The redistribution effect of taxation in emerging economies; evidence from a microsimulation exercise in Zambia

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Introduction

Evidence of substantial variation in average disposable wealth across countries and sub-regions exists. This is driven mainly by the level and structure of tax-benefit policies. Albeit such policies, high poverty levels and income inequality persist. The case for Zambia is made in this study. Despite the country meeting the desirable tax-to-GDP ratio of 15.6 per cent from 1995 to 2015 and 16.4 per cent from 2015 to 2019, poverty and income inequality levels have remained higher in Zambia at an average of 56.5 per cent and 52.1 per cent in the same period.

Figure 1. The trend for tax/gpd, gini index and absolute poverty -1995 - 2019
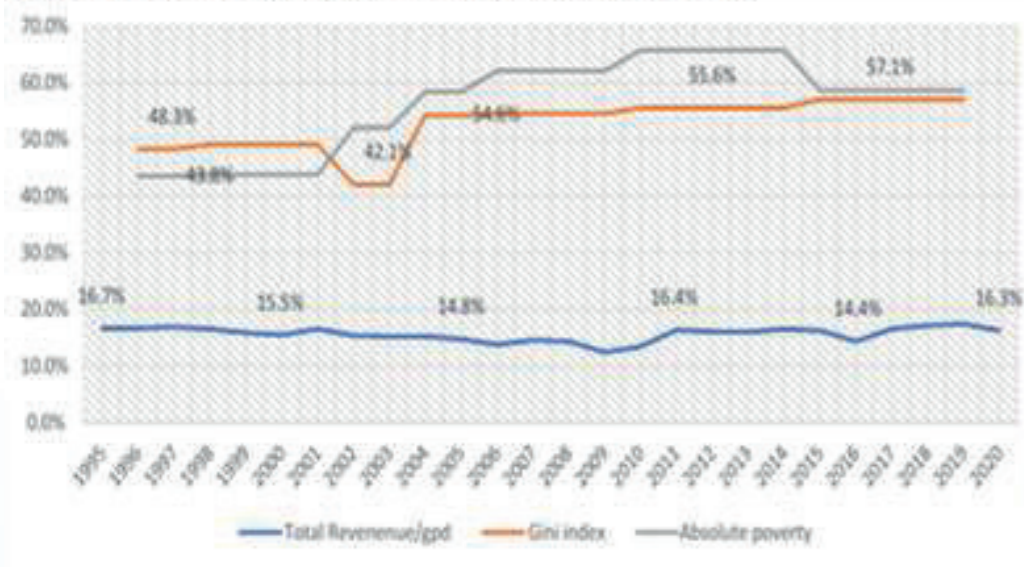
Sub-Saharan Africa, for instance, remains the region with the most significant number of economies below the minimum desirable tax-to-GDP ratio of 15 per cent. At such current levels, domestic revenues must be improved to finance essential public goods, including social safety nets.

Objective

To analyze the effect of taxation on revenues and its redistributive impact on poverty and inequality in Zambia from 2010 to 2019

The Approach

➢ This study uses the MicroZAMOD to unveil the effects of status quo fiscal policies. The study first models a counterfactual policy that proposes a hike in VAT and excise taxes to raise domestic revenue.

➢ To counteract the adverse welfare effects of such a policy, the paper suggests a revenue-neutral approach that entails a reduction in PAYE tax brackets as well as the introduction of a positive income shock in the form of the social cash benefit package for the onward balancing redistribution effect of any additional tax revenue from the counterfactual policy.

Results
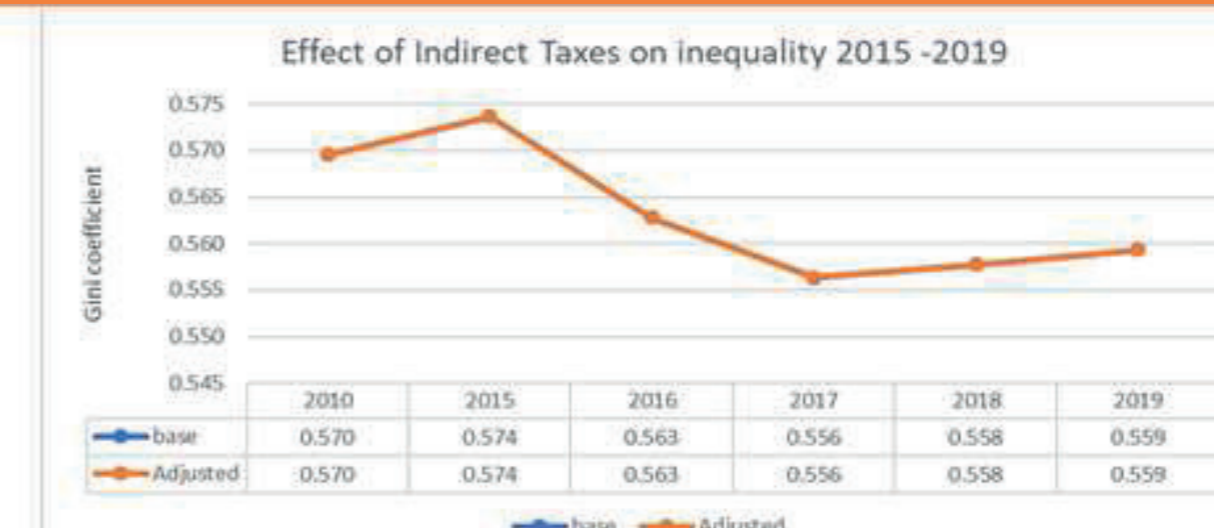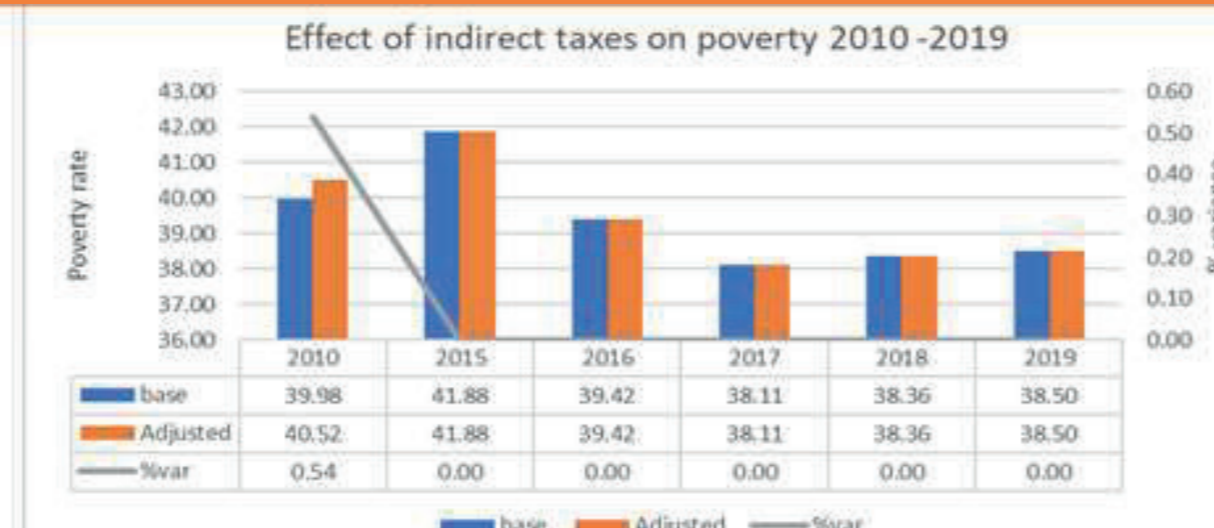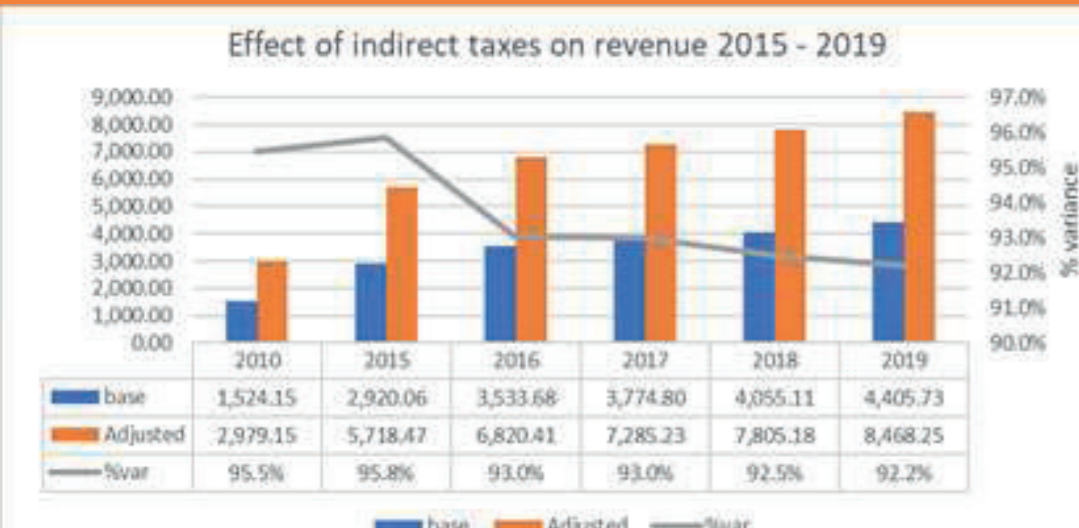
Indirect taxes have less negative effect on poverty and inequality
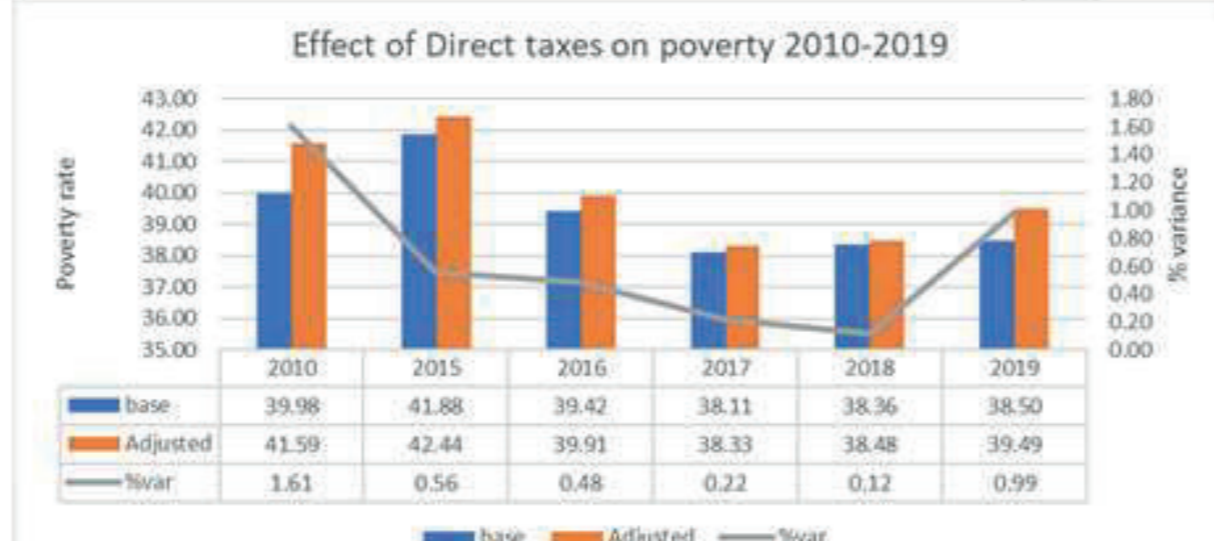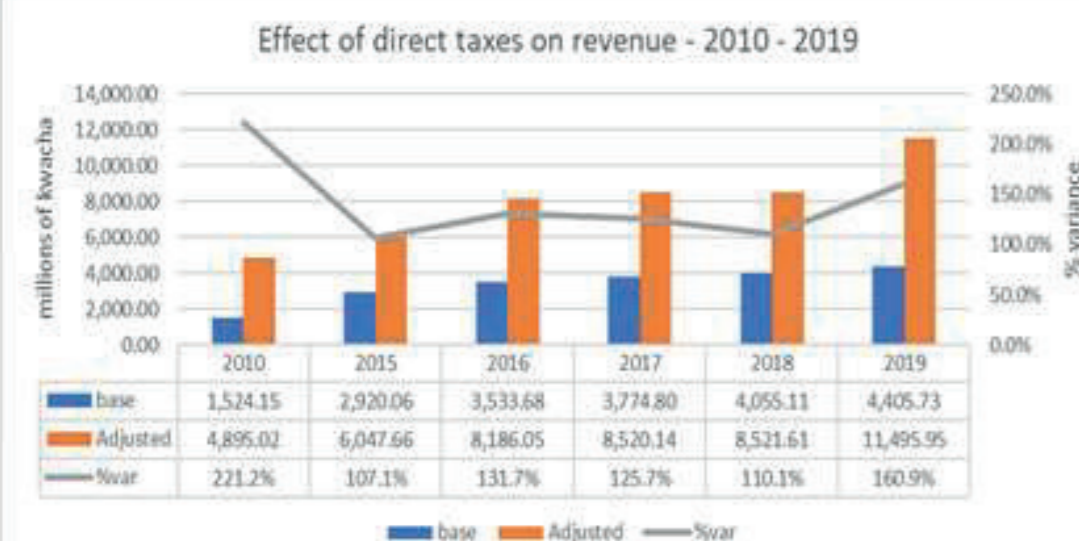
Direct taxes have adverse negative effect on poverty and inequality

Tax and Benefit Reform

Tax-benefit policy			
Yearly, mill. national currency	Base	Reform	Variance
Government revenue through taxes, SSC and indirect taxes	16,438.36	16,482.87	44.51
... direct taxes	6,482.02	5,913.49	-568.53
... indirect taxes	4,676.11	5,289.15	613.04
... social security contributions (employer, employee and self-em	5,280.23	5,280.23	0.00
Government expenditure on social transfers	3,964.93	4,967.06	1,002.14
... child benefits	139.57	139.57	0.00
... social assistance	1,759.23	2,761.37	1,002.14
... orphan/widow benefits	0.00	0.00	0.00
... disabled benefits	1,879.00	1,879.00	0.00
... unemployment benefits	0.00	0.00	0.00
... pension benefits	187.12	187.12	0.00

Poverty after taxes and transfers			
Share of poor population, in %	0	0	0
All	41.15	40.18	-0.98
Poor households out of ...	0	0	0
... male headed households	41.22	40.62	-0.60
... female headed households	40.87	38.36	-2.51
... households with children	42.59	41.66	-0.93
... households with older persons	45.42	41.95	-3.47
Poverty gap (average normalised poverty gap, FGT(1))	0	0	0
All	17.67	16.82	-0.85
Poor households out of ...	0	0	0
... male headed households	17.31	16.85	-0.46
... female headed households	19.14	16.71	-2.43
... households with children	18.36	17.52	-0.84
... households with older persons	19.70	16.67	-3.02
Absolute national poverty line, in national currency, yearly:	3,191	3,191	0

Inequality and the household income distribution after taxes and transfer			
Gini (household income)	0.5429	0.5403	-0.0026
P80/P20	5.00	4.85	-0.15
Quantiles of distribution and median	0	0	0
20th	1,813.35	1,891.22	77.87
40th	3,088.19	3,171.20	83.01
50th	3,959.76	4,042.04	82.28
60th	5,102.15	5,168.99	66.83
80th	9,073.05	9,179.39	106.35
Absolute national poverty line, in national currency, yearly	3,191	3,191	0

Conclusion

The study simulates direct (*personal income tax and turnover tax*) and consumption (Value Added Tax and excise tax) taxes to show that consumption taxes neutralize welfare indices. In contrast, direct taxes have an unbalancing or worsening effect on these indices.

The study reveals that emerging economies should tailor fiscal policies with a focus on indirect taxes as a major driver for domestic revenue mobilization strategies.

Further, with the realized revenue gain from tax reforms, emerging economies should design benefit packages to redistribute the gains as way of reducing poverty and inequality

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