How Extended Unemployment Benefits for Older Workers Affect Labor Market Exit, Disability Enrollment, and Social Security Claims

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Research Question

• How do changes in the potential duration of unemployment insurance (UI) benefits affect
  • the incidence of labor market exit of older unemployed?
  • claiming of disability (DI)/old-age benefits of older unemployed?
Motivation

• Extending the duration of UI benefits is an important policy instrument to ease economic hardship of job losers
  • Not clear how such measures interact with other transfer programs

• More generous UI benefits can have two effects:
  • may reduce enrollment into other programs (program substitution)
  • may increase labor market exit by sequential take-up of other programs (program complementarity)
What We Do

• We study program interaction effects in Austria

• We exploit the Regional Extended Benefit Program (REBP)
  • Extended UI benefits from 1 to 4 years for some unemployed
  • Eligible were unemployed workers, age 50 or older, with residence in regions with a strong steel sector
  • Extension effective from 1988 to 1993 (1991 in some regions)

• Institutional comparison to U.S.
  • Similar social security system and aging population structure
  • DI & old-age benefits more generous in Austria: older unemployed more likely to claim DI & old-age benefits compared to U.S.
Treatment and Control Regions

- Control regions (CRs)
- Treated regions 1 (TR1s)
- Treated regions 2 (TR2s)
Expected Impact of the REBP

• Expected impact of UI benefit extension on unemployment exits:

  • Age 50-54: Exits to DI ↑
    • Eligibility criteria for DI benefits relaxed at age 55
    • Use extension to bridge time until age 55 (complementarity)

  • Age 55-57: Exits to old-age benefits ↑, exits to DI ↓
    • Earliest eligibility age for old-age benefits is 60
    • Use extension to bridge time until age 60 (complementarity)
    • UI becomes more attractive relative to DI (substitution)
Data and Outcome Variables

- **Data Sources**
  - Austrian social security and unemployment register data
  - Labor market and earnings histories from 1972-2012

- **Sample**: unemployed men aged 50-57 who started a UI spell between 1985 and 1995

- **Key outcome variables**
  - Early retirement: Indicator(claim DI or old-age benefits after UI spell)
  - Exit to DI benefits: Indicator(claim DI benefits after UI spell)
  - Exit to old-age benefits: Indicator(claim old-age benefits after UI spell)
Difference-in-Differences Estimation Design

- **Treatment group:** Unemployed men, age 50-57, living in regions with UI benefit extension (treated regions, TRs)

- **Control groups:** Unemployed men, age 50-57, living in regions without UI benefit extension (control regions, CRs)

- **Compare unemployed men in TRs and CRs before, during, and after UI benefit extension**
Impact on Early Retirement

Before REBP

During REBP

After REBP

Fraction

Age at UI entry

CRs  TRs

CRs  TRs

CRs  TRs
Impact on Exits to DI Benefits

Before REBP

During REBP

After REBP

Fraction

Age at UI entry

CRs

TRs

Age at UI entry

CRs

TRs

Age at UI entry

CRs

TRs
Impact on Exits to Old-Age Benefits

Before REBP

During REBP

After REBP

Fraction

Age at UI entry

CRs

TRs

CRs

TRs

CRs

TRs
Estimation Results, Men Age 50 – 57

<table>
<thead>
<tr>
<th></th>
<th>Age 50-54</th>
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<th>Age 55-57</th>
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<tbody>
<tr>
<td></td>
<td>Early retirement</td>
<td>Disability benefits</td>
<td>Old-age benefits</td>
<td>Early retirement</td>
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<tr>
<td>REBP introduced</td>
<td>0.162***</td>
<td>0.122***</td>
<td>0.034**</td>
<td>0.148***</td>
</tr>
<tr>
<td>((D \times TR))</td>
<td>(0.018)</td>
<td>(0.022)</td>
<td>(0.017)</td>
<td>(0.024)</td>
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<tr>
<td>REBP abolished</td>
<td>-0.155***</td>
<td>-0.098***</td>
<td>-0.043***</td>
<td>-0.121***</td>
</tr>
<tr>
<td>((A \times TR))</td>
<td>(0.018)</td>
<td>(0.021)</td>
<td>(0.009)</td>
<td>(0.019)</td>
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<tr>
<td>(R^2)</td>
<td>0.204</td>
<td>0.171</td>
<td>0.092</td>
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<td>Mean TRs pre-REBP</td>
<td>0.265</td>
<td>0.210</td>
<td>0.037</td>
<td>0.497</td>
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<tr>
<td>No. of Obs.</td>
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<td>56,102</td>
<td>56,102</td>
<td>21,972</td>
</tr>
</tbody>
</table>
Welfare Implications

• Was the REBP a welfare-improving policy?

• Trade-off:
  • More generous UI provides better insurance during job loss
  • More generous UI can be very costly by reducing labor supply

• We assess this trade-off by incorporating program complementarity and substitution effects
  • REBP only a welfare-improving policy if individuals are very risk averse
Summary

• Exploit large regional extension in the potential duration of UI benefits

• Main findings:
  1. Extension has large disincentive effects for older unemployed
  2. Reason is program complementarity: UI can be used as a bridge to other programs
  3. Program substitution effect is quantitatively important, but has small effect on budget