Declining Inequality in Latin America

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and

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SAIS

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Inequality in Latin America is high...
...but has been declining since around 2000

- Decline is pervasive and significant
- Larger than the rise in inequality in 1990s
- Important contribution to the decline in poverty
- Contributed to the rise of the middle-class
- In countries with high growth & low growth
- In countries with left and nonleft governments
- In commodity exporters and commodity importers
LATAM IS THE MOST UNEQUAL REGION IN THE WORLD

Gini Coefficient by Region (in %), 2004

Ferreira and Ravallion, 2008.
Inequality declined during the 2000’s

Latin America: Declining income inequality by country: 2000-2011
(Annual Change of Gini in %)
The decline of income inequality in the 2000s has been higher than the rise in the 1990s (Annual average change in Gini in %)
On average, 39 percent of the reduction in poverty was due to the decline in inequality c. 2001-2010

Declining inequality has contributed to the expansion of the “middle-class”

Ferreira et al., 2012.
The faster the decline in inequality, the fastest the growth of the middle-class
Determinants of the decline in inequality

• Declining inequality of hourly labor income
• Larger and more progressive transfers
• Lower dependency ratios & higher participation rates of adults
Decomposing Decline in Inequality
Labor (red); Transfers (Green); Demog (Blue) (Azevedo et al. 2012)
Determinants of declining inequality in hourly labor earnings:

Decline in returns to post-secondary education (aka. skill premium)

- Supply
- Demand
- Labor Market Institutions
- Declining “quality” in workers with tertiary degree
Zooming in

Brazil
Zooming in: Brazil

• Low growth during most of the period
• Decomposition of change in wage inequality:
  • Change in Relative Wages => Effect Equalizing
  • Change in Composition for Education and Experience => Slightly Unequalizing (Bourguignon et al., 2005) “paradox of progress”)
Zooming in: Brazil

• Relative Wages effect:
  • Increase in relative supply of skilled workers
  • Increase in relative demand of low-skilled workers
  • Rising minimum wages
  • Declining absolute real wages for workers with tertiary => degraded tertiary?
Brazil: Decline in Wage Inequality

Table 1: Dispersion of Real Wages: 2002-2011, Male aged 16-65

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td><strong>Hourly Wage</strong></td>
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<tr>
<td>Male Sample</td>
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<tr>
<td>Mean</td>
<td>4.63</td>
<td>4.38</td>
<td>4.25</td>
<td>4.35</td>
<td>4.57</td>
<td>4.65</td>
<td>4.80</td>
<td>4.98</td>
<td>5.15</td>
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<tr>
<td>Median</td>
<td>2.50</td>
<td>2.41</td>
<td>2.42</td>
<td>2.39</td>
<td>2.55</td>
<td>2.66</td>
<td>2.79</td>
<td>2.91</td>
<td>3.11</td>
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<tr>
<td>Gini</td>
<td>0.52</td>
<td>0.51</td>
<td>0.50</td>
<td>0.50</td>
<td>0.50</td>
<td>0.49</td>
<td>0.48</td>
<td>0.48</td>
<td>0.47</td>
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<tr>
<td>Theil</td>
<td>0.57</td>
<td>0.54</td>
<td>0.52</td>
<td>0.53</td>
<td>0.54</td>
<td>0.52</td>
<td>0.51</td>
<td>0.53</td>
<td>0.48</td>
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<tr>
<td>90-10</td>
<td>7.79</td>
<td>7.27</td>
<td>7.05</td>
<td>6.60</td>
<td>6.75</td>
<td>6.12</td>
<td>6.11</td>
<td>6.00</td>
<td>5.60</td>
</tr>
<tr>
<td>50-10</td>
<td>2.08</td>
<td>2.01</td>
<td>2.00</td>
<td>1.83</td>
<td>1.87</td>
<td>1.84</td>
<td>1.85</td>
<td>1.82</td>
<td>1.79</td>
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<tr>
<td>90-50</td>
<td>3.75</td>
<td>3.62</td>
<td>3.53</td>
<td>3.60</td>
<td>3.60</td>
<td>3.33</td>
<td>3.30</td>
<td>3.30</td>
<td>3.13</td>
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<td>Obs</td>
<td>44097</td>
<td>43480</td>
<td>47187</td>
<td>49734</td>
<td>51479</td>
<td>51519</td>
<td>53825</td>
<td>55138</td>
<td>49419</td>
</tr>
</tbody>
</table>

Wang, Yang. 2013. “Decomposing the Changes in Male Wage Distribution in Brazil.” Tulane University, Ph.D. field paper
Brazil (2002-2011):

- Relative Wages => Equalizing
- Composition Education & Experience => Slightly Unequalizing

Wang, Yang. 2013. “Decomposing the Changes in Male Wage Distribution in Brazil.” Tulane University, Ph.D. field paper
Brazil: Decline in relative returns to education

Fig. 8: Relative Return to Education

Wang, Yang. 2013. “Decomposing the Changes in Male Wage Distribution in Brazil.” Tulane University, Ph.D. field paper
Brazil: Decline in skill premium coincides with the expansion of the relative supply of workers with post secondary education.
Brazil: Rising minimum wage

Fig. 13: Minimum Wage in Reais: 2002 Price

Wang, Yang. 2013. “Decomposing the Changes in Male Wage Distribution in Brazil.” Tulane University, Ph.D. field paper
Brazil: Decline in real wages for workers with tertiary

Fig. 6: Average Hourly Wage of Tertiary Group: 2002-2011 Male

Wang, Yang. 2013. “Decomposing the Changes in Male Wage Distribution in Brazil.” Tulane University, Ph.D. field paper
Zooming in

Mexico
Zooming in: Mexico

• Low growth

• Decomposition of change in wage inequality:
  • Change in Relative Wages => Effect Equalizing
  • Change in Composition for Education and Experience => Slightly Unequalizing
Zooming in: Mexico

- Change in Relative Wages
  - Increase in relative supply of skilled workers
  - Minimum wages and unionization no effect
  - Degraded tertiary?
Mexico (1996-2010):

• Relative Wages => Equalizing

• Composition Education & Experience => Slightly Unequalizing

Mexico: Changes in Schooling

In contrast to Brazil, in Mexico minimum wages did not increase at all...

Real Minimum Wage and Unionization: 1988-2010

A. Real Minimum Wage Index (December 2010 = 100)

B. Unionization Rate

Income: education

Government Transfers
How redistributive are Latin American governments?

• Decomposition of changes in inequality by income source show that transfers is, on average, the second most important proximate determinant of decline in overall inequality

• Social spending and tax incidence analysis for 14 countries (8 from Latin America)

• [www.commitmenttoequity.org](http://www.commitmenttoequity.org)
What is CEQ

The Commitment to Equity (CEQ) was designed to analyze the impact of taxation and social spending on inequality and poverty in individual countries, and provide a roadmap for governments, multilateral institutions, and nongovernmental organizations in their efforts to build more equitable societies. Directed by Nora Lustig, the CEQ is a joint project of CIPR and the Department of Economics at Tulane University and the Inter-American Dialogue.
Redistribution in the rich and developing countries

Sources: Immervoll et al. (2009) for EU and for CEQ countries see Lustig (2014) and slides at the end.

Note: in these calculations contributory pensions are part of market income and NOT treated as a government transfer.
Zooming in (CEQ 14 countries; LA 8 in red)

Sources: Lustig (2014) and slides at the end.
Note: in these calculations contributory pensions are part of market income and NOT treated as a government transfer.
Redistribution rises with income per capita

Sources: Lustig (2014) and slides at the end.
Note: in these calculations contributory pensions are part of market income and NOT treated as a government transfer.
.... the more unequal, the more redistribution

Sources: Lustig (2014) and slides at the end.
Note: in these calculations contributory pensions are part of market income and NOT treated as a government transfer.
Higher inequality is associated with more redistributive “effort:” spending on transfers/GDP rises with inequality.

Sources: Lustig (2014) and slides at the end. 
Note: in these calculations contributory pensions are part of market income and NOT treated as a government transfer.
...and so does social spending/GDP

Sources: Lustig (2014) and slides at the end.
Note: in these calculations contributory pensions are part of market income and NOT treated as a government transfer.
Argentina: Rising role of transfers

Argentina-Reduction in Inequality: Market (blue) vs. Redistribution (red)

-24%  
124%
2003-06

43%  
58%
2006-09

Redistribution  
Market

Lustig, N. and C. Pessino. 2014.
Argentina-Reduction in Poverty: Market (blue) vs. Redistribution (red)

Lustig, N. and C. Pessino. 2014.
### Mexico: Rising role of transfers

#### Mexico: The impact of cash transfers on inequality and poverty, 1996, 2000 and 2010

<table>
<thead>
<tr>
<th>Year</th>
<th>Gini</th>
<th>Net market income</th>
<th>Disposable income</th>
<th>% change wrt net market income</th>
<th>Headcount index ($2.5 PPP)</th>
<th>% change with respect to net market income</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td></td>
<td>0.522</td>
<td>0.520</td>
<td>—</td>
<td>30.2%</td>
<td>-0.4%</td>
</tr>
<tr>
<td>2000</td>
<td></td>
<td>0.544</td>
<td>0.539</td>
<td>—</td>
<td>22.1%</td>
<td>-0.9%</td>
</tr>
<tr>
<td>2010</td>
<td></td>
<td>0.503</td>
<td>0.495</td>
<td>—</td>
<td>13.8%</td>
<td>-1.7%</td>
</tr>
</tbody>
</table>

Thank you!
References


CEQ Teams
(Year of Survey; C=consumption & I=income)(MWB Version)


2. **Armenia (2011; I):** Stephen Younger and Artsvi Khachatryan (March 12, 2014; paper)


5. **Costa Rica (2010; I):** Pablo Sauma and Juan Diego Trejos (February 2014; paper)


7. **Ethiopia (2010/11; C):** Ruth Hill, EyasuTsehaye, Tassew Woldehanna (April 30, 2014)

8. **Guatemala (2011; I):** Maynor Cabrera, Nora Lustig and Hilcias E. Moran (April 13, 2014)

9. **Indonesia (2012; C):** Jon Jellema and Matthew Wai-Poi (February 18, 2014)
CEQ Teams (Year of Survey; C=consumption & I=income)(MWB Version)


15 United States (2011; I): Sean Higgins, Nora Lustig, Whitney Ruble and Timothy Smeeding


• Research Assistant: Yang Wang, Tulane University