Living Arrangements, Doubling Up, and the Great Recession: Was This Time Different?

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Hilary Hoynes (UC Berkeley)

AEA session on
How Did the Safety Net Perform During the Great Recession?
January 5, 2015
• The title of this paper to the submitted session was “Income Support and Poverty During the Great Recession”

• Since this session is a “papers and proceedings” session, the papers are short

• So ... I thought I would expand my presentation to also include some results on the original topic “income support and poverty during the GR”
Living Arrangements, Doubling Up, and the Great Recession: Was This Time Different?
Our paper

• We examine the relationship between the Great Recession and the private safety net
• In particular we focus on living arrangements: Household size, doubling up, and young adults living alone
• To put these results in perspective we take a historical approach, relying on data (and cycles) back to 1980
• We test whether the patterns that we see in the Great Recession are what we would expect given the historical experience
During the Great Recession there was significant media attention to young adults’ living conditions.

Boomerang Babies: Record Numbers of Young Adults Live with Parents at Terrible Cost

*Facing big debts and job insecurity, today's young people can't get started in life.*

**DEMOGRAPHICS**

**STUDY: More Young Adults Living With Parents**
Overview of our approach

• Two sets of results:
  1) Estimate the response of living arrangements to cycles
  2) Test whether responses in the GR are different from earlier cycles

• Empirical strategy:
  – Exploit differences in timing and severity of cycles across states (state panel fixed effects model)
  – Use state unemployment rate as the measure of cycle

• Outcomes we explore: Household size, doubling up, young adults living independently

• Part of a broader research agenda on the effects of the GR on poverty, the social safety net, and family well-being
Preview of the findings

• Measures of living arrangements are cyclical: In recessions, household size grows and the propensity for young adults to live independently falls.

• However, the magnitudes of the behavioral adjustments are small and they are often statistically insignificant.

• We find no evidence that the response is different in the Great Recession. The decline in young adults living independently in the Great Recession is similar to what would have been predicted from prior patterns.
Outcome measures:

• Young adults living independently
  – Living alone or together only with their own nuclear family (spouse and/or child) or other non-relatives
  – Defined for those ages 18-30
• Number of persons in the household
• Number of families in the household
• Other measures we looked at: number of “extra” adults in the household, young adults (18-24) enrolled in school part or full time, young adults who completed various education levels
Data

- CPS ASEC, survey years 1981-2014
- Captures income and program participation for prior calendar year and demographics at survey (March)
- Collapse to state-year cell using CPS weights
- Measure of the cycle: State annual unemployment rate
- We match the living arrangements at survey with the unemployment rate for the prior calendar year
- Our analysis captures the major recessions (two back to back) in the early 1980s, the moderate recessions of the early 1990s and 2000s, and the Great Recession
Young Adults 18-24 Living Independently

Year

Fraction

Unemployment Rate

1980 1990 2000 2010

Young adults, 18-24  Unemployment Rate
• Overall decreasing trend of living independently throughout the period
• Higher rate of living independently for older young adults (25-30) compared to younger young adults (18-24)
• Steeper decrease in living independently in 1980s and GR
• The recent decrease begins in 2005, before the GR
• To get in deeper beyond the simple time series trends, we take advantage of the variation across U.S. states in the timing and severity of cycles. During the Great Recession:

<table>
<thead>
<tr>
<th>States with lowest incr in UR</th>
<th>States with highest incr in UR</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Dakota</td>
<td>Nevada</td>
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<tr>
<td>+0.2pp</td>
<td>+8.3pp</td>
</tr>
<tr>
<td>Alaska</td>
<td>Florida</td>
</tr>
<tr>
<td>+1.0pp</td>
<td>+6.4pp</td>
</tr>
<tr>
<td>Nebraska</td>
<td>California</td>
</tr>
<tr>
<td>+1.1pp</td>
<td>+6.3pp</td>
</tr>
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</table>
Differences across states in the GR

• Relate changes in unemployment rates across states in the Great Recession to changes in young adults living independently.
  – Should capture basic relationship in media-- increase in living at home/decline in living independently with increase in unemployment rates

• Changes over years 2007 to 2011 (across trough period)
Share of Young Adults Living Independently and State UR
Change from 2007 to 2011


- Black dots represent Young Adults 18-24
- Blue circles represent Young Adults 25-30
Little relationship between the severity of the state UR increase and changes in young adults living alone

Modest negative relationship for older group (25-30)

Essentially zero effect for 18-24 year olds
Empirical model

• State panel fixed effects model; cycle measured by state-year unemployment rate

\[ y_{st} = \beta UR_{st} + \alpha_s + \delta_t + \varepsilon_{st} \]

  – Standard errors clustered on state, weighted using sum of person weights for members of the cell

• Is GR different from 1980s cycle? Are the responses what would expect based on the historical evidence?

  – Compare GR cycle [2007-2013] to early 1980s cycle [1980-1989] (includes also the rest of the period)

\[ y_{st} = \beta_{80} D_{80} UR_{st} + \beta_{GR} D_{GR} UR_{st} + \beta_{O} D_{O} UR_{st} + \alpha_s + \delta_t + \varepsilon_{st} \]
<table>
<thead>
<tr>
<th></th>
<th>All young adults</th>
<th>Ages 18-24</th>
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<th>Number of persons</th>
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<tr>
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<tr>
<td></td>
<td>All nonelderly persons</td>
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<td></td>
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<tr>
<td><strong>A. Pooled Estimates</strong></td>
<td></td>
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</tr>
<tr>
<td>UR</td>
<td>-0.403</td>
<td>-0.369</td>
<td>-0.427</td>
<td>2.127*</td>
<td>0.425</td>
</tr>
<tr>
<td></td>
<td>(0.210)</td>
<td>(0.195)</td>
<td>(0.217)</td>
<td>(0.973)</td>
<td>(0.265)</td>
</tr>
<tr>
<td>% Impact</td>
<td>-0.74%</td>
<td>-1.03%</td>
<td>-0.57%</td>
<td>0.59%</td>
<td>0.45%</td>
</tr>
<tr>
<td>Full Period Mean</td>
<td>0.546</td>
<td>0.360</td>
<td>0.754</td>
<td>3.595</td>
<td>0.950</td>
</tr>
<tr>
<td>N</td>
<td>1734</td>
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A 1 percentage point increase in unemployment rate leads to an decrease of 0.4 on a base mean of 54.6 for a 0.7 percent decrease in the share of young adults living independently

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Full period results

• Young adults
  – Small insignificant decline in the probability of living independently with an increase in the unemployment rate
  – Slightly larger in magnitude for younger group (18-24), a 1 percentage point increase in the unemployment rate leads to a 1% decline in living independently for 18-24 year olds, a 0.6% decline for the 25-30 year olds
  – Small but significant increase in the probability 18-24 year olds attend college part or full time [not shown]

• Full non-elderly population
  – Marginally significant small effect on number of persons in the household (0.6% increase in number of persons for a 1 percentage point increase in unemployment)
  – Smaller and insignificant effect on number of families living together
### Young adults living Independently (with no other relatives besides husband/wife or kids)

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<td></td>
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<td></td>
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</tr>
<tr>
<td><strong>B. By Period (1980s, GR, Rest of Period)</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UR x 1980s</td>
<td>-0.268</td>
<td>-0.265</td>
<td>-0.313</td>
<td>2.415***</td>
<td>0.355**</td>
</tr>
<tr>
<td></td>
<td>(0.162)</td>
<td>(0.173)</td>
<td>(0.156)</td>
<td>(0.685)</td>
<td>(0.132)</td>
</tr>
<tr>
<td>UR x Rest of period</td>
<td>-0.365</td>
<td>-0.335</td>
<td>-0.496*</td>
<td>1.903</td>
<td>0.442</td>
</tr>
<tr>
<td></td>
<td>(0.251)</td>
<td>(0.283)</td>
<td>(0.218)</td>
<td>(1.427)</td>
<td>(0.263)</td>
</tr>
<tr>
<td>UR x GR</td>
<td>-0.728</td>
<td>-0.621</td>
<td>-0.628</td>
<td>1.743</td>
<td>0.546</td>
</tr>
<tr>
<td></td>
<td>(0.395)</td>
<td>(0.387)</td>
<td>(0.462)</td>
<td>(1.716)</td>
<td>(0.563)</td>
</tr>
<tr>
<td>% Impact, 1980s</td>
<td>-0.49%</td>
<td>-0.74%</td>
<td>-0.41%</td>
<td>0.67%</td>
<td>0.37%</td>
</tr>
<tr>
<td>% Impact, GR</td>
<td>-1.33%</td>
<td>-1.72%</td>
<td>-0.83%</td>
<td>0.49%</td>
<td>0.58%</td>
</tr>
<tr>
<td>p-value 1980s = GR</td>
<td>0.228</td>
<td>0.385</td>
<td>0.462</td>
<td>0.640</td>
<td>0.698</td>
</tr>
<tr>
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Is the GR different from the 1980s cycles?

- Young adults
  - Effects of cycle on living independently slightly larger in magnitude in GR than 1980s cycles but differences not significant, and impacts still small

- Non-elderly population
  - Effects not significantly different and similar in magnitude for number of persons per HH, number per family
Conclusion

• One dimension of the “private safety net” is the ability to adjust by changing living arrangements.
• There has been much attention to the large share of young adults living at home in the GR.
• We examine the cyclicality of various measure of living arrangements and find that they exhibit very modest cyclicality, and not much is different in the GR.
Some findings from our broader research agenda on “Income Support and Poverty During the Great Recession”
1) With the massive employment losses in the Great Recession, how were the most disadvantaged affected?

2) What role did the social safety net play in protecting vulnerable families from income losses?

3) How did changes in policies in the years prior to the Great Recession (welfare reform) and the policy changes during the Great Recession (UI extensions, stimulus) affect these outcomes?

- We use this as a “stress test” to identify the what is working well (or not well) in the safety net moving forward
The safety net we consider
(our focus is on nonelderly families)

• Cash welfare AFDC/TANF [means tested]
• Food Stamps [means tested]
• The EITC [means tested, requires employment]
• Unemployment Compensation [social insurance]
Reforms in the safety net, prior to Great Recession

• *The decline of welfare*
  – AFDC had a guaranteed income (never very high) and a high benefit reduction rate (~100%). Eligibility was limited to single mothers.
  – This led to a (longstanding) concern that AFDC discourages work and marriage, and causes long term dependence.
  – Welfare reform in 1996 → time limits, work requirements, lower tax rates → caseloads at historic low [Now TANF]

• *The rise of the EITC*
  – Transition from *out-of-work* assistance to *in-work* assistance
  – Refundable tax credit for low income families
  – Benefits focused on families with children
  – Requires earnings: strong incentives for employment
The response to the Great Recession: The Stimulus and the Safety Net

- **Unemployment Benefits**: Emergency program raised UI benefit durations to as long as 99 weeks (usual maximum is 26 weeks); shifts costs from states to federal government
- Increase in **unemployment benefits** ($25/week)
- Increase in **Food Stamp** benefits (13.6%, e.g. $80/month for family of 4)
- Increase in **EITC** (for families with 3+ children)
- New tax credit (**Making Work Pay**), up to $400 per worker/yr
A 1 percentage point increase in unemployment rate leads to an 18 percent increase in UI participation in the Great Recession.

Source: Bitler and Hoynes “The More Things Change, the More They Stay the Same? The Safety Net and Poverty in the Great Recession,”

*Note coefficient on “rest of period” omitted here.*
Findings:

- Less protection in GR for cash welfare (TANF)
- More protection in GR for UI and (not significantly) food stamps
- EITC not responsive to cycles
Illustration of these results for TANF
State Scatterplot of ΔUR against %ΔTANF caseload/pop

Cash Welfare (TANF) and Unemployment Rate Change between 2007 and 2009

Little relationship between changes in state labor market conditions and TANF in GR
Comparison of Food Stamps and TANF in GR
State Scatterplot of $\Delta UR$ against $\% \Delta caseload/pop$

Cash Welfare (TANF) and Unemployment Rate
Change between 2007 and 2009

TANF

Food Stamps

Food Stamps and Unemployment Rate
Change between 2007 and 2009
Safety nets and the Great Recession: Bottom Line

- Cash welfare (TANF) provided no protection in the Great Recession
- Unemployment Insurance and Food Stamps provided more protection in the Great Recession (compared to a similar shock to UR in earlier recessions)
- But how does this translate to family wellbeing?
Descriptive illustration of the total effect of the social safety net: Change in poverty rates in GR period.

Source: Bitler, Hoynes and Kuka “Child Poverty in the Great Recession.”
State Scatterplot of Change in UR against Change in Child Poverty, 2005-2007 to 2010-2012

Source: Bitler, Hoynes and Kuka “Child Poverty in the Great Recession.”
• We extend this to examine the effects of cycles across the distribution of income-to-poverty ratio.

• As before, two sets of results:
  1) Estimate the response to cycles over the full period (1980-2013)
  2) Test whether responses in the GR are different from earlier cycles
Source: Bitler and Hoynes “Heterogeneity in the Impact of Economic Cycles and the Great Recession: Effects Within and Across the Income Distribution
25% of households have income above 400%
Percent Impact of Unemployment Rate on ATTI Poverty
<18 Years Old, 1980s vs. Great Recession

Children
THE BAD NEWS
• The share of nonelderly falling below 50% poverty (extreme poverty) is more affected than we would have expected from prior cycles
  – This seems directly related to welfare reform

THE GOOD NEWS
• The share of children falling below 75% and 100% poverty is less affected than we would have expected from prior cycles
  – This may be tied to food stamps
Conclusions on “Stress Test” of Safety Net

• The U.S. safety net for extreme poverty has been weakened

• In-work benefits (the EITC) are not well suited to providing protection against job loss

• With the decline of out-of-work assistance (e.g., welfare reform) accompanying the increase in in-work assistance, the net effect is less protection against job and income losses for the most disadvantaged

• A large and targeted stimulus can make a difference