Institute for Fiscal Studies

Preferential VAT rates, cash transfers and redistribution

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TaxDev

UKaid from the British people

Introduction

How can governments in LMICs improve social protection?

- Given typically low tax/GDP ratios
- And limited sophistication of the direct tax and benefit system due to information and resource constraints

Preferential rates of VAT are one common approach

- Reducing the price of goods and services – indirectly targeting households through what they buy
- Estimates of the effects of these in LMICs are hard to come by

VAT rate differentiation

Preferential VAT rates can mean reduced rates or exemptions

A number of potential motivations exist

- Administrative exemptions: when there is not an explicit price on a transaction, or to reduce compliance and administration costs
- Efficiency: lower rates to avoid discouraging formal market activity
- Equity: lower rates on goods/services that take up a large share of the budgets of poorer households (e.g. foodstuffs, water supply, kerosene)

There is some consensus on the need for "administrative" exemptions

This research

Are preferential VAT rates an effective way of achieving redistributive goals in LMICs?

- We use microsimulation models and a consistent methodology in (currently) Ethiopia, Ghana, Senegal and Zambia
  - Collaboration with researchers at Commitment to Equity (CEQ) Institute and World Bank Poverty and Equity Global Practice
- We estimate the distributional and poverty/inequality effects of:
  - Existing reduced VAT rates and VAT exemptions (excluding administrative exemptions)
  - Existing cash transfer programmes
  - Broadening the VAT base to fund a Universal Basic Income (UBI)

Methodology (I)

Microsimulation models

- Ethiopia (ETHTAX) and Ghana (GHATAX): models built as part of partnership between TAXDEV and finance ministries
- Senegal and Zambia: Commitment to Equity/World Bank fiscal incidence analysis

Data

- Models are based on household survey data
  - In Ghana and Ethiopia, consumption in the survey data is close to national accounts
  - In Senegal and Zambia, consumption is under-recorded. Thus, absolute cash amounts may be too small but relative numbers are valid

Methodology (II)

Considerations for modelling in LMICs

- Non-compliance and unregistered firms
  - We account for an aggregate level of non-compliance in each country: e.g. in Ghana 60% of monetary expenditure is taxable
- Home production and barter
  - Our welfare measure is consumption net of indirect taxes
- Exemptions are more common than reduced rates in the countries studied
  - VAT on intermediate goods can be passed onto consumer prices
  - We estimate the impact of VAT exemptions on consumer prices using input-output relationships between sectors

The impact of existing preferential VAT rates

They are expensive

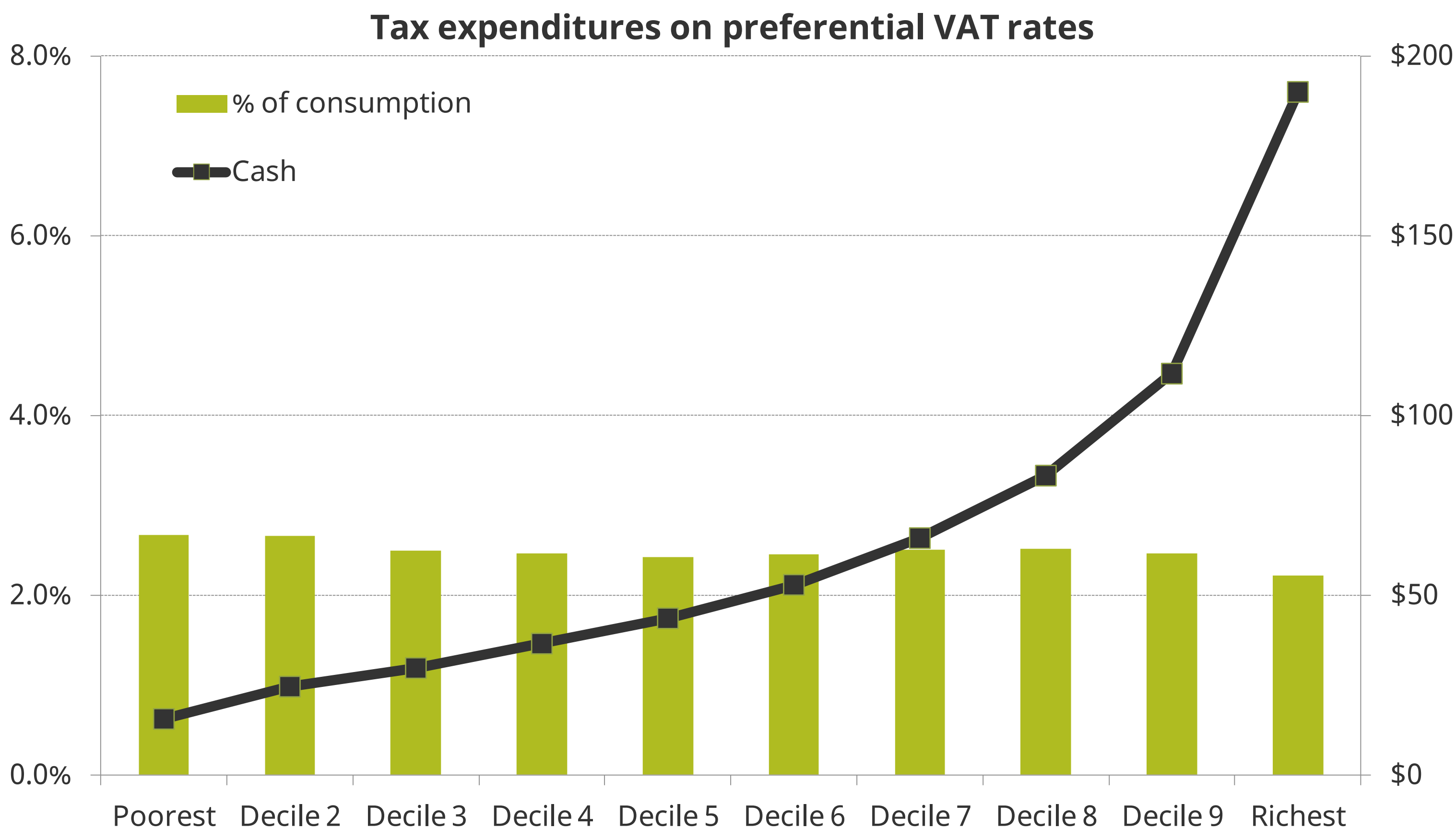
- Cost relative to VAT revenue ranges from 23% in Ethiopia to 56% in Senegal
- Variation driven by specifics of existing VAT rules

They are poverty-reducing

- A uniform VAT without compensation would increase all measures of poverty in all countries
- Some estimated effects are large – 3.4pp in Senegal at the lowest line

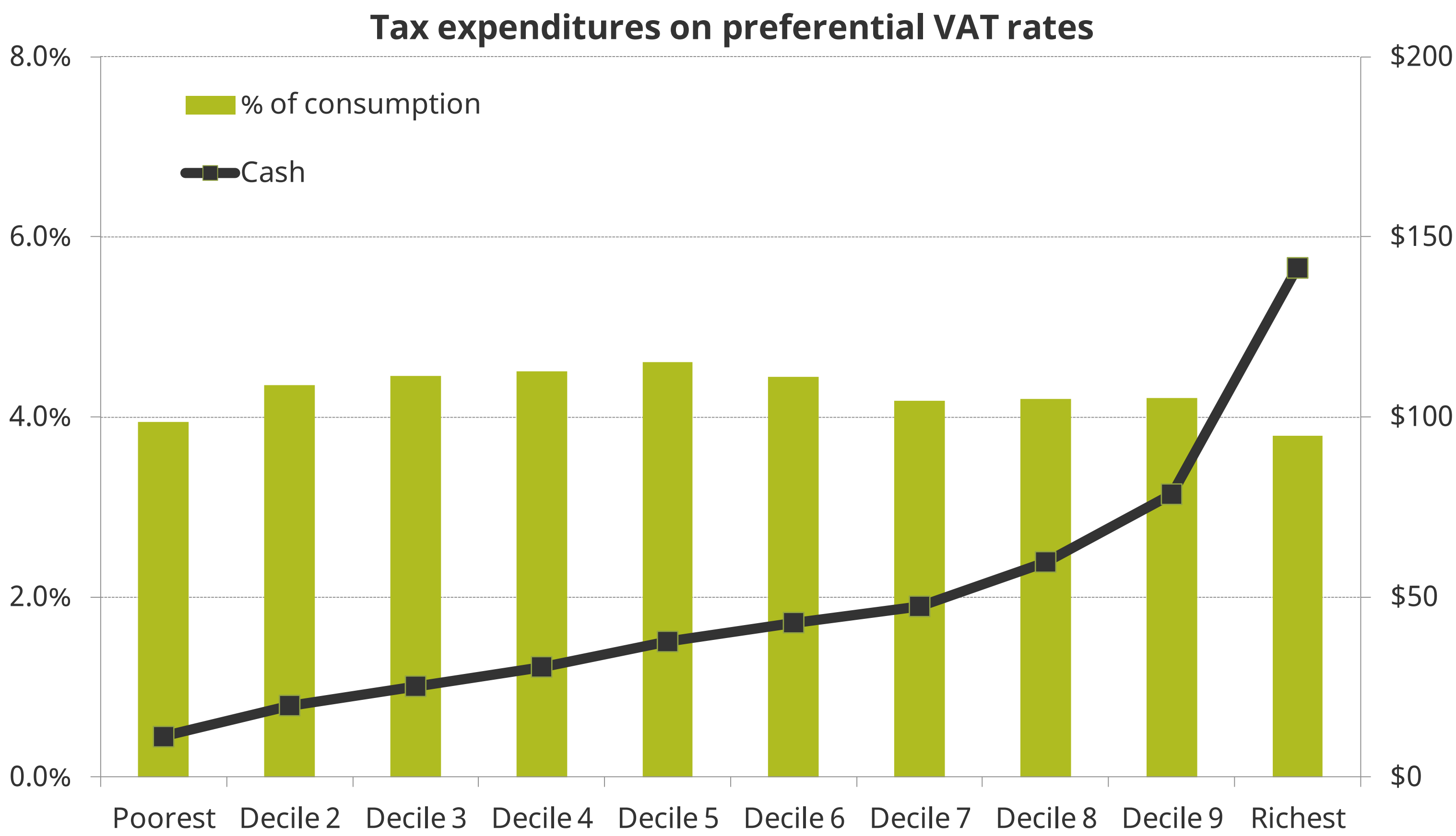
How well targeted are they?

Ghana



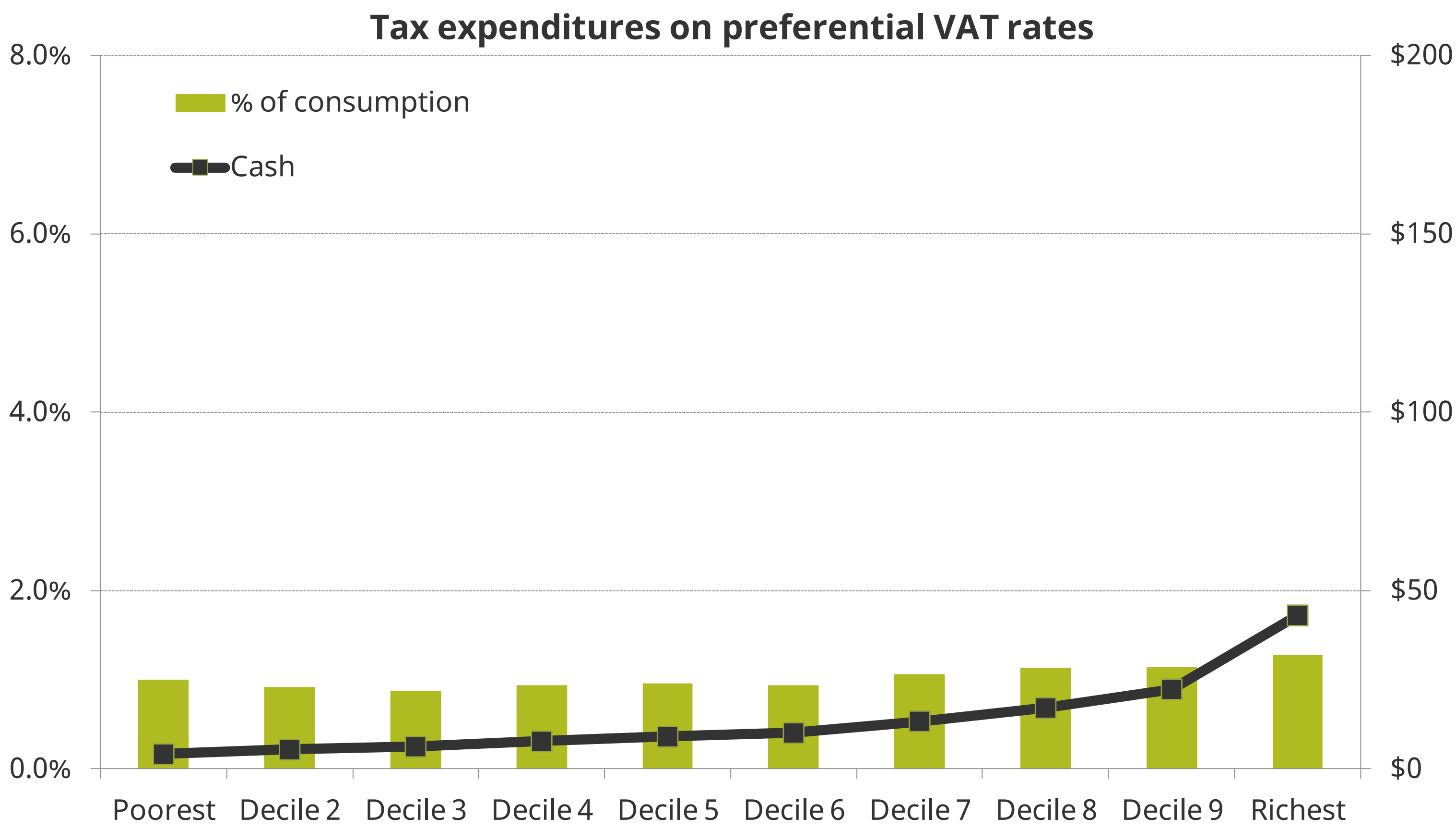
Note: population ranked by consumable income per capita; cash amounts in annual 2011 USD PPP.
Source: calculated using GHATAX.

Senegal



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

Ethiopia



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

Existing cash transfers

All four countries analysed have a cash transfer scheme

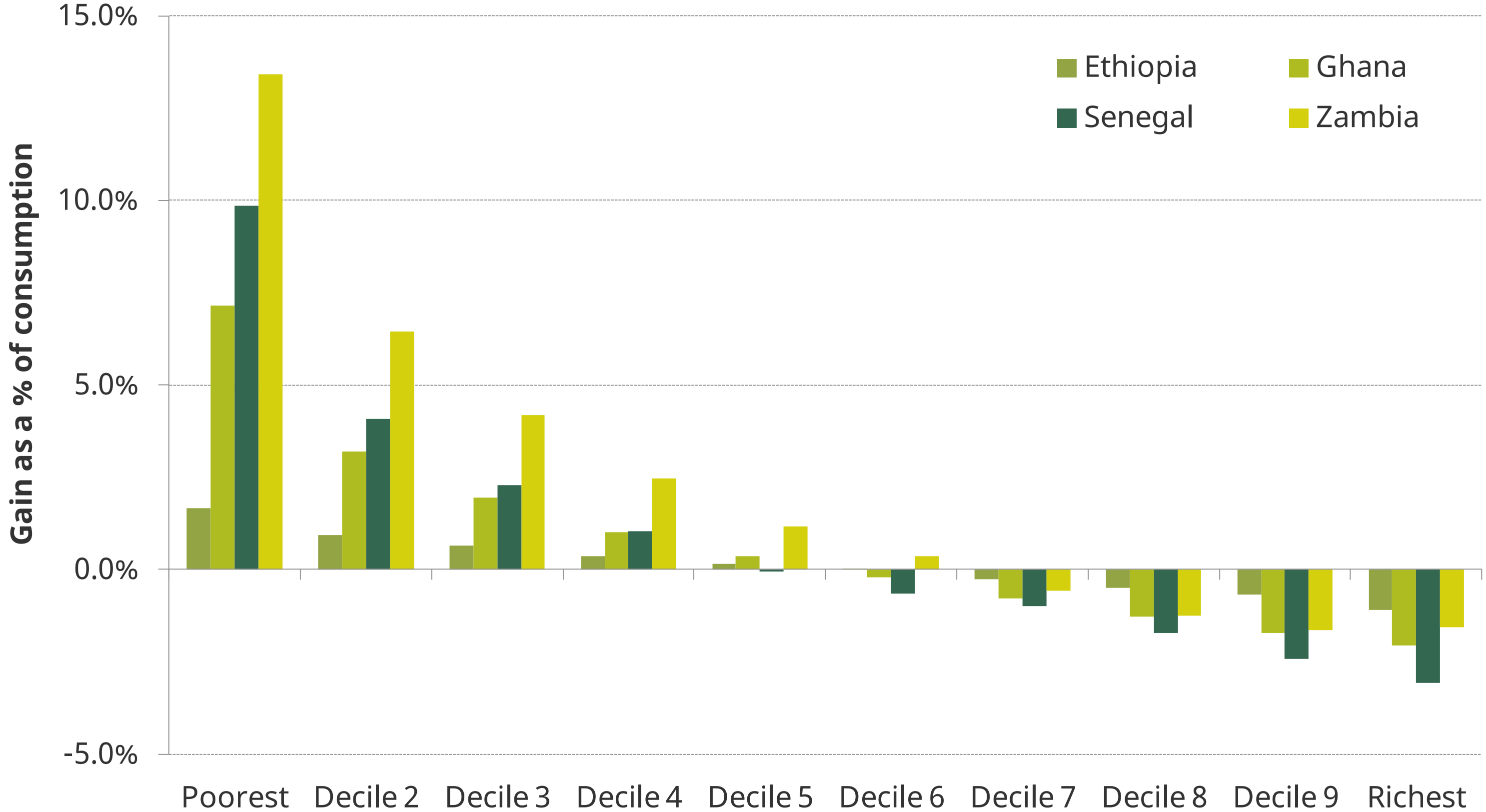
- On average they are better targeted than VAT rates

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

Reduction in poverty headcount (ppt)			
Poverty line	*$1.90 per day*	*$3.20 per day*	*$5.50 per day*
Ethiopia	0.24	-0.26	-0.20
Ghana	0.67	0.44	-0.52
Senegal	-0.15	-0.48	-0.39
Zambia	0.19	-0.41	-0.23

Note: a positive number indicates a reduction in poverty. 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

Is this a policy prescription?

- Not necessarily. More research is needed:
  - Wider impacts of unconditional income e.g. on labour supply
  - Considerations for VAT design in LMICs e.g. how does informal sector affect the efficiency case for rate differentiation?
- Immediate next steps:
  - Adding Indonesia, Sri Lanka, Tanzania and Vietnam
  - Refining analysis after incorporating feedback on working paper