The lost ones: the opportunities and outcomes of white, non-college-educated Americans born in the 1960s

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• Most cohorts are better off than the previous one because of growth, but not all
Motivation

- Most cohorts are better off than the previous one because of growth, but not all
- We should be thinking more about changes in lifetime opportunities across cohorts and large groups within these cohorts
What changes in lifetime opportunities and why?

- Wages of men and women
  - Guvenen, Kaplan, Song, Weidner (2017): Median lifetime earnings
  - Men: 12-19% lower for 1960s birth cohort than for 1940s one
  - Women: 22-33% higher for same cohorts

- Medical expenses
  - Hall, Jones (2007): Aggregate health services over consumption
  - ↑ from 9% in 1975 to 15% in 2000

- Life expectancy later in life
  - Case, Deaton (2017): Mortality of white, non-college-educated age 55-59
  - ↑ 22% from 1999 to 2015
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Our paper

- Focus on white, non-college-educated Americans born in the 1940s and 1960s
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• Document new facts on how these two groups compare in terms of
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- Document new facts on how these two groups compare in terms of
  - Wages
  - Medical expenses
  - Life expectancies
- Calibrate a structural model with married and single men and women for the 1960s cohort
- Give this cohort the wage schedule, medical expenses, and life expectancy of the 1940s cohort
- Evaluate effects on labor supply, savings, and welfare of the 1960 birth cohort
Model key features

- Single and married people and marital transitions
- Endogenous human capital (measured as average past earnings) affecting wages
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- Endogenous human capital (measured as average past earnings) affecting wages
- Risks during working and retirement periods
- Self-insurance: saving and labor supply
- Government taxes and transfers
## Key features

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- Working stage ($t_0$ to $t_r$), people
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  - Face wage shocks
  - Might get married if they are single
  - Risk divorce if they are married
  - Both spouses can work
Key features

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• Working stage ($t_0$ to $t_r$), people
  • Alive for sure
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• Retirement stage ($t_r$ to $T$), people
  • Face health shocks
  • Medical expense shocks
  • Exogenous probability of death
• Large decreases in the wages of men (↓ 9%) and increases in the wages of women (↑ 7%). PSID data
Wages conditional on human capital

- Wages as a function of human capital ($0^{th}$, $25^{th}$, $50^{th}$, $75^{th}$ and $99^{th}$ percentiles of the distributions of men and women)

- Large drops in wages conditional on human capital, with largest drops for lower human capital levels, especially for men
An 80% increase in OOP medical expenses (from $2,878 to $5,236 at age 66).

HRS data
Borella, De Nardi, Yang
Life expectancy

<table>
<thead>
<tr>
<th></th>
<th>Men, 1940</th>
<th>Men, 1960</th>
<th>Women, 1940</th>
<th>Women, 1960</th>
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<tbody>
<tr>
<td>Age 50</td>
<td>77.6</td>
<td>76.1</td>
<td>79.8</td>
<td>78.7</td>
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<tr>
<td>Age 66</td>
<td>82.5</td>
<td>80.9</td>
<td>85.7</td>
<td>84.0</td>
</tr>
</tbody>
</table>

- Large drops in life expectancy (1.1 to 1.7 years). HRS data
How do we do the counterfactuals?

Give the 1960s calibrated cohort, the 1940s

- Wage function
- Medical expenses
- Life expectancies
- Wage function, medical expenses, and life expectancies

We then look at outcomes and welfare
Under the 1960s wage schedule

- Participation of married women 8 percentage points higher at age 25
- Participation of married men 4 percentage points lower at age 55
1940s vs. 1960s wages: hours

- Hours worked by young married women 100 hours a year higher under the 1960s wage schedule
1940s vs. 1960s wages: savings

- Assets at age 66 are lower under the 1960s wage schedule: 21% for single men, 1.1% for single women, and 6.1% for couples
1940s vs. 1960s wages: welfare

- Everyone loses welfare under the 1960s wage schedule
- One-time asset compensations
  - Single men: 7.3% of present discounted value of their lifetime income
  - Couples: 4.5% of the present discounted value of their lifetime income
  - Single women: 3.4% of present discounted value of their lifetime income
1940s vs. 1960s wages: welfare

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1940s vs. 1960s medical expenses

- Savings go up
- Smaller changes in participation and hours
- \( \Rightarrow \) Everyone loses welfare under the 1960s medical expenses
- One-time asset compensations
  - Single men: 1.4% of present discounted value of their lifetime income
  - Single women: 1.0% of present discounted value of their lifetime income
  - Couples: 0.9% of the present discounted value of their lifetime income
1940s vs. 1960s life expectancy

- Savings go down
- Almost no changes in participation and hours
- ⇒ Everyone loses welfare under the 1960s life expectancy
- One-time asset compensations
  - Single men: 3.2% of present discounted value of their lifetime income
  - Single women: 2.4% of present discounted value of their lifetime income
  - Couples: 2.2% of the present discounted value of their lifetime income
1940s vs. 1960s life expectancy, medical expenses, and wages

- Changes in participation and hours driven by changes in wages
- Savings go up slightly because increased medical expenses dominate
- \( \Rightarrow \) Everyone loses welfare in the 1960s cohort due to these changes
- Asset compensations for welfare losses:
  - Single men: 12.5% of present discounted value of their lifetime income
  - Couples: 8.1% of present discounted value of their lifetime income
  - Single women: 7.2% of present discounted value of their lifetime income
Conclusions

- The non-college-educated, white Americans born in 1960s compared with those born in 1940s
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  - Experienced much lower wages over all of their life cycle
  - Expect much higher medical expenses during retirement
  - Expect lower life expectancy at retirement time
  - Experienced large welfare losses as a result
- Thinking about the changes experienced by various cohorts and education levels over time is worth studying more.
Conclusions

• The non-college-educated, white Americans born in 1960s compared with those born in 1940s
  • Experienced much lower wages over all of their life cycle
  • Expect much higher medical expenses during retirement
  • Expect lower life expectancy at retirement time
  • Experienced large welfare losses as a result

• Thinking about the changes experienced by various cohorts and education levels over time is worth studying more.
  • To what extend did government policies attenuate these changes?
  • Should the government have done something different?
  • What and at what stages of their life cycle?