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ABSTRACT

As the share of U.S. adult children living with their parents increases, it is important to understand how children who "boomerang" back home impact their parents in their pre-retirement and post-retirement years. We use data from the Health and Retirement Study (HRS) to examine the effects of boomerang children on their parents' labor market expectations and choices, as well as on their wealth, health, and life satisfaction. Event study analysis suggests that boomerang children return home due to short-term instabilities, such as negative shocks to marriage, income, and employment. We find that boomerang children are associated with a small increase in their parents' subjective probability of working after age 65. However, there is no clear statistically significant evidence that they impact parents' current or future labor market choices; nor is there any evidence that they affect parents' wealth, health, or life satisfaction.

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1. Introduction

The share of U.S. adult children living with their parents has increased since the 1960s. Figure 1 shows that in 2020, approximately one-third of children between ages 18 and 34 lived with their parents, with men and 18-24 year-olds, respectively, more likely to co-reside than women and 25-34 year-olds. Some coresident adult children never leave the parental nest, while the rest – sometimes labeled "boomerang children" – return home after living independently. Moving back home can be a rational choice for adult children who encounter shocks to their employment or income, allowing them to smooth consumption in the presence of borrowing constraints (Dettling and Hsu, 2018). With more than 70 percent of coresident adult children reporting knowing a friend or family member who recently moved back home, the economic benefits may also outweigh any costs associated with social stigma (Parker, 2012).

Prior research supports the hypothesis that financial shocks exacerbated by borrowing constraints increase the probability of an adult child returning home. For example, Matsudaira (2016) finds that a lack of employment, low wages, and high rental costs increase the number of adult children who move back home. Dettling and Hsu (2018) find that delinquency, a decrease in credit scores, and greater amounts of debt (particularly student loan debt) increase both the probability of moving home with parents and the duration of time spent back at home. Kaplan (2012) shows that having the option to return home reduces the cost of job loss, especially for adult children from lower-income households whose parents cannot provide pecuniary transfers. The author also finds that returning home allows adult children to hold out for jobs with high earnings potential, which often take longer to find or pay lower initial wages. Aladangady, Feiveson, and Paciorek (2019) show that young adults who move back with their parents consume less and increase savings compared to young adults who live independently. Finally, dissolution of relationships may also be a factor pushing young adults back home (Albertini, Gahler, and Harkonen, 2018). Returning home after a divorce or separation may help relieve financial or childcare burdens.

Boomerang children have been portrayed in the media and by some financial organizations as a monetary drain jeopardizing parental retirement, the premise being that parents may need to

delay retirement if they deplete their savings to support coresident children.[1] However, to our knowledge, no prior academic research has examined the extent to which adult children returning home compromises the retirement plans or well-being of parents.[2] Some studies have examined the impact of children leaving home. For example, Biggs (2019) and Biggs, Chen, and Munnell (2021) show that household consumption declines when children leave home. However, Dushi et al. (2021) find that parental saving in retirement accounts increases only slightly when children leave, and Biggs, Chen, and Munnell (2021) find that parental net worth is unchanged. In terms of labor market behavior, Miller, Tamborini, and Reznik (2018) and Biggs, Chen, and Munnell (2021) find that parents reduce both expected and actual labor supply when an adult child leaves home. There is reason to believe that boomerang children may not simply have the opposite effect as departing children. While there may be some uncertainty around the timing of a child's departure from home (Miller, Tamborini, and Reznik, 2018), a child returning home is more likely to be an unanticipated event. Additionally, parents may be more likely to view the boomerang arrangement as temporary, lasting only until the child can get back on their feet.

There are several mechanisms through which boomerang children may impact parental retirement outcomes. First, adult children with financial or relationship struggles can be a source of stress or conflict within the home (Tosi and Grundy, 2018). Second, Miller, Tamborini, and Reznik (2018) show that parents provide significant support for coresident children and that parental transfers decline by $1,500 a year when children leave home. Third, on the positive side, parents may find satisfaction in the return of their adult children (Casares and White, 2018). For example, boomerang children can alleviate empty nest syndrome, help parents with household tasks and responsibilities, or allow parents to see grandchildren more often. Finally, employed adult children can contribute to household expenses. The impact of a child returning home may depend on whether the event is transitory or long-term. A long-term stay with parents clearly

[1] See https://www.aarp.org/home-family/friends-family/info-2017/how-to-manage-your-boomerang-children.html, https://www.tiaa.org/public/learn/prepare-unexpected/how-to-cope-when-adult-children-or-parents-move-in, and https://www.forbes.com/sites/rcarson/2019/08/11/five-ways-to-keep-boomerang-children-from-ruining-your-retirement/.

[2] A large literature has examined other determinants of retirement, focusing on health status (McGarry, 2004), the availability of postretirement health insurance (Madrian, 1994; Gruber and Madrian, 1995; Blau and Gilleskie, 2001; Marton and Woodbury 2006, 2012; Robinson and Clark, 2010; Strumpf, 2010; Kapur and Rogowski, 2011; Nyce et al., 2013), quality of work (Siegrist et al., 2007), macroeconomic conditions that affect retirement wealth and job opportunities (Hurd and Reti, 2001; Kezdi and Sevak, 2004; Hurd, Reti, and Rohwedder, 2009; Coile and Levine, 2010; Goda, Shoven, and Slavov, 2012; Gorodnichenko, Song, and Stolyarov, 2013), and pension incentives (Coile and Gruber, 2007).

extends the timeline of any impacts. Beyond that, Dettling and Hsu (2018) show that the duration of time that adult children spend with their parents increases with financial distress. Thus, boomerang children who remain in the parental home long-term may have a disproportionately negative impact on their parents' finances. However, even a transitory boomerang event may have both short- and long-term impacts on their retirement outcomes.

In this paper, we examine the relationship between adult children returning home and parental retirement outcomes using data from the Health and Retirement Study (HRS), a nationally representative panel of individuals over the age of 50 and their spouses; the HRS also tracks children of respondents. Using a sample of 51-69-year-old parents, we estimate the relationship between the first boomerang event observed in the data – defined as an adult child under the age of 30 who returns to the parental home without being a caregiver to the parents – and parental labor market status, total wealth, health, and life satisfaction. We also use the child-level panel to explore events in the child's life that may prompt a return to the parental nest. At both the parent and child levels, we examine the outcomes of interest before and after the first observed boomerang event. Event study analyses that disaggregate the post-boomerang period into two-year intervals further help us explore the dynamics of these relationships.

An important consideration for our analysis is that boomerang events may not be exogenous. They may be associated with other shocks – for example, labor market or family-specific shocks – that also affect parental retirement outcomes. We attempt to address this concern by controlling for age, individual fixed effects, and survey wave. We also specifically exclude children who return home to provide care to parents experiencing health shocks. Our event study analyses can further alert us to the possibility of pre-trends, which could suggest the presence of outside factors that are operating before the boomerang event. Additionally, our child-level regressions can support a causal story by showing the plausibly exogenous shocks in a child's life that drive boomerang events. However, we cannot fully rule out the possibility that other time-varying, individual-specific shocks may be at work.

Our child-level analysis suggests that a boomerang event is likely associated with negative shocks to a child's marriage, income, and employment. The event study analysis suggests that many of these shocks are temporary, and correspondingly most boomerang events are transitory. At the parent level, we find no clear, statistically significant association between boomerang children and parental health, wealth, probability of working, hours worked, or well-being.

However, we do find an increase in the self-reported probability of working full-time after age 65. That increase is concentrated among men, those under the age of 62, and those in the top half of the initial wealth distribution. Overall, our results provide evidence that parents may delay their anticipated retirement when children return home. However, there is no evidence that they adjust their current labor market choices. Moreover, there is no evidence of an impact on their wealth, health, or life satisfaction.

The remainder of the paper proceeds as follows. Section 2 describes the HRS data used in the analysis and summarizes the characteristics of the parents and boomerang children in our sample. Section 3 presents the methodology, while Section 4 discusses the results of our analysis. Section 5 concludes.

2. Data and Descriptive Statistics

Our data are drawn from the Health and Retirement Study, a biennial national longitudinal survey of individuals over the age of 50 and their spouses or partners. The survey began in 1992 with an initial cohort aged 51–61 (additional cohorts were added in subsequent waves), and interviews take place every two years. We primarily rely on cleaned versions of the HRS data compiled by the RAND Center for the Study of Aging through wave 12 (2014). Data on HRS respondents' children are drawn from the RAND HRS Family Data (2014, version 1, "child-level file"), which contains information about all living children of each respondent, including their age and sex, their work and income, whether they live with the respondent, and whether they are a caregiver to the respondent. We merge these data with the RAND HRS Longitudinal File (2018, version 1, "parent-level file"), which contains demographic, financial, employment, and health information on each HRS respondent in each wave.[3] We also merge in data on respondents' life satisfaction from the RAND HRS Fat Files (2006-2014).[4]

In the child-level file, we exclude children with RAND-identified longitudinal linkage problems, drop non-response waves, and keep all unique children between the ages of 18 and 29

[3] In addition to questions about labor market participation, the HRS asks respondents under the age of 65 to self-report a subjective probability of working full time after age 65.

[4] Although the RAND HRS Longitudinal File (2018, version 1) includes waves from 1992-2018, the RAND HRS Family Data (2014, version 1) only covers waves from 1992-2014. Thus, we use data from 1992-2014 for most of our analysis. Life satisfaction variables are only available from the RAND HRS Fat Files from 2006 onwards; thus, we use data from 2006-2014 for our analysis of parental life satisfaction.

(inclusive).[5] Children's total family income is reported inconsistently both within and across waves, with a continuous variable available for some children and a set of potentially overlapping brackets for others.[6] If a child has a continuous income variable available, we use that value. If a child's income is bracketed, we use the minimum value in the bracket.[7] We construct an indicator for "boomerang children," which takes on the value of 1 for a child between the ages of 18 and 29 who transitions between two non-missing waves from living outside the respondent's home to living with the respondent. We further impose a restriction that boomerang children are not a caregiver for the respondent during the wave in which they return home.[8] Our final child sample contains 27,307 children aged 18-29 with 73,899 child-wave observations. The steps of sample selection and observation counts for the child sample are shown in the top panel of Appendix Table A-1. We observe 1,630 boomerang children with 1,679 individual boomerang events (1,630 first boomerang events). Panel 1 of Appendix Table A-2 shows the boomerang event observations by child and child-wave.

We collapse the number of boomerang children in the child sample at the respondent-wave level, merge with respondents in the parent-level file, restrict our parent sample to waves in which the respondent is aged 51 to 69 with at least one child between the ages of 18 and 29, and drop non-response waves. (The steps of sample selection and observation counts for the parent sample are shown in the bottom panel of Appendix Table A-1.) We also construct measures of each parent's total household wealth and weekly hours worked. Total household wealth is defined by summing the RAND HRS measure of non-housing financial wealth (which excludes retirement wealth) with each household's total assets in individual retirement accounts and any balances in the respondent's or spouse's defined contribution accounts from their current employer. Total weekly hours worked is the number of hours the respondent normally works in their main and

[5] RAND researchers identify potential longitudinal linkage problems by checking for changes over time in key information, e.g., sex, age, relationship and name. In the child-level file, a particular child will appear in two records if connected to a couple household, and both parents are respondents. We keep unique children by selecting the child record from the longest-lived respondent in a couple household. If both respondents are present throughout the data, we select the child record from the designated family respondent.

[6] Total family income bracket ranges are different for Waves 1, 2 and 3 (1992–1996) as compared to bracket ranges in later waves. In wave 2H (1994) and wave 3 (1995 and 1996) continuous income is reported.

[7] For example, a child with a bracketed income of $35,000–70,000, and a child with a bracketed amount of $35,000 or more, would both be assigned an income of $35,000.

[8] We define caregivers as co-resident children who are reported in the HRS Helper file (HP module) or assist the respondent with activities of daily living (ADLs) or instrumental activities of daily living (IADLs). ADLs include bathing, dressing, eating, getting in and out of bed, and walking across the room. IADLs include managing money, using the phone, and taking medications.

secondary jobs.[9] All monetary amounts are converted to 2020 dollars using the Retroactive Research Series of the Consumer Price Index for All Urban Consumers (R-CPI-U-RS).

Table 1 shows summary statistics for all observations used in the analysis. The top panel reports results from the child sample. Children in the sample have an average age of around 25, and 25 percent live with their parents. However, boomerang events are relatively rare, with only 5 percent of observations in the child sample occurring after a boomerang event. The bottom panel reports results from the parent sample. Parents, on average, have 1.8 children between the ages of 18 and 29 (with 0.45 children, on average, living in the parental home). Only 10 percent of observations in the parent-level file occur after an observed boomerang event. (Both parents and children may experience other transitions, such as a child leaving home, that are not considered in this analysis.) The main dependent variables for parents include respondents' self-reported subjective probability of working full time after age 65 (asked of respondents under age 65), an indicator for whether the respondent does any work for pay, the respondent's total weekly hours worked, total household wealth, the respondent's self-reported life satisfaction (with responses ranging from 1 to 7 and higher numbers indicating greater life satisfaction), the respondent's self-reported health status (ranging from 1 for excellent to 5 for poor), an index of the respondent's ever reported health conditions (out of a possible 8), and the respondent's depression score (the higher the score, the more negative the respondent's feelings).[10, 11, 12] Summary statistics broken down by sex, as well as by pre- and post-boomerang periods (for those experiencing boomerang events) are available upon request.

[9] We assume that respondents work zero hours in their main job if they have elsewhere indicated not working. We also assume zero hours in their second job if missing.

[10] For respondent's life satisfaction, HRS respondents are asked to rate their agreement with the statement "I am satisfied with my life." In waves 9–12, the options are "strongly disagree" (1), "somewhat disagree" (2), "slightly disagree" (3), "neither agree nor disagree" (4), "slightly agree" (5), "somewhat agree" (6), and "strongly agree" (7). In wave 7, the scale is reversed (1 corresponds to "strongly agree" and 7 corresponds to "strongly disagree") and the "somewhat agree"/"somewhat disagree" options are replaced with "agree"/"disagree." In wave 8, the options range from "strongly disagree" (1) to "strongly agree (6) with no option to "neither agree nor disagree." We recode the wave 7 variable to make it consistent with waves 9–12 and transform the wave 8 variable to range from 1 to 7 by multiplying responses by 6/5 and subtracting 1/5.

[11] Respondent's ever reported health conditions is the sum (out of eight) of indicators for whether a doctor has ever told the respondent, and the respondent reported that they had high blood pressure, diabetes, cancer, lung disease, heart disease, stroke, psychiatric problems, or arthritis.

[12] Respondent's depression score is available beginning in wave 2 and is based on the Center for Epidemiologic Studies Depression (CESD) scale. The score is the sum of six "negative" sentiment indicators (feeling depression, that everything is an effort, that sleep is restless, feeling alone, feeling sad, and being unable to get going) minus two "positive" indicators (whether the respondent felt happy and enjoyed life all or most of the time).

3. Methodology

Our main objective is to examine the impact of adult children returning home on parental work, wealth, health, and well-being. However, we start by exploring potential determinants of boomerang events by examining how children's marriage, in-school status, employment, income, number of children, and childcare change around the time of the boomerang event. To do this, we estimate the following regression:

$$y_{kt} = \beta_0 + \beta_1 \cdot post_{kt} + age_{kt} + \lambda_k + \mu_t + \epsilon_{kt} \quad (1)$$

*w*here y_{kt} represents any of the dependent variables of interest (shown in the top panel of Table 1, not including age, sex, or whether the respondent resides with parents) for child k in wave t. On the right-hand side, $post_{kt}$ is a binary variable equal to 1 in all waves including and following the child's first boomerang event (living independently in one observed wave followed by living with a parent in the next); it takes on a value of zero prior to the first boomerang event and in every wave for children who do not experience a boomerang event. We include a set of age-specific intercepts, age_{kt}; individual fixed effects, λ_k, to capture observable and unobservable time-invariant factors; and a wave fixed effect, μ_t, to capture economy-wide shocks that affect all children or cross-wave differences in survey methodology (such as the inconsistencies in child income brackets). ϵ_{kt} is a stochastic error term.

At the parent level, we estimate a similarly specified regression:

$$y_{it} = \beta_0 + \beta_1 \cdot post_{it} + age_{it} + \lambda_i + \mu_t + \epsilon_{it}. \quad (2)$$

In this equation, y_{it} represents any of the dependent variables of interest (shown in the bottom panel of Table 1, not including age, sex, number of children, or number of coresident children) for respondent i in wave t; $post_{it}$ is an indicator that takes on a value of 1 in all waves including and following the parent's first boomerang event (having at least one child between the ages of 18 and 29 who was living independently in one observed wave and moves back home in the next); age_{it} is a set of age-specific intercepts; λ_i is a fixed-effect for respondent i that captures the effect of observable and unobservable time-invariant factors; μ_t is a wave fixed effect that captures any factors that affect all respondents in wave t in the same way, such as economy-wide shocks or variations in survey questions; and ϵ_{it} is a stochastic error term.

To examine the dynamics around boomerang events, we estimate event study specifications of Equations (1) and (2) that disaggregate the periods before and after a boomerang event into individual waves. The event study version of (1) is:

$$y_{kt} = \sum_{s=-T}^{T} \theta_s b_{kt-s} + age_{kt} + \lambda_k + \mu_t + \epsilon_{kt} \quad (3)$$

where b_{kt} is an indicator that takes on a value of 1 if the first boomerang event occurs in wave t. It takes on a value of 0 otherwise (including for children who do not experience a boomerang event). Thus, the b_{t-s} terms included in the summation are lags and leads of the boomerang event (in our estimation, s ranges from $T = 5$ waves before to $T = 5$ waves after the event). The omitted category is s = –1, the wave immediately before the boomerang event, and b_{kt} is defined without regard to any prior or subsequent moves. For example, if a child living independently in wave 2 moves in with a parent between waves 2 and 3, $b_{k3} = 1$, and $b_{kt} = 0$ for all other values of t. In wave 1, the two-wave lead, $b_{k,t+2}$, would be equal to 1 (the boomerang event occurs in two periods), so the equation above would be $\theta_{-2} + age_{kt} + \lambda_k + \mu_t + \epsilon_{kt}$; in wave 2, the one-wave lead, $b_{k,t+1}$, would be equal to 1, so the equation above would be $\theta_{-1} + age_{kt} + \lambda_k + \mu_t + \epsilon_{kt}$; and so on. All other variables are defined in the same way as in Equation (1).

The event study version of Equation (2) is

$$y_{it} = \sum_{s=-T}^{T} \theta_s b_{it-s} + age_{it} + \lambda_i + \mu_t + \epsilon_{it}. \quad (4)$$

Analogous to Equation (3), b_{it} is an indicator that takes on a value of 1 if the first boomerang event occurs in wave t. It takes on a value of 0 in other waves (including for parents who do not experience a boomerang event). Thus the b_{it-s} terms in the summation above are the lags and leads of b_{it} (with s ranging from $T = 5$ years before to $T = 5$ years after the event). Just as in Equation (3), the event indicators are defined without regard to any prior or subsequent events. All other variables are defined in the same way as in Equation (2).

4. Results

4.1. Main Findings

Table 2 presents results from the estimation of Equations (1) and (2). We apply the inverse hyperbolic sine (IHS) transformation to total family income and total household wealth variables to deal with skewness while retaining zero and negative values. The top panel reports coefficients

for children and the bottom panel reports coefficients for parents. The top panel shows that boomerang children exhibit lower income, are 5 percent less likely to be in school, are 2 percent less likely to be not working, and are 3 percent more likely to be working part-time in the post-boomerang period than they were before returning home. In terms of their family status, boomerang children are 14 percent less likely to be married, have 0.12 fewer children, and are 3 percent more likely to use their parents for childcare following the boomerang event. For parents of boomerang children, the results presented in the bottom panel of Table 2 suggest that having adult children return home increases the subjective probability of working full-time after age 65 by 1.5 percentage points. Although this increase is significant at the 10 percent level, it represents only a 6 percent increase relative to the mean of the dependent variable (28 percent) shown in Table 1. Boomerang events have no statistically significant impact on parental wealth, health, life satisfaction, or observed labor supply.

These results are consistent with boomerang children using the option to move back home to smooth marital, employment, or income shocks. The decrease in the probability of being in school suggests that some boomerang events may reflect children returning home after attending college away from home. As these former students may now be employed, this story is also consistent with the decline in the probability of not working. However, part-time work increases, consistent with boomerang events being driven by a failure to find or maintain full-time employment. The reason for the observed post-boomerang decline in the number of children is unclear. It could reflect a post-divorce loss of stepchildren or a failure to report children who are not in the custody of the parent. The results for parents suggest that while boomerang children may increase anticipated work effort after age 65, there is no evidence that they affect parents' labor force participation, health, or life satisfaction.

To illustrate the dynamics of boomerang events, Figure 2 presents the results from the estimation of Equation (3) – the event study for children – with an indicator for residing with parents as the dependent variable. The point estimates for each period show the probability of living with parents relative to the period immediately before the boomerang event. By construction, in the period immediately before the boomerang event ($t = -1$), no boomerang children live with their parents, and in the period immediately following the boomerang event, all boomerang children live with their parents. However, many boomerang children lived with their parents 2 or 3 waves before the boomerang event, suggesting that their departure from the parental

home was temporary and may reflect either college attendance or an attempt at living independently. Figure 2 also shows that following the boomerang event, many children leave their parental home again; only 50 percent of boomerang children are still at home 4 waves out. These results suggest that leaving home may often not be a one-time, discrete event for many young adults. As they attempt to establish financial independence, adult children may alternate between living on their own and living with their parents.

Figures 3 and 4 present the results from the estimation of Equations (3) and (4) – the event study for children and parents, respectively – with the dependent variables shown in Table 2. Figure 3 shows the results for boomerang children. Consistent with the results presented in Table 2, it appears that boomerang children experience negative shocks to marital status, income, and employment at the same time they return to the parent's home. The shocks generally occur at the time of the boomerang event with no obvious pre-trends. The decline in income and the increase in the probability of part-time employment appear to be temporary, and even the decline in the probability of being married appears to reverse over time. Meanwhile, the probability of full-time employment increases. Figure 4 presents the results for the parents. It shows that the increase in the probability of working full time after age 65 occurs shortly after the boomerang event, with no obvious pre-trends, suggesting a causal role for the boomerang event. Figure 4 also suggests that there may be a minor worsening in self-reported health (less than 0.1 relative to the standard deviation of 1.05 reported in Table 1). However, looking at the other outcomes shown in Figure 4, there does not seem to be any long-term impact of boomerang events on parental wealth, current labor market choices, life satisfaction, or health conditions. The lack of major long-term impacts on parents may reflect the transitory nature of boomerang events, as shown in Figures 2 and 3.

4.2. Heterogeneity and Robustness

We examine whether there are heterogeneous effects for parents by sex, age, wealth, and in the period after the 2008 recession. We do this by interacting the post-boomerang indicator in Equation (2) with indicators for being female, being age 62 or older, being in the top half of the initial wealth distribution (in the respondent's first observed wave), and interview waves during and after 2008. Table 3 presents the results from estimating these specifications. The top section of Table 3 presents results by sex, with the first row reporting the coefficients on the post-boomerang indicator and the second row reporting the coefficients on its interaction with the indicator for being female. These results suggest that the increase in the subjective probability of

working after age 65 is concentrated among men. However, men reduce their hours worked in the post-boomerang period, while women increase their hours worked. There is a small post-boomerang decrease in life satisfaction (0.319 / 1.71 = 0.186 of a standard deviation) and a minor worsening of self-reported health (0.0627 / 1.05 = 0.059 of a standard deviation) for men but not for women. The second, third, and fourth sections present results by age, wealth, and waves after the 2008 recession, respectively. They suggest that the increase in the probability of working full-time after age 65 is concentrated among those under the age of 62 and those in the top half of the initial wealth distribution. It is also observed only during interview waves before the 2008 recession. Few other coefficients are significant in the bottom three panels of Table 3.

Figure 5 further explores heterogeneity by sex by presenting event studies in which the event time indicators in Equation (4) are interacted with an indicator for being female. We show only event studies for the two statistically significant labor market outcomes from Table 3, the subjective probability of working full time after age 65 and total weekly hours worked. (Other event studies are available from the authors upon request.) Figure 5 suggests that the changes in hours worked shown in Table 3 do not coincide with the boomerang event. Indeed, they appear to be part of trends that were occurring before the boomerang event. Thus, these labor supply changes are unlikely to be directly caused by the boomerang event. In contrast, the increase in the subjective probability of work (for men but not women) does follow shortly after the boomerang event with no pre-trends. This change is more likely to be driven by a boomerang event.

Boomerang events may be transitory or persistent, and the lack of a major impact on parents (other than a small increase in the probability of working full-time after age 65) may be driven by children who remain in the parental home for only one or two waves. Our post-boomerang period indicator is defined without regard to subsequent transitions; that is, it continues to take on a value of 1 after the first observed boomerang event. To explore whether transitory boomerang events may be driving our results, we drop all observations that come after a boomerang child subsequently moves out of the parental home for the last observed time.[13] Table 4 shows the

[13] We define a "leave event" as a child between ages 18 and 29 who transitions between two non-missing waves from living with the respondent (not as a caregiver) to living independently. For the restricted samples, we drop all waves including and after a child's/parent's last leave event. (Some children and parents in the restricted samples experience leave and boomerang events between their first boomerang and last leave.) In the restricted samples, counts of first boomerang events and periods pre first boomerang events remain the same as in the non-restricted samples. For children, post boomerang event child-wave observations decrease from 3,814 in the primary sample (see top panel of Appendix Table A-2) to 2,541 in the restricted sample. For parents, post boomerang event parent-

estimation of Equations (1) and (2) with these restricted samples. Compared to Table 2, these results suggest that boomerang children experience a decrease in the probability of full-time work and a larger decrease in income while they remain in the parental home. The impact on the parents' probability of working full-time after age 65 also increases in both magnitude and significance.

5. Conclusion

When the COVID-19 pandemic began, many adult children moved back in with their parents, and some reports suggest that a large share of these boomerang children are still living at home.[14] While the media and popular movies (like the 2006 romantic comedy Failure to Launch) sometimes portray adult children who live at home as exploiting their parents' resources by overstaying their welcome, we find no clear evidence that boomerang children affect their parents' financial status, labor market outcomes, health, or life satisfaction. We show that there are real income and marital shocks that drive some children to return home and that the return home is often transitory. Thus, adult children appear to use returning to their parents' home as insurance. While fathers may believe they have to work beyond age 65 because of a boomerang child, they exhibit no actual change in labor supply and only small decreases in life satisfaction and self-reported health. Mothers do not experience any decline in well-being, health, or wealth. As returning to the parental home continues to become more common, reducing the stigma associated with this living arrangement, our results can help inform both policy makers and parents about the impact that a boomerang child could have on their retirement and well-being.

wave observations decrease from 5,837 in the primary sample (see bottom panel of Appendix Table A-2) to 3,838 in the restricted sample.

[14] See https://www.cnbc.com/2022/09/06/many-pandemic-boomerang-kids-still-live-with-mom-and-dad.html.

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Table 1: Summary Statistics for Boomerang Children and Parents

Panel 1 — Child Sample					
Variable	Mean	Std. Dev.	Min	Max	Individuals
Age	24.87	2.76	18.00	29.00	27,307
Female	0.49	0.50	0.00	1.00	27,302
Resides with Parents	0.25	0.36	0.00	1.00	27,307
Post Boomerang Event	0.05	0.14	0.00	0.83	27,307
Married	0.37	0.44	0.00	1.00	27,211
In School	0.23	0.33	0.00	1.00	26,471
Not Working	0.23	0.36	0.00	1.00	26,738
Working Part Time	0.15	0.27	0.00	1.00	26,738
Working Full Time	0.61	0.41	0.00	1.00	26,738
Total Family Income	$22,187.63	$23,563.96	$0.00	$824,038.10	23,002
Number of Children	0.69	1.11	0.00	12.00	26,841
Parent Provides Childcare	0.11	0.28	0.00	1.00	21,394
Panel 2 — Parent Sample					
Variable	Mean	Std. Dev.	Min	Max	Individuals
Age	57.55	3.77	51.00	69.00	18,416
Female	0.51	0.50	0.00	1.00	18,416
Number of Children	1.79	0.81	1.00	10.00	18,416
Number of Co-Resident Children	0.45	0.55	0.00	4.00	18,416
Post Boomerang Event	0.10	0.21	0.00	1.00	18,416
P(Working Full Time After 65)	27.99	29.67	0.00	100.00	15,989
Working For Pay	0.65	0.42	0.00	1.00	18,386
Total Weekly Hours Worked	27.15	20.65	0.00	168.00	18,358
Total Household Wealth	$569,989.20	$1,540,391.00	-$2,549,436.00	$136,000,000.00	18,416
Life Satisfaction	5.19	1.71	1.00	7.00	6,052
Self-Reported Health	2.71	1.05	1.00	5.00	18,414
No. of Health Conditions	1.36	1.24	0.00	7.00	18,416
Depression Score	1.50	1.82	0.00	8.00	16,241

Notes: This table shows summary statistics based on samples and variables used in regressions. Panel 1 (top) reports results for the child sample, and Panel 2 (bottom) for the parent sample. Standard deviations, minimums, and maximums are between values (i.e., they are calculated across individual-level means). Data are unweighted.

Source: Authors' calculations using data from the Health and Retirement Study.

Table 2: Determinants of Boomerang Events and Impact on Parental Outcomes

Panel 1 — Child Sample

Variables	(1) Married or Partnered	(2) In School	(3) Not Working	(4) Working Part Time	(5) Working Full Time	(6) Total Family Income	(7) Number of Children	(8) Parent Provides Childcare
Post Boomerang	-0.143***	-0.0518***	-0.0248**	0.0322***	-0.00736	-0.973***	-0.124***	0.0305***
	(0.00963)	(0.0124)	(0.0121)	(0.0114)	(0.0132)	(0.181)	(0.0168)	(0.00871)
Observations	73,500	65,463	69,884	69,884	69,884	41,728	67,790	56,006
R-Squared	0.163	0.166	0.044	0.040	0.109	0.218	0.159	0.022
Individuals	27,211	26,471	26,738	26,738	26,738	23,002	26,841	21,394

Panel 2 — Parent Sample

Variables	(1) P(Work Full Time After 65)	(2) Working For Pay	(3) Total Weekly Hours Worked	(4) Total Household Wealth	(5) Life Satisfaction	(6) Self-Reported Health	(7) No. of Health Conditions	(8) Depression Score
Post Boomerang	1.552*	-0.00284	0.337	-0.0413	-0.0943	0.0266	0.00633	0.0448
	(0.820)	(0.00924)	(0.427)	(0.110)	(0.103)	(0.0185)	(0.0165)	(0.0407)
Observations	40,111	57,912	57,377	58,092	8,613	58,065	58,092	47,860
R-Squared	0.005	0.092	0.123	0.004	0.014	0.031	0.338	0.006
Individuals	15,989	18,386	18,358	18,416	6,052	18,414	18,416	16,241

Notes: This table shows results from the estimation of Equations (1) and (2). Panel 1 (top) reports results for the child sample, and Panel 2 (bottom) for the parent sample. Robust standard errors in parenthesis. All regressions include a set of age-specific intercepts, individual fixed effects, and wave fixed effects. See text for details. *** p<0.01, ** p<0.05, * p<0.1

Source: Authors' calculations using data from the Health and Retirement Study.

Table 3: Heterogeneous Effects on Parental Outcomes

Variables	(1) P(Work Full Time After 65)	(2) Working For Pay	(3) Total Weekly Hours Worked	(4) Total Household Wealth	(5) Life Satisfaction	(6) Self-Reported Health	(7) No. of Health Conditions	(8) Depression Score
				Sex				
Post Boomerang	2.570**	-0.0180	-1.510**	-0.0504	-0.319**	0.0627**	0.0195	0.0456
	(1.141)	(0.0125)	(0.595)	(0.152)	(0.143)	(0.0265)	(0.0232)	(0.0543)
Post Boomerang x Female	-1.925	0.0306*	3.704***	0.0184	0.403**	-0.0726**	-0.0264	-0.00149
	(1.549)	(0.0177)	(0.816)	(0.209)	(0.187)	(0.0353)	(0.0324)	(0.0771)
				Age				
Post Boomerang	1.641**	-0.00780	0.107	-0.0845	-0.109	0.0149	0.0144	0.0503
	(0.821)	(0.00916)	(0.433)	(0.121)	(0.114)	(0.0199)	(0.0159)	(0.0445)
Post Boomerang x Age ≥ 62	-0.520	0.0141	0.655	0.123	0.0485	0.0334	-0.0228	-0.0165
	(1.662)	(0.0156)	(0.709)	(0.168)	(0.152)	(0.0285)	(0.0266)	(0.0587)
				Initial Wealth				
Post Boomerang	0.296	-0.00973	1.032	-0.0817	0.232	0.0369	0.0496	0.0850
	(1.810)	(0.0161)	(0.726)	(0.231)	(0.433)	(0.0347)	(0.0307)	(0.0753)
Post Boomerang x Top Half	4.708**	0.0234	-1.428	-0.0322	-0.721	0.0101	-0.0863**	-0.0484
	(2.228)	(0.0225)	(1.039)	(0.238)	(0.457)	(0.0447)	(0.0413)	(0.0981)
				Post-Recession				
Post Boomerang	1.768*	0.000871	0.202	-0.190	-0.159	0.0171	0.0177	0.0476
	(0.905)	(0.00984)	(0.453)	(0.118)	(0.141)	(0.0209)	(0.0169)	(0.0474)
Post Boomerang x Post 2008 Recession	-0.637	-0.0121	0.572	0.534***	0.0903	0.0382	-0.0463	-0.0121
	(1.361)	(0.0175)	(0.778)	(0.205)	(0.147)	(0.0323)	(0.0305)	(0.0724)

Notes: This table shows results from the estimation of Equation (2), interacting the post boomerang indicator with indicators for being female (shown in first section), being age 62 or older (shown in second section), being in the top half of the initial wealth distribution (in the respondent's first observed wave, shown in third section), and interview waves during and after 2008 (shown in last section). Robust standard errors in parenthesis. All regressions include a set of age-specific intercepts, individual fixed effects, and wave fixed effects. See text for details. *** p<0.01, ** p<0.05, * p<0.1

Source: Authors' calculations using data from the Health and Retirement Study.

Table 4: Determinants of Boomerang Events and Impact on Parental Outcomes, Restricted Samples

Panel 1 — Restricted Child Sample

Variables	(1) Married or Partnered	(2) In School	(3) Not Working	(4) Working Part Time	(5) Working Full Time	(6) Total Family Income	(7) Number of Children	(8) Parent Provides Childcare
Post Boomerang	-0.189***	-0.0345***	-0.0150	0.0493***	-0.0342**	-1.391***	-0.0992***	0.0329***
	(0.00912)	(0.0133)	(0.0127)	(0.0119)	(0.0138)	(0.201)	(0.0166)	(0.00911)
Observations	72,227	64,294	68,648	68,648	68,648	41,111	66,720	54,736
R-Squared	0.158	0.159	0.042	0.037	0.104	0.213	0.158	0.022
Individuals	27,211	26,466	26,737	26,737	26,737	22,956	26,839	21,309

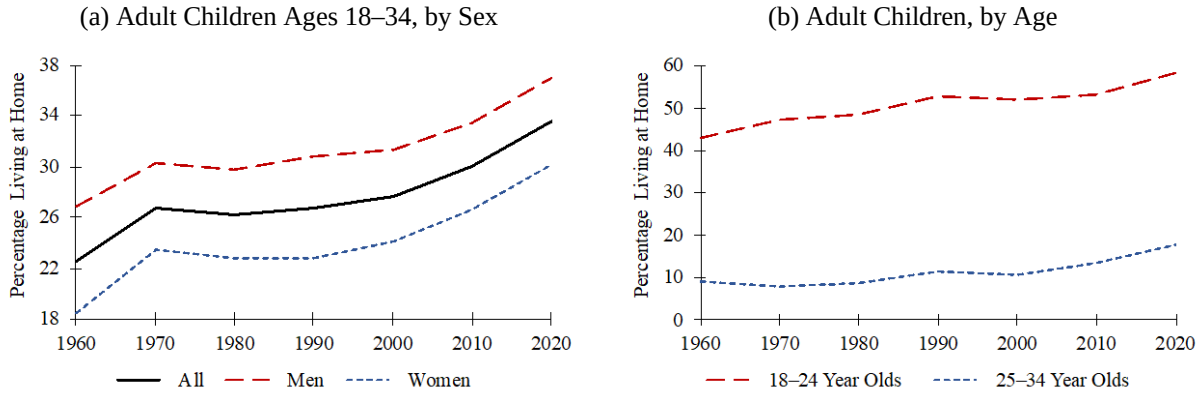
Panel 2 — Restricted Parent Sample

Variables	(1) P(Work Full Time After 65)	(2) Working For Pay	(3) Total Weekly Hours Worked	(4) Total Household Wealth	(5) Life Satisfaction	(6) Self-Reported Health	(7) No. of Health Conditions	(8) Depression Score
Post Boomerang	1.694**	-0.00549	0.471	-0.0272	-0.0320	0.0318	0.0153	0.0545
	(0.840)	(0.00917)	(0.429)	(0.114)	(0.112)	(0.0194)	(0.0158)	(0.0438)
Observations	39,041	55,913	55,402	56,093	8,236	56,066	56,093	46,015
R-Squared	0.005	0.087	0.115	0.005	0.015	0.029	0.330	0.006
Individuals	15,968	18,386	18,358	18,416	5,877	18,414	18,416	16,225

Notes: This table shows results from the estimation of Equations (1) and (2). Panel 1 (top) reports results for the restricted child sample, and Panel 2 (bottom) for the restricted parent sample. The restricted samples drop all observations that come after a boomerang child subsequently moves out of the parental home for the last observed time. Robust standard errors in parenthesis. All regressions include a set of age-specific intercepts, individual fixed effects, and wave fixed effects. See text for details. *** p<0.01, ** p<0.05, * p<0.1

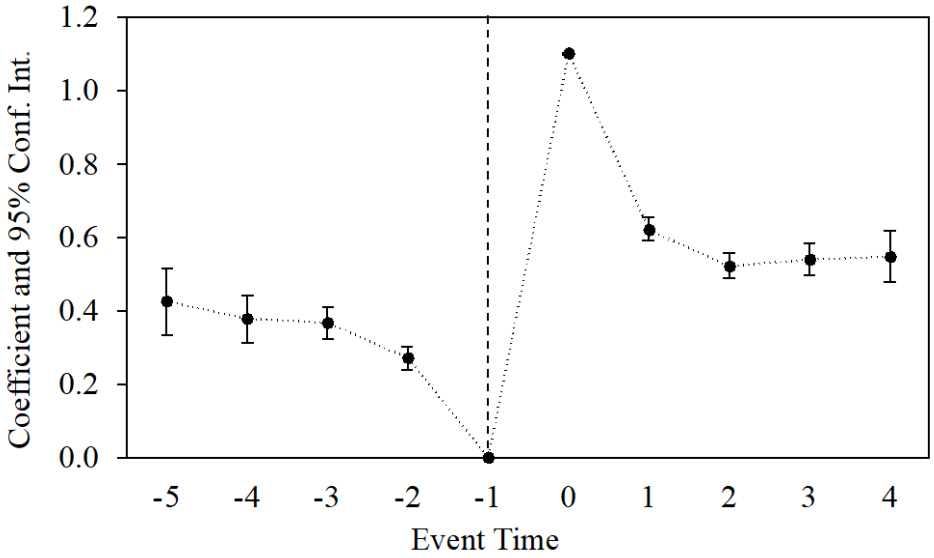
Source: Authors' calculations using data from the Health and Retirement Study.

Figure 1: Adult Children Living in the Parental Home, 1960–2020



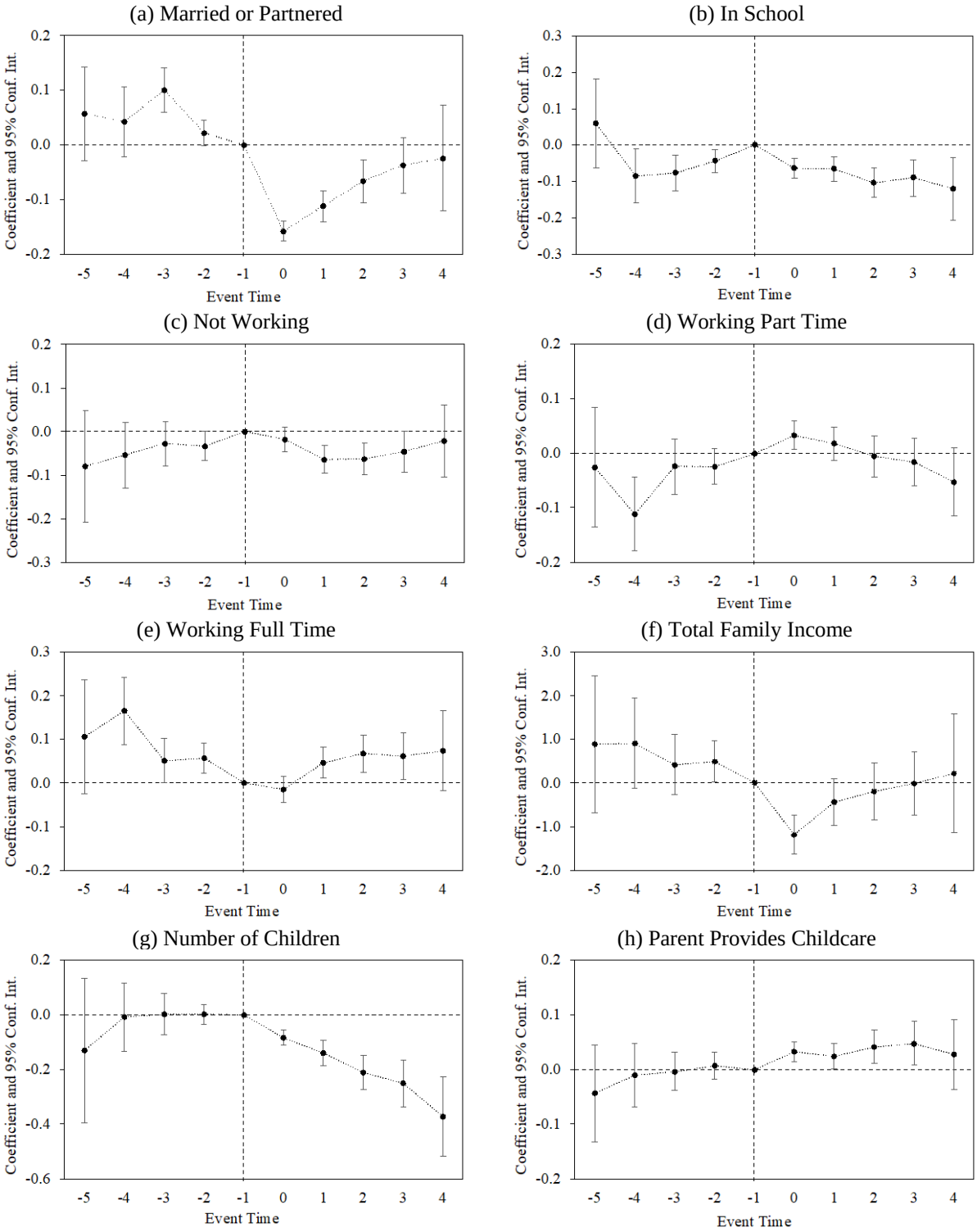
Notes: This figure shows that the share of co-resident adult children in the U.S. has increased since the 1960s. Panel (a) disaggregates the share by sex and panel (b) by age (18–24 and 25–34).
Source: U.S. Census Bureau Decennial Censuses, 1960 to 1980, and Current Population Survey Annual Social and Economic Supplements, 1990 to 2020. https://www.census.gov/data/tables/time-series/demo/families/adults.html.

Figure 2: Probability of Residing with Parents Relative to Period Preceding Boomerang Event



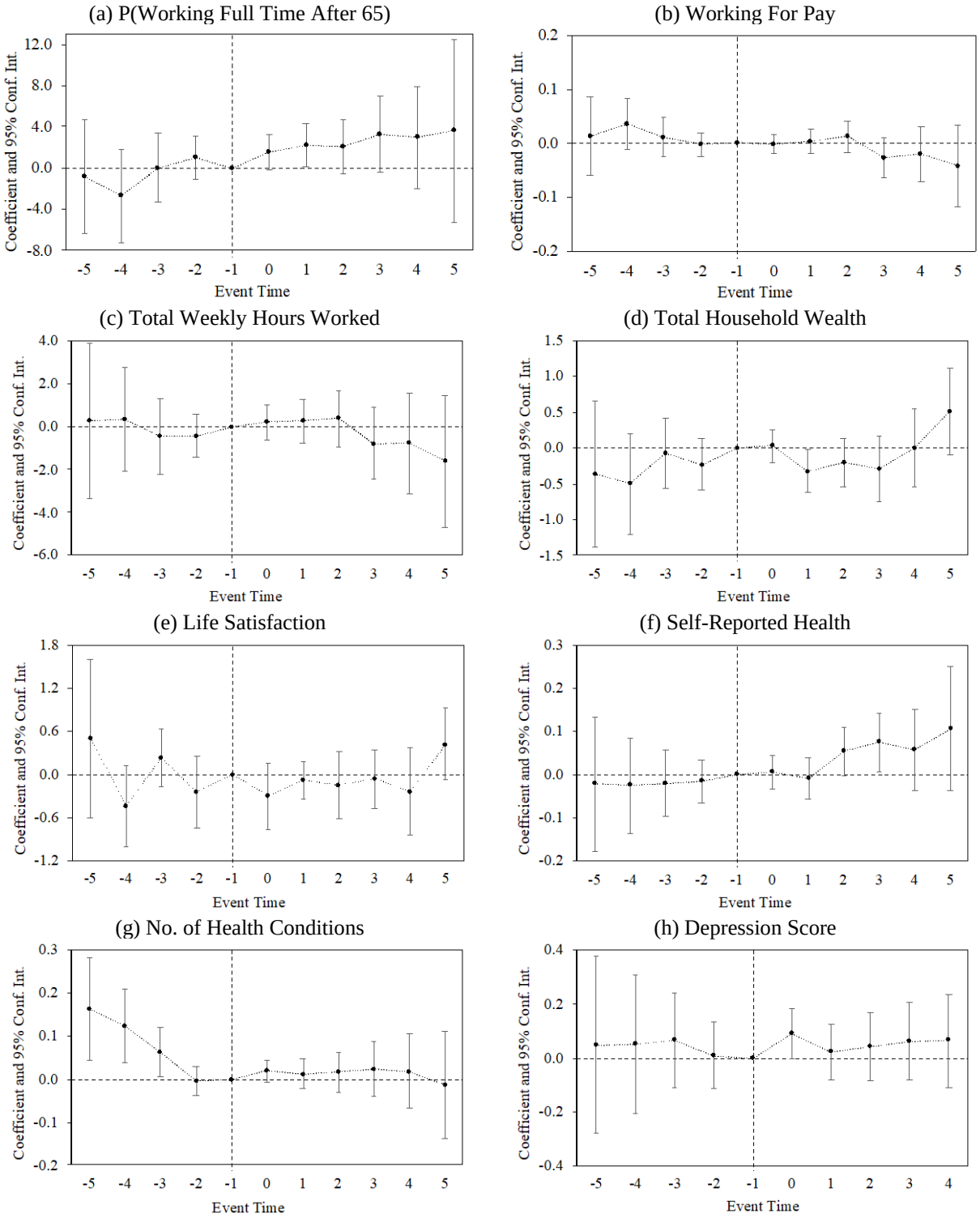
Notes: This figure shows results from the estimation of Equation (3) with an indicator for residing with parents as the dependent variable. Bars represent 95 percent confidence intervals.
Source: Authors' calculations using data from the Health and Retirement Study.

Figure 3: Children's Outcomes Relative to Period Preceding Boomerang Event



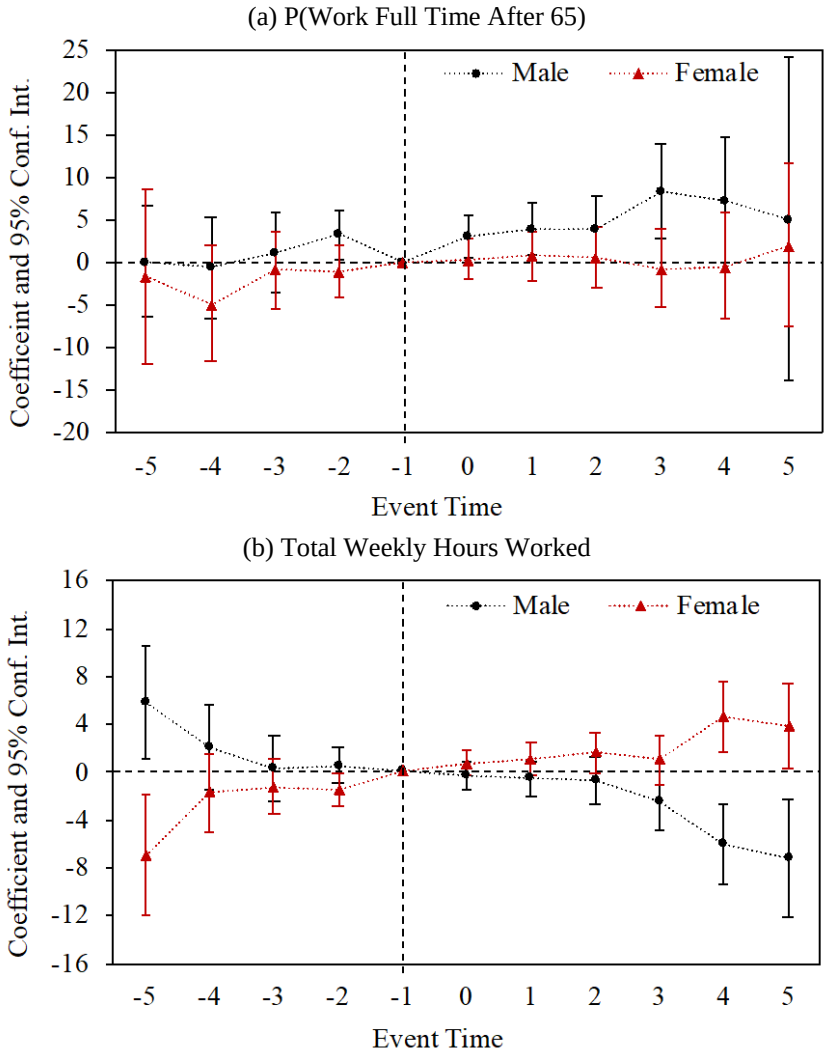
Notes: This figure shows results from the estimation of Equation (3) with indicators for whether a child was married or partnered (a), in school (b), not working (c), working part time (d), or working full time (e); continuous variables for total family income (f) and number of children (g); and an indicator for whether a parent provides childcare (h) as dependent variables. Bars represent 95 percent confidence intervals.
Source: Authors' calculations using data from the Health and Retirement Study.

Figure 4: Parental Outcomes Relative to Period Preceding Boomerang Event



Notes: This figure shows results from the estimation of Equation (4) with subjective probability of working full time after age 65 (a), an indicator for whether the respondent does any work for pay (b), total weekly hours worked (c), total household wealth (d), life satisfaction (e), self-reported health status (f), number of health conditions (g), and depression score (h) as dependent variables. Bars represent 95 percent confidence intervals.
Source: Authors' calculations using data from the Health and Retirement Study.

Figure 5: Selected Labor Market Parental Outcomes Relative to Period Preceding Boomerang Event, By Sex



Notes: This figure shows results from the estimation of Equation (4), interacting the event time indicators with an indicator for being female. Panel (a) (top) shows results for subjective probability of working full time after age 65 as the dependent variable. Panel (b) (bottom) shows results for total weekly hours worked as the dependent variable. Bars represent 95 percent confidence intervals.
Source: Authors' calculations using data from the Health and Retirement Study.

Appendix Tables

Appendix Table A-1: Sample Selection

Panel 1 — Child Sample	Individuals	Person-wave observations
Initial count from RAND HRS data file (waves 1-12)	128,908	1,546,896
Drop if longitudinal linkage problems	127,127	1,525,524
Drop no-response/dead waves	127,127	817,473
Keep unique child records	77,821	532,725
Keep children age [18-29]	27,307	73,899
Panel 2 — Parent Sample	Individuals	Person-wave observations
Initial count from RAND HRS data file (waves 1-12)	42,233	506,796
Drop no-response/dead waves	37,494	226,562
Keep respondents age [51-69] with children age [18-29]	18,416	58,092

Notes: This table shows the steps of sample selection and observation counts for samples used in regressions. Panel 1 (top) reports results for the child sample, and Panel 2 (bottom) for the parent sample. See text for details. Data are unweighted.
Source: Authors' calculations using data from the Health and Retirement Study.

Appendix Table A-2: Boomerang Event Observations

Panel 1 — Child Sample	Individuals	Observations
All boomerang events	1,630	1,679
First boomerang event	1,630	1,630
Post first boomerang event (including event)	1,630	3,814
Pre first boomerang event	1,630	3,195
Panel 2 — Parent Sample	Individuals	Observations
All boomerang events	2,095	2,311
First boomerang event	2,095	2,095
Post first boomerang event (including event)	2,095	5,837
Pre first boomerang event	1,900	3,868

Notes: This table shows boomerang event observations by individual and individual-wave for samples used in regressions. Panel 1 (top) reports results for the child sample, and Panel 2 (bottom) for the parent sample. See text for details. Data are unweighted.
Source: Authors' calculations using data from the Health and Retirement Study.