Comparing Taxation, Transfers, and Redistribution in Brazil and the United States

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Motivation

- Two largest economies and most populous countries in Western Hemisphere
 - Large racial/ethnic minorities
 - High income inequality and inequality of opportunity
 - Low intergenerational mobility
- Both countries have persistently been relatively unequal given their level of development
 - In 1989, Brazil was the second most unequal country in the world behind only Sierra Leone (Ferreira, Leite, and Litchfield, 2008)
 - In 1985, the United States was the second most unequal OECD country behind only Turkey (OECD, 2011)
 - US had similar level of inequality to Brazil today when it had similar level of development: Gini of 0.55 in 1940 (Plotnick et al., 1998)

Motivation (continued)

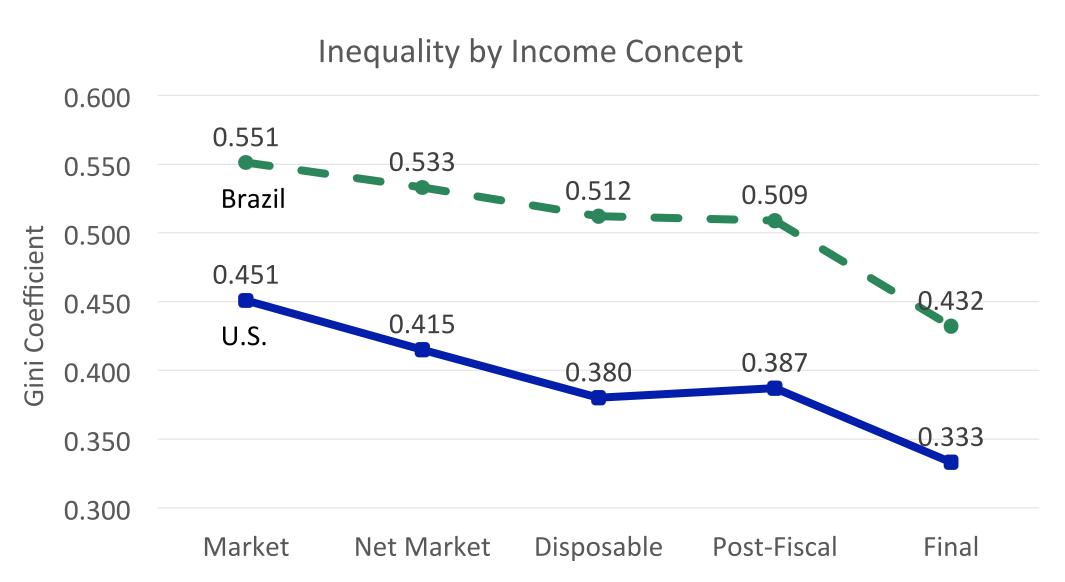
- High inequality of opportunity
 - Brazil among highest of a large sample of countries and US high among developed countries (Brunori, Ferriera, and Peragine 2013)
- Low intergenerational mobility (Corak, 2011)
- Possibly "converging" levels of inequality and mobility
 - Inequality is higher in Brazil than the US
 - But falling in Brazil (Barros et al., 2010)
 - o and rising in the US (Kenworthy and Smeeding, 2013)
 - Reasons to believe trends could continue
 - Intergenerational mobility is lower in Brazil than the US
 - But rising in Brazil (Ferreira et al. 2013)
 - o and falling in the US (Aaronson and Mazumder, 2008)

Our Analysis

- Comprehensive fiscal incidence analysis for the US and Brazil
 - Direct taxes (individual income tax, payroll taxes, corporate income tax, property taxes)
 - Direct transfers (cash transfers for poor and elderly, unemployment benefits, food transfers, refundable tax credits)
 - Indirect taxes (sales and excise taxes)
 - Indirect subsidies (household energy subsidies)
 - In-kind transfers (government-provided health, education, and housing)
- Multiple data sources
 - Current Population Survey 2011
 - American Community Survey 2011
 - National Household Education
 Survey 2007

- Pesquisa de Orçamentos
 Familiares 2008-2009
- Pesquisa Nacional por Amostra de Domicílios 2008

Preview of Results: Inequality Reduction



Construction of Income Concepts: Brazil

MARKET INCOME

Labor income (in formal sector, pre-payroll tax counterfactual), fringe benefits, bonuses, vacation pay, overtime pay, commission, rents, profits, alimony, remittances, gifts, other private transfers, financial interest, imputed rent for owner-occupied housing, goods produced for own consumption, contributory pensions

NET MARKET INCOME

DISPOSABLE INCOME

TAXES

BENEFITS

CCT (Bolsa Familía), Noncontributory pensions (BPC), scholarships, unemployment benefits, special circumstances pensions, milk transfers (PAA Leite), other direct transfers

Energy subsidies (TSEE)

In-kind education benefits (incl. daycare and preschool) and health benefits (primary care, inpatient care, preventative care) Individual income tax (IRPF), payroll tax (FGTS), corporate income tax (IRPJ), property taxes (IPTU and ITR), tax on services (ISS)

State consumption taxes (ICMS) and federal consumption taxes (IPI)

FINAL INCOME

Construction of Income Concepts: United States

MARKET INCOME

Labor income, farm income, non-farm business income, fringe benefits (including employer contributions to health insurance), retirement income, capital income (interest, dividends, rents), private transfers (alimony, child support, other), private scholarships, contributory pensions

BENEFITS

TAXES

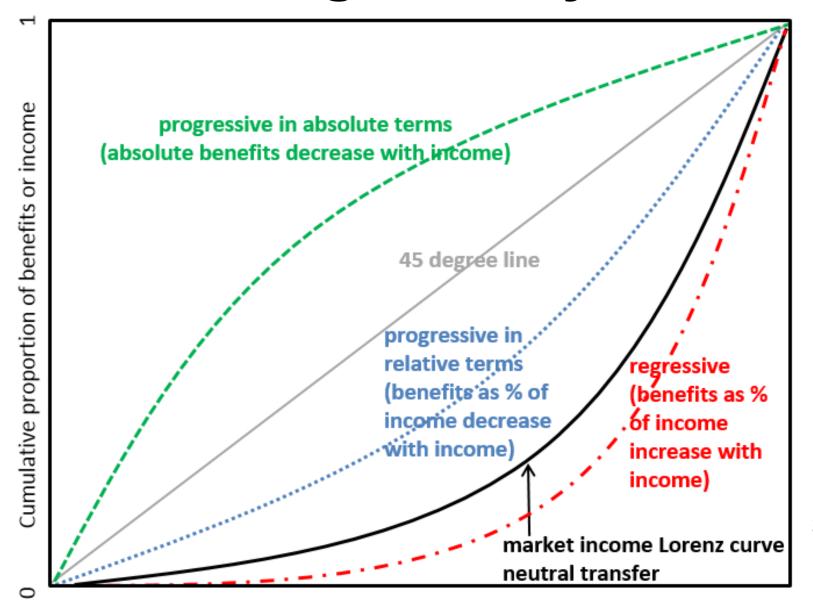
Welfare, TANF, AFDC, noncontributory pensions (SSI), unemployment benefits, Pell grants (public scholarships), food stamps (SNAP), food transfers for women and children (WIC), school lunch

Energy subsidies for low-income

In-kind education benefits (including daycare through CCDF/TANF and preschool through Head Start) and health benefits (Medicare, Medicaid)

State and federal individual income taxes, state and federal corporate income taxes, and NET MARKET INCOME state and local property taxes DISPOSABLE INCOME State and federal sales and excise taxes (taking into account different rates by state) POST-FISCAL INCOME FINAL INCOME

Definitions of Progressivity for Transfers

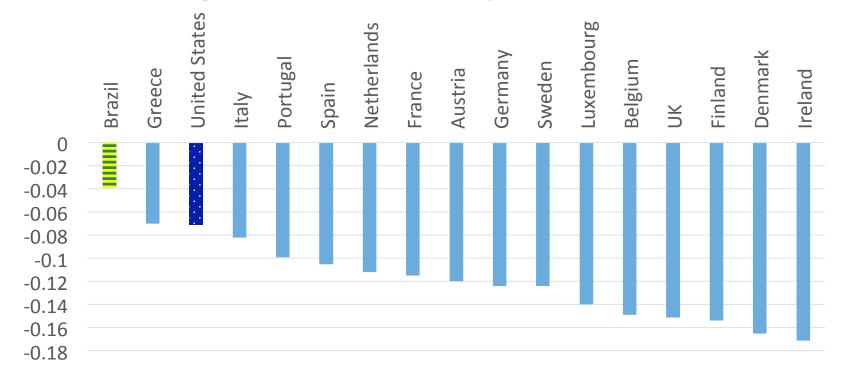


Source: adapted from Lustig and Higgins (2013)

Direct Taxes and Transfers

- Direct taxes and transfers reduce inequality by
 - 7.0 percentage points in US
 - 3.9 percentage points in Brazil

Change between Market and Disposable Income Ginis



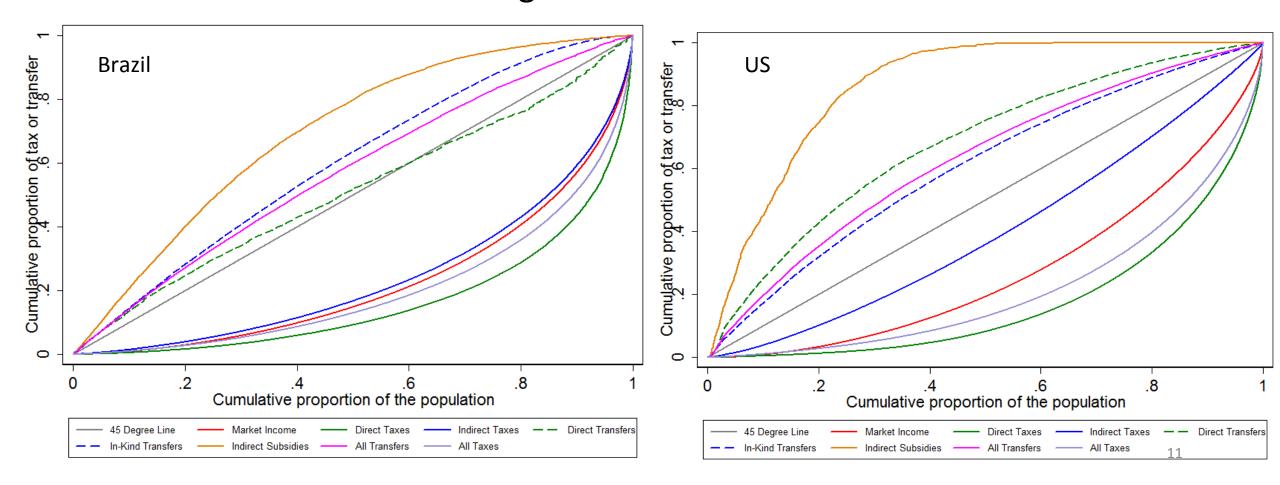
Source: authors' calculations for Brazil and US; Immervoll et al. (2009) for Europe

Direct Taxes and Transfers

- Underutilized individual income tax in Brazil
 - 2.1% of GDP, compared to 8.2% in US
- Less progressive direct taxes in Brazil (regardless of size)
 - Kakwani of 0.194 in the US compared to 0.122 in Brazil
- Brazil's well-targeted programs are small:
 - Bolsa Família (conditional cash transfers)
 - Beneficio de Prestação Continuada (non-contributory pensions)
 - Programa de Aquisição de Alimentos Leite (milk transfers)
 - ...make up less than 1% of GDP combined!
- Food stamps in US increase incomes of bottom decile (in %) more than any transfer program in Brazil

Indirect Taxes

- Large but only slightly regressive in Brazil
- Smaller but much more regressive in US



Household Energy Subsidies

- Targeted to low-income families
- Progressive in absolute terms in both countries
 - Concentration coefficient of -0.73 in US, -0.33 in Brazil
- But very small programs
 - Increase incomes of poorest decile by only around 1% in both countries

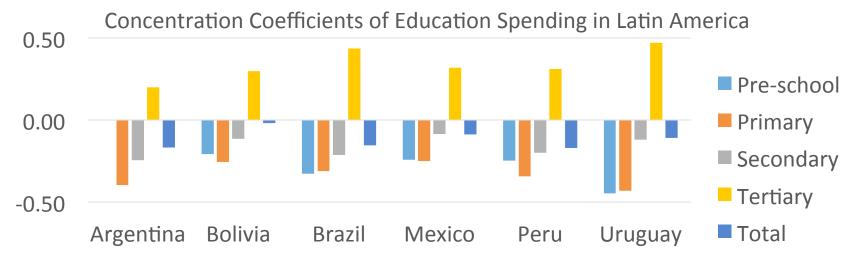
In-kind Transfers

- An important part of redistribution in both countries
- US: Gini reduced from **0.45** (market income) to **0.33** (final income)
 - 5.2 percentage points due to spending on non-tertiary education, health, and housing
 - Health: Medicaid is highly progressive in absolute terms (CC = -0.51)
- Brazil: Gini reduced from 0.55 (market income) to 0.43 (final income)
 - 7.7 percentage points due to spending on non-tertiary education and health
 - All three types of public health spending analyzed
 - Preventative care
 - Basic care
 - Inpatient care

...are progressive in absolute terms

Education

- Spending on public preschool is particularly progressive
 - Head Start has a concentration coefficient of -0.68 in US
 - Public preschool has concentration coefficient of -0.30 in Brazil
- Tertiary education
 - Not possible to determine beneficiaries in US, so excluded for both countries
 - When included for Brazil, tertiary education spending almost neutral;
 overall education spending still progressive in absolute terms



Sources:

Argentina: Lustig and Pessino (2013)

Bolivia: Paz Arauco et al. (2013)

Brazil: Higgins and Pereira (2013)

Mexico: Scott (2013) Peru: Jaramillo (2013)

Uruguay: Bucheli et al. (2013)