Skilled Immigrants’ Contribution to Innovation and Entrepreneurship in the United States

Jennifer Hunt

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Skilled immigration can raise US innovation
Issue

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  - thereby raising productivity growth, economic growth

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- Why?
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  - better educated, more specialized in relevant fields of study

- Mechanism?
  - self-selected
  - screened by visa system

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- Will present some evidence
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- National Survey of College Graduates 2003
- Census data at state level 1940–2000
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## Immigrants compared to native–born

<table>
<thead>
<tr>
<th></th>
<th>Simple comparison</th>
<th>Similar immigrants and natives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wages</td>
<td>2.9**</td>
<td>-8.2**</td>
</tr>
<tr>
<td>Any patent licensed or commercialized (native = 0.6%)</td>
<td>0.7**</td>
<td>-0.0</td>
</tr>
<tr>
<td>More than 6 publications or papers (native = 3.6%)</td>
<td>3.1**</td>
<td>0.3**</td>
</tr>
<tr>
<td>Started firm with over 10 workers (native = 0.61%)</td>
<td>0.18*</td>
<td>0.21**</td>
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</table>

Figure 3: U.S. Origin U.S. Patents 1941–2001

Patents
Patents per 100,000 residents

Number of patents
Patents
Patents per 100,000 residents

Year (Application Date)

Source: USPTO, BEA and authors' calculations.

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Skilled immigrants as share of population 1940–2000

Figure 4: Skilled Immigrants as Share of U.S. Population 1940-2000

Note: Shares based on population 18–65 for college and post-college and workforce 18-65 for scientists and engineers.
Source: U.S. Census.
Causal effect of skilled immigration on patenting per capita

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- From 1990–2000 patents per capita rose 63%
  - immigrant college graduates rose from 2.2% to 3.5% population
  - accounting for an increase in patenting per capita of 12–21%
Conclusions

- Due to higher education and different fields of study, skilled immigrants patent more, publish more, and start companies more than natives.

Skilled immigrants raise patenting per capita, and college immigrants raised GDP per capita by 1.4–2.4% in the 1990s.

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