







# What explains low redistributive impact of Fiscal Policy in Bolivia?

Verónica Paz Arauco (Instituto Alternativo, La Paz, Bolivia), George Gray Molina (UNDP-RBLAC), Wilson Jiménez Pozo (Fundación ARU, La Paz, Bolivia), Ernesto Yáñez Aguilar (Instituto Alternativo, La Paz, Bolivia)

Commitment to Equity Project (CEQ)
Twitter @noralustig

September 2013

#### Introduction

Between 2007 and 2009, social spending in Bolivia increased from 11.5 to 14.7 percent of GDP, while primary spending in the general government increased from 29.2 to 33.3 percent of GDP. Approximately 79 percent of the primary spending increase with respect to GDP came from social spending.

How much redistribution and poverty reduction can be attributed to social spending and taxation policies? We answered this question using data from the 2009 Household Survey (*Encuesta de Hogares*, or EH) collected by the Bolivian National Institute of Statistics (*Instituto Nacional de Estadistica*, or INE). Income categories used in the incidence analysis are constructed based on those outlined by Lustig and Higgins (2013).

Our main findings show a low redistributive impact of fiscal policy, mainly due to the presence of significant leakages in transfers to the non-poor and to the small size of per beneficiary transfers. The impact of fiscal policy on poverty and income inequality could increase with better targeting to the poor, larger per capita benefits, and an increase in coverage and progressivity of the tax system.

# Inequality and poverty reduction

Results obtained from the incidence analysis show that the effect of inequality after direct transfers and indirect taxes is neutral: the Gini coefficient remains at 0.503 (see Table 1). Looking at extreme and moderate poverty head count ratios, for both international and national poverty lines, we observe that the net effect of transfers and indirect taxes increases poverty. When we compare the Gini coefficients for disposable income and post-fiscal income, we observe the unequalizing effect of net indirect taxes. More inequality reduction occurs after in-kind education and health transfers, with an 11.3 percent decline in the Gini coefficient.

In the following sections, we summarize the progressivity of direct transfers, indirect taxes and subsidies, and in-kind education and health spending individually.

<sup>&</sup>lt;sup>1</sup> The survey information is collected with a cross-sectional sampling design, including 4,034 households and 15,665 individuals. It includes detailed information on socio-demographic characteristics, labor market information, earned and unearned income, and imputed rent estimates.

Table 1. Bolivia: Taxes, Transfers, Inequality and Poverty Benchmark

|                              | Marke<br>t<br>Incom<br>e | Net<br>Marke<br>t<br>Incom<br>e | Disposabl<br>e Income | Post-<br>fiscal<br>Incom<br>e | Final<br>Income<br>* | Final<br>Incom<br>e |
|------------------------------|--------------------------|---------------------------------|-----------------------|-------------------------------|----------------------|---------------------|
| Gini                         |                          | 0.503                           | 0.493                 | 0.503                         | 0.441                | 0.446               |
| Headcount index Poverty line |                          |                                 |                       |                               |                      |                     |
| \$2.5 PPP/day                |                          | 19.6%                           | 17.6%                 | 20.2%                         |                      |                     |
| Headcount index Poverty line |                          |                                 |                       |                               |                      |                     |
| \$4.0 PPP/day                |                          | 32.5%                           | 30.7%                 | 33.9%                         |                      |                     |
| Headcount index National     |                          |                                 |                       |                               |                      |                     |
| Extreme Poverty Line         |                          | 23.8%                           | 21.4%                 | 24.4%                         |                      |                     |
| Headcount index National     |                          |                                 |                       |                               |                      |                     |
| Moderate Poverty Line        |                          | 46.7%                           | 45.4%                 | 49.6%                         |                      |                     |

Source: Author's calculations based on Encuesta de Hogares 2009 and Fiscal accounts.

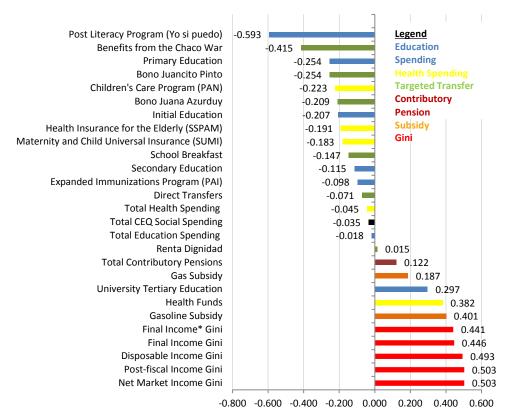
## Progressivity of Direct Transfers

Bolivia spends a low share of GDP on cash transfers: only 2.1 percent, with the non-contributory pension *Renta Dignidad* accounting for 1.4 percent and the other direct transfers (*Bono Juanctio Pinto, Bono Juana Azurduy, Beneméritos del Chaco* and *Desayuno Escolar*) accounting for the remaining 0.7 percent. As can be observed in Figure 1, while the flagship cash transfers such as *Juancito Pinto* and *Juana Azurduy* are progressive in absolute terms, the distribution of benefits of *Renta Dignidad* is neutral. Since this program captures the lion's share of transfers, total transfers are almost equi-proportional. In sum, 62.9 percent of social spending included in the analysis in 2009 was progressive in absolute terms; the remaining 37.1 percent was progressive in relative terms.

The underlying explanation of the low redistributive impact of Direct Transfers relies on two design characteristics of all of the transfer programs. First, too few resources are left for the poor, since a large proportion (62 percent) of the transfers goes to the non-poor (see Figure 2). Second, none of them give beneficiaries enough cash to exit poverty status – transfers range from a low of \$0.18 PPP/day in the case of *Bono Juancito Pinto* to a high of just \$2.1 PPP/day for *Renta Dignidad* beneficiaries. As a result of this "universal" design, 68 percent of the non-poor benefit from the direct cash transfer programs (Figure 2). However, it is important to note that the effects of direct transfers on poverty and inequality should be considered as an upper bound, since actual benefits may be smaller than those obtained by simulating the rules of the programs.

The redistributive effect of direct transfers has an effectiveness indicator of only 0.97. The effectiveness indicator of the transfers on extreme poverty was 5.1 and on total poverty, 2.8.

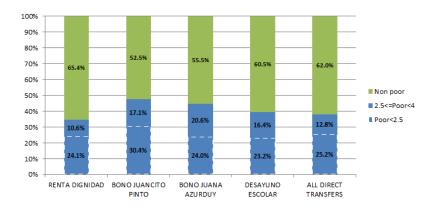
Figure 1. Bolivia: Concentration Coefficient by Spending Category



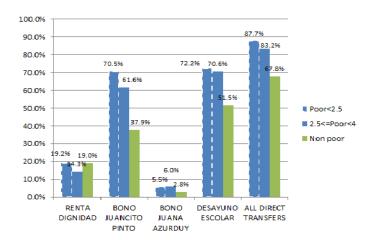
Source: Authors calculations based on: Encuesta de Hogares 2009 and National Fiscal Accounts.

Figure 2. Leakages and Coverage of Direct Transfers

## Percent of Benefits Going to Each Income Group



### Percent of Poor and Non Poor Who are Beneficiaries a



Source: Author's calculations based on Encuesta de Hogares 2009 and Fiscal Accounts. For these calculations, a beneficiary was identified as such if he/she received at least one of the direct transfers included in the analysis.

### Progressivity of Indirect taxes and subsidies

The tax system in Bolivia does not exempt poor people from paying taxes on certain items. Moreover, households become net contributors to the fiscal system beginning in the third decile, meaning that only people from the two poorest deciles receive more than what they contribute in monetary terms, before including transfers in-kind. Gas and gasoline subsidies are not progressive in absolute terms, but they are in relative terms—that is, they are equalizing. Nevertheless, a shift of resources from these subsidies to targeted cash transfers would be beneficial for both inequality and poverty reduction.

### In-kind education and health

When we add transfers in-kind, the impact on the Gini coefficient is significant. All education and health transfers analyzed here are progressive in absolute terms, with the exception of tertiary education, which is progressive in relative terms only. It remains to be seen whether the disproportionate benefits to the poor from in-kind transfers is a result of demographics or the opting-out of the middle and upper classes from public services.

### Conclusions

- Fiscal policy in Bolivia has low redistributive impact. Weak impact is mainly due to the
  presence of significant leakages in transfers to the non-poor and the small size of per
  beneficiary transfers. The net effect of transfers and indirect taxes increases poverty,
  for both international and national extreme and moderate poverty lines.
- The overall effect of indirect taxes and subsidies is regressive. The tax system in Bolivia needs closer scrutiny in order to identify alternative policies that may prevent poor people from being net payers to the Treasury of the State. The impact of transfers in-

- kind on the Gini coefficient is significant. All education and health transfers analyzed are progressive in absolute terms.
- Evidence suggests that there is a significant scope to improve poverty and inequality
  reduction resulting from fiscal policy in Bolivia. A higher proportion devoted to social
  spending could be progressive in absolute terms by creating new programs targeted to
  the poor and the most vulnerable groups of the population, as well as by increasing the
  sizes of the transfers. However, additional future policy efforts must go beyond cash
  transfers, primarily by ensuring universal access to in-kind education and health
  benefits.

#### References

- Paz Arauco, Verónica; Gray Molina George; Jiménez Pozo Wilson and Ernesto Yáñez Aguilar 2013. Explaining Low Redistributive Impact in Bolivia. CEQ Working Paper No.6, April.
- Lustig, Nora and Sean Higgins. 2013. Commitment to Equity Assessment: Estimating the Incidence of Social Spending, Subsidies and Taxes Handbook. CEQ Working Paper No.1, January.