

# 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

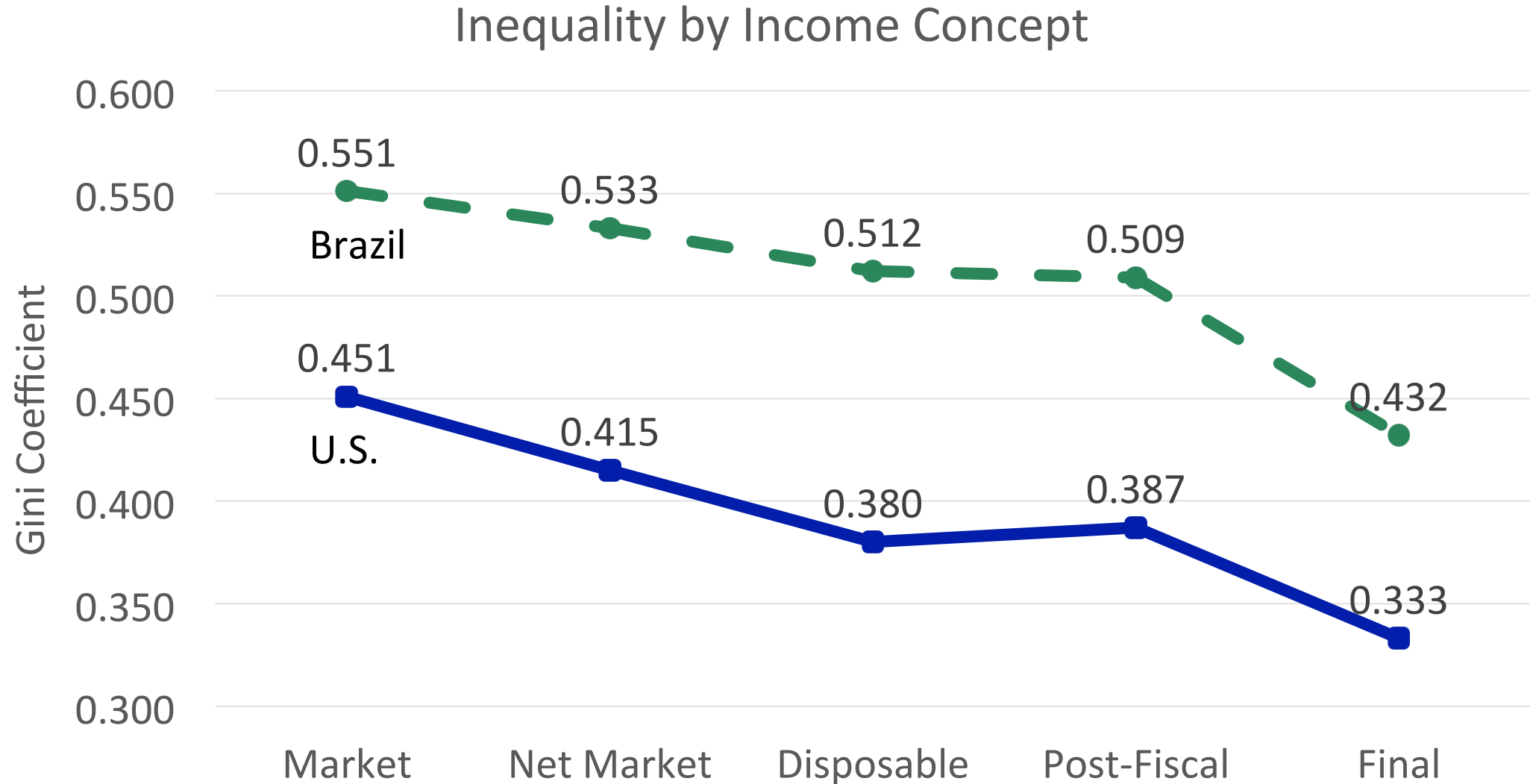
(continued)

- 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)
    - 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)
    - and falling in the US (Aaronson and Mazumder, 2008)

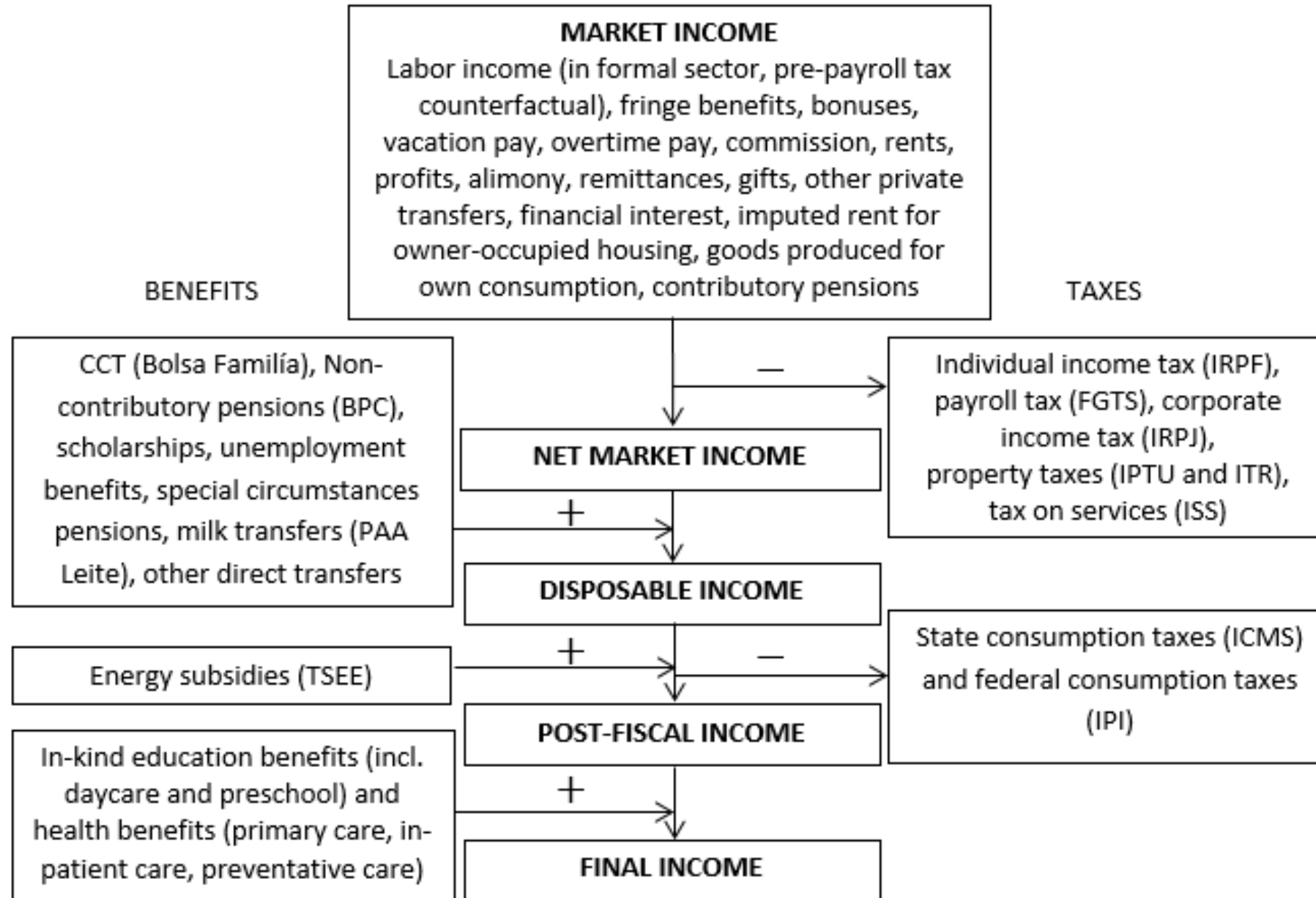
# Our Analysis

- 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

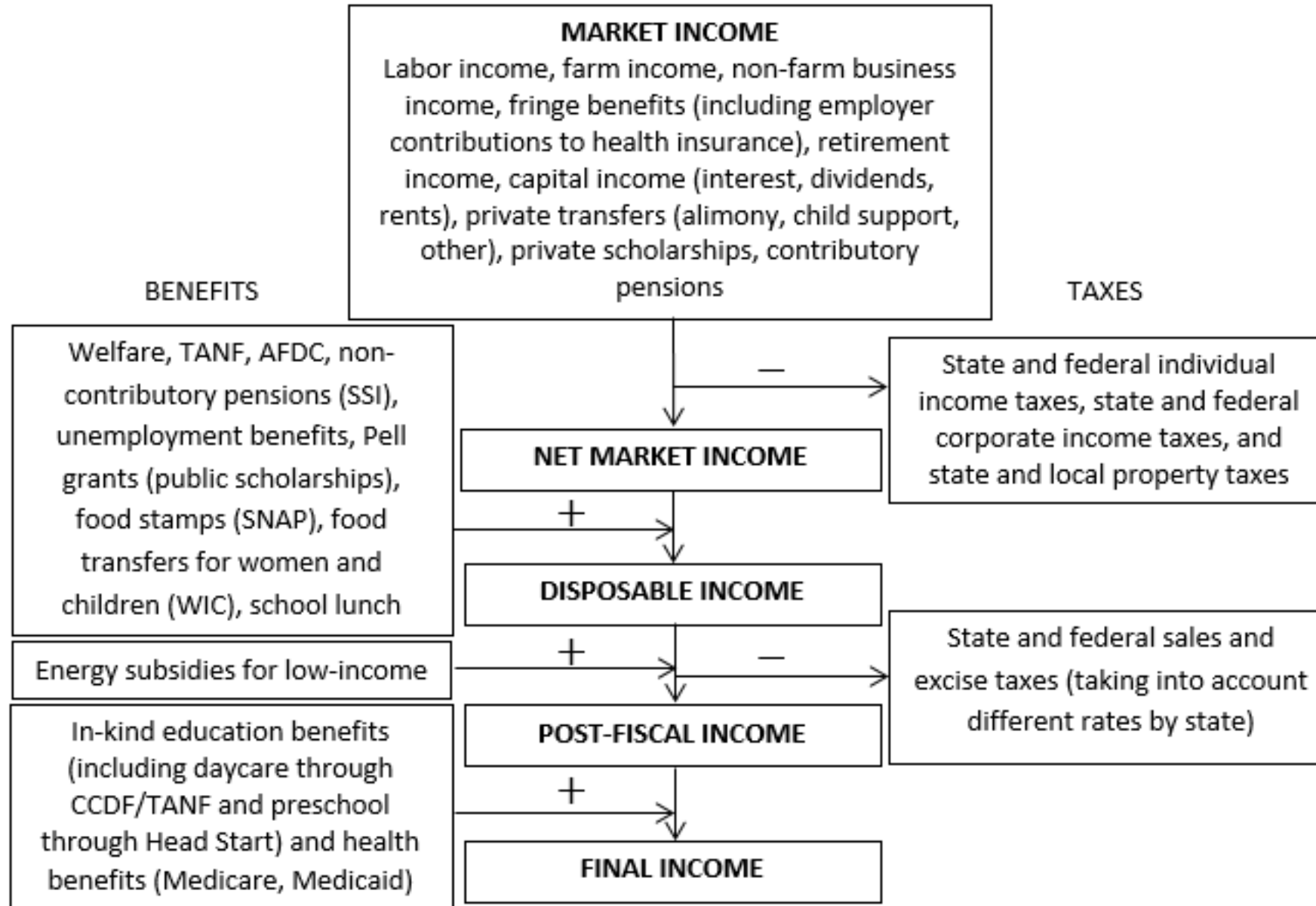
# Preview of Results: Inequality Reduction



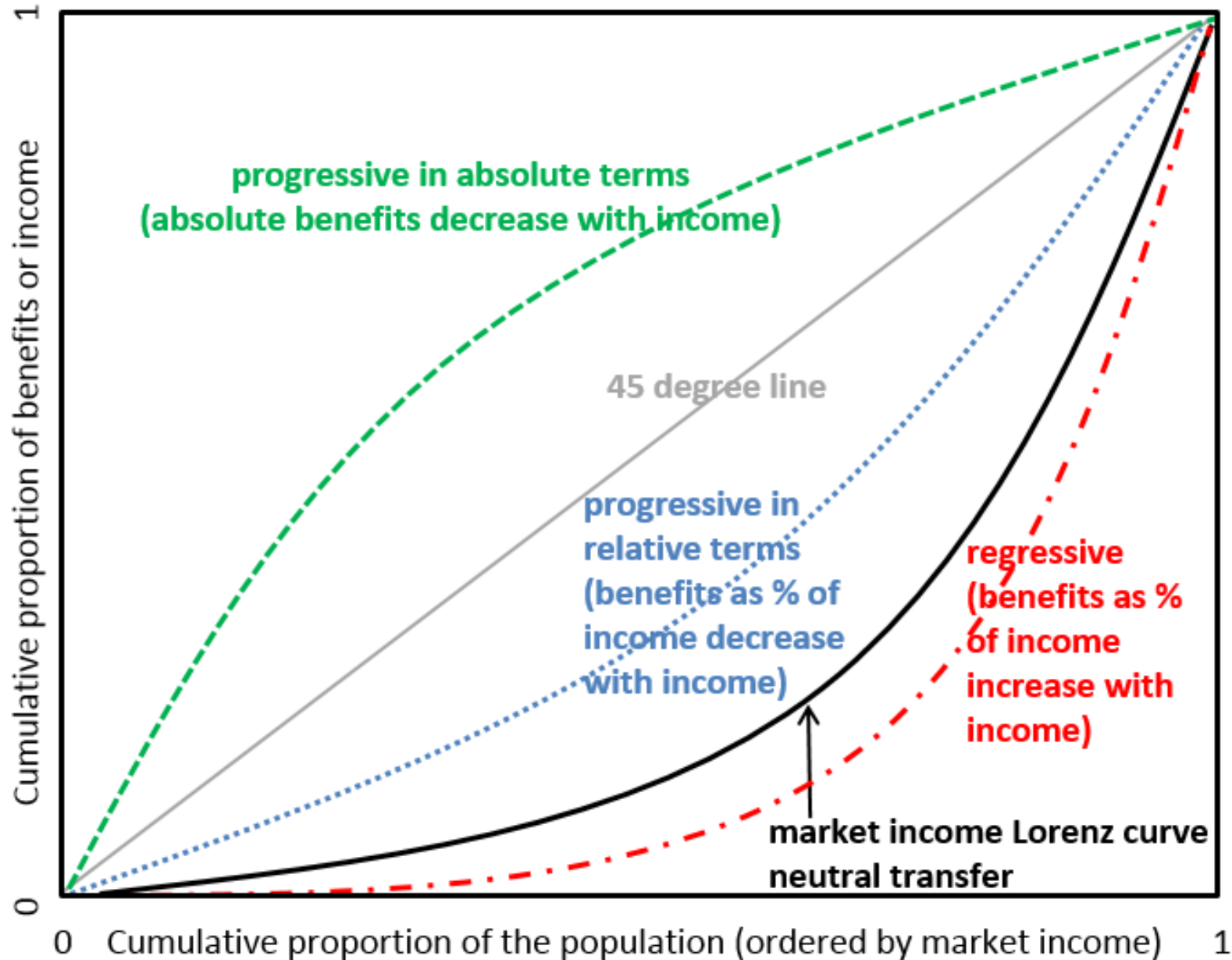
# Construction of Income Concepts: Brazil



# Construction of Income Concepts: United States



# Definitions of Progressivity for Transfers

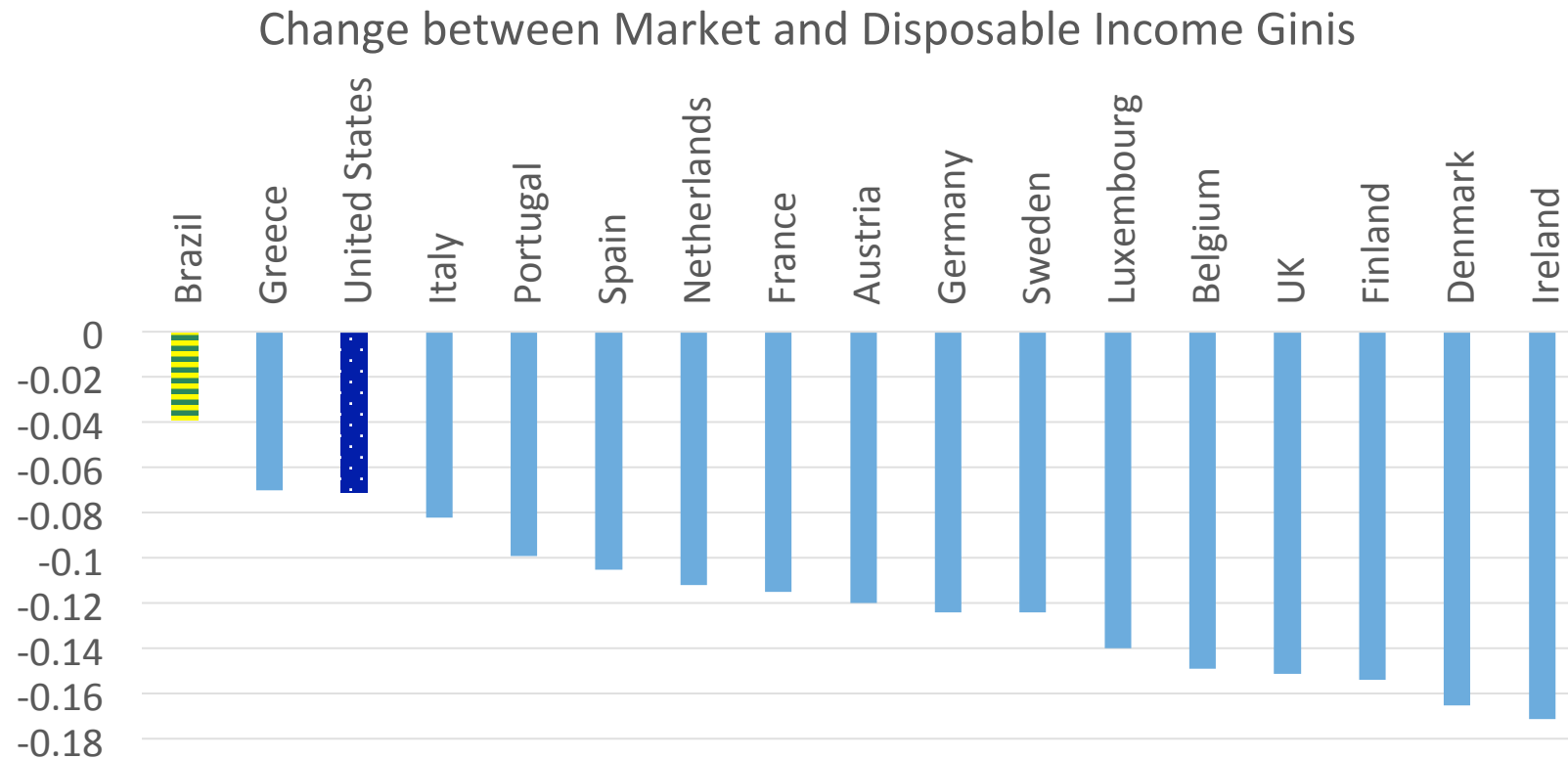


Source: adapted from  
Lustig and Higgins  
(2013)



# Direct Taxes and Transfers

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



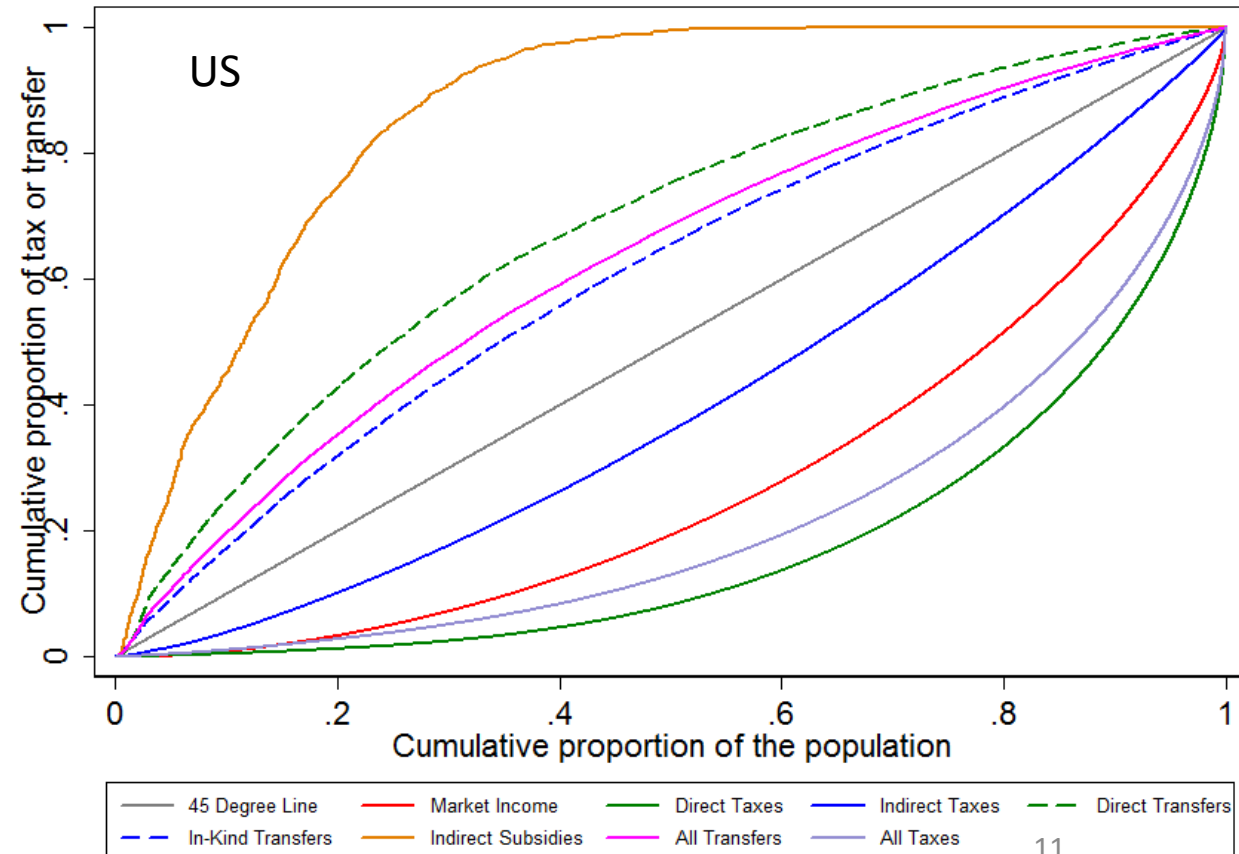
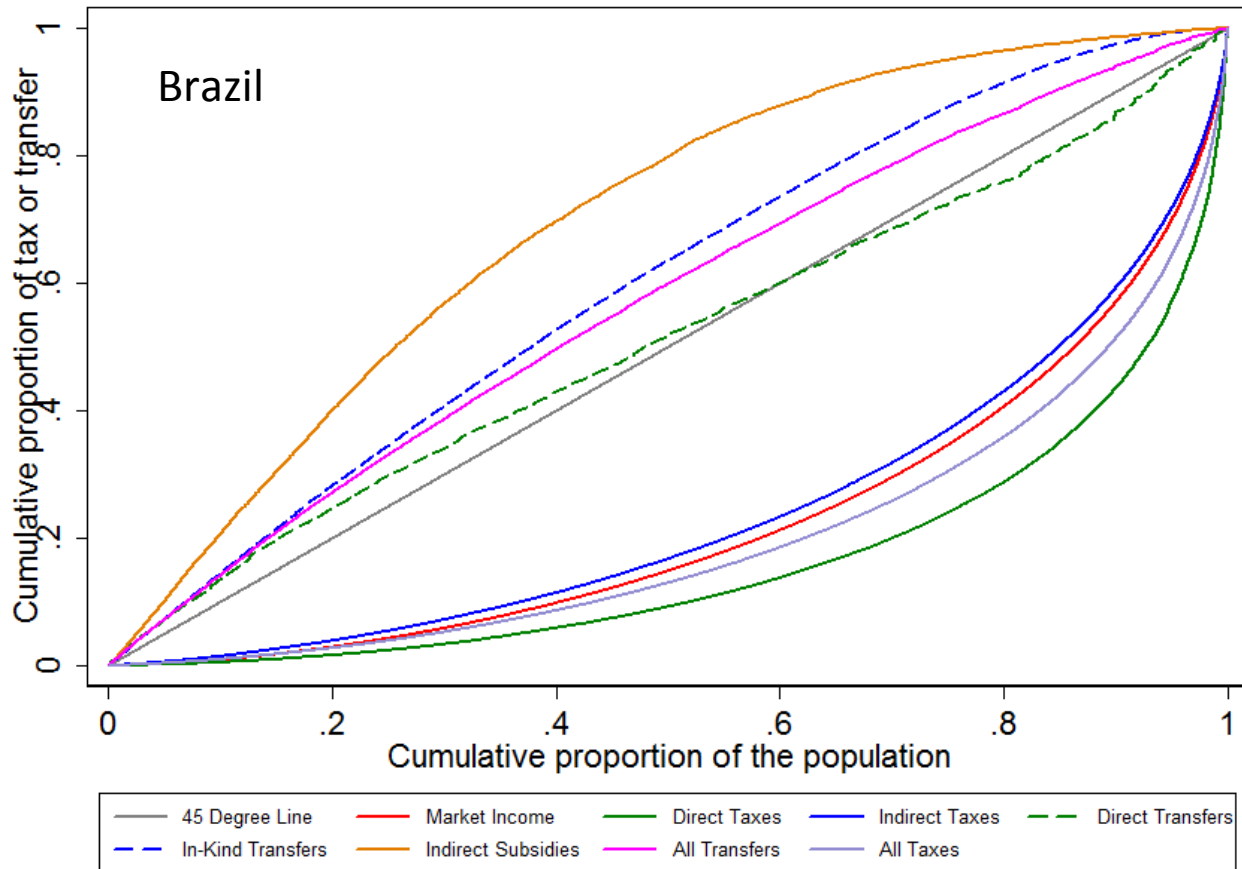
Source: authors' calculations for Brazil and US; Immervoll et al. (2009) for Europe

# 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)
  - Benefício 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

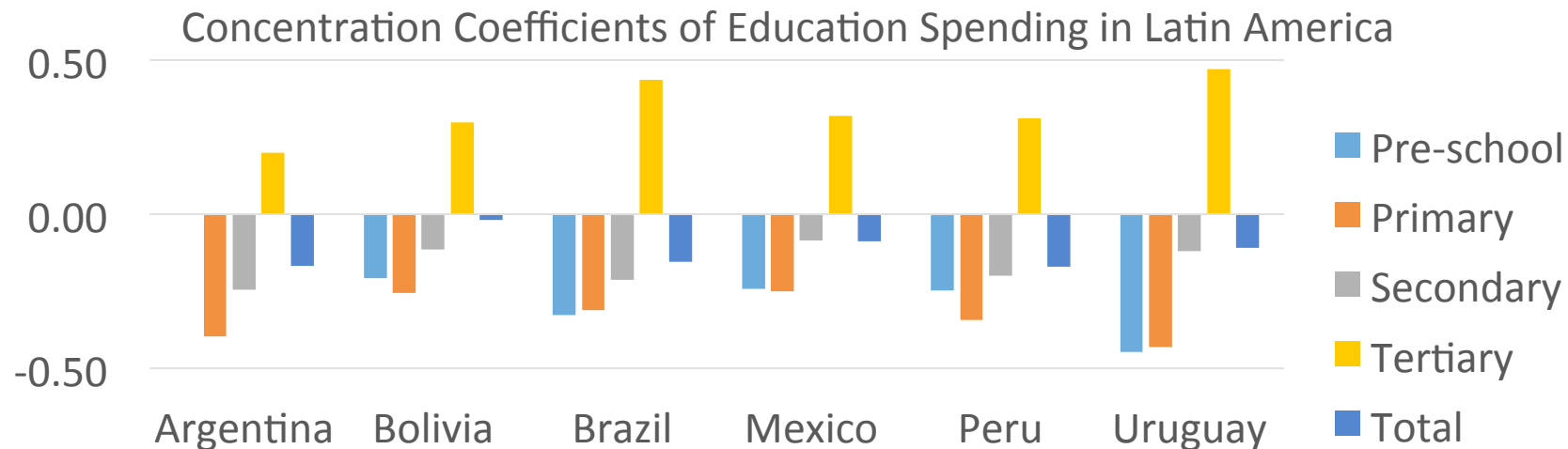
- Targeted to low-income families
- Progressive in absolute terms in both countries
  - Concentration coefficient of -0.73 in US, -0.33 in Brazil
- But very small programs
  - Increase incomes of poorest decile by only around 1% in both countries

# 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)