Impacts of quotas on public higher education in Brazil

Fifth Lemann Dialogue
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Higher education enrollment
Changes in quotas by area of study

<table>
<thead>
<tr>
<th>Area</th>
<th>2013 Students</th>
<th>2013 Quotas</th>
<th>2013 %</th>
<th>2009 Students</th>
<th>2009 Quotas</th>
<th>2009 %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultura e veterinária</td>
<td>27,253</td>
<td>5,993</td>
<td>22.0%</td>
<td>21,757</td>
<td>1,721</td>
<td>7.9%</td>
</tr>
<tr>
<td>Engenharia, produção e construção</td>
<td>73,757</td>
<td>15,688</td>
<td>21.3%</td>
<td>50,549</td>
<td>3,575</td>
<td>7.1%</td>
</tr>
<tr>
<td>Ciências, matemática e computação</td>
<td>57,142</td>
<td>10,981</td>
<td>19.2%</td>
<td>51,454</td>
<td>4,281</td>
<td>8.3%</td>
</tr>
<tr>
<td>Ciências sociais, negócios e direito</td>
<td>89,979</td>
<td>17,269</td>
<td>19.2%</td>
<td>67,008</td>
<td>7,508</td>
<td>11.2%</td>
</tr>
<tr>
<td>Saúde e bem estar social</td>
<td>43,473</td>
<td>7,920</td>
<td>18.2%</td>
<td>37,983</td>
<td>3,939</td>
<td>10.4%</td>
</tr>
<tr>
<td>Serviços</td>
<td>10,242</td>
<td>1,820</td>
<td>17.8%</td>
<td>6,917</td>
<td>502</td>
<td>7.3%</td>
</tr>
<tr>
<td>Humanidades e artes</td>
<td>16,700</td>
<td>2,736</td>
<td>16.4%</td>
<td>22,938</td>
<td>2,249</td>
<td>9.8%</td>
</tr>
<tr>
<td>Educação</td>
<td>147,678</td>
<td>23,475</td>
<td>15.9%</td>
<td>85,712</td>
<td>8,058</td>
<td>9.4%</td>
</tr>
</tbody>
</table>
Quotas in Public Universities
Share of admissions per year

- 2008: 0%
- 2009: 10%
- 2010: 20%
- 2011: 30%
- 2012: 40%
- 2013: 50%
- 2014: 60%

- 2008: 0
- 2009: 20
- 2010: 40
- 2011: 60
- 2012: 80
- 2013: 100
- 2014: 120
Status of 2009 freshmen by the end of 2013

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>%</th>
<th>Quota</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ongoing</td>
<td>38,682</td>
<td>34.1%</td>
<td>11,405</td>
<td>39.9%</td>
</tr>
<tr>
<td>Absent</td>
<td>3,982</td>
<td>3.5%</td>
<td>912</td>
<td>3.2%</td>
</tr>
<tr>
<td><strong>Dropout</strong></td>
<td>38,619</td>
<td>34.0%</td>
<td>8,415</td>
<td>29.4%</td>
</tr>
<tr>
<td>Transfered</td>
<td>2,064</td>
<td>1.8%</td>
<td>428</td>
<td>1.5%</td>
</tr>
<tr>
<td>Graduated</td>
<td>30,205</td>
<td>26.6%</td>
<td>7,399</td>
<td>25.9%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>113,552</td>
<td>100.0%</td>
<td>28,559</td>
<td>99.9%</td>
</tr>
</tbody>
</table>
Admission without quotas

- Quota
- Non-quota
Admission with quotas
Econometric analysis

- Censo da Educação Superior
- ENADE
- Difference-in-differences
- Compare university programs that expanded their quotas quickly with those that did not
- Look at impacts of quotas on non-quota students
Preliminary findings--performance

- Quota students perform worse than non-quota students on ENADE exams
- As the percentage of quota students increases, non-quota students do worse
- Quota students do better as their percentages increase.
Preliminary findings—drop out

- Quota students are less likely to drop out in the first two years.
- As the percentage of quota students increases, dropout of nonquota students increases.
- Quota students are less likely to drop out as the percentage of quota students increases.
Conclusions

- Quotas have multiple effects—composition of classes, selectivity
- Social inclusion—what kind of society is Brazil going to be?
- Adjustment costs—lower achievement test scores
- Lower drop out—resilience
- What are universities doing to help students adjust to the new regime?
- To combat inequality—start with primary schooling