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Labor Market Exit and Re-Entry: Is the United States Poised for a Rebound in the Labor Force Participation Rate?

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Abstract:

The U.S. labor force participation rate has declined sharply since 2007—far faster than can be explained by demographic shifts in the population. This brief analyzes the re-entry probability for individuals who exit the labor force as well as the financial, demographic, and employment characteristics of these individuals. The vast majority of individuals younger than 45 years of age re-enter the labor market within four years of exiting; however, the re-entry rate drops substantially for 50–54 year-olds and 55–59 year-olds. Those individuals who exit the labor market appear more marginally attached to the labor force, and they have less financial resources to sustain themselves during long periods of being out of work. There is also some evidence that intra-household labor market substitution occurs when the household head exits the labor market first.

JEL Codes: J21

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1 Background

The U.S. labor force participation rate (LFPR) has trended downward since 2000, in part due to the aging of the U.S. population. This downward trend has accelerated since the onset of the Great Recession as individuals have left the labor force at a faster pace (see Figure 1). Given the sharp decrease in the LFPR, there has been much discussion regarding how much of this decline is permanent (structural) versus temporary (cyclical).[1] Nonparticipants in the labor market who are able-bodied and prefer to be working will likely re-enter the labor market and look for a job when they perceive employment conditions have improved. In contrast, workers who have exited the labor market because of their age, a disability, or some other related factor are unlikely to re-enter the labor market regardless of improving labor demand.

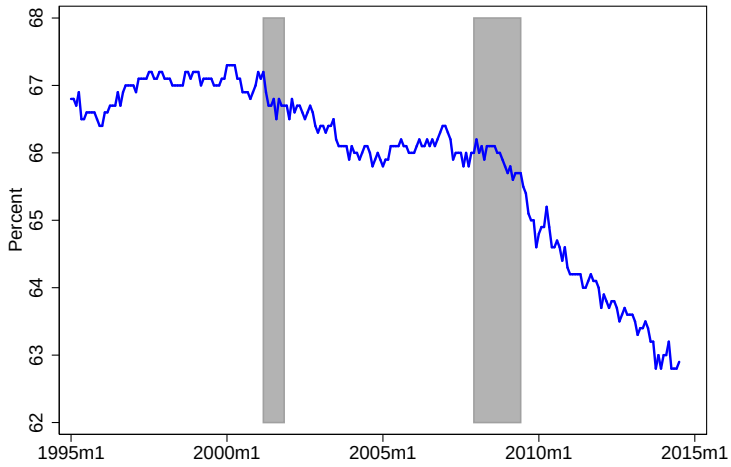
Understanding the permanent versus cyclical breakdown for the decline in the LFPR is directly relevant for predicting future labor force trends as labor demand conditions improve, as well as for evaluating the current underlying strength of the labor market. If much of the decline is cyclical, then there may be a large pool of individuals waiting to re-enter the job market when underlying labor demand conditions further improve—a situation that would result in upward pressure on the unemployment rate. Such a case would imply that the current level of the unemployment rate overstates the true strength of the labor market because many individuals remain on the sidelines waiting for conditions to improve further before searching for a new job. In comparison, if the decline in the LFPR is permanent, then the unemployment rate is a fairly accurate measure of labor market health. Hence, the economy could be closer to full employment than some researchers who are focused on a cyclical decline in the LFPR believe.

In the end, it is likely that there are both cyclical and permanent components to the decline in the LFPR given, among other things, the aging of the U.S. population. This policy research note seeks to inform the debate about the decline in the LFPR by using panel data to examine labor market re-entry after labor market exit for individuals who are 55 years-old and younger. The greater the possibility of labor market re-entry for those individuals who are out of the labor force (OLF), the greater the likelihood that the unemployment rate could rise as labor demand further strengthens.

We consider both cross-sectional evidence of re-entry behavior as well as time-series patterns of re-entry, such as whether re-entry rates rise following recessions or during periods

[1] An individual is considered to be in the labor force if he or she is either working or not employed but actively looking for a job.

FIGURE 1: U.S. Labor Force Participation Rate (1995:M1-2014:M7)



of robust labor demand. We also analyze whether there is evidence of intra-household labor market substitution that occurs concurrently with the head of the household's decision to exit and/or re-enter the workforce. In principle, it is likely easier for an individual to stay out of the labor force for an extended period—especially at a young age—if his/her spouse is working or enters the workforce at the time he/she exits. Finally, we study the employment characteristics and financial conditions of individuals 55 years of age and under who report being out of the labor force in recent years to better understand the economic situation of those who exit the labor market compared to similar individuals who do not exit.

We find since 1980 that the vast majority (about 80 percent) of 25–44 year-olds who exit the labor force during recessions or early recovery periods are working again within four years.[2] Only about 40 percent of 45–54 year-olds who exit the labor force re-enter over the same time horizon. These results are consistent with a nontrivial portion of the labor force participation decline being cyclical. Labor market re-entry by individuals who previously exited the labor force also increased substantially during the late 1990s—a period characterized by tight labor markets and high labor demand in the United States. In addition, there does appear to be some intra-household labor market substitution when the head of the household exits the labor force—especially those younger than 45 years of age. Heads of household 55 years of age and younger who report being OLF—prior to or after the Great Recession—after being employed in previous years appear to have been somewhat less

[2]Since the PSID ends in 2011, this finding does not include anyone who was out of the labor force after 2007. See section 2 for more details.

attached to the labor market in the past and have more limited financial resources than those individuals who remain in the labor force.

The remainder of this paper proceeds as follows. The next section describes the data and provides definitions of key variables used in the analysis. Sections 3 and 4 present our results and section 5 concludes.

2 Data and Definitions

This paper uses data from the Panel Study of Income Dynamics (PSID), which is a household-level survey that began in 1968 and follows households and their offspring over time. Sixty percent of the initial 4,800 surveyed households belonged to a cross-national sample from the 48 contiguous states, while the other portion was a national sample of low-income families from the Survey of Economic Opportunity. The survey was conducted annually through 1997 and biennially thereafter. The 2011 wave of the PSID includes close to 9,000 households. In addition, the PSID has wealth supplements in 1984, 1989, 1994, and 1999 onward, which include detailed information on households' financial positions.[3]

The advantage of the PSID relative to other datasets usually used for labor market analysis in the United States, like the Current Population Survey, is that with the PSID one can follow an individual and/or household over multiple years. The PSID's main drawback is its relatively small sample size, which limits certain analyses such as the size of the age groups one can use to examine labor market re-entry. At present the PSID data are only available through 2011. Despite these limitations, the PSID has extensive individual-level (the household head and spouse) labor market data that is relevant for the analysis in this paper. The results may be influenced somewhat by the noise caused by the relatively small sample size, but we have kept the sample sizes reasonable to avoid undue influence by outliers and/or measurement error. We feel that the ability to follow an individual and trace his/her labor market status and other characteristics over multiple years far outweighs the drawbacks presented by the PSID's small sample size. Our results are certainly not the final word on labor force participation and labor market re-entry after exit, but these findings should be taken seriously—especially the patterns and broad trends described.

We focus on two primary variables in the PSID related to an individual's (the household

[3]The wealth supplements include data on households' cash holdings (checking and savings accounts), bond holdings, stock holdings, retirement accounts (IRAs), business or farm equity, vehicle values, and nonprimary residential real estate holdings. There are also data on noncollateralized debt holdings (educational debt, credit card debt, and any other unsecured borrowing).

head and/or spouse) labor market status. The first variable, called EMPSTAT, asks individuals about their current labor market status at the time of the PSID interview. EMPSTAT is available for household heads in all years of the PSID and for their spouses since 1976. The possible responses for the EMPSTAT variable are the following:

1. Working now
2. Only temporarily laid off, sick leave or maternity leave
3. Looking for work, unemployed
4. Retired
5. Permanently disabled; temporarily disabled
6. Keeping house
7. Student
8. Other; "workfare"; in prison or jail
9. NA; refused.

For the labor market re-entry analysis individuals are characterized as OLF if they are working or were looking for work in the previous survey wave (responses 1 to 3), but currently report their status as retired, a student, or other (responses 4, 7, and 8). For simplicity, we refer to these three changes in labor market status as "nonworking episodes." Younger individuals—those under 55 years of age—who say they retire likely exit the labor force for nonstandard reasons, since the vast majority of them are probably too young to formally and comfortably retire. These "retired" individuals, like students, potentially wish to re-enter the labor force although the difficulty of doing so likely increases as they get older. Following the Great Recession there have also been a substantial number of individuals reporting that they are OLF *and* retired (see, for example, Fujita, 2014), so including retirees in our definition of nonworking episodes has the added benefit of potentially providing insight as to whether young retirees will eventually re-enter the labor market. Additionally, including disabled individuals or individuals keeping house in our measure of nonworking episodes does not dramatically alter the results, although more respondents tend to be disabled or keeping house when we check whether they have re-entered the labor force.

We also use data available since 2003 that asks respondents how many weeks they spent out of the labor force for any period of time in the previous year (meaning the year prior to the interview year—for example, 2002 for the 2003 survey). The same question is asked

regarding the head of the household's spouse (if any).[4] The description of this second variable is as follows:

> "Head's total weeks out of the labor force in the past year represent the actual number of weeks that Head did not have a job and was not looking for one. All missing data were assigned. The value ranges from 0.1 to 52 and 0 indicates that Head was not out of the labor force in [2008]."[5]

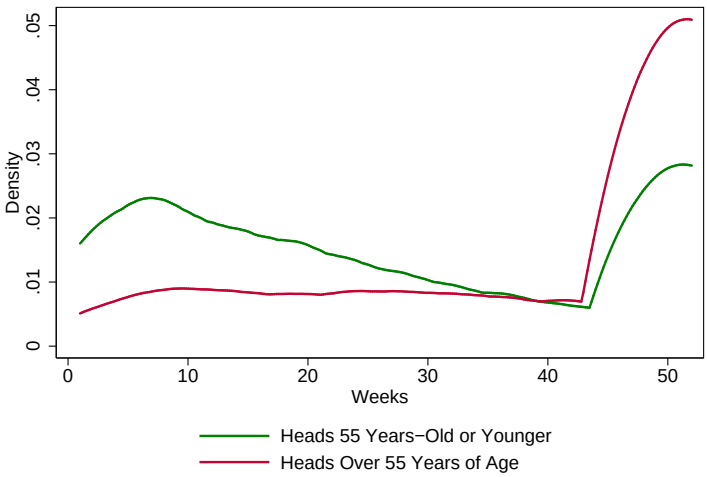
The values assigned to the "weeks OLF" variable appear reasonable. That is, individuals reporting that they were out of the labor force for 52 weeks in the previous year report zero weeks of unemployment or looking for work during the same time period. In contrast, individuals who were OLF for fewer than 52 weeks report periods of unemployment and/or employment during the year. Figure 2 shows the distribution of weeks spent OLF for individuals who are 55 years-old and under and individuals who are over 55 years of age. Notice the bunching at 52 weeks even for the younger individuals. The year-by-year distributions are similar although there has been some shifting toward 52 weeks OLF over time (not shown). Based on these distributions we further divide individuals into those that experience short (less than 52 weeks) versus long (52 weeks or more) episodes OLF.[6] We chose the 52 week cut-off based on the distributions in Figure 2 and the fact that individuals OLF 52-weeks in the year prior to the survey year are likely to potentially still be OLF when they are interviewed.

[4]These data are available for many years of the PSID, but are consistently worded and most compatible across the years from 2003 onward.

[5]There is a related yes/no question asking the head whether he/she was out of the labor force since the previous survey wave.

[6]Splitting the sample at 40-weeks out of the labor force yielded similar results in earlier analysis.

FIGURE 2: Kernel Density Estimates for the Number of Weeks the Household Head is Out of the Labor Force for the First Time

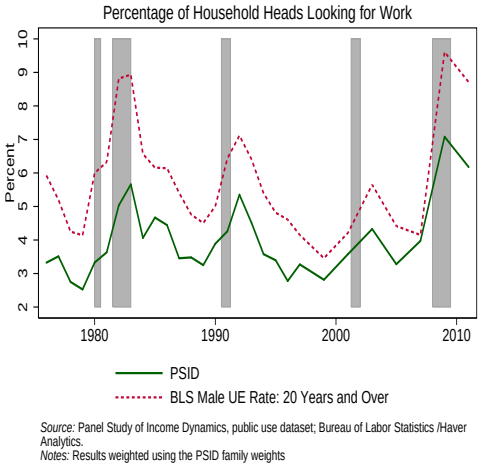


Source: Panel Study of Income Dynamics, public use dataset.

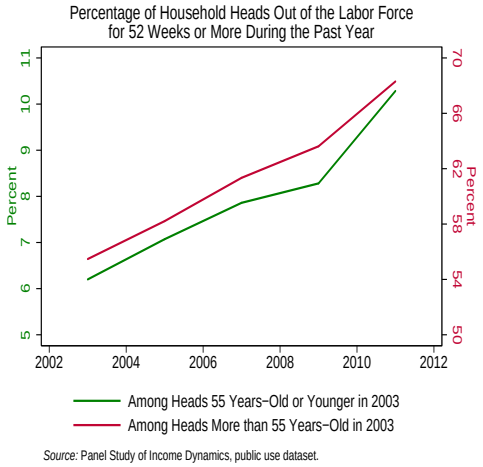
Broadly speaking, the PSID labor force participation data seem reasonable relative to the business cycle aggregate trends. Figure 3, Panel A shows the percentage of household heads who report that they are looking for work in a given year—a measure that is broadly comparable to the prime age male unemployment rate. Notice that, as expected, the percentage of heads looking for work rises during economic slowdowns and falls during expansions. The actual percentage of those looking for work is also reasonable since it is broadly consistent with the unemployment rate for males.[7] In addition, Figure 3, Panel B shows that the share of individuals designated as OLF based on the "weeks OLF" data has increased since 2003, consistent with the downward trend in the LFPR.

[7]Not all household heads in the PSID are male, but the default head is male unless he is incapacitated or if there is no male present in the household.

FIGURE 3: Data Validation



Panel A



Panel B

2.1 Labor Market Re-Entry Sample

The labor market re-entry sample includes household heads 59 years-old and younger who experienced non-working episodes during the 1980-1986, 1991 to 1993, and 2001 to 2003 periods, as well as in 2007.[8] The goal of the sample is to focus on individuals who left the labor force during periods of economic stress—periods that at least economically are broadly similar to the Great Recession and its aftermath. We pool household heads across years to gather a sufficiently-sized sample that will permit us to analyze re-entry by age group and to test whether individuals who are farther from the standard retirement age (usually 65 years) are more likely to re-enter the labor force.[9] Individuals who are not working but report that they are disabled or keeping house are excluded from the analysis because they are more likely to be less attached to and/or more permanently out the labor force.[10] Given our desire to examine individuals probability of labor market re-entry two or four years ahead they must have EMPSTAT data in the current wave as well as two or four years in the future in order to be included in the sample.

[8]We include individuals with nonworking episodes in 2007 since their labor market re-entry was likely impacted by the slow recovery from the Great Recession and we can observe four years of post-exit behavior. Similarly, we restrict the sample to individuals 59 years-old and under so that individuals are still younger than 65 after four years when we analyze their re-entry behavior.

[9]We use "household heads" and "individuals" interchangeably.

[10]Including such individuals in the analysis increases the percent of individuals who report keeping house or being disabled two years or four years after exiting the labor force. These results are shown in the appendix.

The sample we use for examining the characteristics of OLF individuals focuses on those individuals who are 55 years-old and under and OLF for the first time in a given year during the 2003–2011 period. That is, we examine individuals who report being OLF after having previously worked.[11] We focus our analysis on individuals 55 years-old and under in order to avoid the confounding effects of individuals' retirement decisions on our results.

3 Results

The decline in the LFPR has been widespread across age groups—especially younger adult age groups. Table 1 utilizes BLS data to show the change in LFPRs for pre-retirement age groups between 2007 and 2013, excluding the effects of demographic changes in the U.S. population. The table also reports the contribution of each age group's labor force participation behavior to the overall decline in the LFPR (again, excluding demographic effects) between 2007 and 2013. The table reports average participation rates for 2007 and 2013, although the results are similar when comparing the rates between December 2007 and December 2013.

Table 1: Changes by Age Cohort in Labor Force Participation Rates from 2007 to 2013

Age in Years	25 to 34	35 to 44	45 to 54	55 to 59
2007 LFPR	83.3	83.8	82.0	72.0
2013 LFPR	81.2	82.2	79.7	72.4
Memo:				
Contribution to LFPR decline (ppt)	0.36	0.26	0.40	-0.03
Share of Population (2013)	0.17	0.16	0.18	0.09

Source: BLS/Haver Analytics and Authors' Calculations. *Notes:* The numbers in the table represent the *within* group changes in the labor force participation rate. These changes exclude demographic shifts in the population.

The key takeaway from Table 1 is that the decline in the LFPR is widespread across age-based groups of prime-age workers—those workers 25–54 years-old—and is not the result of older workers (those 55 years-old and over) retiring earlier. Indeed, older workers have, on net, increased their participation in the labor force since 2007 as they have delayed retirement in the aftermath of the Great Recession. The results suggest that much of the decline in the

[11] An individual's (household head's) first episode OLF is defined as the earliest survey wave between 2003 and 2011 where they report being out of the labor force after having been in the labor force in the previous wave. In a small number of some cases, we need to make assumptions. For instance, if a head reports being out of the labor force in 1999, 2003, 2005, and 2011, 2003 is assigned as the first time s/he is out of the labor force for our analysis. If a head reports to be out in years 2001, 2003, 2005, and 2009, 2009 is assigned as the first year. The results are similar if we exclude the special cases from our analysis.

LFPR—beyond demographic changes—is cyclical given that the decrease has occurred among prime-age workers. We use the PSID, however, to try to quantify the likelihood that after exiting individuals in these age categories will re-enter the labor market in the future.

3.1 Labor Market Re-Entry

Re-Entry by Age Groups

Table 2 shows the future labor market status of individuals who report a nonworking episode in the current period. Recall that someone with a nonworking episode was employed or seeking work in the previous period but is neither employed nor looking for work in the current period (t) and does not report that he/she is disabled or keeping house. The labor market status of these individuals is analyzed two or four years later (year $t+2$ or year $t+4$, respectively).

TABLE 2: Post-Labor Market Exit Status for the Household Heads Not Working, Keeping House, or Disabled

Age in Years	25 to 44		45 to 54		55 to 59	
	2yrs after	4yrs after	2yrs after	4yrs after	2yrs after	4yrs after
Percent In Labor Force[a]	78.87	78.11	38.21	40.65	27.78	20.14
Percent Retired	2.64	3.40	44.72	43.90	64.58	74.31
Percent Disabled	4.15	6.42	11.38	11.38	6.94	5.55
Percent Keeping House	4.15	2.26	4.07	2.44	0.70	0
Percent Other Nonworker[b]	10.19	9.81	1.62	1.63	0	0
Average Age in Years	32		50		57	
Observations	265	265	123	123	144	144

Notes: [a] Includes individuals who are working or looking for work. [b] Includes students and other individuals classified by the PSID as not working. The analysis pools workers across three recession and early recovery periods: 1980 to 1986, 1991 to 1993, and 2001 to 2003, as well as 2007. The sample is restricted to those individuals who were working or looking for work immediately prior to the period in which they report not working.

The results reported in Table 2 show that the number of individuals who are back in the labor force two or four years after a nonworking episode declines with age. Nearly 80 percent of 25–44 year-olds are back in the labor force after four years compared with about 20 percent of 55–59 year-olds. The low re-entry rate for the oldest age group may indicate that these individuals are nearing retirement and likely chose to leave the labor force early rather than continue looking for employment, which can be difficult to find at an advanced age. In addition, around 40 percent of 45–54 year-olds are back in the labor force after four years, although splitting the group between 45–49 year-olds and 50–54 year-olds suggests that much of the decline in re-entry occurs among the older half of the group (see Table A.1).

The optimistic view of the results in Table 2 is that young workers appear to re-enter the labor force after a nonworking episode—especially the vast majority of workers 25–44 years-old. The results are encouraging in that they are consistent with the belief that a nontrivial portion of the decline in the LFPR below its demographic trend is cyclical. In contrast, a pessimistic view of the results notes that at least 20 percent of 25–44 year-olds do not re-enter the labor force within four years of exiting, and the majority of workers in the 45–54 year-old age group do not re-enter. In other words, there is a nontrivial percentage of young workers who appear to exit the labor force during difficult economic times and then do not re-enter over the medium term.

We believe that the results in Table 2 are consistent with a reasonable amount of labor force re-entry among younger individuals. The sample size is too small and the data are too noisy to say with certainty that exactly 80 percent of young workers re-enter the labor force rather than perhaps 76 percent, but overall our results are consistent with the vast majority of the younger workers re-entering the labor force after a nonworking episode, and a moderate portion of older workers re-entering.

The results in Table 2 hardly change when observations from the 1980s recession and recovery period are excluded from the analysis (see Table A.2 in the appendix). The results also remain qualitatively similar when individuals who are disabled or keeping house are included in the definition of nonworkers. Of course, given this change, the percentage of individuals who report being disabled or keeping house four years after a nonworking episode are higher than in Table 2 (see Table A.3).

In addition, one can combine the results in Table 2 (taken at face value) with the data in Table 1 to obtain an estimate of how much of the decline in the LFPR will be reversed for 25-54 year old workers. Individuals in this age group account for roughly 1 percentage point of the LFPR decline, and the age specific re-entry rates suggest that about 0.66 percentage point of the decline will be reversed.

It is important to note that this calculation is based on the portion of the LFPR decline that is *not* due to demographic shifts in the population. So, if one believes that 50 percent of the decline in the LFPR is due to demographics, then two-thirds of the remaining one-half of the LFPR decrease may be reversed due to labor market re-entry by younger individuals. This would imply a decline in the LFPR that is roughly two-thirds structural, one-third cyclical. Of course, this approach is slightly unfair since some of the workers who left the labor force in 2008 should already have re-entered based on the results in Table 2. Still, the exercise is instructive and suggests a non-trivial cyclical portion of the LFPR drop since the Great Recession.

Labor Market Re-Entry Over Time

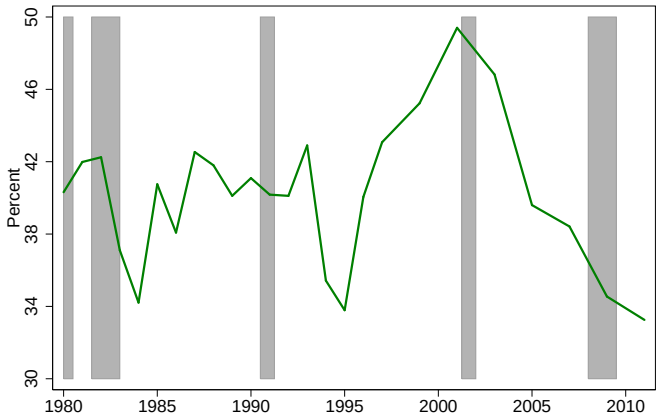
The probability that an individual will re-enter the labor force likely depends on the strength of the labor market at a given point in time. Figure 4 plots the cyclical patterns of labor market re-entry. In particular, it shows the percentage of individuals 55 years-old and under who are currently in the labor force (working or looking for work) in year t after having reported a nonworking episode four years prior (year $t-4$). Figures A.1 and A.2 show similar patterns for individuals reporting a non-working episode two years or six years prior to the current period. Unfortunately, sample size limitations prevent us from examining the cyclical re-entry patterns of more disaggregated age groups.

The results show that there was a large increase—about 8 to 10 percentage points—in the number of individuals who re-entered the labor force during the tight labor market in the late 1990s. In addition, the overall time-series pattern suggests that the re-entry rate declines during and following recessions and rises during expansions, except for the mid-2000s. These patterns are consistent with labor market re-entry increasing as the economy improves—especially during periods of high labor demand.

Regressing the percentage of individuals that re-enter the labor market after four years on the overall U.S. unemployment rate in the year of re-entry yields an imprecisely estimated coefficient of –1.02 (based on 25 observations). That is, a 1 percentage point higher unemployment rate decreases the number of individuals who re-enter the labor force by 1 percentage point. The unemployment rate explains little of the variation in the percentage of individuals who re-enter the labor force (R-squared = 0.04), but the sign of this effect suggests that re-entry does indeed vary positively with the business cycle (and negatively with the unemployment rate).

Overall, the results in Figure 4 and the regression analysis suggest that younger individuals—those 55 years old or under—might be particularly likely to re-enter the labor force during a period of strong labor demand.

FIGURE 4: Percentage of 55 Year-Olds and Younger Who Re-Enter the Labor Force after Having Experienced a Nonworking Stint Four Years Earlier



Source: Panel Study of Income Dynamics, public use dataset.
Notes: The sample is restricted to individuals who are in the sample in both the current year and four years earlier.

3.2 Intra-Household Labor Market Substitution

One reason that an individual might be inclined to exit the labor force prior to a normal retirement age is if his/her spouse is working or if as he/she exits, his/her spouse enters the labor force due to better labor market opportunities or other factors. That is, there may be a degree of intra-household substitution that contributes to one's decision to leave the labor market, and re-entry into the labor market may be less likely in situations where intra-household labor market re-optimization has occurred.

TABLE 3: Spousal Labor Market Participation for Household Heads with Nonworking Episodes

Age in Years	25 to 44	45 to 54	55 to 59
Percent with Spouse	39.25	63.41	70.34
Percent with Working Spouse	27.55	34.96	37.93
Percent Conditional on Having Spouse	70.19	55.13	53.92
Percent with Spouse Not Working in the Prior Period and Now Working	14.42	5.13	3.92

Notes: The analysis pools workers across three recession and early recovery periods: 1980 to 1986, 1991 to 1993, and 2001 to 2003, as well as 2007. The sample is restricted to those individuals who were working or looking for work immediately prior to the period in which they report not working.

Since the PSID tracks the labor market status of the household head and his/her spouse (if any), we can use the data to examine the marital status and potential intra-household labor market substitution of heads of households who exit the labor market during periods

of economic stress. Table 3 shows the marital status and spousal labor market status of individuals who had a nonworking episode during the same recession and early recovery periods as in Table 2. Only around 40 percent of 25–44 year-olds who exit the labor force during a period of sluggish economic activity have a spouse. Some of this may be due to the fact that these individuals are relatively young and have not yet married, but this low percentage of married young household heads contrasts with the vast majority of people aged 45 years and over who have spouses when they exit the labor force.

Conditional on a 25–44 year old-having a spouse, 70 percent of those spouses are working when that person exits the labor market—a higher percentage than for the older age groups. In addition, roughly 14 percent of young labor market "exiters" have a spouse who starts working in the period when they exit. Taken together, these results suggest that there is potentially some amount of intra-household labor market substitution occurring among individuals who are under 45 years of age. A majority of older individuals who are married and exit the labor force also have an employed spouse, but the percentage of these spouses who have just entered the labor market is much lower.

Overall, these results suggest that some intra-household labor market substitution may occur when younger individuals decide to leave the labor market. Indeed, roughly one-third of all individuals who exit the labor market have the support of a working spouse, although the youngest group of households seems least likely to have an intra-household security net when they leave the labor force. Still, a sizeable portion of young individuals who exit the labor market do not appear to have any sort of intra-household security net. Individuals without intra-household earnings support likely face a more difficult financial situation when they exit the labor market than those households with a working spouse, and as a result adults from single-earner households may be more likely to eventually re-enter the labor force when the job market improves.

4 Characteristics of Individuals who Recently Exited the Labor Force

Using the "weeks OLF" data we also examine the characteristics of individuals who reported that they were OLF in 2010 (2011 survey year) after reporting they were employed in the previous PSID wave (2009). We restrict the analysis to individuals who exited the labor force at the end of the Great Recession and/or in the early part of the recovery. The goal is to analyze whether they appear well positioned for an early retirement or whether they lack

substantial financial resources and thus appear to be more marginally attached to the labor market and/or to have suffered a lengthy bout of unemployment and given up searching for new employment. In addition, we consider whether these individuals appear different from those workers who did not exit the labor market in 2010, whether in terms of their occupation or some other factor(s) that might prompt certain people to leave the labor force.

Table 4 reports employment history statistics for individuals who were OLF in 2010 and those who were not. Individual employment histories are measured from 20 years prior until five years prior to the OLF episode—this is an attempt to get a sense of a person's typical employment behavior without including any potential employment issues/irregularities around the time he/she exits the labor force.

The job history data are consistent with the notion that individuals who exited the labor force in 2010 were more marginally attached to the labor force. An individual who exited the labor market worked on average about 500 hours less a year prior to his/her OLF episode than an individual still in the labor force in 2010. Persons reporting that they were OLF in 2010 also had more annual weeks of unemployment in the past, on average, than those individuals who remained in the labor force. These unemployment differences, while precisely estimated, are not large economically. Table A.4 in the appendix shows the job history data for people in and out of the labor force in 2004, prior to the recession. Again, those individuals OLF appear to have been less attached to the labor force over time—perhaps slightly more so than individuals OLF in 2010. As a result, it does not appear that the different employment histories between individuals OLF and those in the labor force are a post-Great Recession phenomenon.

Table 5 shows the 2009 occupations for those individuals who exited the labor force in 2010. The largest share of these individuals were service workers. Indeed, among those individuals who exited the labor force, the percentage of service workers was noticeably

TABLE 4: Employment History Statistics for 55 Year-Olds and Under Who Were In or Out of the Labor Force in 2010

	Out of the Labor Force			In the Labor Force		
	Mean	Median	Std. Dev	Mean	Median	Std. Dev
Avg. Ann. Wks. Unemployed	3.6	1.3	5.0	1.9	0.2	3.5
Avg. Ann. Hours Worked	1608	1844	696	2081	2120	545
Average Age in Years		51.8			49.7	
Observations	114	114	114	1,843	1,843	1,843

Notes: Labor market statistics are measured between 20 years and five years prior to 2010.

higher than the overall share of service workers among employed individuals in the PSID who were 55 years-old and younger.

Individuals who exited the labor force in 2010 also frequently worked in transportation, administrative support, and sales jobs. These occupational results are consistent with individuals exiting the labor force from, broadly speaking, low pay and low skill jobs. Indeed, in the PSID the individuals in these occupations tend to be less educated than individuals in other occupations—the portion with only a high school degree is roughly 10 percentage points higher. Similarly, the portion with a college degree is 10 percentage points lower. Overall, these findings are consistent with less educated and more marginally attached individuals exiting the labor force, rather than higher skill workers choosing to retire early because they cannot find adequate or desired employment. In addition, the occupational distribution for individuals who exited the labor force in 2004 prior to the Great Recession is very similar to the distribution for the 2010 exiters. This suggests that individuals who exited the labor force after the Great Recession were not inherently different from those individuals who left the labor force in earlier years, at least in terms of their prior occupations.

Table 5: Occupations of Workers 55-Years-Old and Under in the PSID

	2009 Occupations		2003 Occupations	
	Exit LF 2010[1]	All Workers	Exit LF 2004[1]	All Workers
Executives	1.99	7.26	3.49	8.51
Management	0.00	2.94	1.74	2.65
Professionals	3.48	11.79	5.23	11.28
Technicians	1.00	3.29	2.33	3.26
Sales	7.96	7.73	6.98	8.73
Admin Support	10.95	10.45	4.65	10.41
Service Occup.	27.86	19.00	28.49	15.42
Farm/Agriculture	0.50	1.53	0.58	1.91
Mechanics	4.48	5.01	2.33	5.81
Construction	3.48	5.06	4.07	4.95
Extraction	0.50	0.19	0.00	0.15
Precision Production	3.48	2.51	2.91	3.83
Machine Operators	6.97	4.65	6.98	5.96
Transportation	11.94	10.48	11.05	9.92
Unspecified	15.41	8.11	19.17	7.21
Observations	201	6,325	172	5,955

Notes: Rows report the percent of workers in a given occupation. [1] Workers who exit the labor force in a given year after working in the previous period.

Table 6 reports data on the financial holdings of individuals who were OLF in 2010 (after previously working) compared with those individuals who were not OLF. The wealth data are measured immediately prior to the OLF episode (if any) in 2009 as well as in 2005. The 2005 data have the advantage of avoiding the impact of financial losses related to the Great Recession on households' wealth holdings as well as avoiding any balance sheet divestment immediately prior to individuals exiting the labor force in order to better position them to qualify for government assistance programs. Still, the 2009 data are of interest for providing a snapshot of an individual's financial position immediately prior to exiting the labor force—as this gauges the resources that in principle they will have to support themselves while not working and/or while looking for work.[12]

[12]The number of observations differ between Table 4 and Table 6 because our approach with the labor market data requires individuals to have employment information over a period that ranges from five years to 20 years before their OLF episode.

TABLE 6: Wealth and Spending Data for 55 Year-Olds and Under Who Were In or Out of the Labor Force in 2010

	Out of the Labor Force			In the Labor Force		
	Mean	Median	Std. Dev	Mean	Median	Std. Dev
2005 Holdings						
Total Wealth (incl. housing)	49,780	1,793	141,536	82,276	19,106	155,720
Financial Wealth	24,842	1,344	86,007	34,610	6,004	83,886
Liquid Wealth	6,443	0	18,603	12,909	1,344	31,711
Cash Holdings	2,767	0	7,400	6,210	1,344	13,097
Total Wealth/Income Ratio	0.78	0.13	2.7	1.23	0.48	2.0
Financial Wealth/Income Ratio	0.45	0.05	1.8	0.49	0.16	1.1
Liquid Wealth/Income Ratio	0.15	0	0.5	0.19	0.03	0.4
Cash Holdings/Income Ratio	0.06	0	0.2	0.10	0.03	0.2
Food Consumption	3,701	3,244	3,501	5,401	5,126	3,469
Nonhousing Debt	3,264	0	6,576	6,211	1,344	10,060
2009 Holdings						
Total Wealth (incl. housing)	27,925	82	87,555	60,968	11,463	125,738
Financial Wealth	16,696	49	5,765	28,027	4,191	73,287
Liquid Wealth	4,159	0	15,126	12,678	1,233	33,744
Cash Holdings	4,462	0	17,040	6,299	1,233	13,510
Total Wealth/Income Ratio	0.87	0.01	2.9	0.88	0.29	1.7
Financial Wealth/Income Ratio	0.45	0.0	1.8	0.37	0.12	1.1
Liquid Wealth/Income Ratio	0.19	0	0.7	0.18	0.03	0.4
Cash Holdings/Income Ratio	0.12	0	0.4	0.10	0.03	0.2
Food Consumption	3,510	2,991	3,035	5,375	5,062	3,113
Nonhousing Debt	3,077	0	6,405	7,752	1,643	12,595
Average Age in 2011		42.1			39.9	
Observations	132	132	132	3,218	3,218	3,218

Notes: Liquid wealth is the sum of cash, stock, and bond holdings. Wealth, debt, and spending data are in 2000 dollars where applicable. Income is after tax (disposable) family income.

The results in Table 6 are inconsistent with the idea that individuals 55 years-old and younger left the labor force following the Great Recession to enjoy a permanent early retirement. If this was truly the case, then exiters should have accumulated substantially more financial resources to sustain themselves in retirement than those individuals who remained in the labor market. Instead, the individuals who exit had mean and median financial wealth holdings prior to the Great Recession (2005) that are well below those of the individuals who remained in the labor force. Cash holdings and liquid wealth holdings (stocks, bonds, and cash)—the funds most easily accessed and used to sustain spending when one is OLF—are also lower, as is the value of OLF individuals' total wealth. Average wealth holdings relative to disposable income are similar whether or not the head of the household is OLF; however, the median wealth-to-income ratios are much higher for those individuals not OLF. In comparison, those individuals who exit the labor force have lower consumption and non-housing debt holdings, on average, than those individuals who remain in the labor force, suggesting that OLF individuals need less resources to finance expenditures and service their non-housing debt.

Qualitatively, the results are very similar when we consider individuals' 2009 wealth holdings. The financial positions of those who exit the labor force are, on average, much lower than the positions of individuals who remain in the labor force. As an additional check we examined the percentage of individuals who exited the labor force in 2010 who had total wealth in 2009 that was 10 times or more greater than their current income. Individuals with substantial wealth relative to their income likely are better able to sustain themselves for spending an extended period out of the labor force. Roughly three times as many of the household heads OLF in 2010 (9 percent) had substantial wealth relative to income compared to those household heads in the labor force in 2010 (3 percent). Still, the vast majority of household heads OLF in 2010 appear to lack the substantial resources necessary for having a sustainable early retirement and/or an extended period out of the labor force. The pattern of results is very similar when one compares the wealth holdings of OLF and employed individuals in 2004 (see Table A.5 in the Appendix), so the more limited resources of younger individuals exiting the labor force compared to those who remain in the labor force is not simply a post-Great Recession phenomenon. Overall, these findings are consistent with our earlier results suggesting that a nontrivial portion of younger individuals who exit the labor market will eventually re-enter it.

Individuals who exited the labor force in 2010 are also somewhat more likely to decrease their cash holdings between 2009 and 2011, and are almost 10 percentage points more likely to increase their debt levels over the same period. People OLF are also much more likely to

experience a decline in their financial wealth. Again, these patterns are consistent with individuals needing to spend down their resources when they exit the labor force and, given their relatively young ages, raises the question of whether this dissaving behavior and remaining out of the labor force are sustainable practices in the long run.

5 Conclusion

This memo examined issues related to the decline in the labor force participation rate including the likelihood that individuals will re-enter the labor market, the characteristics of those who exit, and whether any intra-household labor market substitution coincides with an adult member deciding to leave the labor force.

A key takeaway from the analysis is that a nontrivial share of workers under 45 years of age who exit the labor market appear to re-enter within four years. In addition, even though some spouses enter the labor force when their husband/wife exits, most individuals appear to leave the labor force without alternative income support. Individuals who exit the labor force also appear to be worse off financially than those who remain in the labor force, suggesting that people who exit are not, on average, wealthy individuals pursuing an early retirement.

In terms of policy implications, the results are consistent with a good portion of the non-demographics-related decline in the LFPR being cyclical. Back-of-the-envelope estimates of the cyclical share are broadly consistent with the split being two-thirds structural versus one-third cyclical. The results further suggest that there is likely more slack in the labor market than is reflected in the current unemployment rate, especially if the economy achieves a period of sustained high labor demand that entices former workers to re-enter the labor market. It will be interesting to see whether these patterns and implications hold when data become available from the PSID or elsewhere that permits examining individuals' labor market behavior during the latter years of the recovery.

References

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A Appendix Tables and Figures

TABLE A.1: Future Employment Status for Household Heads Not Working, Keeping House, or Disabled

	45–49 Year-Olds		50–54 Year-Olds	
	2yrs after	4yrs after	2yrs after	4yrs after
Percent in Labor Force	59.1	63.6	26.6	27.9
Percent Retired	22.7	15.9	57.0	59.5
Percent Disabled	11.4	11.4	11.4	11.4
Percent Keeping House	2.3	4.6	5.0	1.2
Percent Others	4.5	4.5	0.0	0.0
Observations	44	44	79	79

TABLE A.2: Future Employment Status for Household Heads Not Working, Keeping House, or Disabled (excluding 1980 to 1986)

	25 to 44 Year-Olds		45–54 Year-Olds		55–59 Year-Olds	
	2yrs after	4yrs after	2yrs after	4yrs after	2yrs after	4yrs after
Percent In Labor Force[a]	74.83	74.13	40.79	43.42	30.21	18.75
Percent Retired	4.90	4.90	46.05	47.37	64.58	76.04
Percent Disabled	4.90	6.29	6.58	5.26	5.21	5.21
Percent Keeping House	4.90	2.10	3.95	2.63	0	0
Percent Others	10.47	12.58	2.63	1.32	0	0
Observations	143	143	76	76	96	96

Notes: Excludes 1980s recession and recovery period (1980 to 1986). [a] Includes individuals who are working or looking for work. [b] Includes students and other individuals classified by the PSID as not working. The analysis pools workers across two recession and early recovery periods: 1991 to 1993, and 2001 to 2003, as well as 2007. The sample is restricted to those individuals who were working or looking for work immediately prior to the period in which they report not working.

TABLE A.3: Future Employment Status for Household Heads Who are Not Working[1]

	25–44 Year-Olds		45–54 Year-Olds		55–59 Year-Olds	
	2yrs after	4yrs after	2yrs after	4yrs after	2yrs after	4yrs after
Percent In Labor Force[a]	64.87	66.55	33.80	31.34	25.71	20.95
Percent Retired	1.85	3.36	25.35	25.70	49.05	59.05
Percent Disabled	13.61	13.78	30.28	31.34	18.57	13.81
Percent Keeping House	12.44	10.25	9.15	9.51	6.67	6.19
Percent Other Nonworker[b]	7.23	6.06	1.42	2.11	0	0
Observations	595	595	284	284	210	210

Notes: [1] Includes individuals who say that they are keeping house or are disabled in addition to other nonworkers. The [a] includes individuals who are working or looking for work. The [b] includes students and other individuals classified by the PSID as not working. The analysis pools workers across three recession and early recovery periods: 1980 to 1986, 1991 to 1993, and 2001 to 2003, as well as 2007. The sample is restricted to those individuals who were working or looking for work immediately prior to the period in which they report not working.

TABLE A.4: Employment History Statistics for Individuals 55 Years-Old and Under Who Were In and Out of the Labor Force in 2004

	Out of the Labor Force			In the Labor Force		
	Mean	Median	Std. Dev	Mean	Median	Std. Dev
Avg. Yearly Wks. Unemployed	5.6	4.0	6.2	2.0	0.3	3.5
Avg. Yearly Hours Worked	1368	1653	866	2121	2132	526
Average Age in Years		48.7			49.0	
Observations	76	76	76	1737	1737	1737

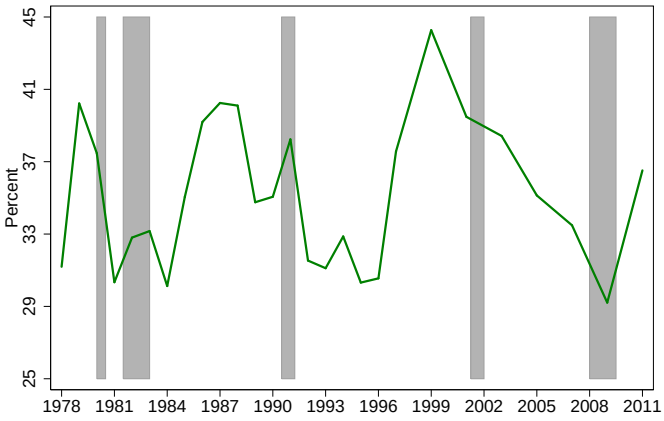
Notes: Labor market statistics are measured between 20 years and five years prior to 2004.

TABLE A.5: Wealth and Spending Data for Individuals 55 Year Olds and Younger Who Were In and Out of the Labor Force in 2004

	Out of the Labor Force			In the Labor Force		
	Mean	Median	Std. Dev	Mean	Median	Std. Dev
1999 Holdings						
Total Wealth (incl. housing)	36,470	4,509	76,713	75,868	23,469	142,412
Financial Wealth	20,491	1,947	53,156	46,369	8,711	113,272
Liquid Wealth	5,492	0	14,455	16,495	1,742	40,318
Cash Holdings	2,415	3	5,948	6,368	1,537	13,819
Total Wealth/Income Ratio	0.84	0.17	1.7	1.21	0.54	1.9
Financial Wealth/Income Ratio	0.39	0.08	0.9	0.69	0.23	1.5
Liquid Wealth/Income Ratio	0.16	0.0	0.6	0.26	0.04	0.6
Cash Holdings/Income Ratio	0.05	0.0	0.1	0.10	0.03	0.2
Food Consumption	4,235	4,130	3,488	5,753	5,329	3,545
Non-housing Debt	2,246	0	4,880	4,659	615	8,159
2003 Holdings						
Total Wealth (incl. housing)	27,925	82	87,555	60,968	11,463	125,738
Financial Wealth	16,696	49	5,765	28,027	4,191	73,287
Liquid Wealth	4,104	0	15,137	16,857	1,894	40,536
Cash Holdings	2,783	0	7,733	7,218	1,430	14,666
Total Wealth/Income Ratio	0.83	0.06	1.9	1.32	0.59	1.9
Financial Wealth/Income Ratio	0.17	0.0	1.0	0.60	0.21	1.2
Liquid Wealth/Income Ratio	0.13	0	0.5	0.25	0.04	0.6
Cash Holdings/Income Ratio	0.07	0	0.2	0.11	0.03	0.2
Food Consumption	3,934	2,955	4,111	5,621	5,415	3,272
Nonhousing Debt	4,322	0	10,235	5,591	947	9,310
Average Age in Years (in 2005)		42.3			40.7	
Observations	132	132	132	3,218	3,218	3,218

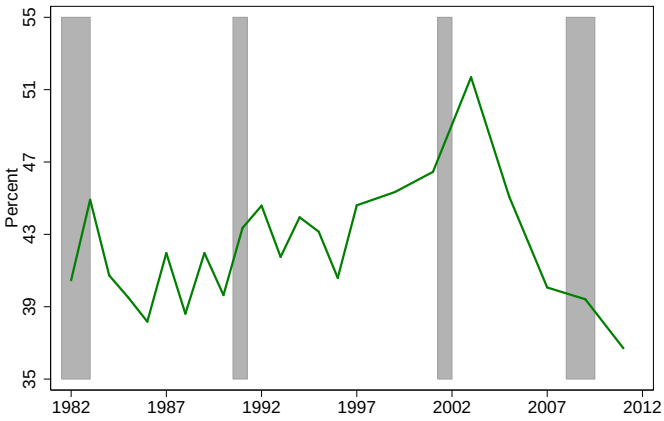
Notes: Liquid wealth is the sum of cash, stock, and bond holdings. Wealth, debt, and spending data are in 2000 dollars where applicable. Income is after tax (disposable) household income

FIGURE A.1: Percent of 55 Year-Olds and Under who Re-Enter the Labor Force after a Nonworking Stint Two Years Earlier



Source: Panel Study of Income Dynamics, public use dataset.
Notes: The sample is restricted to individuals who are in the sample in both the current year and 2 years earlier.

FIGURE A.2: Percent of 55 Year-Olds and Under Who Re-Enter the Labor Force after a Nonworking Stint Six Years Earlier



Source: Panel Study of Income Dynamics, public use dataset.
Notes: The sample is restricted to individuals who are in the sample in both the current year and 6 years earlier.