



**THE LONG-TERM IMPACT OF DISABILITY, EMPLOYMENT, AND MARITAL
STATUS SHOCKS: EVIDENCE FROM MATCHED ADMINISTRATIVE DATA**

Owen Haaga and Richard W. Johnson

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Center for Retirement Research at Boston College
Hovey House
140 Commonwealth Avenue
Chestnut Hill, MA 02467
Tel: 617-552-1762 Fax: 617-552-0191
<http://crr.bc.edu>

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Abstract

People face a wide range of risks throughout their lifetime that can disrupt employment, reduce earnings, derail retirement planning, and impair economic well-being later in life. This paper measures the impact of health, employment, and marital status shocks on lifetime earnings. Using household survey data from the *Survey of Income and Program Participation* matched to administrative earnings records, we compared lifetime earnings for people who developed a health problem that limited the type or amount of work they could do, were laid off from their job, or became widowed, divorced, or separated with those who did not experience these shocks.

The paper found that:

- Employment shocks are fairly common, and disability shocks become much more common as people age. About one in five workers is laid off from their job over a four-year period, even when the job market is robust. About one in seven men and one in six women develop a work-limiting disability in their early 50s.
- People who eventually develop disabilities or lose their jobs generally have lower lifetime earnings even before these shocks occur than people who do not experience these shocks.
- Health and employment shocks have substantial and long-lasting impacts on earnings. Relative lifetime earnings rank falls by 5 percentile points a decade and a half after disability onset and by 3 percentile points a decade and a half after job loss.

The policy implications of the findings are:

- Strong safety nets are essential for people who experience health problems and job losses during their working years.
- Increased investment in workforce development programs, including retraining of displaced workers, might raise lifetime earnings for workers who have experienced job layoffs.

Introduction

People face a wide range of risks throughout the lifetime that can disrupt employment, reduce earnings, derail retirement planning, and impair economic well-being in later life. Unemployment is at least a temporary period without earnings, and many laid-off workers who become reemployed earn less on their new jobs than their pre-displacement jobs (Farber, 2005; Johnson and Mommaerts, 2011). Health problems often force people to reduce their work hours or withdraw from the labor force altogether. Health problems among family members, especially spouses, children, and older parents, sometimes induce workers to cut back on their labor supply. Divorce or widowhood may increase child care responsibilities and lead workers to reduce their hours or turn to more flexible but less financially rewarding work.

Such shocks are common after age 50. About seven in 10 adults who were ages 51 to 61 in 1992 developed a health problem, lost spouses to death or divorce, or became unemployed during the 10-year period ending in 2002 (Johnson, Mermin, and Uccello, 2006). Many of these shocks, especially the onset of disability and unemployment, significantly reduced household financial wealth, defined benefit pension wealth, and Social Security retirement benefits (Coile, 2004; Johnson, Mermin, and Uccello, 2006; Johnson, Mermin, and Murphy, 2007).

Much of the existing research focuses on shocks in later life, and relatively little is known about how negative shocks earlier in life affect retirement outcomes. However, the impact could be substantial. For example, several studies have found that workers who experience mass layoffs earn less years later (Jacobson, LaLonde, and Sullivan, 1993; von Wachter, 2012; von Wachter, Song, and Manchester, 2009, 2013). Of course, workers who experienced past unemployment might respond by delaying retirement.

This study measured the impact of health, employment, and marital status shocks throughout the lifetime on lifetime earnings. It assessed which shocks have the most serious consequences, how the impacts vary by demographic and other characteristics, and how they have changed over time. The study also examined how the timing of the shocks – whether they occur relatively early or later in life – influence their consequences.

Our results show that health and employment shocks have substantial and long-lasting impacts on earnings. Relative lifetime earnings rank falls by 5 percentile points a decade and half after disability onset and by 3 percentile points a decade and a half after job loss. Marital

disruptions have smaller effects. These findings highlight the need for a strong safety net for people who experience health problems and job loss during their working years.

Background

Employment, health, and marriage shocks are common as people move through their careers. About 10 percent of workers leave their jobs involuntarily each year, and estimates of annual job loss are higher during recessionary periods (Farber, 2010). Tracking workers in the *Survey of Income and Program Participation* (SIPP), Johnson and Smith (2015) found that 22 percent of workers were displaced from their job at some point during the Great Recession and its aftermath – a 45-month period from August 2008 to April 2012 – when the unemployment rate was high. Job displacements were also common a few years earlier, when the unemployment rate was low; between January 2004 and September 2007, 17 percent of workers were laid off at least once. In both periods, job losses were much more common among workers with limited education than among college graduates (Johnson and Smith, 2015).

Older workers are less likely to be laid off than younger workers (Johnson and Mommaerts, 2011). Nonetheless, layoffs are not rare at older ages. Between 2004 and 2008, 15 percent of workers ages 50 to 61 and 16 percent of workers ages 62 and older were laid off from their jobs (Johnson and Smith, 2015). Johnson, Mermin, and Murphy (2007), following workers ages 51 to 55 in 1992 in the *Health and Retirement Study* (HRS), found that 21 percent experienced a layoff or business closing by age 62. Again, job layoffs were more common among workers who did not attend college.

Previous research has shown that employment shocks significantly reduce earnings, and that the effects are often long-lasting. The seminal study here is Jacobson, LaLonde, and Sullivan (1993). Using administrative earnings data from a sample of workers in stable employment in Pennsylvania, they found that those who experienced a mass layoff earned about 25 percent less than workers who did not experience one. A study by von Wachter, Song, and Manchester (2009) confirmed their findings using more recent national data. Combining information from the 2004 Continuous Work History Sample, a 1 percent extract from the Master Earnings File, and a 1 percent extract from the Longitudinal Employee-Employer Data, they found that workers who experienced a sudden mass layoff during the 1982 recession saw an immediate earnings loss of 30 percent, compared with otherwise similar workers who did not

experience a mass layoff. Moreover, 15 to 20 years after the mass layoff their earnings remained 20 percent below expectations. The estimated impact of mass layoffs was somewhat smaller, but still significant, at the peak of the 1980s recovery. Related studies include Couch, Daly, and Zissimopoulos (2013), Couch, Jolly, and Placzek (2011), and Couch and Placzek (2010).

Economic shocks, such as job loss, may have a particularly adverse effect on the retirement savings of low-income households. Ghilarducci et al. (2016) found that economic shocks explain about one-third of withdrawals from 401(k) plans and IRAs. Job loss can also induce workers to take early Social Security benefits and increase mortality (Card, Maestas, Purcell, 2014; Sullivan and von Wachter, 2009).

Health problems are also common as people age. Between ages 51 and 62, about one-quarter of adults develop a health problem that limits the type or amount of work that they can perform (Johnson, Mermin, and Murphy, 2007). Workers can also lose labor income when they or their family members become seriously ill. Health problems force many older Americans into early retirement (Butrica and Karamcheva, 2012; Congressional Budget Office, 2004; McGarry, 2004), and workers sometimes have to cut back on their work hours to care for ill family members (Coile, 2004; Johnson and Favreault, 2001; Johnson and Lo Sasso, 2006). In 2001, 35 percent of those bankrupted by medical problems curtailed their employment, often to care for someone else (Himmelstein et al., 2005).

Many studies have documented the loss of income and increased likelihood of impoverishment that results from widowhood (Burkhauser, Butler, and Holden, 1991; Sevak, Weir, and Willis, 2003/2004; Weir and Willis, 2000; Zick and Smith, 1991). In 2000, 17 percent of widowed women ages 65 or older received income below the federal poverty line, compared with just 4 percent of married women (Social Security Administration, 2002). The death of a spouse can result in the loss of household earnings, if the deceased spouse had been working, and in the loss of the spouse's Social Security and employer-sponsored pension benefits.¹ Poverty rates at older ages are even higher among divorced women than widowed women. In 2000, 20 percent of divorced women ages 65 or older had incomes below the poverty line (Social Security Administration, 2002). The share of divorced women in the retired population will grow in the

¹ Federal legislation passed in 1984 now requires participants in employer-sponsored defined benefit plans to obtain the written consent of their spouses before they may decline survivor protection. Between 1992 and 2002, 72 percent of married men who retired with defined benefit pension plans chose a joint and survivor annuity, guaranteeing their spouses pension income if they became widowed (Johnson, Uccello, and Goldwyn, 2005).

coming decades with the aging of the Baby Boomers, who have much higher divorce rates than earlier generations (Butrica and Iams, 2000).

Data and Methods

Our data came from the *Survey of Income and Program Participation* (SIPP) panels from 1996, 2001, 2004 and 2008, each of which collected demographic, health, employment, and financial information over time. The SIPP followed respondents for 48 months in the 1996 panel, 36 months in the 2001 panel, 48 months in the 2004 panel, and 54 months in the 2008 panel. These four panels have been merged with Social Security administrative records on W-2 earnings in Social Security-covered employment from 1951 through 2012, which allow us to observe earnings before and after the SIPP interviews. Our analysis used the summary earnings records, which record earnings each year only up to the taxable maximum for Social Security. We expressed earnings in constant 2012 dollars, adjusting by the change in the Consumer Price Index and calculated lifetime earnings for each individual through the year they entered the SIPP panel and through 2012, the last year of available administrative records when we began the study. We then calculated each respondent's percentile in the lifetime earnings distribution, computed separately by SIPP panel, sex, and birth year. The sample was restricted to respondents ages 25 to 54 with positive lifetime earnings when they entered the SIPP panel.

We compared lifetime earnings by disability, employment, and marital status shocks that we observed in the SIPP interview data. The disability shock was defined as developing, in any subsequent wave, a health problem that limited the type or amount of work a respondent could perform. The employment shock was defined as spending time being laid off or searching for work in a month. We classified married respondents as experiencing a marital status shock if they became widowed, separated, or divorced in any subsequent interview wave. For each shock, we restricted our sample to the respondents who faced a risk of experiencing that shock. The population at risk for the disability shock included individuals who did not report any work-limiting health conditions in the first interview wave. For the employment shock analysis, the sample included individuals who were employed in the first month of the first wave and did not report any time on layoff or searching for work in that month. For the marriage shock analysis, the sample consisted of individuals who reported being married in the first interview wave.

For each of the three shocks, we investigated the selectivity of experiencing the shock and the difference in future outcomes after experiencing the shock or not, separately by age (or cohort), race, sex, and education. For the 1996 panel, which gave us the longest spell between the end of the SIPP interview panel – when we could observe the shocks – and the latest available earnings record in 2012, we reported median lifetime earnings at SIPP entry and in 2012 for each subgroup, as well as the mean percentile rank within the lifetime earnings distribution for each measure. We also reported the median of the individual changes in percentile rank between the beginning of the SIPP and 2012, which serves as a summary measure of the future evolution of relative earnings.

We then estimated regressions of the percentile earnings rank in 2012 on age, education, and race and ethnicity, controlling for lifetime earnings percentile when first observed in the SIPP interview panel. We estimated these regressions separately by sex, SIPP panel, and shock type.

Results

The rate of disability shocks is fairly low but increases rapidly with age (table 1). In the 1996 SIPP panel, which follows respondents for 48 months, disability onset rates for men range from 6 percent at ages 25 to 29 to 14 percent at ages 50 to 54. Rates are slightly higher for women, ranging from 9 percent at ages 25 to 29 to 17 percent at ages 50 to 54. Disability shocks are more common for African-Americans than whites or Hispanics, and much more common among people with less education than those with more education. For example, 18 percent of men who did not complete high school and 12 percent of those with only a high school diploma or GED experienced a disability shock in the 1996 SIPP panel, compared with only 5 percent of men with at least a bachelor's degree. Disability shocks have become less common over time among women. Comparing the rates of disability onset in the 1996 and 2004 SIPP panels, both of which spanned 48 months, we see, for example, that rates fell 5 percentage points for non-Hispanic whites, 7 percentage points for non-Hispanic blacks, 6 percentage points for Hispanics, and 11 percentage points for women who did not complete high school.

Although our analysis samples span periods of strong economic growth and a deep recession, the likelihood of ever being laid off did not vary much over the different SIPP panels (table 2). Overall all, about one-fifth of male and female workers ever experienced a job loss.

Employment shocks are more common among young people than older people, and much more common among people with limited education. In the 1996 SIPP panel, for example, 34 percent of women who did not complete high school experienced an employment shock, compared with only 16 percent of college graduates. Employment shocks were more common among men than women in the 2008 panel, which spanned the Great Recession and its immediate aftermath, but not in the earlier panels. Recessions often disproportionately raise layoff rates for men, because many men work in the manufacturing and constructions industries, which are often hit hard during economic downturns (Johnson and Mommaerts, 2011).

Marital disruptions are not very common among people ages 25 to 54, and the incidence falls with age (table 3). For example, the share of married women in the 1996 SIPP panel who became widowed or divorced during the 48-month follow-up period fell from 10 percent at ages 25 to 29 to 5 percent at ages 50 to 54. Marital disruptions are also more common among people with less education than those with more education, especially for women. Overall, rates of marital disruption are similar for men and women.

Median Lifetime Earnings and Relative Earnings Rank

Disability Shocks. Table 4 reports median lifetime earnings for respondents ages 25 to 54 in the 1996 SIPP panel, both at the beginning of the SIPP and in 2012, comparing outcomes for those who never reported a work disability and those who reported no work-limiting conditions in the first wave of the SIPP but reported a work-limiting condition in a later wave. Overall, median lifetime earnings at the beginning of the panel, before any disability onset, were lower for both men and women who subsequently experienced a disability shock over the course of the panel than for those who never developed a disability. Among non-Hispanic whites, for example, median lifetime earnings at the beginning of the panel was 10 percent lower for men who eventually developed a disability and 22 percent lower for women who eventually developed a disability. The differences in median lifetime earnings in 2012 are much more dramatic: Median 2012 lifetime earnings are 34 percent lower for non-Hispanic white men who experienced a disability shock than for those who did not experience a disability shock, and 37 percent lower for non-Hispanic white women for experienced a disability shock. Lifetime earnings rank within single-year birth cohort generally fell between 1996 and 2012 for men and

women who developed disabilities between 1996 and 2000. Among non-Hispanic white men, for example, the median change in lifetime earnings percentile ranking was -4 percentile points for those who developed disabilities, whereas the median ranking did not change for those who did not develop disabilities.

The largest disability-related difference in median rank changes from 1996 to 2012 is for men in the 25-29 age group in 1996. The median change in lifetime earnings rank for men in this cohort who did not experience a disability shock during the panel is a 1-point drop, whereas the median man in this age group who experienced the shock saw a 7-point drop in lifetime earnings rank between 1996 and 2012. Although this 6-point gap is the largest we observed, men ages 45-49 at SIPP entry experienced a 5-point gap (a 1-point increase for those without the shock and a 4-point drop for those who experienced the shock), which suggests that the severity of the disability shock's impact on men's lifetime earnings may not change smoothly with the age of disability shock.

The gap between the median change in lifetime earnings rank for respondents who experienced the disability shock and respondents in the same demographic group who did not experience the shock was notable (and in the same direction) for all groups. Even members of groups who would otherwise see strong relative earnings growth saw much lower relative earnings growth if they experienced a disability shock than other members of that group. Men with Bachelor's degrees, for example, who experienced a median earnings increase of 5 percentiles between 1996 and 2012 in the absence of a disability shock, saw no median change in their relative earnings position if they experienced a disability shock. Similarly, Hispanic or other race men and women, who saw a median percentile increase of 3 points each in the absence of a disability shock, both saw a median decrease of 1 percentile rank in the presence of the shock.

Employment Shocks. Table 5 compares median lifetime earnings and relative lifetime earnings rank in the 1996 SIPP and in 2012 for respondents ages 25 to 54 with positive lifetime earnings who reported employment in the first 1996 SIPP wave without any weeks of job search or layoff in that wave. Respondents in this sample who reported any weeks of layoff or job search in the subsequent waves of the panel are classified as having experienced an employment shock.

As is the case for the disability shock, the incidence of the employment shock varies substantially with lifetime earnings percentile at SIPP entry. Across all the demographic groups we examined, respondents who eventually experienced an employment shock already had a lower mean percentile rank, before an observed spell of unemployment, than those in the same demographic group who were at risk for the shock but never experienced it during the panel. For most demographic groups, this gap widened between the 1996 SIPP interview and 2012.

For all age groups from 30 to 54 at SIPP entry, percentile rank did not change much for either men or women who were in the sample but who did not experience an employment shock, but it dropped for those who experienced the shock. This pattern was more pronounced among men; men who experienced an employment shock lost between 2 and 4 percentile ranks in lifetime earnings relative to their peers in the at-risk sample who did not experience the shock. For women, the difference was 1 or 2 percentile ranks.

Respondents in the youngest age category (25 to 29 years old at SIPP entry) experienced a different pattern, with both men and women losing 2 percentile ranks between the 1996 interview and 2012 if they were in the at-risk sample but did not experience the shock, and 4 percentile ranks if they experienced the shock. The difference between the two outcomes is consistent with the pattern seen in other age groups, but the level requires some explanation. We hypothesize that the drop in percentile rank across both groups reflects the role of higher education in lifetime earnings. Higher lifetime earnings up to age 25 could indicate a lack of higher education, as people who did not attend college worked and earned more at younger ages than those who attended college, and thus lower lifetime earners, causing churn in the subsequent percentile ranks which is picked up in the negative median change in lifetime earnings percentile. For women, the selection into the at-risk sample appears to be a more positive signal of earnings up to the SIPP interview than of lifetime earnings; the average lifetime earnings percentile for women in the 25 to 29 age group who were employed but did not experience the shock dropped from 62 in 1996 to 60 in 2012, and the average percentile for women in this age group who experienced the shock dropped from 51 in 1996 to 49 in 2012.

For both men and women, non-Hispanic white and non-Hispanic black respondents' rankings remained steady in the absence of the employment shock, while the median rank change for Hispanic respondents was a gain of 3 percentiles. The average lifetime earnings percentile for Hispanic or other race men who were in the sample but did not experience the

shock increased from 41 to 45 between the SIPP interview and 2012, while it increased from 51 to 55 for Hispanic or other race women. This earnings growth, visible both in the means and in the median individual changes, would appear to suggest a secular trend that may or may not be explained by age or educational composition. In addition, while Hispanic and other race men in the sample exhibit roughly the same relative drop in lifetime earnings rank if they experience an employment shock as non-Hispanic men (about 3 percentiles), Hispanic and other race women who experienced the shock experience the same increases in mean rank and the same median rank changes as their peers who did not experience the shock.

The selective incidence of the shock by earnings rank can be seen again in the breakdown by education level. Among men, there may also be an increasing trend in the degree of selectivity of the employment shock by education level, with only a 7 point gap in mean lifetime earnings rank at SIPP entry for the lowest education group (less than a high school diploma) between those who will and will not experience the employment shock, compared with a 12 point gap for respondents with a Bachelor's degree or more.

However, the most striking pattern in the men's lifetime earnings ranks by education level is the dramatic increase of the earnings rank of men with at least a bachelor's degree relative to all other education levels in the at-risk sample. The mean rank of men in the sample with a bachelor's degree increased from 62 at SIPP entry to 69 in 2012 for those who did not experience the employment shock, and from 50 to 58 for those who experienced the shock. The median increase in individual rank for members of each group was 4 percentile points. In keeping with secular trends, the other three education groups lost ground relatively during this period, regardless of whether they experienced the shock or not. Strikingly, while the lower education groups appear to experience worse outcomes if they experienced the shock, relative to their peers who did not, the secular trend dominates any influence of the shock among those with bachelor's degrees or higher, and the members of this group who experienced the shock appear to experience the same growth in lifetime earnings rank as their peers who were not subject to the employment shock.

While the women in the at-risk sample displayed similar or greater differences in percentile earnings rank by education level at SIPP entry, the dramatic differences in the subsequent fortunes of college graduates between those who did and did not experience an employment shock evident among men do not show up among women. The mean lifetime

earnings ranks at SIPP entry ranged from 39 to 67 for women who did not experience the shock, (compared with a gap of 39 to 62 for the men) and from 29 to 59 for women who did experience the shock (compared with 32 to 50 for men). Clearly the pattern of earnings inequality by education level is as pronounced among women, or more so, but the mean earnings rank of women with a bachelor's degree or more who did not experience the shock only grows from 67 to 69 (with a median individual increase of only 1 point) between SIPP entry and 2012. Although women may experience the same pattern of earnings rank growth at the top of the educational distribution, which is relatively impervious to the employment shock, this pattern is much less pronounced among women than men.

Marital Status Shocks. Table 6 shows median lifetime earnings and relative earnings rank in the 1996 SIPP for respondents ages 25 to 54 with positive lifetime earnings who were married in the first wave of the SIPP. Respondents in this population who report being separated, widowed, or divorced in a subsequent wave are classified as having experienced a marital status shock during the 48-month panel.

The incidence of a marital status shock does not vary as much by earnings rank as the incidence of disability or employment shocks. In fact, for some groups of men (such as those ages 25 to 29, or those with some college or less than a high school diploma) the mean earnings rank for men who will go on to experience a marital status shock is slightly higher than for those who will not.

Another striking difference from the other two shocks is the number of subgroups that experienced a negative median change in individual earnings ranks from 1996 to 2012, even among those who did not experience a marital-status shock. This pattern suggests that being married at the first SIPP wave – the criteria for selection into the sample – becomes a weaker predictor of high relative earnings over time, whether or not the shock was experienced during the panel.

Perhaps most important, the overall effect of a marital status shock appears to have different signs for men than women, with the marital status shock predicting negative changes in earnings rank from SIPP entry to 2012 for men but positive changes in earnings rank for women.

The pattern of subsequent earnings changes appears to be more pronounced for younger cohorts than older cohorts, among both men and women. Experiencing the marital status shock

predicts a 4-point drop (from -2 to -6) in median percentile rank changes for men ages 25 to 29 in the SIPP, and a 4-point gain (from 0 to 4) for women in the same age group. For men ages 50 to 54 in the SIPP, those who experienced the shock see the same median change in rank (-1) as those who did not, while women in this age group saw only a 2-point difference (-2 versus 0).

The largest effects of the marital-status shock on subsequent median rankings changes were for Hispanic and other race men and women. Hispanic and other race men who experienced the shock saw a median increase of 2 percentile points, while those who did not experience the shock saw a median decrease of 2 percentile points. Similarly, but in the opposite direction, the Hispanic or other race women who experienced the marital status shock saw a median increase of 5 percentile points, compared to an increase of one percentile point for those who did not. The 5 percentile point expected increase in lifetime earnings percentile rank from 1996 to 2012 for Hispanic or other race women who experienced a marital status shock was the largest positive change for any demographic group.

For women, the impact of the marital-status shock appears to increase monotonically with education level, from a 1-point difference (-1 versus 0) for women without a high school diploma to a 3-point gap (0 versus 3) for women with a bachelor's degree or more. The education pattern of both the overall earnings rank changes and the effect of the shock for men of different education levels appears similar to the pattern shown by the employment shock. Men with a bachelor's degree or more experienced strong median earnings rank growth of 4 percentage points, whether or not they experienced the marital-status shock, while the median man in the other education categories saw a drop in rank even without experiencing the shock, dropping a further point or two if they experienced the shock.

Regression Estimates

Table 7 reports results from our regression estimates of the association between disability shocks and 2012 percentile earnings rank. For both men and women, disability shocks significantly reduce earnings relative to other people in the cohort, and the impact grows over time. For both male and female respondents in the 2004 SIPP panel, a disability shock is associated with a 3.1 percentile point drop in relative 2012 earnings, between five and eight years after disability onset. For respondents in the 1996 SIPP panel, however, a disability shock

is associated with a 5.4 percentile point drop in relative 2012 earnings – between 12 and 16 years after disability onset – for men and a 4.9 percentile point drop for women.

Employment shocks also have permanent impacts on lifetime earnings. Our regression estimates show that job loss reduces men’s relative 2012 lifetime earnings rank by 3.3 percentile points in the 1996 SIPP, 3.5 percentile points in the 2001 SIPP, 3.0 percentile points in the 2004 SIPP, and 2.8 percentile points in the 2008 SIPP (table 8). The effects are similar for women, with the estimated impacts ranging from -2.7 percentile points in the 2004 SIPP to a -3.3 percentile points in the 2001 SIPP.

The long-term impact of marital shocks on lifetime income varies by gender and over time. Marital shocks reduce men’s 2012 lifetime earnings, relative to other men in their cohort, although the effects are smaller than those for disability and employment shocks (table 9). For women, divorce and widowhood between ages 25 and 54 raise lifetime earnings. However, the effects have fallen over time, and the effects do not differ significantly from zero in the 2008 SIPP panel. This trend likely reflects the growth in married women’s employment over time. In the past, divorce and widowhood often prompted once-married women to enter the labor force to offset the loss of their former husband’s earnings; the effect of marital dissolution on women’s own lifetime earnings is smaller today, because most married women are already working.

Conclusion

We found that health and employment shocks have substantial and long-lasting impacts on earnings. Controlling for age, education, race and ethnicity, and pre-shock earnings rank, our results show that both men’s and women’s relative lifetime earnings rank in 2012 was about 5 percentile points lower for those who developed a disability between 1996 and 2000 than those who did not. Among men and women who experienced a job loss between 1996 and 2000, the relative lifetime earnings rank in 2012 was 3 percentile points lower than for those who did not experience a job loss during the period. We found stronger evidence that the negative impact on lifetime earnings grows over time for disability than for job displacement. Moreover, people who experienced health shocks and job displacements had lower lifetime earnings before they experienced these shocks than those who never experienced them over a two- to four-year period. Marital status disruptions have smaller effects on lifetime earnings for men, and tend to increase earnings for women.

Our results highlight the need for a strong safety net for people who experience health problems and job losses during their working years. Of course, Social Security Disability Insurance (SSDI) is designed to replace some of the earnings workers lose when they develop serious health problems and are unable to remain in the labor force. Our analysis did not consider the protections provided by SSDI, but it does highlight the need for such a program. Increased investment in workforce development programs, including retraining efforts for displaced workers, might raise lifetime earnings for workers who have experienced job layoffs.

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Table 1. *Percentage of Men and Women Experiencing Disability Shocks in the SIPP Panels*

			1996	2001	2004	2008	
Men	Age	25-29	6%	7%	7%	4%	
		30-34	8%	8%	7%	4%	
		35-39	9%	9%	7%	4%	
		40-44	10%	10%	9%	5%	
		45-49	13%	13%	11%	5%	
		50-54	14%	13%	13%	8%	
	Race	White Non-Hispanic	9%	10%	9%	5%	
		Black Non-Hispanic	14%	14%	13%	7%	
		Hispanic or Other	10%	10%	10%	5%	
	Education	Less than HS	18%	18%	15%	9%	
		HS Grad/GED	12%	13%	11%	7%	
		Some college	10%	10%	11%	5%	
		Bachelors or More	5%	5%	4%	2%	
	Women	Age	25-29	9%	9%	5%	5%
			30-34	9%	8%	5%	5%
35-39			12%	10%	5%	5%	
40-44			12%	11%	5%	5%	
45-49			15%	12%	8%	8%	
50-54			17%	15%	10%	9%	
Race		White Non-Hispanic	11%	10%	6%	6%	
		Black Non-Hispanic	17%	14%	10%	8%	
		Hispanic or Other	14%	9%	8%	7%	
Education		Less than HS	24%	22%	13%	12%	
		HS Grad/GED	13%	13%	8%	8%	
		Some college	12%	10%	7%	7%	
		Bachelors or More	7%	6%	4%	3%	

Source: Authors' estimates from the 1996, 2001, 2004, and 2008 SIPP panels.

Table 2. *Percentage of Men and Women Experiencing Employment Shocks in the SIPP Panels*

			1996	2001	2004	2008
Men	Age	25-29	25%	29%	26%	24%
		30-34	19%	23%	18%	20%
		35-39	19%	21%	17%	17%
		40-44	18%	21%	14%	16%
		45-49	15%	19%	15%	16%
		50-54	14%	17%	14%	16%
	Race	White Non-Hispanic	17%	20%	15%	17%
		Black Non-Hispanic	22%	28%	23%	19%
		Hispanic or Other	25%	26%	21%	21%
	Education	Less than HS	29%	33%	28%	30%
		HS Grad/GED	22%	25%	20%	23%
		Some college	18%	20%	18%	18%
		Bachelors or More	12%	15%	11%	11%
Women	Age	25-29	28%	29%	24%	19%
		30-34	21%	24%	20%	15%
		35-39	22%	23%	18%	14%
		40-44	20%	22%	18%	14%
		45-49	18%	19%	16%	13%
		50-54	17%	20%	15%	12%
	Race	White Non-Hispanic	20%	21%	17%	13%
		Black Non-Hispanic	26%	29%	25%	17%
		Hispanic or Other	24%	25%	20%	16%
	Education	Less than HS	34%	37%	27%	24%
		HS Grad/GED	23%	25%	21%	18%
		Some college	20%	23%	19%	15%
		Bachelors or More	16%	17%	14%	10%

Source: Authors' estimates from the 1996, 2001, 2004, and 2008 SIPP panels.

Table 3. *Percentage of Men and Women Experiencing Marital Status Shocks in the SIPP Panels*

			1996	2001	2004	2008
Men	Age	25-29	10%	6%	6%	4%
		30-34	7%	7%	5%	3%
		35-39	6%	5%	4%	3%
		40-44	5%	5%	4%	2%
		45-49	4%	5%	4%	2%
		50-54	4%	3%	3%	2%
	Race	White Non-Hispanic	6%	5%	4%	2%
		Black Non-Hispanic	6%	6%	5%	4%
		Hispanic or Other	4%	4%	3%	2%
	Education	Less than HS	7%	7%	5%	2%
		HS Grad/GED	6%	6%	6%	4%
		Some college	6%	5%	5%	3%
		Bachelors or More	4%	3%	3%	2%
	Women	Age	25-29	10%	8%	8%
30-34			7%	6%	7%	3%
35-39			7%	8%	6%	3%
40-44			6%	6%	5%	3%
45-49			4%	5%	5%	2%
50-54			5%	4%	4%	2%
Race		White Non-Hispanic	6%	6%	6%	2%
		Black Non-Hispanic	11%	11%	8%	5%
		Hispanic or Other	6%	5%	5%	3%
Education		Less than HS	10%	9%	8%	3%
		HS Grad/GED	7%	7%	7%	3%
		Some college	7%	7%	7%	3%
		Bachelors or More	4%	3%	3%	2%

Source: Authors' estimates from the 1996, 2001, 2004, and 2008 SIPP panels.

Table 4. *Median Lifetime Earnings by Disability Shock, 1996 SIPP Panel*

			No Shock		Shock		No Shock		Shock		No Shock	Shock
			Lifetime Earnings in SIPP	Mean Percentile	Lifetime Earnings in SIPP	Mean Percentile	Lifetime Earnings in 2012	Mean Percentile	Lifetime Earnings in 2012	Mean Percentile	Median Change in Percentile	Median Change in Percentile
Men	Age	25-29	169,757	54	132,567	43	877,011	55	523,889	36	-1	-7
		30-34	370,279	55	233,062	36	1,129,271	56	494,606	31	0	-3
		35-39	592,480	55	414,627	40	1,347,665	56	769,115	36	1	-3
		40-44	845,922	55	626,745	43	1,598,204	56	891,583	39	0	-3
		45-49	1,100,452	55	794,271	42	1,744,860	56	998,667	39	1	-4
		50-54	1,445,605	55	1,174,646	46	1,971,016	56	1,399,133	44	0	-2
	Race	White Non-Hispanic	648,628	59	585,743	46	1,473,173	59	974,399	42	0	-4
		Black Non-Hispanic	367,669	42	263,689	28	903,402	42	454,923	25	-1	-2
		Hispanic or Other	291,191	38	291,894	31	842,653	42	596,113	30	3	-1
	Education	Less than HS	313,538	37	286,828	27	742,180	35	516,247	24	-1	-2
		HS Grad/GED	509,654	53	479,727	43	1,139,708	49	824,008	36	-3	-6
		Some college	574,762	56	531,547	46	1,339,828	56	991,447	42	-1	-3
		Bachelors or More	724,484	60	797,806	51	1,853,588	68	1,497,566	52	5	0
	Women	Age	25-29	117,505	53	78,032	42	506,821	53	279,970	39	-1
30-34			219,946	53	138,561	40	603,806	54	322,609	37	0	-3
35-39			325,143	54	204,230	44	732,721	55	405,025	40	1	-4
40-44			380,208	54	267,042	45	790,746	55	546,901	43	0	-2
45-49			470,104	54	320,352	44	894,846	55	469,838	41	0	-4
50-54			491,721	54	399,186	47	776,459	56	497,957	45	-1	-3
Race		White Non-Hispanic	302,321	56	236,786	47	729,342	56	458,790	43	-1	-3
		Black Non-Hispanic	235,029	50	185,206	41	647,993	53	421,538	39	1	-3
		Hispanic or Other	145,476	41	147,700	34	500,460	47	340,643	35	3	-1
Education		Less than HS	100,353	30	88,038	26	304,567	32	207,531	25	0	-1
		HS Grad/GED	227,487	48	188,234	41	556,160	48	396,973	37	-1	-3
		Some college	305,840	57	254,954	50	746,712	57	503,223	46	0	-4
		Bachelors or More	378,343	63	382,660	62	1,008,154	65	833,884	58	1	-3

Source: Authors' estimates from the 1996 SIPP panel.

Table 5. Median Lifetime Earnings by Employment Shock, 1996 SIPP Panel

			No Shock		Shock		No Shock		Shock		No Shock	Shock
			Lifetime	Mean	Lifetime	Mean	Lifetime	Mean	Lifetime	Mean	Median	Median
			Earnings in	Percentile	Earnings in	Percentile	Earnings in	Percentile	Earnings in	Percentile	Change in	Change in
			SIPP		SIPP		2012		2012		Percentile	Percentile
Men	Age	25-29	188,593	58	140,801	47	944,761	58	670,395	44	-2	-4
		30-34	395,566	58	264,355	41	1,221,168	59	729,096	40	1	-3
		35-39	628,198	56	454,464	45	1,415,255	58	902,132	42	1	-3
		40-44	887,567	57	642,435	44	1,664,244	57	1,024,514	42	0	-2
		45-49	1,100,316	55	928,409	48	1,737,996	55	1,327,871	47	0	-2
		50-54	1,408,058	54	1,263,735	52	1,949,716	56	1,618,937	49	0	-3
	Race	White Non-Hispanic	705,765	60	461,322	50	1,533,509	60	1,021,107	47	0	-3
		Black Non-Hispanic	431,043	45	251,016	32	1,001,479	45	589,886	31	0	-2
		Hispanic or Other	353,528	41	228,102	34	976,229	45	688,531	35	3	0
	Education	Less than HS	390,986	39	245,437	32	823,699	37	603,794	30	-1	-2
		HS Grad/GED	568,789	54	389,986	46	1,208,598	50	864,375	40	-3	-5
		Some college	631,914	57	428,177	48	1,410,378	57	961,183	45	-1	-3
		Bachelors or More	782,507	62	489,698	50	1,916,797	69	1,341,179	58	4	4
	Women	Age	25-29	155,041	62	112,932	51	632,378	60	427,494	49	-2
30-34			279,736	61	163,846	47	807,991	62	481,366	47	0	-1
35-39			397,331	61	224,702	47	902,180	62	526,569	46	1	-1
40-44			466,484	59	284,534	47	966,993	60	614,088	48	0	-1
45-49			530,052	58	393,992	49	985,707	59	739,326	49	0	-1
50-54			555,625	58	457,924	50	872,856	60	605,469	51	0	-1
Race		White Non-Hispanic	377,751	62	232,890	51	886,593	62	565,400	49	0	-2
		Black Non-Hispanic	346,671	58	175,832	45	801,716	59	471,520	46	0	0
		Hispanic or Other	231,615	51	138,645	39	700,849	55	421,793	43	3	3
Education		Less than HS	183,729	39	97,220	29	453,265	41	317,558	31	0	-1
		HS Grad/GED	310,485	55	185,886	45	701,352	54	460,859	43	-1	-2
		Some college	369,767	62	235,099	52	877,425	62	596,992	50	0	-2
		Bachelors or More	438,147	67	289,290	59	1,152,733	69	807,241	60	1	0

Source: Authors' estimates from the 1996 SIPP panel.

Table 6. Median Lifetime Earnings by Marital Status Shock, 1996 SIPP Panel

			No Shock		Shock		No Shock		Shock		No Shock	Shock
			Lifetime Earnings in SIPP	Mean Percentile	Lifetime Earnings in SIPP	Mean Percentile	Lifetime Earnings in 2012	Mean Percentile	Lifetime Earnings in 2012	Mean Percentile	Median Change in Percentile	Median Change in Percentile
Men	Age	25-29	192,753	57	200,323	60	901,182	56	896,918	53	-2	-6
		30-34	395,186	57	325,018	50	1,193,790	58	821,359	46	0	-4
		35-39	627,673	57	574,040	53	1,413,006	57	1,307,284	53	0	-1
		40-44	878,717	55	778,763	52	1,623,339	56	1,431,952	50	0	-2
		45-49	1,091,077	54	1,030,629	56	1,715,011	54	1,707,335	55	0	-1
		50-54	1,411,636	54	1,242,250	49	1,886,362	54	1,758,067	50	-1	-1
	Race	White Non-Hispanic	772,626	60	533,345	56	1,594,104	60	1,247,806	53	0	-3
		Black Non-Hispanic	460,845	44	376,731	41	996,853	43	885,818	41	-1	-3
		Hispanic or Other	334,546	37	228,102	34	856,206	41	624,885	35	2	-2
	Education	Less than HS	361,781	35	291,105	37	740,231	33	594,975	32	-2	-3
		HS Grad/GED	628,301	54	375,126	50	1,231,567	50	896,918	44	-3	-5
		Some college	678,424	57	642,120	58	1,465,471	56	1,290,734	55	-1	-3
		Bachelors or More	903,564	63	836,490	62	2,062,248	69	1,800,256	68	4	4
	Women	Age	25-29	117,456	52	113,522	52	440,132	48	429,813	51	-4
30-34			218,319	53	152,611	45	557,320	52	510,457	48	-2	1
35-39			303,959	52	188,456	43	648,196	51	553,296	47	0	2
40-44			336,830	50	349,435	49	680,027	50	757,940	52	-1	0
45-49			402,357	49	347,829	45	712,023	49	774,119	47	-1	0
50-54			390,055	49	353,385	44	560,825	49	523,914	46	-2	0
Race		White Non-Hispanic	290,816	52	215,224	49	628,501	51	585,552	51	-2	0
		Black Non-Hispanic	278,737	52	167,449	43	653,482	52	526,187	47	-1	2
		Hispanic or Other	151,842	40	99,618	31	457,686	44	365,022	38	1	5
Education		Less than HS	89,669	27	65,279	25	237,453	28	264,199	26	-1	0
		HS Grad/GED	226,250	45	169,719	43	506,785	44	470,573	44	-2	0
		Some college	298,301	53	256,834	54	648,384	52	752,008	56	-2	1
		Bachelors or More	390,328	61	262,063	56	922,862	61	916,744	62	0	3

Source: Authors' estimates from the 1996 SIPP panel.

Table 7. Regression Estimates of the Impact of Disability Shocks on the 2012 Percentile Earnings Rank

		1996		2001		2004		2008		
		Estimate	StdErr	Estimate	StdErr	Estimate	StdErr	Estimate	StdErr	
Men	Intercept	11.789 *	0.470	7.790 *	0.498	5.337 *	0.296	2.776 *	0.200	
	Age	25-29	-0.577	0.444	0.064	0.488	0.213	0.300	-0.016	0.192
		30-34	-0.146	0.433	-0.834	0.464	-0.447	0.290	-0.356	0.193
		35-39	0.278	0.427	-0.179	0.461	-0.489	0.283	-0.436 *	0.191
		40-44	-0.470	0.432	0.330	0.455	0.014	0.276	-0.357	0.188
		45-49	-0.920 *	0.441	0.427	0.463	0.223	0.276	-0.125	0.184
		[Ref: 50-54]								
	Race/ethnicity	Non-Hispanic black	-1.736 *	0.429	-0.946 *	0.480	-0.490	0.294	-0.150	0.191
		Hispanic or other	1.139 *	0.366	2.128 *	0.388	1.187 *	0.225	0.739 *	0.144
		[Ref: Non-Hispanic white]								
	Education	Bachelors or more	8.632 *	0.305	7.349 *	0.343	6.078 *	0.200	3.852 *	0.136
		HS Grad/GED	-4.307 *	0.303	-3.338 *	0.347	-2.403 *	0.217	-1.184 *	0.146
		Not HS grad	-5.137 *	0.443	-3.657 *	0.503	-2.921 *	0.318	-1.288 *	0.210
		[Ref: Some college]								
	Earning percentile, SIPP entry year	0.791 *	0.004	0.845 *	0.005	0.889 *	0.003	0.942 *	0.002	
Health shock	-5.416 *	0.406	-4.323 *	0.448	-3.086 *	0.289	-2.414 *	0.255		
Women	Intercept	10.982 *	0.483	7.563 *	0.499	4.723 *	0.293	1.970 *	0.187	
	Age	25-29	-2.032 *	0.461	-1.576 *	0.485	-1.172 *	0.296	-0.475 *	0.183
		30-34	-1.619 *	0.452	-1.683 *	0.475	-1.177 *	0.288	-0.637 *	0.185
		35-39	-1.046 *	0.448	-0.949 *	0.466	-0.684 *	0.285	-0.444 *	0.182
		40-44	-0.893 *	0.449	-0.355	0.468	-0.213	0.275	-0.366 *	0.178
		45-49	-0.737	0.464	-0.141	0.469	-0.076	0.277	-0.078	0.175
		[Ref: 50-54]								
	Race/ethnicity	Non-Hispanic black	2.139 *	0.392	1.934 *	0.429	1.958 *	0.264	0.913 *	0.165
		Hispanic or other	3.875 *	0.376	2.788 *	0.397	2.632 *	0.229	1.336 *	0.141
		[Ref: Non-Hispanic white]								
	Education	Bachelors or more	2.769 *	0.316	2.783 *	0.337	2.840 *	0.197	2.098 *	0.125
		HS Grad/GED	-2.078 *	0.307	-1.624 *	0.345	-1.171 *	0.219	-0.392 *	0.146
		Not HS grad	-3.638 *	0.473	-2.456 *	0.555	-1.715 *	0.337	-0.658 *	0.219
		[Ref: Some college]								
	Earning percentile, SIPP entry year	0.821 *	0.005	0.871 *	0.005	0.908 *	0.003	0.957 *	0.002	
Health Shock	-4.921 *	0.380	-4.064 *	0.442	-3.142 *	0.271	-2.021 *	0.224		

Source: Authors' estimates from the 1996, 2001, 2004, and 2008 SIPP panels.

* $p < .05$

Table 8. *Regression Estimates of the Impact of Employment Shocks on the 2012 Percentile Earnings Rank*

		1996		2001		2004		2008		
		Estimate	StdErr	Estimate	StdErr	Estimate	StdErr	Estimate	StdErr	
Men	Intercept	11.021 *	0.466	7.697 *	0.486	5.396 *	0.292	3.330 *	0.199	
	Age	25-29	-0.681	0.448	0.094	0.486	0.391	0.305	0.614 *	0.193
		30-34	0.162	0.431	-0.537	0.458	-0.130	0.289	-0.047	0.192
		35-39	0.434	0.424	0.096	0.454	-0.267	0.279	-0.214	0.188
		40-44	-0.352	0.427	0.349	0.444	0.035	0.274	-0.239	0.185
		45-49	-0.975 *	0.436	0.357	0.450	0.276	0.273	-0.036	0.180
		[Ref: 50-54]								
	Race/ethnicity	Non-Hispanic black	-1.400 *	0.442	-0.765	0.484	-0.118	0.303	-0.122	0.195
		Hispanic or other	1.852 *	0.374	2.554 *	0.389	1.277 *	0.227	0.820 *	0.145
		[Ref: Non-Hispanic white]								
	Education	Bachelors or more	8.570 *	0.304	7.144 *	0.338	5.910 *	0.200	3.552 *	0.134
		HS Grad/GED	-3.962 *	0.303	-3.188 *	0.343	-2.313 *	0.218	-1.175 *	0.146
		Not HS grad	-4.842 *	0.454	-3.560 *	0.507	-2.810 *	0.324	-1.129 *	0.215
		[Ref: Some college]								
	Earning percentile, SIPP entry year	0.799 *	0.004	0.850 *	0.005	0.892 *	0.003	0.940 *	0.002	
Employment shock	-3.343 *	0.311	-3.457 *	0.326	-2.976 *	0.221	-2.763 *	0.146		
Women	Intercept	12.193 *	0.522	9.093 *	0.529	6.224 *	0.310	3.450 *	0.202	
	Age	25-29	-3.210 *	0.490	-2.086 *	0.503	-1.099 *	0.309	0.004	0.193
		30-34	-0.784	0.479	-0.493	0.494	-0.460	0.299	0.011	0.196
		35-39	-0.365	0.470	-0.143	0.480	0.288	0.296	0.161	0.191
		40-44	-0.370	0.465	-0.090	0.476	0.461	0.282	0.111	0.185
		45-49	-0.814	0.476	-0.325	0.472	0.008	0.280	0.024	0.179
		[Ref: 50-54]								
	Race/ethnicity	Non-Hispanic black	1.430 *	0.416	1.175 *	0.440	1.171 *	0.269	0.698 *	0.173
		Hispanic or other	3.483 *	0.421	2.591 *	0.426	2.287 *	0.245	1.277 *	0.152
		[Ref: Non-Hispanic white]								
	Education	Bachelors or more	3.455 *	0.327	3.284 *	0.344	3.187 *	0.203	2.222 *	0.130
		HS Grad/GED	-2.032 *	0.325	-1.675 *	0.355	-1.120 *	0.230	-0.370 *	0.156
		Not HS grad	-3.707 *	0.551	-2.399 *	0.624	-2.076 *	0.371	-0.467	0.255
		[Ref: Some college]								
	Earning percentile, SIPP entry year	0.811 *	0.005	0.860 *	0.006	0.894 *	0.003	0.943 *	0.002	
Employment shock	-2.778 *	0.326	-3.314 *	0.338	-2.745 *	0.225	-3.079 *	0.161		

Source: Authors' estimates from the 1996, 2001, 2004, and 2008 SIPP panels.

* $p < .05$

Table 9. Regression Estimates of the Impact of Marital Status Shocks on the 2012 Percentile Earnings Rank

		1996		2001		2004		2008		
		Estimate	StdErr	Estimate	StdErr	Estimate	StdErr	Estimate	StdErr	
Men	Intercept	9.197 *	0.476	5.937 *	0.507	4.252 *	0.298	2.066 *	0.202	
	Age	25-29	-0.953	0.514	-1.081	0.581	0.836 *	0.362	0.763 *	0.231
		30-34	0.788	0.448	0.093	0.484	0.514	0.304	0.106	0.201
		35-39	1.089 *	0.430	0.546	0.471	-0.012	0.288	0.092	0.189
		40-44	0.101	0.430	0.768	0.458	0.467	0.278	-0.156	0.185
		45-49	-0.551	0.434	0.778	0.459	0.518	0.277	-0.020	0.178
		[Ref: 50-54]								
	Race/ethnicity	Non-Hispanic black	-1.518 *	0.508	-0.743	0.563	-0.455	0.350	0.161	0.224
		Hispanic or other	2.082 *	0.398	2.313 *	0.424	1.165 *	0.240	0.985 *	0.152
		[Ref: Non-Hispanic white]								
	Education	Bachelors or more	7.919 *	0.329	5.963 *	0.364	5.504 *	0.213	3.455 *	0.142
		HS Grad/GED	-3.567 *	0.328	-2.863 *	0.375	-2.096 *	0.236	-1.018 *	0.156
		Not HS grad	-5.306 *	0.470	-3.854 *	0.543	-2.597 *	0.333	-1.477 *	0.217
		[Ref: Some college]								
Earning percentile, SIPP entry year	0.821 *	0.005	0.873 *	0.005	0.902 *	0.003	0.952 *	0.002		
Marital status shock	-1.974 *	0.551	-2.593 *	0.654	-2.552 *	0.440	-1.078 *	0.369		
Women	Intercept	7.366 *	0.524	5.014 *	0.548	2.627 *	0.312 *	0.732 *	0.193	
	Age	25-29	-2.864 *	0.555	-2.774 *	0.614	-2.322 *	0.364 *	-2.173 *	0.223
		30-34	-0.857	0.508	-1.782 *	0.547	-1.605 *	0.325 *	-0.774 *	0.202
		35-39	-0.147	0.499	-0.965	0.529	-0.614	0.314	-0.451 *	0.194
		40-44	0.107	0.498	-0.322	0.521	-0.068	0.303	-0.283	0.188
		45-49	0.021	0.514	-0.276	0.524	0.131 *	0.303 *	-0.040	0.182
		[Ref: 50-54]								
	Race/ethnicity	Non-Hispanic black	1.200 *	0.577	1.844 *	0.615	2.330 *	0.370	1.238 *	0.228
		Hispanic or other	4.389 *	0.438	3.805 *	0.458	2.890 *	0.260	1.536 *	0.154
		[Ref: Non-Hispanic white]								
	Education	Bachelors or more	2.323 *	0.372	2.147 *	0.396	2.197 *	0.227	1.505 *	0.139
		HS Grad/GED	-1.734 *	0.355	-1.161 *	0.405	-0.721 *	0.250	-0.196	0.162
		Not HS grad	-3.806 *	0.557	-2.783 *	0.646	-1.624 *	0.386	-0.312	0.242
		[Ref: Some college]								
Earning percentile, SIPP entry year	0.842 *	0.005	0.889 *	0.006	0.927 *	0.003 *	0.972 *	0.002		
Marital status shock	3.221 *	0.582	3.046 *	0.673	1.035 *	0.415	0.550	0.354		

Source: Authors' estimates from the 1996, 2001, 2004, and 2008 SIPP panels.

* $p < .05$

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