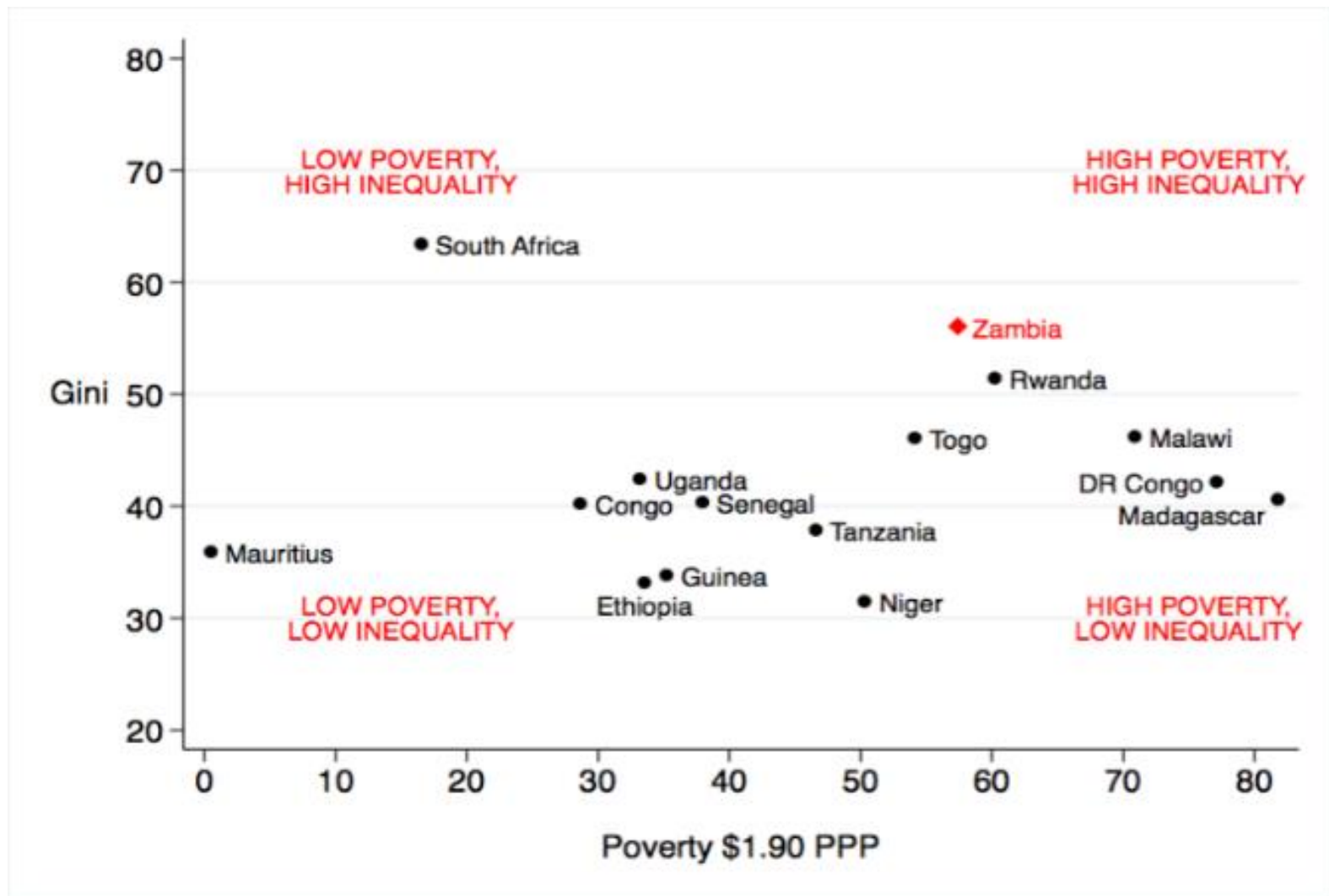


# The Impact of Fiscal Policy on Inequality and Poverty in Zambia

July 6, 2017



# Why conduct a study of fiscal incidence in Zambia?



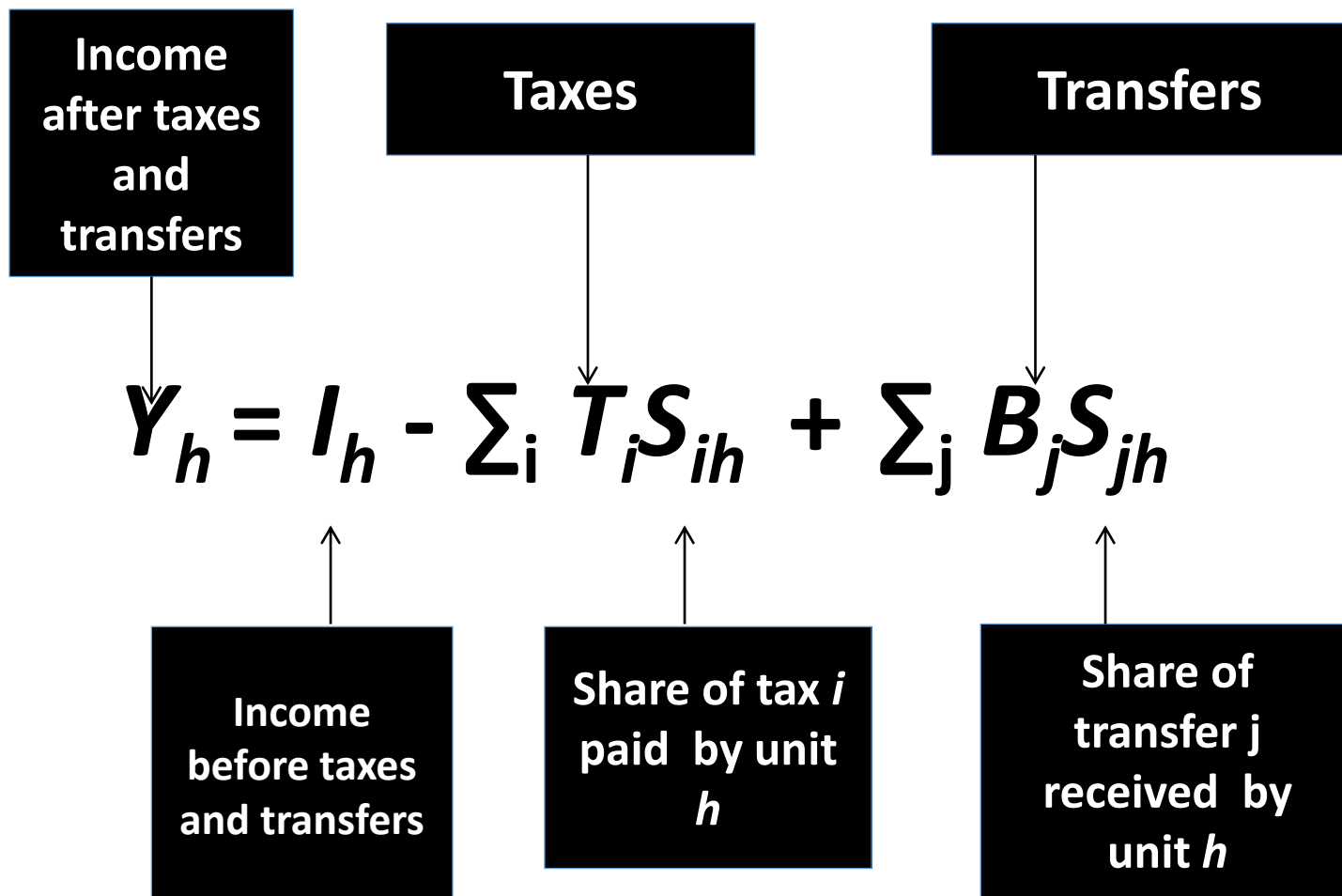
# What sort of policy relevant question this study aims to answer?

- (i) What is the impact of taxes and transfers on inequality and poverty?
- (ii) What is the contribution of specific fiscal interventions to the overall impact?
- (iii) What is the impact on inequality and the poor of simulated fiscal policy reforms?

# Methodology

- Fiscal incidence analysis that relies on the Commitment to Equity Approach Methodology
  - Accounting approach: no behavioral responses; no general equilibrium nor inter-temporal effects, but it incorporates assumptions to obtain economic incidence (not statutory)
  - Point-in-time
  - Mainly average incidence; a few cases with marginal incidence
  - Direct Identification in microdata (However, results must be checked: how realistic are they?). If information not directly available in microdata, then: Simulation, Imputation, Inference, Prediction, Alternate survey, Secondary sources.

# Fiscal Incidence Analysis



# Income Concepts Considered

**MARKET INCOME**



**PLUS DIRECT TRANSFERS MINUS DIRECT TAXES**



**DISPOSABLE INCOME**



**PLUS SUBSIDIES MINUS INDIRECT TAXES**



**CONSUMABLE INCOME**



**PLUS MONETIZED VALUE OF PUBLIC SERVICES: EDUCATION & HEALTH**



**FINAL INCOME**

Higgins and Lustig. "Allocating Taxes and Transfers, Constructing Income Concepts, and Completing Section C of CEQ Master Workbook" in Lustig (editor) *Commitment to Equity Handbook. A Guide to Estimating the Impact of Fiscal Policy on Inequality and Poverty*, Tulane University, Fall 2016.

# Data Sources

- Micro-data set with household or individual budgets:  
2015 LCMS, 2013-14 DHS
- Budget figures, MTEF, Annual Economic Performance Report
- Administrative data at the program level:
  - SCT
  - FISP, Fuel, Electricity subsidy spending
  - Education Statistical Abstract
  - Health Statistical Abstract
- Third-party reporting and secondary sources:
  - SCT evaluations

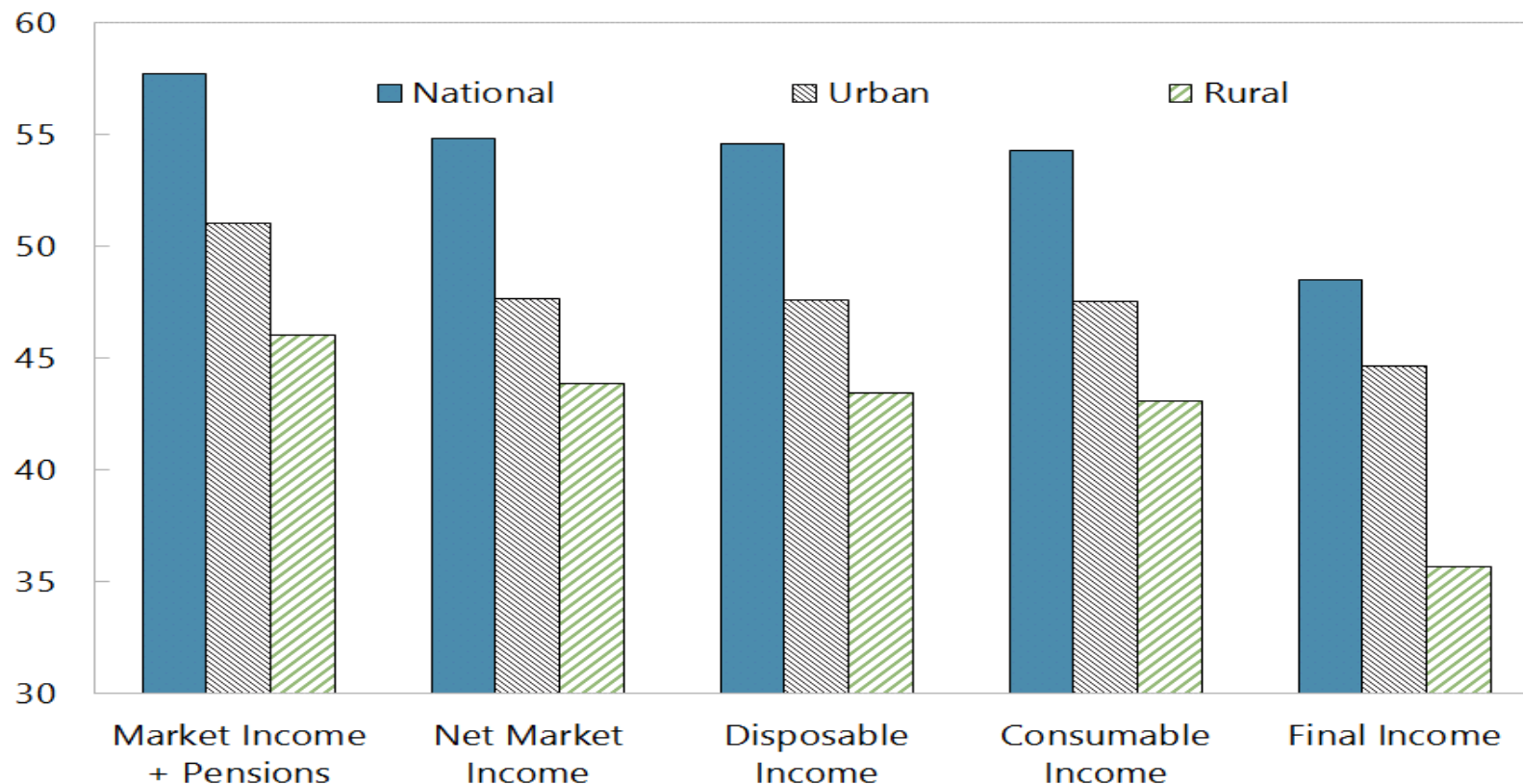
# Main Results

- Fiscal policy in Zambia reduces inequality, mainly when in-kind transfers are taken into account (though the underlying causes are not necessarily positive - lower pre-fiscal incomes and higher dependency ratios for education & more proneness to sickness).
- But impoverishes the majority of the population because their net contributions to the fiscal system were larger than net receipts.
- Direct cash transfers are too small to make a dent on poverty.
- Subsidy expenditures are almost completely concentrated in rich households, and yet they only provide a *marginal* boost to rich households incomes. This is a huge opportunity cost: an equally-sized transfer delivered to the poorest 10 percent would provide them an income boost of about two-fifths of disposable income.



# The fiscal system reduces inequality...

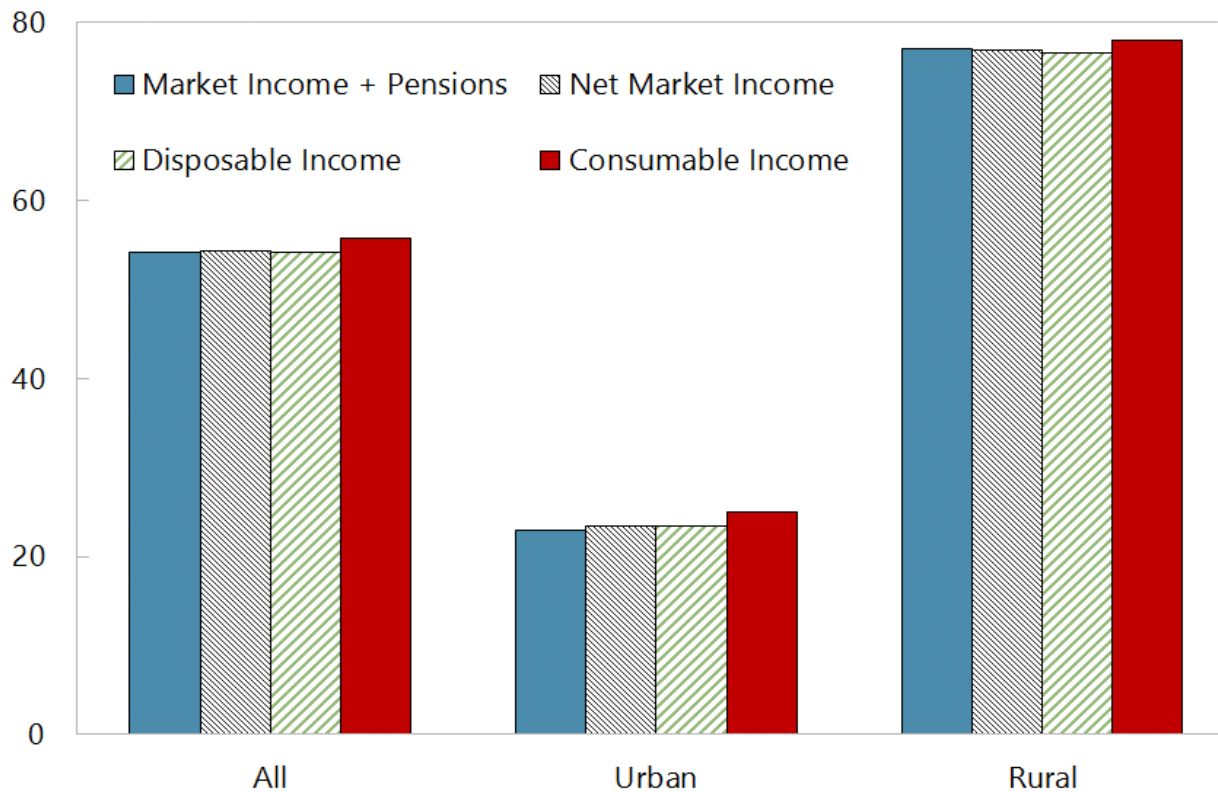
**Fiscal Policy's Impact on Inequality (Gini coefficient), 2015**



Source: Authors' estimates based on LCMS 2015.

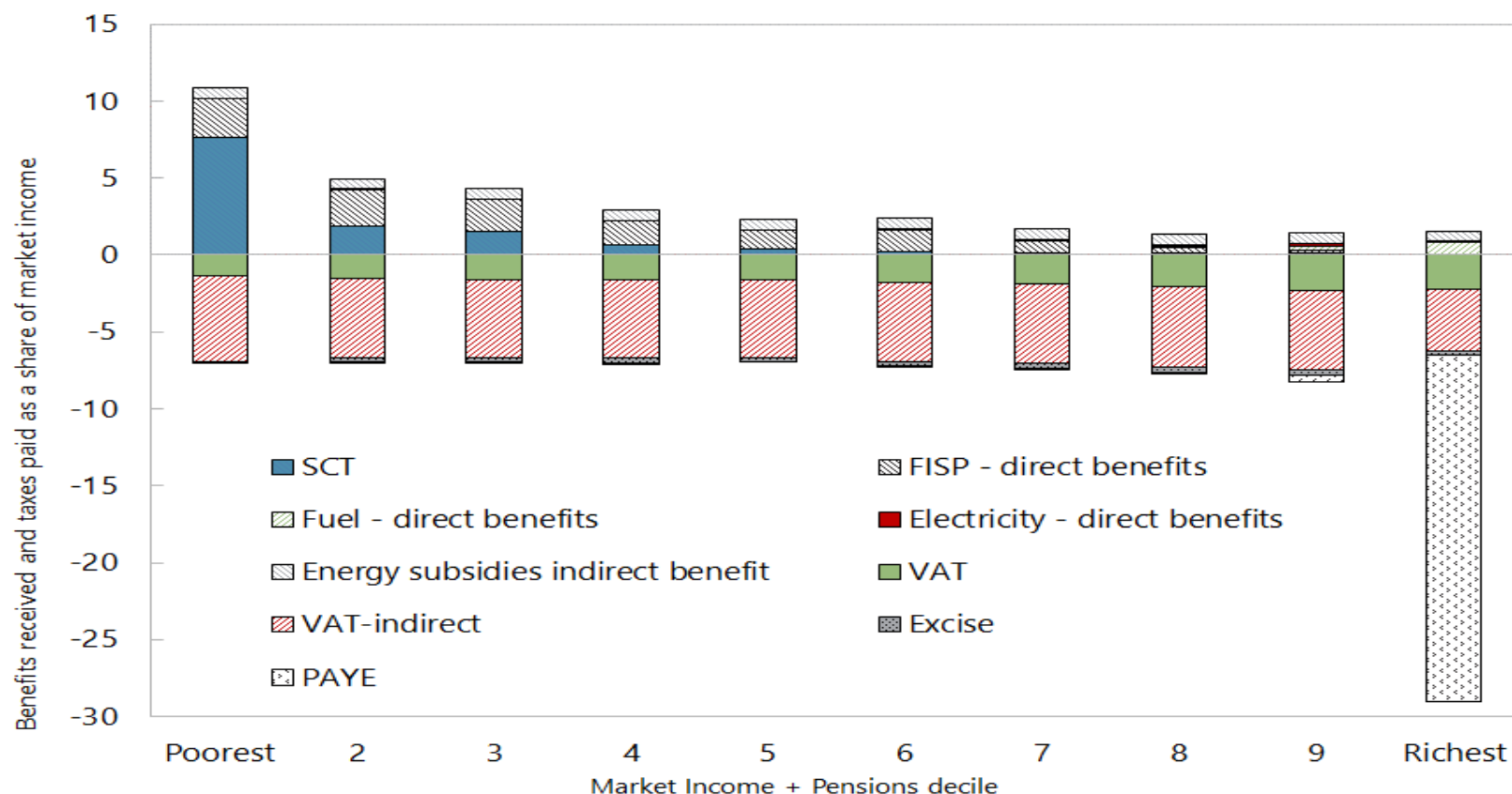
# But increases poverty

## Fiscal Policy's Impact on the Poverty Headcount Ratio, 2015



Source: Authors' estimates based on LCMS 2015.

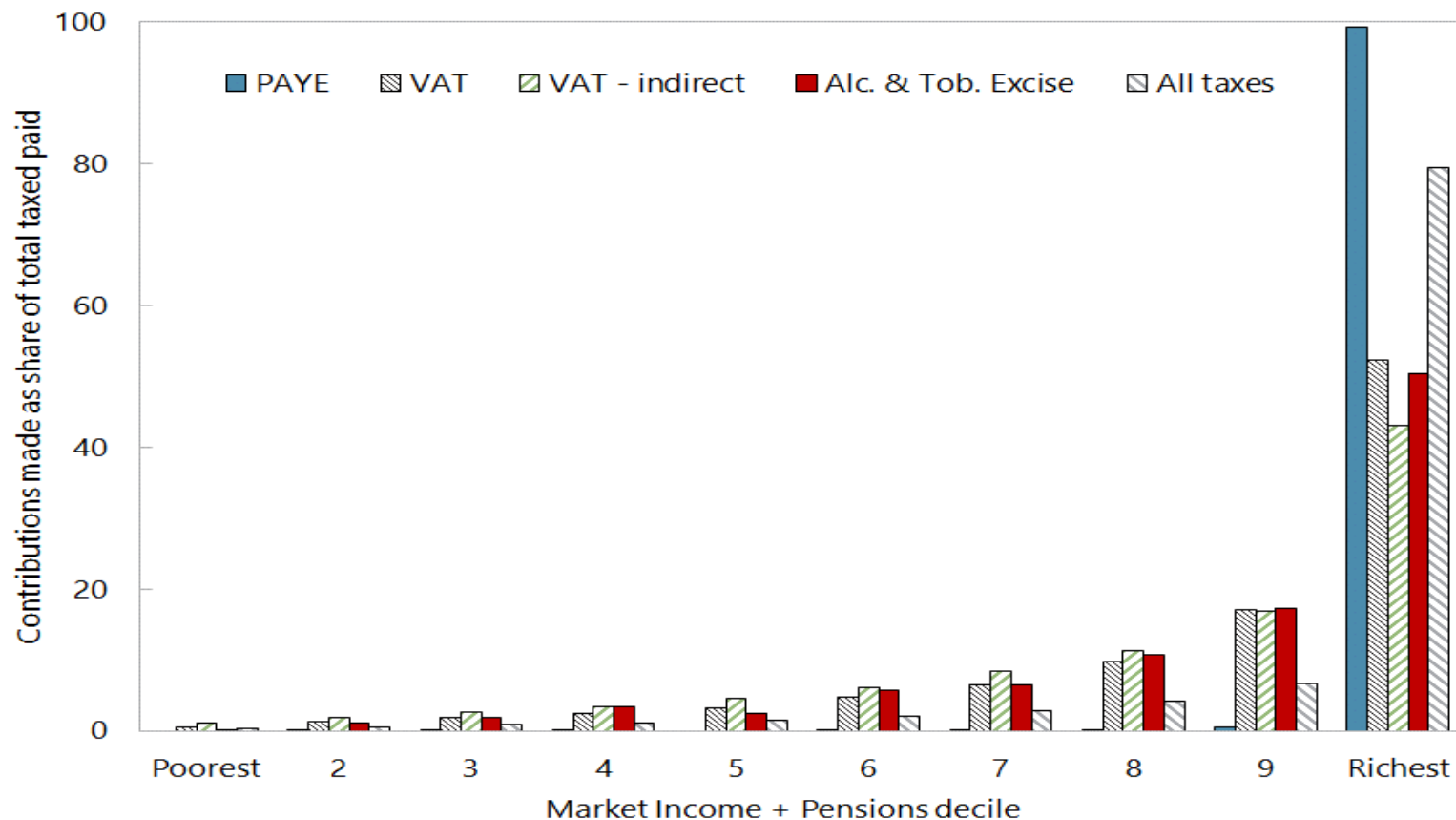
**Fiscal impoverishment happens because most (poor and vulnerable) households receive less from the fiscal system than they pay into it (in cash terms)**



Source: Authors' estimates based on LCMS 2015.

All benefits, subsidies, and indirect taxes as a share of disposable income

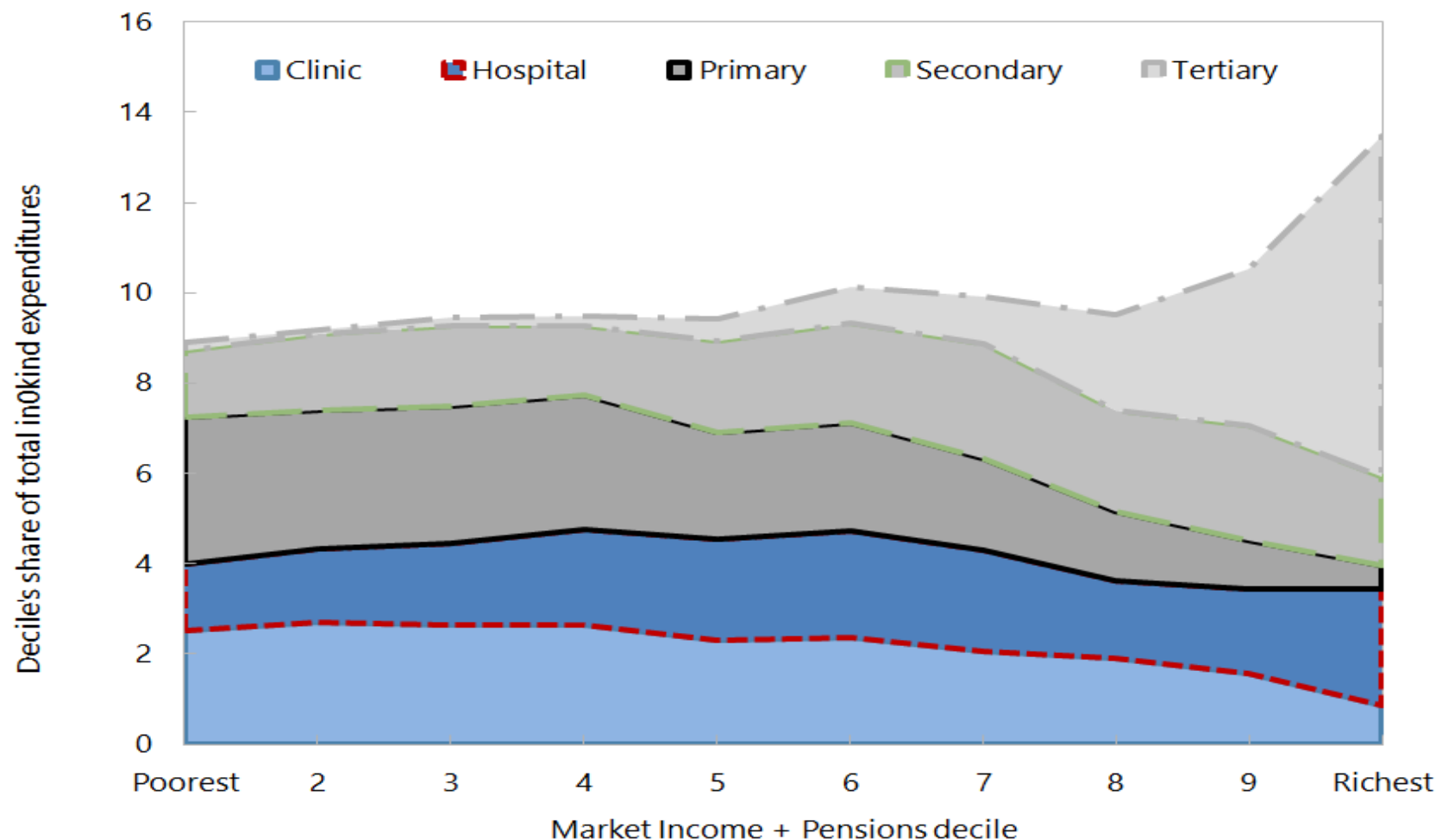
**Income taxes are borne by rich households;  
indirect taxes (VAT, Excise) are borne by  
everyone.**



Source: Authors' estimates based on LCMS 2015.

Concentration shares of total taxes collected, by decile and by tax

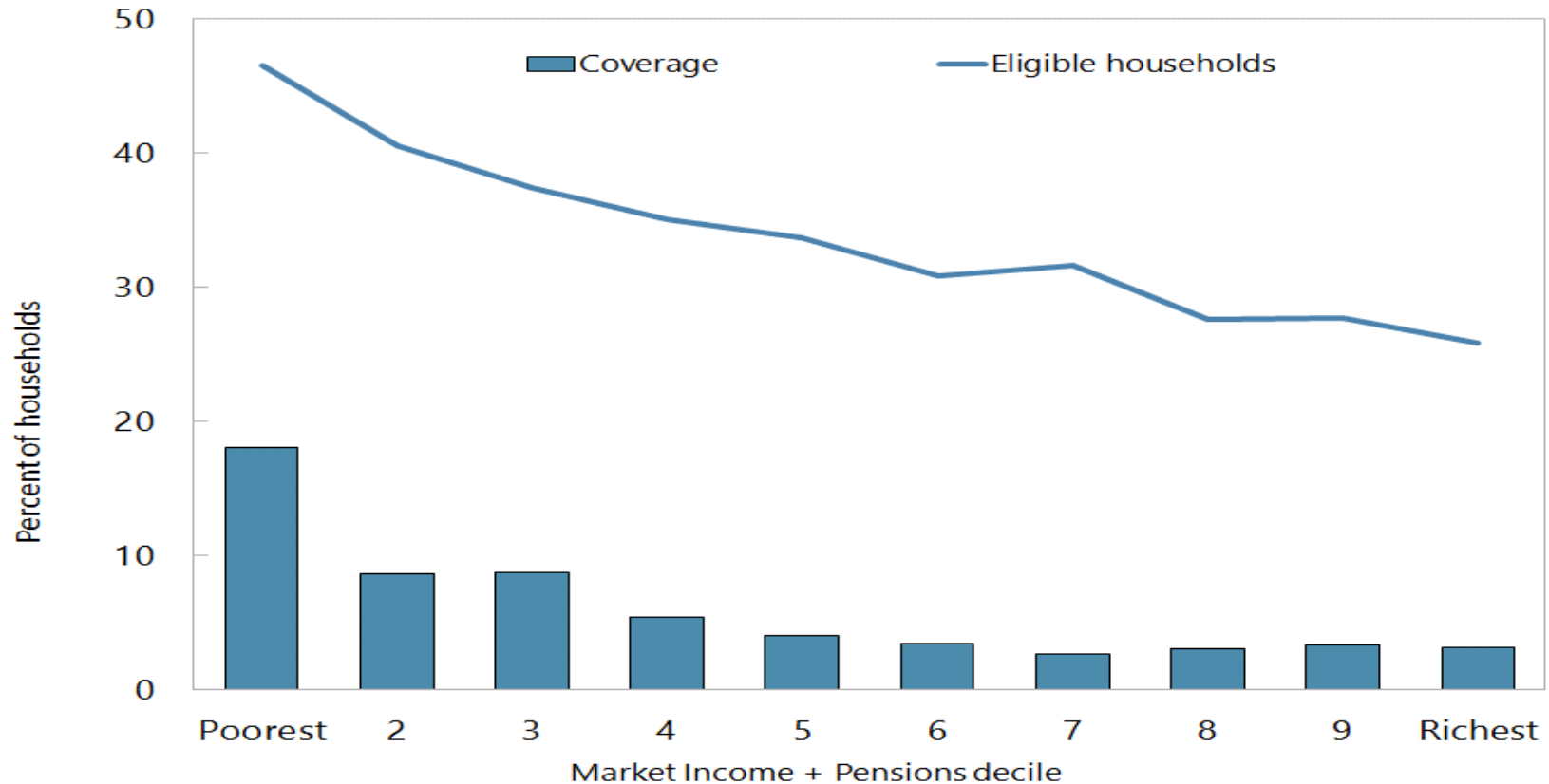
# Poor and non-poor households capture unequal shares of the available in-kind benefits



Source: Authors' estimates based on LCMS 2015.

Total in-Kind Expenditures by Education Level and Health Facility Type (%)

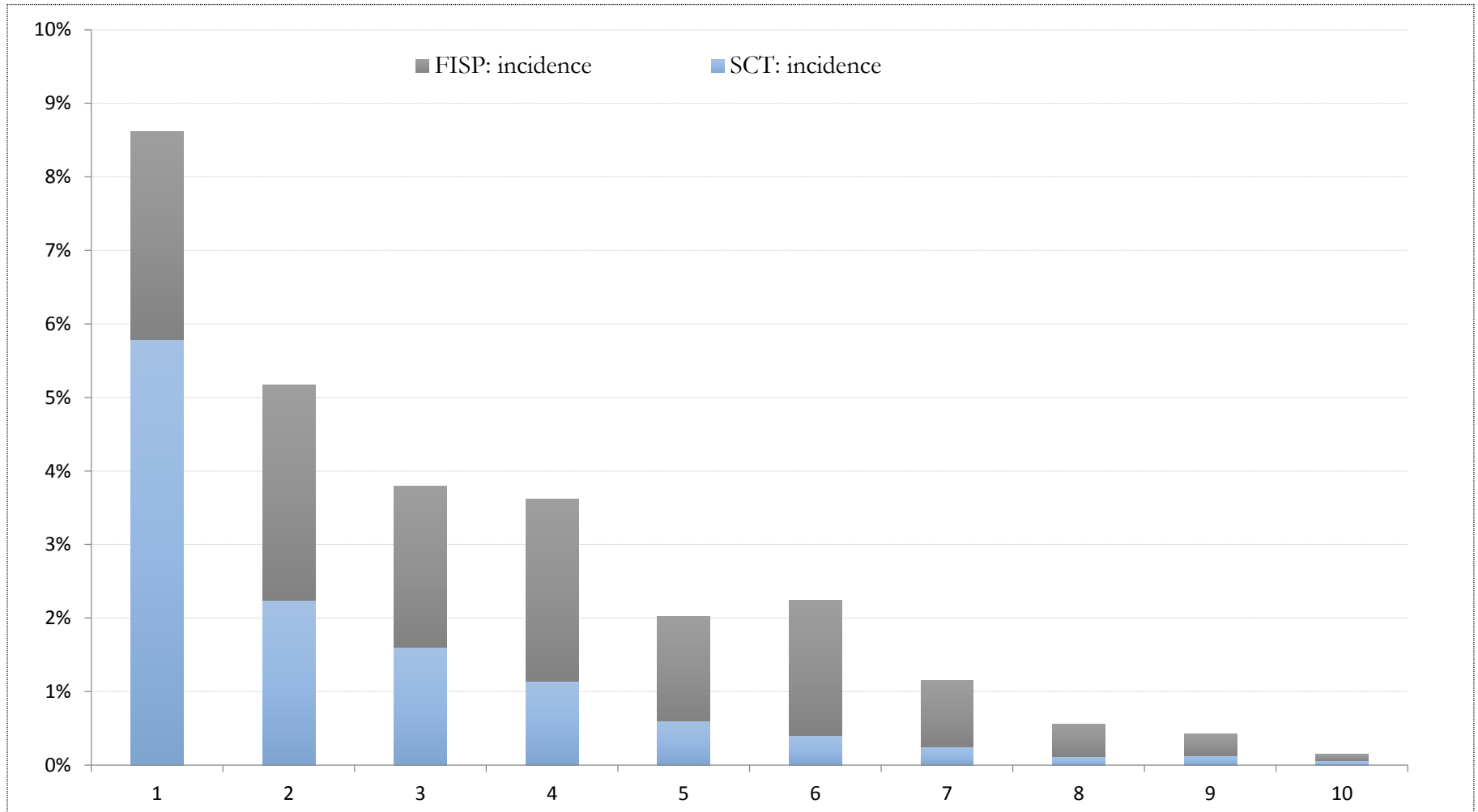
# SCTS is pro-poor, but provides low coverage and the top 60 percent still captures 2/5ths of program benefits



Source: Authors' estimates based on LCMS 2015.

Share of SCT-eligible and SCT-receiving households, by decile (left to right: poorest to richest deciles)

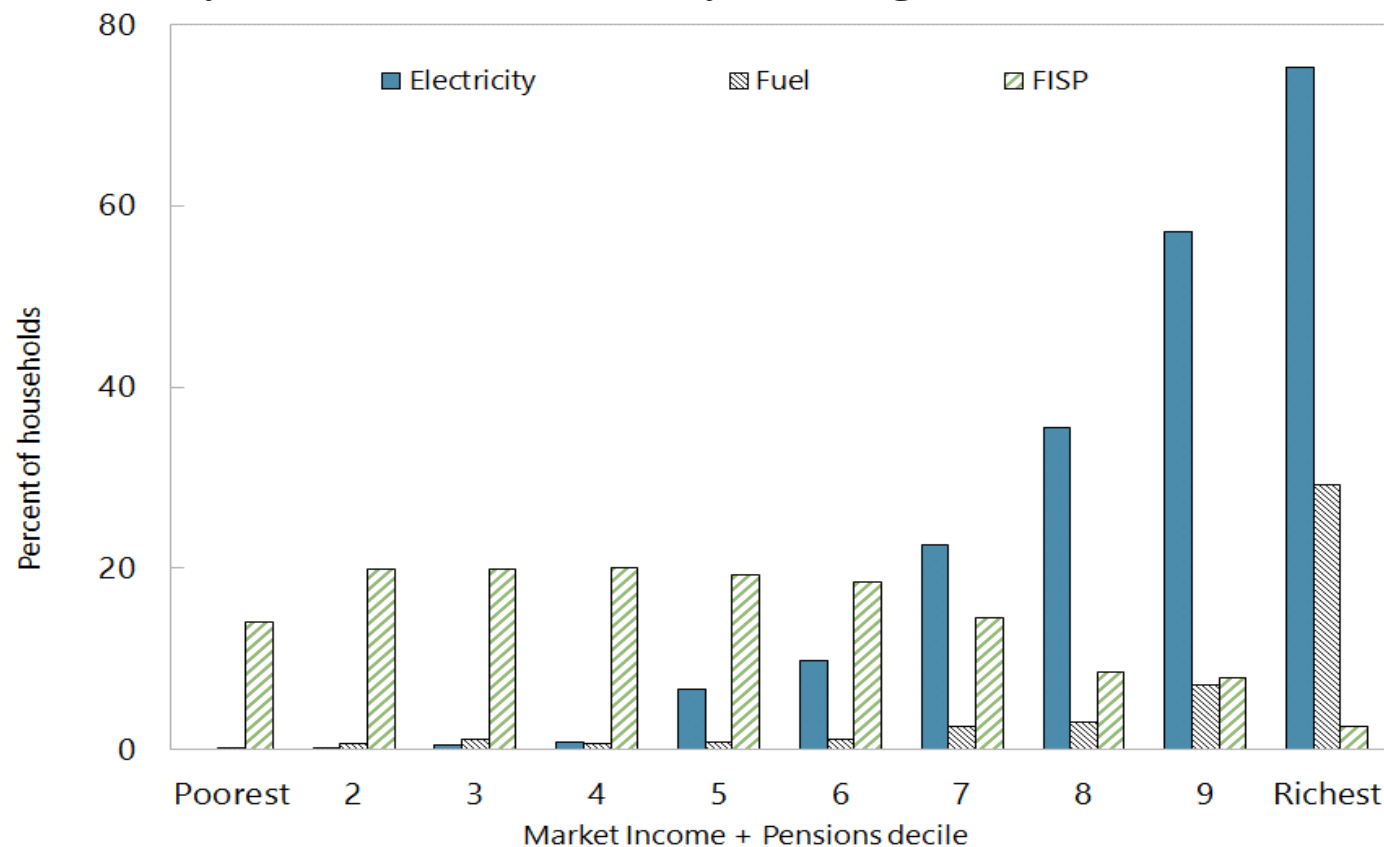
# FISP is a more important income source than cash transfers for all but the poorest households



**SCT** and **FISP** benefits received as a share of disposable income (by decile)

# Energy subsidies – especially fuel subsidies – are received by rich households; FISP is concentrated in the middle of the income distribution

**Electricity, Fuel, and FISP Subsidy Coverage Rates, 2015**



Source: Authors' estimates based on LCMS 2015.

Percent of households receiving subsidies



# Main Results of Fiscal Policy Reform Simulations

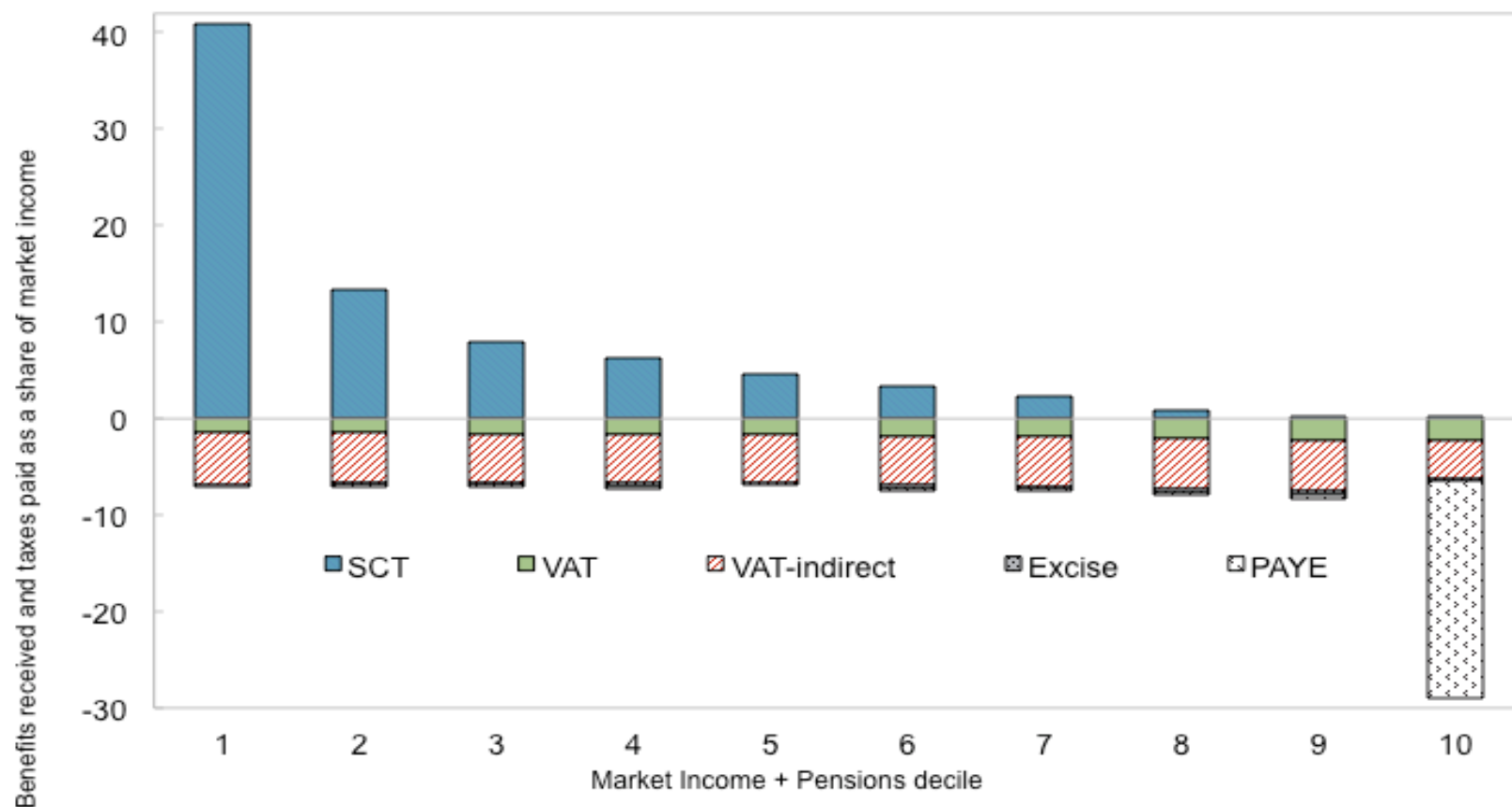
## Fiscal Reforms and Poverty, Inequality Impacts

	@ Disposable Income			@ Consumable Income		
	Poverty Headcount	Poverty Gap	Inequality	Poverty Headcount	Poverty Gap	Inequality
Current/2015	54.4%	0.26	0.546	56.3%	0.28	0.543
Partial	53.9%	0.25	0.539	56.0%	0.27	0.534
Full	50.3%	0.24	0.539	53.3%	0.25	0.537

*Source:* Authors' estimates based on LCMS 2015.

Notes: “Partial” reform includes the elimination of fuel and electricity subsidies and an increase in coverage of the SCT program to 500,000 beneficiaries, and a 28 percent increase in SCT benefit levels. The increased SCT cost under “partial” reform represents 7 percent of foregone energy subsidy expenditures. “Full” reform includes the elimination of fuel, electricity, and FISP subsidies and an increase in coverage of the SCT program to 500,000 beneficiaries, and a 100 percent increase in SCT benefit levels. The increased SCT cost under “full” reform represents 18 percent of foregone energy and FISP expenditure.

# Eliminating all subsidy spending and increasing SCT coverage and benefit levels would lead to the bottom 1/3<sup>rd</sup> becoming net recipients



Source: Authors' estimates based on LCMS 2015.

All benefits, subsidies, and indirect taxes as a share of pre-fiscal income after subsidy elimination and compensatory SCT transfers