Partial Internalization of Social Security Disability Insurance (DI) Experience to Employers: Trick or Treat?

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The DI Funding Gap

- DI Trust Fund depletion projected for 2016
- Two prominent approaches to filling the gap change employer and worker liabilities
  - Proportional to SS wages
    - Increase the 1.8 percent DI payroll tax by 0.33 percentage points (2014: $19 billion)
  - Partial internalization of DI benefit costs to claimants’ recent employers
Partial Internalization Policies

● Partially tie firm labor cost to future benefit costs of current workers

● Two prominent examples
  – Mandatory short-term disability insurance (STDI)
    ▪ Autor and Duggan (2010)
  – Experience-rated DI payroll tax
    ▪ Burkhauser and Daly (2011)
Overview of Analysis

- Statistics on firm DI benefit experience relative to Social Security (SS) wages
- Simulations of:
  - STDI premiums
  - Payroll tax experience rates
Main results (firms with 50+ workers only)

- Partial internalization is likely to cause a disproportionately increase in labor costs for
  - Many relatively small firms with low mean annual wages
  - Many low-skill workers

- The impact of partial internalization on aggregate labor costs might be larger or smaller than an increase in the payroll tax that would close the DI funding gap by the same amount
Data

- 100% Master Earnings File for 2001 to 2005
- 100% 831 Disability Determination File
Relative liability measure

- Employers liable for 24 months of DI benefits
- Each employer in a DI entrant’s entry year and two previous years shares that liability in proportion to the wages paid in those years
- Firm’s relative liability for a year
  - Numerator: Total liability accrued in year
  - Denominator: Total SS wages paid in year
The distribution of relative liabilities across firms has high positive skew.

<table>
<thead>
<tr>
<th>Percentile</th>
<th>Relative liability</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% of SS Wages</td>
<td>Relative to Median</td>
</tr>
<tr>
<td>25th</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Median</td>
<td>0.5</td>
<td>1.0</td>
</tr>
<tr>
<td>75th</td>
<td>1.4</td>
<td>2.6</td>
</tr>
</tbody>
</table>

● Reflects:
  – Allowance rate variation
  – Low mean wages of allowed applicants
  – DI progressivity
# Workers and DI Entrants by Liability Category

<table>
<thead>
<tr>
<th>Relative Liability Category*</th>
<th>Mean workers</th>
<th>% of Workers</th>
<th>% of DI Entrants</th>
</tr>
</thead>
<tbody>
<tr>
<td>All firms</td>
<td>901</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>1&lt;sup&gt;st&lt;/sup&gt; quarter</td>
<td>771</td>
<td>21.4</td>
<td>4.9</td>
</tr>
<tr>
<td>2&lt;sup&gt;nd&lt;/sup&gt; quarter</td>
<td>1,875</td>
<td>52.0</td>
<td>45.9</td>
</tr>
<tr>
<td>3&lt;sup&gt;rd&lt;/sup&gt; quarter</td>
<td>718</td>
<td>19.9</td>
<td>30.6</td>
</tr>
<tr>
<td>4&lt;sup&gt;th&lt;/sup&gt; quarter</td>
<td>241</td>
<td>6.7</td>
<td>18.6</td>
</tr>
</tbody>
</table>

- Most firms with high relative liabilities are relatively small
- The share of DI entrants from firms with high liabilities is small

*Firms with 50+ workers only.*
## Worker Wages and DI-entrant Education by Liability Category

<table>
<thead>
<tr>
<th>Relative Liability Category*</th>
<th>Mean Worker Wages</th>
<th>Education of Allowed Applicants (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>&lt; 12 years</td>
</tr>
<tr>
<td>All firms</td>
<td>25,956</td>
<td>18.9</td>
</tr>
<tr>
<td>1&lt;sup&gt;st&lt;/sup&gt; quarter</td>
<td>36,900</td>
<td>9.4</td>
</tr>
<tr>
<td>2&lt;sup&gt;nd&lt;/sup&gt; quarter</td>
<td>28,330</td>
<td>15.0</td>
</tr>
<tr>
<td>3&lt;sup&gt;rd&lt;/sup&gt; quarter</td>
<td>14,242</td>
<td>22.6</td>
</tr>
<tr>
<td>4&lt;sup&gt;th&lt;/sup&gt; quarter</td>
<td>7,206</td>
<td>25.4</td>
</tr>
</tbody>
</table>

*Firms with 50+ workers only.

- Partial internalization is likely to have a disproportionately positive impact on labor costs for
  - Many relatively small firms with low mean wages
  - Many low-skill workers
Policy Questions

● What is the aggregate new liability imposed on labor costs, assuming no behavioral response?

● For firms, to what extent will the new liability reflect the actual liabilities for their workers?

● Unanswered: To what extent and how will the policies affect:
  – Employment and wages?
  – Trust fund revenues and expenditures?
  – Worker wellbeing?
Results for STDI Mandate

● If no behavioral change:
  – Reduction in Trust Fund liabilities: 0.25 percent of SS wages of workers in firms with 50+ workers
  – Increase in labor costs: .31 percent of SS wages or larger
  – Premiums relative to SS wages:
    ▪ Closely reflect relative liabilities for large firms
    ▪ For small firms with low benefit costs may exceed those for large firms with high benefit costs

● Behavioral change matters
Results for Experience-rated Payroll Tax

● If no behavioral change
  – Effect on Trust Fund liabilities is a policy choice
  – Impact on aggregate labor cost is the same as impact on Trust Fund liabilities
  – Experience rates are less sensitive to firm size.
    ▪ Firms of any size with persistently low DI experience fare relatively well, those with persistently high DI experience fare poorly
    ▪ Experience rates for firms with variable DI experience may be out of sync with their actual experience in any given year

● Behavioral change matters
Partial Internalization: Trick or Treat?

- **Treat**
  - Potential to address DI solvency at lower cost to employers and with better outcomes for workers than an increase in the payroll tax

- **Trick**
  - Higher labor costs for many relatively small firms
  - Higher costs for low-skill labor
  - Impact on labor cost might exceed savings to the DI Trust Fund

- **Much depends on the size of behavioral responses that are currently unpredictable**
Citations

- **STDI proposal:**

- **Experience rating proposal:**

- **Working paper:**
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