

An Analysis of the Distributional Impact of Excise Duty in Uganda Using a Tax-Benefit Microsimulation Model

UGAMOD Workshop

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Structure of Presentation

- Motivation of study
- Literature review
- Excise duty in Uganda
- Methodology
- Research questions
- Results
- Next steps

Motivation

- ❖ Renewed commitment to fund development using domestic resources – reaffirmed in Addis Tax Initiative Conference in 2016.
- ❖ Uganda's tax-to-GDP ratio (15.1%) is still below that for countries in Africa (17.2%)
- ❖ Two-thirds (64.1%) of Uganda's tax revenue comes from indirect taxes
- ❖ Microsimulation models have been widely used to analyse the redistributive impact of tax policy reforms (Decoster et al, 2011; Leahy et al, 2011 and Asiya et al, 2019)

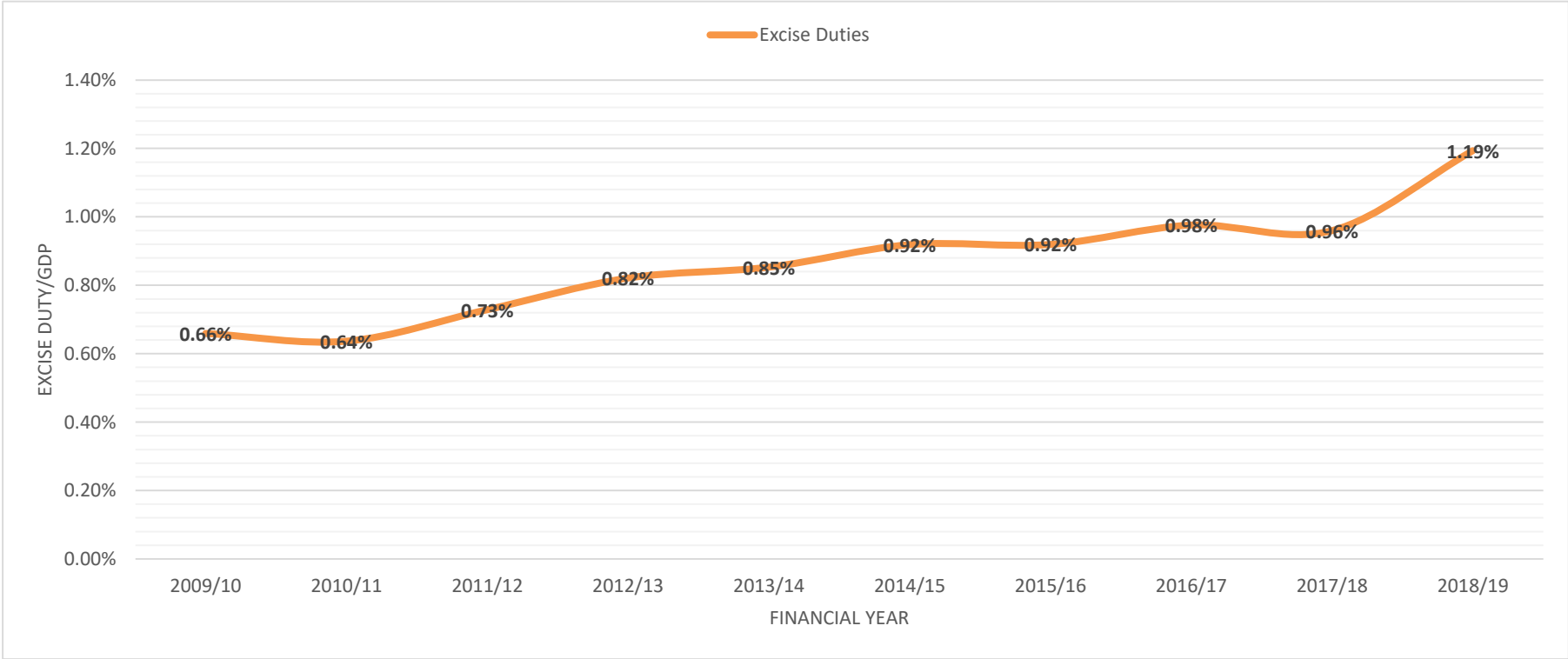
Literature Review

- ❖ Excise duties are levied to correct social behavior (Levell et al, 2016; Junquera-Varela et al, 2017)
- ❖ Broadened mandate of excise duty to rising more revenue (Beegle et al, 2018).
- ❖ Excise duties could be regressive (if levied on essentials) or progressive (if levied on luxury commodities) – Junquera-Varela et al; Action Aid, 2018.
- ❖ Few studies have analyse the redistributive impact of indirect (excise duty)
- ❖ In Uganda's case – 2 studies have focused on excise duty– Ssewanyana & Okidi, 2008; Jellema et al (2016)

Excise Duty in Uganda

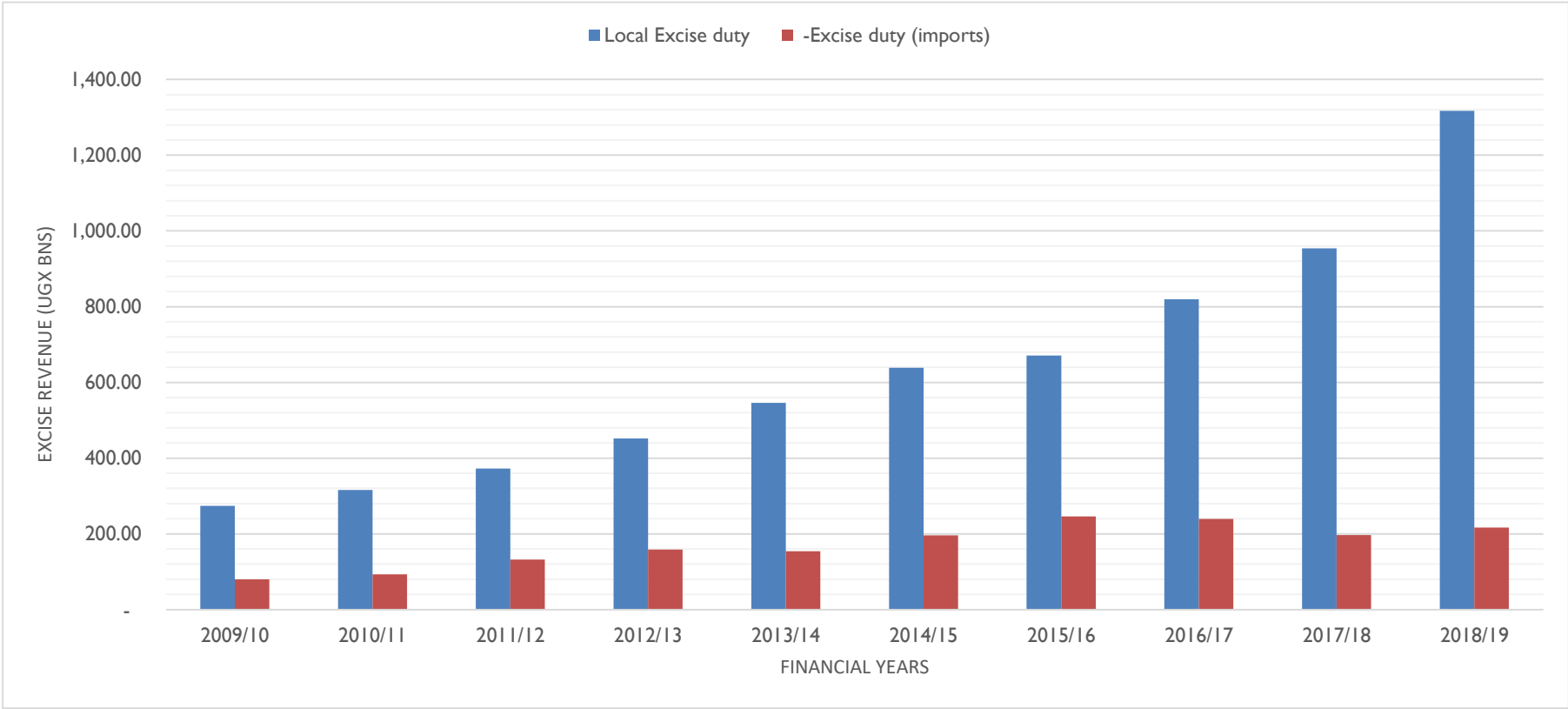
- ❖ Uganda has 2 indirect taxes – VAT and excise duty (charged on selected commodities)
- ❖ Uganda has broadened motive of excise duties to raising more revenue e.g. tax on mobile money, airtime, social media etc.
- ❖ In FY 2018/19, excise duty accounted for 9% of total revenue
- ❖ Uganda has implemented several tax policy reforms such as: harmonizing excise duties, introducing new excise duties and compliance initiatives.

Figure 1: Excise Duty Revenues as a Percentage of GDP



Source: URA reports and Uganda Bureau of Statistics

Figure 2: Excise Revenue (FY 2009/10 – FY 2018/19)



Methodology

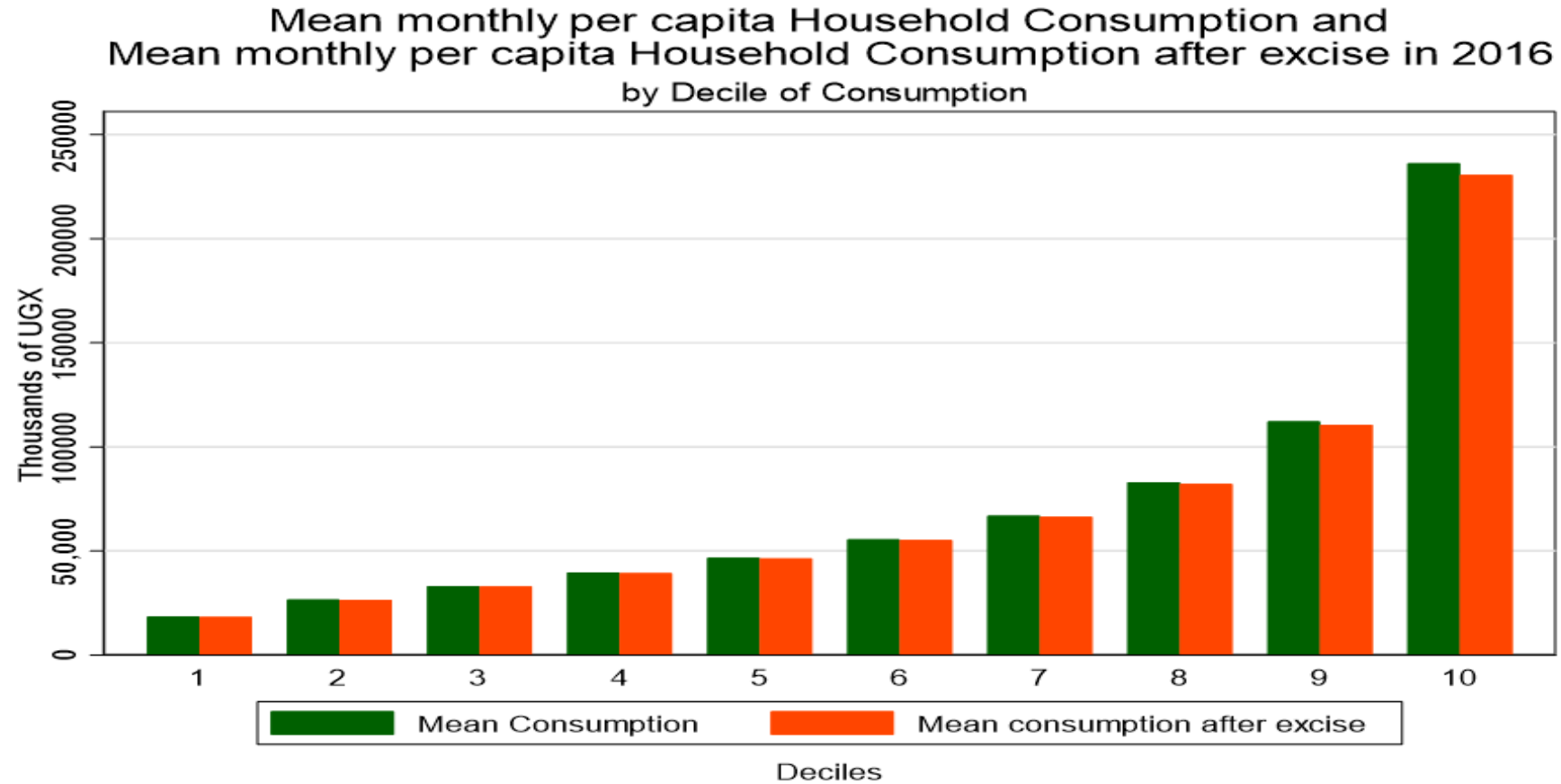
- ❖ Used a Tax-Benefit Microsimulation model for Uganda (UGAMOD 1.4) to analyse the distributive impact of excise duty in Uganda for the period 2016-2019.
- ❖ Model is static, doesn't account for behavioral changes and assumes full compliance.
- ❖ The underpinning data was obtained from UNHS 2016/17.
- ❖ UGAMOD simulates 15 excise duties (sugar, soda, other juices, foreign beers, cigarettes, engine oil, airtime, furniture, mineral water, fruit juices, domestic beers, gin, vehicle fuel, kerosene, mobile money)
- ❖ Excise duty is calculated on either an ad valorem or ad quantum basis, or as a combination of both
- ❖ Assumes constant budget share – household spends the same share of its budget on vatable/excisable commodities, regardless of changes in the overall budget.

Research Questions

- ❖ What is the excise duty incidence by decile?
- ❖ What excise duties are progressive (regressive) ?
- ❖ How have tax policy reforms affected tax incidence by decile?
- ❖ What is the distributional impact of tax policy reforms for excise duty ?

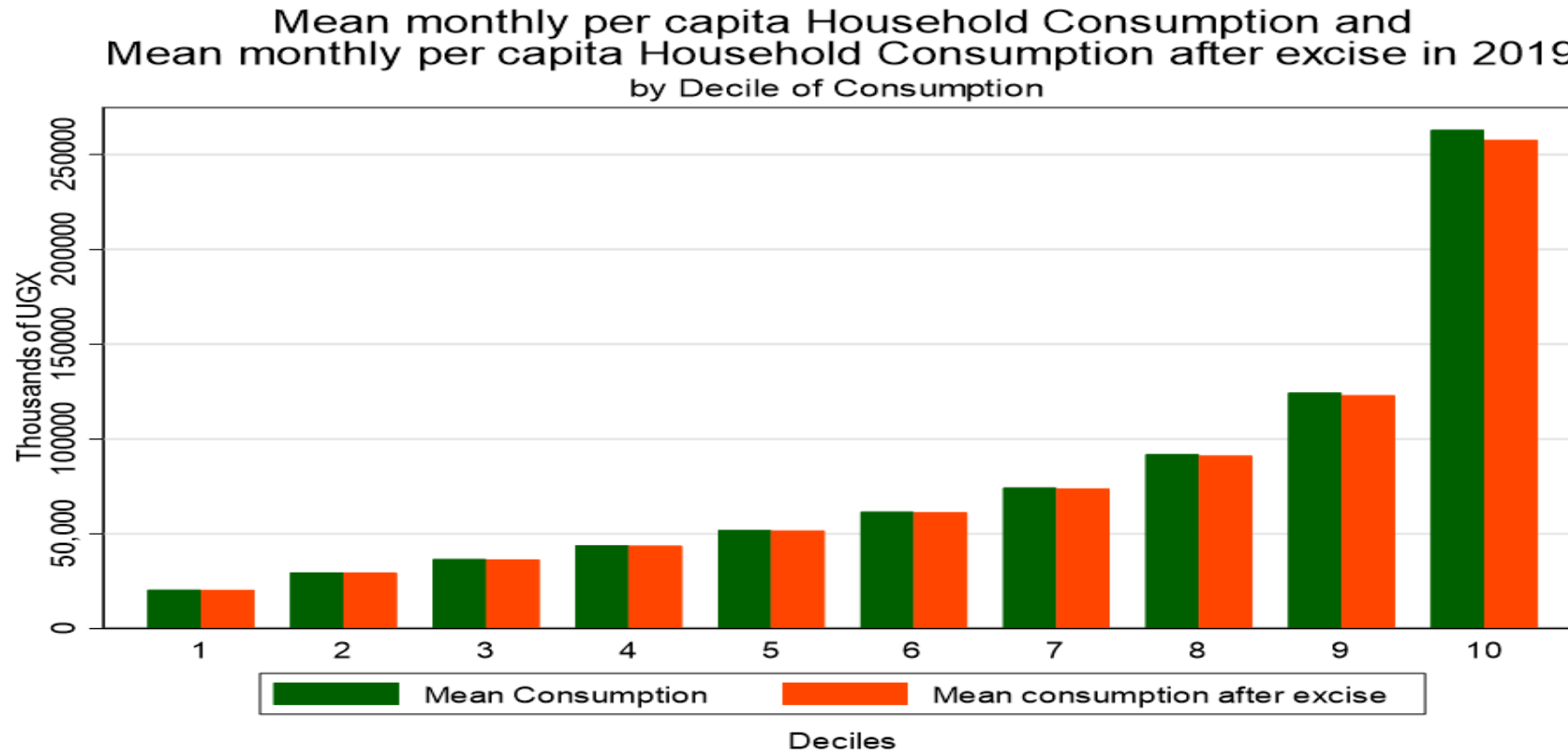
Results

Figure 4: Mean monthly per capita household consumption and mean monthly per capita household consumption after excise in 2016



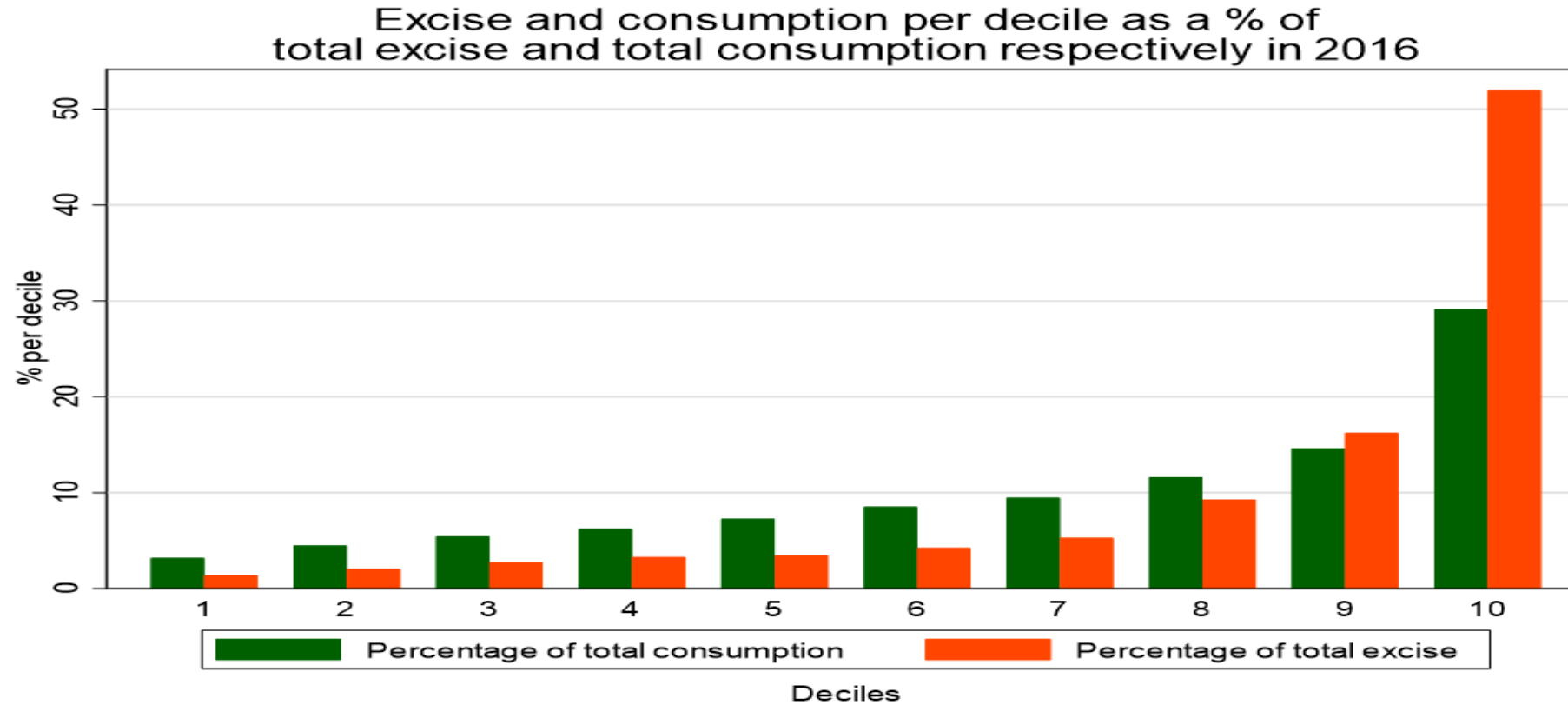
Results Cont'd

Figure 5: Mean monthly per capita household consumption and mean monthly per capita household consumption after excise in 2019



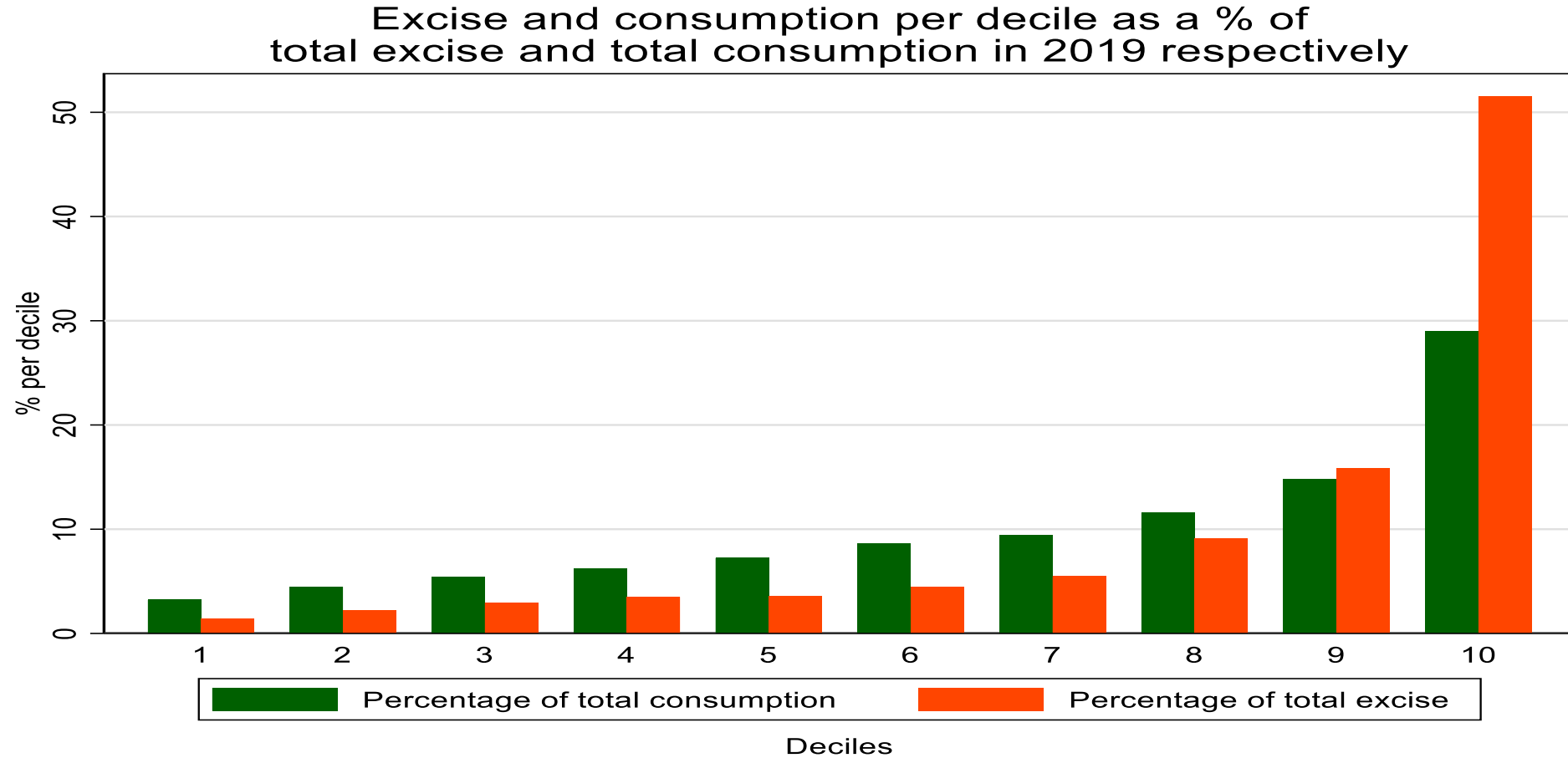
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Figure 6 :Excise and consumption as percentage of total excise and total consumption 2016



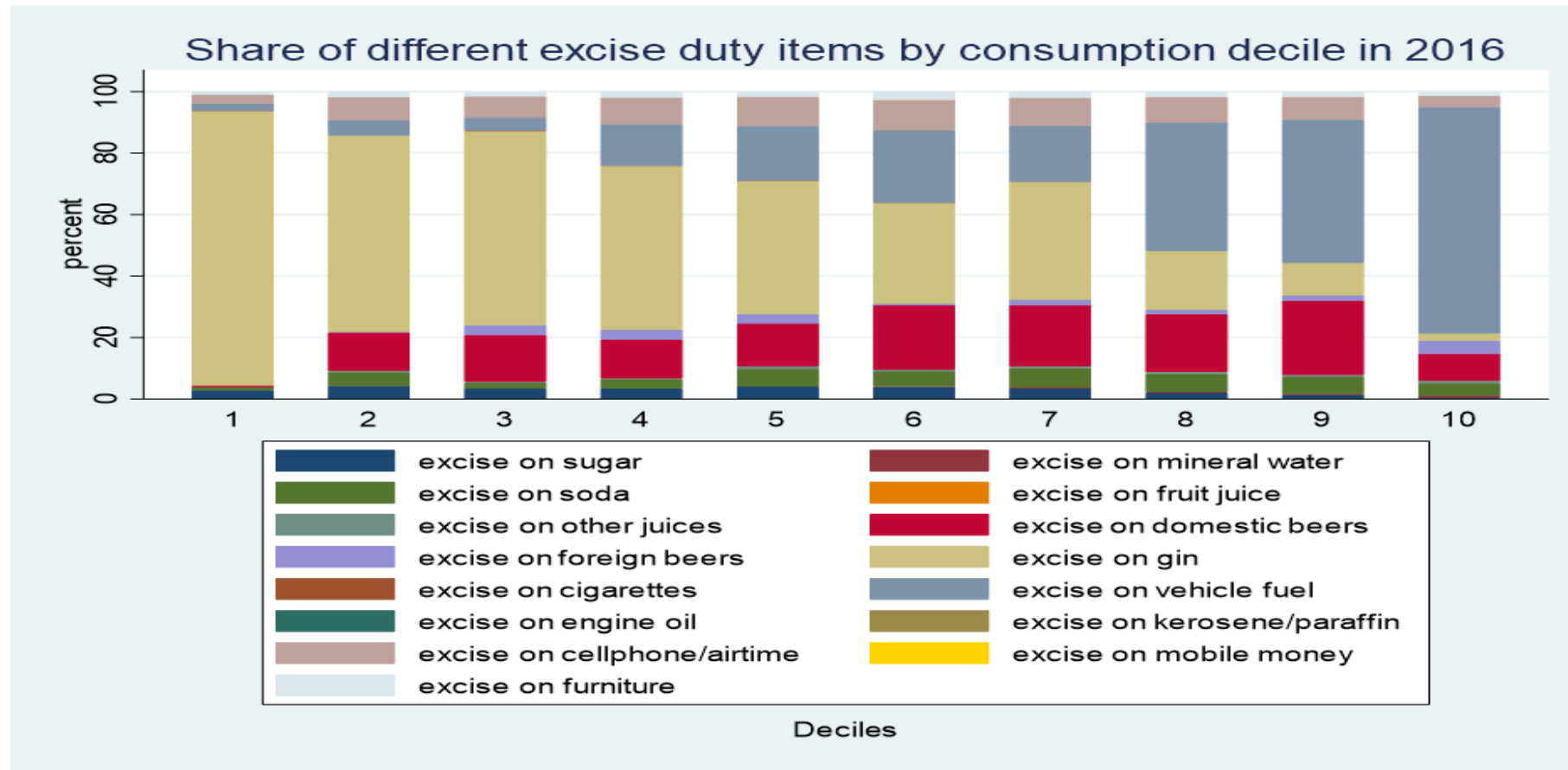
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Figure 7: Excise and consumption as percentage of total excise and total consumption 2019



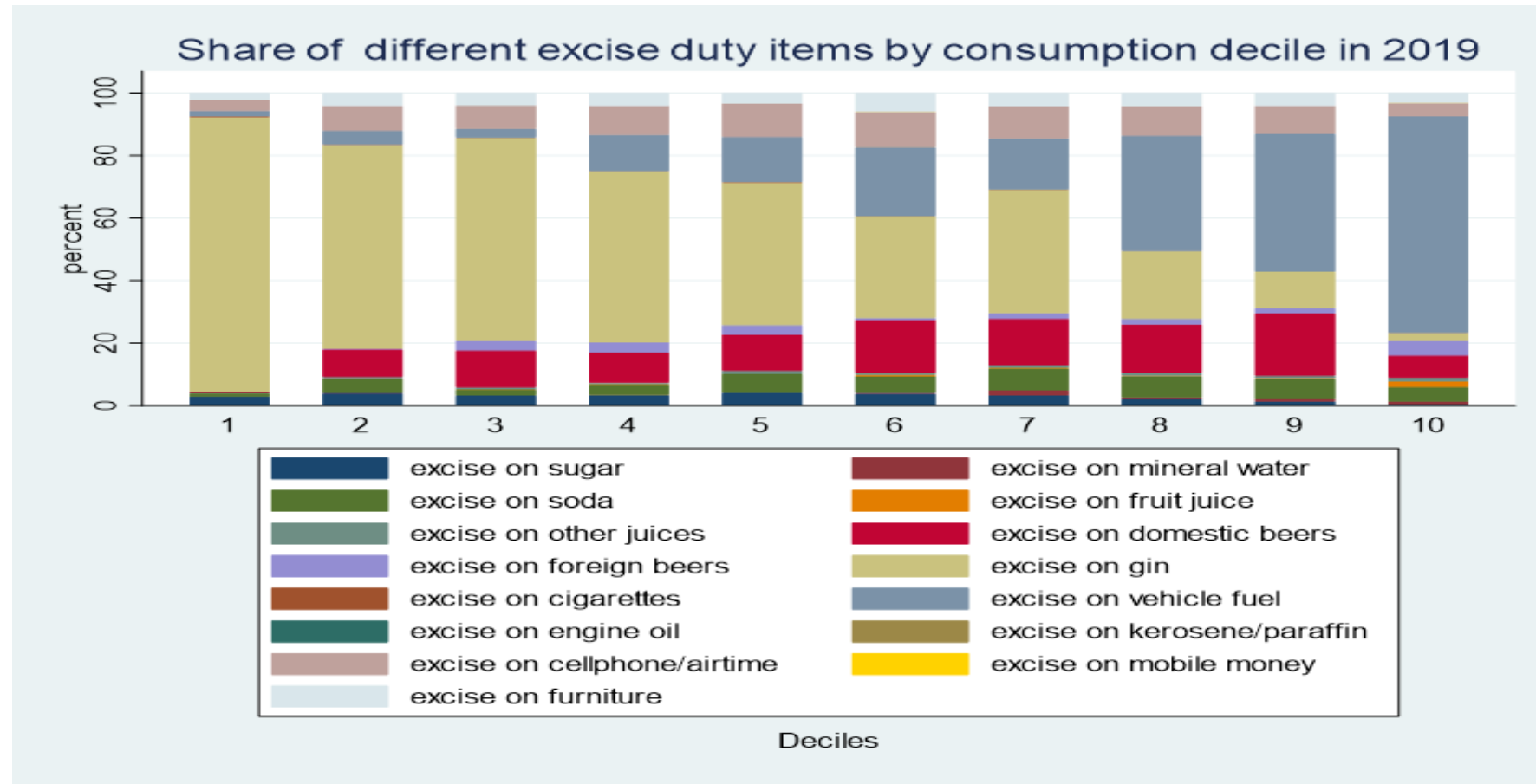
Results Cont'd

Figure 8: Share of total excise duty items by consumption decile in 2016.



Results Cont'd

Figure 9: Share of total excise duty items by consumption decile in 2019.



Post fiscal consumption-based poverty

	2019	2019 with no excise duties payable	Difference to base
Share of poor population, in %			
All	22.13	21.05	-1.08
Poor households out of ...			
... male headed households	22.20	21.02	-1.18
... female headed households	21.93	21.11	-0.82
... households with children	23.25	22.14	-1.12
... households with older persons	23.07	22.42	-0.65
Average normalised poverty gap, FGT(1)			
All	5.86	5.56	-0.31
Poor households out of ...	0	0	0
... male headed households	5.76	5.41	-0.35
... female headed households	6.15	5.97	-0.18
... households with children	6.15	5.83	-0.32
... households with older persons	6.14	5.87	-0.27

Inequality after taxes and transfers

Income	2019	2019 with no excise duties payable	Difference to base
Gini (household income)	0.3902	0.3948	0.0046
P80/P20	2.95	2.99	0.04

Next Steps

- ❖ Further analysis of the redistributive impact of excise duty – on poverty and income inequality.
- ❖ Include policy reform e.g. change the rate of excise duty on Waragi
- ❖ Tidy up the paper – insert graph on trend of excise duty revenues compared to other revenues over time.
- ❖ Address comments from peers and this workshop.
- ❖ Write the conclusion and recommendation section.
- ❖ Submit paper as a WIDER working paper
- ❖ Present the paper in international conferences.

THANK YOU FOR YOUR ATTENTION!



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