Social Spending, Taxes and Income Redistribution in Paraguay

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Summary of Taxes

• No income tax in 2010
• VAT accounted for 33.8% of total government revenues and 6.4% of GDP
• Farming income tax represents 0.3% of government revenues
  – Lack of coherence: agriculture and livestock contributes 18% of GDP
Summary of Spending

• Spending as % of GDP has grown 2005-2010
Summary of Spending

• Conditional cash transfer program Tekoporã began in 2005
  – 0.4% of GDP (same relative size as Bolsa Família)
  – Targeting is based in the most vulnerable regions and extreme poor households

• Health
  – Contributory system through social security institute (IPS)
  – Free public health care system
    • Expanded dramatically in 2009
Definition of income concepts: Benchmark case

MKT INCOME
Labor income, income from agriculture, private transfers, capital income, imputed rent for owner-occupied housing, goods produced for own consumption, pensions

NET MKT INCOME

DISPOSABLE INCOME

POST-FISCAL INCOME

FINAL INCOME

TAXES
Property taxes, municipal taxes, and other direct taxes

Value added tax and combustibles tax

BENEFITS
Tekaporã (CCT), other direct transfers

Energy subsidies (Tarifa Social de Energía Eléctrica)

In-kind education benefits (incl. pre-school and tertiary) and health benefits (contributory and non-contributory)
Definition of income concepts: **Sensitivity analysis**

- **MARKET INCOME**
  - Labor income, income from agriculture, private transfers, capital income, imputed rent for owner-occupied housing, goods produced for own consumption, **pensions**

- **NET MARKET INCOME**
  - **BENEFITS**
    - Tekaporã (CCT), other direct transfers, **pensions**
    - Energy subsidies (Tarifa Social de Energía Eléctrica)
    - In-kind education benefits (incl. pre-school and tertiary) and health benefits (contributory and non-contributory)
  - **TAXES**
    - Property taxes, municipal taxes, and other direct taxes, contributions to pensions

- **DISPOSABLE INCOME**
  - Value added tax and combustibles tax

- **POST-FISCAL INCOME**

- **FINAL INCOME**
Additional Limitations

• Social programs captured by one “catch-all” question
  – Use inference to separate Tekoporã from other direct transfers

• Pensions
  – Complicated rules for non-contributory pensions
  – Lack of necessary survey questions
  → impossible to separate non-contributory and contributory pensions

• No consumption data
  – Secondary sources for incidence of VAT and combustibles taxes by decile based on 2001 data
Inequality Reduction

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Evolution of Poverty over Time

<table>
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<tr>
<th>Year</th>
<th>Overall Poverty</th>
<th>Extreme Poverty</th>
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<tr>
<td>2006</td>
<td>43.7</td>
<td>23.7</td>
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<tr>
<td>2007</td>
<td>41.2</td>
<td>23.2</td>
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<tr>
<td>2008</td>
<td>37.9</td>
<td>19.0</td>
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<tr>
<td>2009</td>
<td>35.1</td>
<td>18.0</td>
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<tr>
<td>2010</td>
<td>34.7</td>
<td>19.4</td>
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</table>

Source: Dirección de Estadística, Encuestas y Censos
Poverty

Market Income | Net Market Income | Disposable Income | Post-fiscal Income

Benchmark case, $2.5 PPP/day
Benchmark case, $4 PPP/day
Sensitivity analysis, $2.5 PPP/day
Sensitivity analysis, $4 PPP/day
## Incidence of taxes and transfers

<table>
<thead>
<tr>
<th>Deciles</th>
<th>Direct Taxes</th>
<th>Net Market Income</th>
<th>Flagship CCT</th>
<th>Other Direct Transfers</th>
<th>All Direct Transfers</th>
<th>Disposable Income</th>
<th>Indirect Subsidies</th>
<th>Indirect Taxes</th>
<th>Post-Fiscal Income</th>
<th>In-kind Education</th>
<th>In-kind Health</th>
<th>Final Income</th>
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<tbody>
<tr>
<td>1</td>
<td>-1.2%</td>
<td>-1.2%</td>
<td>5.6%</td>
<td>3.5%</td>
<td>9.1%</td>
<td>7.9%</td>
<td>0.4%</td>
<td>-28.0%</td>
<td>-19.7%</td>
<td>12.9%</td>
<td>18.6%</td>
<td>11.8%</td>
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<tr>
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<td>-2.5%</td>
<td>1.7%</td>
<td>0.3%</td>
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<td>-0.5%</td>
<td>0.2%</td>
<td>-6.9%</td>
<td>-7.2%</td>
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<td>10.2%</td>
<td>9.5%</td>
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<tr>
<td>3</td>
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<td>0.7%</td>
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<td>1.1%</td>
<td>-0.2%</td>
<td>0.2%</td>
<td>-7.6%</td>
<td>-7.6%</td>
<td>4.7%</td>
<td>9.9%</td>
<td>7.0%</td>
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<tr>
<td>4</td>
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<td>-2.2%</td>
<td>0.4%</td>
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<td>0.4%</td>
<td>-1.8%</td>
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<td>4.6%</td>
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<tr>
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<td>-1.7%</td>
<td>-1.7%</td>
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<td>-6.1%</td>
<td>-8.7%</td>
<td>2.5%</td>
<td>5.5%</td>
<td>-0.7%</td>
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<td>0.1%</td>
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<tr>
<td>9</td>
<td>-3.1%</td>
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<td>10</td>
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<td>-10.0%</td>
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<td>-7.1%</td>
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<tr>
<td>Total Pop.</td>
<td>-3.3%</td>
<td>-3.3%</td>
<td>0.2%</td>
<td>0.1%</td>
<td>0.3%</td>
<td>-3.0%</td>
<td>0.1%</td>
<td>-6.1%</td>
<td>-9.0%</td>
<td>2.5%</td>
<td>4.9%</td>
<td>-1.6%</td>
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</tbody>
</table>
Progressivity of Taxes and Spending

• Overall, taxes are slightly *regressive*
  – High reliance on regressive VAT
  – In other Latin American countries, taxes are progressive overall

• Direct transfers are *progressive in absolute terms*

• Total spending on education and health is *progressive in relative terms* only
  – In contrast, in most Latin American countries it is progressive in absolute terms
  – Tertiary education spending is *regressive*

• Social spending *progressive in relative terms*
Progressivity of Taxes and Spending

Legend
- Education Spending
- Health Spending
- Targeted Transfer
- Subsidy
- Gini

Concentration Coefficient with respect to Market Income

- Other Transfers: -0.54
- Tekopora: -0.47
- Free Health Care: -0.13
- Primary School: -0.11
- Social Tariff for Electric Energy: -0.11
- Secondary School: 0.09
- Total Education: 0.12
- Social Spending: 0.14
- Total Health: 0.20
- Health / IPS: 0.39
- Market Income: 0.50
- Tertiary School: 0.55
Possible Improvements

• Could the low reduction of inequality and absolute poverty caused by direct transfers be improved?

1. Do a large portion of direct transfers go to the poor?
2. Are a large portion of the poor covered by direct transfer programs?
3. Do the poor who are covered by the safety net receive enough to escape poverty?
• Do a large portion of direct transfers go to the poor?

Yes

 Argentina  
 Bolivia  
 Brazil  
 Guatemala  
 Mexico  
 Paraguay  
 Peru  
 Uruguay  

 Non-poor  
 Moderate Poor  
 Extreme Poor
• Are a large portion of the poor covered by direct transfer programs? *No*

![Bar chart showing coverage of poor by direct transfer programs in different countries, with percentages for each country.](chart.png)
• Do the poor who are covered by the safety net receive enough to escape poverty? **No**

**Average amount received per household member in beneficiary households**

<table>
<thead>
<tr>
<th>Groups: y &lt; 1.25</th>
<th>1.25 &lt; y</th>
<th>2.5 &lt; y</th>
<th>y &lt; 4</th>
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<tr>
<td>Tekoporã</td>
<td>$0.32</td>
<td>$0.37</td>
<td>$0.35</td>
</tr>
<tr>
<td>Other Direct Transfers</td>
<td>$0.71</td>
<td>$0.67</td>
<td>$0.69</td>
</tr>
<tr>
<td>Tekoporã + Other</td>
<td>$0.38</td>
<td>$0.39</td>
<td>$0.38</td>
</tr>
<tr>
<td>Direct</td>
<td>$0.01</td>
<td>$0.01</td>
<td>$0.01</td>
</tr>
<tr>
<td>Social Tariff for Electric Energy</td>
<td>$0.01</td>
<td>$0.01</td>
<td>$0.01</td>
</tr>
</tbody>
</table>
Conclusions

• Paraguay reduces inequality little compared to other Latin American countries

• Poverty is essentially not reduced by direct transfers
  – When indirect taxes and subsidies are considered, post-fiscal income poverty is always higher than market income poverty

• Overall, taxes are regressive

• Room for improvement
  – Expanded coverage
  – Possibly larger transfers