Disparities in Disability and the Ability to Work: Implications for Increasing the Retirement Age

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Symposium: Extending Working Life – Possible for Everyone?

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Background

• Aging workforce
• Policies and macroeconomic changes encourage staying in workforce
• Private health insurance need until 65
• Shift from defined benefit pension to defined contribution
• Near elimination of mandatory retirement age
• Increase in age for full social security from 65 to 67
• > 40% of working age US adults have chronic conditions
• Thus, work disability is increasingly important
Objectives

• Examine work disability prevalence at older working ages
• Explore educational and racial differences
• Use nationally representative sample of African Americans and whites living in community in United States
Panel Study of Income Dynamics (PSID)

- World’s longest household panel survey, 1968-present
- \( n = 16,115 \)
- 261,804 person years
- National Death Index
- 33 years of participants’ reports of monthly work status (1981-2013) and analogous prior annual reports (1968-1980)
Disability measures, any of:

1. Work disability, 1968-2013: physical or nervous problem that limited type or amount of work

Questions and coding:

“Do you have any physical or nervous condition that limits the type of work or the amount of work you can do?”

“Does this condition keep you from doing some types of work?”

“How much does this condition limit the amount of work you can do?

Moderate: impairment limited work at least “somewhat” (“just a little” not included)

Severe: impairment limited work “a lot” or could not work
Disability measures continued

2. Difficulty doing any of seven activities of daily living (ADLs), 1992-2013

3. Permanent disability: based on participants’ reports of being permanently disabled, validated longitudinally, 1968-2013
Controls

- Education, < high school, or ≥ high school
- Age, age-squared
- Gender
- Separate results for African Americans and whites
Analytical Strategy, Overview

1. Estimate annual disability transition probabilities using multinomial logistic Markov chain analysis

2. Conduct microsimulations

3. Analyze simulated populations
Markov model & microsimulation

- Six-state multinomial logistic Markov models estimated annual transition probabilities for combinations of work status, disability status, and mortality

- Using the probabilities from the Markov model, simulated large populations: annual work and disability status for each individual, age 20 through death

- Bootstrapping estimated variation in microsimulation results

- Analyzed simulated populations for outcomes
## Results

<table>
<thead>
<tr>
<th></th>
<th>Education:</th>
<th>African American</th>
<th>White</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td><strong>Women</strong></td>
<td></td>
<td></td>
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<tr>
<td>Life expectancy, age 50</td>
<td></td>
<td>78.3</td>
<td>80.5</td>
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<tr>
<td>Retirement age, mean</td>
<td></td>
<td>58.3</td>
<td>60.4</td>
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<tr>
<td><strong>Men</strong></td>
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<tr>
<td>Life expectancy, age 50</td>
<td></td>
<td>73.5</td>
<td>75.4</td>
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<tr>
<td>Retirement age, mean</td>
<td></td>
<td>55.4</td>
<td>57.7</td>
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Percent Reporting Any Disability at Retirement

<table>
<thead>
<tr>
<th></th>
<th>Women</th>
<th>Men</th>
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</thead>
<tbody>
<tr>
<td>Low Ed African American</td>
<td>28.0</td>
<td>32.6</td>
</tr>
<tr>
<td>High Ed African American</td>
<td>21.1</td>
<td>27.0</td>
</tr>
<tr>
<td>Low Ed White</td>
<td>34.1</td>
<td>41.2</td>
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<tr>
<td>High Ed White</td>
<td>24.9</td>
<td>32.9</td>
</tr>
</tbody>
</table>
Work Status and Disability
Percent of Years, Ages 20-65, Women

- African American
  - Low Ed: 31.5%
  - High Ed: 19.2%

- White
  - Low Ed: 28.9%
  - High Ed: 17.2%

% of years unemployed not shown
Work Status and Disability
Percent of Years, Ages 20-65, Men

<table>
<thead>
<tr>
<th></th>
<th>Low Ed</th>
<th>High Ed</th>
<th>Low Ed</th>
<th>High Ed</th>
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</thead>
<tbody>
<tr>
<td>African American</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not working</td>
<td>27.2%</td>
<td>15.6%</td>
<td>26.1%</td>
<td>14.7%</td>
</tr>
<tr>
<td>Not disabled</td>
<td></td>
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</table>

% of years unemployed not shown
Discussion

• Substantial percentages of women and men have a disability at older working ages

• Women and men with less education are more likely than those with more education to have work disability throughout working life

• Work disability disparities associated with education are much larger than those associated with race

• Among women and men nearing retirement age, large percentages report having a functional limitation or work disability
Limitations

• Self-reports of work disability may be subject to error

• Small differences in wording of work disability questions may lead to different estimates than those of other surveys

• Models did not control for occupation or occupational risks
Conclusions and Implications

• Many adults have disabilities over long periods of working life, particularly at later working ages

• People with less education are more likely to work in jobs with occupational health risks (e.g., machine operations, construction, helping professions, cleaning)

• Proposals to address solvency of Social Security by raising retirement age are likely to differentially disadvantage people with low education, raising questions about fairness of a “one size fits all” policy
The data for this study are available from the Panel Study of Income Dynamics, http://psidonline.isr.umich.edu/default.aspx.

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