Equilibrium Labor Market Search and Health Insurance Reform

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The views expressed here are those of the author and do not necessarily reflect the views of the Federal Reserve Bank of Philadelphia or the Federal Reserve System.
Very ambitious but skillfully executed!

Question: What are the macro consequences of the ACA?

Construct a rich labor-search model (Burdett-Mortensen):
- Firms differ in productivity and HI cost.
- Firms offer: (HI or not, w).
- Risk-averse workers face health and medical expense shocks.
- Workers decide whether to accept or reject the offer.

Estimate the model using pre-ACA data:
- Use both worker-side and firm-side data for estimation.

Study the effects of the ACA by introducing stylized ACA in their estimated model.
Components of ACA in the model:

- **Health Insurance Exchange (EX)**
  Individuals can buy HI at Exchange, where premium is based on the entire pool.

- **Individual Mandate (IM)**
  Individuals either obtain HI or pay max\{\$695, 2.5\% of taxable income\}.

- **Employer Mandate (EM)**
  Firms with $n \geq 50$ have to offer HI or pay penalty of $2000(n - 30)$.

- **Income-Based Premium Subsidy (SUB)**
  Individuals earning $< 133\% (400\%)$ of FPL pay up to 3.5\% (9.5\%) of income for HI.
Comment 1: Who are Missing?

Only the individuals satisfying below are considered for estimation:

- Male
- Age 26-46
- At most high school graduate
- Not student, self-employed, or in public sector or military
- Not receiving welfare benefits
- Receiving HI from employer under his/her name or uninsured
- Not in top/bottom 3% of income distribution
### Health Insurance Choice: March CPS (1997)

<table>
<thead>
<tr>
<th>Proportion (%)</th>
<th>CPS (All)</th>
<th>CPS (A&amp;F)</th>
<th>Model (A&amp;F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer HI, primary</td>
<td>40.7</td>
<td>60.3</td>
<td>79.9</td>
</tr>
<tr>
<td>Employer HI, dependent</td>
<td>20.9</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Individual private HI</td>
<td>12.8</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Medicaid</td>
<td>8.0</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Medicare</td>
<td>18.4</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>No HI</td>
<td>15.4</td>
<td>39.7</td>
<td>20.1</td>
</tr>
</tbody>
</table>

- A lot of individuals are dropped.
- ACA vs. individual private HI or Medicaid?
- Model’s uninsured rate of 20.1% seems too low.
### Comment 2: Test Model’s Prediction using MA Reform

<table>
<thead>
<tr>
<th>Proportion (%)</th>
<th>Data: MA</th>
<th>Model: MA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre</td>
<td>Post</td>
</tr>
<tr>
<td>Uninsured rate</td>
<td>11.8</td>
<td>6.1</td>
</tr>
<tr>
<td>Employer HI</td>
<td>70.4</td>
<td>72.6</td>
</tr>
<tr>
<td>Exchange</td>
<td>5.3</td>
<td>4.4</td>
</tr>
<tr>
<td>Medicaid</td>
<td>11.1</td>
<td>15.7</td>
</tr>
</tbody>
</table>


- Model’s prediction for MA Reform = out-of-sample forecasting.
- Model correctly predicts ↓ uninsured rate and ↑ employer HI.
- However, uninsured rate declined for different reasons.
  - Missing: Medicaid expansion.
  - Difference between MA and US. Sample selection.
- Wage with/without HI?
Comment 3: Full-Time vs. Part-Time

<table>
<thead>
<tr>
<th>Proportion (%)</th>
<th>CPS (All)</th>
<th>CPS (A&amp;F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of Part-time (all firms)</td>
<td>17.7</td>
<td>4.7</td>
</tr>
<tr>
<td>% of Part-time (&lt;100 employees)</td>
<td>22.6</td>
<td>6.4</td>
</tr>
<tr>
<td>% of Part-time (≥100 employees)</td>
<td>14.1</td>
<td>3.2</td>
</tr>
</tbody>
</table>

- Large fraction work PT (<35). More PT in smaller firms.
- Under the ACA (EM), employers don’t need to cover PT. → Replacing FT by PT workers?
- Nakajima and Tüzemen (2013).
Comment 4: No Need to Finance ACA

- ACA does not cause a higher tax in the model.
  - CBO’s current estimate: $1.4 trillion over the next decade.

- Even without an additional tax, ACA reduces average welfare!
  - HI not very valuable?
  - Pashchenko and Porapakkarm (2012): ACA as redistribution policy.
Comment 5: Firm Dynamics?

- (No) firm dynamics in the model.
  - Firms do not change employment size or HI decision.

- Firm dynamics in the data.
  - According to Brügemann and Manovskii (2010), 11% of all establishments stop offering HI within 2 years.
  - Even higher proportion for smaller establishments.

