Inequality in Latin America: Markets and Politics

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• Trends
• Correlates
• Determinants
• Summing-up
Inequality Trends: 1990-2018

- Inequality in Latin America higher than in other regions and higher than expected given the countries’ income per capita
- Increased in the early 1990s
- Declined in the 2000s
- No change or slightly increasing 2012- circa 2018
- In most LA countries, inequality is lower in circa 2018 than in circa 1990

Note: data for Argentina refers to urban areas only
Latin America used to be identified as the most unequal region in the world...

Gini Coefficient by Region (in %), 2004

Ferreira and Ravallion, 2008.
...and a region with ‘excess’ inequality
After rising in the 1990s, since the 2000s, however, a remarkable inequality decline has occurred.
Inequality by Region 1990-2000

Source: World Bank World Development Indicators. Indicators show the five year average for each country.
Inequality by Region 2000-2010

Source: World Bank World Development Indicators. Indicators show the five year average for each country.
Inequality by Region 2010 – c. 2018

Source: World Bank World Development Indicators. Indicators show the five year average for each country.
Inequality by Region 1990 - c. 2018

Source: World Bank World Development Indicators. Indicators show the five year average for each country.
Inequality in Latin America 1990 - c. 2018

Source: World Bank World Development Indicators. Indicators show the five year average for each country.
Inequality by Region 2000 - c. 2018

Source: World Bank World Development Indicators. Indicators show the five year average for each country.
Income Share of the Top 10%, 2000 – c. 2018

For the Gini-skeptics....

Source: World Bank World Development Indicators. Indicators show the five year average for each country.
90/10 Income Share Ratio, 2000 – c. 2018

Source: World Bank World Development Indicators. Indicators show the five year average for each country.

For the Gini-skeptics....
Latin America still the most unequal region in the world but converging...

Average Inequality By Region (5 year Averages) 1990 – c. 2018

<table>
<thead>
<tr>
<th>Region</th>
<th>1990</th>
<th>2000</th>
<th>2010</th>
<th>c. 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>0.416</td>
<td>0.423</td>
<td>0.383</td>
<td>0.376</td>
</tr>
<tr>
<td>Latin America and the Caribbean</td>
<td>0.499</td>
<td>0.535</td>
<td>0.481</td>
<td>0.464</td>
</tr>
<tr>
<td>Africa</td>
<td>0.437</td>
<td>0.437</td>
<td>0.435</td>
<td>0.438</td>
</tr>
<tr>
<td>Asia</td>
<td>0.362</td>
<td>0.359</td>
<td>0.362</td>
<td>0.349</td>
</tr>
<tr>
<td>Europe</td>
<td>0.270</td>
<td>0.340</td>
<td>0.316</td>
<td>0.316</td>
</tr>
<tr>
<td>Middle-East</td>
<td>0.408</td>
<td>0.388</td>
<td>0.380</td>
<td>0.373</td>
</tr>
<tr>
<td>North-America</td>
<td>0.346</td>
<td>0.368</td>
<td>0.370</td>
<td>0.415</td>
</tr>
</tbody>
</table>

Source: World Bank World Development Indicators.
Income Share of the Top 10%, c. 2018

Source: World Bank World Development Indicators. Indicators show the five year average for each country.
In the 2000s, economic growth and declining inequality led to

- significant poverty reduction: proportion of poor declined from 42 to 25 percent (poverty line US$4 ppp (2005)/day)

- a robust expansion of the middle-class: proportion of middle class population rose from 22 to 34 percent
Poverty: 2001-2017

Poverty headcount; Latin America

Source: SEDLAC (CEDLAS & The World Bank)
Percentage of population by income groups Latin America, c. 2000-2012

Azevedo, Lopez-Calva, Lustig and Ortiz. 2015. Inequality, Mobility and Middle Classes in Latin America. In Dayton, Jeff (editor)
Poverty reduction: growth contributed with 61 percent and inequality reduction with 39 percent, on average.

Lustig et al. (2014) based on SEDLAC
Expansion of the middle-class: growth contributed with about 79 percent and inequality reduction with 21 percent, on average.

Lustig et al. (2014) based on SEDLAC
Ethnic and Racial Inequality

Figure 6. National Poverty Headcount Rates at Market Income

Source: Author’s based on Bolivia (2009); Paz-Arauco et al., 2013 CEQ-IDB; Brazil (2009); Higgins and Pereira, 2013 CEQ-IDB; Guatemala (2010/2011); Cabrera and Moran, 2013 CEQ-IDB; Aranda and Scott, 2016 CEQ-IDB; Uruguay (2009); Bucheli, Rossi and Amabile, 2013 CEQ-IDB.

Note: Poverty rates are based on national poverty lines. As such, the specific rates are different in each country and direct comparisons in poverty rates across countries are not possible.

Source: Lustig, Morrison and Ratzlaff (2019)
Correlates
2000s, inequality decline (blue) was pervasive

Inequality Trends in LAC by Country by Period (circa 1990-2017)

Changes in Gini Points

Post 2012, inequality reversed its declining trend

Post, 2012, declining when rest is no longer or not as much

Source: SEDLAC (CEDLAS & The World Bank)
Income inequality in the 2000s declined:

- In countries with high growth (Chile & Peru) & low growth (Mexico)
- In (net) commodity exporters (Argentina, Bolivia, Brazil, Ecuador, Peru) and commodity importers (El Salvador, Mexico and Nicaragua)
- In countries with rising (Argentina & Brazil) and stagnant (Mexico) minimum wages
- In countries with left (Argentina, Bolivia, Brazil, Chile, El Salvador, Ecuador, Nicaragua, Paraguay and Uruguay) and nonleft (Mexico & Peru) governments
However, largest declines occurred in countries:

- With higher economic growth
- Experiencing commodity boom
- With rising minimum wages
- Under leftist regimes
## Declining Inequality Episodes and Correlates

<table>
<thead>
<tr>
<th>Country</th>
<th>Period</th>
<th>% change in Gini</th>
<th>Average % change in GDP per-capita</th>
<th>Commodity Exporter</th>
<th>Political Regime</th>
<th>% change in Minimum Wage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina (urban)</td>
<td>2002-2013</td>
<td>-23.28</td>
<td>4.75</td>
<td>Yes</td>
<td>Left</td>
<td>N/A</td>
</tr>
<tr>
<td>Bolivia</td>
<td>2002-2011</td>
<td>-22.29</td>
<td>2.63</td>
<td>Yes</td>
<td>Left</td>
<td>12.8</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>1993-2009</td>
<td>-22.10</td>
<td>2.33</td>
<td>No</td>
<td>Left</td>
<td>94.2</td>
</tr>
<tr>
<td>Ecuador</td>
<td>1999-2011</td>
<td>-21.78</td>
<td>2.57</td>
<td>Yes</td>
<td>Left</td>
<td>64.1</td>
</tr>
<tr>
<td>Peru</td>
<td>2002-2014</td>
<td>-19.45</td>
<td>5.40</td>
<td>Yes</td>
<td>Rest</td>
<td>30.1</td>
</tr>
<tr>
<td>El Salvador</td>
<td>2002-2012</td>
<td>-19.14</td>
<td>1.49</td>
<td>No</td>
<td>Left</td>
<td>7.7</td>
</tr>
<tr>
<td>Paraguay</td>
<td>2002-2013</td>
<td>-16.04</td>
<td>3.19</td>
<td>Yes</td>
<td>Left</td>
<td>-1.7</td>
</tr>
<tr>
<td>Chile</td>
<td>1998-2006</td>
<td>-15.63</td>
<td>3.10</td>
<td>Yes</td>
<td>Left</td>
<td>35.7</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>2006-2014</td>
<td>-14.96</td>
<td>3.40</td>
<td>No</td>
<td>Rest</td>
<td>14.6</td>
</tr>
<tr>
<td>Uruguay</td>
<td>2007-2012</td>
<td>-13.99</td>
<td>4.82</td>
<td>Yes</td>
<td>Left</td>
<td>58.4</td>
</tr>
<tr>
<td>Honduras</td>
<td>2004-2009</td>
<td>-13.77</td>
<td>1.57</td>
<td>No</td>
<td>Rest</td>
<td>14.5</td>
</tr>
<tr>
<td>Brazil</td>
<td>1997-2015</td>
<td>-13.45</td>
<td>1.58</td>
<td>Yes</td>
<td>Left</td>
<td>120.3</td>
</tr>
<tr>
<td>Guatemala</td>
<td>2006-2014</td>
<td>-11.54</td>
<td>1.19</td>
<td>Yes</td>
<td>Left</td>
<td>14.9</td>
</tr>
<tr>
<td>Panama</td>
<td>2001-2014</td>
<td>-10.24</td>
<td>6.50</td>
<td>No</td>
<td>Rest</td>
<td>15.8</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>2001-2005</td>
<td>-8.21</td>
<td>1.96</td>
<td>Yes</td>
<td>Rest</td>
<td>-2.4</td>
</tr>
<tr>
<td>Mexico</td>
<td>1996-2004</td>
<td>-4.81</td>
<td>1.53</td>
<td>No</td>
<td>Rest</td>
<td>-2.7</td>
</tr>
<tr>
<td>Colombia</td>
<td>2001-2005</td>
<td>-4.41</td>
<td>2.25</td>
<td>Yes</td>
<td>Rest</td>
<td>5.2</td>
</tr>
</tbody>
</table>

Source: World Bank Development Indicators and CEPAL
Inequality Trends in LAC by Political Regime

Averages of the Gini coefficient for household per capita income by political regime, 1992-2017

Interpolated series

Eight countries under leftist rule 2008-2014

Five of the eight were voted out

Commodity Boom Begins

End of Commodity Boom

Source: SEDLAC (CEDLAS & The World Bank)
Inequality Trends in LAC by Political Regime

Averages of the Gini coefficient for household per capita income by political regime, 1992-2017

Interpolated series

Source: SEDLAC (CEDLAS & The World Bank)

Definition of regimes: Arnson & Perales (2007)
Extreme Poverty by Political Regime: 2001-2017

Poverty headcount at $3.2/day by political regime

Interpolated series

Source: SEDLAC (CEDLAS & The World Bank)
• Puzzle #1: why perceptions appear inconsistent with observed patterns of declining inequality and poverty?
  – Perhaps what matters are absolute differences and/or directional mobility and/or reality vs. expectations
  – Could the problem be one of measurement error? The “missing rich” in household surveys
Inequality measures based on household surveys miss the richest individuals (Piketty’s capital owners)

- Merrill Lynch’s 4,400 individuals (roughly 0.001% of total population) with a net worth of US$30 million or more with an average wealth of US$500 million
- Assuming a 5% return on assets:
  - Roughly US$600,000/month
- Forbes’ 30 billionaires
  - Roughly US$15 million/month
- Average income of two richest households
  - Mexico’s household surveys roughly US$45,000/month
  - Brazil’s survey, roughly US$80,000/month
Correcting for “Missing Rich:” Brazil

Figure 2.8: Top 10% Shares Across Income Concepts

Source: Morgan (2018)
Correcting for “Missing Rich:” Brazil

Figure 2.11: Top 1% Shares Across Income Concepts

Source: Morgan (2018)
Correcting for “Missing Rich:” Brazil

Figure 2.18: Gini coefficients for Total Income in Brazil: 1995–2016

Source: Morgan (2018)
Correcting for “Missing Rich:” Brazil

Figure 2.21: Growth Incidence Curve in Brazil: 2002–2013

Source: Morgan (2018)
Correcting for “Missing Rich:” Brazil

Table 2.4: Income growth, recession and inequality in Brazil: 2002-2016

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Population</td>
<td>4.7%</td>
<td>21.0%</td>
<td>-13.5%</td>
</tr>
<tr>
<td>Bottom 50%</td>
<td>16.6%</td>
<td>38.8%</td>
<td>-16.0%</td>
</tr>
<tr>
<td>Middle 40%</td>
<td>-4.9%</td>
<td>15.4%</td>
<td>-17.6%</td>
</tr>
<tr>
<td>Top 10%</td>
<td>7.9%</td>
<td>20.6%</td>
<td>-10.5%</td>
</tr>
<tr>
<td>Incl. Top 1%</td>
<td>24.7%</td>
<td>38.7%</td>
<td>-10.1%</td>
</tr>
<tr>
<td>Incl. Top 0.1%</td>
<td>30.4%</td>
<td>43.8%</td>
<td>-9.3%</td>
</tr>
<tr>
<td>Incl. Top 0.01%</td>
<td>38.8%</td>
<td>43.9%</td>
<td>-3.6%</td>
</tr>
<tr>
<td>Incl. Top 0.001%</td>
<td>83.1%</td>
<td>82.5%</td>
<td>0.3%</td>
</tr>
</tbody>
</table>

Source: Morgan (2018)
Correcting for “Missing Rich:” Argentina, Brazil, Chile, Colombia, Uruguay

Figure 1.8: Top 1% Share in Latin America (1990-2015)

Authors’ estimates for Chile, Alvaredo (2010) for Argentina, Morgan (2017) for Brazil, Alvaredo and Londoño-Vélez (2013) for Colombia, and Burdín et al. (2014) for Uruguay.

Source: Flores (2019)
Determinants

Why did inequality (measured with household surveys) decline in the 2000s?
Inequality Trends in LAC by Country (2000-2012)

Annual percentage change in the Gini coefficient for household per capita income between circa 2000 and 2012

Source: SEDLAC (CEDLAS & The World Bank)
Proximate Determinants

- Labor income, 62
- Transfers, 17
- Other non-labor income, 15
- Capital, 4
- Pensions, 2

Source: Non-parametric decomposition results from Azevedo et al. (2013); and parametric results provided by CEDLAS, based on data from SEDLAC (CEDLAS and The World Bank).
Determinants of declining inequality in labor earnings 2000-2012:

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

- Supply of skilled labor outpaced its demand

- Expanding access to education probably the single most important policy behind the declining trend in inequality
Gini coefficient and educational attainment; circa 2000-2012

Educational attainment for total population aged 25-65

- Annual % change in the Gini coefficient
- Change in share of labor force with secondary education (in percentage points)
- Change in share of labor force with tertiary education (in percentage points)

Source: Own calculations, based on data from SEDLAC (CEDLAS, and The World Bank), December 2014.

Notes: The average change in the Gini for each country is calculated as the percentage change between the end year and the initial year, divided by the number of years. The change in educational attainment is calculated as the absolute change between the shares in the end and initial years. According to years of schooling, the education groups are calculated as follows: secondary education (between 9 and 13 years of schooling) and tertiary education (more than 13 years of schooling).
Changes in Inequality and Returns to Education, 2001 - 2012

Source: Own calculations, based on data from SEDLAC (CEDLAS, and The World Bank), December 2014.

Notes: The average change in the Gini for each country is calculated as the percentage change between the end year and the initial year, divided by the number of years.
Determinants of declining inequality in labor earnings:

Reinforcing factors

• Labor market institutions: rising minimum wages and power of labor unions
  – Rise of the Left

• Commodity boom => higher demand for low-skilled workers

Countervailing forces

▪ Assortative matching?
Increase in real value of minimum wage (2002-2010)

Increase in real value of minimum wage (2002-2010)
Determinants of more progressive transfers

• Mainly two types:
  – Conditional cash transfers targeted to the poor
  – Noncontributory old-age pensions

• Technological innovation in social policy: cash transfers replaced general subsidies

• Politics:
  – Democratization & inclusion of previously excluded sectors
  – Rise of the left & electoral competition
Were leftist regimes in Latin America during the 2000s more redistributive than other countries?

Green: completed
Orange: in progress
Size of the state:
Government revenues as a share of GDP (circa 2010)

(rankied by total government revenue/GDP; GNI right hand scale)

Note: Non-Latin American countries: Armenia, China, Ethiopia, Georgia, Ghana, India, Indonesia, Iran, Jordan, Russia, South Africa, Sri Lanka, Tanzania, Tunisia, and Uganda.
Source: see bibliographical reference by country at the end of this presentation.
Inequality and Social Spending

Contributory pensions as deferred income

Source: see bibliographical reference by country at the end of this presentation and Lustig (2018).

\[ y = 0.0521x + 0.0878 \]
\[ (0.807) \]
\[ (0.423) \]
\[ R^2 = 0.0038 \]
Redistributive effect

(Change in Gini points: market income plus pensions and market income to disposable income, circa 2010)

(ranked by redistributive effect (left hand scale); Gini coefficients right hand scale)

Source: see bibliographical reference by country at the end of this presentation and Lustig (2018).
Fiscal policy and poverty reduction

Poverty line $2.50 dollars 2005 PPP/day; in % and for the scenario of contributory pensions as deferred income

Source: see bibliographical reference by country at the end of this presentation and Lustig (2018).
Fiscal policy and poverty reduction

Poverty line $4 dollars 2005 PPP/day; in % and for the scenario of contributory pensions as deferred income

Source: see bibliographical reference by country at the end of this presentation and Lustig (2018).
Why is Inequality Rising in Some Countries?


Annual percentage change in the Gini coefficient for household per capita income between circa 2012 and 2017

<table>
<thead>
<tr>
<th>Country</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guatemala</td>
<td>-2.33%</td>
</tr>
<tr>
<td>Honduras</td>
<td>-2.01%</td>
</tr>
<tr>
<td>El Salvador</td>
<td>-1.82%</td>
</tr>
<tr>
<td>Colombia</td>
<td>-1.10%</td>
</tr>
<tr>
<td>Bolivia</td>
<td>-1.09%</td>
</tr>
<tr>
<td>Panama</td>
<td>-0.70%</td>
</tr>
<tr>
<td>Ecuador</td>
<td>-0.60%</td>
</tr>
<tr>
<td>Peru</td>
<td>-0.52%</td>
</tr>
<tr>
<td>Mexico</td>
<td>-0.22%</td>
</tr>
<tr>
<td>Uruguay</td>
<td>-0.21%</td>
</tr>
<tr>
<td>Dominican Rep.</td>
<td>-0.20%</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>-0.11%</td>
</tr>
<tr>
<td>Argentina</td>
<td>0.05%</td>
</tr>
<tr>
<td>Chile</td>
<td>0.12%</td>
</tr>
<tr>
<td>Paraguay</td>
<td>0.29%</td>
</tr>
<tr>
<td>Brazil</td>
<td>0.32%</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>1.01%</td>
</tr>
<tr>
<td>Latin America</td>
<td>-0.54%</td>
</tr>
</tbody>
</table>

Source: SEDLAC (CEDLAS & The World Bank)
Why is Inequality Rising in Some Countries?

Labor Markets

Lower labor demand and fiscal consolidation imply that

• Market-determined wages at the bottom, are growing less, not at all or decline
• Real minimum wages began to decline

The rate of increase in the supply of skilled workers may have slowed down
Why is Inequality Rising in Some Countries?

Government transfers

With most countries facing limited or no fiscal space transfers lost their equalizing force

- Some countries had to cut them down (e.g., Mexico)
- In others they were eroded by inflation (e.g., Argentina and Brazil)
- In addition, taxes rose and subsidies were cut (e.g., Argentina and Mexico)
Why is Inequality Declining in the Northern Triangle?

• Declining skill premium?

• Remittances?

• Government transfers?

• How does declining inequality interact with violence, low social cohesion and migratory patterns?
Summing-up and Questions for the Inquisitive Mind

• Latin America, still unequal but much less than last century
  ➢ Markets and politics have played a role

• Declining inequality and poverty in the 2000s is pervasive and more pronounced among countries governed by the left
  ➢ Must determine role of ideology vs. commodity boom

• Does the story change if we include the really rich?
  ➢ Have leftist governments done much to curb egregious concentration of economic power at the top?
Summing-up and Questions for the Inquisitive Mind

- Declining inequality slowed-down or even began to reverse itself from 2013 onwards in most countries
  - Must determine role of this disappointing performance in electoral results: i.e., what role this change played in getting leftist governments voted out of office?
  - Will the switch away from the left result in outright less pro-poor policies?

- Disentangling the Northern Triangle “mystery” of declining inequality
  - Are remittances the cause and, if so, will anti-immigration politics and policies in the US put a damp?
Summing-up and Questions for the Inquisitive Mind

• Puzzles in fiscal redistribution

  ➢ Why is there such a large discrepancy within leftist governments with Bolivia and Nicaragua redistributing little and Argentina and Uruguay a lot?

  ➢ Why even leftist governments end up hurting the poor through indirect taxes and can this be prevented and how?
Thank you!
References

Teams and references by country
(the year for which the analysis was conducted in parentheses);
C=consumption & I=income)


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Cabrera, Maynor and Hilcias E. Moran. 2015. “CEQ Master Workbook: Guatemala (2011),” CEQ Data Center on Fiscal Redistribution (CEQ Institute, Tulane University, Instituto Centroamericano de Estudios Fiscales (ICEFI) and International Fund for Agricultural Development (IFAD)). October 4, 2016.
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(the year for which the analysis was conducted in parentheses); C=consumption & I=income)


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Cabrera, Maynor and Hilcias E. Moran. 2015. “CEQ Master Workbook: Nicaragua (2009),” CEQ Data Center on Fiscal Redistribution (CEQ Institute, Tulane University, Instituto Centroamericano de Estudios Fiscales (Icefi) and International Fund for Agricultural Development (IFAD)). October 14, 2015.


Teams and references by country
(the year for which the analysis was conducted in parentheses); C=consumption & I=income)


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(the year for which the analysis was conducted in parentheses);
C=consumption & I=income)


