The Rise of In-and-Outs: Declining Labor Force Participation of Prime Age Men

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Federal Reserve Board of Governors

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The views expressed in this paper are those of the author and do not necessarily represent the views or policies of the Board of Governors of the Federal Reserve System or its staff.
In 1960, more than 97% of men ages 25–54 were either working or looking for work in any given month.

By 2015, rate fell to 88%.

Without decline there would be 5.5 million more men in labor force at any point in time.

Source: BLS. Line shows the monthly share of civilian noninstitutionalized men ages 25-54 either working or looking for work in the reference week (week of the 12th). Shaded bars indicate NBER-dated recessions.
**In-and-Outs**

**In-and-Outs** - men who are short-term or temporary nonparticipants

- Nonparticipants: not working or looking for work
  - Distinct from standard definition of unemployment
- Short-term ⇒ out of the labor force *less than two years* at a time

- Measure using Survey of Income and Program Participation (SIPP)
  - Follow monthly labor force status longitudinally for 2.5–5 years per individual
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Distribution of Nonparticipation

- In-and-outs between 1.7% and 2.7% of prime age men in 1984–85
- By 2011–2012, in-and-outs rose to 2.8–4.2%
- Also accompanied by rise of long-term dropouts

Source: SIPP 1984-2008, men ages 25-54. Observations within one year of the beginning or end of each SIPP panel are excluded.
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### Distribution of Nonparticipation

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<thead>
<tr>
<th>Nonparticipation Spell Duration (months)</th>
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</tr>
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<tbody>
<tr>
<td>1-4</td>
<td>0.8%</td>
</tr>
<tr>
<td>5-8</td>
<td>0.0%</td>
</tr>
<tr>
<td>9-12</td>
<td>0.0%</td>
</tr>
<tr>
<td>13-16</td>
<td>0.0%</td>
</tr>
<tr>
<td>17-20</td>
<td>0.0%</td>
</tr>
<tr>
<td>21-24</td>
<td>0.0%</td>
</tr>
<tr>
<td>25-28</td>
<td>0.0%</td>
</tr>
<tr>
<td>29-</td>
<td>0.0%</td>
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Rise of In-and-Outs

- In-and-outs rising consistently since 1980s
- Similar rise of in-and-outs seen in other longitudinal datasets, but not retrospective datasets (March CPS)
- In-and-out breaks mostly fall between long periods of employment

Source: SIPP matched longitudinally, 1984-2008 Panels (excluding 1989 Panel), excluding observations within one year of the beginning or end of panels to minimize censoring. Spells less than 24 months in length which are either left- or right-censored are categorized as having indeterminant duration.
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Are Labor Force Exits Costly?

- Well-documented “scarring” effect of unemployment
  - Jacobson et al., 1993; Davis & von Wachter, 2010
- Do in-and-outs suffer similar loss to future income?

- Compare evolution of in-and-outs’ income to:
  1. Unemployed Job Losers - permanent declines in earnings
  2. Non-Separating Workers - counterfactual if remained employed
- Measure monthly change in earnings for each group using SIPP from 6 months before to 24 months after event
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### Income of In-and-Outs Recovers

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<tr>
<th>Month Relative to Separation</th>
<th>In-and-Outs</th>
<th>Unemployed Job Losers</th>
<th>Non-Separating Workers</th>
</tr>
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<tr>
<td>Change in Personal Earnings (% rel. to t=-2)</td>
<td>-100</td>
<td>-50</td>
<td>0</td>
</tr>
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**Source:** SIPP 1984-2008, men ages 25-54 employed in month 0 with earnings exceeding $140 in 2016 dollars and employed again by at least month 12. Each group differs only in reported labor force status in month 1. In-and-outs report nonparticipating in month 1; unemployed job losers report being unemployed for reason of firing, layoff, or plant closing; and non-separating workers report being employed. Earnings for all groups are normalized as the percentage change relative to earnings in month -2. Standard errors are clustered at the individual level.
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### Extra Time Spent Mostly on Leisure

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<tr>
<td></td>
<td>In LF</td>
<td>Out of LF</td>
<td></td>
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<tr>
<td>Child Care</td>
<td>0.3</td>
<td>0.7</td>
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Source: American Time Use Survey, 2003-2015, matched to basic monthly CPS. Subcategories listed in grey italics. Categories are not exhaustive, so time use may not add to 24 hours. Unemployed in-and-outs have been excluded for comparability. Unemployed in-and-outs have time use similar to men out of the labor force. Each category includes travel time associated with that activity. All statistics are computed using survey weights.
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Why are In-and-Outs More Common Today?

- Economic theory predicts that incentives to work (e.g. wages) affect employment
  - Traditionally, key margin is hours worked per week
  - With fixed costs of work, in-and-outs are key margin (Prescott et al., 2009)

- Useful to separate:
  1. Rising in-and-outs due to lower incentives to work (Labor Demand)
  2. Rising in-and-outs holding incentives to work constant (Labor Supply)
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Source: CPS men ages 25-54 excluding dropouts, 1977-2015. Individuals are assigned to a wage decile based on the annual wage distribution in their year. For each period, the average temporary nonparticipation rate and average real wage are computed for each decile and plotted, pooling individuals across years within the period. Nominal hourly wages are deflated by PCE price index. Missing wages are imputed using the method of Blau & Kahn (2007).

- Shifts in wage-participation schedule separate demand and supply
- Most growth of in-and-outs occurred without wage declines
- Less than 20% of rising in-and-outs could be explained by lower labor demand
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Conclusion

- In-and-outs rising, contrary to conventional story
- Distinct margin of labor supply; not unemployment
- Declining labor demand explains little of the rise of in-and-outs