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

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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

- 16-24 years
- 25-54 years
- 55 years and older
Unemployment rate is lower for older workers, but older workers have struggled with longer unemployment spells than other individuals.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Total, 16 years and older</th>
<th>16 to 24 years</th>
<th>25 to 54 years</th>
<th>55 years and older</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total unemployed (in thousands)</td>
<td>15,991</td>
<td>3,888</td>
<td>9,843</td>
<td>2,260</td>
</tr>
<tr>
<td>Percentage unemployed 27 weeks or longer</td>
<td>39.3</td>
<td>28.5</td>
<td>41.3</td>
<td>49.1</td>
</tr>
<tr>
<td>Median number of weeks unemployed</td>
<td>19.6</td>
<td>14.4</td>
<td>20.6</td>
<td>26.7</td>
</tr>
<tr>
<td>Average number of weeks unemployed</td>
<td>29.3</td>
<td>23.3</td>
<td>30.3</td>
<td>35.5</td>
</tr>
</tbody>
</table>
Figure 3: Percentage change in family net worth of self employed

% Change (mean net worth)
% Change (median net worth)
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

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

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

- 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

Age 55-59
Age 60-64
## Difference in Differences

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

Aggregate: Females Enter SE
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

\[ y_{it} = \lambda_t + \eta \text{Older}_{it} + \delta \text{Recession}_{it} \ast \text{Older}_{it} + X'\beta + \Theta_i + \varepsilon_{it} \]

• \( y \): Entry or exit from self-employment
• \( \lambda \): Indicators for survey wave (including recessionary waves 6 and 9)
• \( \text{Older} \): 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
• \( \text{Recession} \ast \text{Older} \): 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
• \( \Theta \): 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?