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WEALTH TRAJECTORIES ACROSS KEY MILESTONES: LONGITUDINAL EVIDENCE FROM LIFE-COURSE TRANSITIONS

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Wealth Trajectories Across Key Milestones: Longitudinal Evidence from Life-Course Transitions Gopi Shah Goda and Jialu Liu Streeter NBER Working Paper No. 28329 January 2021 JEL No. G51,I13,J1

ABSTRACT

Wealth varies considerably across the population and changes significantly over the lifecycle. In this paper, we trace out trajectories of wealth across several key life milestones, including marriage, homeownership, childbirth, divorce, disability, health shocks, retirement and widowhood using multiple decades of longitudinal panel data. We estimate both changes over the ten-year period before and after each milestone and assess whether those changes occur gradually or sharply after the milestone. We find evidence of significant long-run increases in wealth associated with homeownership and retirement, and significant long-run reductions in wealth associated with divorce, health shocks, and disability. In general, these changes appear to occur gradually rather than immediately after the milestone. Our results also indicate a large degree of heterogeneity across demographics, socioeconomic status and risk protection from insurance. In particular, those with lower levels of socioeconomic status and those without access to risk protection experience smaller wealth gains (or larger wealth losses) following life-course transitions. These results identify populations and life stages where individuals are most vulnerable to large reductions in wealth.

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I. INTRODUCTION

The large differences in wealth that are prevalent across many different socioeconomic groups are well-documented. According to the 2019 Survey of Consumer Finances (SCF), median family net worth for households where the reference person has a college degree was more than four times higher than for households where the reference person's highest level of education is a high school diploma.¹ Net worth also varies significantly by race and ethnicity, with median family net worth of white, non-Hispanic families eight times higher than for Black, non-Hispanic families, and five times higher than Hispanic families. The SCF also shows evidence of significant differences in net worth over the lifecycle. For example, median family net worth is higher for couples relative to singles, and the median net worth for homeowners was 40 times that of non-homeowners. Net worth varies considerably by age of the reference person, with low levels early in life to higher levels for those aged 65 and older.

While these cross-sectional data highlight wealth disparities across subpopulations, they do not indicate how wealth changes longitudinally throughout life, holding other factors fixed. This distinction is important as the rationale for policy interventions from the above statistics may differ greatly depending on whether, for instance, higher wealth among homeowners represents the selection of those who purchase homes or a wealth gain associated with homeownership. In addition, it is unclear from cross-sectional data whether certain socioeconomic groups have lower levels of wealth due to lower rates of homeownership or whether the wealth gains associated with homeownership for these groups are smaller.

¹ These data were obtained from the SCF Interactive Chart, available at

<u>https://www.federalreserve.gov/econres/scf/dataviz/scf/chart/</u>, on December 2, 2020. A family in the Survey of Consumer Finances is defined as the economically dominant single person or couple and all other persons in the household who are financially interdependent with that economically dominant person or couple. If a person is economically dominant, that person is denoted the reference person in a family. If a couple is economically dominant, the reference person is the male in a mixed-sex couple or the older person in a same-sex couple.

Our study helps us better understand wealth disparities by examining wealth changes during different key times in the lifecycle, often referred to as "life milestones," and how these wealth changes vary across different groups using longitudinal panel data. The milestones we examine, namely marriage, divorce, childrearing, homeownership, retirement, the onset of health shocks, and widowhood, can represent both positive and negative shocks to income and/or consumption and often signify changes in financial circumstances when people may change patterns of spending, work, and saving. Some – such as the onset of health shocks and disability – may be unanticipated, and present a role for public and private insurance to cushion losses resulting from these events. Others – such as marriage, childrearing, homeownership and retirement – represent life events that are often anticipated but require planning and foresight in order to transition through them without negative consequences.

We analyze net financial and non-financial wealth among households surveyed repeatedly over time in the National Longitudinal Survey of Youth (NLSY79) between 1985 and 2016, and in the Health and Retirement Study (HRS) between 1992 and 2016. Our measure of wealth includes housing wealth, net of outstanding debt, as well as financial sources of wealth owned by a family and is divided by two if a respondent is married. We employ individual fixed effects and an event-study framework, which allows us to trace out wealth trajectories of households before and after they experience a particular milestone.

We investigate both short- and long-run changes in wealth surrounding each milestone. The long-run change is defined as the estimated difference in the outcome over the ten-year period after the milestone relative to the ten-year period before the milestone, after controlling for observables and individual fixed effects. The short-run change is defined as the estimated discontinuous difference in the outcome at the time of the milestone after fitting smooth polynomials to the data on either side of the milestone, conditional on the same controls.

The estimated changes reflect the forces of both causal and non-causal factors. A milestone may directly impact income, consumption, or savings, or trigger behavioral changes with long-term implications. For example, having a child may impact family work decisions, increase levels of consumption, or prompt additional savings to prepare for future education expenses. The changes we estimate may also reflect other behavioral changes that are coincident with the milestone in question. For example, promotions may occur around the same time as child-rearing, causing earnings growth to be higher, and leading to more disposable income that occurs in the years surrounding child-rearing. It is also possible that some behaviors made in anticipation of a milestone, such as saving for a down payment on a house, may affect wealth trajectories both before and after the milestone. Therefore, our estimates do not isolate the pure causal effects of each milestone on wealth; however, they help identify the life stages that tend to be associated with increases or declines in wealth and whether the change occurs sharply or gradually.

We find strong evidence that long-run wealth changes with respect to many of the milestones we examine, including marriage, homeownership, childbirth, divorce, disability, health shocks, retirement, and widowhood. On an absolute basis, homeownership and retirement have the largest positive changes overall, and both early and late health shocks as well as disability are associated with large negative changes. On a relative basis, the positive change in wealth associated with homeownership is much larger than those for retirement due to the higher baseline wealth later in life when retirement is typically experienced. In addition, disability has a much larger proportional effect than early or late health shocks, and is accompanied by an almost 300 percent decline in wealth. The increase in wealth at retirement appears to be partly driven by

conversions from retirement wealth in defined contribution plans (which are not included in HRS measures of wealth) to Individual Retirement Accounts (which are).

We find that most of the long-run changes in wealth that we observe occur gradually rather than suddenly. When we examine how wealth changes in the short run, our analysis suggests that marriage, divorce, homeownership, retirement, and widowhood are associated with more immediate changes in overall wealth. However, these short-run changes are generally small in magnitude, indicating that the underlying factors resulting in long-run wealth changes are likely to be more gradual and perhaps anticipated. The largest short-run change on an absolute basis is widowhood, where the death of a spouse eliminates the need to divide total wealth by two, and the largest short-run relative change appears to happen at the time of homeownership.

We next examine how changes in wealth across these milestones differ by race, gender, education and health status. When experiencing the same milestones, different subpopulations show varying degrees of wealth change. Specifically, while whites experience long-run increases in wealth after marriage, having children, divorce, and retirement, non-whites experiences longrun *reductions* for these milestones. In addition, non-whites have significantly larger reductions in wealth after early-life health shocks and disability. These results are echoed across educational attainment, with college-educated and those without college education experiencing similar disparities in the long-run changes in wealth, and health status, where reporting poor health status is associated with significantly worse long-run changes in wealth after experiencing milestones. When we examine how wealth changes differ by sex, we find that the long-run changes in wealth associated with any marital status change, such as marriage, divorce, and widowhood, are driven by changes for women, while the changes for men are either smaller or statistically insignificant. We also analyze whether our results vary based on insurance coverage to determine whether forms of risk protection are associated with different outcomes. We find that health insurance coverage, retirement plan access and life insurance mitigate negative wealth changes associated with certain life milestones, possibly signifying the importance of employer benefits and policies that increase access to health insurance and retirement savings instruments outside of employment. Finally, we decompose the changes into home equity and non-housing wealth, and find that, with the exception of homeownership that significantly increases home equity in the long run, the milestones generally have similar proportional effects on these two types of wealth. Our results are also robust to a variety of alternative specifications and sample restrictions.

Our findings add to a large literature that investigates the relationship between demographic milestones and wealth. Generally, studies on younger individuals focus on one or two milestones and analyze how wealth changes with these milestones. For examples, see Zagorsky (2005) and Lersch (2017) on marriage and divorce; Scholz and Seshadri (2007) Maroto (2018) on children; Di, Belsky, and Liu (2007), Herbert, McCue, and Sanchez-Moyano (2013), Killewald and Bryan (2016), and Turner and Luea (2009) on homeownership. For older households, several studies examine the broader impacts of health shocks, retirement, and widowhood (Coile and Milligan 2009; De Nardi, French, and Jones 2015; Jones et al. 2020; Lee and Kim 2008; Love, Palumbo, and Smith 2009; Poterba, Venti, and Wise 2011; Ward-Batts 2001). In general, these studies show similar qualitative findings – increases in wealth upon marriage and homeownership; reductions in wealth upon divorce, childbearing, health shocks and widowhood – though the magnitudes vary depending on the methods and data used.

Our study contributes to this literature in several ways. First, our approach of an eventstudy framework with individual fixed effects allows us to trace out within-person wealth changes surrounding different milestones and separately estimate both the short-run and long-run changes for each milestone. Second, our analysis examines a large set of key milestones over the lifecycle using one unified framework, which allows a comparison in both absolute and relative terms across different points in the lifecycle. Finally, we examine several sources of heterogeneity in our results by socioeconomic status and whether risk protection from insurance and workplace pensions are associated with better outcomes. Our results illuminate populations that may be more or less vulnerable to changes in financial outcomes at different life stages, and the potential for policy instruments to protect households from negative outcomes.

The rest of our paper proceeds as follows. In Section II, we describe the data we use in our study. Section III illustrates our empirical methodology. In Section IV, we describe both our main results as well as the results of our heterogeneity analysis and robustness exercises. Section V concludes.

II. DATA

Our data come from two sources that focus on individuals in different stages of life. We use the National Longitudinal Survey of Youth (NLSY79) between 1985 and 2016 to examine early-life milestones such as marriage and family formation, and use the Health and Retirement Study (HRS) between 1992 and 2016 to examine later-life milestones such as retirement and widowhood. Both data sources provide rich longitudinal information on demographics, income, assets, health, and family structure.

The first data source, the NLSY79, is a nationally representative sample of Americans born between 1957 and 1965, who were interviewed annually between 1979 and 1994, and are currently interviewed biannually. We use all observations in this cohort where the wealth and income measures are available. We then construct a panel spanning 1985 to 2016, which spans ages from the early 20s to early 50s, with an average age of 34 years old. Our full data sample from the NLSY79 includes 11,301 distinct individuals and 122,646 person-year records. The second data source, the HRS, is a national longitudinal survey of individuals over age 50 and their spouses or partners regardless of age. Participants have been interviewed biannually since 1992, and new cohorts are added every six years. The average age is 67 years old. Our full data sample from the HRS includes 42,032 distinct individuals and 246,672 person-year records. The samples used in our analysis change from these totals in order to accommodate the empirical strategy, and differ by the milestone examined. These additional sample restrictions are discussed in more detail in the following section.

The measure of wealth in the NLSY79 includes total net family wealth, home equity, and financial wealth. More specifically, total net family wealth is computed from a wide range of wealth and debt components, including home value, mortgages, other residential debt, market value and debt of farm, business, and real estate, market value and debt of vehicles, value of money assets such as checking and savings accounts, stocks, bonds, mutual funds, CDs, IRAs, workplace retirement plans such as 401(k)s and 403(b)s, and other debt such as credit cards and student loans. In the HRS, the measure of wealth is total net wealth, which is computed as the sum of all wealth components less all debt. More specifically, the wealth components include market value of home, business, vehicles, IRAs, stock and bond, checking account, and CDs. Debt items include home mortgages and home loans, and all other debt.² The wealth measures between the two data sources are similar with the exception that the latter does not include balances in workplace retirement

 $^{^{2}}$ While these wealth measures are self-reported, the wealth data in the HRS in particular is known to be of high quality (Venti 2011).

plans. Thus, if individuals convert wealth from workplace plans into IRAs or other forms of wealth, it will appear that wealth is increasing.

Some milestones involve changes in the household structure, which may mechanically change the wealth calculation. Therefore, we divide family wealth by two for married couples. This adjustment allows us to focus on the per person changes in wealth levels due to marriage, divorce and widowhood.

Table 1 presents the summary statistics of the variables used in our analysis for the NLSY and HRS data. All monetary variables are converted to 2018 real dollars using the Consumer Price Index (CPI-U-RS). As shown in the table, the average age of respondents in the HRS is much higher than that in the NLSY. By and large, the control variables match up pretty well across the two datasets, but there are some differences in the controls for health status variables and geographic information. The net wealth is much higher in the HRS owing to the higher ages represented.

Table 2 shows the share of individuals in our data who we observe experiencing each milestone during the study period. About 66% of survey participants got married during the study period, 58% had children, 70% bought a home, and 38% of the married later divorced. Among those who have completed these milestones during the study period, we find the median ages for the first marriage, child, home, and divorce are 27, 29, 31 and 35, respectively. Among individuals who were observed to be married, 23% of them lost their spouses, with the median age entering widowhood being 75 years old. Among those who have worked for at least ten years, we observe 44% of them enter retirement (both partly and completely) in subsequent years. The median retirement age is 62 years. Lastly, about 43% of the households in the HRS experienced a health

shock that prevented them from working, with the median age of such late-life health shocks happening at 72 years old.

III. EMPIRICAL METHODS

We adopt an event-study framework and estimate a model with binary variables representing the time relative to the occurrence of a life event using panel data and individual fixed effects. The formulation is very similar to the framework specified in Bayaz-Ozturk, et al. (2018):

$$y_{it} = \alpha + \beta X_{it} + \sum_{k=-10}^{10} \gamma_t d_{it}^k + \delta T_t + \mu_i + \varepsilon_{it} - 10 \le t \le 10$$
(1)

where y_{it} is a measure of wealth for individual *i* in calendar year *t*. On the right-hand-side of expression (1), X_{it} represents a set of time-varying socioeconomic-demographic characteristics such as age, age-squared, marital status, employment, family size, self-reported health status, and family income (adjusted for family size). T_t represents a set of survey year fixed effects. The parameter μ_i represents the individual time-invariant fixed-effects. ε_{it} is an error term that is independent and identically distributed. A series of dummy variables, $\{d_{it}^k = I(t = k)\}$, are used to indicate a person's timing position relative to the year of a life milestone. The baseline is the period immediately prior to a milestone occurring; in the NLSY79, we omit k = -1, and in the HRS, we omit k = -2 because the dataset is biannual.

To collapse the long-run impact of a milestone into a single coefficient, we replace the relative year time dummies in expression (1) with a single indicator, $I(t \ge 0)$, that takes value 1 during the ten years after a milestone, and 0 during the ten years prior to a milestone. Time outside of the [-10,10] time frame is omitted as shown below:

$$y_{it} = \alpha + \beta X_{it} + \gamma I(t \ge 0) + \delta T_t + \mu_i + \varepsilon_{it} \qquad -10 \le t \le 10 \qquad (2)$$

The coefficient estimate for γ in equation (2) represents the long-run change in wealth associated with a life event. This value represents the average change from the ten years before the milestone to the ten years after the milestone.

To assess the short-run impact of a milestone, we fit parametric functions of time since a milestone, allowing for different parameters on either side of the milestone:

$$y_{it} = \alpha + \beta X_{it} + D I(t \ge 0) + f_l(t) + f_r(t) \times I(t \ge 0) + \delta T_t + \mu_i + \varepsilon_{it}$$

-10 \le t \le 10 (3)

Here, $f_l(\cdot)$ represents the polynomial on the left of the milestone, while $f_r(\cdot)$ represents the polynomial on the right of the milestone. Again, we omit years more than 10 years before or after a milestone. The short-run change in wealth associated with a milestone is defined as the value D in the expression above. This value represents the changes in wealth at the time of a life event after accounting for smooth changes before and after the milestone. If D from equation (3) is small and statistically insignificant, while γ in equation (2) is large and significant, it suggests that the estimated long-run change is gradual rather than immediate.

To implement the analyses described above, we identify survey participants as being in the following three categories: (1) people who already experienced a shock before the time s/he entered the study; (2) people who experienced a shock during the study period; and (3) people who never experienced a shock by the end of the study period. For the first group, we often do not have information on the timing of the shock, and hence, cannot calculate the time lapsed. Therefore, we omit these individuals from our analysis. For the second group, it is possible that they experienced the same type of shocks more than once during the study period, in which case, we focus on the first occurrence.

The final sample for each milestone includes individuals who experienced a milestone during the survey period, as well as those who never experienced the milestone. For example, the final data sample for the marriage milestone includes those who got married during the observation period, as well as those who were never married. The advantage of including the never-married individuals instead of only focusing on the married is that the never-married group experienced changes in well-being that allow for us to better control for time-varying conditions such as booms and busts. Excluding the single individuals can result in an overestimate of the loss due to marriage during economic downturns and an underestimate in a booming economy (Bayaz-Ozturk et al. 2018; Tach and Eads 2015).

IV. RESULTS

A. Main Results

1. Event study results

For each milestone summarized in Table 2, we first display the series of event-study coefficients γ_t from equation (1) in Figure 1. The figure is divided into early-life milestones that use the NLSY79, and late-life milestones that use the HRS. These coefficients show the pattern of wealth for ten years prior to and ten years after the milestone relative to the baseline year after controlling for observables, year fixed effects and individual fixed effects. The baseline year is defined as the year prior to a milestone in the annual NLSY79, and two years before a milestone in the biannual HRS.

The early-life milestones we examine include marriage, having children, buying a home, divorce, the onset of a work-limiting health shock, and disability. As shown in the figure, wealth appears to gradually increase with marriage. Wealth also increases leading up to the birth of a first

child and then levels off. Wealth increases leading up to and following homeownership, but there appears to be a discrete jump at the time of homeownership, which we explore when we examine short-run changes. We see gradual declines in wealth before and after divorce, work-limiting health shocks, and the onset of disability.

The bottom panel of Figure 1 displays the results for late-life milestones including widowhood, retirement, and work-limiting health shocks. We find that widowhood is associated with increases in per capita wealth. This increase is due to the adjustment in the wealth figures by marital status, which results in dividing family wealth by two in the years prior to widowhood, and using raw family wealth figures after widowhood. Ceteris paribus, the wealth increase due to the change in family size should be 100%; however, our results show only a 78% wealth increase in the year of spousal loss, suggesting other factors, such as costly end-of-life expenditures, carry a negative impact on the surviving spouse's financial status. Work-limiting health shocks are associated with large declines in wealth that begin in the years leading up to the shock and continue for up to 10 years afterwards. Retirement appears to be associated with a non-monotonic pattern of wealth changes, exhibiting an increase in the first two years after retirement.

We also examine specific health shocks measured in the HRS summarized in the bottom panel of Table 2. These include the onset of high blood pressure, diabetes, cancer, lung disease, heart disease, stroke, psychiatric conditions, and arthritis. The results from estimating equation (1) with these shocks are shown in Appendix Figure A.1. Similar to the more general worklimiting health shock, we find that wealth gradually declines with the onset of most health shocks. These reductions are more pronounced in the case of high blood pressure, diabetes, and lung disease.

2. Long-run changes

Table 3 displays the results of estimating the long-run and short-run changes in wealth following each milestone. Column (1) shows the mean of family wealth in the period before each milestone to provide a benchmark. Column (2) shows the estimates of γ from equation (2) while Column (3) shows the estimates of *D* from equation (3). Starting with the early-life milestones in the NLSY, we do not find evidence that marriage and having children are associated with long-run changes in wealth. However, homeownership is associated with a \$44,394 long-run increase in wealth. This result is statistically significant and large relative to the baseline mean of \$21,057. Divorce is associated with a \$5,461 reduction in wealth in the long run, relative to a baseline mean of \$23,800. Note that our results are on a per capita basis, and so they are not the mechanical result of changes in household size, such as those occurring at marriage and divorce. Both work-limiting health shocks and disabilities are associated with large reductions in wealth over the long run: \$26,688 and \$34,629, respectively. Both of these reductions are larger than the baseline mean.

When we turn to the late-life milestones in the HRS data, we find that retirement is associated with a \$18,933 *increase* in wealth over the long run, seemingly at odds with lifecycle models that predict that wealth is spent down during retirement. We investigate these results further when we analyze different sources of wealth. For widowhood, our analysis shows that widowhood is associated with a \$116,906 increase in wealth. However, this increase results from our adjustment for marital status. Since we divide by two if a household has a married couple and no longer make this adjustment after widowhood, no change in wealth would imply that wealth increases by a factor of two. The increase in wealth is less than the baseline wealth, suggesting that unadjusted wealth still declines in the long run after widowhood.

Finally, we estimate the long-run change in wealth associated with work-limiting health shocks at older ages. The reduction of \$27,560 is statistically significant and similar in magnitude

to that found for work-limiting health shocks in early life; however, since baseline wealth is higher for HRS households (who are older), this reduction represents a smaller relative decline in late life. Finally, we report the long-run changes in wealth associated with specific health shocks, including a diagnosis of high blood pressure, diabetes, cancer, lung disease, heart disease, stroke, psychiatric conditions, and arthritis. We find that high blood pressure, diabetes, lung disease, psychiatric conditions, and arthritis are associated with statistically significant reductions in long-run wealth, ranging from \$12,000-25,000.

In order to better compare the results across milestones, we plot the absolute and relative long-run changes in wealth for both the early- and late-life milestones in Figure 2. Aside from widowhood, homeownership is associated with the largest long-run wealth increase. This finding may be specific to the cohorts we examine, given the high growth in housing prices the U.S. experienced during the period of our study. These increases may also be due to high earnings growth or behavioral changes (such as financial prudence) associated with home purchases. Disability and early-life health shocks are associated with the largest reductions in long-run wealth in relative terms, 295 percent and 154 percent reductions, respectively. Health shocks that occurred in later life appear to have a smaller relative impact as households are likely better able to cushion this shock at later ages given the higher baseline level of wealth. Also, Medicare may shield older individuals from the financial impact of medical treatment. The long-run changes in wealth associated with marriage, children, and divorce are small in both absolute and relative terms.

3. Short-run changes

We display the estimated short-run changes in wealth associated with each milestone in Table 3, Column (3). We find evidence that marriage and having a child is associated with

immediate declines in wealth of \$9,249 and \$4,191, respectively, that eventually reverse themselves over the 10-year period that we measure long-run wealth changes in Column (2). A portion of the long-run increase in wealth associated with homeownership appears to appear immediately at the time of homeownership, which is associated with a \$23,138 short-run increase in wealth. Divorce, mirroring marriage, is associated with an immediate increase in wealth of \$8,553, but also appears to reverse over the 10-year period given the opposite sign of the long-run change in Column (2). When we turn to late-life milestones, we find that much of the long-run changes associated with retirement and widowhood appear to be immediate; however, the change in long-run wealth associated with work-limiting health shocks appears to be more gradual. The event study estimates in Figure 1 suggest caution is warranted in fitting linear functional forms given the non-monotonic nature of the wealth trajectory after retirement. We do not find evidence of statistically significant short-run changes in wealth occurring at the time of health shocks or disability. We display these changes in both absolute and relative terms in Figure 3.

One challenge in interpreting the results above is that many of the life events may be correlated and happen in clusters. Therefore, it is not clear whether, for example, homeownership leads to an increase in wealth or whether homeownership occurs at the same time as marriage, and marriage leads to greater wealth accumulation. We examine this in Appendix Figure A.2, where we use the same event-study framework to investigate the extent to which the timing of certain life events is correlated with other life events. The figures shown in Figure A.2 are the result of estimating equation (1) with a binary variable of one life milestone as the dependent variable, and shows how passing through one milestone is associated with achieving a different milestone. The top-left panel shows that both the likelihood of buying a home and having children increase sharply within the first five years of marriage. The top-right and middle-left panels indicate that people are

more likely to buy homes before children than the other way around. The bottom two panels show a strong correlation between the occurrences of disability and work-limiting health problems. These figures show that indeed, many of the early-life milestones are correlated in timing. Therefore, it is important to interpret the results above as potentially the result of one or more milestones.

B. Heterogeneity

As discussed in the introduction, large amounts of variation in wealth exist across race, ethnicity, education and other factors. We next consider whether socioeconomic status is associated with different changes in financial resources after achieving the same life milestones. In addition, we examine whether insurance coverage and access to saving plans can mitigate longrun reductions in wealth after people experience negative shocks.

We explore heterogeneity in our main results across several dimensions, including race, education, gender, insurance coverage and general health status. The full set of results are shown in Appendix Table A.1. The first two columns report estimates of the long-run change in wealth from a modified version of equation (2) where an interaction term for the characteristic shown is used. Similarly, the last two columns report estimates of the short-run change from an interacted version of equation (3). The interpretation of columns (1) and (3) is the long- or short-run change in wealth for the omitted group, while the interpretation of columns (2) and (4) is the incremental change for the group represented by the interaction term. Note that the interaction term must be a fixed value over time for each person, so we aggregate time varying characteristics, such as health insurance coverage and health status, into a single measure that does not vary for a given individual.³

³ We define seven interaction variables that are held fixed over time for each observation. The first is "non-white," which includes those who report Hispanic ethnicity or that their race is not white. The second is "no college

Here, we focus on the heterogeneity by race/ethnicity and sex, and refer the reader to the appendix for the full set of results. The absolute long-run and short-run changes in wealth for whites and non-whites are depicted in Figure 4 along with 95 percent confidence intervals. In Panel A, the results show that for every milestone we examine, non-whites, who comprise 49% and 29% of the early- and later-life samples respectively, experience significantly smaller longrun increases in wealth (or larger long-run reductions in wealth) than their white counterparts. In some cases, such as homeownership, disability, widowhood and both early- and late-life workprohibiting health conditions, the overall sign of the long-run change in wealth is the same for whites and non-whites, though non-whites experience significantly worse outcomes in each case. For other milestones, such as marriage, children, divorce, and retirement, white respondents experience positive changes in wealth while non-whites experience substantial negative declines. We see no evidence that short-run changes differ across race, with the exception of widowhood which is associated with a much smaller change for non-whites than whites. Heterogeneity by education and health status follow similar patterns (see Appendix Figures A.3.-A.4), with those without college degrees experiencing worse outcomes than those with college degrees, and those with better self-reported health status experiencing better outcomes than those with worse selfreported health.

education," which includes those who had no more than 12 years of education. Third, we have an interaction term for women. Fourth, we define an interaction term for "worse than average health" as those whose health status at age 40 (for early-life milestones) and between age 50 and 65 (for late-life milestones) were below the average levels of people in the same age range. Fifth, we have an interaction term for not having continuous health insurance that measures whether health insurance is observed less than 90% of time during the study period, where 90% roughly corresponds to the average level of health insurance over the study period in the HRS. Sixth, we have an interaction term for "no work pensions," which is defined as not having any retirement plans that are sponsored by one's employer or union. Such retirement plans include not only basic pension or retirement plans, but also tax-deferred plans like thrift plans, savings plans, 401(k)'s, deferred profit sharing, or stock ownership. Finally, we include an interaction term for spouse never had life insurance, which denotes whether the interviewee was ever named as a beneficiary on their spouse's life insurance.

In both Figure 5 and Panel C of Table A.1, we see that the small overall long-run changes in wealth associated with marriage, childbirth and divorce in our sample overall from Table 3 mask significant heterogeneity in the changes across men and women. Women experience substantially larger long-run increases in wealth after marriage and childbirth than men, as well as larger longrun decreases following divorce and widowhood. Our results show some evidence that the changes associated with marriage and divorce occur at the same time as marriage formation and dissolution and that the lack of short-run changes in the full sample may be masked by short-run changes in opposite directions for men and women. Women fare worse in the long-run after retirement than men, but their wealth changes are similar to men after disability.

We also examined how our results differ across ownership of health insurance, workplace pension programs, and life insurance ownership (Table A.1 and Figures A.5.-A.7.). These latter two indicators are only available for our late-life milestones, so we limit this analysis to retirement, widowhood and work-limiting health conditions in late-life. Lack of continuous health insurance ownership, which includes approximately 47% and 18% of our early- and later-life samples over our sample period, is associated with significantly smaller long-run increases in wealth or larger long-run reductions in wealth for all of the milestones we examine. For work-prohibiting health conditions in early life, the long-run reductions in wealth are concentrated among this group, suggesting that health insurance can mitigate losses from health shocks with continuous coverage. The fact that long-run changes in wealth differ across health insurance status for non-health-related milestones, such as homeownership and marriage, suggest that health insurance coverage is correlated with other factors that may be associated with better outcomes.

Not having access to a retirement savings plan (60% of the sample) is associated with negative long-run changes in wealth at retirement while the rest of the sample experience positive changes

in wealth after retirement, suggesting that workplace pensions are important sources of wealth in retirement. Not having life insurance (34% of the sample) is not associated with statistically significant differences in long-run wealth at the time of widowhood; however, those without life insurance experience significantly smaller increases in the short-run at the time of widowhood, which is unsurprising given that life insurance can provide immediate financial support at the time of bereavement.

C. Sources of Wealth

Beyond aggregate wealth levels, we are also interested in decomposing the effects across different types of wealth to determine the sources of these wealth changes. While both the NLSY and the HRS report several components of wealth, the source that we are able to estimate most consistently throughout each survey is home equity. Therefore, we estimate equations (2) and (3) for both home equity and all other wealth separately. Given that housing wealth represents a large source of wealth for American households, but is often less liquid than other forms of wealth, these results can help determine whether different types of milestones affect the accumulation and decumulation of resources differently depending on the type of wealth. For retirement, we also examine wealth in IRA accounts separately to better understand wealth changes associated with retirement.

The results of this analysis are included in Appendix Tables A.2 and A.3. While the baseline mean varies by milestone, in general, home equity represents approximately half of non-housing wealth, or one third of total wealth. Correspondingly, the results show that the changes in wealth are about half the magnitude for home equity than for non-housing wealth, and that the changes are roughly proportional across the two sources. One notable exception is homeownership, which is associated with a long-run change in home equity that is twice the

associated long-run change for non-housing wealth and where the entire associated short-run change is attributed to home equity. We also find that the overall small short-run changes in wealth associated with marriage and children can be decomposed into a small and insignificant increase in home equity and a statistically significant decline in non-housing wealth. When we perform our analysis for the retirement milestone for IRA wealth, we find that increases in IRA wealth occur after retirement and account for a significant portion of the short-run and long-run changes in wealth associated with retirement.⁴ This suggests that the increase in wealth occurring at the time of retirement can be attributed to the conversion of assets in workplace saving plans (which are not included in the HRS wealth measure) to IRAs (which are included).

D. Robustness Tests

Tables 4 and 5 summarize the results of several alternative specifications in order to understand the robustness of our results. Column (1) in each table repeats the baseline results from Table 3. In column (2), we report the results of a specification where log wealth is the dependent variable. This specification allows us to understand whether the effects are concentrated among high-wealth households or apply proportionately across the distribution. Specifically, the dependent variable is ln (wealth + 1) if wealth ≥ 0 , and -ln (|wealth| + 1) if wealth < 0 which allows us to include households with negative wealth in the analysis. In column (3), we use sampling weights from the NLSY or HRS as appropriate. In column (4), we address the concern that there may be selection in the timing of when we observe individuals relative to experiencing the milestone. In this column, we omit individuals who responded less than three times in each of the five years before and after the milestone (NLSY) or less than three times in each of the four waves before and after the milestone (HRS). This reduces our sample by approximately 10-78%,

⁴ These results are not reported but are available upon request.

depending on the specific milestones. We estimate quantile regressions at the median and report the results in column (5). In these specifications, we are unable to use individual fixed effects in the specifications, so we run these with random effects. We report bootstrapped standard errors for the quantile regressions. In column (6), we exclude individuals who never experience the milestone, so that the estimates are driven solely by differences in timing among those who experience the milestone.

Across all of these models, our results are generally qualitatively and quantitatively similar. When we use log wealth as the dependent variable, the coefficients tell us the proportional change in wealth experienced over 10 years after the given milestone. For example, divorce is associated with an 83 percent long-run decline in wealth, while homeownership is associated with a 236 percent increase. These results are fairly consistent in both magnitude and statistical significance to our baseline results, suggesting that the changes in wealth affect those with both low and high levels of wealth. When we use weights, our results are largely unchanged. The results using a more balanced panel are similar, though marriage is now associated with a statistically significant long-run increase in wealth. The results from quantile regressions produce results that are similar in magnitude to the baseline results, suggesting that our baseline estimates are not being driven by outliers. Excluding those who never experienced the milestone produces results that differ from our baseline specification for several of the milestones, indicating that having a population to serve as a control for economic conditions for those experiencing the milestones has important implications for the results.

For the short-run changes in wealth reported in Table 5, we see that the log specification produces results that provide some evidence that disability, late-life work-limiting health shocks, and health shocks such as cancer and stroke are associated with immediate short-run changes in

wealth, where our baseline results do not. In addition, the sign for the direction of the short-run change is flipped for marriage, and the estimated short-run changes for widowhood are statistically insignificant under the log specification. Running weighted regressions, trimming the samples to be balanced, running quantile regressions, and excluding those who never experienced the milestone does not result in statistically different short-run estimates than our baseline specification. In Table 5, we also report the results of estimating Equation (3) with a quadratic parametric specification in Column (7). This change produces estimates that are very similar to our baseline estimates that fit linear functions on each side of the milestone, with the exception of retirement. Given the patterns in our event study estimates shown in Figure 1, the evidence for short-run changes in wealth associated with retirement is weak.

V. DISCUSSION

Overall, the results in our work are qualitatively consistent with prior findings. For instance, prior studies show wealth is positively associated with marriage (Zagorsky 2005), homeownership (Di et al. 2007; Herbert et al. 2013; Killewald and Bryan 2016; Turner and Luea 2009), and retirement (Love et al. 2009), and negatively associated with health problems and widowhood (Coile and Milligan 2009; Lee and Kim 2008; Ward-Batts 2001). However, since we examine multiple milestones, we are able to quantify the relative sizes of financial risks associated with life events. For example, though marriage, family formation, and homeownership often occurs during similar stages of the lifecycle, homeownership is clearly associated with substantially more wealth gain than marriage and childbearing. Work-limiting health shocks and disability during one's prime age can deplete their family wealth. In comparison, health shocks in later life present a smaller financial risk, as families have already accumulated sufficient financial cushion.

In the framework of the lifecycle hypothesis (LCH), which states that individuals aim to smooth consumption across time and over different states of the world (Friedman 1957; Modigliani and Brumberg 1954), our results can help identify life stages where various factors prevent individuals from achieving these goals. These factors include market imperfections such as incomplete credit markets that prevent individuals from borrowing to invest in education (Lochner and Monge-Naranjo 2011); frictions in insurance markets that lead to incomplete insurance for health and disability shocks (Brown and Finkelstein 2011); or adjustment costs that prevent illiquid wealth from being accessed in response to shocks (Kaplan and Violante 2014). In addition, beliefs and preferences, such as bequest motives that may limit the amount that people spend down in retirement (Hurd 1987), or the role of uncertainty (Davies 1981) can influence the ability to smooth consumption. Finally, behavioral explanations, such as time-inconsistent preferences, mental accounting, myopia and self-control, may contribute (Laibson 1997; O'Donoghue and Rabin 1999; Shefrin and Thaler 1988; Thaler 1990, 1994, 1999).

The LCH would predict that individuals demand insurance for unanticipated shocks such as disability or health shocks to aid in consumption smoothing. While we analyze wealth and not consumption, the fact that wealth drops significantly in the long run following these points in the lifecycle appears to suggest that individuals are not fully insured against these shocks. We also see that homeownership is associated with large increases in wealth over the long run. While these results may not be causal, it is important to consider whether homeownership is lower than optimal, perhaps due to lack of access to credit. Finally, our results do not show strong evidence for reductions in wealth following retirement. These results are consistent with previous literature (see De Nardi, et al (2016) for a survey), but also suffer from the fact that our wealth measure does not include annuitized Social Security wealth as well as wealth in workplace savings plans (Modigliani, 1986).

VI. CONCLUSION

We find strong evidence that certain life milestones are associated with long-run increases in wealth, while others, including divorce, work-limiting health shocks, and disability are associated with declines in wealth over the long-run. While our results show that wealth increases over the long-run after widowhood and retirement, these increases are driven by the fact that our analysis adjusts for marital status and analyzes per capita wealth (for widowhood) and conversions from wealth in workplace saving plans to IRAs (for retirement). For most of the milestones we examine, the changes in wealth are gradual and not sudden. However, we do find evidence that homeownership and widowhood are associated with more immediate changes in wealth.

In our data, marriage, family formation, and homeownership often happen in clusters, and they are associated with significant wealth accumulation in the long-run. Compared to prior generations, Millennials and GenZs have showed clear trends of delaying these life milestones, due to reasons such as more time spent in school, rising mobility, and rising housing costs. The delay of crucial milestones may translate to a missed opportunity to accumulate wealth if these individuals are making lower returns on these financial resources in the absence of buying a house.

Our results vary greatly with population characteristics. Both non-whites and those without a college education see significantly more negative long-run changes in wealth from their white and highly-educated counterparts. In some of these cases, such as marriage, childbearing, divorce, and retirement, the differences are so large that the white and high education populations experience positive long-run changes in wealth while non-white and less educated populations experience

negative long-run changes in wealth. Those who report being in worse than average health also experience worse outcomes for almost every milestone we examine. When we stratify the sample by men and women, we find that increases in wealth upon marriage (and reductions upon divorce) are concentrated among women, and that women fare worse after widowhood as compared to men. Our results also indicate that those with more continuous health insurance, access to workplace pensions and life insurance coverage are able to minimize their losses to wealth. It is important to note that these results are descriptive, and the heterogeneity in the effects shown may be due to other factors correlated with insurance coverage. However, our study helps identify the life stages and individual characteristics associated with large changes in wealth and highlight points in the life cycle where certain populations are most vulnerable. Our results are also consistent with the idea that policies that expand health insurance and access to retirement plans through the Affordable Care Act and the SECURE Act could help mitigate wealth losses surrounding certain life milestones.

While changes in wealth may not perfectly correlate with changes in consumption due to interfamily transfers, in-kind government transfers and capital gains, it is highly likely that consumption drops during times of large reductions in wealth. To the extent that changes in wealth are also accompanied by changes in consumption, our results indicate situations where the consumption-smoothing predictions of lifecycle models do not hold due to either market imperfections, adjustment costs, or lack of planning. Our findings thus have implications for the optimal role for policy intervention in many arenas, including the adequacy of social insurance, the function of private insurance markets, and the role of informational and awareness campaigns. Examining how the private sector and social insurance design may allow people to be better protected from financial risks is an important area for future research.

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	NLSY 79, 1985-2016		HRS, 1992-2016	
	Mean	SD	Mean	SD
Age	34	9	67	11.4
Male	51%	0.5	42%	0.49
Education, <12 yrs	14%	0.35	26%	0.44
Education, 12 yrs	34%	0.47	33%	0.47
Education, 13-16 yrs	40%	0.49	31%	0.46
Education, 17+ yrs	12%	0.33	10%	0.30
Race/ethnicity, White	51%	0.5	71%	0.45
Race/ethnicity, Black	28%	0.45	16%	0.37
Race/ethnicity, Hispanic	19%	0.39	10%	0.31
Race/ethnicity, Others	2%	0.16	3%	0.16
Family size	3.1	1.70		
Live in rural areas	21%	0.41		
Live in urban areas	78%	0.41		
Rural-urban areas unknown	1%	0.08		
Not in MSA	18%	0.39		
MSA, non-central city	38%	0.48		
MSA, central city	22%	0.42		
MSA, unknown city	22%	0.41		
Marital status, Never married	33%	0.47	4%	0.19
Marital status, Married	48%	0.5	63%	0.48
Marital status, Separated/divorced	18%	0.38	15%	0.36
Marital status, Widowed	1%	0.09	19%	0.32
Health, Excellent			12%	0.32
Health, Very good			28%	0.45
Health, Good			31%	0.46
Health, Fair			20%	0.40
Health, Poor			9%	0.29
Family income (equivalence scale)	44,178	71,582	54,230	446,875
Family net wealth (per capita)	54,982	133,043	303,328	1,114,791
Home equity (per capita)	20,357	74,400	99,920	254,167
Non-housing wealth (per capita)	34,870	111,090	203,408	958,862
Number of observations	122,646		246,672	
Number of distinct persons	11,301		42,032	

Table 1: Summary statistics, NLSY79 and HRS

Note: (1) People in the NLSY79 cohort were born between 1957 and 1964. We include observations whose wealth measures are available in survey years 1985-1994, 1996, 1998, 2002, 2006, 2010, and 2014. There are 11,301 distinct individuals and 122,646 person-year records.

(2) The HRS includes people aged 50+ and their spouses regardless of age. There are 42,032 distinct individuals and 246,672 person-year records.

(3) All monetary variables are converted to 2018 constant dollars using CPI-U-RS.

(4) Equivalence-scale means we divide a variable by the square root of household size.

(5) In wealth measures, "per capita" means that if married, we divide the wealth measure by 2.

(6) These samples differ from those used in the estimation due to the omission of individuals who experienced the milestone prior to the beginning of the study period, and the omission of observations more than 10 years away from the milestone.

Events	% of surveyed who	
	experienced the event	those who experienced the event
	during the study period	during the study period
Life Milestones		
Marriage	66%	27
Children	58%	29
Homeownership	70%	31
Divorce (among who married)	38%	35
Work-limiting health problem (early-life)	35%	36
Disability	24%	42
Retirement (among who worked 10+ years)	44%	62
Widowhood (among who married)	23%	75
Work-limiting health problem (late-life)	43%	72
Health Shocks		
High blood pressure	38%	65
Diabetes	16%	66
Cancer	12%	71
Lung disease	9.5%	69
Heart disease	21%	71
Stroke	8%	75
Psychiatric conditions	14%	67
Arthritis	43%	66
Cumulative health shocks (among the 8 shocks	5)	
0	41%	
1	24%	
2	18%	
3	11%	
4+	7%	

Table 2: Prevalence and timing of life events

Note: Sample excludes people who experienced the event before the study period began, i.e., 1985 in the NLSY79 and 1992 in the HRS.

	(1)	(2)	(3)	(4)
	Baseline	Long-run	Short-run	
	Mean and S.D.	Change	change	Ν
Early-life Milestones: NLSY 79		<u> </u>	C	
Marriage	26,752	2,528*	-9,248***	38,377
C	(68,300)	(1,425)	(1,890)	
Children	37,044	2,275	-4,191***	39,755
	(66,298)	(1,773)	(2,270)	
Homeownership	21,057	44,394***	23,138***	50,920
-	(45,759)	(968)	(1,249)	
Divorce	23,800	-5,461***	8,553***	70,627
	(56,213)	(1,605)	(2,629)	
Work-limiting health shock	17,286	-26,688***	3,989	60,095
C	(47,414)	(1,799)	(2,865)	,
Disability	11,718	-34,629***	96	70,977
2	(32,774)	(2,317)	(3,705)	,
Late-life Milestones: HRS data				
Retirement	311,721	18,933***	20,808***	129,276
	(784,906)	(7,003)	(9,652)	,
Widowhood	192,965	116,906***	137,089***	120,667
	(289,576)	(4,123)	(5,372)	
Work-limiting health shock	280,187	-27,560***	1,644	182,222
	(998,640)	(6,065)	(8,598)	
Health shocks: HRS data	())))))))	(0,000)	(0,0)	
High blood pressure	306,552	-24,832***	-6,679	132,799
ingh croce pressure	(947,172)	(6,182)	(9,213)	10_,///
Diabetes	232,426	-25,704***	2,991	208,304
Diabetes	(555,235)	(7,536)	(12,627)	200,501
Cancer	344,110	4,253	15,183	219,472
Culleon	(1,263,229)	(8,035)	(13,260)	219,172
Lung disease	245,695	-18,398**	-11,642	222,241
Lung abouse	(1,024,694)	(9,371)	(15,564)	222,211
Heart disease	283,143	-10,402	9,314	197,031
Treart disease	(828,140)	(6,839)	(10,925)	177,051
Stroke	246,301	-9,676	17,504	230,852
SUORE	(588,021)	(9,869)	(16,179)	230,032
Psychiatric conditions	215,474	-18,371**	-5,158	207,458
i syematric conditions	(517,734)	(8,482)	(13,937)	207,430
Arthritis	274,548	-12,126*	-756	143,092
An unituo	(616,162)	(7,004)	(10,056)	145,092
	(010,102)	(7,00+)	(10,050)	

Table 3: Changes in Family Wealth by Milestone

Note: Sample excludes those who experience the milestone prior to entering the sample, and observations outside the 10-year window surrounding the milestone. Dependent variable is total family wealth. For all milestones, family wealth is divided by 2, if married. Column (1) summarizes baseline values measured one period before a milestone (NLSY – 1 year; HRS – 2 years). Column (2) displays estimates of γ from equation (2). Column (3) displays D from equation (3) using a linear functional form. Numbers in parentheses are standard deviations for column (1) and standard errors for columns (2) and (3). * p < 0.10, ** p < 0.05, *** p < 0.01. See text for more details.

	(1) Described	(2)	(3) Walata 1	(4) Dalama 1	(5)	(6) E 1 1
	Baseline	Log	Weighted	Balanced	Quantile	Exclude
	specification	wealth	Regression	Panel	regression	"never"
	NH GNZ 1				(median)	
Early-life Milestor		1 100***	2 100**	F 027***	2 (22	10 100***
Marriage	2,528*	1.188***	-3,199**	5,837***	2,623	-10,460***
~	(1,425)	(0.095)	(1,626)	(2,118)	(1,646)	(1,590)
Children	2,275	-0.09	285	-2,382	2,108	-1,059
	(1,773)	(0.09)	(1,972)	(2,576)	(1,613)	(1,654)
Homeownership	44,394***	2.36***	45,958***	41,502***	43,643***	22,637***
	(968)	(0.0787)	(1,106)	(1,143)	(1,399)	(1,407)
Divorce	-5,461***	-0.906***	-9,522***	-3,438	-5,494***	6,051**
	(1,605)	(0.087)	(1,798)	(2,431)	(2,010)	(2,460)
Work-limiting	-26,688***	-0.630***	-30,791***	-22,607***	-26,517***	2,882
health shock	(1,799)	(0.091)	(2,108)	(2,703)	(1,512)	(2,193)
Disability	-34,629***	-1.027***	-42,014***	-26,496***	-34,461***	903
5	(2,318)	(0.116)	(2,799)	(3,581)	(2,164)	(2,794)
Late-life Milestone						
Retirement	18,933***	0.12***	28.910***	21,552**	19.186***	21.117***
	(7,003)	(0.04)	(7,057)	(9,581)	(5,921)	(7,426)
Widowhood	116,906***	-0.18***	135,945***	114,899***	113,787***	152,671***
	(4,123)	(0.06)	(4,814)	(5,169)	(3,978)	(6,740)
Work-limiting	-27,560***	-0.17***	-36,066***	12,764	-26,010***	4,342
health shock	(6,065)	(0.03)	(6,392)	(17,245)	(6,357)	(8,301)
ficatul shoek	(0,005)	(0.05)	(0,3)2)	(17,243)	(0,557)	(0,501)
Health shocks: HR	S data					
High blood	-24,832***	-0.08**	-28,965***	-2,868	-24,489***	-1,086
pressure	(6,182)	(0.03)	(6,873)	(12,985)	(6,255)	(9,089)
Diabetes	-25,704***	-0.13***	-29,932***	-12,817	-24,643***	-1,547
	(7,536)	(0.04)	(7,883)	(10,787)	(4,851)	(6,937)
Cancer	4,253	-0.01	19,832**	3,912	5,621	20,347
Culleer	(8,035)	(0.04)	(8,586)	(33,918)	(11,311)	(19,821)
Lung disease	-18,398**	-0.18***	-27,584***	-32,500	-18,622	-6,928
Early albease	(9,371)	(0.05)	(10,022)	(50,575)	(15,577)	(24,571)
Heart disease	-10,402	-0.09**	-15,085**	7,050	-9,109	5,576
ricari uiscase	(6,839)	(0.04)	(7,382)	(22,650)	(5,674)	(12,359)
Stroke	-9,676	-0.37***	2,855	(22,030) 3,174	-11,611	(12,339) 20,123
Suoke	,		,	· ·	,	,
Densiliaria	(9,869)	(0.05)	(11,211)	(18,470)	(10,192)	(13,522)
Psychiatric	-18,371**	-0.24***	-23,943***	6,915	-17,882***	3,851
conditions	(8,482)	(0.04)	(9,136)	(12,808)	(4,517)	(7,414)
Arthritis	-12,126*	0.01	-19,663***	-9,462	-10,400	3,774
	(7,004)	(0.03)	(7,086)	(20,519)	(6,531)	(9,434)

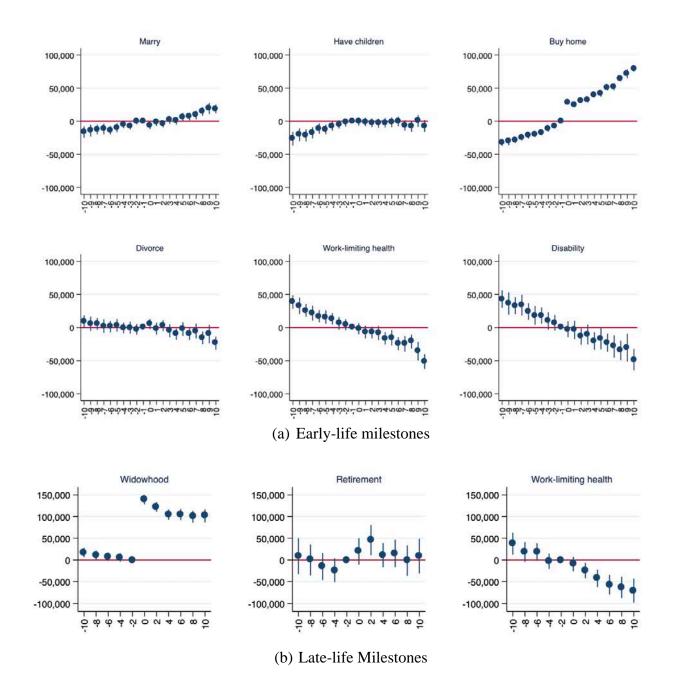
Table 4: Alternative Specifications: Long-run Changes in Wealth

Notes: Column (1) displays results from Table 3, Column (2). Dependent variable in Column (2) is log(wealth + 1) if wealth ≥ 0 , and $-\ln(abs(wealth + 1))$ if wealth ≤ 0 . Column (3) uses survey sampling weights. Column (4) omits those who responded less than 3 times in each of the 5 years before and after the milestone (NLSY) or less than 3 times in the 4 waves before and after the milestone (HRS). Column (5) excludes those who never experienced a milestone.

	(1) Baseline	(2) Log	(3) Weighted	(4) Balanced-	(5) Quantile	(6) Exclude	(7) Quadratic
	specification	wealth	Regression	panel	regression (median)	"never"	Quadratic
Early-life Milesto					(meutair)		
Marriage	-9,248***	0.976***	-11,028***	-9,655***	-8,991***	-9.644***	-10,615***
Marriage	-9,248**** (1,890)	(0.126)	(2,084)	(3,094)	(1,738)	-9,644**** (1,643)	-10,615****
Children	(1,890) -4,191*	(0.126) -0.302**	(2,084) -4,052	(3,094) -6,640*	(1,738) -4,170***	(1,643) -3,278**	(2,796) -3,518
Children	-4,191* (2,270)		-4,052 (2,499)	-6,640* (3,793)	, ·	,	-3,518 (3,359)
TT		(0.122) 1.768***			(1,428) 22,900***	(1,670)	
Homeownership	23,138***		23,651***	18,526***	,	23,894***	22,007***
	(1,249)	(0.102)	(1,358)	(1,563)	(1,260)	(1,435)	(1,868)
Divorce	8,553***	-0.527***	11,374***	3,992	8,323***	5,349**	5,864
4 44 4.4	(2,629)	(0.143)	(2,942)	(4,193)	(2,088)	(2,495)	(4,091)
Work-limiting	3,989	-0.114	7,067**	3,569	3,625*	2,938	-1,724
health shock	(2,865)	(0.145)	(3,382)	(4,671)	(1,996)	(2,214)	(4,427)
Disability	96	-0.478**	644	3,644	-157	954	347
	(3,705)	(0.185)	(4,551)	(6,398)	(2,336)	(2,801)	(5,958)
Late-life Mileston							
Retirement	20,808**	0.08	37,774***	24,761*	21,138***	17,743*	589
	(9,652)	(0.05)	(9,660)	(14,455)	(7,740)	(9,490)	(16,866)
Widowhood	137,089***	0.04	155,854***	141,920***	132,859***	147,733***	152,738***
	(5,372)	(0.08)	(6,232)	(7,440)	(5,139)	(6,920)	(10,777)
Work-limiting	1,644	-0.14***	-3,250	14,171	1,189	1,654	-6,559
health shock	(8,598)	(0.04)	(9,141)	(18,113)	(8,268)	(8,785)	(15,471)
Health shocks: HI					<u> </u>		
High blood	-6,679	-0.07	-6,205	-9,668	-7,689	-5,467	31,937*
pressure	(9,213)	(0.05)	(10,273)	(13,643)	(9,293)	(9,661)	(16,712)
Diabetes	2,991	-0.04	-2,509	-9,011	2,589	1,057	2,176
10 100C	(12,627)	(0.06)	(13,141)	(11,281)	(6,107)	(7,285)	(22,766)
Cancer	15,183	-0.14**	33,474**	5,766	13,458	14,274	32,558
Cuncer	(13,260)	(0.07)	(14,112)	(35,357)	(14,606)	(20,455)	(23,619)
Lung disease	-11,642	-0.13	-36,758**	-21,020	-13,856	-7,982	41,421
Lung uncase	(15,564)	(0.08)	(16,628)	(52,694)	(14,953)	(25,612)	(27,971)
Heart disease	9,314	-0.03	-10,052	21,877	6,605	10,552	-16,577
IICart ursease	(10,925)	-0.03 (0.06)	(11,800)	(23,595)	(14,063)	(12,846)	(19,621)
Stroke	(10,923) 17,504	(0.08) -0.41***	(11,800) 36,047*	(23,393) 7,556	(14,005)	(12,846) 17,386	4,015
SHOKE	(16,179)	(0.08)	(18,439)	(19,072)	(13,311)	(13,861)	4,015 (28,792)
Dershistria							(28,792) 759
Psychiatric	-5,158	-0.12*	-9,094	-6,556	-5,376	-2,496	
condition	(13,937)	(0.07)	(15,072)	(13,473)	(6,715)	(7,848)	(25,307)
Arthritis	-756	0.02	1,205	-15,565	-56	875	17,631
	(10,056)	(0.05)	(10,195)	(21,721)	(9,897)	(10,239)	(18,434)

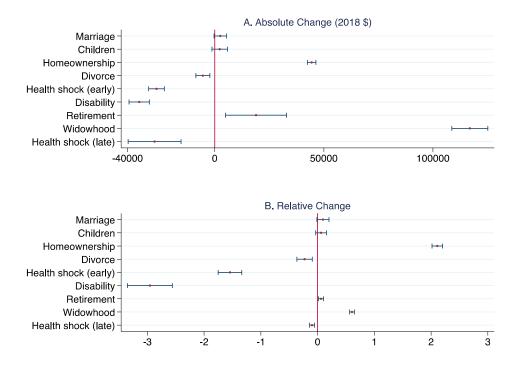
Table 5: Alternative Specifications - Short-run Changes in Wealth

Notes: Column (1) displays results from Table 3, Column (2). Dependent variable in Column (2) is $\log(\text{wealth} + 1)$ if wealth ≥ 0 , and $-\ln(abs(\text{wealth} + 1))$ if wealth ≤ 0 . Column (3) uses survey sampling weights. Column (4) omits those who responded less than 3 times in each of the 5 years before and after the milestone (NLSY) or less than 3 times in the 4 waves before and after the milestone (HRS). Column (5) excludes those who never experience a milestone. Column (6) displays results when a quadratic term of relative time is included in the regression.



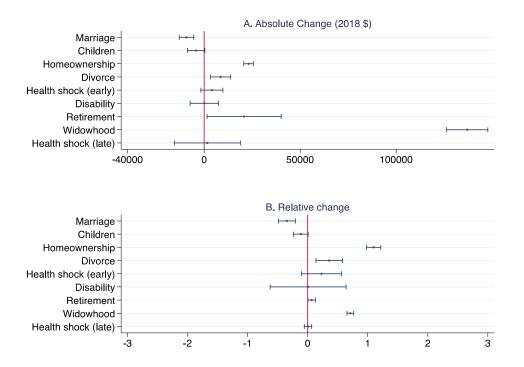
Notes: Plots represent coefficients γ_t in equation (1). Early-life milestones use NLSY79 with per capita wealth and display results relative to one year before milestone. Late-life milestones use HRS with per capita wealth and display results relative to one wave (two years) before milestone.





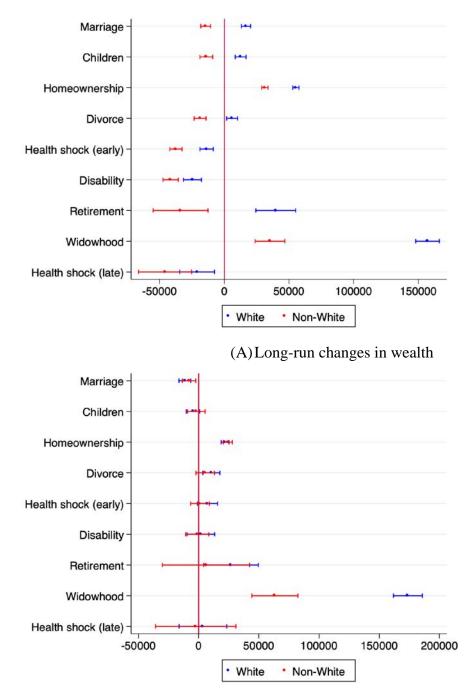
Notes: Upper figure displays coefficients γ from equation (2). Lower figure displays these coefficients divided by baseline wealth. Baseline wealth represents wealth measured one period before a milestone. Ranges represent 95 percent confidence interval. See text for more details.

Figure 3: Short-run Changes in Wealth across Milestones



Notes: Upper figure displays coefficients D from equation (3) using a linear functional form. Lower figure displays these coefficients divided by baseline wealth. Baseline wealth represents wealth measured one period before a milestone. Ranges represent 95 percent confidence interval. See text for more details.

Figure 4: Heterogeneity in Long-run Changes in Wealth across Milestones by Race/Ethnicity



(B) Short-run changes in wealth

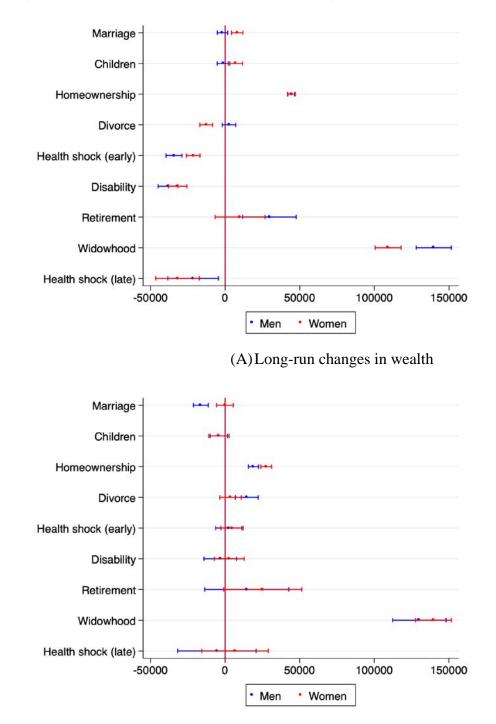


Figure 5: Heterogeneity in Long-run Changes in Wealth across Milestones by Sex

(B) Short-run changes in wealth

Notes: Panel A displays coefficients γ from equation (2) for groups separated by observable characteristics. Ranges represent 95 percent confidence interval. Panel B displays coefficients D from equation (3) with a linear functional form for groups separated by observable characteristics. See text for more details.

APPENDIX

Table A.1:	Heterogeneity	analvsis

	Long-run Change		Short-run Change	
	(1) (2)		(3)	(4)
	$1(t \ge 0)$	$1(t \ge 0) \times Interaction$	$1(t \ge 0)$	$1(t \ge 0) \times$ Interaction
A. Interaction =	= Non-Whites			
Marriage	16,721***	-31,076***	-11,482***	3,460
C	(1,756)	(2,260)	(2,469)	(3,645)
Children	12,635***	-26,563***	-4,733*	2,781
	(2,083)	(2,812)	(2,823)	(4,551)
Homeownership	55,354***	-23,993***	21,938***	2,258
1	(1,181)	(1,490)	(1,615)	(2,449)
Divorce	6,021***	-24,749***	10,483***	-5,002
	(2,132)	(3,029)	(3,540)	(5,241)
Work-limiting health	-13,699***	-23,723***	7,312*	-6,229
conditions (early-life)	(2,568)	(3,348)	(4,187)	(5,694)
Disability	-24,698***	-16,819***	1,884	-3,100
	(3,495)	(4,430)	(5,746)	(7,462)
Retirement	39,778***	-73,591***	26,875**	-20,808
Retirement	(7,681)	(11,149)	(11,319)	(21,256)
Widowhood	157,211***	-121,950***	173,783***	-110,455***
Widownood	(4,571)	(6,025)	(6,032)	(10,595)
Work-limiting health	-21,016***	-24,826**	3,509	-5,981
conditions (late-life)	(6,752)	(11,266)	(9,909)	(19,238)
``	= No College Edi	~ / /	(9,909)	(19,230)
Marriage	<u>- No College Eul</u> 13,976***	-31,076***	-9,388***	1,002
Manlage	(1,662)	(2,260)	(2,321)	(3,743)
Children	(1,002) 13,145***	-31,846***	-4,727*	2,864
Cililaten				(4,601)
Homoorpanshin	(2,023) 57,399***	(2,870) -33,400***	(2,768) 25,054***	-4,740*
Homeownership				
Dimense	(1,140)	(1,521)	(1,570)	(2,478)
Divorce	6,365***	-24,050***	9,576**	-1,672
XX7 - 1	(2,177)	(3,024)	(3,693)	(5,224)
Work-prohibiting health	-10,554***	-29,849***	5,843	-3,732
conditions (early-life)	(2,545)	(3,345)	(4,180)	(5,699)
Disability	-22,512***	-20,122***	4,095	-6,214
	(3,559)	(4,465)	(5,893)	(7,541)
Retirement	70,402***	-97,506***	29,365**	-16,793
	(8,757)	(9,969)	(14,009)	(19,089)
Widowhood	216,716***	-137,737***	243,260***	-146,641***
	(5,638)	(5,327)	(8,447)	(9,413)
Work-limiting health	-2,962	-39,980***	-437	3,997
conditions (late-life)	(8,701)	(10,142)	(13,773)	(17,341)
C. Interaction =				
Marriage	-1,735	9,850***	-16,270***	16,215***
	(1,730)	(2,269)	(2,468)	(3,667)
Children	-1,035	7,979***	-4,128	34
	(2,112)	(2,770)	(2,951)	(4,458)
Homeownership	44,213***	377	19,046***	8,578***
*	(1,198)	(1,472)	(1,701)	(2,428)
	(1,1,0)	(1,1,2)		
Divorce	2,602	-15,196***	14,500***	-10,800**

Work-limiting health	-34,198***	12,860***	2,488	2,238
conditions (early-life)	(2,669)	(3,375)	(4,386)	(5,752)
Disability	-38,209***	6,511	-3,236	6,061
	(3,340)	(4,375)	(5,475)	(7,379)
Retirement	29,727***	-19,692*	14,534	10,753
	(8,930)	(10,109)	(14,099)	(19,116)
Widowhood	139,815***	-30,626***	130,195***	9,500
	(5,906)	(5,655)	(8,952)	(9,865)
Work-limiting health	-21,444**	-10,391	-5,531	12,214
conditions (late-life)	(8440)	(9,973)	(13,152)	(17,027)
	<i>Worse than aver</i>			5 500th
Marriage	11,214***	-19,048***	-14,151***	7,739*
	(1,950)	(2,459)	(2,801)	(4,048)
Children	9,893***	-17,021**	-4,311	352
	(2,360)	(2,966)	(3,310)	(4,916)
Homeownership	54,133***	-17,072***	21,953***	3,089
	(1,316)	(1,599)	(1,880)	(2,687)
Divorce	3,677	-17,051***	10,591***	-2,163
	(2,375)	(3,263)	(4,094)	(5,737)
Work-limiting health	-23,251***	-6,761*	4,059	-1,015
conditions (early-life)	(3,168)	(3,796)	(5,266)	(6,517)
Disability	-37,811***	2,884	-3,176	4,220
	(4,435)	(5,198)	(7,294)	(8,750)
Retirement	46,043***	-65,905***	30,029**	-20,869
	(8,241)	(10,314)	(12,314)	(19,584)
Widowhood	151,760***	-116,963***	180,381***	-114,867***
() lao () lioba	(5,478)	(6,134)	(8,047)	(10,970)
Work-limiting health				
	- 1 / 898	-108/	1 011	10.043
e	-37,898*** (9 547)	-3,687 (12,864)	1,011 (15,076)	10,043 (21,887)
conditions (late-life)	(9,547)	(12,864)	(15,076)	(21,887)
conditions (late-life) E. Interaction	(9,547) = Heath Insurance	(12,864) e observed <90% of time	(15,076)	(21,887)
conditions (late-life)	(9,547) = Heath Insurance 16,199***	(12,864) e observed <90% of time -35,458***	(15,076) -13,551***	(21,887)
conditions (late-life) <i>E. Interaction</i> = Marriage	(9,547) = Heath Insurance 16,199*** (1,678)	(12,864) e observed <90% of time -35,458*** (2,316)	(15,076) -13,551*** (2,337)	(21,887) 7,855** (3,748)
conditions (late-life) E. Interaction	(9,547) = Heath Insurance 16,199*** (1,678) 16,034***	(12,864) <u>e observed <90% of time</u> -35,458*** (2,316) -40,243***	(15,076) -13,551*** (2,337) -4,758*	(21,887) 7,855** (3,748) 3,144
conditions (late-life) <u>E.</u> Interaction = Marriage Children	(9,547) = Heath Insurance 16,199*** (1,678) 16,034*** (2,027)	(12,864) <u>e observed <90% of time</u> -35,458*** (2,316) -40,243*** (2,887)	(15,076) -13,551*** (2,337) -4,758* (2,742)	(21,887) 7,855** (3,748) 3,144 (4,646)
conditions (late-life) <i>E. Interaction</i> = Marriage	(9,547) = Heath Insurance 16,199*** (1,678) 16,034*** (2,027) 56,760***	(12,864) <u>e observed <90% of time</u> -35,458*** (2,316) -40,243*** (2,887) -31,291***	(15,076) -13,551*** (2,337) -4,758* (2,742) 20,845***	(21,887) 7,855** (3,748) 3,144 (4,646) 5,661**
conditions (late-life) <u>E. Interaction</u> Marriage Children Homeownership	(9,547) = Heath Insurance 16,199*** (1,678) 16,034*** (2,027) 56,760*** (1,137)	(12,864) <u>e observed <90% of time</u> -35,458*** (2,316) -40,243*** (2,887) -31,291*** (1,527)	(15,076) -13,551*** (2,337) -4,758* (2,742) 20,845*** (1,538)	(21,887) 7,855** (3,748) 3,144 (4,646) 5,661** (2,504)
conditions (late-life) <u>E.</u> Interaction = Marriage Children	(9,547) = Heath Insurance 16,199*** (1,678) 16,034*** (2,027) 56,760*** (1,137) 14,987***	(12,864) e observed <90% of time -35,458*** (2,316) -40,243*** (2,887) -31,291*** (1,527) -38,862***	(15,076) -13,551*** (2,337) -4,758* (2,742) 20,845*** (1,538) 10,680***	(21,887) 7,855** (3,748) 3,144 (4,646) 5,661** (2,504) -4,255
conditions (late-life) <u>E. Interaction</u> = Marriage Children Homeownership Divorce	(9,547) = Heath Insurance 16,199*** (1,678) 16,034*** (2,027) 56,760*** (1,137) 14,987*** (2,259)	(12,864) e observed <90% of time -35,458*** (2,316) -40,243*** (2,887) -31,291*** (1,527) -38,862*** (2,150)	(15,076) -13,551*** (2,337) -4,758* (2,742) 20,845*** (1,538) 10,680*** (3,809)	(21,887) 7,855** (3,748) 3,144 (4,646) 5,661** (2,504) -4,255 (5,222)
conditions (late-life) <u>E. Interaction</u> Marriage Children Homeownership Divorce Work-prohibiting health	(9,547) = Heath Insurance 16,199*** (1,678) 16,034*** (2,027) 56,760*** (1,137) 14,987*** (2,259) -3,290	(12,864) <u>e observed <90% of time</u> -35,458*** (2,316) -40,243*** (2,887) -31,291*** (1,527) -38,862*** (2,150) -39,615***	(15,076) -13,551*** (2,337) -4,758* (2,742) 20,845*** (1,538) 10,680*** (3,809) 7,243	(21,887) 7,855** (3,748) 3,144 (4,646) 5,661** (2,504) -4,255 (5,222) -6,366
conditions (late-life) E. Interaction = Marriage	(9,547) = Heath Insurance 16,199*** (1,678) 16,034*** (2,027) 56,760*** (1,137) 14,987*** (2,259) -3,290 (2,692)	(12,864) <u>e observed <90% of time</u> -35,458*** (2,316) -40,243*** (2,887) -31,291*** (1,527) -38,862*** (2,150) -39,615*** (3,392)	(15,076) -13,551*** (2,337) -4,758* (2,742) 20,845*** (1,538) 10,680*** (3,809) 7,243 (4,434)	(21,887) 7,855** (3,748) 3,144 (4,646) 5,661** (2,504) -4,255 (5,222) -6,366 (5,768)
conditions (late-life) <u>E. Interaction</u> Marriage Children Homeownership Divorce Work-prohibiting health	(9,547) = Heath Insurance 16,199*** (1,678) 16,034*** (2,027) 56,760*** (1,137) 14,987*** (2,259) -3,290 (2,692) -16,565***	(12,864) <u>e observed <90% of time</u> -35,458*** (2,316) -40,243*** (2,887) -31,291*** (1,527) -38,862*** (2,150) -39,615*** (3,392) -26,272***	(15,076) -13,551*** (2,337) -4,758* (2,742) 20,845*** (1,538) 10,680*** (3,809) 7,243 (4,434) 2,210	(21,887) 7,855** (3,748) 3,144 (4,646) 5,661** (2,504) -4,255 (5,222) -6,366 (5,768) -3,001
conditions (late-life)E. Interaction =MarriageChildrenHomeownershipDivorceWork-prohibiting health conditions (early-life)Disability	(9,547) = Heath Insurance 16,199*** (1,678) 16,034*** (2,027) 56,760*** (1,137) 14,987*** (2,259) -3,290 (2,692) -16,565*** (3,976)	(12,864) <u>e observed <90% of time</u> -35,458*** (2,316) -40,243*** (2,887) -31,291*** (1,527) -38,862*** (2,150) -39,615*** (3,392) -26,272*** (4,697)	(15,076) -13,551*** (2,337) -4,758* (2,742) 20,845*** (1,538) 10,680*** (3,809) 7,243 (4,434) 2,210 (6,503)	(21,887) 7,855** (3,748) 3,144 (4,646) 5,661** (2,504) -4,255 (5,222) -6,366 (5,768) -3,001 (7,871)
conditions (late-life)E. Interaction =MarriageChildrenHomeownershipDivorceWork-prohibiting health conditions (early-life)	(9,547) = Heath Insurance 16,199*** (1,678) 16,034*** (2,027) 56,760*** (1,137) 14,987*** (2,259) -3,290 (2,692) -16,565*** (3,976) 34,529***	(12,864) <u>e observed <90% of time</u> -35,458*** (2,316) -40,243*** (2,887) -31,291*** (1,527) -38,862*** (2,150) -39,615*** (3,392) -26,272*** (4,697) -66,141***	(15,076) $-13,551***$ $(2,337)$ $-4,758*$ $(2,742)$ $20,845***$ $(1,538)$ $10,680***$ $(3,809)$ $7,243$ $(4,434)$ $2,210$ $(6,503)$ $25,257**$	(21,887) 7,855** (3,748) 3,144 (4,646) 5,661** (2,504) -4,255 (5,222) -6,366 (5,768) -3,001 (7,871) -17,919
conditions (late-life) E. Interaction = Marriage Children Homeownership Divorce Work-prohibiting health conditions (early-life) Disability Retirement Conditions (early-life)	(9,547) = Heath Insurance 16,199*** (1,678) 16,034*** (2,027) 56,760*** (1,137) 14,987*** (2,259) -3,290 (2,692) -16,565*** (3,976) 34,529*** (7,555)	(12,864) <u>e observed <90% of time</u> -35,458*** (2,316) -40,243*** (2,887) -31,291*** (1,527) -38,862*** (2,150) -39,615*** (3,392) -26,272*** (4,697) -66,141*** (12,033)	(15,076) $-13,551***$ $(2,337)$ $-4,758*$ $(2,742)$ $20,845***$ $(1,538)$ $10,680***$ $(3,809)$ $7,243$ $(4,434)$ $2,210$ $(6,503)$ $25,257**$ $(10,958)$	(21,887) 7,855** (3,748) 3,144 (4,646) 5,661** (2,504) -4,255 (5,222) -6,366 (5,768) -3,001 (7,871) -17,919 (22,682)
conditions (late-life)E. Interaction =MarriageChildrenHomeownershipDivorceWork-prohibiting health conditions (early-life)Disability	(9,547) = Heath Insurance 16,199*** (1,678) 16,034*** (2,027) 56,760*** (1,137) 14,987*** (2,259) -3,290 (2,692) -16,565*** (3,976) 34,529*** (7,555) 137,986***	(12,864) <u>e observed <90% of time</u> -35,458*** (2,316) -40,243*** (2,887) -31,291*** (1,527) -38,862*** (2,150) -39,615*** (3,392) -26,272*** (4,697) -66,141*** (12,033) -109,521***	(15,076) $-13,551***$ $(2,337)$ $-4,758*$ $(2,742)$ $20,845***$ $(1,538)$ $10,680***$ $(3,809)$ $7,243$ $(4,434)$ $2,210$ $(6,503)$ $25,257**$ $(10,958)$ $154,224***$	(21,887) 7,855** (3,748) 3,144 (4,646) 5,661** (2,504) -4,255 (5,222) -6,366 (5,768) -3,001 (7,871) -17,919 (22,682) -91,324***
conditions (late-life) <u>E. Interaction</u> Marriage Children Homeownership Divorce Work-prohibiting health conditions (early-life) Disability Retirement Widowhood	(9,547) = Heath Insurance 16,199*** (1,678) 16,034*** (2,027) 56,760*** (1,137) 14,987*** (2,259) -3,290 (2,692) -16,565*** (3,976) 34,529*** (7,555) 137,986*** (4,356)	(12,864) <u>e observed <90% of time</u> -35,458*** (2,316) -40,243*** (2,887) -31,291*** (1,527) -38,862*** (2,150) -39,615*** (3,392) -26,272*** (4,697) -66,141*** (12,033) -109,521*** (7,365)	(15,076) $-13,551***$ $(2,337)$ $-4,758*$ $(2,742)$ $20,845***$ $(1,538)$ $10,680***$ $(3,809)$ $7,243$ $(4,434)$ $2,210$ $(6,503)$ $25,257**$ $(10,958)$ $154,224***$ $(5,718)$	(21,887) 7,855** (3,748) 3,144 (4,646) 5,661** (2,504) -4,255 (5,222) -6,366 (5,768) -3,001 (7,871) -17,919 (22,682) -91,324*** (12,827)
conditions (late-life)E. Interaction =MarriageChildrenHomeownershipDivorceWork-prohibiting health conditions (early-life)DisabilityRetirementWidowhoodWork-limiting health	(9,547) = Heath Insurance 16,199*** (1,678) 16,034*** (2,027) 56,760*** (1,137) 14,987*** (2,259) -3,290 (2,692) -16,565*** (3,976) 34,529*** (7,555) 137,986*** (4,356) -22,350***	(12,864) <u>e observed <90% of time</u> -35,458*** (2,316) -40,243*** (2,887) -31,291*** (1,527) -38,862*** (2,150) -39,615*** (3,392) -26,272*** (4,697) -66,141*** (12,033) -109,521*** (7,365) -28,456**	(15,076) $-13,551***$ $(2,337)$ $-4,758*$ $(2,742)$ $20,845***$ $(1,538)$ $10,680***$ $(3,809)$ $7,243$ $(4,434)$ $2,210$ $(6,503)$ $25,257**$ $(10,958)$ $154,224***$ $(5,718)$ 25	(21,887) 7,855** (3,748) 3,144 (4,646) 5,661** (2,504) -4,255 (5,222) -6,366 (5,768) -3,001 (7,871) -17,919 (22,682) -91,324*** (12,827) 9,883
conditions (late-life) <u>E. Interaction</u> Marriage Children Homeownership Divorce Work-prohibiting health conditions (early-life) Disability Retirement Widowhood	(9,547) = Heath Insurance 16,199*** (1,678) 16,034*** (2,027) 56,760*** (1,137) 14,987*** (2,259) -3,290 (2,692) -16,565*** (3,976) 34,529*** (7,555) 137,986*** (4,356)	(12,864) <u>e observed <90% of time</u> -35,458*** (2,316) -40,243*** (2,887) -31,291*** (1,527) -38,862*** (2,150) -39,615*** (3,392) -26,272*** (4,697) -66,141*** (12,033) -109,521*** (7,365)	(15,076) $-13,551***$ $(2,337)$ $-4,758*$ $(2,742)$ $20,845***$ $(1,538)$ $10,680***$ $(3,809)$ $7,243$ $(4,434)$ $2,210$ $(6,503)$ $25,257**$ $(10,958)$ $154,224***$ $(5,718)$	(21,887) 7,855** (3,748) 3,144 (4,646) 5,661** (2,504) -4,255 (5,222) -6,366 (5,768) -3,001 (7,871) -17,919 (22,682) -91,324*** (12,827)
conditions (late-life)E. Interaction =MarriageChildrenHomeownershipDivorceWork-prohibiting health conditions (early-life)DisabilityRetirementWidowhoodWork-limiting health conditions (late-life)F. Interaction =	(9,547) = Heath Insurance 16,199*** (1,678) 16,034*** (2,027) 56,760*** (1,137) 14,987*** (2,259) -3,290 (2,692) -16,565*** (3,976) 34,529*** (7,555) 137,986*** (4,356) -22,350*** (6,546) = No work pension	(12,864) <u>e observed <90% of time</u> -35,458*** (2,316) -40,243*** (2,887) -31,291*** (1,527) -38,862*** (2,150) -39,615*** (3,392) -26,272*** (4,697) -66,141*** (12,033) -109,521*** (7,365) -28,456** (13,458) ms	(15,076) $-13,551***$ $(2,337)$ $-4,758*$ $(2,742)$ $20,845***$ $(1,538)$ $10,680***$ $(3,809)$ $7,243$ $(4,434)$ $2,210$ $(6,503)$ $25,257**$ $(10,958)$ $154,224***$ $(5,718)$ 25 $(9,419)$	(21,887) 7,855** (3,748) 3,144 (4,646) 5,661** (2,504) -4,255 (5,222) -6,366 (5,768) -3,001 (7,871) -17,919 (22,682) -91,324*** (12,827) 9,883 (22,475)
conditions (late-life)E. Interaction =MarriageChildrenHomeownershipDivorceWork-prohibiting health conditions (early-life)DisabilityRetirementWidowhoodWork-limiting health conditions (late-life)	(9,547) = Heath Insurance 16,199*** (1,678) 16,034*** (2,027) 56,760*** (1,137) 14,987*** (2,259) -3,290 (2,692) -16,565*** (3,976) 34,529*** (7,555) 137,986*** (4,356) -22,350*** (6,546)	(12,864) e observed <90% of time -35,458*** (2,316) -40,243*** (2,887) -31,291*** (1,527) -38,862*** (2,150) -39,615*** (3,392) -26,272*** (4,697) -66,141*** (12,033) -109,521*** (7,365) -28,456** (13,458)	(15,076) $-13,551***$ $(2,337)$ $-4,758*$ $(2,742)$ $20,845***$ $(1,538)$ $10,680***$ $(3,809)$ $7,243$ $(4,434)$ $2,210$ $(6,503)$ $25,257**$ $(10,958)$ $154,224***$ $(5,718)$ 25	(21,887) 7,855** (3,748) 3,144 (4,646) 5,661** (2,504) -4,255 (5,222) -6,366 (5,768) -3,001 (7,871) -17,919 (22,682) -91,324*** (12,827) 9,883
conditions (late-life)E. Interaction =MarriageChildrenHomeownershipDivorceWork-prohibiting health conditions (early-life)DisabilityRetirementWidowhoodWork-limiting health conditions (late-life)F. Interaction =	(9,547) = Heath Insurance 16,199*** (1,678) 16,034*** (2,027) 56,760*** (1,137) 14,987*** (2,259) -3,290 (2,692) -16,565*** (3,976) 34,529*** (7,555) 137,986*** (4,356) -22,350*** (6,546) = No work pension	(12,864) <u>e observed <90% of time</u> -35,458*** (2,316) -40,243*** (2,887) -31,291*** (1,527) -38,862*** (2,150) -39,615*** (3,392) -26,272*** (4,697) -66,141*** (12,033) -109,521*** (7,365) -28,456** (13,458) ms	(15,076) $-13,551***$ $(2,337)$ $-4,758*$ $(2,742)$ $20,845***$ $(1,538)$ $10,680***$ $(3,809)$ $7,243$ $(4,434)$ $2,210$ $(6,503)$ $25,257**$ $(10,958)$ $154,224***$ $(5,718)$ 25 $(9,419)$	(21,887) 7,855** (3,748) 3,144 (4,646) 5,661** (2,504) -4,255 (5,222) -6,366 (5,768) -3,001 (7,871) -17,919 (22,682) -91,324*** (12,827) 9,883 (22,475)
conditions (late-life) E. Interaction = Marriage Children Homeownership Divorce Work-prohibiting health conditions (early-life) Disability Retirement Widowhood Work-limiting health conditions (late-life) F. Interaction =	(9,547) = Heath Insurance 16,199*** (1,678) 16,034*** (2,027) 56,760*** (1,137) 14,987*** (2,259) -3,290 (2,692) -16,565*** (3,976) 34,529*** (7,555) 137,986*** (4,356) -22,350*** (6,546) = No work pension 38,373***	(12,864) <u>e observed <90% of time</u> -35,458*** (2,316) -40,243*** (2,887) -31,291*** (1,527) -38,862*** (2,150) -39,615*** (3,392) -26,272*** (4,697) -66,141*** (12,033) -109,521*** (7,365) -28,456** (13,458) ns -55,409***	(15,076) -13,551*** (2,337) -4,758* (2,742) 20,845*** (1,538) 10,680*** (3,809) 7,243 (4,434) 2,210 (6,503) 25,257** (10,958) 154,224*** (5,718) 25 (9,419) 29,368**	(21,887) 7,855** (3,748) 3,144 (4,646) 5,661** (2,504) -4,255 (5,222) -6,366 (5,768) -3,001 (7,871) -17,919 (22,682) -91,324*** (12,827) 9,883 (22,475) -19,430
conditions (late-life)E. Interaction =MarriageChildrenHomeownershipDivorceWork-prohibiting health conditions (early-life)DisabilityRetirementWidowhoodWork-limiting health conditions (late-life)F. Interaction =Retirement	(9,547) = Heath Insurance 16,199*** (1,678) 16,034*** (2,027) 56,760*** (1,137) 14,987*** (2,259) -3,290 (2,692) -16,565*** (3,976) 34,529*** (7,555) 137,986*** (4,356) -22,350*** (6,546) = No work pension 38,373*** (7,921) 129,973***	(12,864) $(2,316)$ $(2,316)$ $(2,316)$ $(2,316)$ $(2,316)$ $(2,316)$ $(2,316)$ $(2,316)$ $(3,291)$ $(3,291)$ $(3,392)$ $(3,392)$ $(3,392)$ $(3,392)$ $(3,392)$ $(4,697)$ $(4,697)$ $(4,697)$ $(4,697)$ $(4,697)$ $(3,392)$ $(10,521)$ $(13,458)$ $(13,458)$ $(13,458)$ $(10,551)$ $(10,55)$ $(10,551)$ $(10,55)$ $(10,$	(15,076) -13,551*** (2,337) -4,758* (2,742) 20,845*** (1,538) 10,680*** (3,809) 7,243 (4,434) 2,210 (6,503) 25,257** (10,958) 154,224*** (5,718) 25 (9,419) 29,368** (11,960) 157,517***	(21,887) 7,855** (3,748) 3,144 (4,646) 5,661** (2,504) -4,255 (5,222) -6,366 (5,768) -3,001 (7,871) -17,919 (22,682) -91,324*** (12,827) 9,883 (22,475) -19,430 (19,959) -27,737***
conditions (late-life)E. Interaction =MarriageChildrenHomeownershipDivorceWork-prohibiting health conditions (early-life)DisabilityRetirementWidowhoodWork-limiting health conditions (late-life)F. Interaction =RetirementWidowhood	(9,547) = Heath Insurance 16,199*** (1,678) 16,034*** (2,027) 56,760*** (1,137) 14,987*** (2,259) -3,290 (2,692) -16,565*** (3,976) 34,529*** (7,555) 137,986*** (4,356) -22,350*** (6,546) = No work pension 38,373*** (7,921) 129,973*** (5,642)	(12,864) $(2,316)$ $(2,316)$ $(2,316)$ $(2,316)$ $(2,316)$ $(2,316)$ $(3,32)$ $(3,392)$ $(3,392)$ $(3,392)$ $(3,392)$ $(3,392)$ $(4,697)$ $(4,697)$ $(4,697)$ $(4,697)$ $(10,521)***$ $(7,365)$ $(28,456**$ $(13,458)$ $(10,551)$ $(19,062***$ $(5,619)$	(15,076) -13,551*** (2,337) -4,758* (2,742) 20,845*** (1,538) 10,680*** (3,809) 7,243 (4,434) 2,210 (6,503) 25,257** (10,958) 154,224*** (5,718) 25 (9,419) 29,368** (11,960) 157,517*** (8,934)	(21,887) 7,855** (3,748) 3,144 (4,646) 5,661** (2,504) -4,255 (5,222) -6,366 (5,768) -3,001 (7,871) -17,919 (22,682) -91,324*** (12,827) 9,883 (22,475) -19,430 (19,959) -27,737*** (9,892)
conditions (late-life)E. Interaction =MarriageChildrenHomeownershipDivorceWork-prohibiting health conditions (early-life)DisabilityRetirementWidowhoodWork-limiting health conditions (late-life)F. Interaction =Retirement	(9,547) = Heath Insurance 16,199*** (1,678) 16,034*** (2,027) 56,760*** (1,137) 14,987*** (2,259) -3,290 (2,692) -16,565*** (3,976) 34,529*** (7,555) 137,986*** (4,356) -22,350*** (6,546) = No work pension 38,373*** (7,921) 129,973***	(12,864) $(2,316)$ $(2,316)$ $(2,316)$ $(2,316)$ $(2,316)$ $(2,316)$ $(2,316)$ $(2,316)$ $(3,291)$ $(3,291)$ $(3,392)$ $(3,392)$ $(3,392)$ $(3,392)$ $(3,392)$ $(4,697)$ $(4,697)$ $(4,697)$ $(4,697)$ $(4,697)$ $(3,392)$ $(10,521)$ $(13,458)$ $(13,458)$ $(13,458)$ $(10,551)$ $(10,55)$ $(10,551)$ $(10,55)$ $(10,$	(15,076) -13,551*** (2,337) -4,758* (2,742) 20,845*** (1,538) 10,680*** (3,809) 7,243 (4,434) 2,210 (6,503) 25,257** (10,958) 154,224*** (5,718) 25 (9,419) 29,368** (11,960) 157,517***	(21,887) 7,855** (3,748) 3,144 (4,646) 5,661** (2,504) -4,255 (5,222) -6,366 (5,768) -3,001 (7,871) -17,919 (22,682) -91,324*** (12,827) 9,883 (22,475) -19,430 (19,959) -27,737***

G. Interaction	on = Spouse never h	ad life insurance		
Retirement	24,883***	-22,147*	19,120*	7,925
	(7,644)	(11,405)	(11,255)	(21,485)
Widowhood	118,053***	-6,697	144,177***	-39,166***
	(4,283)	(6,744)	(5,756)	(11,737)
Work-limiting health	-25,530***	-5,797	7,306	-16,279
conditions (late-life)	(7,063)	(10,343)	(10,675)	(17,510)

Note: Sample excludes those who experience the milestone prior to entering the sample, and observations outside the 10-year window surrounding the milestone. Dependent variable is total family wealth. For all milestones, family wealth is divided by 2 if married. Columns (1) and (2) report estimates of the long-run change in wealth from a modified version of equation (2) using the interaction as shown. Columns (3) and (4) report estimates of the short-run change from a modified version of equation (3) using a linear functional form. Standard errors in parentheses. * p < 0.10, ** p < 0.05, *** p < 0.01. See text for more details.

	(1)	(2)	(3)	(4)
	Baseline	Long-run	Short-run	
	Mean and S.D.	Change	change	Ν
Early-life Milestones: NLSY 79				
Marriage	6,490	2,868***	524	37,996
	(43,440)	(1,113)	(1,471)	
Children	6,905	4,702***	3,187*	39,581
	(113,868)	(1,398)	(1,789)	
Homeownership	0	30,472***	22,988***	50,440
	(0)	(926)	(1,198)	
Divorce	6,446	-2,111*	3,731**	70,075
	(76,418)	(1,151)	(1,879)	
Work-limiting health shock	3,310	-8,401***	2,405	59,788
-	(74,168)	(1,333)	(2,117)	
Disability	5,169	-13,736***	-4,063	70,543
•	(22,600)	(1,641)	(2,624)	
Late-life Milestones: HRS data				
Retirement	99,251	2,509	6,164***	129,276
	(192,108)	(1,676)	(2,310)	
Widowhood	73,161	55,802***	64,113***	120,667
	(93,519)	(1,459)	(1,901)	,
Work-limiting health shock	88,410	-5,731***	1,069	182,222
6	(217,947)	(1,419)	(2,012)	- 7
Health shocks: HRS data				
High blood pressure	103,612	-6,947***	-2,317	132,799
	(239,271)	(1,723)	(2,568)	
Diabetes	83,682	-5,670***	3,659	208,304
	(144,313)	(1,778)	(2,979)	
Cancer	103,007	6,061***	7,911**	219,472
	(151,494)	(1,896)	(3,129)	
Lung disease	78,607	-9,563***	-127	222,241
	(190,598)	(2,246)	(3,730)	
Heart disease	92,940	-1,174	1,280	197,031
	(167,302)	(1,601)	(2,558)	
Stroke	86,921	-8,998***	-321	230,852
	(164,356)	(2,336)	(3,829)	
Psychiatric conditions	81,515	-9,123***	-6,700**	207,458
	(183,503)	(2,052)	(3,373)	
Arthritis	92,872	-390	2,555	143,092
	(159,952)	(1,539)	(2,210)	

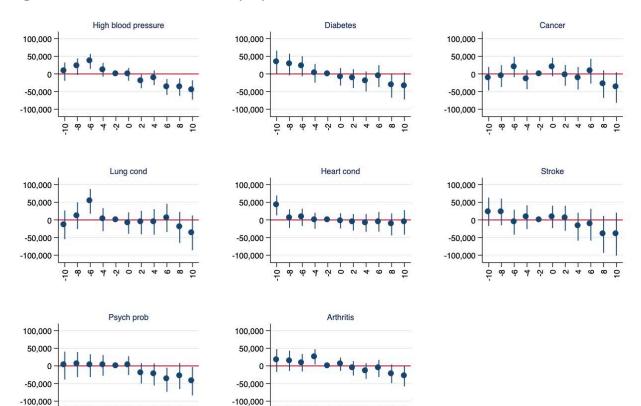
Table A.2: Changes in Family Wealth by Milestone: Home Equity

Note: Sample excludes those who experience the milestone prior to entering the sample, and observations outside the 10-year window surrounding the milestone. Dependent variable is total home equity. For all milestones, family wealth is divided by 2, if married. Column (1) summarizes baseline values measured one period before a milestone (NLSY – 1 year; HRS – 2 years). Column (2) displays estimates of γ from equation (2). Column (3) displays D from equation (3) using a linear functional form. Numbers in parentheses are standard deviations for column (1) and standard errors for columns (2) and (3). * p < 0.10, ** p < 0.05, *** p < 0.01. See text for more details.

	(1)	(2)	(3)	(4)
	Baseline	Long-run	Short-run	
	Mean and S.D.	Change	change	Ν
Early-life Milestones: NLSY 79		8	8	
Marriage	20,266	-721	-9,704***	38,377
5	(63,479)	(1,416)	(1,880)	,
Children	30,143	-2,514	-7,315***	39,755
	(125,493)	(1,807)	(2,314)	
Homeownership	21,057	13,739***	134	50,920
Ĩ	(45,759)	(1,084)	(1,409)	
Divorce	17,355	-3,559**	4,880*	70,627
	(82,400)	(1,546)	(2,533)	
Work-limiting health shock	13,980	-17,967***	1,601	60,095
5	(92,809)	(1,784)	(2,843)	,
Disability	6,550	-20,707***	3,923	70,977
Ş	(26,463)	(2,239)	(3,582)	,
Late-life Milestones: HRS data				
Retirement	212,470	16,424**	14,644	129,276
	(690,263)	(6,650)	(9,165)	,
Widowhood	119,804	61,104***	72,977***	120,667
	(242,832)	(3,737)	(4,870)	- ,
Work-limiting health shock	191,777	-21,829***	575	182,222
8	(926,721)	(5,796)	(8,218)	- 7
Health shocks: HRS data				
High blood pressure	202,940	-17,884***	-4,362	132,799
8 I I I I I I I I I I I I I I I I I I I	(835,423)	(5,826)	(8,683)	- ,
Diabetes	148,744	-20,034***	-668	208,304
	(480,848)	(7,180)	(12,030)	
Cancer	241,104	-1,808	7,272	219,472
	(1,219,602)	(7,664)	(12,647)	- 7 -
Lung disease	167,088	-8,836	-11,515	222,241
	(976,380)	(8,941)	(14,850)	7
Heart disease	190,203	-9,227	8,034	197,031
	(763,705)	(6,505)	(10,392)	
Stroke	159,380	-678	17,825	230,852
	(503,105)	(9,416)	(15,437)	,
Psychiatric conditions	133,959	-9,248	1,542	207,458
	(432,525)	(8,072)	(13,264)	,
Arthritis	181,676	-11,737*	-3,311	143,092
	(535,011)	(6,720)	(9,650)	- ,

Table A.3: Changes in Family Wealth by Milestone: Non-Housing Wealth

Note: Sample excludes those who experience the milestone prior to entering the sample, and observations outside the 10-year window surrounding the milestone. Dependent variable is total family wealth – home equity. For all milestones, family wealth is divided by 2, if married. Column (1) summarizes baseline values measured one period before a milestone (NLSY – 1 year; HRS – 2 years). Column (2) displays estimates of γ from equation (2). Column (3) displays D from equation (3) using a linear functional form. Numbers in parentheses are standard deviations for column (1) and standard errors for columns (2) and (3). * p < 0.10, ** p < 0.05, *** p < 0.01. See text for more details.



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Figure A.1.: Wealth Event Study by Milestone: Health Shocks

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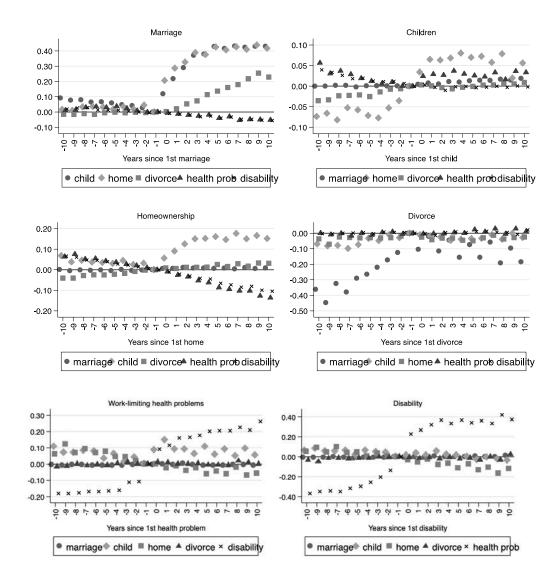
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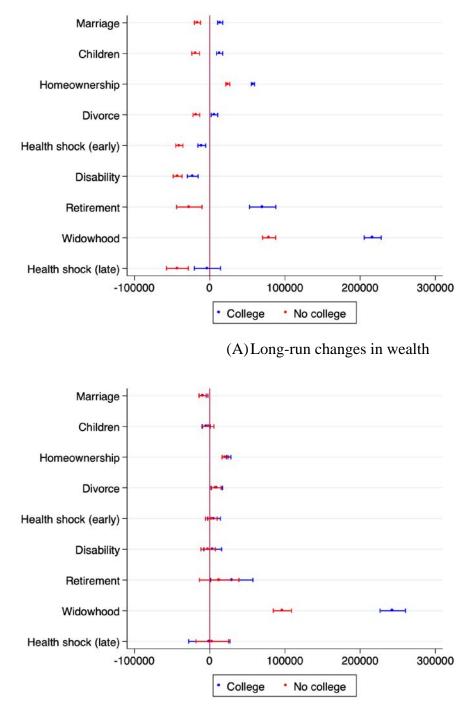
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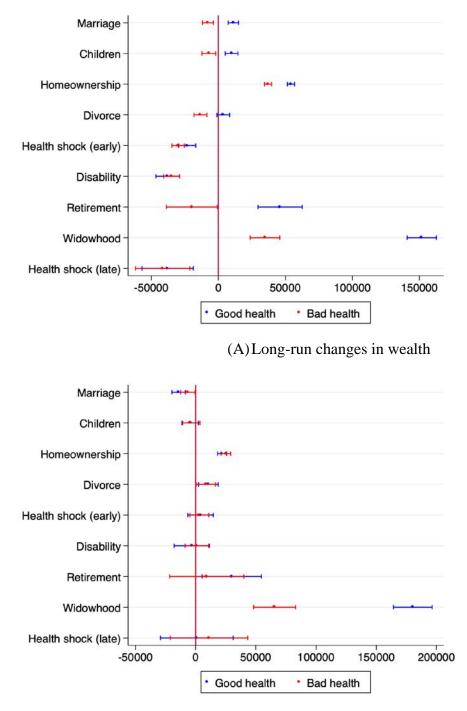






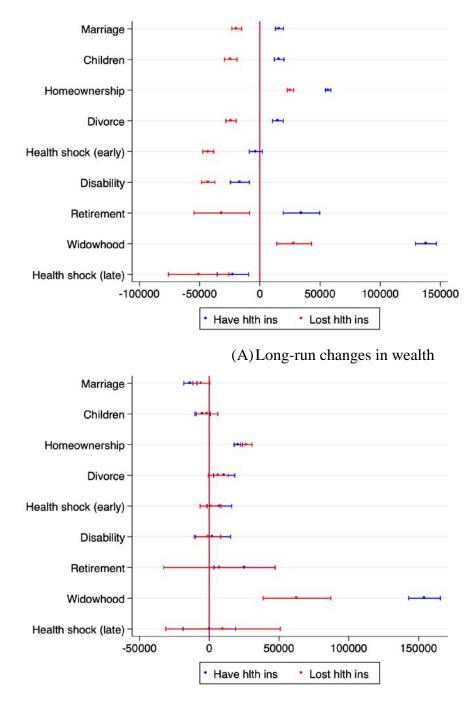
(B) Short-run changes in wealth

Figure A.4.: Heterogeneity in Long-run Changes in Wealth across Milestones by Health Status



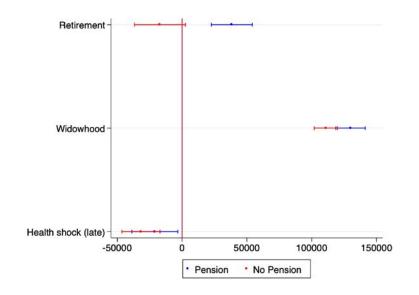
(B) Short-run changes in wealth

Figure A.5.: Heterogeneity in Long-run Changes in Wealth across Milestones by Continuous Health Insurance

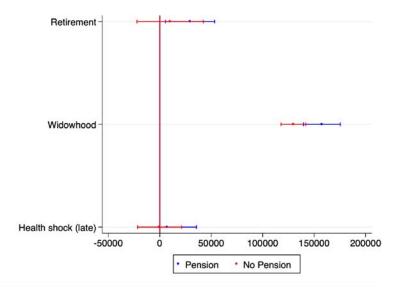


(B) Short-run changes in wealth

Figure A.6.: Heterogeneity in Long-run Changes in Wealth across Milestones by Access to Workplace Pensions

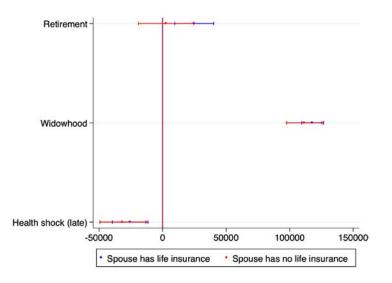


(A)Long-run changes in wealth



(B) Short-run changes in wealth

Figure A.7.: Heterogeneity in Long-run Changes in Wealth across Milestones by Spousal Life Insurance Ownership



(A)Long-run changes in wealth

