The productivity and innovation agenda

William Maloney
World Bank
Copper Production
Chile 1870 - 1970

- % World Production
- Chilean Copper Production

Maloney and Valencia, 2014
Introduction of New Technologies—Rio Tinto and Spain

US: basis of knowledge network for industrialization

Japan: Sumitomo, Furukawa—Major conglomerates today

Introduction of New Technologies in Chile

Maloney and Valencia, 2014
The Key: Differences in ability to adopt and adapt new technologies.

Maloney and Valencia, 2014
Thanks
## 1. Entrepreneurship and Management Quality: Another Historical Mystery

### Table 9: Relative Contribution to Industrialization of Locals vs. Immigrants

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>% Owners</th>
<th>% Pop.</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Immigrants</td>
<td>Immigrants</td>
<td>All</td>
</tr>
<tr>
<td>Argentina</td>
<td>1900</td>
<td>80</td>
<td>30</td>
<td>2.7</td>
</tr>
<tr>
<td>Brazil (Sao Paulo)</td>
<td>1920-1950</td>
<td>50</td>
<td>16.5</td>
<td>3.0</td>
</tr>
<tr>
<td>Brazil (Minas Gerais)</td>
<td>1870-1900</td>
<td>3.6</td>
<td>1.5</td>
<td>2.4</td>
</tr>
<tr>
<td>Chile</td>
<td>1880</td>
<td>70</td>
<td>2.9</td>
<td>24.1</td>
</tr>
<tr>
<td>Colombia (Antioquia)</td>
<td>1900</td>
<td>5</td>
<td>4.7</td>
<td>1.1</td>
</tr>
<tr>
<td>Colombia (Barranquilla)</td>
<td>1888</td>
<td>60</td>
<td>9.5</td>
<td>6.3</td>
</tr>
<tr>
<td>Colombia (Santander)</td>
<td>1880</td>
<td>50</td>
<td>3</td>
<td>16.7</td>
</tr>
<tr>
<td>Mexico</td>
<td>1935</td>
<td>50</td>
<td>0.97</td>
<td>51.5</td>
</tr>
<tr>
<td>US (5% census sample)</td>
<td>1900</td>
<td>31</td>
<td>13.6</td>
<td>2.3</td>
</tr>
<tr>
<td>US (Fortune 500)</td>
<td>various</td>
<td>18</td>
<td>10.5</td>
<td>1.7</td>
</tr>
</tbody>
</table>

Notes: Table tabulates the share of industries owned by immigrants, their share in the population, their contribution relative to their share in the population and their contribution assuming all immigrants and entrepreneurs are male. Source: Industrial Surveys, both official and academic. See text.

Business climate? Property rights?

Maloney, 2014
Managerial Practices and Development

Bloom et al. (2015)
• Macro issues broad consensus
• LA low productivity, excessively concentrated.
• Argue- not a function of production mix-much more attention to producing a society that is 1. entrepreneurial and 2. can manage new technologies at the frontier.
• Heterogeneity in productivity growth more interesting than central tendency (no resource curse).

• How we produce arguably more important than what and since we have no clue about which is better. Designing the i Phone better than low grade textiles but aside from that.

• Still relevant: Mexico has had an electronics industry about as long as Korea- but no telefono Azteca.

• But who hires the engineers?
Entrepreneurship—who employs engineers

• Latin America: 50% of turn of century firms immigrants as directors or owners. Generally the case in LA vastly out of proportion to share in the population. Not the case in the US.
  • Question: how critical is Business climate? Institutions? How much is information?
• Bloom Van Reenen: LAC- poor management and weak ability to take a long view.
• Arguably: Challenge is generating a private sector that is dynamic, knows how to learn.
  • Asian countries: Japan, Singapore- quality, or productivity.
• Challenge going forward.