

Fiscal Policy, Inequality, Poverty and the Ethnic Divide in Guatemala

-Preliminary results-

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Fiscal Policy and Income Redistribution in Latin America

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Motivation

- Guatemala belongs to the group of the poorer and most unequal countries in Latin America: Gini 0.545 and one of the highest incidence of poverty 28% (US \$2.5 PPP per day poverty line).
- With an incidence of poverty of 42%, the indigenous (>40%) population is more than twice as likely of being extremely poor than the non-indigenous population whose incidence of poverty is equal to 18%.
- Guatemala is a country with a high incidence of inequality and poverty as well as a sharp ethnic divide in terms of the gap in living standards between the indigenous and non-indigenous population.

Objective and questions

- This paper investigates the effects of fiscal policy on inequality and poverty in Guatemala applying standard incidence analysis with data from the 2009-2010 National Survey of Family Income and Expenditures (ENIGFAM).
- Given the high incidence of poverty and inequality, and the sharp ethnic divide, a particular question of this study is:
 - To what extent does fiscal policy reduce the indigenous-nonindigenous welfare gap?

Income definitions

Market Income: wages, salaries, income from capital before taxes, SS contributions and government transfers ; private transfers (remittances), pensions (BM, not included in SA1)



- Personal Income Taxes (ISR Flat or Progressive), Contributions to SS (BM w/o Pensions)



Net Market Income

+ Direct transfers: CCT Mi familia progresiva, Non Contributive Pensions, other transfers



Disposable Income

+Subsidies (transport, electricity)

- Indirect taxes VAT, Excises



Post Fiscal Income

+ Education, Health



Final Income

Government size, social spending and taxes

- Public sector income is extremely low: tax burden of the lowest in Latin America and the world.
- Social expenditure is very low (9.7% PIB). It increased before the actual government, but during the last two years it has declined .

Guatemala: Composition Social Spending (2010)

	% GDP	% TOTAL
Education	3.0	31.0
Health	2.4	24.7
Social assistance	1.9	19.7
Social security payments	0.5	5.3
Environmental protection	0.1	0.9
Housing and Community Amenities	1.6	16.2
Recreation, Culture, and Religion	0.2	2.1
Total	9.7	100.0

Source: Own calculations based on data of Ministry of Finance.

Tax system

Guatemala: Composition of Tax Revenues (2010)

	% TOTAL
TOTAL	100.0
Indirect taxes	70.3
IVA (VAT)	48.8
Import taxes	6.8
Other indirect taxes	14.6
Direct taxes	29.7
Personal Income	3.0
Corporate Income Tax (Includes ISO)	23.2

Source: Own calculations based on data of Ministry of Finance.

Main social programs

CCT program: “mi familia progresa”

- It began in 2008.
- It provides two kind of transfers:
 - 150 quetzales (US\$18 dollars) to women with at least one child 6 years old or pregnant women.
 - Q150 to families with at least one child attending primary school.
- Families can receive both transfers.
- the population covered by the program was roughly equal to 4.8 million

The Economic Assistance Programme for the Elderly: “Programa de Aporte Económico del Adulto Mayor “

- It began in 2006 and by 2010 it had around 103,000 beneficiaries.
- The target population is poor and extremely poor who are over 65 year old.
- It provides transfer of Q400, approximately US\$50 dollars.

Main results: fiscal policy and inequality

Guatemala: Inequality and poverty (2010)

	Area/Ethnicity	Market	Net Market	Disposable	Post-fiscal	Final*	Final
Gini coefficient	Urban	0.529	0.529	0.527	0.533	0.509	0.514
	Rural	0.514	0.515	0.507	0.515	0.477	0.483
	Indigenous	0.488	0.489	0.479	0.486	0.45	0.455
	Non-Indigenous	0.538	0.539	0.536	0.542	0.516	0.521
	National	0.549	0.55	0.545	0.55	0.522	0.526

- The market income Gini is quite high.
- The effect of taxes and transfers on inequality is very small.
- Education and health spending have a more equalizing effect for rural (versus urban) and indigenous (versus nonindigenous) population indicating that the distribution of these in-kind transfers is more pro-poor for the rural and indigenous population.

Main results: fiscal policy and poverty

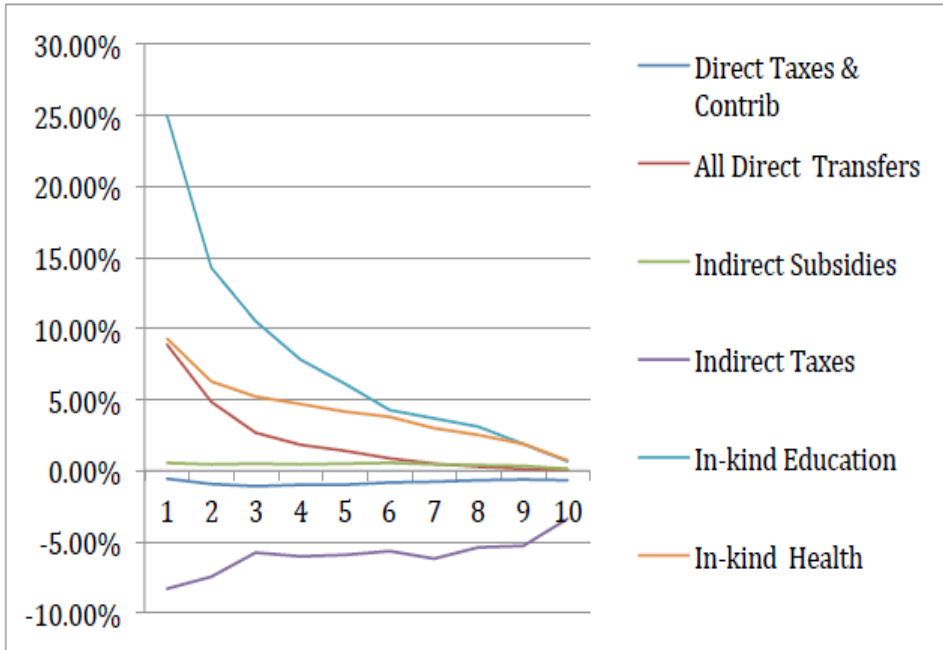
Guatemala: Inequality and poverty (2010)

	Area/Ethnicity	Market	Net Market	Disposable	Post-fiscal	Final*	Final
Poverty US\$2.5 PPP	Urban	14.10%	14.70%	13.70%	14.90%		
	Rural	42.10%	43.10%	40.50%	42.10%		
	Indigenous	43.50%	44.60%	41.70%	43.50%		
	Non-Indigenous	18.70%	19.10%	18.20%	19.30%		
	National	28.70%	29.50%	27.70%	29.00%		
Poverty US\$4 PPP	Urban	30.50%	31.10%	30.40%	31.70%		
	Rural	70.00%	70.50%	69.30%	71.20%		
	Indigenous	71.90%	72.20%	71.00%	72.50%		
	Non-Indigenous	36.80%	37.50%	36.70%	38.40%		
	National	51.10%	51.70%	50.70%	52.30%		

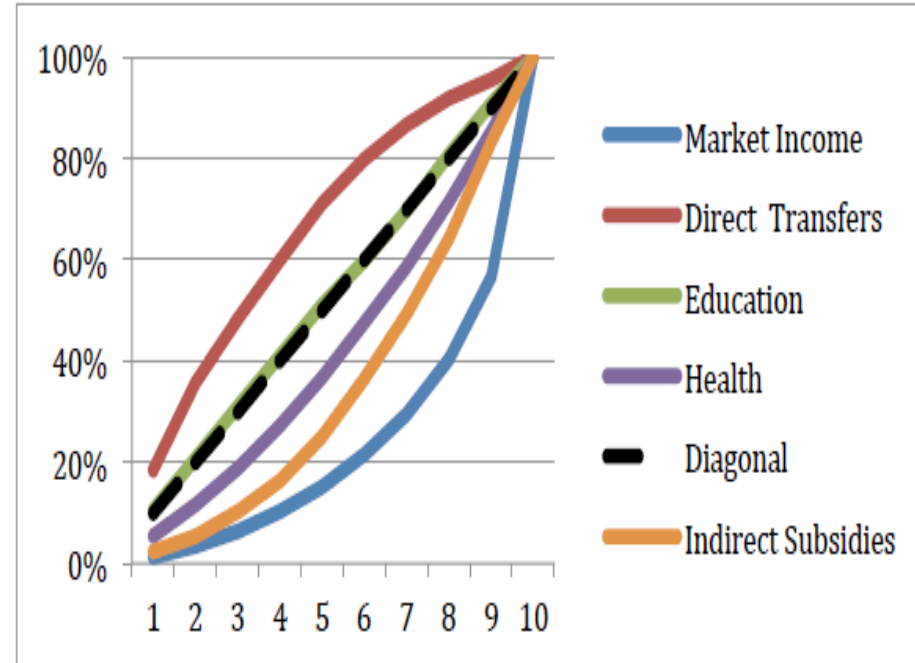
- The incidence of poverty in Guatemala is also quite high.
- The incidence of poverty is markedly higher in rural areas and for the indigenous population.
- The reduction in poverty induced by direct transfers is quite small.

Main results: incidence of taxes and transfers

Incidence of Direct and Indirect Taxes and Cash and In-kind Transfers



Concentration Shares of Cash and In-kind Transfers

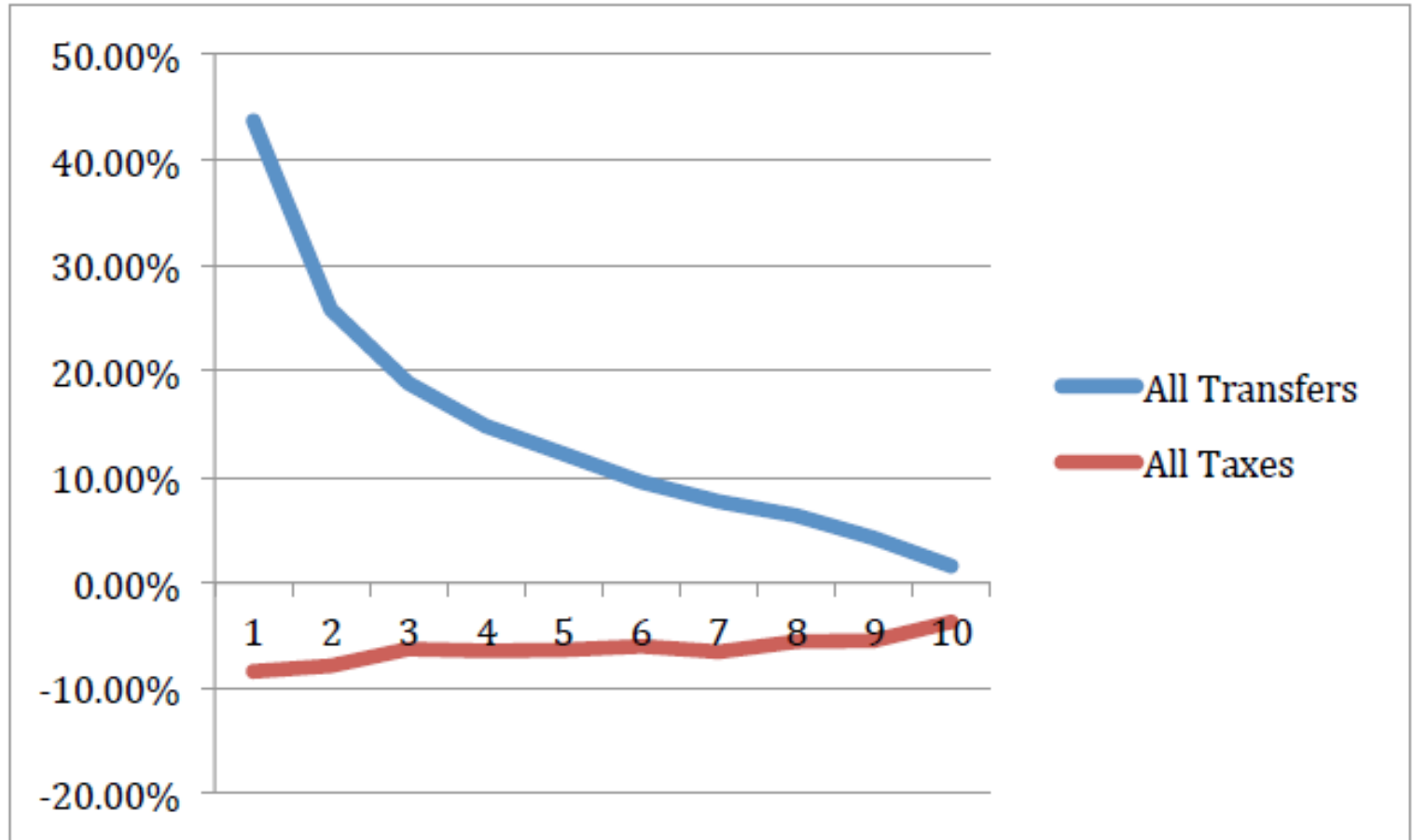


Source: own calculations based on Enigfam 2010.

1. Indirect taxes are regressive.
2. Direct taxes are neutral across income distribution.
3. Direct transfers are progressive in absolute terms (small impact).
4. Education spending is neutral in absolute terms.
5. Health spending is progressive only in relative terms.
6. Indirect subsidies are progressive in relative terms.

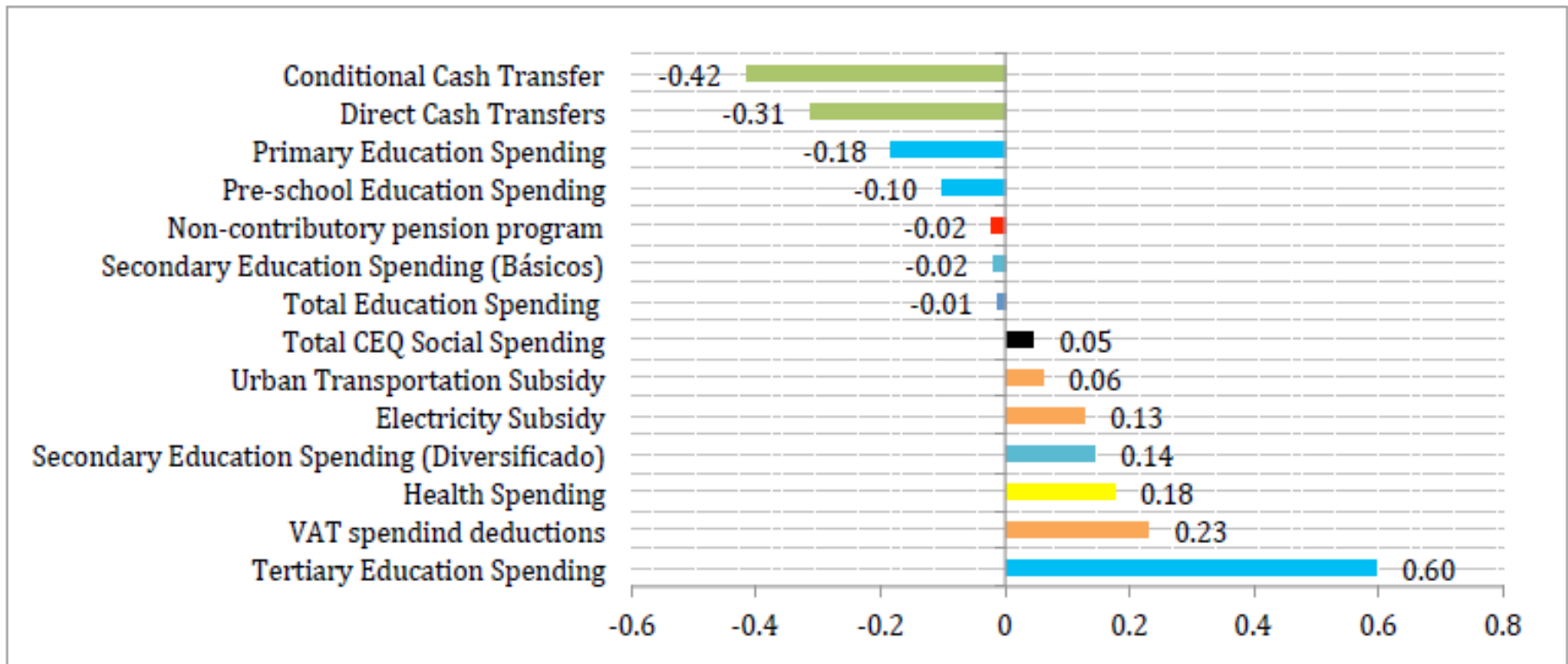
Main results: incidence of all taxes and all transfers

Incidence of Taxes (Direct and Indirect) and Transfers (Cash and In-kind) by Decile



Main results

Concentration Coefficients of Spending Categories



- The CCT program *Mi Familia Progres*a, primary education and the pre-school education spending are the most progressive and are progressive in absolute terms.
- Tertiary education is regressive.

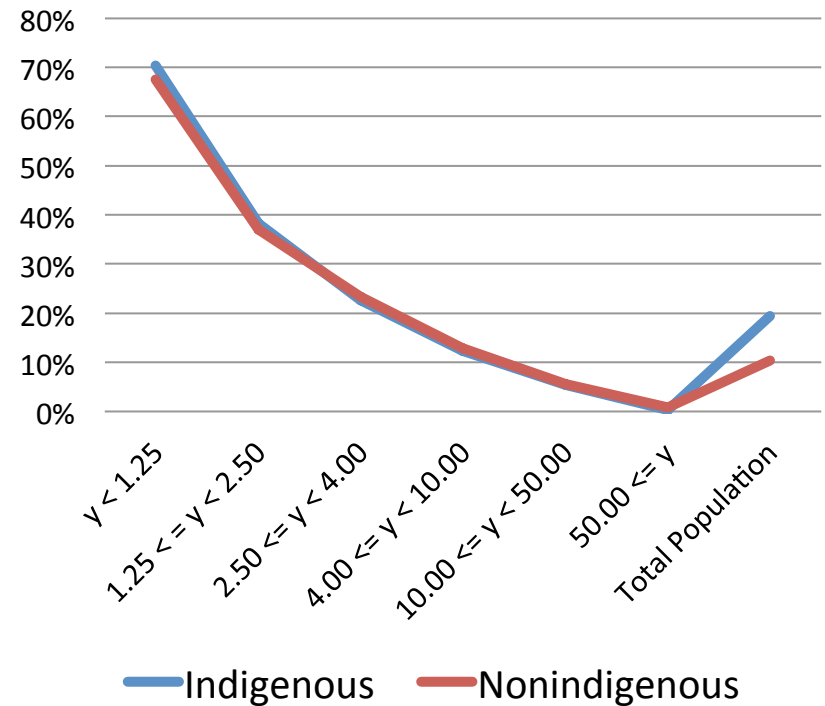
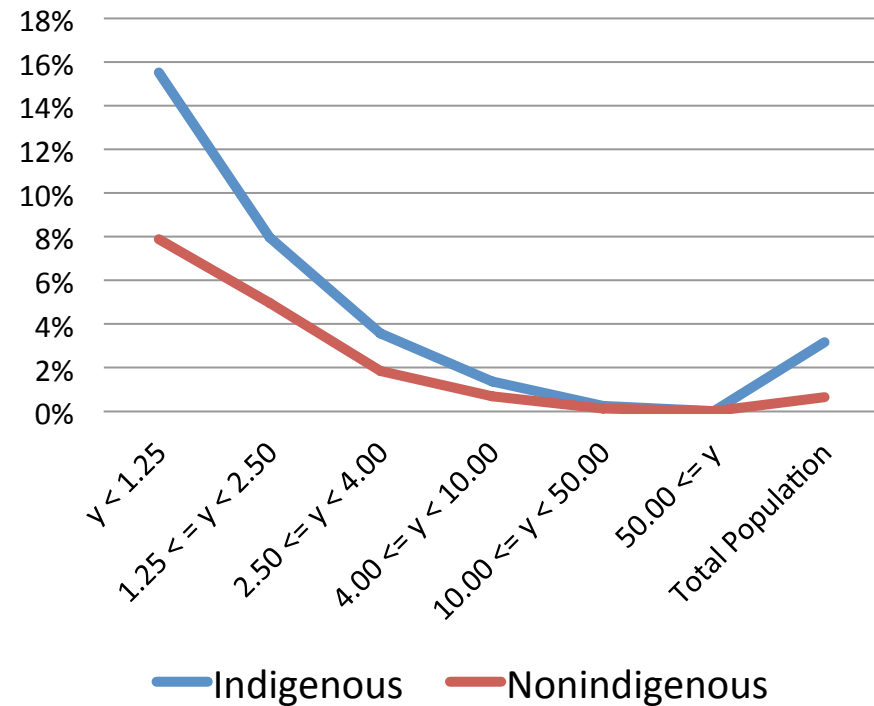
The ethnic divide

	INDIGENOUS	NONINDIG	INDIGENOUS/NO NINDIGENOUS
	% nat'l	% nat'l	
Population	41%	59%	--
Market Income	24%	76%	0.47
Direct Taxes	17%	83%	0.29
Net Market Income	24%	76%	0.47
All Direct Transfers	61%	39%	2.29
Non-contributory pension	37%	63%	0.84
CCT	76%	24%	4.61
Other Direct Transfers	27%	73%	0.55
Disposable Income	25%	75%	0.48
Indirect Subsidies	22%	78%	0.41
Indirect Taxes	24%	76%	0.45
Net Indirect Taxes	23%	77%	0.45
Post-Fiscal Income	25%	75%	0.48
In-kind Education	40%	60%	0.99
Education: preschool	40%	60%	0.95
Education: primary	49%	51%	1.38
Education: secondary	39%	61%	0.92
Education: all except	44%	56%	1.15
Education: tertiary	14%	86%	0.24
In-kind Health	29%	71%	0.59
All Transfers	38%	62%	0.88
All Taxes	23%	77%	0.44
Final Income	25%	75%	0.49

- Per capita income of indigenous population, on average, is approximately half of the non-indigenous.
- Indigenous receive more cash Transfers .
- But Education and Health are higher for non-indigenous.

Main results: incidence of direct and total transfers

Incidence of Direct Transfers (left) and Total Transfers (right): Indigenous and Non-indigenous



Direct transfers are more pro-poor for the indigenous than the non-indigenous population and total transfers are equally pro-poor for both

Conclusions

- Guatemala is a country with a high incidence of inequality and poverty as well as a sharp ethnic divide in terms of the gap in living standards between the indigenous and non-indigenous population.
- The incidence analysis presented here shows that fiscal policy does almost nothing to change this.
- *CCT Mi Familia Progresá* is pro-poor and pro-indigenous, its scale is way too small to make a difference: the size of the transfer and the coverage of the poor are low.
- Education spending is not pro-poor or pro-indigenous enough.
- Health spending reaches only a fraction of the poor.

Conclusions

- Direct and indirect taxes are regressive and, given the small scale of transfers and indirect subsidies, the net payers of taxes start in the second decile.
- Indirect taxes, in fact, wipe out the benefits of direct transfers and post-fiscal income poverty stands at roughly the same level of market income poverty.
- Overall, the fiscal system does little to reduce the ethnic gap.
- Inequality of opportunity (i.e., inequality due to circumstances) is not reduced at all.

Main results: inequality opportunities by ethnic group

Inequality of Opportunity

MLD of smoothed distribution	
Income concept	Inequality of Opportunity
Market	0.198903
Net Market	0.197078
Disposable	0.196677
Post-fiscal	0.189318
Final	0.197449

- fiscal policy is not opportunity-equalizing.