# VAT, Gender and Distribution: Evidence from an 8-country study

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#### **VAT**

- One of the features of tax system in developing countries is the rise and dominance of VAT.
- Since 1990s, more than three-quarters of countries in sub-Saharan Africa have adoped VAT
- For many developing countries, which lack high levels of formal-sector employment, VAT is the mainstay of tax revenue

#### Two controversies

- VAT places a heavy burden on the poor negative distribution impacts
- VAT is a tax on consumption so may place a burden on persons who have a high propensity to consume
- VAT may therefore have negative gendered income distribution impacts
  - Women bear a disproportionate burden for consumption expenditure so may have a higher VAT incidence
  - Women are disproportionately in poorer households so may have a higher VAT incidence

# Our study

- Combine income classes and gender
- 8 country study: South Africa, Ghana, Uganda, Morocco, India (West Bengal), Argentina, Mexico, UK
- Studied direct and indirect taxes, but I only report on indirect

### Indirect taxes

- Tax incidence analysis
- Using household income and expenditure surveys
  - Split households into quintiles
  - Look at what households are spending
  - Calculate the indirect taxes they pay
  - Calculate gendered incidence

## Which Indirect Taxes?

- Value-added taxes
- Excise taxes
- Fuel taxes

# Methodological challenge

- Data on expenditure is at household level
- But gender is an individual characteristic so our ultimate interest is individuals within households
- How do we engender the analysis?

# Bringing Gender into the Analysis

- How do we engender household level data?
  - Use "gendered" household classifications
    - Household gender composition by Adults (with/without children) (6 categories)
      - Female dominated
      - Male dominated
      - Equal numbers
    - Employment status
      - Male breadwinner
      - Female breadwinner
      - Dual earner
      - None employed
    - By Headship: male vs female head
    - For each type: with and without children

# Indirect Tax Incidence in South Africa, by HH Head

Table 4.Tax as a percentage of GDP by headship

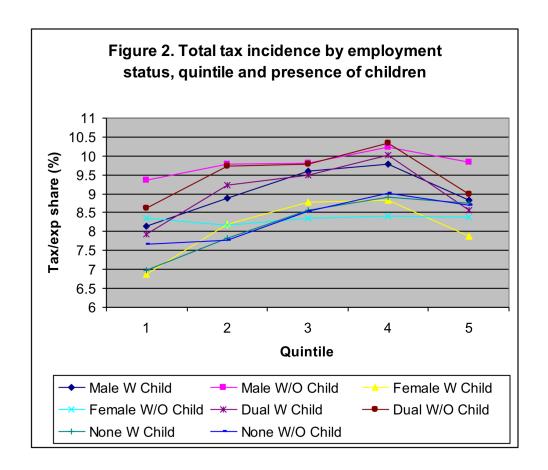
	Total Tax	VAT	Excise Tax	Fuel Levy
Male-headed	9.06	7.17	0.96	0.94
Femaleheaded	7.99	7.08	0.44	0.48

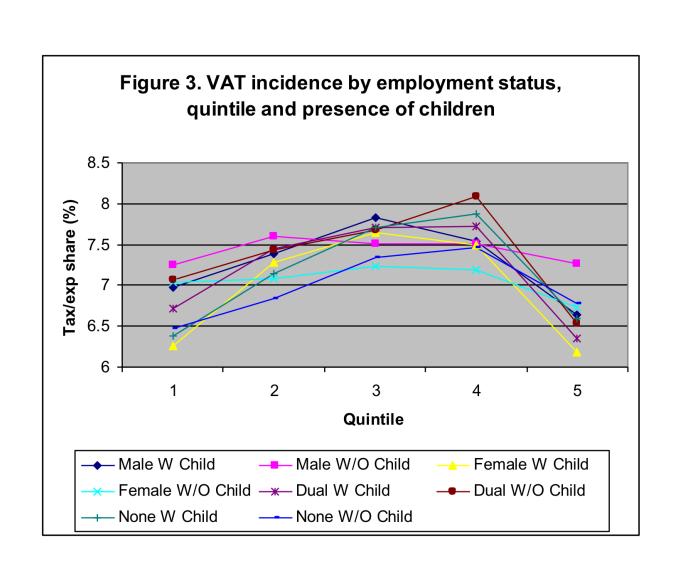
## Results for India

Table 15: Overall Incidence by Household Types

					Number of	
	Total Tax	VAT	Excise Tax	Fuel Tax	Households	
Headship						
	2.079	1.901	0.045	0.059	7066	
Male headed	(1.312)	(1.174)	(0.209)	(0.312)	7000	
	2.12	2.021	0.027	0.024	821	
Female headed	(1.071)	(1.02)	(0.106)	(0.169)	021	
Household Sex Composition						
	2.237	2.035	0.054	0.067	3282	
Male-dominated	(1.612)	(1.473)	(0.279)	(0.349)	3202	
	1.945	1.808	0.034	0.045	2552	
Female-dominated	(0.949)	(0.847)	(0.121)	(0.239)	2552	
	2.011	1.851	0.037	0.052	2043	
Equal # females & males	(1.036)	(0.888)	(0.141)	(0.287)	2043	

# Total Indirect Tax Incidence South Africa





# Indirect Tax by Income Class

Table 3. Greatest incidence of each type of tax by income quintile

Incidence falls most heavily on:	Total Indirect Taxes	VAT	Excises	Fuel Tax
Quintile 5	Ghana <sup>1</sup> , Mexico, Uganda, Morocco	Mexico, Morocco, Uganda, UK		Argentina, Ghana, India, Morocco, South Africa, Uganda
Quintile 3-4	South Africa, UK	South Africa	Argentina, Morocco, South Africa	
Quintiles 1-2	Ghana <sup>1</sup> , India	India	Ghana, India, Mexico, UK	Mexico <sup>4</sup> , UK
Proportional	Argentina <sup>2</sup>	Argentina <sup>3</sup> , Ghana	Uganda	

# By Gender

Table 4. Incidence of Indirect Taxes by Household Type

Incidence falls	Total Indirect	VAT	Excises	Fuel Tax	
most heavily on:	Taxes				
Male-headed households	Argentina, Ghana, Mexico, Morocco, South Africa, Uganda, UK	Argentina, Ghana, Mexico, South Africa, Uganda, UK	Argentina, Ghana India, Mexico, Morocco, South Africa, Uganda, UK <sup>1</sup>	Argentina, Ghana, India, Morocco, UK, South Africa, Uganda	
Female-headed households	India	India, Morocco	UK <sup>1</sup>	Mexico	
	status (comparing m	ale-breadwinner, fen	nale-breadwinner, du	ial-earner, none-	
employed)					
Male- breadwinner households	dwinner Mexico, South Mexico, South Mexico, Moro South Africa, Uganda Africa, Uganda South Africa,		Argentina, Ghana, Mexico, Morocco <sup>2</sup> , South Africa, Uganda	Ghana <sup>2</sup> , Uganda, Morocco <sup>2</sup>	
Female- breadwinner households				Mexico	
Dual-earner households	Argentina <sup>2</sup> , Morocco	Argentina <sup>2</sup> , Mexico, Morocco, UK	Morocco <sup>2</sup>	Argentina, Ghana <sup>2</sup> Morocco <sup>2</sup> , South Africa, UK	
No-employed	UK		UK		
•	ex composition (comp	aring male-dominate	d, female-dominated	and equal	
numbers)					
Male-majority households			Argentina, Ghana, India, Mexico, Morocco, South Africa, Uganda, UK		
Female- majority households				Mexico	
Equal-number households		Mexico <sup>3</sup> , UK		Ghana <sup>3</sup> , South Africa	
Proportional		Morocco		Morocco	

### Indirect taxes- some headlines

- Total tax incidence in most countries falls on richest or middle quintiles;
- For the most part, total tax incidence falls on 'male-type' households, irrespective of household types
  - A few exceptions: India, Ghana

# Why such positive results?

 All countries, with exception of India (West Bengal) have extensive zero-rating of basic consumption goods Table 4 (cont.) Zero-rating and Exemptions

	Morocco	South Africa	Uganda	UK
Zero rating	Exports, Fertilisers, Agriculture tools, Acquisition of vehicles for taxi usage, Residential building construction, Products and equipment and medicine, Donations	19 basic foods, paraffin, exports, petrol and diesel, farming inputs, certain grants by government.	Export goods, milk, seeds, fertilizers, educational materials, cereals, machinery for agriculture, printing services for educational material	Food, sugar and confectionary, children's clothing and footwear, public transport, books and newspapers, medical expenditure, education, water and sewage
Exemptions	All food of basic necessity (cereals, bread, milk, fish, meet, fruits and vegetables), unprocessed food, sugar, salt, Paraffin and candles, books and newspapers, medicine, self construction of main home, healthcare acts, dental and nursing services, education, handicrafts, agricultural products and services, micro credit.	Residential rental and accommodation, Educational services (including creches) Public road and rail transport Non-fee related financial services, medical aid and medicine, medical services provided by public health institutions	Financial and insurance services, education services, medical, dental and nursing services	Financial and banking services, private education and health (excluding spectacles, lenses, sunglasses, most mobility and hearing equipment and non-NHS medical products and services), postal charges, betting and funerals
Reduced Rate	Water			Domestic fuel, women's sanitary products, children's car seats

## South Africa

Effect of VAT exemptions and zero-rating by consumption category:

#### Benefit to female-headed HH:

- \*Basic foods
- \*Paraffin

Public transport

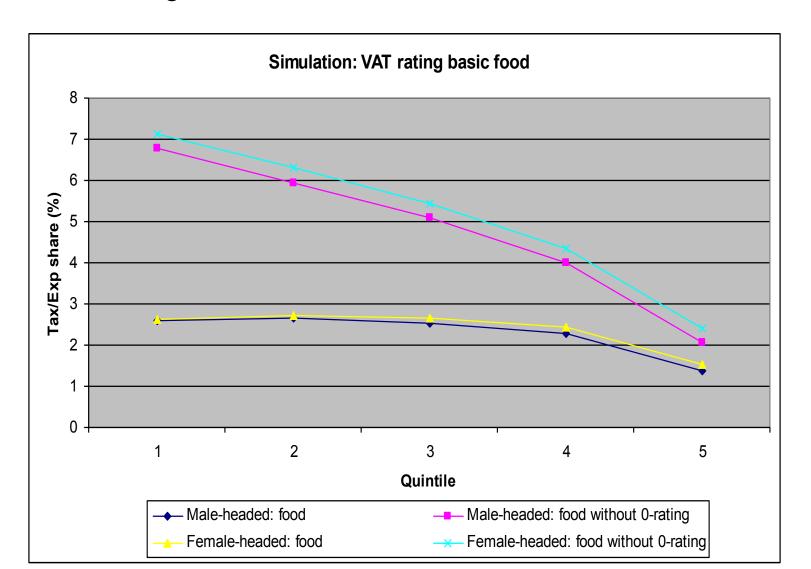
Education

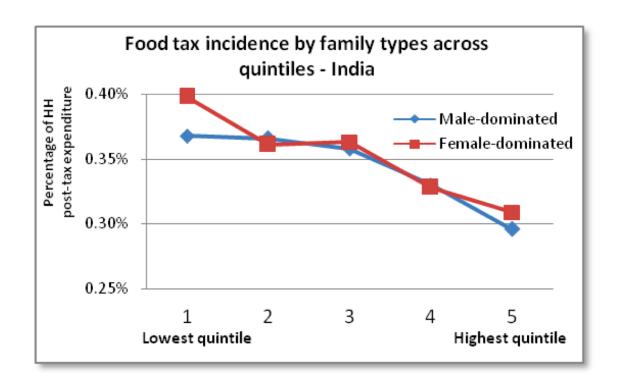
\*relative gender gain largest

#### **Benefit to male-headed HH:**

Housing/rental Financial services Medical Simulation: Vat rating 19 basic food items that are currently zero-rated.

Result: Zero-rating reduces incidence and regressivity substantially and eliminates the gender bias.

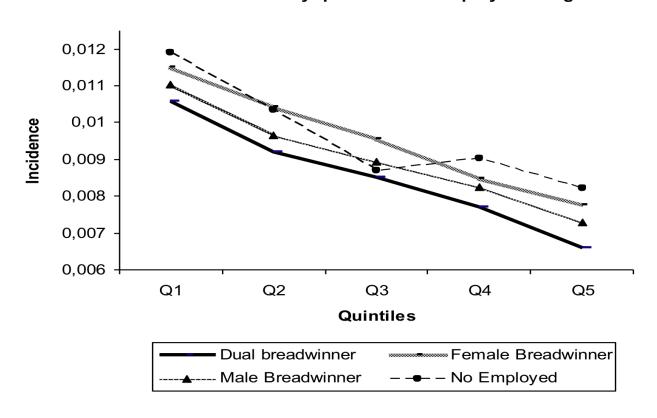




No zero-rating of food in India hurts poor women

# Morocco – Food Higher incidence at Q1 for HH without work and female HH

Tax for Basic Proccessed Food by quintiles and employed categories



Any remaining 'biases' by consumption item (after exemptions and zero-rating)?

#### Female-headed:

- -all other non-basic food
- -children's clothing
- -personal care items
- -fuel for household use

#### Male-headed:

- -housing
- -tobacco
- -alcoholic beverages (esp. beer)
- -meals out
- -private transport
- -fuel for transport
- -adult's clothing
- -communication
- -recreation

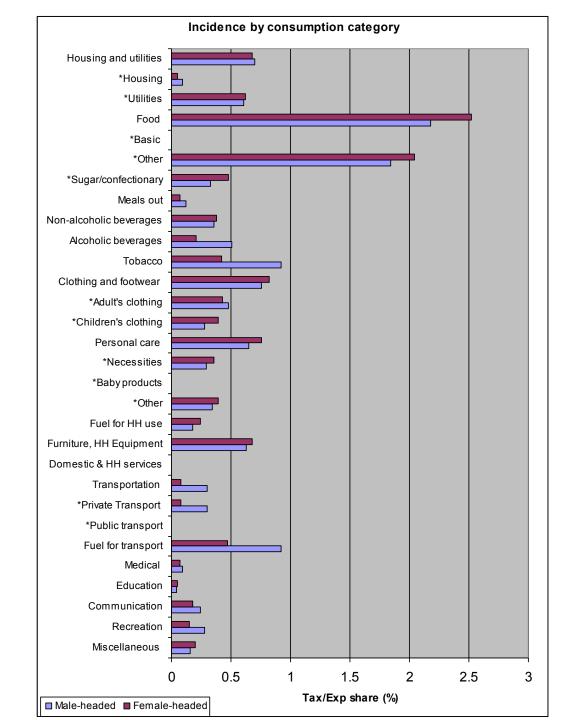


Table 6. Revenue implications: loss/gain to households (millions Rands per month

in 2000 prices)

	VAT RATE:		ZERO-RATE:					
	Basic food	Paraffin	Other non- conf. food items	Children' s clothing	Basic personal care items	Poultry	Baby food (milk and grain)	Coal, firewood, candles
Total	-323.0	-19.1	399.0	48.0	51.5	63.4	6.5	12.6
Male-headed	-209.1	-11.1	288.6	31.6	35.1	42.2	4.3	7.2
Female-headed	-113. 9	-8. 0	110.4	16.4	16.4	21.1	2.2	5.4
Ratio female/male (0.28 HH exp)	0.54	0.72	0.38	0.52	0.47	0.50	0.54	0.75
04	24.4	2.4	44.0	2.5	2.4	2.4	0.5	1 1
Q1 Q2	-24.4 -41.5	-2.1 -4.1	11.3 26.4	2.5 5.3	2.4 4.8	3.1 6.9	0.5 0.9	1.4 2.7
Q3	-56.7	-5.4	47.6	7.6	7.7	11.0	1.4	3.4
Q4	-78.9	-5.5	92.3	11.5	12.5	17.1	1.6	2.8
Q5	-121.6	-1.9	221.6	21.1	24.1	25.3	2.2	2.3
Ratio Q1-4/Q5 (0.38 HH exp)	1.66	8.91	0.80	1.27	1.14	1.50	2.05	4.56

Baby food and other fuel for HH use have large gender and income distributional impacts.

But should further policy change come from the expenditure side rather?

### **Caveats**

- Our sharing rule: equal splitting of expenditure inside the HH
- Not considered transfers on the expenditure side of the budget – eg. food subsidies in India
- No account of behavioral change

# **Policy Lessons**

- VAT, and in general indirect taxes, do not appear to place an undue burden on women and the poor
- Zero-rating of food and other basic consumption goods goes a long way to protecting women and the poor
- Without this, the incidence of VAT would fall disproportionately on women and the poor
- Higher incidence of indirect taxes on men appears to be the result of their 'bad habits' – alcohol, leisure, transport

# If you're interested

- You can buy the book
- For \$145!

