

Economic Recovery and Self-employment: The Role of Older Americans

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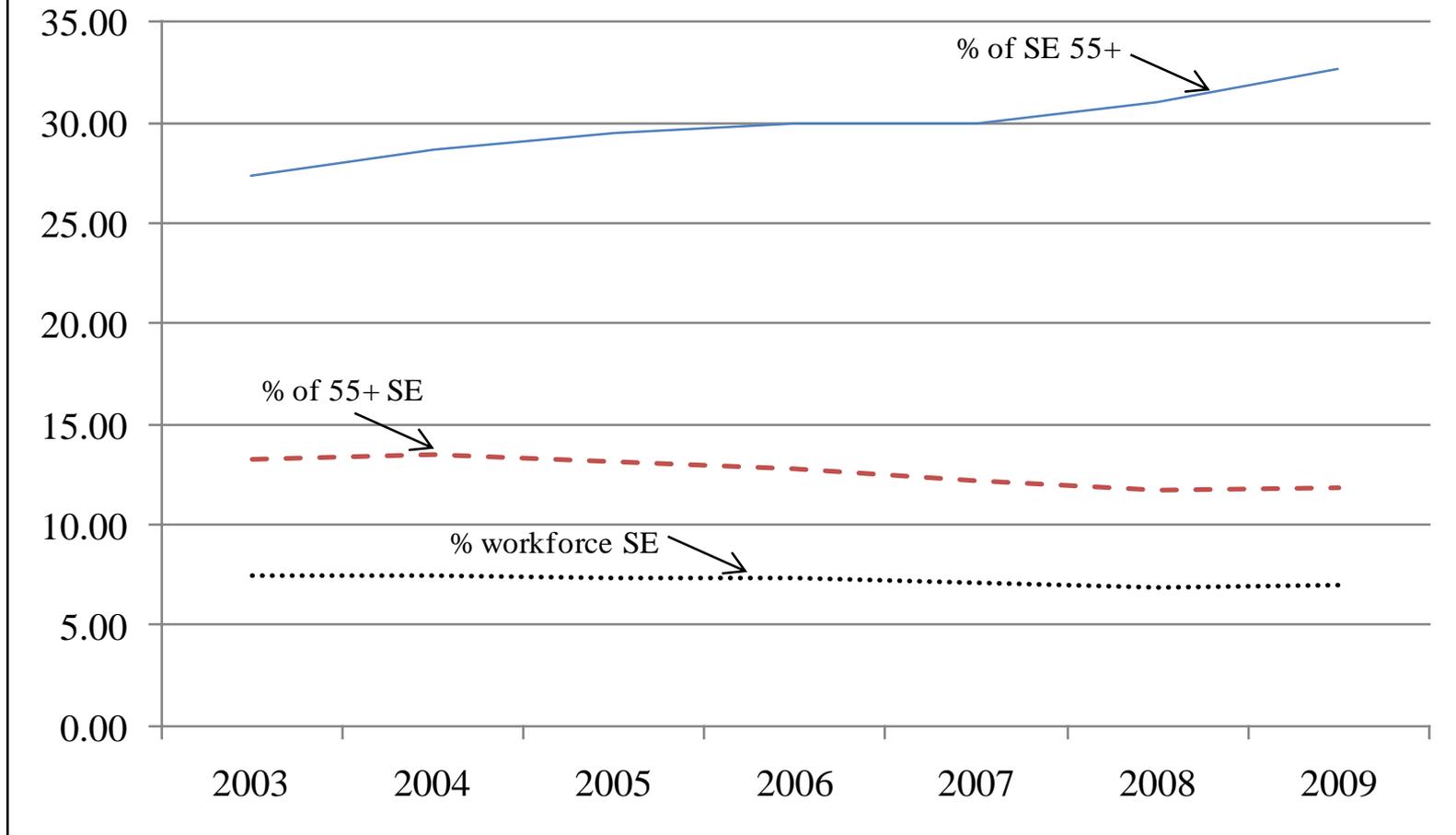
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Figure 1: Self employed and older workers



- Majority of self-employed workers are under the age of 55
 - Total number of self-employed individuals in US 10.3 million in 2003 and 9.8 million in 2009
 - The number of self-employed individuals aged 55 and over 2.8 million in 2003 and 3.2 million in 2009

Figure 2: Unemployment Rate (Seasonally Adjusted), 1948-2010

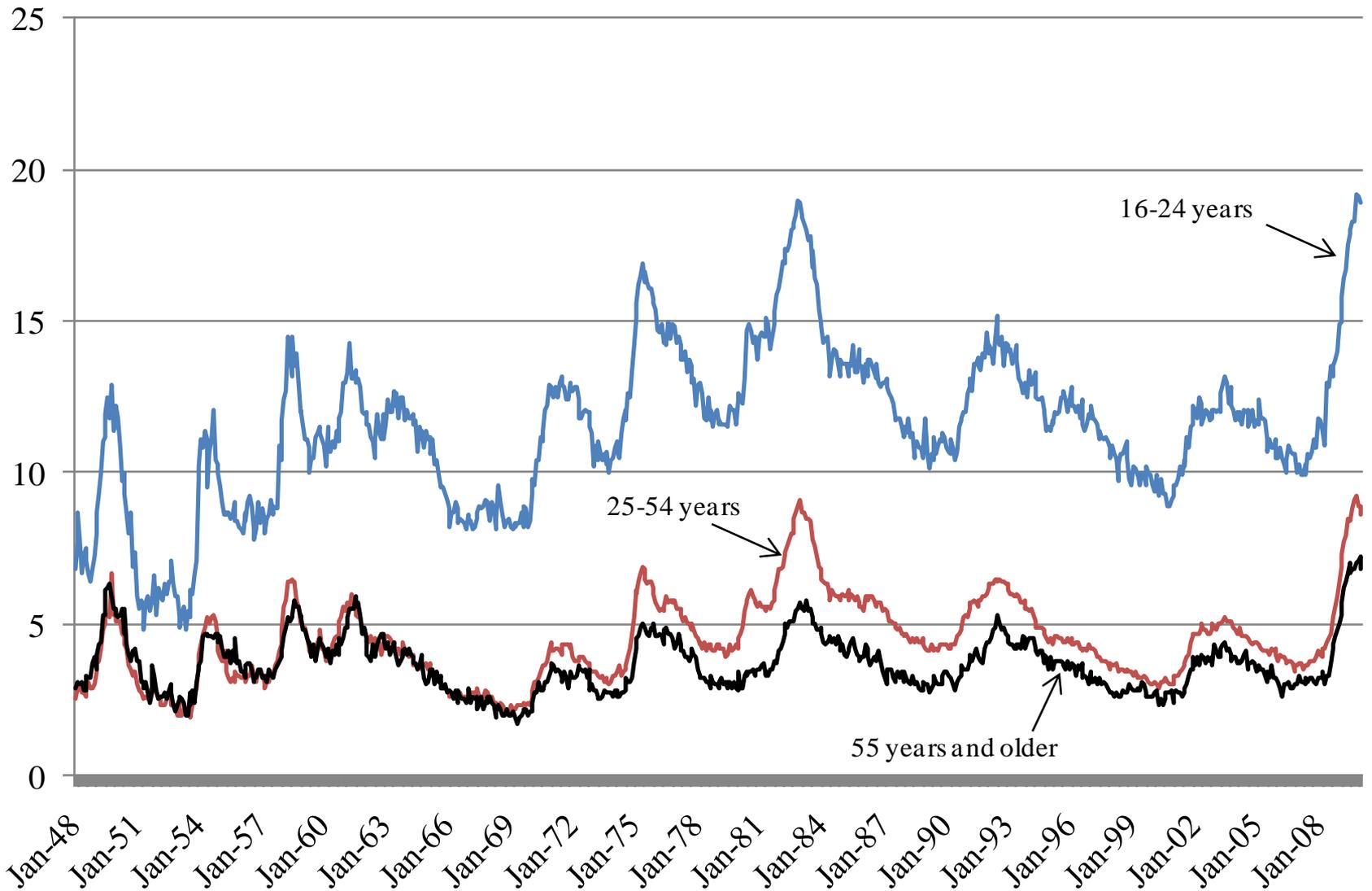
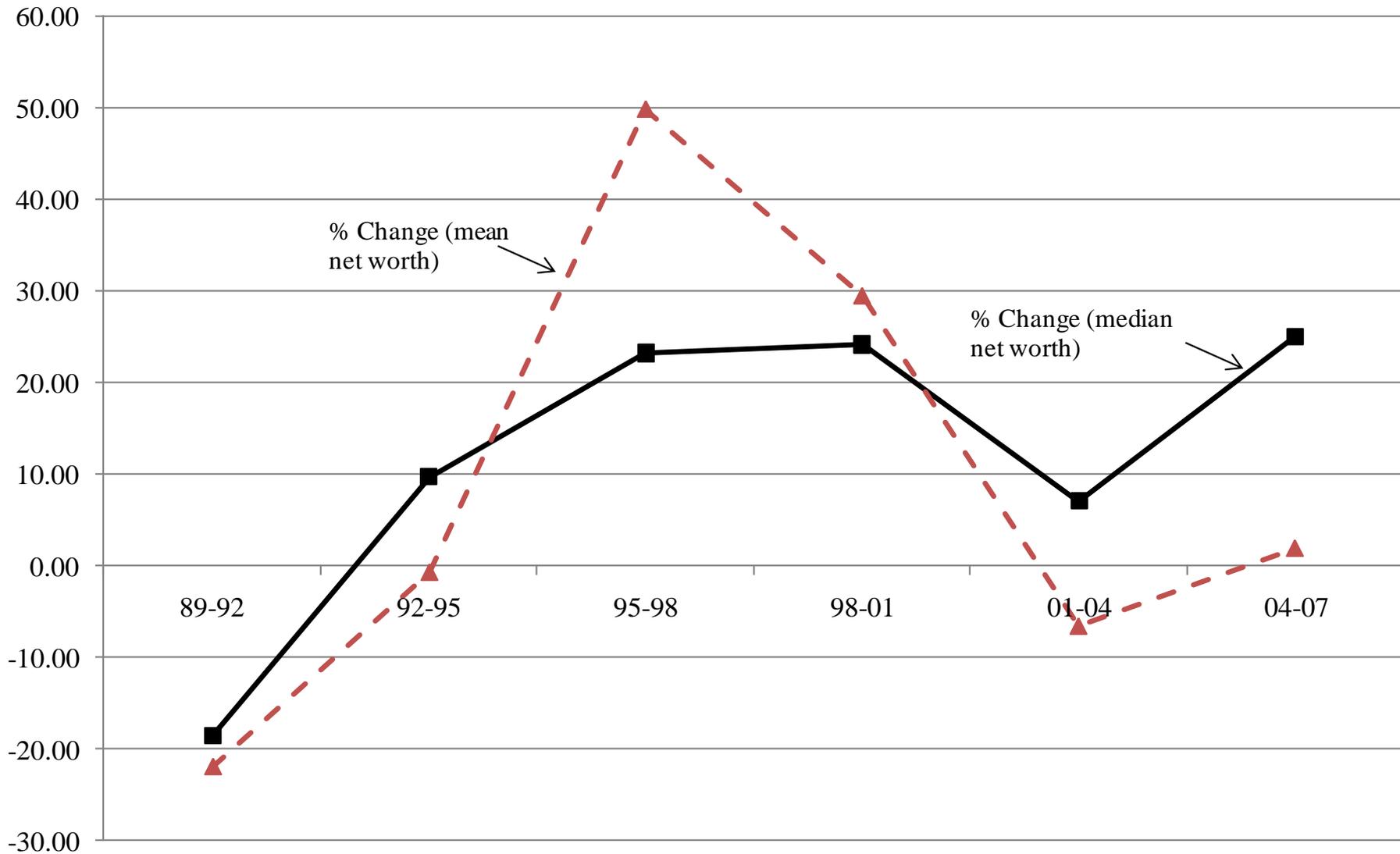


Table 1. Selected labor force measures, by age, February 2010, not seasonally adjusted

Characteristic	Total, 16 years and			
	older	16 to 24 years	25 to 54 years	55 years and older
Total unemployed (in thousands)	15,991	3,888	9,843	2,260
Percentage unemployed 27 weeks or longer	39.3	28.5	41.3	49.1
Median number of weeks unemployed	19.6	14.4	20.6	26.7
Average number of weeks unemployed	29.3	23.3	30.3	35.5

- Unemployment rate is lower for older workers, but older workers have struggled with longer unemployment spells than other individuals

Figure 3: Percentage change in family net worth of self employed



Background

- Research on self-employment
 - Push factors
 - Pull factors
- Research on labor supply decisions of older Americans
 - Self-employment
 - Retirement
- Our research: we examine whether older individuals were more likely to enter or exit self-employment during recessions using a difference-in-differences (DD) approach where we compare entries over time within individuals

Policy Relevance

- Recessions likely affect wage and salary job opportunities as well as wealth holdings
 - Older Americans possess a wealth of work experience and knowledge
 - But may face limited job opportunities as well as fewer years to recoup wealth losses
- Do self-employment rates change during recessions because of changes in entry or exit decisions?
 - Different policy responses

Preview of Results

- Use Health and Retirement Study (HRS)
- Choice of self-employment by older workers varies among male and female Americans
- Older men are generally more likely to *exit* self-employment than those who are younger but in a recession the exit probabilities are almost identical
- Entry for men is not different across ages during recessions, so self-employment among older men increases in a recession relative to other periods because of a reduction in exits
- Relative to younger females, older female workers were less likely to enter self-employment during recession
 - Unmarried women

Data

- Health and Retirement Study (HRS)
 - First collected in 1992 and most recently in 2008
 - Biennial survey of about 22,000 Americans over the age of 50 and their spouses
- RAND-HRS
 - Center for the Study of Aging, compiles public-use HRS data from various survey years into a panel of individual-level data available for download on the HRS website
 - Data contain all cohorts of interviewees beginning with the baseline group (born 1931 to 1941) through the Early Baby Boomer cohort (born 1948 to 1953)
- Contains detailed information about work, income, health and health care, retirement savings, and assets

Self-employed

- What does it mean to be self-employed?
 - Use self-reported measure of self-employment
- Entered self-employment if report self as self-employed in time t and either
 - Wage and salary job, unemployed, retired or out of the labor force in time $t-1$ (“at risk” of entering self-employment)
- Exit self-employment if report self as not self-employed in time t and self-employed in time $t-1$ (“at risk” of exiting self-employment)
- About 4 percent of men and women respondents entered self-employment
- About 9 percent of self-employed male respondents and 11 percent of self-employed female respondents exited self-employment over the time period

“At risk” of entering self-employment

Variable	Men				Women			
	Entry Sample		Enter Self-Employment		Entry Sample		Enter Self-Employment	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Enter Self-employment	0.041	0.197	1.000	0.000	0.040	0.196	1.000	0.000
Affected by a Recession	0.101	0.302	0.112	0.316	0.102	0.303	0.091	0.288
Age 60-64	0.457	0.498	0.515	0.500	0.421	0.494	0.450	0.498
White	0.841	0.366	0.831	0.375	0.797	0.402	0.848	0.360
Black	0.114	0.318	0.127	0.334	0.164	0.370	0.123	0.328
Highest Education								
high school	0.276	0.447	0.230	0.421	0.347	0.476	0.322	0.468
some college	0.222	0.415	0.230	0.421	0.249	0.433	0.220	0.414
college graduate	0.285	0.452	0.343	0.475	0.214	0.410	0.205	0.404
Foreign Born	0.101	0.301	0.088	0.284	0.091	0.288	0.115	0.320
Married	0.838	0.368	0.808	0.394	0.637	0.481	0.703	0.458
Wealth Quartiles (by wave)								
2nd Quartile	0.255	0.436	0.199	0.400	0.274	0.446	0.203	0.402
3rd Quartile	0.296	0.457	0.268	0.443	0.276	0.447	0.255	0.436
4th Quartile	0.308	0.462	0.402	0.491	0.257	0.437	0.346	0.476

- Men who entered self-employment were older, more likely to have a college degree, and more likely to be in the top wealth quartile
- Women who entered self-employment were more likely to have less than a high school education, more likely to be foreign born, more likely to be married, and more likely to be in the top wealth quartile

“At risk” of exiting self-employment

Variable	Men				Women			
	Exit Sample		Exit Self-Employment		Exit Sample		Exit Self-Employment	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Exit Self-employment	0.090	0.286	1.000	0.000	0.106	0.308	1.000	0.000
Affected by a Recession	0.111	0.314	0.110	0.313	0.119	0.324	0.099	0.300
Age 60-64	0.515	0.500	0.513	0.501	0.451	0.498	0.392	0.490
White	0.891	0.312	0.886	0.318	0.869	0.337	0.823	0.383
Black	0.078	0.269	0.088	0.284	0.090	0.286	0.127	0.334
Highest Education								
high school	0.239	0.427	0.230	0.421	0.324	0.468	0.232	0.423
some college	0.247	0.432	0.274	0.447	0.268	0.443	0.331	0.472
college graduate	0.336	0.472	0.326	0.470	0.221	0.415	0.243	0.430
Foreign Born	0.097	0.296	0.059	0.237	0.096	0.294	0.110	0.314
Married	0.843	0.364	0.832	0.375	0.714	0.452	0.635	0.483
Wealth Quartiles (by wave)								
2nd Quartile	0.141	0.348	0.242	0.429	0.183	0.387	0.243	0.430
3rd Quartile	0.239	0.426	0.271	0.445	0.255	0.436	0.276	0.448
4th Quartile	0.530	0.499	0.271	0.445	0.440	0.497	0.282	0.451

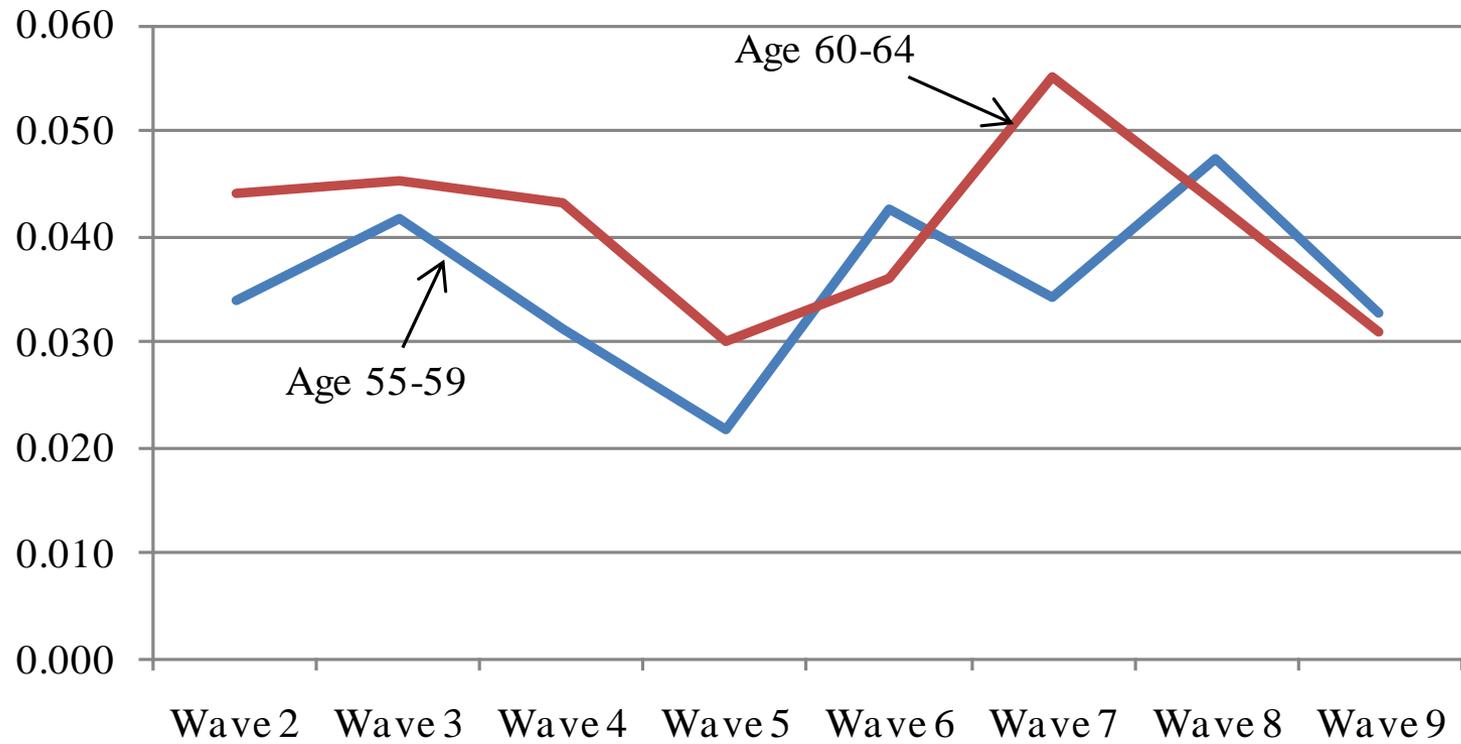
- Men who exit have are less likely to be foreign born, more likely to be in the manufacturing and professional services industries, and less likely to be in the top wealth quartile
- Women who exit self-employment are younger, more likely to be white, less likely to be married, and far less likely to be in the top wealth quartile

Empirical specification

- Summary statistics suggest that, at least for men, self-employment entries are higher and exits are lower for older Americans during recessionary periods
- Use DD approach
- We posit that the effects of limited job opportunities will be more pronounced for those aged 60 to 64 than those aged 55 to 59
 - Initial regressions: sample is those aged 55 to 64
 - We expect the similarity of individuals within age groups to be a more reasonable assumption when the age range is small

Difference in Differences

Aggregate Female: Enter Self-employment



Difference in Differences

Aggregate: Females Enter SE

	Age 55-59	Age 60-64	Difference	DD (relative to previous Wave)
Wave 2	0.034	0.044	0.010	
Wave 3	0.042	0.045	0.004	-0.006
Wave 4	0.031	0.043	0.012	0.008
Wave 5	0.022	0.030	0.008	-0.004
Wave 6	0.043	0.036	-0.007	-0.015
Wave 7	0.034	0.055	0.021	0.027
Wave 8	0.047	0.043	-0.004	-0.025
Wave 9	0.033	0.031	-0.002	0.002

Empirical specification

- Thus we compare self-employment outcomes for respondents when they are aged 55 to 59 versus 60 to 64 in a panel data model

$$y_{it} = \lambda_t + \eta Older_{it} + \delta Recession_{it} * Older_{it} + X'\beta + \Theta_i + \varepsilon_{it}$$

- y : Entry or exit from self-employment
- λ : Indicators for survey wave (including recessionary waves 6 and 9)
- $Older$: binary variable, which takes a value of 1 if the individual is in the 60-64 age group and zero when they are in the 55 to 59 age group
- $Recession * Older$: interaction term for the age 60 to 64 indicator and an indicator for recession, wave 6 or 9
- X : set of individual-level controls including marital status, wealth quartile, industry and spousal controls
- Θ : an individual-specific fixed effect

Entry Results

- Males
 - Self-employment decreases with age
 - Entry is less likely during recession
 - Respondents aged 60 to 64 were less likely to enter self-employment, but the probability of entry increased during recessions (not significant)
 - Entry more likely for those with higher wealth
- Females
 - Self-employment not correlated with age
 - Entry is more likely during recession
 - Respondents aged 60 to 64 were less likely to enter self-employment, and the probability of entry decreased during recessions (not significant)
- No significant differential effects on entry decisions

Exit Results

- Males
 - More likely to exit SE if in the 60 to 64 age group
 - But this increased probability is almost completely offset in a recession
 - Older men are generally more likely to exit self-employment than those who are aged 55 to 59 but in a recession the exit probabilities are almost identical
- Females
 - No evidence that exit rates of older females are differentially affected by recession
 - More likely to exit SE during a recession

Additional Results

- 51-69 Sample
 - Increase our sample size and test the sensitivity of our results to the inclusion of other age groups
 - Entry results for men are consistent
 - Men 60 to 69 are far less likely to exit self-employment during recessions compared to those in the younger age groups (51-59)
- 2001 Recession only
 - Older women (60-64) are generally less likely to enter self-employment than those who are aged 55 to 59 and in 2002 the difference increases
 - Older men (60-69) are generally more likely to exit self-employment than those who are aged 51 to 59 but in 2002 the exit probabilities decrease

Conclusion

- Recessions that limit wage and salary job opportunities and affect wealth holdings are likely to affect self-employment entry and exit decisions
- These effects differ for older Americans
 - Older men more likely to exit SE but during recessions these differences no longer exist
 - Older women are less likely to enter SE and this difference increases during recession
- Do different recessions (2001 vs 2007-09) have different effects?