How much redistribution does Uruguay accomplish through social spending and taxes?

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Introduction

Uruguay is a small country with a population of 3.3 million, living primarily in urban areas (87 percent in 2009). It has an aging population in which those older than 64 represent 15 percent of the population and those less than 15 make up 22 percent.

Between 1990 and 1998, Uruguay’s GDP grew at a cumulative annual rate of 4.4 percent. Inequality began to increase in 1995, when the country became affected by a regional recession (tequila effect). Shortly thereafter, between 1998 and 2002, the country went through a severe crisis that led to a 17.7 percent decline in production. During this period, the unemployment rate reached a historic high of 18 percent. The growing trend of inequality continued and poverty increased.

In 2003, GDP began to recover, with a cumulative annual growth rate of 6.2 percent between 2003 and 2009. Poverty began to fall beginning in 2005, in which a series of specific transitional measures were introduced to address it. In the years immediately following, a tax reform took place that created a personal income tax and reduced indirect tax rates. Additionally, a national health insurance program was implemented, as well as the so-called Equity Plan, which reformed the family allowance program and had as its primary goal the improvement of child welfare. In this context, poverty fell from 22.5 percent to 8.9 percent (based on a Purchasing Power Parity (PPP) poverty line of 4 USD per day) between 2003 and 2009. Changes in inequality were less clear.

Methods

In Social Spending, Taxes and Income Redistribution in Uruguay, we apply standard incidence analysis to estimate the impact of social spending and taxes on inequality and poverty, using the Continuous Household Survey (Encuesta Continua de Hogares, 2009) and the Household Survey of Spending and Income (Encuesta de Gastos e Ingresos de los Hogares, 2006), both of which are administered by the National Institute of Statistics. In our incidence analysis, social spending includes direct and in-kind transfer programs. Direct transfers include transfers of money (non-contributory pensions, family allowances, and other smaller programs) and food. In-kind
transfers include public spending on education and health. Contributory pensions are considered part of market income. We have carried out a sensitivity analysis of our results by including contributory pensions among government transfers.

**Analysis**

In Table 1 we present the impact of social spending and taxes on inequality and poverty. We do this through analysis of changes in inequality across five measures of income: market income (pre-taxes and transfers), net market income (market minus direct taxes), disposable income (net plus direct transfers), post-fiscal income (disposable minus indirect taxes), and final income (post-fiscal income plus education and health transfers). Direct taxes and direct transfers reduce inequality and poverty. Indirect taxes slightly offset these results. Finally, public spending on education and health has an important equalizing effect.

Overall, the combined effect of social spending and taxes reduces the Gini coefficient by 10 percentage points. Direct transfers reduce the rate of extreme poverty (measured with the PPP poverty line of 2.50 USD/day) from 5.1 percent to 1.5 percent, and indirect taxes raise it to 2.3 percent.

### Table 1. Gini and Headcount Index for Different Income Concepts.

<table>
<thead>
<tr>
<th></th>
<th>Market Income</th>
<th>Net Market Income</th>
<th>Disposable Income</th>
<th>Post-fiscal Income</th>
<th>Final Income</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gini</strong></td>
<td>0.492</td>
<td>0.478</td>
<td>0.457</td>
<td>0.459</td>
<td>0.393</td>
</tr>
<tr>
<td><strong>Headcount index</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poverty line: $2.5 PPP/day</td>
<td>5.1%</td>
<td>5.1%</td>
<td>1.5%</td>
<td>2.3%</td>
<td>--</td>
</tr>
<tr>
<td>Poverty line: $4 PPP/day</td>
<td>11.6%</td>
<td>11.7%</td>
<td>6.7%</td>
<td>8.9%</td>
<td>--</td>
</tr>
<tr>
<td>Poverty line: National moderate</td>
<td>25.8%</td>
<td>26.3%</td>
<td>22.7%</td>
<td>26.3%</td>
<td>--</td>
</tr>
</tbody>
</table>

Source: Bucheli et al., 2013, Table 2.

Figure 1 shows the concentration coefficients for all programs, sorted by progressiveness. Readers should recall that a negative concentration coefficient means that the transfer is progressive in absolute terms. That is, the transfer declines as income increases. A positive concentration coefficient, but one that is smaller than the market income Gini, means that the transfer is progressive in relative terms. That is, the transfer as a share of market income declines as income increases. If the concentration coefficient is higher than the market income Gini, the transfer is regressive—that is, unequalizing--.
All of the components of social spending are progressive in absolute terms, except spending on secondary and tertiary education: spending on secondary education is progressive in relative terms while spending on tertiary education is nearly neutral.

Figure 1. Concentration Coefficient by Spending Category and for Total Social Spending

Source: Bucheli et al., 2013.

Conclusion

In summary, Uruguay stands out as a country in which the government seems quite committed to reducing inequality and poverty through its fiscal policy (Lustig et al. 2013), although extreme poverty has not been eradicated. However, there is room for improvement with regard to inequality in education. Indeed, the results obtained for higher education highlight the challenges to access experienced by low-income individuals. This can be explained by the relatively high dropout rate among high school students from low-income families.

References
