Examining Wage Trajectories of Community College Students
Using Growth Curve Modeling Approach

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Data
- 2006-2008 cohorts across the 23 community colleges in Virginia
- Student award data matched with enrollment and graduation data from the National Student Clearinghouse (NSC)
- Student unit-record administrative data matched with Unemployment Insurance (UI) record data
- Followed from the first quarter of 2005 to the first quarter of 2013
- Quarterly wage data adjusted to 2012 dollars

Descriptive: Earning by Award

<table>
<thead>
<tr>
<th>Award Type</th>
<th>Before College</th>
<th>During College</th>
<th>After College</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Award</td>
<td>4046.00</td>
<td>3633.01</td>
<td>5345.44</td>
<td>4283.16</td>
</tr>
<tr>
<td>Bachelor</td>
<td>2957.42</td>
<td>2913.09</td>
<td>3502.6</td>
<td>3502.6</td>
</tr>
<tr>
<td>Associate</td>
<td>3844.08</td>
<td>3979.81</td>
<td>4075.23</td>
<td>4075.23</td>
</tr>
<tr>
<td>Longcert</td>
<td>5304.28</td>
<td>4784.17</td>
<td>5441.37</td>
<td>5441.37</td>
</tr>
<tr>
<td>Shortcert</td>
<td>5394.11</td>
<td>5394.11</td>
<td>5448.73</td>
<td>5448.73</td>
</tr>
</tbody>
</table>

Descriptive: Wage Earnings Over Time

Results: Overall

- Stronger returns to longer-term degrees
- Credential does not always result in immediate wage jump, but bends wage growth curve upward
- Noticeable variations among different award groups in wage trajectories during college
- Non-trivial variations across different award groups even before college enrollment
- Violation of strict exogeneity assumption underlying fixed effects approach

Methodological Implications

- Necessary to control for variation in the "lock in" effect across different award groups
- Necessary to control for the length of time after college
- The key assumptions underlying individual fixed effects model may not hold
- Bias may be larger when the sample is younger in age

Acknowledgement

This research is sponsored by the Institute of Education Sciences