Immigration and the Highly Skilled Foreign-born Workforce in the United States

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Annual immigrant admissions & the visa system

- Permanent visas, 140k (~50k principals)
- Temporary visas, 300k+
- The numbers increased sharply in 1990s
- The system favors temporary visas
### Temporary visas issued by skill level and permanent admissions numbers

<table>
<thead>
<tr>
<th>Temporary visas issued</th>
<th>Visa</th>
<th>Description</th>
<th>2011 Visas Issued</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highly skilled, temporary</td>
<td>H-1B</td>
<td>Specialty occupations</td>
<td>129,559</td>
</tr>
<tr>
<td></td>
<td>L-1, L-2</td>
<td>Intercompany Transferees</td>
<td>147,677</td>
</tr>
<tr>
<td></td>
<td>O1, O2</td>
<td>Extraordinary ability</td>
<td>13,691</td>
</tr>
<tr>
<td></td>
<td>E-1, E-2</td>
<td>Treaty traders and investors</td>
<td>35,052</td>
</tr>
<tr>
<td>Mixed skills, temporary</td>
<td>P</td>
<td>Athletes and Entertainers</td>
<td>84,545</td>
</tr>
<tr>
<td></td>
<td>J</td>
<td>Exchange Visitors</td>
<td>359,384</td>
</tr>
<tr>
<td></td>
<td>Q-1, Q-2</td>
<td>Cultural Exchange</td>
<td>1,492</td>
</tr>
<tr>
<td></td>
<td>R</td>
<td>Religious Workers</td>
<td>4,929</td>
</tr>
<tr>
<td>Less skilled, temporary</td>
<td>H-2A</td>
<td>Agricultural</td>
<td>55,384</td>
</tr>
<tr>
<td></td>
<td>H-2B, H-2R</td>
<td>Non-agricultural and returnees</td>
<td>50,826</td>
</tr>
<tr>
<td>Legal Permanent Residents</td>
<td>Family &amp;</td>
<td>New arrivals</td>
<td>481,948</td>
</tr>
<tr>
<td></td>
<td>employment</td>
<td>Adjustments of status</td>
<td>580,092</td>
</tr>
</tbody>
</table>
Highly skilled temporary (non-immigrant) workers, visa issuances 1970 - 2011

- H1 specialty worker, issuances incl. estimates
- L1 intracompany worker, issuances incl. estimates
- O1 & O2 extraordinary worker, issuances
- E1 & E2 treaty worker, issuances
Highly skilled temporary workers by country, visa issuances 2008

- India: 113,308
- Japan: 19,830
- United Kingdom: 15,203
- China: 11,738
- Germany: 9,828
- Mexico: 7,963
- Philippines: 5,696
- Australia: 3,006
- Italy: 2,867
- Brazil: 4,125

Highly skilled temporary workers by country, visa issuances 2011

- India: 99,809
- Japan: 18,018
- United Kingdom: 14,754
- China: 14,267
- Mexico: 9,447
- Germany: 9,154
- Korea, South: 8,948
- France: 6,886
- Philippines: 3,708
- Brazil: 4,153
- Italy: 3,489
- Australia: 2,867
- China: 14,267
- United Kingdom: 14,754
Total temporary working visas and new arrival legal permanent residents, 1971-2008

Source: tabulations of US State and Homeland security data
Percent of persons ages 25-54 adjusting by legal permanent admission class, 1972-2008

Source: tabulations of DHS microdata.
Sixty years of employment in STEM
(Science, Engineering, Technology & Math)

• Slow steady growth followed by rapid growth of immigrants in STEM after the 1990 Act and the New Economy boom

• The foreign-born presence is greatest in natural sciences & significant in detailed occupations

• Asian origins dominate
The core STEM workforce by nativity, 1950 - 2009

Source: US Decennial and American Community Survey samples
The core STEM workforce by nativity, 1994 to 2012

Source: March Current Population Survey, IPUMS
Percent of the STEM workforce that is foreign born and select other occupations

Source: US Census and American Community Survey samples
Nativity and Place of Birth of the Population Aged 25 and Older With a Science and Engineering Bachelor's Degree: 2010
(Data based on sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/acs/www)

Science and engineering bachelor's degree holders aged 25 and older
Region of birth for foreign born
Country of birth for those born in Asia

Source: U.S. Census Bureau, 2010 American Community Survey.
Regional concentration

• California has a big lead in number of foreign-born STEM workers, other states change place
  – Top 10 states today have 3/4ths of foreign workers

• Foreign-born percent of each state’s workforce has been steadily increasing

• Foreign-born with STEM education, as percent of all foreign-born, concentrate coasts & NE
Largest foreign-born core STEM state workforces & their share of STEM workers in the ten leading states (2009 ranking)

<table>
<thead>
<tr>
<th></th>
<th>1990</th>
<th>2000</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>Number</td>
<td>%</td>
<td>Number</td>
</tr>
<tr>
<td>Total</td>
<td>419,390</td>
<td>11.6</td>
<td>1,033,145</td>
</tr>
<tr>
<td>California</td>
<td>126,139</td>
<td>22.6</td>
<td>274,280</td>
</tr>
<tr>
<td>New Jersey</td>
<td>34,567</td>
<td>21.8</td>
<td>77,172</td>
</tr>
<tr>
<td>Texas</td>
<td>27,524</td>
<td>11.1</td>
<td>74,330</td>
</tr>
<tr>
<td>Florida</td>
<td>19,380</td>
<td>13.9</td>
<td>Illinois</td>
</tr>
<tr>
<td>Illinois</td>
<td>18,510</td>
<td>11.5</td>
<td>Mass.</td>
</tr>
<tr>
<td>Mass.</td>
<td>17,823</td>
<td>13.3</td>
<td>Florida</td>
</tr>
<tr>
<td>Maryland</td>
<td>14,210</td>
<td>10.7</td>
<td>Maryland</td>
</tr>
<tr>
<td>Arizona</td>
<td>6,006</td>
<td>11</td>
<td>Michigan</td>
</tr>
<tr>
<td>DC</td>
<td>1,428</td>
<td>13</td>
<td>Conn.</td>
</tr>
<tr>
<td>Delaware</td>
<td>144</td>
<td>10.2</td>
<td>DC</td>
</tr>
</tbody>
</table>
Figure 5.
Foreign-Born Population With Science and Engineering Degrees as a Percentage of All Foreign Born Aged 25 and Older, by Metropolitan Statistical Area: 2010

Source: U.S. Census Bureau, 2010 American Community Survey.