Inequality, Poverty, Markets and the State: the Case of Brazil

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OUTLINE

• The facts
• Inequality, poverty reduction and the middle class
• Why has inequality declined?
• Zooming in: Brazil
  – Labor Markets
  – Transfers
• Unintended consequences of fiscal policy in Brazil (Commitment to Equity Project, CEQ)
THE FACTS
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
LATAM IS THE MOST UNEQUAL REGION IN THE WORLD

Gini Coefficient by Region (in %), 2004

Ferreira and Ravallion, 2008.
Declining Inequality in 2000’s

• The Gini coefficient for household per capita income fell from a weighted (unweighted) average of 0.550 (0.532) in the early 2000s to 0.496 (0.483) circa 2012.

• On average, the decline equaled .86%/year

• The decline occurred in 16 of the 18 countries.

• The rate of decline ranged from an annual average of -2.64 percent in Nicaragua to -0.28 percent in Venezuela.
Average Yearly Change in Gini: 2000 (circa) - 2012 (circa)

Lustig et al. (2014) based on SEDLAC
Panel A: Weighted averages of the Gini coefficient; 18 countries

Lustig et al. (2014) based on SEDLAC
Panel B: Weighted averages of the Gini coefficient, excluding Mexico

Lustig et al. (2014) based on SEDLAC
The decline of income inequality in the 2000s has been higher than the rise in the 1990s (Change in Gini points in %)

Lustig et al. (2014) based on SEDLAC
Inequality, Poverty and the Middle-Class
Decline in Poverty 1992-2012
(Ave. Headcount Ratio in %)

Incidence of poverty, US$2.50 a day poverty line
Incidence of poverty, US$4 a day poverty line

Lustig et al. (2014) based on SEDLAC
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.
On average, 21 percent of the expansion of the middle-class was due to the decline in inequality c. 2001-2010

Lustig et al. (2014) based on SEDLAC
WHY?
Inequality in Latin America is high...
...but has been declining since around 2000

• In countries with high growth & low growth
• In countries with left and nonleft governments
• In commodity exporters and commodity importers
• In high and low (for Latam standards) inequality countries
Determinants of the decline in inequality: candidates

- Declining inequality of hourly labor income
- Larger and more progressive transfers
- Lower dependency ratios
- Higher participation rates of adults
Nonparametric Labor income Transfers Other non-labor income Pensions Capital Adult population Occupation share

Lustig et al. (2014) based on SEDLAC
Zooming in

Brazil: Labor Market
Brazil: Decline in Inequality (Gini)

Fig. 1: Evolution of Household Per Capita Income Gini

Data: SEDLAC

Wang, Yang. 2013. “Decomposing the Changes in Male Wage Distribution in Brazil.” Tulane University, Ph.D. field paper
Figure 2: Household incomes and labour earnings in Brazil, 1995-2012: inequality.

Source: Ferreira et al. (2014)
Figure 1: Household incomes and labour earnings in Brazil, 1995-2012: levels.

Source: Ferreira et al. (2014)
Brazil: Race and Gender

Figure 8: Demographic changes in the working-age population, 1995-2012.

Source: Ferreira et al. (2014)
Brazil: Expansion of Education

Source: Ferreira et al. (2014)
Brazil: Relative Supply and Relative Returns

Lustig et al. (2014)
Brazil: Decline in real wages for workers with tertiary education

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
Brazil: Formalization and Workers Earning Above the Minimum Wage

Figure 7: Formalization and the minimum wage, 1995-2012.

Source: Ferreira et al. (2014)
Brazil: Rising minimum wage

Brazil: Decomposing: human capital, gender/race, urban/rural, minimum wage, informality

Source: Ferreira et al. (2014)
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
Relative Wages effect:

• Real average wages increased during most of the period

• Real average wages of less educated, less experienced, rural, and poorer workers increased

• Real average wages of the college-educated declined over the period
Relative Wages effect:

- **Expansion of education:**
  - Increase in relative supply of skilled workers => decline in the skill premium

- **Agricultural exports boom**
  - Increase in relative demand of low-skilled workers and workers living outside big metropolis => increase in relative wages of low-skilled and poorer workers

- **Rising minimum wages and formality**
  - => increase in relative wages of low-skilled and poorer workers

- **Declining absolute real wages for workers with tertiary**
  - Degraded tertiary?
  - Mismatch?
  - Obsolescence of Skills of older workers?
Zooming in

Brazil: Transfers
Brazil: Role of Transfers (Barros et al., 2010)

• Changes in the size, coverage, and distribution of public transfers account for 49 percent of the total decline in inequality.

• Public transfers represent over 80 percent of nonlabor income and 29 percent of household income.
Redistribution in the rich and developing countries

Change in Gini: Disposable vs. Market
(in GINI points)

Note: in these calculations contributory pensions are part of market income and NOT treated as a government transfer.

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Construction of Income Concepts

MARKET INCOME

MINUS DIRECT TAXES

NET MARKET INCOME

PLUS DIRECT TRANSFERS

DISPOSABLE INCOME

MINUS NET INDIRECT TAXES

POST-FISCAL INCOME

The impact of net cash transfers and net indirect taxes on inequality (Gini coefficient): CEQ 16

Changes in Gini Coefficients

- Gini of Market Income
- Gini of Disposable Income
- Gini of Post-fiscal
- GNI per capita (2005 PPP)
Net Payers to the Fiscal System Start at Decile...

- Guatemala
- Peru
- El Salvador
- Costa Rica
- Armenia
- Uruguay
- Bolivia
- Brazil
- Sri Lanka
- Mexico

Decile 0-1: "Net Payers"
Adding the Effect of Monetized Value of Public Spending on Education and Health


Lindert’s (2006) historical result is also found in cross section: Higher GDP/capita, more redistribution

Change in Gini: Post-fiscal vs. Market
(decline in Gini points shown in positive quadrant)

Note: in these calculations contributory pensions are part of market income and NOT treated as a government transfer.
However, no Robin Hood Paradox
And results do not depend on South Africa


Note: in these calculations contributory pensions are part of market income and NOT treated as a government transfer.
Brazil

Unintended consequences of fiscal policy: consumption taxes increase poverty
Construction of Income Concepts

MARKET INCOME

MINUS DIRECT TAXES

NET MARKET INCOME

PLUS DIRECT TRANSFERS

DISPOSABLE INCOME

Direct Transfers (net of direct taxes) reduce poverty (except in Ethiopia): CEQ 16

Change in Headcount Ratio ($2.5 PPP/Day): Disposable vs. Market Income
(in percentage points)

Note: in these calculations contributory pensions are part of market income and NOT treated as a government transfer.
Construction of Income Concepts

MARKET INCOME

MINUS DIRECT TAXES

NET MARKET INCOME

PLUS DIRECT TRANSFERS

DISPOSABLE INCOME

MINUS NET INDIRECT TAXES

POST-FISCAL INCOME

Indirect Taxes increase poverty over and above market income poverty in six out of the CEQ 16 countries, including Brazil.


Note: in these calculations contributory pensions are part of market income and NOT treated as a government transfer.
Changes in Headcount Ratio: Post-fiscal vs. Market Income (Poverty Line: US$2.50 ppp/day)


Note: in these calculations contributory pensions are part of market income and NOT treated as a government transfer.
Note that Net Indirect Taxes can be equalizing and yet poverty increasing: Ethiopia


Note: in these calculations contributory pensions are part of market income and NOT treated as a government transfer.
References

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<thead>
<tr>
<th>CEQ Teams</th>
<th>(Year of Survey; C=consumption &amp; I=income)(MWB Version)</th>
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<tbody>
<tr>
<td><strong>5.</strong> Chile (2009, I): Jaime Ruiz-Tagle and Dante Contreras (Oct. 25, 2014)</td>
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Thank you!