Outmigration and Human Capital: Homeward Bound or Gone for Good

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Motivation

• Outmigration

– Illinois has historically ranked near the bottom in outmigration.

– Compounding the problem is the fact that Illinois-based higher education institutions are unable to attract enough high school graduates from outside the state to make up for the loss.

– In terms of net-migration, Illinois also ranks near the bottom.

– Outmigrants are more likely to stay out-of-state upon graduation than their counterparts who enrolled in-state (Adelman, 2004).

– This represents a significant loss of tax revenue for the state (Smith & Wall, 2006).
Outmigration

• Each year the state of Illinois experiences a net loss of roughly 11,000 students.

• Outmigrants tend to be among the best and brightest Illinois high school graduates (Manley et al., 2013; Smalley et al., 2010).

• This represents a significant loss of human capital.
Research Questions

• Given the present and historical problem of outmigration, we are left with the following questions:

  – Do outmigrants return home to work and find employment in Illinois?
  – And if so, what are their earnings?
  – How do these Illinois-specific workforce outcomes compare with an observationally equivalent comparison group?
  – Also, among the outmigrants who returns?
Data Sources

• ACT/PSAE

• National Student Clearinghouse
  – College Enrollment
  – Degrees

• Illinois-specific UI-wage records (Illinois Department of Employment Security)
Creating the ‘Treatment’ and Comparison Groups

End of Study Status (seven years out) for the Illinois High School Class of 2003 (N=128,323)

- No Degree, Not Enrolled: 53.9%
- Bachelor’s or higher: 32.7%
- Associate: 5.0%
- No Degree, but Still Enrolled: 7.1%
- Certificate: 1.3%
Outmigration

Map of the United States showing outmigration rates in various states. Each state is color-coded to indicate the percentage of outmigrants: 10.0%+, 5.0–9.9%, 2.0–4.9%, 1.0–1.99%, and <1.0%.
Outmigration Status

N=41,929

Outmigrant: 32%
Stayer: 68%
Study Group Composition Prior to Matching

N=41,929

Post-Bachelor’s Enrollment

No Post-Bachelor’s Enrollment

38%

62%

n=25,806

Post-Bachelor’s Enrollment

No Post-Bachelor’s Enrollment

31%

68%

n=21,508

Valid SSN

No Valid SSN

17%

83%

n=19,503

Major Indicated

No Major Indicated

31%

69%

No Major Indicated

Major Indicated

91%
Study Group Composition Prior to Matching

- Outmigrant: 32% (n=41,929)  
  - Post Bachelor’s Enrollment: 38% (n=25,806)
  - No Post Bachelor’s Enrollment: 62%

- Stayer: 68% (n=41,929)  
  - No Valid SSN: 31% (n=21,508)
  - Valid SSN: 69%

- Outmigrants: 31% (n=19,503)  
  - No Major Indicated: 31% (n=6,087)
  - Major Indicated: 69%

- Stayers: 69% (n=13,416)
Conceptual Model Predicting Outmigration

- Pre-College Characteristics
- Environmental Factors
- Geography
- Involvement
- Pathways

Treatment vs. Control
(Probability of being an Outmigrant)
Matched Pairs:

• Were from the same region and locale
• Had a similar likelihood of being an outmigrant
• Graduated from a four-year college with the same Barron’s competitiveness rating
• Had the exact same major associated with their bachelor’s degree
• The only observable difference between each member of the matched pairs was exposure to the ‘treatment’
## Balancing Diagnostics – Environment

<table>
<thead>
<tr>
<th>Control</th>
<th>Prior to Matching</th>
<th>After Matching</th>
<th>Standardized Difference</th>
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<tbody>
<tr>
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<td>Outmigrants (n=6,087)</td>
<td>Stayers (n=13,416)</td>
<td>Standardized Difference</td>
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<tr>
<td><strong>High School Level</strong></td>
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<td>HS Mean Composite ACT</td>
<td>22.31</td>
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<td><strong>Student Level</strong></td>
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<td>0.67</td>
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<td>Expected Financial Aid: No</td>
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<td>Planned Work Hours: 0</td>
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</table>

Cells are shaded according to their difference from zero.
Overall Rate of Post-Bachelor’s Illinois Employment

**Stayers**
- Employed in Illinois at Least One Quarter: 92%
- Never Employed in Illinois: 8%

**Outmigrants**
- Employed in Illinois at Least One Quarter: 67%
- Never Employed in Illinois: 33%
Cumulative Rate of Illinois Employment by Outmigration Status

- Stayers (n=4,400)
- Outmigrants (n=4,400)
Quarterly Wages
Major Findings

• Outmigrants were significantly less likely to gain employment in Illinois relative to stayers.

• Among the outmigrants, those with stronger academic profiles were less likely to obtain Illinois employment.

• Further, the outmigrants with the degrees deemed most important for the Illinois economy were even less likely to return to Illinois for employment.
Consequences of Outmigration

- Outmigrants experienced significantly lower rates of Illinois-specific employment relative to the stayers resulting in substantially lower aggregate Illinois wages among the outmigrant group.

- This in turn, represents some of the negative economic impact that outmigration has on the state of Illinois.
Policy Recommendations

• Data specific recommendations:
  – Entering into data sharing agreements with neighboring states.
  – Graduates of private high schools and the ILDS.

• Education policy specific recommendations:
  – Increasing affordable postsecondary options for Illinois students.
  – Actively recruiting outmigrants to return to Illinois for work.
Illinois Education Research Council

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