The Economic Cost of Brain Waste in the U.S.

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Who Was Involved

Support and collaboration

New American Economy: Angela Marek, Pavel Dramski, and Kate Brick
World Education Services: Paul Feltman and Stacey Simon
The J.M. Kaplan Fund: Suzette Brooks Masters

Research team

Jeannine Batalova, Michael Fix, and Ariel Ruiz, MPI
Jim Bachmeier, Sociology Department, Temple University
Carl Davis and Meg Wiehe, Institute on Taxation and Economic Policy
1. How many immigrants are underemployed (i.e., in low-skilled jobs) or unemployed?

2. Profiles by nativity, place of education, and legal status
   - Foreign born, foreign educated
   - Foreign born, U.S. educated
   - U.S. born, U.S. educated

3. What are the most important contributors to immigrant underemployment?
4. What are the costs of underemployment in terms of forgone earnings?

5. What are the costs of underemployment in terms of forgone federal and state taxes?
Factors Linked to Skill Underutilization

- Place of education
- English language proficiency
- Legal status
- Race and ethnicity
- Time in the U.S.
- Degree level
- Degree field
Foreign Degree is a Major Risk Factor

Percent in low-skilled jobs or unemployed

- U.S. Born: 18%
- U.S.-Educated Immigrants: 21%
- Foreign-Educated Immigrants: 29%

Source: MPI analysis of 2009-13 ACS and 2008 SIPP U.S. Census Bureau data, with legal status assignments by Bachmeier and Van Hook.
The U.S. Citizenship Premium

Percent in low-skilled jobs or unemployed

- Unauthorized: 40%
- Legal Permanent Residents: 30%
- U.S. Naturalized Citizens: 23%
- Temporary Visa Holders: 10%

Source: MPI analysis of 2009-13 ACS and 2008 SIPP U.S. Census Bureau data, with legal status assignments by Bachmeier and Van Hook.
Immigrants from **Latin America and Africa** Have High Underutilization Rates

**Percent in low-skilled jobs or unemployed**

- **Mexico**: 50%
- **Caribbean**: 45%
- **South America**: 40%
- **Africa**: 35%
- **Philippines**: 30%
- **Middle East**: 25%
- **India**: 20%
- **China**: 15%
- **European Union/EEA**: 10%
- **Canada**: 5%

**Source**: MPI analysis of 2009-13 ACS and 2008 SIPP U.S. Census Bureau data, with legal status assignments by Bachmeier and Van Hook.

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Immigrants with Degrees in **Education** and **Business** More Likely to Be Underutilized

Percent in low-skilled jobs or unemployed

<table>
<thead>
<tr>
<th>Field</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>36%</td>
</tr>
<tr>
<td>Business</td>
<td>34%</td>
</tr>
<tr>
<td>Engineering</td>
<td>19%</td>
</tr>
<tr>
<td>Physical Sciences</td>
<td>18%</td>
</tr>
<tr>
<td>Computer Sciences</td>
<td>17%</td>
</tr>
<tr>
<td>Health</td>
<td>15%</td>
</tr>
<tr>
<td>Biological Sciences</td>
<td>13%</td>
</tr>
</tbody>
</table>

Source: MPI analysis of 2009-13 ACS and 2008 SIPP U.S. Census Bureau data, with legal status assignments by Bachmeier and Van Hook.
Florida Has High Rate of Skill Underutilization; Michigan & Ohio: Low

Percent in low-skilled jobs or unemployed

- Immigrants
- U.S. Born

Source: MPI analysis of 2009-13 ACS and 2008 SIPP U.S. Census Bureau data, with legal status assignments by Bachmeier and Van Hook.

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# How Immigrant College Graduates in FL and MI Differ from the U.S.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Florida</th>
<th>Michigan</th>
</tr>
</thead>
<tbody>
<tr>
<td>English proficiency</td>
<td>Less likely</td>
<td>More likely</td>
</tr>
<tr>
<td>With U.S. degrees</td>
<td>Less likely</td>
<td>Less likely</td>
</tr>
<tr>
<td>Advanced degree</td>
<td>Less likely</td>
<td>More likely</td>
</tr>
<tr>
<td>Temporary visa holders</td>
<td>Lower shares</td>
<td>Higher shares</td>
</tr>
<tr>
<td>Age</td>
<td>Older</td>
<td>Similar</td>
</tr>
<tr>
<td>Top origin</td>
<td>Caribbean and South America</td>
<td>Asia and Europe</td>
</tr>
</tbody>
</table>
What are the costs of underemployment?

- Forgone earnings
- Forgone federal and state/local taxes
### Difference in Annual Earnings Adequately Employed vs. Underemployed

<table>
<thead>
<tr>
<th>Average Annual Earnings</th>
<th>Foreign-Educated Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employed in high/middle-skilled jobs</td>
<td>$96,000</td>
</tr>
<tr>
<td>Employed in low-skilled jobs</td>
<td>$40,000</td>
</tr>
<tr>
<td>Gap</td>
<td>$56,000</td>
</tr>
</tbody>
</table>

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Amount and Sources of Underemployment Disadvantage: Foreign-Educated Men

$56,000

Due to differences in characteristics:
$24,000

Due to low-skilled employment:
$33,000

Total due to low-skilled employment:
$15.9B
Annual Forgone Earnings Due To Low-Skilled Employment

$39.4 Billion

- $9.4 B - California
- $5.0 B - New York
- $3.6 B - Florida
- $2.5 B - Texas
- $830 M - Washington
- $510 M - Michigan
- $510 M - Ohio
- $16.9 B - Other states

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$10.2 Billion

- Federal level: $7.2 billion
- State/Local level: $3 billion
## Annual Forgone State and Local Taxes

<table>
<thead>
<tr>
<th>State</th>
<th>Forgone State &amp; Local Taxes</th>
</tr>
</thead>
<tbody>
<tr>
<td>California</td>
<td>$694.8 M</td>
</tr>
<tr>
<td>New York</td>
<td>$594.0 M</td>
</tr>
<tr>
<td>Florida</td>
<td>$214.7 M</td>
</tr>
<tr>
<td>Texas</td>
<td>$167.5 M</td>
</tr>
<tr>
<td>Washington</td>
<td>$74.9 M</td>
</tr>
<tr>
<td>Ohio</td>
<td>$53.0 M</td>
</tr>
<tr>
<td>Michigan</td>
<td>$48.6 M</td>
</tr>
<tr>
<td><strong>Total U.S.</strong></td>
<td><strong>$3,033.6 M</strong></td>
</tr>
</tbody>
</table>
Takeaways: Brain Waste’s Impacts

1.9 million or 25% of the 7.6 million university-educated immigrants

**Costs**

$39.4 billion in forgone earnings

$10.2 billion in forgone taxes, including

- $3.0 billion at state/local level
- $7.2 billion at federal level

**Conservative estimates**
Why Is It An Urgent Issue?

- 48% of recent immigrant adults have with a university degree
- 7 million or 18% U.S.-born college graduates
- Focus on both development and full use of human capital regardless of place of education

Promising initiatives: International and U.S.
MPI’s Research

National Report & Report-in-Brief
http://bitly.com/mpiuntappedtalent
Infographic
http://bitly/infobrainwaste
State Fact Sheets
CA, FL, MI, NY, OH, TX, WA
http://bitly/untappedtalentstates
For More Information

Topic “Brain Waste and Credential Recognition:”
www.migrationpolicy.org/topics/brain-waste-credential-recognition

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Brain waste (aka skills underutilization): College graduates cannot fully utilize their skills and education in the workplace despite their high professional qualifications. Includes two outcomes:

1. **Unemployment**: Persons are actively searching for employment but unable to find work.
2. **Underemployment**: College graduates working in low-skilled jobs (e.g., home-health aides, personal-care aides, maids and housekeepers, taxi and truck drivers, and cashiers). These occupations typically require a high school diploma or less.

**Adequate employment** in high- or middle-skilled jobs. *High-skilled* jobs require at least a bachelor’s degree (e.g., postsecondary teachers, surgeons, engineers); *middle-skilled* jobs require long-term on-the-job training, vocational training, or an associate’s degree (e.g., carpenters, electricians, and real estate brokers).
How Serious is Brain Waste in the United States?

Of the 7.6 million immigrant college graduates in the U.S. labor force

• **1.9 million** — one in four — are in low-skilled jobs or unemployed

• Nearly **1.4 million** are in middle-skilled jobs

• **4.4 million** in high-skilled jobs
Immigrants with Low English Skills Are 5 Times More Likely to Be Underemployed

Odds Ratios of Low-Skilled Employment: Compared to "English Only" Speakers

How well do you speak English?

- Not Well / Not at All
- Well
- Very Well
English Proficiency
The Strongest Predictor

Percent in low-skilled jobs or unemployed

How well do you speak English?

Not well/not at all

Well

English only

61%
35%
20%
The U.S. Citizenship Premium

Distribution by citizenship/legal status

- Unauthorized: 11%
- Temporary visa holders: 8%
- Legal permanent residents: 24%
- U.S. naturalized citizens: 57%

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Immigrants with Degrees in Education and Business More Likely to Be Underutilized

Percent in low-skilled jobs or unemployed

- Immigrants
- U.S. Born

Fields:
- Education
- Business
- Engineering
- Physical Sciences
- Computer Sciences
- Health
- Biological Sciences

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