Preferential VAT rates, cash transfers and redistribution

Ross Warwick, Institute for Fiscal Studies

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The Institute for Fiscal Studies (IFS)

Institute for Fiscal Studies

IFS is an independent microeconomic research institute in London

- Broad research remit from tax to human capital and consumer behaviour to development policy
- Conducts both policy-focused and more academic research

Tax and benefit policy in LMICs is a growing part of research portfolio

- DfID-funded Centre for Tax Analysis in Developing Countries (TAXDEV) founded in 2016 and combines policy-relevant research with demand-led analysis and capacity building with partners
- TAXDEV involves close partnership with finance ministries and revenue authorities in Ghana and Ethiopia

Introduction

Preferential rates of VAT are a common feature of tax systems across the world

- These take the form of reduced rates and VAT exemptions
- Why do these exist?

1. To enhance economic efficiency (e.g. locally produced food)
   - Little empirical evidence on the role of this in LMICs
2. For administrative reasons (e.g. financial services)
   - Consensus is that these make sense in specific cases
   - But in general, deviations from a uniform VAT likely increase admin costs due to policing product boundaries, allocating inputs to outputs and providing cash refunds, for example

This research

3. To ease the tax burden on certain groups i.e. for redistributive reasons (e.g. kerosene)

Are VAT rates an effective way of supporting poor households in LMICs?

- This issue has been researched in HICs before but LMICs:
  - Have notably different VAT structures and consumption patterns
  - Lack sophisticated direct tax and benefit systems
- We use microsimulation models in Ethiopia, Ghana, Senegal, Sri Lanka, Vietnam and Zambia to investigate this empirically by:
  - Estimating the impact of existing preferential VAT rates on revenues and households (except those in place for administrative reasons)
  - Contrasting these with existing cash transfer programmes and a hypothetical flat transfer funded by a broader VAT

Data

Key points

- The main data source is high quality household survey data in each country
  - E.g. Zambian Living Conditions Monitoring Survey 2015
- Combine this with budget data and input-output tables or Social Accounting Matrices in each country
  - Generally these are older than the survey data
- We do not have the data to model informality at the individual level
- The household survey data in Senegal, Sri Lanka and Zambia underrecords total consumption – absolute values are likely understated as a result

Methodology

Key points

- We use microsimulation methods and a consistent methodology to conduct analysis of distributional impacts and on poverty/inequality
- Average level of informality and non-compliance calculated at an aggregate level in each country
- Welfare measure includes monetary consumption and home production, net of indirect taxes plus subsidies
- The impact of VAT exemptions on consumer prices estimates using a price-shifting model
  - Assume full incidence of VAT on prices
  - No behavioural response

The impact of existing preferential VAT rates

They are expensive

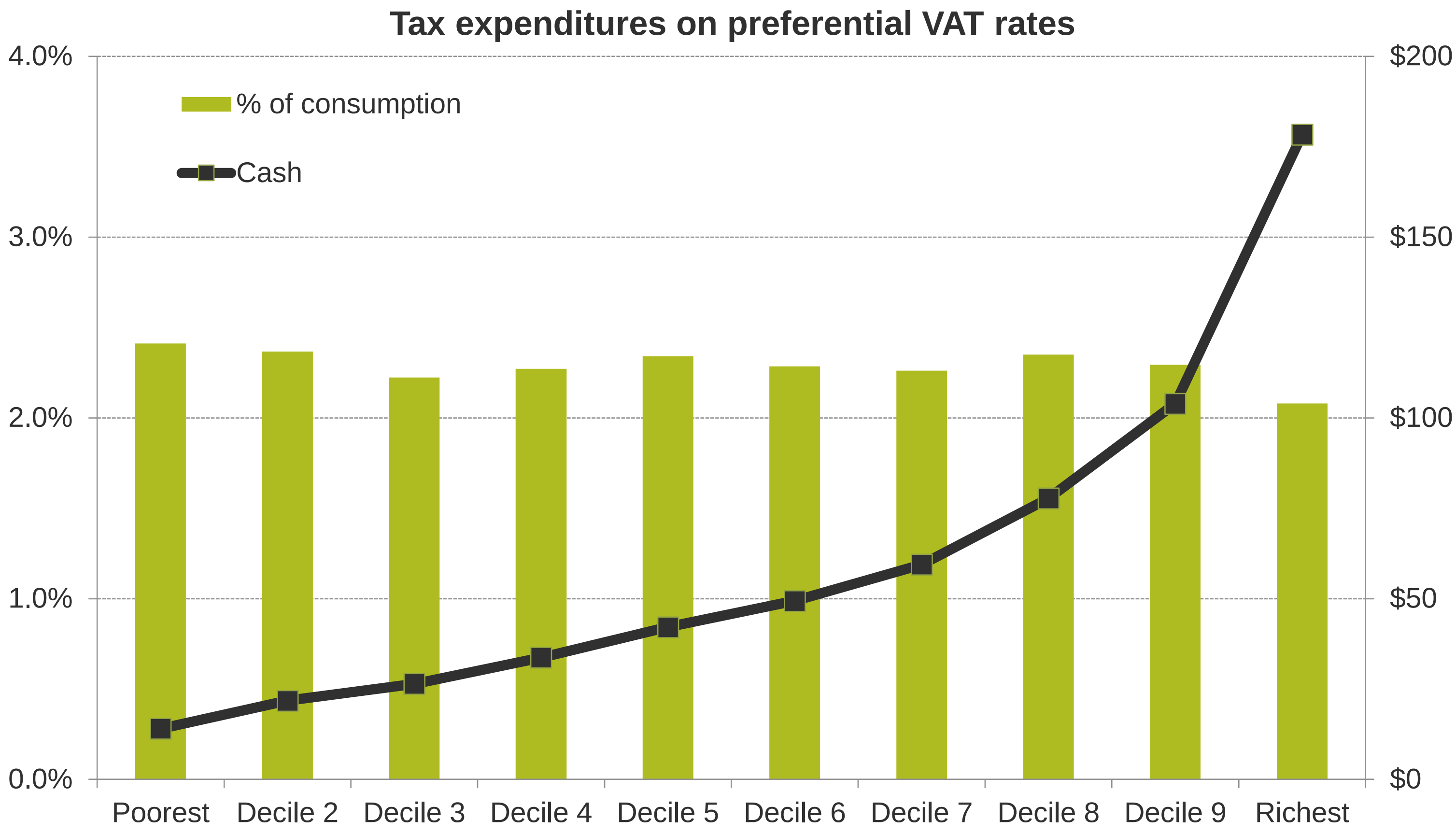
- Cost relative to VAT revenue ranges from 25% in Ethiopia to 44% in Sri Lanka
- Variation driven by specifics of existing VAT rules

They are poverty-reducing

- A uniform VAT without compensation would increase all measures of poverty in all countries
- Some estimated effects are large – 2.4pp in Senegal at the lowest line

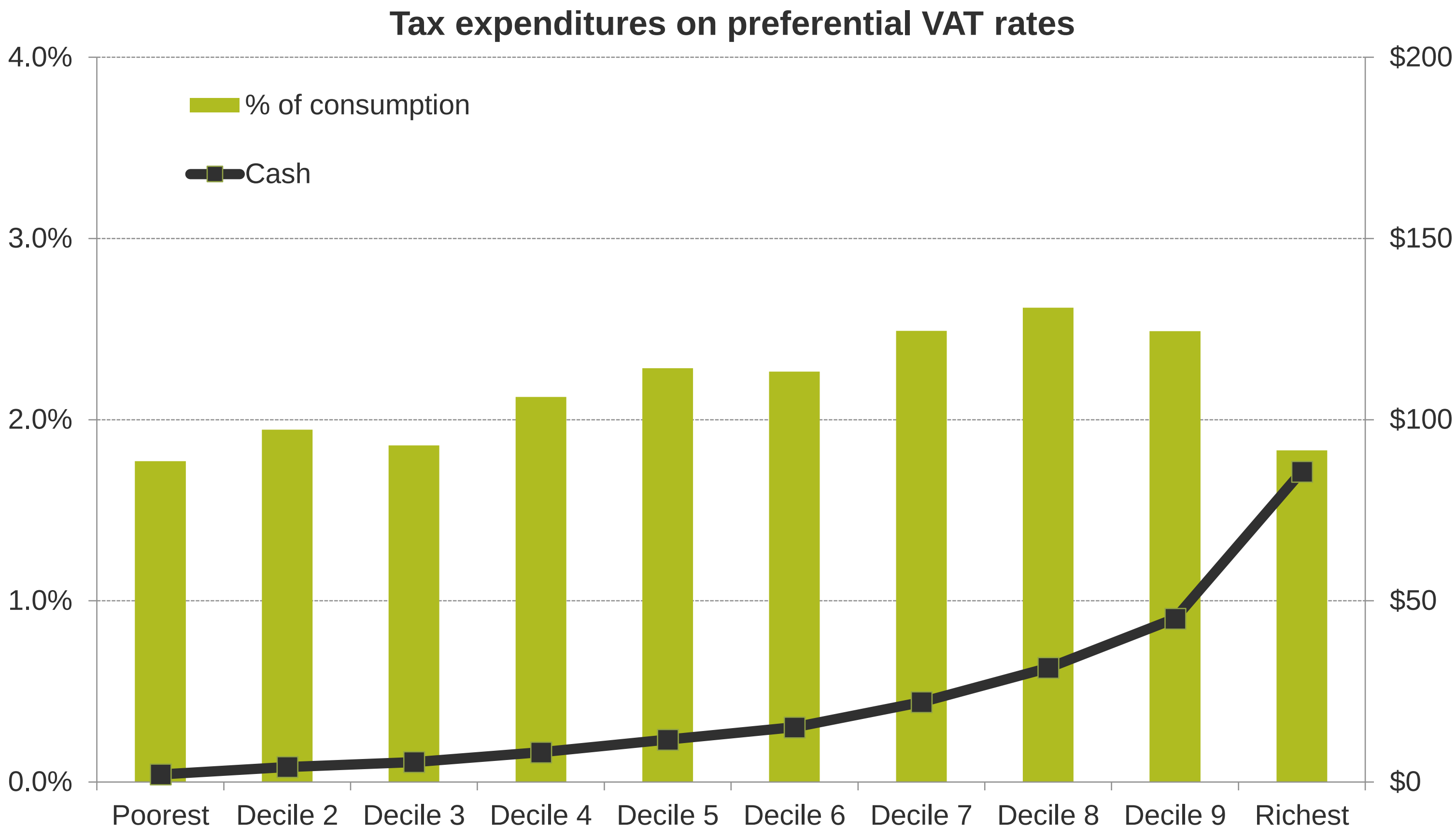
How well targeted are they?

Ghana



Note: population ranked by consumable income per capita; cash amounts in annual 2011 USD PPP.
Source: calculated using GHATAX.

Zambia



Note: population ranked by consumable income per capita; cash amounts in annual 2011 USD PPP.
Source: calculated using CEQ/World Bank fiscal incidence analysis.

Existing cash transfers

Five of the six countries analysed have a cash transfer scheme

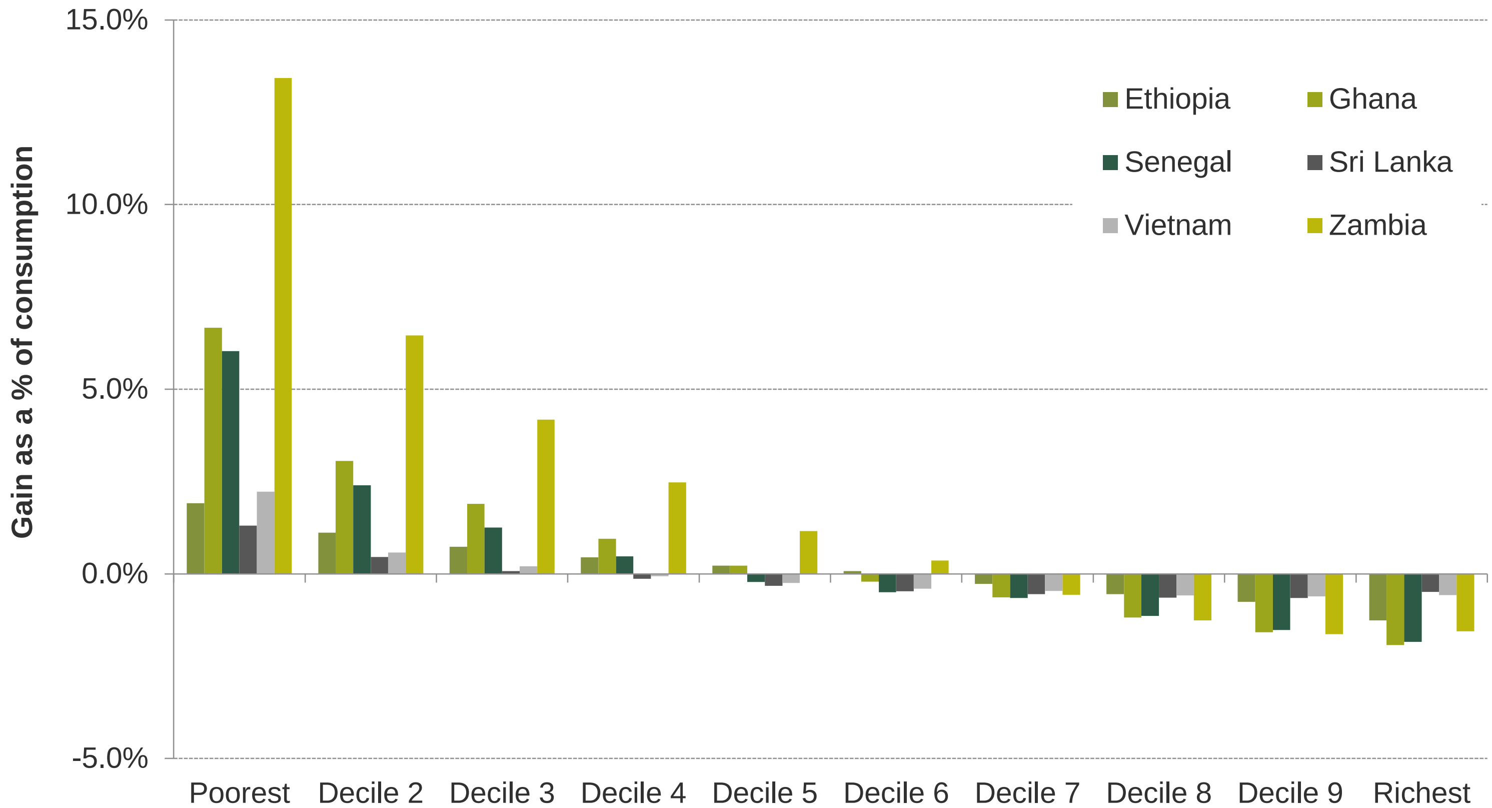
- On average they are better targeted than VAT rates

Compensation for a uniform VAT via these schemes would be tricky

- They are relatively small and target subsets of vulnerable households
- More generally, information and resource constraints make targeting mechanisms imperfect

Thus, we consider what could be achieved using a Universal Basic Income (UBI) funded by 75% of the additional revenue raised

Distributional impact of uniform VAT and UBI



Note: population ranked by consumable income per capita; cash amounts in annual 2011 USD PPP. Post-reform consumable income accounts for additional indirect tax paid on the UBI granted.
Source: calculated using ETHTAX, GHATAX and CEQ/World Bank fiscal incidence analysis.

Poverty reduction from uniform VAT and UBI

Change in poverty headcount (ppt)			
Poverty Line	**$1.90**	**$3.20**	**$5.50**
Ethiopia	-0.60	0.22	0.23
Ghana	-0.71	-0.56	0.42
Senegal	-0.45	0.19	0.20
Sri Lanka	-0.16	-0.17	0.26
Vietnam	-0.22	-0.22	0.08
Zambia	-0.19	0.41	0.23

Note: figures are based on consumable income per capita pre- and post-reform and account for additional indirect tax paid after receiving UBI.
Source: calculated using ETHTAX, GHATAX and CEQ/World Bank fiscal incidence analysis.

Effect on inequality of uniform VAT and UBI

Change in measures of inequality		
Measure	**Gini Index**	**90/10 Ratio**
Ethiopia	-0.31	-0.07
Ghana	-0.58	-0.46
Senegal	-0.73	-0.22
Sri Lanka	-0.16	-0.07
Vietnam	-0.23	-0.10
Zambia	-0.60	-1.47

Note: figures are based on consumable income per capita pre- and post-reform and account for additional indirect tax paid after receiving UBI.
Source: calculated using ETHTAX, GHATAX and CEQ/World Bank fiscal incidence analysis.

Conclusions

Preferential VAT rates are not well targeted towards low-consumption households

- Even an untargeted cash transfer is considerably more progressive

This doesn’t make the simulated reform a policy prescription

- We don’t fully understand:
  - The potential broader impacts of unconditional incomes
  - Issues of VAT design in LMICs e.g. how does informal sector affect incidence and the efficiency case for rate differentiation?
- Existing cash transfer schemes or other more targeted forms of compensation would be even more redistributive
- And of course there are political and practical dimensions to consider