Community College Training for Displaced Workers

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Automotive Communities and Work Force Adjustment

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Federal Reserve Bank of Chicago
My Perspective

Based on work with Louis Jacobson (Center for Naval Analysis) and Robert LaLonde (University of Chicago)


These are my own views – not those of the Federal Reserve Bank of Chicago or the Federal Reserve System
Conclusions

- Returns to community college training are similar to those for other education – i.e., pretty good
  - Not necessary to acquire a credential
  - More limited evidence that older displaced workers can benefit

- Returns vary by type of course and workers’ prior skills, age, and gender
  - Those with significant skills deficits are unlikely to benefit

- Participation patterns are consistent with these impacts
  - Many displaced workers take just a few classes

- Training is unlikely to fully offset earnings losses
  - Offsetting large losses would require large training investments

- Policy makers should consider other interventions, such as wage insurance for older workers
The Current Context

Civilian Unemployment Rate
(percent, shading corresponds with NBER recession periods)

- Michigan
- National

- Sep-2009
- Aug-2009

'76 '81 '86 '91 '96 '01 '06
Long-term Unemployment Is Extremely High

### Long-term Unemployed

- **27+ weeks**
- **15+ weeks**

![Graph showing the share of unemployed over time with peaks and troughs indicating significant fluctuations.](Image)
Unemployment Rate By Education Level

Unemployment Rates (age ge 25) (percent)

< HS  |  HS Only  |  Some College  |  Bachelors
--- | --- | --- | ---
| | | | |
September '07 | September '09 | September '07 | September '09
Unemployment Workers By Education Level

Unemployment Workers (age ge 25) (thousands)

- < HS
- HS Only
- Some College
- Bachelors

September '07  September '09
Washington State Study

- Studied 65,000 workers displaced from jobs in Washington State during the early 1990s
  - At least three years job tenure
  - Strong attachment to Washington State labor market

- Link three sources of administrative data
  - Wage records from 1987 to 2000
  - UI records from 1990 to 1995
  - CC transcripts from 1989 to 1996

- Types of Credits
  - Type 1: Health professions, Technical/professional, Technical trades, College level math and science
  - Type 2: Sales/Service, Other vocational, Social science / Humanities, Health / PE / Consumer ed, Basic skills, Other
Earnings By Quarter Relative to Job Loss

FIGURE 1
Earnings of displaced workers by prior tenure

- 1995 dollars per quarter
- Quarter relative to displacement
- Graph showing earnings decline for different tenure periods (6-11 quarters, 6 or more years, 12-23 quarters) over time relative to displacement.
Displaced Workers’ CC Utilization

- Almost 16% of the displaced workers in our sample completed at least one community college credit.

- Workers with some previous college education were the most likely to get community college training.

- Rates by age and sex:

<table>
<thead>
<tr>
<th></th>
<th>Younger than 35</th>
<th>35 or older</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Male</strong></td>
<td>16.8%</td>
<td>10.9%</td>
</tr>
<tr>
<td><strong>Female</strong></td>
<td>23.5%</td>
<td>17.2%</td>
</tr>
</tbody>
</table>
Displaced Workers’ CC Utilization

- Of those completing at least one credit, the mean credits earned was $26.9 = 0.6$ academic years
  - 45 credits equals one academic year

- Many who start take very few classes
  - Roughly $1/3$ earn less than 6 credits
  - Especially among those with poor educational backgrounds

- Mean credits by age and sex:

<table>
<thead>
<tr>
<th></th>
<th>Younger than 35</th>
<th>35 or older</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>29.5</td>
<td>27.4</td>
</tr>
<tr>
<td>Female</td>
<td>27.3</td>
<td>23.5</td>
</tr>
</tbody>
</table>
We estimate impacts from variation in numbers of credits earned

- Also see an effect from “just showing up”
Long-Run Earnings Impacts

Long-run Impact as a percentage of annual earnings

<table>
<thead>
<tr>
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<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt; 35</td>
<td>ge 35</td>
</tr>
<tr>
<td>First Credit</td>
<td>1.9</td>
<td>2.7</td>
</tr>
<tr>
<td></td>
<td>-1.5</td>
<td>2.0</td>
</tr>
<tr>
<td>Year of Type 1 Credits</td>
<td>10.2</td>
<td>7.8</td>
</tr>
<tr>
<td></td>
<td>25.3</td>
<td>16.9</td>
</tr>
<tr>
<td>Year of Type 2 Credits</td>
<td>4.9</td>
<td>2.6</td>
</tr>
<tr>
<td></td>
<td>5.8</td>
<td>3.9</td>
</tr>
</tbody>
</table>
Is Training A Good Investment?

- Whose perspective?
  - Workers
  - Society’s

- Direct costs of community college education
  - Often heavily subsidized

- Opportunity costs of foregone income
  - Workers’ earnings lower while earning credits
  - Opportunity costs may be lower when unemployment is high
Cost - Benefit Analysis Assumptions

- Workers take one academic year of credits over three quarters and then work until age 65
- Typical mix of type 1 and type 2 credits
- None of “just showing up” effect is real benefit
- Half of the “during CC” impact is a true cost
- 25% of increased earnings go to taxes
- CC costs $8,000 -- 20% paid by student
## Base-Case Internal Rates of Return

Long-run Impact as a percentage of annual earnings

<table>
<thead>
<tr>
<th>Perspective</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt; 35</td>
<td>ge 35</td>
</tr>
<tr>
<td>Individual</td>
<td>13.1%</td>
<td>11.4%</td>
</tr>
<tr>
<td>Society</td>
<td>7.4%</td>
<td>3.9%</td>
</tr>
</tbody>
</table>
Rates of Return

- **Pretty good**
  - Especially for younger workers
  - Especially for type 1 credits

- **However,**
  - Investment returns less favorable for older workers
  - Many workers appear unable to complete CC courses

- **Takes substantial investments to offset 25% earnings losses**
  - Roughly 3 years of full-time studies will fully offset losses
  - Cost = direct + indirect \(\sim$100,000\)
  - Very few get such extensive training

- **Policymakers might consider other forms of assistance**