## WORKING PAPER 2014-06

# Sandwiched between Aging Parents and Boomerang Kids in Two Cohorts of American Women 

Emily Wiemers<br>University of Massachusetts Boston<br>Assistant Professor, Department of Economics<br>emily.wiemers@umb.edu<br>Suzanne Bianchi<br>University of California, Los Angeles<br>Dorothy Meier Chair in Social Equities and Distinguished Professor of Sociology<br>Department of Sociology and California Center for Population Research

## Abstract

In late middle age, individuals may face competing demands on their time and financial resources from elderly parents and young adult children. This study uses the Panel Study of Income Dynamics to examine changes over time in the probability of having children and living parents for women age 45 to 64 . We compare two cohorts: those born in the 1920s and 1930s and those born in the 1940s and 1950s. We find that there has been a dramatic increase in the probability of having children and living parents and that this increase has been driven by changes in life expectancy of the parent generation. We further examine obligations of money and co-residence for women in the later cohort. We find that while women may not always face concurrent demands from parents and children, approximately thirty percent of them have provided support to both parents and children at some point in the past.

The authors gratefully acknowledge funding from the Sloan Foundation grant 2011-6-24.

## Introduction

In the decades leading up to retirement, individuals may have obligations of support to multiple family members including adult children and grandchildren as well as aging parents and parents-in-law. In the aging literature, the majority of research has focused on care for parents (Coward and Dwyer 1990, Dwyer and Coward 1991, Wolf, Freedman, and Soldo 1996, 1997, McGarry 1998, 2006) but care and support for adult children is actually more prevalent in late middle age (Kahn et al. 2011). Demands for care and support are unlikely to come from only one family member and individuals in late middle age may often be sandwiched between the needs of their children and grandchildren and the needs of their parents.

Fertility, mortality and marriage trends have reshaped the potential for intergenerational demands over time. Trends toward later births, fewer births, and a delayed transition to adulthood alter the time required to fully launch one's offspring. Longer life expectancy increases the chances that one will have surviving parents later in the life course. Marriage, which brings obligations to parents-in-law, is increasingly delayed or foregone altogether by some segments of the population. There has been some assessment of how these demographic trends may have affected the "sandwich generation" at a single point in time but there has been no assessment of change over time.

This study uses the Panel Study of Income Dynamics (PSID) to examine the potential for intergenerational demands for financial support and care on women in late middle age. We focus on women between the ages of 45 to 64 because these are the ages in which women are most likely to have young adult children and parents who may require care and it is when retirement savings typically reach their peak (Attanasio 1998). Caregiving demands that negatively affect labor supply, or intergenerational financial support that reduces savings can be consequential for
later life well-being. To assess change over time, we compare two cohorts of women: those born between 1924 and 1944 and the Baby Boom cohort born between 1943 and 1962. We begin by examining the differences in the potential for intergenerational demands for support between cohorts by assessing how many women have living parents and children. ${ }^{1}$ We then use the more recent cohort to examine current and past support that individuals have provided to parents and children.

## The Changing Demography of Kin Availability and Need

Mortality. Between 1970 and 2007, life expectancy at birth increased from 71 to 78 years (Miniño et al. 2011). By 2008, women lived an average of 80.6 years and men 75.6 years (Miniño et al. 2011). Uhlenberg (1996) estimates that about 37 percent of 60 year olds had at least one living parent in 1980 compared with 44 percent of 60 year olds in 2000. Other things equal, as parents live longer, individuals in late middle age have an increased likelihood of having at least one parent who survives into old age when frailty and disability increase. Thus demands from older parents may be increasing over time. This prediction is complicated, however, by the fact that increases in life expectancy have been coupled with declines in disability later in life (Martin et al. 2010, Crimmins 2004, Cutler 2001). The trend in declines in functional limitations among the elderly in the 1990s may have stalled more recently but does not seem to have reversed (Freedman et al. 2013). This increase in "healthy life expectancy" may lessen care demands from elderly parents even as parents live longer.

Fertility. The effect of fertility trends on later life caregiving is even more difficult to predict than the effect of mortality trends because some changes increase the likelihood of having "needy" children later in life whereas other changes lessen this probability. Between 1970 and 2009, the TFR declined from 2.5 to about 2.0 children per woman (Martin et al. 2012:

Table 4). The decline in TFR is due to both the reduction in the number of children for women who have children and the increase in childlessness. The fraction of women 40-44 without children has increased from 11 percent in 1984 to 18 percent in 2008 (Pew Center Report 2010). Other things equal, the decline in the number of children should have decreased the demands on parents for care and support of children. However, the timing of childbearing has also undergone change, with the median age at first birth rising from 22.7 to 25.2 between 1980 and 2009 (Martin et al. 2012: Table I-1). This suggests that women today may reach late middle age with younger children than in the past, increasing the likelihood that they still have dependent children - either children under age 18 in the home or older children who are not yet fully financially independent. Change due to the later timing of fertility is muted, however, by the fact that earlier cohorts had more children than later cohorts. Thus, the change in age at last birth may not be as dramatic as the change in age at first birth across cohorts. It is likely that the timing of last birth, more so than timing of the first birth, more often determines when the nest is truly empty.

Young adults today remain in their parents' households longer before striking out on their own than in the recent past (Furstenberg et al. 2004). Higher rates of college attendance have extended the period of financial dependence on parents in more affluent families (Schoeni and Ross 2004) and young adults who do not go to college have great difficulty finding good jobs. The extent to which young adults take longer to settle into stable careers and family lives - and parents help finance their slow transition - have likely increased the demands for support from parents later in the life course (Kahn et al. 2013).

Marriage. Marriage - as a formal link that ties families together - creates obligations to parents-in-law and increases the sets of older kin who may need assistance. Pierret (2006) shows
that married women aged 43 to 54 in the late 1990s, had more living parents (or parents-in-law) than unmarried women. Whereas only 11 percent of married women had no parents, almost onethird of unmarried women had no living parents. The one factor that may dampen marital status differences in caregiving, however, is that studies of frail elderly tend to find that unmarried daughters more often provide care than married daughters. Married daughters greater number of kin who might need care may be counterbalanced by unmarried daughter's greater propensity to provide care when a need arises.

## Studies of Sandwich Care

Studies of sandwich caregiving are limited but one of the best descriptions is Pierret's (2006) analysis of the National Longitudinal Study - Young Women cohort. He estimates both the percentage of women who are at risk of being sandwiched between the needs of children and parents and, using various definitions, the percentage giving help to two generations simultaneously. Using a definition of "sandwich caregiving" in which assistance to parents includes either co-residence, having a parent in a support facility, giving aid of $\$ 200$ or more in the previous year, or providing 100 hours or more of assistance, and, assistance to children includes co-residence, support for college, aid of \$200 or more, or assistance of 100 or more hours, 33 percent of women in their mid-forties to mid-fifties could be considered sandwiched caregivers in the late 1990s in the U.S.. If higher levels of assistance are used to define sandwich caregiving, e.g., parental co-residence or providing aid of $\$ 1,000$ or more, or help amounting to 500 hours or more combined with support for children that includes either co-residence or support for college, or aid of $\$ 1,000$ or more, or assistance of 500 hours or more, than a smaller nine percent of women are classified as sandwiched caregivers.

A recent Pew Research Center Report on the sandwich generation (Pew Research Center, 2013a) takes a somewhat different approach. Instead of defining the population at risk for facing competing demands and then examining actual demands, they define the "sandwich generation" as adults who have a parent age 65 or older who are also either raising a young child or financially supporting an adult child. Under this definition, 47 percent of adults in their 40s and 50s are members of the sandwich generation. Consistent with other research on transfers, they find that financial transfers are more likely to flow to children (McGarry and Schoeni, 1995). They also find that the sandwich generation is more likely to provide emotional support to a child than to a parent.

Henretta, Grundy and Harris (2001) use the 1994 Health and Retirement Study (HRS) to estimate the percentage at risk of sandwich care for those aged 50 and over. Between 32 and 37 percent have both living children and at least one living parent, with higher estimates for more highly educated women than for women with less education. Grundy and Henretta (2006) combine financial and time assistance to estimate the percentage of women age 55 to 69 who provide care to both generations. About 36 percent of married women and 27 percent of unmarried women are helping both parents and children simultaneously.

A handful of other studies focus on whether there are negative outcomes, in terms of health, for those they define as "sandwiched caregivers." These studies are not always careful about determining who is at risk of being sandwiched between multiple generations and vary in their comparison groups. Chassin et al. (2010) find that sandwiched caregivers engage in less healthy behaviors than others (e.g., more smoking, less seat belt usage, less exercise, less health conscious food shopping), suggesting that caregiving may reduce time for activities that enhance well-being or that the stress of caregiving puts one at risk of engaging in unhealthy behaviors
(e.g., smoking). Other studies do not find detrimental effects of sandwich caregiving on wellbeing (Künemund (2006) for a German sample; Loomis and Booth (1995) for a U.S. sample, with Williams (2004) reporting mixed results for a Canadian sample).

To summarize, the existing literature on sandwich caregiving is not extensive and is largely cross-sectional. Definitions of what constitutes sandwich caregiving vary across studies, making it difficult to compare findings. Some of the best studies have used nationally representative data to define sandwich care and estimate its prevalence among women later in life, but only for one point in time or for one cohort. We build in particular on the work of Pierret (2005) and Henretta, Grundy, and Harris (2001) by first defining the population at risk for facing competing demands from parents and children and then exploring transfers. This paper extends these two studies by looking at the population at risk across cohorts to examine changes in the likelihood of facing demands from both children and elderly parents over time.

We ask three main questions: 1) Who is potentially at risk of being sandwich between needs of children and parents and has this changed over time? 2) What is the contribution of changing fertility, mortality and marriage patterns to the change in the population with potential demands up and down the generations? 3) Focusing on those with both living children and parents, who gives to both generations simultaneously? We address these questions using the Panel Study of Income Dynamics (PSID), the longitudinal data set that allows estimation of change in likelihood of being sandwiched over time and that provides indicators of support and care for those at risk.

## Data and Measures

The PSID is the premier dataset in the U.S. for studying intergenerational ties because of its genealogical design, its long life histories of linked family members, and its high wave-to-
wave response rates. Begun in 1968, the study follows individuals whether or not they are living in the same dwelling as the original sample household or with the same people. All individuals in households recruited into the PSID in 1968 are said to have the PSID "gene." Individuals who are born to or adopted by someone with the PSID gene acquire the gene themselves and are followed and become members of the PSID sample for the rest of their lives. This design feature implies that the study provides, at each wave, data on a sample of extended families. Interviews were conducted annually until 1997 when PSID moved to an every other year schedule.

This paper uses data on two cohorts of women. The first cohort is age 45-64 in 1988 and was born between 1924 and 1943. The second cohort is age 45-64 in 2007 and was born between 1943 and 1962. Analysis samples include a total of 1,207 women in 1988 and 1,369 women in 2007. To facilitate comparisons across cohorts we use only individuals with the PSID "gene" in both samples, we exclude individuals in the immigrant sample ${ }^{2}$, and we weight using the longitudinal weights that are comparable across years. In both 1988 and in 2007, information was collected on living parents and parents-in-law, making it possible to identify women in late middle age who are potentially sandwiched between the needs of children and parents.

Defining the "Potentially" Sandwiched. The first thing we do in this paper is to determine the percentage of women who are potentially sandwiched between children and parents in order to assess whether this has changed over time. Women have the potential to be sandwiched if they have at least one child (of any age) and at least one living parent. Our analysis requires information on the number and age of children and whether parents and parents-in-law are living. The children of the women in our sample are PSID sample members and are followed over time. Using both information derived from PSID interviews and
information from birth histories, we have consistent information about the number and year of birth of children for both cohorts in our sample. ${ }^{3}$

We measure having a living parent in two ways-having a living parent and having a living parent or parent-in-law. We include parents-in-law because obligations to older generations may come in the form of caring for an in-law. Consistent information on the parents and parents-in-law of the women in our sample is more problematic than consistent information on children. For the first cohort, most parents are not PSID sample members and are not interviewed. Many individuals in the second cohort have at least one PSID sample parent. However, two special data collection efforts allow us to have consistent information about parents and parents-in-law. In 1988 a special supplement on time and money transfers was added to the data collection. This supplement obtained several characteristics of parents and parents-inlaw including whether they were currently living in 1988, their age, and their marital status. In 2007, household heads and spouses were asked whether their parents were living along with set of transfer questions. These special supplements allow us to have consistent information about the number of parents and parents-in-law who are alive at the time of the interview for the women in both cohorts of our sample.

While knowing whether an individual has a child and a living parent may seem trivial, this information is included in very few nationally representative surveys. ${ }^{4}$ The National Survey of Families and Households (NSFH) and the Health and Retirement Study (HRS) are two other surveys in which individuals in this age group are asked about both parents and children. The NSFH would allow for a similar comparison over time but the latest wave is 2003. The HRS would allow for examining changes in potentially sandwiched women over time but the cohort structure of the data does not allow for a consistent examination of individuals under 50.

Including these younger women seems particularly important for capturing individuals with lower socio-economic status, who, because of differential mortality and fertility patterns, are more likely to experience competing demands from parents and children at younger ages. In fact, the Pew Center finds that 71 percent of individuals with a parent 65 or older and either a minor child or an adult child to whom they are providing support are between 40-59 with a further 19 percent younger than age 40 . Only 10 percent of these individuals are 60 and over.

Defining Who is Actually "Sandwiched" in 2007. After describing change over time in the potential for being sandwiched and examining changes in the characteristics of these individuals over time, we focus on those in the potentially sandwiched category in 2007 and examine the likelihood that they actually make transfers up and down the generational ladder. ${ }^{5}$ In particular, we are interested in how different definitions of the timing of "sandwich caregiving" affect the estimates of care to multiple generations. Our contribution is to consider not just simultaneous caregiving to multiple generations but to consider providing support to multiple generations over a longer time period.

Coresidence. One of the ways in which individuals provide support for others is to coreside and hence we assess whether those with living parents and children have children, parents or both generations coresiding in the household. Current coresidence with parents and children is assessed using household rosters. Past coresidence for parents is measured using a question in the 2007 supplement in which PSID respondents were asked "In the past, did your [or your wife's] parents live with you [and your wife] one year or longer in your home?" Past coresidence with children is measured using household rosters for the past ten years (1997-2007). For each wave, we measure whether any children, any children 18 and over, and any children 25 and older are coresiding with the respondent. We use only the last ten years because at some point,
virtually all of our sample coresided with a child. We break up the child coresidence by age of the child to examine differences between providing support to a minor child and providing support to an adult child.

Financial Assistance. In each survey year, the PSID includes a question on whether financial support has been given to anyone outside of the household during the past year. Respondents are asked "In 2006, did you or anyone else in your family living there give any money toward the support of anyone who was not living there at the time, including child support, alimony, money given to parents, and things like that? Don't include loans or charitable contributions to organizations; we'll ask about them later." If respondents answer yes, the recipient's relationship to the household head is identified. ${ }^{6}$ We use this question to identify whether the respondent has given money to children or to parents in the past year. We also use information from this annual question on financial giving from past waves of the PSID to identify whether respondent had given money to children in the past ten years. We note that the measure of transfers of money was not asked separately for parents and children. Analysis of the 1988 PSID Time and Money Transfer Data suggests that this leads to lower reports of transfers (McGarry and Schoeni 1995, Altonji 2000). Because we believe that financial transfers may be underreported and they exclude money given to individuals living in the household, our estimates on financial assistance should be considered a lower bound estimate. ${ }^{7}$ We supplement information on past financial transfers to children with information on past financial transfers to parents. Instead of using the annual reports, we use responses to the question, asked in 2007, "In the past, did you [or your wife] give significant financial support to your [or your wife's] parents?" We use this information to expand the examination of financial transfers up the generational ladder.

Care. We do not have a measure of time transfers to parents or children in the 2007 PSID but there was a question about whether parents had received care in the past. Respondents were asked "In the past, did you [or your wife] spend a lot of time caring for your [or your wife's] parents or parents?" We show estimates of this type of transfer and also provide overall estimates of support to multiple generations that include time transfers.

## Results: Potential Demands

We begin our analysis by examining the potential for being sandwiched between the needs of a younger and an older generation at two points in time. Table 1 shows the fraction of women with living parents, children, and both. The fraction of women with the potential for being sandwiched - those who have both living parents and children - increased by 11 percentage points from 43 to 54 percent between 1988 and 2007. If we include parents-in-law, 55 percent of women are potentially sandwiched caregivers in 1988 , increasing to 64 percent in 2007. ${ }^{8}$ These increases are despite the fact that the fraction of women age $45-64$ with children decreased slightly from 92 percent in 1988 to 88 percent 2007.
[Table 1 about here]
Table 1 shows that the potential for women being sandwiched between the needs of aging parents and adult children in the decade or two before retirement has increased quite dramatically—by about 20 percent—between the two cohorts in our study. By 2007, almost two thirds of women in later middle age are "at risk" of simultaneously address needs of their children and of their elderly parents.

The changes in the potential for being sandwiched over time are necessarily driven by three demographic factors: the number of parents and in-laws a woman has, the fraction of a women's parents and in-laws who still are living, and whether a woman has children. Because
childbearing is largely complete by age 45 , the number of children and fertility timing are not related to whether a woman is potentially sandwiched between the ages of 45 and 64 -other than through childlessness-though family size is related to the scope of demands that are likely from the younger generation.

Table 2 presents information on the components that contribute to the likelihood of being potentially sandwiched - the relative importance of marriage, mortality and fertility as factors underlying the change in caregiving demands over time. Table 2 focuses on all women in a cohort and shows the fraction of women 45-64 that are married, the average total number of own parents, the average total number of parents and in-laws, and the fraction of women that are childless. Table 2 shows that declines in mortality alone are driving the increase in the fraction of women with living parents and children over time. In fact, both marriage and fertility trends point in the opposite direction. There is a six percentage point decline in the number of women who are married. ${ }^{9}$ The decline in marriage implies that the total number of women with both parents and in-laws is falling over time. In addition, fewer women have children-again a factor that on its own would imply a decline in the fraction of women with living parents and children. At the same time that marriage rates are declining and childlessness is increasing, the number of own parents and parents-in-law is increasing. The average number of own parents alive increases by 45 percent and the average number of parents-in-law increases by 43 percent. The similar increase in the number of own parents and the number of parents-in-law implies that the increase in longevity more than compensates for the decline in marriage. Table 2 shows that the increase in the number of living parents is the factor that drives the increase in the population at risk for being sandwiched between the needs of multiple generations over time.
[Table 2 about here]

Table 3 examines the full distribution of the number of parents by marital status. For married women, there is an over 40 percent decline in the fraction of women without any living parents. There are also nearly triple the fraction of married women with three or more parents in 2007 over 1988. We see similar trends for single women with a declining fraction of women without any living parents and increasing fraction of women with one and two parents. Overall in the sample, the fraction of women without any parents declined 13 percentage points to 27 percent. The fraction of women with one parent remained constant while the fraction with two or more living parents increased by 14 percentage points with most of the increase, 10 percentage points, occurring among women with three or four living parents.
[Table 3 about here]
The number of women in late middle age who have the potential to experience competing demands up and down the generations has increased by approximately 10 percentage points or twenty percent since 1988. This increase has been driven by an increase in the number of living parents with trends in childlessness and marriage exerting countervailing pressure. While changes in the pattern of fertility-namely the increase in the age of first birth and the reduction in the number of births conditional on having children-cannot affect the number of women who are "potentially sandwiched", these patterns can affect the demands that these women may face. Similarly, increases in life expectancy may increase both the number of women with living parents, and the number and age of parents conditional on having living parents. To examine the change over time in potential demands both up and down the generations we examine several characteristics of the sample of women with living parents and children in 1988 and 2007. ${ }^{10}$

Table 4 shows the marital status and age of women with children and living parents in both 1988 and 2007 along with the number and average age of their parents and children. Even
though marriage rates have declined among women 45-64 overall, marriage rates among women with children and living parents have remained relatively constant around 79 percent. The average age of women with children and living parents has also remained similar at around 53 years of age. If the average generation gap has grown over time, it is possible that even with increases in life expectancy among the parent generation, the average age of women with living parents and children may be constant. Table 4 also shows the average size of the older and younger generation. There has been a 13 percent increase in the mean number of own parents and a 19 percent increase in the mean number of parents and in-laws among women with children and living parents. Parents are older by about one year on average. Even if healthy life expectancy has increased, women have a larger number of parents for whom they may be expected to provide care. In terms of the parent generation, an increasing number of women are facing potential demands from an increasing number parents. Conversely, women with children and living parents in 2007 have fewer children overall than their counterparts in 1988-nearly one fewer child on average. However, their children are younger on average-oldest children are nearly two years younger while youngest children are the same age. ${ }^{11}$ Younger children may require more financial resources and be more likely to coreside (Furstenberg 2005, Schoeni and Ross 2005).
[Table 4 about here]
Table 5 shows the distribution of the number of children and number of parents for women with children and living parents in 1988 and 2007. The full distribution allows us to examine more closely the change over time in the relative numbers of parents and children. Table 5 shows that the biggest change for the child generation has been a decline in the fraction of women with more than three children and an increase in the fraction of women with one or
two children. For the parent generation, there has been a parallel increase in the fraction of women with three and four parents and a decline in the fraction of women with only one living parent. In 2007, women 45-64 with children and living parents are likely to have fewer children and more parents while women in 1988 had more children and fewer parents.
[Table 5 about here]
Changes in parental life expectancy have lead to a ten percentage point increase in the fraction of women who face potential demands from parents and children between 1988 and 2007. This increase in the fraction of women with children and living parents is in spite of declines in marriage rates and increases in childlessness over time. Among women with children and living parents, there has been an increase in the number of living parents and a decrease in the total number of children over time. The increase in the number of parents has been coupled with an increase in the average age of parents and the decline in the number of children has been accompanied by a decline in their average age. In 1988, the median women with children and living parents had three children and one parent. In 2007, the balance has shifted to two parents and two children.

## Results: Actual Demands for Baby Boom Cohort

In describing the differences in the potential for being sandwiched and the context in which women with the potential for being sandwiched find themselves in terms of their age, and the age of their potential dependents, several general themes emerge. First, the potential for being sandwiched has increased quite dramatically over time. Second, this trend has been driven by changes in life expectancy of the parent generation. Finally, among those who face the potential for being sandwiched between the needs of aging parents and young adult children in late middle age, the balance has shifted towards having more aging parents and fewer young
adult children. These general themes are consistent with the larger demographic trends in life expectancy, birth timing, fertility, and marriage.

To further understand the actual demands that women face in late middle age, in this section we focus on current and past transfers of money or co-residence with parents and children for the Baby Boom cohort. ${ }^{12}$ Data from the 1997-2007 PSID on current transfers and past transfers allow us to explore several definitions of being sandwiched. We may consider women to only be sandwiched if they provide transfers to multiple generations in a given year. However, a more broad interpretation of being sandwiched is appropriate if actual demands are lumpy. For example, children may not be getting money transfers in every year, rather, they may only receive money transfers when they are unemployed. Similarly, parents may not require care each year but instead only if they are sick. If in one year, a woman gives money to an unemployed child and then next gives care to an aging parent, she would not be sandwiched between children and parents under the strict definition of the term. However, the cyclical nature of the demands suggest she is still facing competing demands from both generations-her behavior in the labor market, for example, may reflect the possibility of facing actual demands to both parents and children simultaneously. We look at measures of support over time to explore demands from children and parents under a variety of definitions of being a sandwiched caregiver.

We begin by analyzing current transfers of money to parents and children and coresidence with parents and children for women with children and living parents in 2007. Table 6 shows current transfers of money and/or co-residence, to children, to parents and to both children and parents. Consistent with the Pew Center Report (2013), transfers of both money and coresidence are more common with children than with parents. Coresidence is also more common
with younger children although approximately 10 percent of women with parents and children live with a child over 25 (with or without parents present). If we consider money transfers and co-residence with any child together, about 3 percent of women with living parents and children are making a financial transfer or coresiding with more than one generation. We do not have any measure of current transfers of care so our figures of being sandwiched between multiple generations, in its strictest form, are a lower bound estimate. ${ }^{13}$
[Table 6 about here]
The estimates of being sandwiched in 2007 in the PSID are low-lower than estimates from other data-and our purpose is not to argue that these estimates reflect the actual fraction of women facing competing demands at any one time. Time transfers are often larger than financial transfers by about 50 percent and excluding time transfers is likely to exclude many women who are providing care to multiple generations. However, even these lower bound estimates allow for an exploration of the change in the incidence of transfers if we consider periods of time longer than one year. If we are concerned about savings, labor supply decisions, and even physical or emotional strain on middle-aged adults who face competing demands from multiple generations it is not clear that transfers over a single year are the correct unit of measurement. Giving money to a child and parent concurrently is more likely to strain the budget of a family in a given year, but, if borrowing is possible, giving concurrently would have the same overall effect on savings as giving money to parents and children sequentially. Similarly, sequential demands from multiple generations may in fact have larger implications for labor supply than acute demands in a single year-for example policies like FMLA may make it easier to deal with acute demands while remaining in the labor force than dealing with more chronic demands from family
members. For this reason, we use the PSID panel to examine transfers over a longer period of time.

In Table 7, we explore the incidence of facing competing demands from multiple generations under a more broad definition than in Table 6 . We combine information on current transfers to children and parents with the incidence of past transfers to parents and children that we outlined in our discussion of the data. Table 7 shows that while in any given year only nine percent of parents report having given a money transfer to a child, over 30 percent of parents have given a money transfer to a child in the last ten years. Similarly, less than three percent of women report giving money to a parent in a single year but over twelve percent of women report having given substantial money transfers to parents in the past. For coresidence, extending the period about which transfers are calculated also dramatically increases the incidence of coresidence with both parents and children. In 2007, 45 percent of women live with a child and 2.2 percent of women live with a parent. However, 89 percent of women have lived with a child in the past ten years and nearly 10 percent of women have lived with a parent for one year or more in the past. Even excluding coresidence with young children, 19 percent of women have lived with a child over 25 in the past 10 years. Extending the period over which transfers are considered also dramatically increases the fraction of women who have given transfers of money or coresidence to both children and parents from less than three percent (at the most) in a given year to approximately 15 percent.
[Table 7 about here]
Finally, while we cannot examine current care to parents or any care for children, we can examine past care for parents. Nearly 65 percent of women with children and living parents report having given significant care to parents in the past. We combine this with coresidence and
money transfers to examine a more complete set of transfers. We find that including care for parents increases the fraction of women who are "sandwiched" between the needs of parents and children to about 30 percent depending on how we count coresidence with children. This is still a lower bound estimate as it excludes transfers of time with parents that are either not for care or not "significant" and it excludes all transfers of time with children. These estimates are much closer to the 30 percent estimated by Grundy and Henretta (2006) and Pierret (2006).

## Conclusions

As women in the Baby Boom generation begin to retire, they face a larger potential for intergenerational demands than previous cohorts. We show that over 60 percent of Baby Boom women have a living parent or in-law and at least one child, up ten percentage points from their parents' generation. The increase over time is driven by increases in the probability of having living parents-a product of changes in life expectancy. Changes in parental mortality are large enough to increase the likelihood of having children and living parents over time despite declines in fertility and marriage and increases in the number of women without any children. We also show that women in the Baby Boom generation who have children and living parents are more likely to have more parents and fewer children than an earlier cohort. On average, the parents of the Baby Boom cohort are older and children are younger than earlier cohorts. While healthy life expectancy has increased, so too has support to young adult children. Overall, the trends outlined here point to an increase over time in the potential for demands from multiple generations.

In the context of an increase in the number of women who are at risk to face demands from multiple generations, we explore actual transfers to children and parents for the Baby Boom cohort. Using data from the 2007 PSID we find that only 3 percent of women are currently making transfers of money or co-residence with multiple generations. However, our estimates of
proving concurrent support to multiple generations are low because of the limitations of information on transfers in the 2007 PSID. In particular, this estimate understates the transfers in two major ways: it does not capture transfers of time and is only focused on the present in a dynamic context that unfolds over relatively long periods. Despite the limitations of the transfer data, we show that the estimates of providing support to multiple generations increases dramatically when we consider transfers over a longer time period. When we examine past transfers to parents and children and include care or time, transfers to parents and children increase substantially and care is the dominant component of support that women report having given to parents in the past. We show that using definitions of "sandwich caregiving" that allow for consecutive and not just concurrent care to multiple generations increases the estimates of sandwich caregiving ten fold. Thus, the range of our estimates of is quite large (as is true of other estimates, such as those of Pierret (2006) with NLS-YW data). Sandwich caregiving rises to 15 percent when we add in past money transfers and past coresidence with parents and children and to approximately 30 percent when we add in past care for parents. Analysis of current and past transfers reveal that a substantial fraction of women are likely to face competing needs from parents and children at some point. The obligations may not always occur simultaneously but the potential for these obligations exists over a long period of time. Intergenerational demands may affect well-being in retirement if women decrease labor supply to care for parents (Van Houtven et al. 2013) or if money transfers to children crowd-out retirement savings.

For the Baby Boom cohort, these demands are particularly salient, as retirement age and increasing intergenerational demands have coincided with the Great Recession. The Great Recession reduced wealth and increased unemployment among older workers while at the same time increasing the demand for intergenerational support to young adults from their Baby Boom
generation parents. While stock markets and housing markets are recovering, the Great Recession has had a large, lasting effect on the labor market. Declining asset values and increases in unemployment that pushed some Baby Boomers who became unemployed to "retire" early and collect Social Security benefits and have made financial transfers to young adults children more difficult (Levine and Coile 2011). At the same time, high youth unemployment has increased the demand from children for financial transfers and coresidence (Pew Research Center 2013b).

In this paper we analyze transfers to parents and children between 1997 and 2007before the Great Recession-and transfers have likely increased since 2007. Even in 2007, we show that intergenerational demands have increased over time and are substantial for the Baby Boom cohort. The 2007 data do have limitations. These data do not allow for a detailed analysis of time transfers to both generations nor does the timing allow for an analysis of transfers during the Great Recession. New data on time and money transfers is being collected in the PSID in 2013. In the future, we plan to use these rich data on transfers to and from parents and children to further analyze transfers between Baby Boom generation retirees and their parents and children in the wake of the Great Recession.

## References

Altonji, J.G., Hayashi, F., \& Kotlikoff, L. 2000. The Effects of Income and Wealth on Time and Money Transfers between Parents and Children. In A. Mason \& G. Tapinos (Eds.), Sharing the Wealth (pp. 306-357). Oxford: Oxford University Press.

Attanasio, O. 1998. Cohort Analysis of Saving Behavior by U.S. Households. Journal of Human Resources, 33(3): 575-609.

Brown DC, Hayward MD, Montez JK, Hummer RA, Chiu C-T, Hidajat MM. 2012. The significance of education for mortality compression in the United States. Demography 49:819-40.

Chassin L., Macy J.T., Seo, D-C., Presson C.C., Sherman S.J. 2010, The association between membership in the sandwich generation and health behaviors: A longitudinal study, Journal of Applied Developmental Psychology, vol. 31, no. 1, pp. 38-46

Cherlin AJ. 2009. The Marriage Go-Round: The State of Marriage and the Family in America Today. New York: Knopf.

Coile, C. and Levine, P. 2011. The Market Crash and Mass Layoffs: How the Current Economic Crisis May Affect Retirement. The B.E. Journal of Economic Analysis \& Policy (Contributions) 11(1): Article 2.

Coward, RT, Dwyer, JW. 1990. The Association of Gender, Sibling Network Composition, and Patterns of Parent Care by Adult Children. Research on Aging 12(2):158-181.

Cutler, D. 2001. Declining Disability among the Elderly. Health Affairs 20(6): 11-27.
Crimmins, EM. 2004. Trends in the Health of the Elderly. Annual Review of Public Health, 25(1): 79-98.

Dwyer, JW and Coward, RT. 1991. A Multivariate Comparison of the Involvement of Adult Sons versus Daughters in the Care of Impaired Parents. Journal of Gerontology: Social Sciences 46:S259-S269.

Eggebeen DJ. 2005. Cohabitation and Exchanges of Support. Social Forces 83:1097-110
Fingerman, KL, Pitzer,LM, Chan,W, Birditt, K, Franks, MM, Zarit.S. 2010. Who gets what and why? Help middle-aged adults provide to parents and grown children. Journals of Gerontology: Social Sciences 66B (1, 2010): 87-98.

Freedman V, Spillman B, Andreski P, Cornman J, Crimmins E, Kramarow E, Lubitz J, Martin L, Merkin S, Schoeni R, Seeman T, Waidmann T. 2013. Trends in Late-Life Activity Limitations in the United States: An Update from Five National Surveys. Demography, 50(2): 661-671.

Furstenberg FF Jr., Rumbaut R, Settersten RA Jr. 2005. On the frontier of adulthood: emerging themes and new directions. In On the Frontier of Adulthood: Theory, Research, and Public Policy, ed. RA Settersten Jr., FF Furstenberg Jr., R Rumbaut, pp. 3-25. Chicago: Univ. of Chicago Press.

Grundy E., Henretta, JC. 2006. Between Elderly Parents and Adult Children: A New Look at the Intergenerational Care Provided by the 'Sandwich Generation', Ageing \& Society, vol. 26, no. 5, pp. 707-722

Henretta, JC, Grundy, E, Harris S. 2001. Socioeconomic differences in having living parents and children: A U.S. - British comparison of middle-aged women. Journal of Marriage and Family 63: 852-867

Hogerbrugge, MJA, Dykstra,PA. 2009. The family Ties of Unmarried Cohabiting and Married Persons in the Netherlands. Journal of Marriage and Family 71, 135-145.

Kahn JR, McGill B, Bianchi SM. 2011. Help to family and friends: are there gender differences at older ages? Journal of Marriage and Family. 73:77-92.

Kahn JR, Goldscheider F, Garcia-Manglano J. 2013. "Growing Parental Economic Power in Parent-Adult Child Households: Coresidence and Financial Dependency in the United States, 1960-2010. Demography (Published online 21 February 2013).

Kennedy S, Bumpass L. 2011. Cohabitation and trends in structure and stability of children's family lives. Paper presented at the annual meeting of the Population Association of America, Washington, DC, March 31-April 2

Künemund H. 2006). Changing Welfare state and the "Sandwich Generation": Increasing Burden for the Next Generation?, International Journal of Ageing and Later Life, vol.1(2), pp. 11-29

Loomis LS, Booth A. 1995. Multigenerational Caregiving and Well-being: The Myth of the Beleaguered Sandwich Generation. Journal of Family Issues; 16 (2), p.131-48

Martin JA, Hamilton BE, Ventura SJ, Osterman MJK, Wilson EC, Mathews TJ,. 2012. Births: final data for 2009. National Vital Statistics Reports, 60 (1). Hyattsville, MD: National Center for Health Statistics

Martin L, Schoeni R, and Andreski P. 2010. Trends in the Health of Older Adults in the United States: Past, Present, and Future. Demography, 47(supplement), pp. S17-S40.

McGarry, K. 1998. "Caring for the Elderly: The Role of Adult Children." In Inquiries in the Economics of Aging, edited by David A. Wise (133-163). Chicago: University of Chicago Press.

McGarry, K. 2006. Does Caregiving Affect Work: Evidence Based on Prior Labor Force Experience. Pp. 209-228 in David A. Wise and Naohiro Yashiro (eds.), Health Care Issues in the United States and Japan. Chicago: University of Chicago Press.

McGarry, K. and Schoeni, R. 1995. Transfer Behavior in the Health and Retirement Study. Journal of Human Resources, 30 (supplement): S184-S226.

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.

Pew Research Center. 2010. Childlessness up Among All Women; Down among Women with Advanced Degrees. http://www.pewsocialtrends.org/2010/06/25/childlessness-up-among-all-women-down-among-women-with-advanced-degrees/ June.

Pew Research Center. 2013a. The Sandwich Generation: Rising Financial Burdens for MiddleAged Americans. http://www.pewsocialtrends.org/2013/01/30/the-sandwich-generation/ January.

Pew Research Center. 2013b. A Rising Share of Young Adults Live in their Parents' Home. http://www.pewsocialtrends.org/2013/08/01/a-rising-share-of-young-adults-live-in-their-parents-home/ August.

Pierret CR. 2006. The "Sandwich Generation": Women Caring for Parents and Children. Monthly Labor Review September, 3-9

Raley RK, Bumpass, LL. 2003 The Topography of the Plateau in Divorce: Levels and Trends in Union Stability after 1980. Demographic Research. 8:246-58

Schoeni RF, Ross KE. 2005. Material Assistance Received from Families during the Transition to Adulthood. In On the Frontier of Adulthood: Theory, Research, and Public Policy, ed. RA Settersten Jr., FF Furstenberg Jr., R Rumbaut. Chicago: Univ. of Chicago Press

Singh, G, Siahpush, M. 2006. Widening Socioeconomic Inequalities in US Life Expectancy, 1980-2000. International Journal of Epidemiology, 35: 969-979.

Uhlenberg, P. 1996. Mortality Decline in the Twentieth Century and Supply of Kin Over the Life Course. The Gerontologist, 36(5): 681-685.

Van Houtven C, Coe N, and Skira M. 2013. The effect of informal care on work and wages. Journal of Health Economics 32: 240-252.

Williams C. 2004. The Sandwich Generation, Perspectives on Labour and Income, Winter 2004, v. 16(4), pp. 7-14

Wolf, DA, Soldo, B, Freedman, V. 1996. The Demography of Family Care for the Elderly. In T. Hareven (Ed.), Aging and Generational Relations Over the Life Course : A Historical
and Cross-Cultural Perspective, (pp.115-138). Hawthorne, NY: Walter de Gruyter, Los Angeles, CA: Rand Corporation

Wolf, DA, Soldo, B, Freedman, V. 1997. The division of family labor: care for elderly parents. Journal of Gerontology: Social Sciences 52B: 102-109.

Wu, LL, Bumpass, LL, Musick, K. 2001. Historical and life course trajectories of nonmarital childbearing. In: Wu, L.L. and Wolfe, B. (eds.). Out of wedlock. New York: Russell Sage: 3-48.

## Tables

Table 1. Percentage of Women, Age 45-64, with Surviving Parents and Children

|  | PSID |  |
| :--- | ---: | ---: |
|  |  | 1988 |
| PARENTS |  | 2007 |
| At Least One Surviving Parent | 47.4 | 61.8 |
| At Least One Surviving Parent or Parent-in-Law | 59.5 | 72.9 |
| CHILDREN* |  |  |
| At Least One Child | 91.4 | 87.3 |
| "SANDWICHED" |  |  |
| At Least One Surviving Parent Plus Child |  |  |

Table 2. Mean Characteristics of Women, Age 45-64

|  | PSID |  |
| :--- | ---: | ---: |
|  | 1988 | 2007 |
| Married | 68.7 | 62.7 |
| Number of Own Parents | 0.58 | 0.84 |
| Number of Own Parents and In-Laws | 0.95 | 1.36 |
| Childless | 8.59 | 12.45 |
| N | 1,207 | 1,369 |

Notes: Weighted using individual weights. Marriage rates for 1988 match the marriage rates (measured as the percent of nonHispanic white and black women 45-64) for the 1990 Census closely ( $68.1 \%$ ) and the 1988 CPS ( $70.6 \%$ ). Marriage rates for 2007 match the 2007 ACS ( $61.4 \%$ ) and 2007 CPS ( $65.5 \%$ ) closely. Although marriages rates are slightly higher in the CPS than in the PSID or the ACS, all show a decline of between 5 and 6 percentage points. Comparable figures on childlessness are difficult to obtain. In the 1990 Census $11.7 \%$ of non-Hispanic white and black women $45-64$ were childless. Childlessness is slightly lower in the PSID in 1988 at $8.6 \%$. The CPS fertility supplements suggest that childlessness has increased over time by about 7 percentage points for women age 40-44 (Pew Research Center, 2010). Childlesness among women age 40-44 matches the Pew Report on Childlessness (2010) closely. For this older age group, childlessness has also increased in the PSID but by about 3.5 percentage points.

Table 3. Distribution of Parents, Women Age 45-64

|  | PSID |  |
| :--- | ---: | ---: |
|  | 1988 | 2007 |
| Married |  |  |
| 0 Parents/In-laws | 33.5 | 19.5 |
| 1 Parent/In-law | 32.9 | 28.6 |
| 2 Parents/In-laws | 22.9 | 24.9 |
| 3 Parents/In-laws | 8.0 | 19.1 |
| 4 Parents/In-laws | 2.7 | 7.9 |
| Single |  |  |
| 0 Parents | 55.7 | 41.8 |
| 1 Parent | 34.9 | 41.5 |
| 2 Parents | 9.4 | 16.7 |
| All |  |  |
| 0 Parents/In-laws | 40.6 | 27.1 |
| 1 Parent/In-law | 33.5 | 33.0 |
| 2 Parents/In-laws | 18.6 | 22.2 |
| 3 Parents/In-laws | 5.5 | 12.5 |
| 4 Parents/In-laws | 1.8 | 5.2 |
| N | 1,207 | 1,369 |
| Notes. Weighted using individual weights. |  |  |

Notes: Weighted using individual weights.

Table 4. Mean Characteristics of Women with Children and Living Parents, Age 4564

|  | PSID |  |
| :--- | ---: | ---: |
|  | 1988 | 2007 |
| Married | 78.9 | 79.7 |
| Age | 52.5 | 52.7 |
| Number of Own Parents | 0.97 | 1.1 |
| Number of Own Parents and In-Laws | 1.6 | 1.9 |
| Mean Age Own Parent | 78.5 | 79.7 |
| Number of Children | 3.3 | 2.4 |
| Mean Age of Youngest Child | 23.5 | 23.9 |
| Mean Age of Oldest Child | 30.7 | 28.7 |
| N | 642 | 858 |
| Notes. Weighted using individual weights. N for |  |  |

Notes: Weighted using individual weights. N for age of parents is lower ( $\mathrm{N}=503$ in 1988 and $\mathrm{N}=678$ in 2007) because of missing data on parental age.

Table 5. Distribution of Parents and Children of Women with Children and Living Parents, Age 45-64

|  | PSID |  |
| :--- | ---: | ---: |
|  | 1988 | 2007 |
| Number of Children |  |  |
| 1 | 10.2 | 16.6 |
| 2 | 27.7 | 45.0 |
| 3 | 23.7 | 27.2 |
| 4 | 18.2 | 8.2 |
| $5+$ | 20.2 | 3.0 |
| Number of Parents or In-Laws |  |  |
| 1 | 55.9 | 44.0 |
| 2 | 31.4 | 30.8 |
| 3 | 9.9 | 17.6 |
| 4 | 2.8 | 7.6 |
| N | 642 | 858 |
| Notes: Weighted using individual weights. |  |  |

Table 6. Current Giving to Children or Parents by Women with Children and Living Parents, Age 45-64 in 2007

|  | Transfers |  |  |
| :--- | ---: | ---: | ---: |
|  | To Children | To Parents | To Children and |
| Money Support | 8.9 | 2.7 | Parents |
| Co-Residence | 45.3 | 2.2 | 1.0 |
| Co-Residence 18+ | 27.8 | 2.2 | 0.5 |
| Co-Residence 25+ | 9.8 | 2.2 | 0.5 |
| Money or Co-Residence (All) | 49.4 | 3.4 | 0.4 |
| Money or Co-Residence (18+) | 34.5 | 4.2 | 2.8 |
| Money or Co-Residence (25+) | 18.1 | 4.4 | 1.9 |

Notes: Weighted using individual weights.

Table 7. Current and Past Giving to Children or Parents by Women with Children and Living Parents, Age 45-64 in 2007

|  | Transfers |  |  |
| :--- | ---: | ---: | ---: |
|  |  |  | To Children |
|  |  | To Children | To Parents |
| and Parents |  |  |  |$~$| Money Support | 31.3 | 12.6 | 5.5 |
| :--- | ---: | ---: | ---: |
| Co-Residence | 89.4 | 9.8 | 8.0 |
| Co-Residence 18+ | 70.5 | 9.8 | 7.2 |
| Co-Residence 25+ | 18.9 | 9.8 | 2.2 |
| Money or Co-Residence (All) | 89.4 | 20.7 | 17.9 |
| Money or Co-Residence (18+) | 78.1 | 20.7 | 16.1 |
| Money or Co-Residence (25+) | 44.3 | 20.7 | 10.6 |
| Money, Co-Residence, or Parent Care | 89.4 | 45.1 | 39.1 |
| Money, Co-Residence (18+), or Parent Care | 78.1 | 45.1 | 35.4 |
| Money, Co-Residence (25+), or Parent Care | 44.3 | 45.1 | 21.7 |
| Notes: Weighted using individual weights. |  |  |  |

${ }^{1}$ We do not attempt to separate period and cohort effects. We do sometimes refer to time trends but time and cohort are not separable in this analysis.
${ }^{2}$ We include only whites and blacks in the analysis and exclude Asians and Latinos. The PSID added a Latino subsample in 1990 that was dropped in 1995 and added an post-1968 immigrant subsample in 1997 and 1999. Both are excluded from the analysis. The sample in 1988 did not include a population representative sample of Asian and Latino women and so including Asians and Latinos would make cross-cohort comparisons impossible.
${ }^{3}$ There are some women in the first cohort who have children who had already left the parental home by the time of the original 1968 PSID interview. These children are not sample members. However, because information on children in this paper is derived from birth histories, having children who are not PSID sample members does not affect the analysis.
${ }^{4}$ Knowing about living parents is quite rare but even information on children is difficult to find. For example, the CPS fertility supplement is not given to women over 44 and the ACS only asks about births in the last year.
${ }^{5}$ Ideally we would also look at actual sandwich caregiving and support over time but measures collected in 1988 are not strictly comparable to those collected in 2007. We therefore opt to provide estimates from the most recent time period.
${ }^{6}$ We include people who have provided child support as providing financial support to children because it is not possible to separate child support from other support for individuals giving both child support and other support. However, we have calculated financial support to children excluding all support for respondents who gave any child support to children. Excluding these individuals reduces the fraction giving to children by approximately 5 percentage points in each case.
${ }^{7}$ New data collection in the 2013 PSID will ask information on financial transfers for parents and children separately.
${ }^{8}$ All analyses include biological or adopted parents and current step-parents. We do not have information on more distant kin ties such as former step-parents. Some individuals may have a parent about whom they know very little-including not knowing if they are alive. We do not know whether respondents have such a parent but these parents are not counted as living. Therefore any increase in the number of absent parents over time would bias our estimates of the change in the "potentially sandwiched" downward.
${ }^{9}$ See notes to Table 2 on comparisons of marriage rates and childlessness with other data sources.
${ }^{10}$ In the text below when we refer to women who have children and living parents we are including those who have living in-laws but no living parents. We do this for expositional ease.
${ }^{11}$ As we outline in the introduction, these figures imply that the age at first birth is rising but due to the decline in the total number of children, the age at last birth has changed very little.
${ }^{12}$ We do not use the 1988 data in this section because the transfers are not comparable to those collected in 2007. Data in the 2013 PSID that will be more comparable to those collected in 1988. When final results of the 2013 PSID become available, we will be able to assess intercohort change in actual, not just potential, sandwich caregiving. For this paper, we choose to focus on the 2007 time point because these data provide the most recent data with which to assess "actual" support for two generations.
${ }^{13}$ Indeed these estimates are much lower than previous estimates that ranged about 30 percent (Grundy and Henretta, 2006; Pierret, 2006). We believe this is because we are unable to include
any transfers of time-other than the implied transfer through co-residence, and because of the nature of questions on financial transfers in the PSID outlined in the data section.

