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Gender and incidence of indirect taxation: Evidence from Uganda

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Abstract

Since the 1990's, Uganda tax system has undergone various reforms. However, both tax policies and reforms have been formulated without clearly indicating the channels through which gender impacts on these policies/reforms. Using the national household survey of 2005/06, this paper provides insights into how tax policies and reforms on indirect taxes impact differently on women and men. The incidence rate of tax by gender-based household typologies controlled by expenditure quintile brings out interesting findings. The incidence rate of indirect tax is significantly greater on households headed by male compared to their female counterparts regardless of income level. This also holds after controlling for the presence of children. More importantly, the impact on different household typologies is largely influenced by differences in consumption patterns. Future tax reforms should take these gender differences in account as a means of improving the social welfare of every Ugandan.

Our policy simulations yield some interesting results. Tax reforms on goods and services which are regressive in nature will significantly reduce the tax burden of households with female heads than comparable households with male heads; but at the same time will result in revenue losses to government. We have demonstrated that the recent announcement by government to drop taxes on salt is gender responsive. We have further demonstrated that removal of taxes on water benefits households in higher income levels; halving the current excise duties on paraffin benefits households with female heads especially in lower income quintiles. Dropping taxes on children's clothing and footwear results into significant benefits to households in the lower quintiles especially those with female heads. While government stands to lose on foregone revenue as a result of reduction or removal of taxes, the policy strategy for government lies in revisiting its expenditure prioritization and enforce cost saving measures. For instance, the need to reduce on luxurious expenditure and public administration costs cannot be overemphasized. The last resort option would be to keep the taxes on these items, but instead government provides assistance in terms of transfers to compensate households for high taxes.

1. Introduction

This paper provides insights into gender[1] analysis of the tax burden. More specifically, the paper seeks to analyze how tax policies and tax reforms are impacting differentially on women and men, and in particular on poor women. The paper focuses on domestic indirect taxes.

The analysis heavily relies on the nationally representative Uganda National Household Survey of 2005/06 (UNHS III) data and administrative data from the Uganda Revenue Authority (URA). Using these data sources, the paper quantifies the gender dimension of the indirect tax and provides insights into possible options for government to guide the mainstreaming of gender in tax policy reform. Throughout the paper, incidence rate of tax is defined as the share of tax in total household consumption expenditure - the higher the rate the higher the burden of tax on a given household. To capture the gender dimension, households are classified into gender-based categories: by sex of household head, sex composition of adult members; and employment status of adult members.

The background to the discussion of this paper requires an explanation of Uganda's economy. Uganda is a low income country that has registered strong economic growth in the past two decades. It is one of the highly aid-dependent countries. The share of the national budget supported by donors reduced from 50 per cent at the turn of the new century to 35 per cent in 2006/07 and stood at 28 per cent in 2007/08 (GoU 2008). This demonstrates that government is committed to reduce donor dependency. The tax reforms in 1997 led the ratio of tax revenue to Gross Domestic Product (GDP) to increase from about 12 per cent in 1997/98 to 13 per cent in 2002/03. However, the share has stagnated at about 14 per cent since 2005, presenting a challenge to fiscal policy. In other words, the domestic revenue remains low in terms of financing critical development investments and eradication of poverty. On the other hand, income inequality as measured by the Gini coefficient increased from 0.35 in 1992/93 to 0.41 in 2005/06. Put differently, the faster growth Uganda has enjoyed has yielded inequitable distribution of income. It remains an empirical question whether taxation is taken by policymakers as a means of raising revenue or as a redistributive policy tool.

Uganda is among the sub-Saharan African (SSA) countries that are leading in pushing the gender profile. Gender is one of the cross-cutting issues identified in the Poverty Eradication Action Plan (PEAP). There are policies that are explicitly aimed at achieving gender equality and equity including affirmative action in accessing tertiary education. Gender inequalities in access to social services, adult literacy to name a few have narrowed over time. Efforts to mainstream gender in the budgeting process are on-going.

Since 1990s government has undertaken reforms in the taxation system. In the recent past a number of studies (Ssewanyana & Okidi 2008; World Bank

[1] In this paper, gender is defined as the *socially constructed* roles, behaviours, activities, and attributes that a given society *considers appropriate* for men and women (WHO, 2009).

2006; Bahiigwa *et al.* 2004) have assessed the impact of such reforms on household welfare. More importantly, studies such as Chen *et al.* (2001), Ssewanyana & Okidi (2008) have provided useful insights into incidence of taxation in Uganda using the nationally representative household survey data collected by the Uganda Bureau of Statistics (UBoS). However, these studies do not analyse the Uganda taxation system from a gender perspective. The analysis focused on incidence of tax (including both direct and indirect taxes) by poverty status and income quintiles.

The rest of the paper is organized as follows: In the next section we discuss the Uganda's tax structure. Section three describes data sources and methods of analysis employed. Section four, presents a snapshot of the Uganda's gendered structure with a focus on employment and income profile, and household composition. The incidence findings are presented and discussed in section five. Section six is policy evaluation and simulations. Section seven concludes with some policy implications.

2. Uganda tax structure

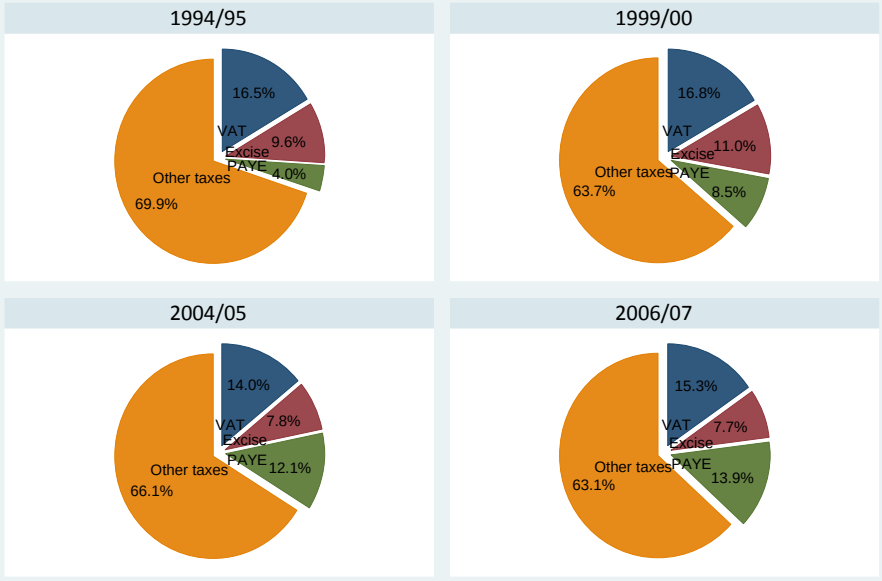
Uganda is among the SSA countries with a high dependence on donor financing, although the trend has been declining over time. The donor budget support to government is estimated at 28 per cent in 2008/09, reflecting a decline from more than 50 per cent in early 1990s (GoU 2008). Uganda is heavily dependent on aid-funded social protection programs including the provision of basic social services, such as the Universal Primary Education (UPE) targeting poor population especially in rural areas. This demonstrates that government cannot fully fund its development programs including eradication of poverty from domestic resources. Uganda's domestic revenue base remains very narrow. The share of tax to GDP has remained at about 13 per cent since 2002/2003 and compares unfavourably to its neighbouring countries (Kenya 23.3 per cent and Tanzania 16 per cent). The government is yet to achieve its set target of increasing domestic revenues by 0.5 per cent of GDP per annum. In recent years, government has made efforts to improve the efficiency with which it collects revenues from domestic sources. On a positive note, the oil discovery and early production set for end of 2009 is envisaged to reduce fiscal constraints and in turn expected to improve quality of life of Ugandans.

Figure A1 depicts the patterns and trends in tax revenue by source. The contribution of pay-as-you-earn (PAYE) in total tax revenue has been growing over time whereas that of excise duty and value added tax (VAT) depict a declining trend since 2004/05. While the increasing trend in PAYE is driven by growing number of jobs in formal employment, the share of formal sector in total employment has remained at about 16 percent. This paper focuses on indirect taxes excluding import duties at household. The increase in VAT share in total indirect tax partly reflects the tax reforms implemented in the mid-1990s.

Restricting analysis of trends to selected years, interesting trends are noted. In absolute terms, net revenue collections increased from Shs1,951bn in 2004/05 to UShs2,713bn in 2006/07. Over the same period, PAYE increased

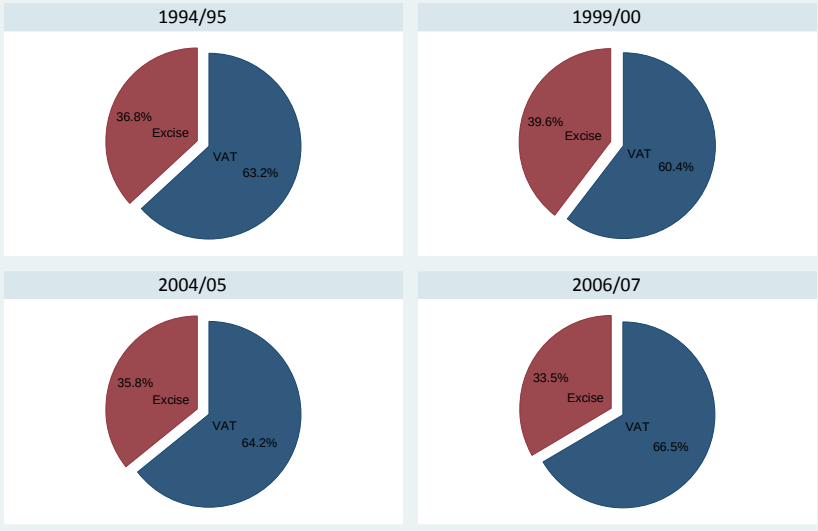
from Shs245bn to Shs368bn respectively; VAT increased from Shs289bn to Shs412bn respectively; and excise duties increased from Shs136bn to Shs185bn. As already alluded to, the shares by type of taxes have changed over time (Figure 1). However, we observe a 10 percentage point increase in the overall contribution of PAYE in total taxes between 1994/95 and 2006/07.

Fig. 1: Share in total taxes, %



Source: Own calculations based on administrative data from the Uganda Revenue Authority
Notes: In 1994/95, VAT refers to CTL

Fig. 2: Share in indirect taxes, %



Source: Own calculations based on administrative data from the Uganda Revenue Authority
Notes: In 1994/95 VAT refers to CTL

At the beginning of the new millennium, the share of direct domestic taxes depicted increasing trend as opposed to indirect domestic taxes. The

increasing trend of direct domestic taxes is largely driven by PAYE. On the other hand, the contribution of excise duties in total indirect taxes declined from nearly 36 per cent in 2004/05 and stagnated at about 33 per cent (Figure 2). During this period, we observe a stagnation of excise duties from beer and cigarettes but an increasing trend derived from phone talk time. The stagnation is partly explained by government's increase in excise duties implemented in 2004/05. However, the excise duties on domestically produced beer have been scaled down by 10 per cent in FY 2008/09. This is meant to encourage local value addition, modernization of agriculture and overall poverty reduction.

Next we briefly discuss the specific tax reforms implemented by government since early 1990s. In July 1996 government introduced VAT to replace sales tax on goods and Commercial Transaction Levy (CTL) on services. It was introduced with three regimes namely, exempt, zero-rate and a standard rate at 17 percent, which was raised to 18 per cent in 2005/06. Table 1 presents goods & services by VAT regime in 2005/06.

Table 1: Goods and services by VAT regime, 2005/06

Exempt Regime	**Zero-rate Regime**	**Standard rate of 18%.**
▪ Supply of unprocessed foodstuffs, unprocessed agricultural products and livestock ▪ Supply Financial services ▪ Supply Insurance services ▪ Supply of Postage stamps ▪ Supply of Fuel products ▪ Supply of unimproved land. ▪ Supply by way of Leasing and letting of immovable property ▪ Education services ▪ Medical, dental and nursing services ▪ Social welfare services ▪ Supply of betting, lotteries, and games of chance. ▪ Supply of burial and cremation services ▪ Supply of precious metals and other valuables to the Bank of Uganda for the state Treasury. ▪ Passenger transportation services (Other than Tour and Travel operators) ▪ Supply of dental, medical and veterinary equipment ▪ Supply of feeds for poultry and livestock. ▪ Supply of machinery used for the processing of agricultural or dairy products ▪ Supply of photosensitive semiconductor devices, including photovoltaic devices, whether or not assembled in modules or made into panels, light emitting diodes. ▪ Supply of computers, printers and accessories. ▪ Supply of computer software ▪ Supply of lifejackets and headgear ▪ Supply of Mobile toilets and Ekoloo toilets. ▪ Supply of insecticides ▪ Supply of accommodation in tourist lodges and hotels outside Kampala and Entebbe.	▪ All exported goods and services ▪ Milk, including milk treated in any way to preserve it ▪ Seeds ▪ Fertilizers ▪ Pesticides and hoes ▪ Educational material ▪ Supply of cereals, where the cereals are grown, milled or produced in Uganda. ▪ Supply of machinery tools and implement suitable for use only in Agriculture. ▪ Supply of international transport of goods or passenger and tickets for their transport. ▪ Supply of printing services for Educational material	All other items that are not exempted or zero-rated.

On the other hand, excise tax system is not as broad-based as VAT. It covers only a few items such as alcoholic and processed soft drinks, airtime, spirits & waragi, cigarettes & tobacco, and petroleum products (petrol, diesel and paraffin). *Ad valorem* excise duty which is expressed as a percentage of expenditure on a given good (e.g. beer) and flat rate excise duty, which is levied as per unit of the physical quantity of a given good (e.g. petroleum products). Like VAT, there were changes in excise duty treatment in 2005/06. Beer was further divided into malt and non-malt with 60 per cent and 20 per cent of excise duty of ex-factory price respectively; spirits 60 per cent of ex-factory price, the excise duty on phone talk time increased from 10 per cent in 2004/05 to 12 per cent per minute in 2005/06; cigarettes changed from attracting *ad valorem* to flat rate duty and lastly sugar attracted a flat rate of Shs50 per kg. On average, the fuel levy tax per litre on petrol and diesel increased from in Shs490 in 2002/03 to Shs560 in 2005/06. The tax levied on kerosene has remained at Shs200 per litre since 2002/03.

3. Data and methodology

3.1 Data

Uganda is one of the few SSA countries that conduct nationally representative surveys on a regular basis. The most recent national household survey of 2005/06 (UNHS III) is our main data source. The survey was conducted from May 2005-April 2006, covering 7,426 households. UBoS followed a multi-stage stratified sampling approach. The survey was multi-purpose in nature. It gathered information relevant to this study on household roster and demographic characteristics (sex, age, etc), employment status and salaries/wages for individuals in formal employment; household level information includes household consumption expenditures (food expenditures and non-food expenditures), housing conditions etc.

The survey captured different sub-components of consumption household expenditures but with different recall period. These included (i) expenses on food, beverage and alcoholic items consumed in the last seven days prior to the survey; (ii) expenses on household non-durables and frequently consumed goods and services in the last 30 days prior to the survey; and (iii) semi-durable and durable goods and services consumed in the last 365 days prior to the survey. Consumption expenditure data were collected on item-by-item basis. However, this is information is not captured by gender of purchaser – hence linking analysis to purchaser is beyond the scope of this paper. Table A 1 presents household consumption patterns by source of acquisition. The household data was complemented by administrative data mainly from URA.

The analysis would have been more enriching if we had expenditure data at individual level. However, the Bureau collects consumption expenditure data at household level. The analysis presented in this paper is based on a sample of 7,421 households. Five households with zero consumption expenditures were dropped. All estimates are weighted using sample weights provided by UBoS.

3.2 Methods

The paper follows closely the approach of the derivation of taxes paid by households based expenditure data gathered in the survey as one used in Ssewanyana & Okidi (2008) and that of Younger & Sahn (1999). The paper uses the statutory tax laws that were in existence at the time of conducting the 2005/06 household survey (see Section 2) to calculate total tax payable per month/year per household.

Incidence rate of tax refers to tax as percentage of consumption expenditure derived at household level. The higher the incidence, the greater the tax burden on a given household. We test for gender differences in the incidence rate using the t-test statistics. The results are available upon request.

3.2.1 Description of variables

Household: UBoS defines a household as a group of people who have been living and eating their meals together for at least 6 of the 12 months preceding the interview. Our unit of analysis is the household unless stated otherwise.

Household member: Membership in a given household is on the basis of the usual place of residence. The Bureau categorises household members into three resident types including usual, regular and visitors/guests. We focus on usual members, who are members that have lived in the same households for at least six months prior to the survey. It also includes babies born by usual members and other members who have lived there for less than six months but intend to stay permanently.

Household composition: A child is a person aged below 18 years and an adult as a person aged 18 years and older. We further categorize adult members according to their employment status. **An adult earner** is any adult person that reported being in employment in the last 365 days prior to the interview. Most working Ugandans are engaged in more than one activity and for the purpose of this paper we focus on the main activity. The main activity is that activity where an individual spends most of his/her time. It has no relationship with how much one earns. The descriptive analysis shows that there are 9 in every 100 households without such earners who are adults.

Household consumption expenditure: The survey captured household consumption from three major sources, namely, out of home production[2], purchases, free/gifts and consumption away from home. However, some taxable items such as beer, sodas, sugar, rice to name a few were consumed as gifts to some households (Table A 1). For the purpose of this paper, these items are included in analysis of incidence of tax since they were originally purchased from the market and hence subjected to taxation.

The consumption expenditures were aggregated according to the recall period used and by broader sub-components of expenditures at household level. Given the different recall periods used to collect data on these expenditures, some conversion factors were applied to change the data on monthly basis.

[2]. This basically refers to subsistence consumption.

Some price adjustments on the food, beverage and tobacco sub-components were done prior to aggregating with other sub-components (see Ssewanyana & Okidi 2007, for details). Household consumption expenditure is expressed in nominal market prices, and is used as a proxy for permanent income throughout the paper.

We assume that the cost of a given level of welfare is directly proportional to household size and hence that a per capita normalization of total household consumption expenditure, in nominal market prices. And household size includes only usual members of a household. Thereafter, we divide the households into expenditure quintiles based on the entire population.

The household consumption expenditure was further classified into smaller consumption categories. The purpose was to allow cross-country comparisons of tax incidence in Uganda to those in other countries[3] that participated in the project. The consumption categories included: Food (Processed excluding sugar, sugar, unprocessed foods); meals out; non-alcoholic beverages; alcoholic beverages (beer, other alcoholic beverages); tobacco & cigarettes; clothing & footwear (children's clothing & footwear, adults' clothing & footwear; other clothing & footwear); housing, water & electricity (housing general, utilities (water & electricity)); fuel for house use (paraffin/kerosene, fuel for generator/lawn mower, other fuels); house furnishing, equipment & routine maintenance; domestic services & household services; health care; transport; fuel; communication; recreation and culture; education; personal care; and miscellaneous.

Head of household: In most cases, the head of the household is the one who manages the income earned and expenses incurred by the household.

Household typologies: In order to capture the gender dimension of the Uganda tax system, we construct gender based-typology of households according to living arrangements. These are based on sex of the household head, presence of working adult by sex and lastly based on the sex composition of adult household members. First, according to sex of household head (household type 1, hereafter), we have (i) female headed and (ii) male headed. Second, household classification based on presence of working adults (household type 2, hereafter) to include (i) having both female and male earners (dual earners, hereafter), (ii) Female breadwinners without male earner (Female breadwinners, hereafter), (iii) Male breadwinners without female earner (Male breadwinners, hereafter), (iv) no adult earners (None employed, hereafter). Lastly, classification of household according to composition of adult members by sex (household type 3, hereafter) (i) Adult female majority - as household with more adult females than males, (ii) Adult male majority – as household with more adult males than females; (iii) equal gender – as household with the same number of adult females and males. All of these household typologies are controlled by presence of children and place of residence.

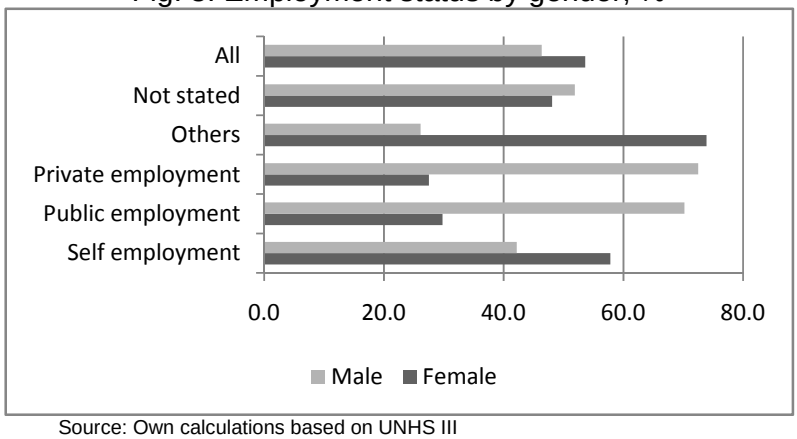
[3] . The following countries participated in the project: Uganda, South Africa, Ghana, Morocco, Mexico, Argentina, United Kingdom.

4. Description of Uganda's gendered structure

4.1 Employment and income profile

Over the years, female participation in the labour market has increased. More importantly, the share of females in high position shows an increasing trend (Okurut *et* al. 2006). Of the total employed persons aged 18 years and above, nearly 53 per cent are female. The proportion of workforce in paid employment stood at 16.1 per cent with the share of males nearly three-fold that of females (Figure 3). Put differently, the majority of Ugandans are in self-employment (Table 2), of which about 34 per cent are unpaid family workers. Like in most SSA countries, in Uganda females make up a greater share of unpaid family workers (82.9 percent) compared to about 28 per cent in paid work. But it is important to note that Ugandan households derive incomes from diversified sources including agricultural and non-agricultural sources.

Fig. 3: Employment status by gender, %



Source: Own calculations based on UNHS III

Nearly 44 per cent of the households reported income below the minimum PAYE threshold of Shs130,000 per month. Restricting analysis to only those in paid employment, the results in Table 2 reveal higher consumption expenditure (proxy for permanent income), on average, for public employees compared to other employment categories. On average, public employees receive income that is twofold that of self employees. The results in Table 2 further reveal that the share of national income for the workforce in self employment is lower than their share in national population. The reverse is observed for private sector employees. Further, the relative mean of expenditure as a measure of welfare inequality for the self employed is twofold that of public employees. However, government has been compensating low income households through transfers such as provision of basic social services[4]. And the benefit incidence analysis done so far demonstrates that the poor segment of the population has indeed benefitted from such services. This is especially so for primary education and access to public basic health facilities (see Deininger & Mpuga 2008).

[4] . But provision of basic social services is heavily donor-supported.

Table 2: Monthly consumption expenditure per capita by employment status, 2005/06

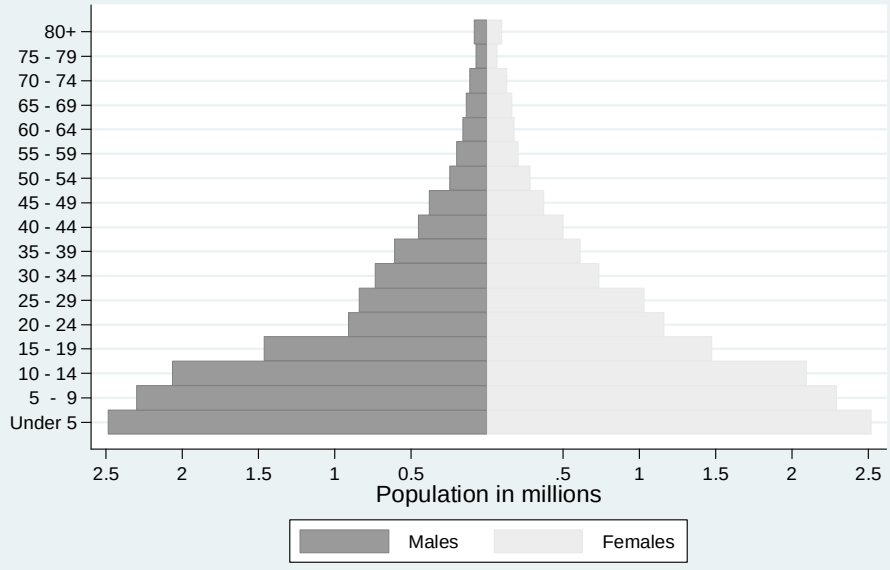
Employment status	Population share	Mean, Ushs	Relative mean	Income share
Self employment	79.3	227,000	0.90	0.71
Public employment	3.1	472,000	1.87	0.06
Private employment	13.0	328,000	1.30	0.17
Others	4.1	325,000	1.29	0.05
Not stated	0.6	348,000	1.38	0.01

Source: Own calculations based on UNHS III
Note: Analysis restricted to those reporting paid employment.

4.2 Household composition

An average Ugandan household has 5.2 members, with more members in male headed households (of 5.5 members) than in female headed households (of 4.4 members). More disaggregated analysis shows that nearly 44 per cent of the households have no more than four members. In terms of sex ratio, Figure A2 shows that there are more adult females than adult males with the exception of some few age groups. Figure 4 depicts a high dependency ratio. Indeed, Ugandan population is youthful and is becoming younger over time. Nearly half of the population is below 18 years, partly due to high total fertility rate which stood at 6.7 per woman in 2006 (UBoS/Macro 2007). The younger population poses fiscal challenges for government in terms of planning for the provision of services especially health and education. For instance, the Ugandan workforce is projected to double in the next 20 years.

Fig. 4: Uganda male and female population by age, 2005



Source: Own calculations based on UNHS III

4.3 Household structure

Table 3 presents the distribution of gender-based household typologies by expenditure quintile. Nearly one in every three Ugandan households is dominated by adult females, about 27 per cent with female heads and 21.1

per cent have female breadwinners. The share of male headed households increases with income level. There is a higher concentration of households with female heads than with male heads among the poorest households. Considering households typology by adult member composition by sex, we observe a concentration of households with more adult males than females in the richest quintile. Turning to sex composition by employment status, households with male breadwinners are concentrated in the richest quintile.

Table 3: Distribution of household typology by expenditure quintile, %

		Expenditure quintile				
Household typology	All	Q1	Q2	Q3	Q4	Q5
Sex of head						
Female	26.9	17.8	16.6	17.7	21.4	26.5
Male	73.1	15.8	18.0	19.4	21.0	25.9
Adult sex composition						
Female majority	29.7	16.9	16.9	18.7	21.0	26.4
Male majority	20.1	9.2	12.1	15.1	20.3	43.4
Equal gender	50.2	18.8	20.3	20.6	21.4	18.9
Employment status						
Dual earners	54.0	18.2	20.4	21.4	21.5	18.5
Female breadwinners	21.1	19.0	16.7	18.7	19.0	26.5
Male breadwinners	16.0	7.8	9.3	11.4	20.8	50.7
None employed	8.9	13.7	17.7	17.9	24.3	26.6

Source: Own calculations based on UNHS III.

Table 4 presents the distribution of households by headship controlled for the other household typologies. Clearly, households with female heads are more likely to have a higher concentration of female earners with no male earners, and tend to be heavily dominated by adult females. On the other hand, male headed households have a higher concentration of households with dual earners.

Table 4: Household by earners & gender composition controlled household headship

	Sex of household head	
	Female headed	Male headed
Employment status		
Dual earners	18.3	67.2
Female breadwinners	60.5	6.6
Male breadwinners	3.7	20.5
No earner	17.5	5.7
Adult sex composition		
Female majority	79.0	11.5
Male majority	5.6	25.4
Equal gender	15.4	63.1

Source: Own calculations based on UNHS III

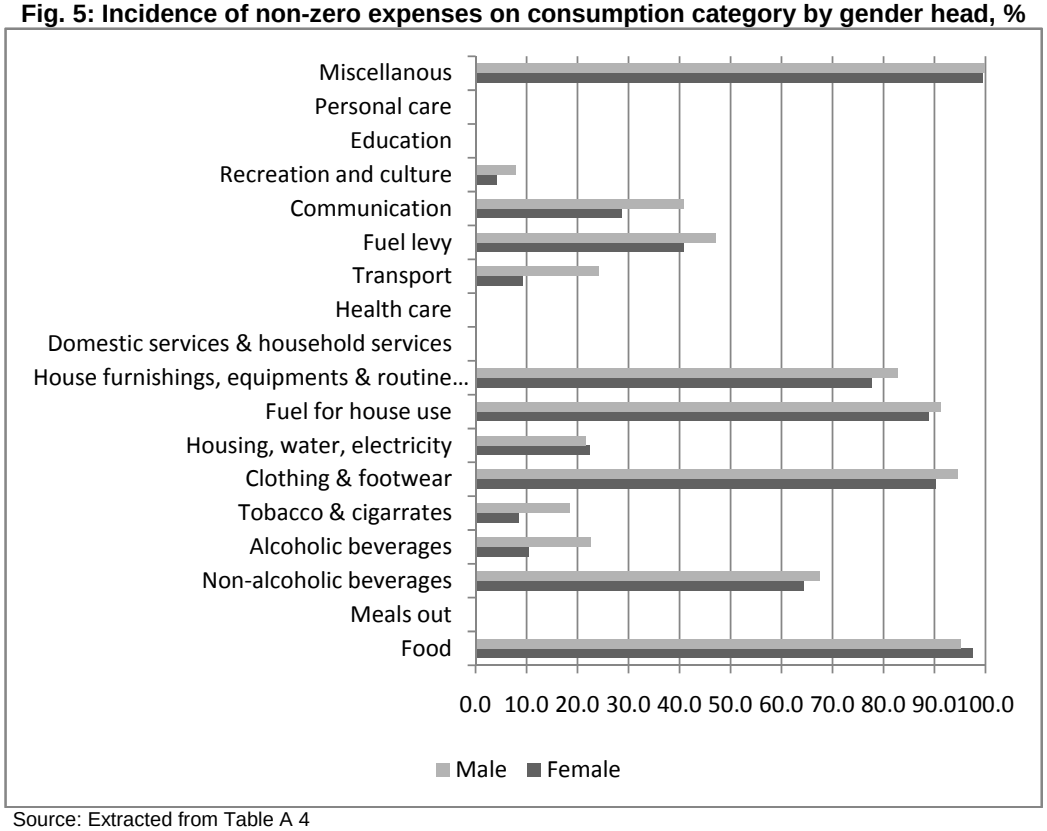
While the patterns are similar for households with children, there are significant differences in ranking for households without children (for details see Table A 2). Eight in every 10 female type households live with children, and five in every ten male type households live with children with the exception of male headed households. Nine in every 10 dual earners or equal gender households are living with children. Female type households have a higher proportion of children than their male type households, with the latter having a higher proportion than the national average. Similar results are noted for dual earners or equal gendered households (Table A 3).

5. Household consumption patterns and indirect tax liabilities

5.1 Household consumption patterns

The indirect taxes are largely consumption-based taxes making it harder for households to evade such taxes. Indirect taxation impacts on household consumption patterns. For instance, higher taxes can prevent consumption of basic goods and services. While UBoS (2003, 2006) reported changes in consumption patterns of Ugandan households, these changes in one way or the other impact on the government's revenue performance. Fig. 5 depicts that consumption patterns of goods and services that attract tax vary by gender of household head and place of residence (Table A 4 for details). Households with male heads were more likely to report spending on alcohol beverages, tobacco & cigarettes, transport & communication than households with female heads. Households with female heads were more likely to report expenditures on food than their male counterparts. This is related to females' role assignment of food provision and care giving for the household. The high percentage on food category is driven largely by salt which is consumed by nearly 93 per cent of the Ugandan households. The fact that government has scrapped taxes on salt, the percentage of households with taxable food items will reduce drastically to about 62 percent. The results in Table A 5 reveal that the share of households with non-zero expenses on selected goods that attract excise tax in addition to VAT is relatively low. Poorer households are less likely to consume sugar, rice, and bread – these items are considered luxuries regardless of sex of household head.

Fig. 5: Incidence of non-zero expenses on consumption category by gender head, %



Source: Extracted from Table A 4

5.2 Household indirect tax liabilities

We present the distribution of indirect tax type by consumption categories to lay a good foundation for the incidence tax analysis. In 2005/06, Ugandan households paid Shs765.4bn in total indirect taxes[5]. And the overall pattern of indirect taxes at household level is consistent with the macro-level picture presented in section 2. At household level, on average, VAT accounted for 59.3 per cent in total indirect taxes followed by excise duties at 25 per cent and fuel levy accounted for 15.9 percent. Table 5 presents the quintile share in tax liabilities by sex of household head. Households with female heads contributed only 19 per cent in total tax liabilities, a percentage lower than their share (of 26.9 per cent) in total Ugandan households. The households in the richest quintile contributed more than 50 per cent of total tax liabilities. This holds for the different of tax type. However, this does not imply that the same households have the highest tax as percentage of their income levels.

[5] . The tax estimates derived from the 2005/06 National Household survey were validated with the official administrative data from URA in the same financial year. As expected the estimates based on the household survey were well below those from URA. The VAT was about 60 per cent of the official VAT figures. The corresponding figures for excise duties excluding fuel was 97 per cent and only 33 per cent for fuel levy. See Ssewanyana & Okidi (2008) for detailed explanations of these discrepancies.

Table 5: Share in tax liabilities by gender of household head, %

	All				Female headed				Male headed			
Quintile	All	VAT	Excise	Fuel	All	VAT	Excise	Fuel	All	VAT	Excise	Fuel
1	4.0	4.2	5.2	1.3	4.6	4.7	6.2	1.6	3.9	4.1	5.0	1.3
2	7.5	7.9	9.0	3.6	7.5	7.8	9.0	3.9	7.5	7.9	8.9	3.6
3	10.9	11.5	11.8	7.1	11.1	11.2	13.2	7.9	10.8	11.5	11.5	6.9
4	18.1	18.2	18.5	17.2	18.3	18.0	19.1	18.3	18.1	18.2	18.4	17.0
5	59.5	58.2	55.5	70.7	58.5	58.2	52.6	68.3	59.7	58.2	56.1	71.2
	100.0	100.0	100.0	100.0	19.0	19.9	17.2	18.5	81.0	80.1	82.8	81.5

Source: Own calculations based on UNHS III

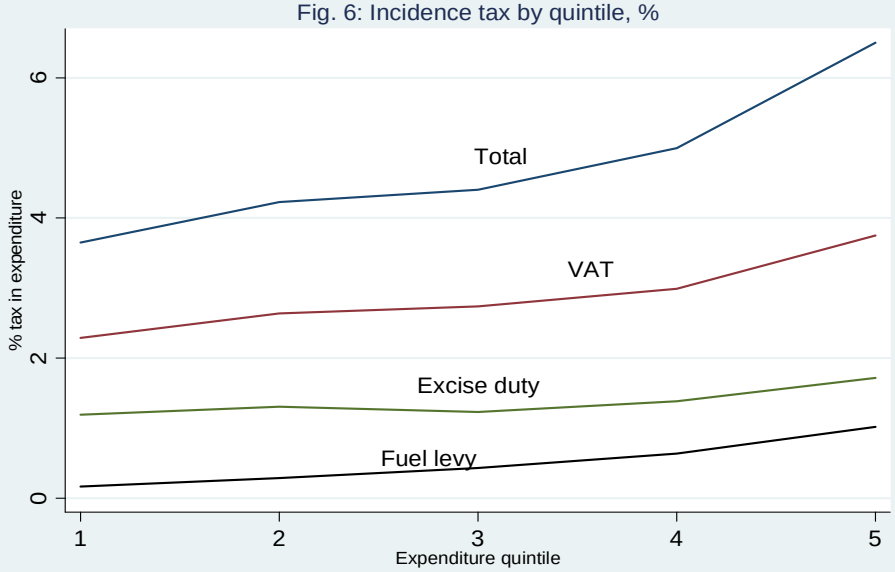
However, there are significant differences to overall contribution of consumption categories within each tax type. Considering VAT, food alone contributed 22.8 per cent followed by clothing and footwear at 17.4 per cent and, miscellaneous goods and services at 12.4 per cent (driven largely by soap at 42.5 per cent followed by cosmetics at 20.5 percent). Further disaggregation of the food consumption category reveals that the greatest contribution was from sugar estimated at 45.6 percent, followed by rice at 19.1 per cent and cooking oil at 18.1 percent. VAT on salt contributed only 5.4 percent in 2005/06, but government scrapped taxes on salt starting with FY2008/09. Adult clothing contributed 65.3 per cent to overall clothing and footwear category compared to 22.1 per cent from children's clothing. Similar patterns are observed by household typologies controlled by expenditure quintile. On the other hand, alcoholic beverages contributed the greatest share (of 30 per cent) to overall household excise duties as expected. It should be noted that alcoholic goods are adult goods whose consumption has positive benefits in terms of government revenue but has negative effects on an individual's heath and overall household consumption especially that of children. On a positive note, a sizable number of Ugandan households do not consume alcohol (Table A 4).

6. Incidence findings

6.1 Incidence analysis by expenditure quintile

The share of indirect taxes as percentage of household consumption expenditure increases with income (Fig. 6). Put differently, there is progressivity with the poorest quintile paying 4.7 per cent of their income while the richest quintile paid 6.9 percent. Similar patterns are observed for VAT. However, progressivity of fuel levy is very limited. Overall VAT imposes a higher tax burden than any other indirect tax category. This is not surprising since VAT is a more broad-based tax relative to other taxes. More importantly, these findings are consistent with those of Ssewanyana & Okidi (2008). That said, this analysis conceals policy relevant information from a gender perspective. For instance, who bears the tax burden within each expenditure quintile? This discussion is presented in the subsequent sections.

Fig. 6: Incidence tax by quintile, %



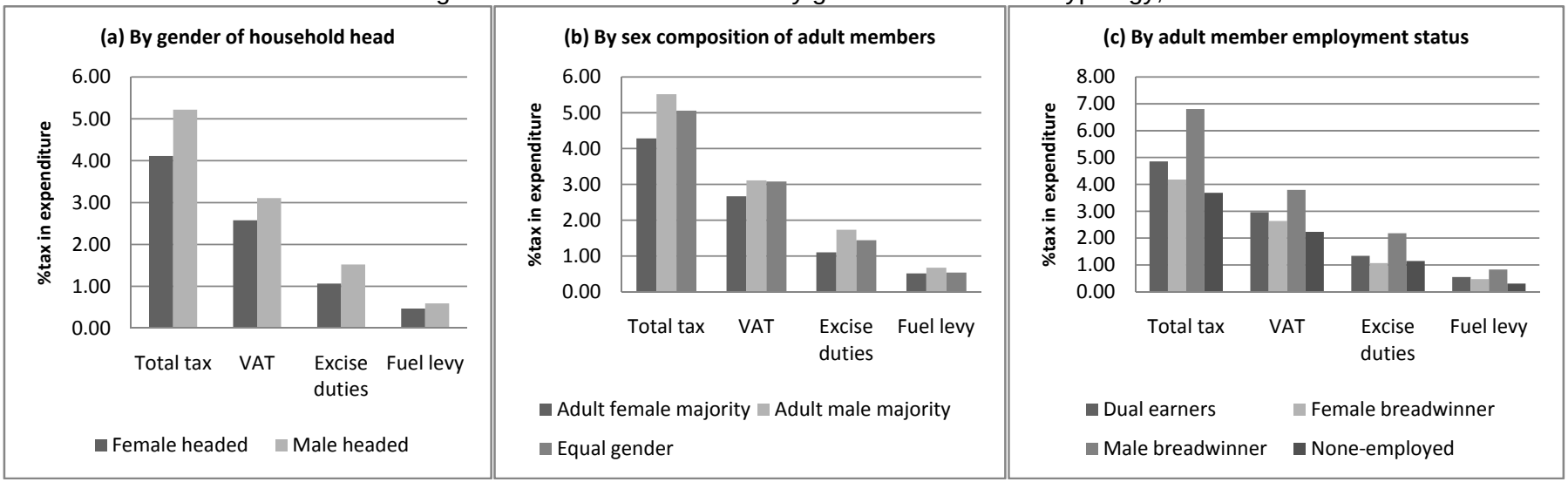
Source: Extracted from Table A 6

6.2 Incidence analysis by gender based household typology

6.2.1 Analysis by type of tax

Gender of household head: Regardless of type of tax, the incidence of tax is significantly greater for households with male heads compared to their counterparts with female heads (Fig 7 (a)). Some degree of progressivity in indirect tax is noted after controlling for expenditure quintile (Fig. 8(a)). Similar patterns are observed for fuel levy. However, disaggregated analysis reveals a mixed picture for VAT and excise duties. Households whose head are females tend to have significantly lower tax incidence relative to their male counterparts after controlling for income – with the exception of fuel levy. This finding largely reflects the different consumption patterns. The differences observed in the incidence rates are significantly more pronounced for VAT followed by excise duties. Notably, the tax burden between female and male heads is more pronounced for those households in the richest quintile.

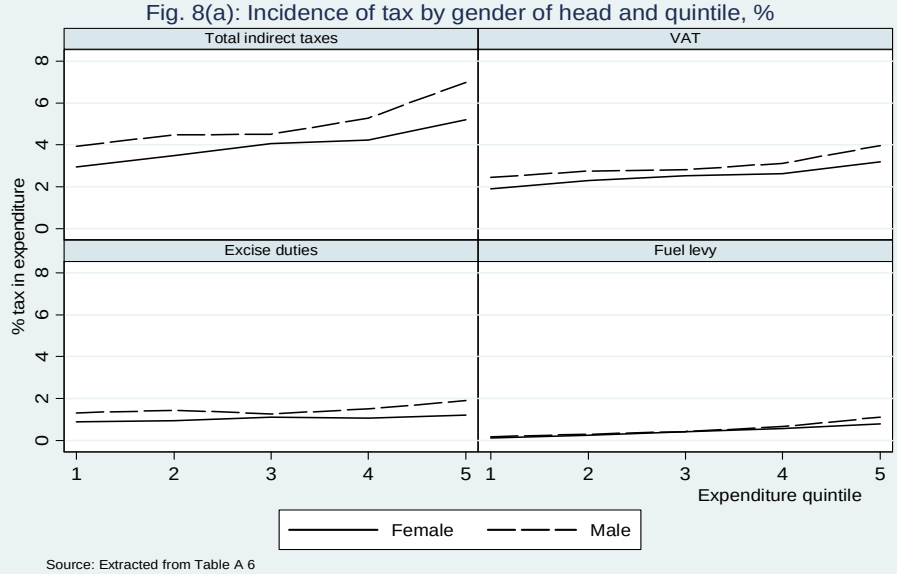
Fig. 7: Incidence of indirect tax by gendered household typology, %



Source: Extracted from Table A 6

There are no significant gender differences in the incidence of fuel tax levy for households in the lower quintile. Households in the richest quintile whose heads are males are significantly more likely to have a higher incidence rate on fuel levy than those households with female heads. The observed pattern of incidence of VAT and of excise duties is partly reflecting differences in consumption patterns. As discussed earlier there are significant gender differences in consumption of such goods and services as alcoholic, transport, communication etc. These items attract very high excise duties.

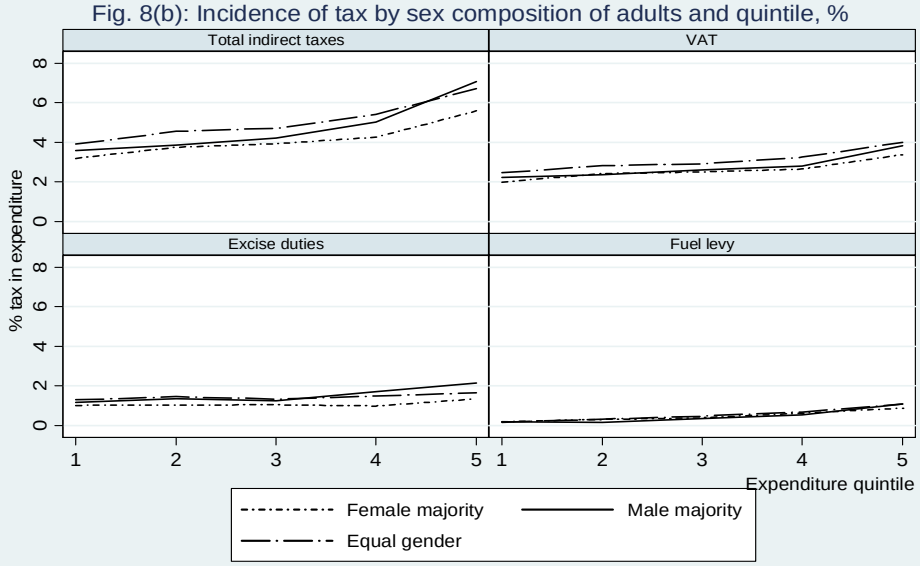
Fig. 8(a): Incidence of tax by gender of head and quintile, %



Source: Extracted from Table A 6

Adult sex composition household type: Classification of households by sex composition of adult members shows that female majority households have a significantly lower incidence of tax than those households with more adult members (Fig. 7(b)). VAT incidence is similar for male majority households with those households with the same number of adult females and males. On controlling for income quintile, Fig. 8(b) reveals that households in the higher income distribution male majority members have significantly higher incidence of total indirect tax compared to their female counterparts. The observed patterns are largely driven by excise duties. There are no evident significant differences among households in the lower income distribution. Furthermore, with the exception of fuel levy, households dominated by adult females have a significantly lower incidence of tax relative to households with equal number of adult males and females. Unlike the other household typologies, the total indirect tax curves cross each other. This observation is driven largely by the behaviour of excise duties. The differences between males and females tend to be greater at higher income especially for excise duties. Overall, these findings seem to suggest that understanding gender-tax differences by sex composition of adult members of the household might not provide much in terms of policy implications.

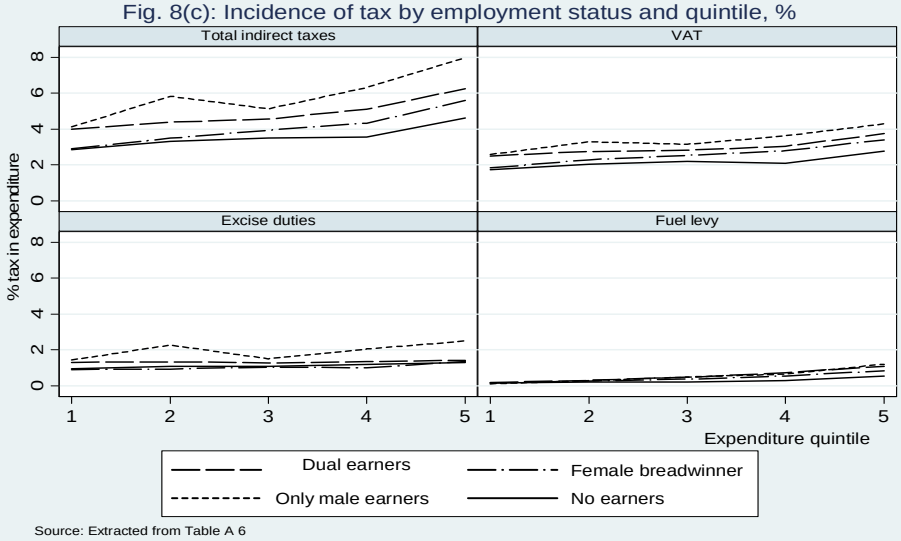
Fig. 8(b): Incidence of tax by sex composition of adults and quintile, %



Source: Extracted from Table A 6

Employment status: Here we discuss results based on the employment status of adult members by sex. Households with male breadwinners have a significantly higher tax incidence compared to those households with female breadwinners (Fig. 7(c)). By extension, households with dual earners have significantly higher incidence of tax than households with female breadwinners. On controlling for income, Fig. 8(c) reveals that the incidence rate of tax is greatest for households with male breadwinners and least for households without earners - with the exception of excise duties. The latter finding is not surprising since these households are less likely to demand goods and services that attract taxes. More notable, households with male breadwinners have a significantly higher tax as percentage of their consumption expenditure relative to households with female breadwinners – except for fuel levy. This result holds regardless of income levels. Consistent with other household typologies, households with male breadwinners in the richest quintile have a significantly higher incidence rate of fuel levy than their counterparts with female breadwinners. While no significant differences are observed for the tax incidence between households with dual earners and male breadwinners in the poorest quintile, at higher income levels the incidence is significantly higher for the latter than the former. This holds for VAT and excise duties.

Fig. 8(c): Incidence of tax by employment status and quintile, %



Source: Extracted from Table A 6

6.2.2 Analysis by type of tax controlled for the presence of children

In the subsequent sections we repeat the analysis above but controlled for the presence of children (Tables A7-A9 and Fig. 9). Nearly 17 per cent of the Ugandan households are not living with children. On average, households without children have a significantly higher tax burden compared to their counterparts living with children (Table 6). Households without children are clustered in the richest quintile (see Table A 2). This suggests that these households have higher disposable incomes making it possible for them to spend on taxable goods and services. On the other hand, higher taxes leading to higher prices might be preventing households living with children from consuming certain goods and services. More importantly, incidence of tax is significantly lower for female based-households relative to their male counterparts regardless of presence of children.

Table 6: Tax incidence by presence of children and household typology, %

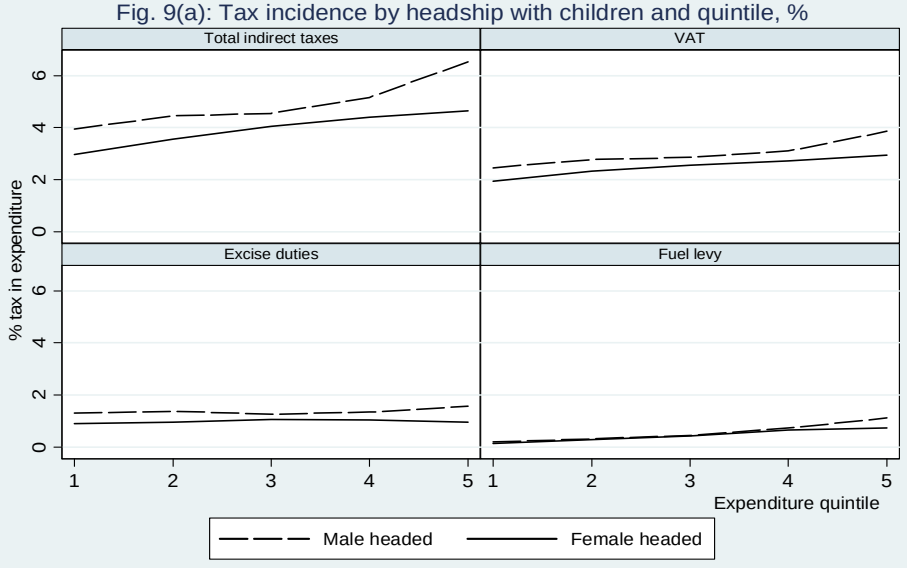
	Total tax		VAT		Excises		Fuel levy	
	With	Without	With	Without	With	Without	With	Without
Gender of head								
Female headed	3.92	4.95	2.50	2.93	0.98	1.45	0.44	0.57
Male headed	4.93	6.69	3.01	3.61	1.36	2.32	0.56	0.77
Adult sex composition								
Female majority	4.16	4.95	2.62	2.92	1.04	1.45	0.50	0.58
Male majority	4.45	7.01	2.70	3.68	1.18	2.50	0.56	0.82
Equal gender	4.99	5.83	3.05	3.38	1.40	1.84	0.53	0.61
Employment status								
Dual earners	4.80	5.83	2.94	3.37	1.31	1.82	0.55	0.64
Female breadwinner	3.89	6.11	2.51	3.53	0.95	1.84	0.43	0.73
Male breadwinner	6.23	7.46	3.66	3.94	1.84	2.57	0.73	0.95
None employed	3.45	3.99	2.17	2.31	0.94	1.41	0.34	0.27
All	*4.66*	*6.17*	*2.87*	*3.40*	*1.26*	*2.06*	*0.53*	*0.71*

Source: Extracted from Table A7

However, mixed results are observed after controlling for expenditure quintile. Considering only households living with children, it is evident that the incidence of tax on households with female heads is significantly lower than that on households with male heads within the same income quintile (Fig. 9(a)). This holds for all expenditure quintiles. The only exception is fuel levy where significant differences are observed for households in the richest quintile, a picture consistent with discussion in section 6.2.1. Taking on household type by presence of working adults, the results suggest that households with male breadwinners have a higher incidence of indirect tax driven by excise duties relative to their counterparts with female breadwinners (Fig. 9(e)). Similar significant differences are observed for fuel levy for households in higher income distribution; and VAT for all expenditure quintile except for the second and third quintiles. By extension, there are no significant differences observed for household typology based on the sex composition of adult members.

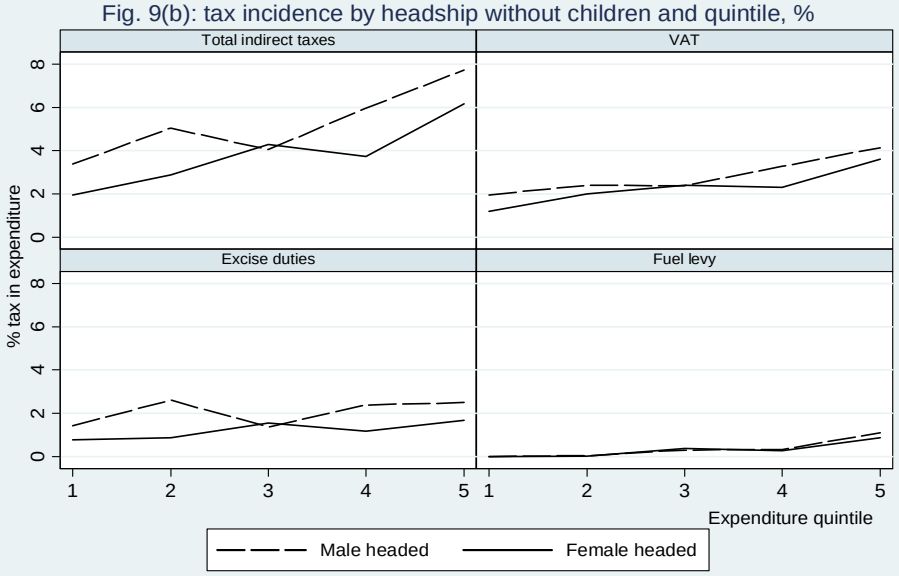
Regardless of type of tax and typology of households, there are no discernible patterns of tax incidence for households living without children controlled by expenditure quintile (see Fig. 9(b, d, f)). However, significant gender differences are observed for households in the lower and higher income distribution. This finding is not surprising since poor households are less likely to be in formal employment and also less likely to spend on goods and services that attract taxes.

Fig. 9(a): Tax incidence by headship with children and quintile, %



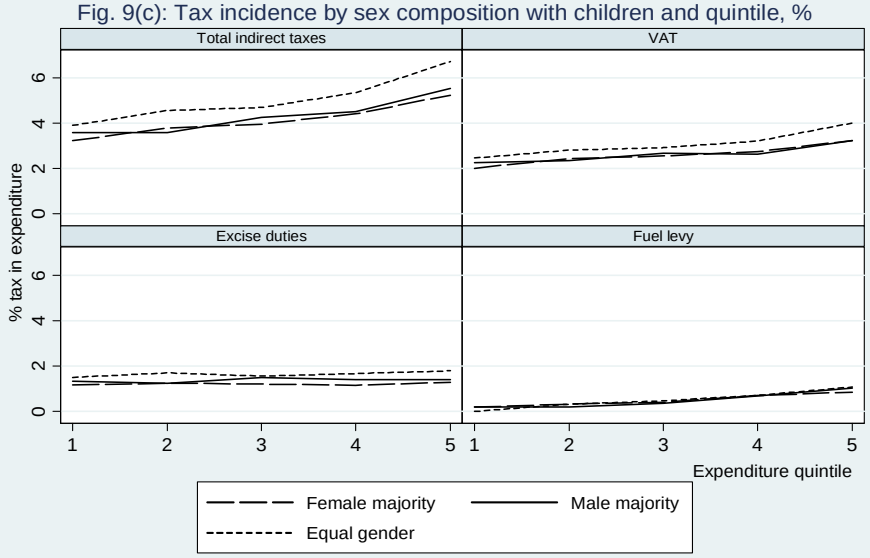
Source: Extracted from Table A 7

Fig. 9(b): tax incidence by headship without children and quintile, %



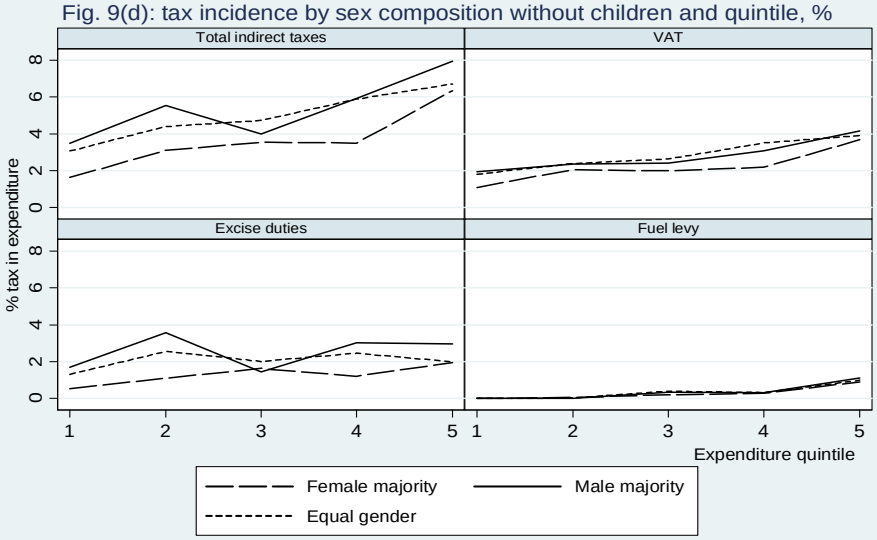
Source: Extracted from Table A 7

Fig. 9(c): Tax incidence by sex composition with children and quintile, %



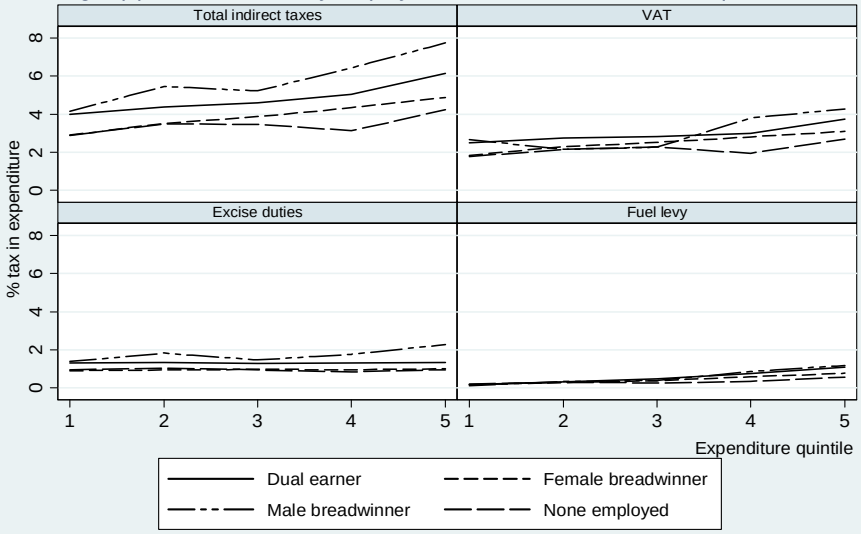
Source: Extracted from Table A 8

Fig. 9(d): tax incidence by sex composition without children and quintile, %



Source: Extracted from Table A 8

Fig. 9(e): Tax incidence by employment status with children and quintile, %



Source: Extracted from Table A 9

Fig. 9(f): tax incidence by employment status without children and quintile, %

Source: Extracted from Table A 9

6.2.3 Analysis by type of tax controlled for place of residence

The results in Table 7 show that the incidence of tax is significantly lower for female based households relative to their male counterparts. This holds for both rural and urban areas. It is also evident that, on average, the incidence rate for female based households is well below the national averages as expected.

Table 7: Tax incidence by place of residence and household typology, %

	Total tax		VAT		Excises		Fuel levy	
Household typology	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
Gender of head								
Female headed	3.75	5.64	2.37	3.48	0.99	1.40	0.40	0.76
Male headed	4.79	7.32	2.88	4.23	1.41	2.08	0.51	1.01
Adult sex composition								
Female majority	3.91	5.87	2.44	3.62	1.02	1.43	0.44	0.82
Male majority	5.04	7.29	2.86	4.04	1.60	2.25	0.59	1.00
Equal gender	4.66	7.28	2.87	4.29	1.34	2.01	0.46	0.98
Employment status								
Dual earners	4.62	6.67	2.84	3.95	1.29	1.71	0.49	1.01
Female breadwinner	3.77	5.87	2.40	3.65	0.97	1.47	0.41	0.75
Male breadwinner	6.08	8.05	3.36	4.54	2.03	2.43	0.69	1.08
None employed	3.45	5.03	2.09	3.03	1.09	1.49	0.27	0.51
All	*4.52*	*6.83*	*2.74*	*4.01*	*1.30*	*1.88*	*0.48*	*0.93*

Source: Own calculations based on UNHS III

6.2.4 Analysis by type of tax by consumption category

Disaggregated analysis at consumption category level provides insights into possible policy tax reforms areas. At aggregate level, there are significant gender differences with some few exceptions (Table 8). However, the impact varies accordingly to household typology. With respect to adult sex composition, female majority households have a higher incidence of indirect tax on food, children's clothing and footwear, fuel levy than the male majority households. The results are quite different for the other household types. More notably, male based households have a greater incidence of tax on alcoholic beverages, tobacco & cigarettes, transport, communication and adult clothing & footwear than female based households. This is partly explained by the consumption patterns discussed in section 5.1.

Considering presence of children, households living with children have a greater incidence of indirect tax than their counterparts without children. The only exceptional consumption categories are adult's clothing & footwear, water & electricity, paraffin, communication and miscellaneous goods & services (Tables A 10-A 12).

Table 8: Incidence of indirect tax by female-male types, %

	Breadwinner			Majority			Headship		
Consumption category	Female	Male		Female	Male		Female	Male	
Food	1.02	1.01		1.00	0.82	a	1.00	0.98	
- Processed foods	0.56	0.60		0.55	0.44	a	0.55	0.55	
- Sugar	0.46	0.41	a	0.45	0.37	a	0.46	0.43	
Non-alcoholic beverages	0.19	0.50	a	0.19	0.38	a	0.19	0.27	a
Alcoholic beverages	0.35	1.09	a	0.38	0.86	a	0.31	0.69	a
- Beer	0.17	0.60	a	0.19	0.36	a	0.14	0.26	a
- Other alcoholic beverages	0.17	0.49	a	0.19	0.49	a	0.17	0.43	a
Tobacco & cigarettes	0.13	0.63	a	0.15	0.51	a	0.16	0.38	a
Clothing & footwear	0.46	0.52	a	0.47	0.49		0.45	0.56	a
- Adults' clothing & footwear	0.27	0.41	a	0.29	0.37	a	0.28	0.38	a
- Children's clothing & footwear	0.14	0.09	a	0.14	0.10	a	0.13	0.14	
Water & electricity	0.13	0.22	a	0.13	0.12		0.12	0.11	
Paraffin/kerosene	0.17	0.16		0.16	0.16		0.17	0.16	
Transport	0.08	0.17	a	0.10	0.18	a	0.07	0.20	a
Fuel levy	0.47	0.83	a	0.52	0.67	a	0.47	0.59	a
Communication	0.17	0.52	a	0.19	0.34	a	0.15	0.27	a
Miscellaneous	0.74	0.77		0.69	0.65	a	0.73	0.68	a

Source: Extracted from Tables A10-A12

Notes: a indicates that there are significant gender differences

In the subsequent section we present and discuss results after controlling for expenditure quintile. And again here, we demonstrate that the level of significance of gender differences vary across consumption category and quintile. It is also evident that the patterns and level of significance remains the same after controlling for presence of children.

Incidence on foods: Fig. 10(a) does not depict systematic patterns by employment status of adult members. But significant gender differences are observed for the third and richest quintile. Households in the richest quintile

with female breadwinners have a higher incidence of indirect tax than their male counterparts. The reverse is observed for households in third quintile. Further significant gender differences are observed for the other household typologies. Female majority households have a significantly higher incidence than male majority households with exception of the first and third quintiles. Turning to gender of household head, households with male heads in the poorest quintile have a significantly higher incidence compared to their male counterparts. The reverse is observed for those households in the fifth quintile. Indirect taxes on foods are mainly VAT on processed foods such as rice, bread cooking oils; and sugar.

Incidence on non-alcoholic beverages: Indirect tax on non-alcoholic beverages is somewhat progressive with female based households having a lower incidence of indirect tax relative to their male counterparts. This holds for all expenditure quintiles though the differences are greater at higher income levels. But significance gender differences are observed for only those households in fourth and fifth quintiles.

Incidence on alcoholic beverages: Incidence of indirect tax on alcoholic beverages is neither progressive nor regressive, but incidence for households in the poorest quintile is lower than that of their counterparts in the richest quintile. More specifically, the incidence falls more on male based households than those female based households. The incidence is significantly higher on male breadwinner households in the second, fourth and fifth quintiles compared to those households with female breadwinners (Fig. 10(c)). Similar observations are noted household typology based on adult sex composition. Turning to headship, households with male heads have significantly higher incidence of indirect tax on alcoholic beverages compared to their counterparts with female heads. This finding holds for all expenditure quintiles. At a more disaggregated level, progressivity is observed for indirect tax on beer but with significantly higher incidence for male majority households compared to their female majority households. This result holds for all expenditure quintiles.

Incidence on tobacco and cigarettes: The incidence on tobacco follows similar patterns as that on alcoholic beverages. However, the impact on female breadwinner households is almost flat (Fig. 10(d)). Significant gender differences are observed regardless of household typology – except for those households in the third quintile. These findings together with those on alcoholic beverages are partly driven by the fact that households with male heads spend a larger percentage of their income on these consumption categories relative to their female counterparts.

Incidence on clothing and footwear: Incidence of indirect tax on clothing and footwear category is less progressive but its turns out to be significantly greater on households with male breadwinners compared to those households with female breadwinner living in the last two bottom poorest quintiles (Fig. 10(e)). Turning to headship, households with male heads have a significantly higher incidence of indirect tax compared to those households with female heads. This is true for all expenditure quintile. Similar results are observed on adult's clothing and footwear. On the other hand, female majority

households have a significantly higher incidence of indirect tax on children's clothing & footwear than compared to male majority households – except for the first two poorest quintiles. No significant gender differences observed based on gender of household head.

Incidence on water and electricity: The incidence is somewhat progressive by employment status and quintile (Fig. 10(f)). However, there are no significant gender differences. Turning to other household typologies, female heads have a significantly higher incidence than their male counterparts living in the second quintile. In addition, female majority households have significantly higher incidences compared to male majority households with the exception for those households in the first and fifth quintile.

Incidence on paraffin/kerosene: The tax levied on paraffin are regressive in nature regardless of gender of household head (Table A 10, Fig. 10(g)). Households in lower income quintile are paying more taxes as a percentage in their total consumption expenditure relative to their richer households. The progressivity of taxes on paraffin are partly due to the higher consumption levels among households in the lower quintiles. The significant gender differences are observed for first three lowest quintiles, with a higher incidence for female based housholds.

Incidence on transport: There is not systematic pattern by employment status and quintile (Fig. 10(h)). However, the incidence is significantly greater on male based households compared to the female based households. The exceptions are household typologies categories by employment status living in the third and fifth quintiles and gender dominated households in the first three poorest quintiles.

Incidence on communication: The incidence by employment status is progressive but the burden is significantly higher for households with male breadwinner compared to their female counterparts – except for the poorest quintile (Fig. 10(i)). Turning to headship, households with female heads have a significantly lower tax burden on communication consumption category relative to those households with male heads.

Incidence on miscellaneous: Lastly, while the incidence of indirect tax on miscellaneous category is neither progressive nor regressive, households with female heads in higher income level have a significantly higher incidence comparable to their male counterparts – except for the first two poorest quintiles. Turning to employment status, there are no significant gender differences (Fig. 10(j)).

Fig. 10: Incidence of indirect tax on consumption categories by employment status and quintile, %

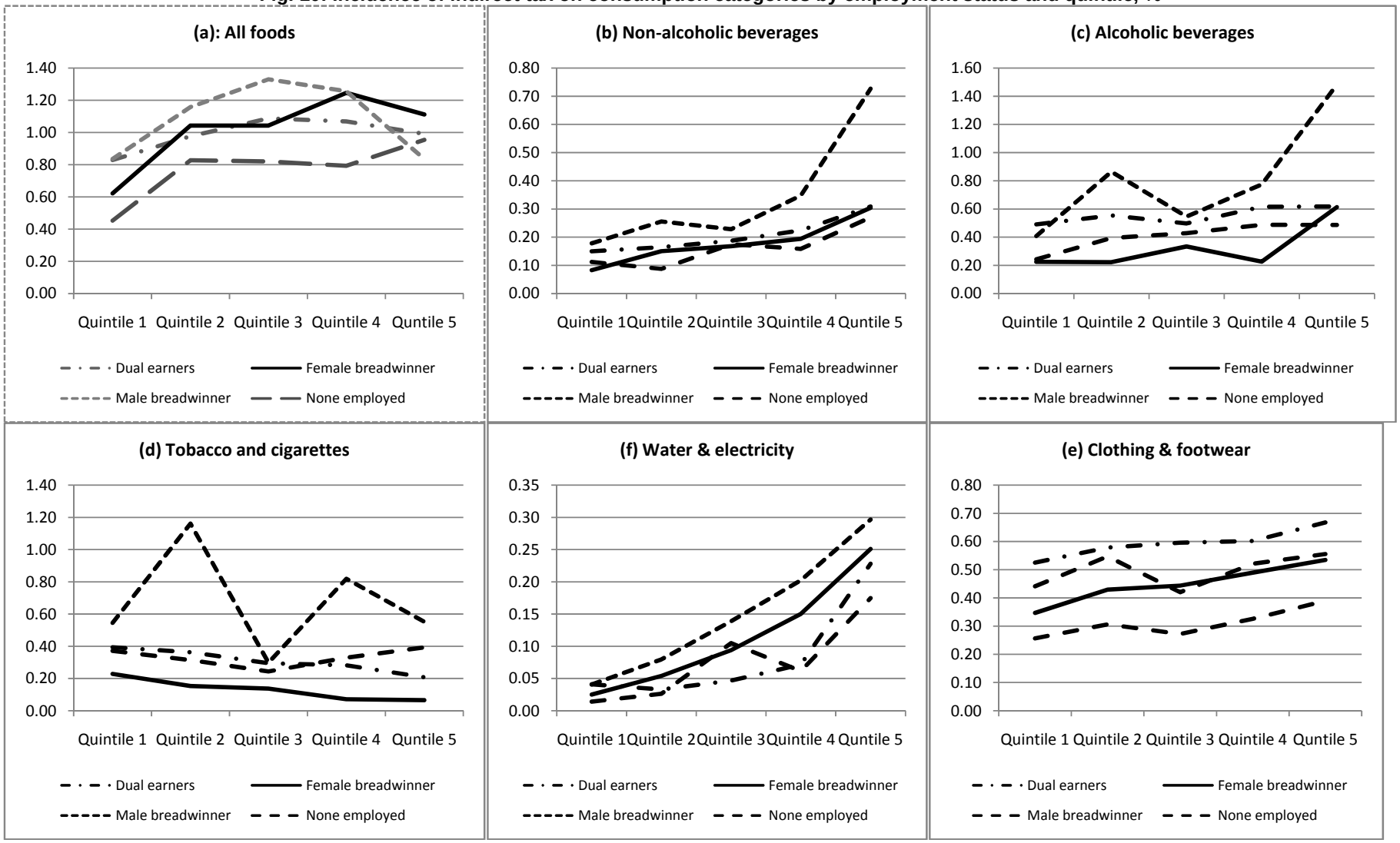
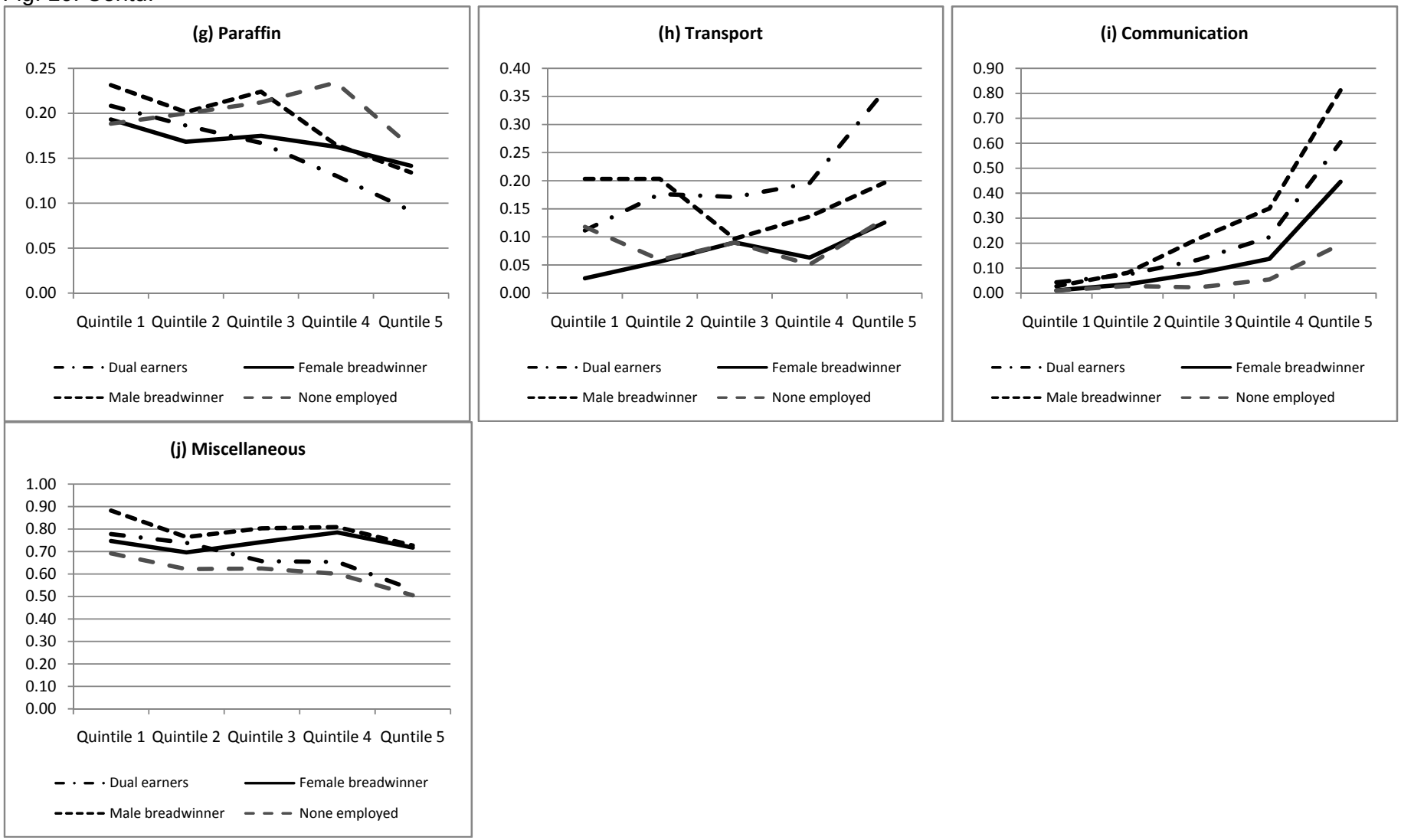


Fig. 10: Contd.


(g) Paraffin
0.25
0.20
0.15
0.10
0.05
0.00
Quintile 1 Quintile 2 Quintile 3 Quintile 4 Quntile 5
Dual earners
Female breadwinner
Male breadwinner
None employed
(h) Transport
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
Quintile 1 Quintile 2 Quintile 3 Quintile 4 Quntile 5
Dual earners
Female breadwinner
Male breadwinner
None employed
(i) Communication
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
Quintile 1 Quintile 2 Quintile 3 Quintile 4 Quntile 5
Dual earners
Female breadwinner
Male breadwinner
None employed
(j) Miscellaneous
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
Quintile 1 Quintile 2 Quintile 3 Quintile 4 Quntile 5
Dual earners
Female breadwinner
Male breadwinner
None employed

In sum, our findings suggest that regardless household typology male based households suffer a greater tax burden compared to their female counterparts. However, the extent of tax burden varies by tax type and consumption category. Similar findings are observed after controlling for presence of children. Indirect taxes have a varying incidence on gendered households in the same quintile.

6. Policy evaluation and simulations

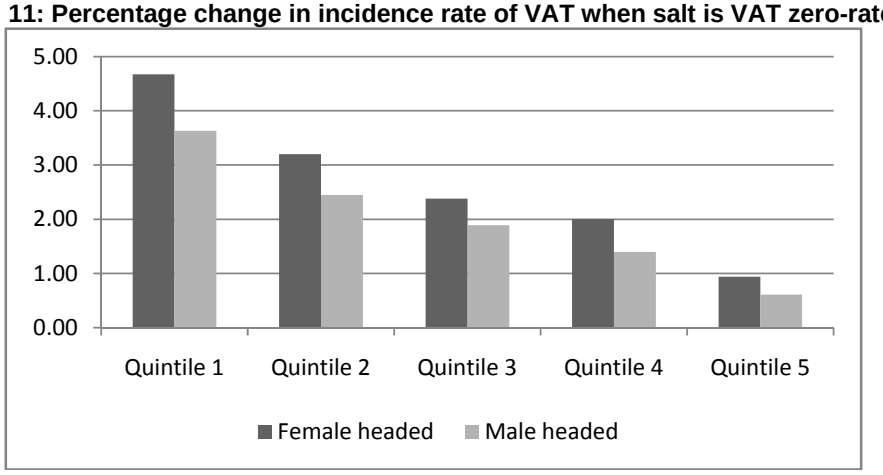
In this section we do conduct some static simulations. The possible options for simulations are based on the current tax debate and recently implemented reforms announced for FY 2008/09. The following consumption items are considered: salt, children's clothing & footwear, kerosene/paraffin, and piped water. Each of these simulations generates new incidence of tax. However, these results must be considered with the caveat that the simulations are essentially static and partial effects. Nonetheless, they provide some important empirical evidence on how tax reforms impacts differently on gender-based household typologies.

i) Removal of taxes on salt

While more than 90 per cent of Ugandan households reported consuming salt, nearly 28.5 per cent reported to have borrowed salt from neighbours in the past 30 days prior to interview- with 31.8 per cent of households with female heads and 27.3 per cent of households with male heads. On a positive note, government recently included salt among the list of VAT exempted goods. Here we demonstrate how this reform would impact on different typologies of households. Based on 2005/06, this would result into a loss of nearly Shs.5.6bn annually; which is equivalent to 28 per cent of government budget for the social development sector of Shs20bn (GoU 2008).

Given the fact that nearly all Ugandan households consume salt, the scrapping of VAT on salt has little impact on the overall progressivity of indirect taxes. But this is not surprising since taxes derived on consumption of salt are a small portion of the total household taxes – less than one percent. Regardless of gender of household head, households in the lower quintile stand to benefit more from removal of taxes on salt relative to their counterparts in higher expenditure quintile (Fig. 11). This demonstrates that tax on salt as percentage of consumption expenditure was relatively greater for households in the lower income quintiles. Furthermore, VAT as per cent of consumption expenditure drops faster for households with female heads compared to households with male heads. In other words, much as removal of taxes on salt was meant to target the poorest households, it is evident that the poorest households with female heads benefit more than their male counterparts. Put differently, removal of taxes on salt was gender responsive.

Fig. 11: Percentage change in incidence rate of VAT when salt is VAT zero-rated

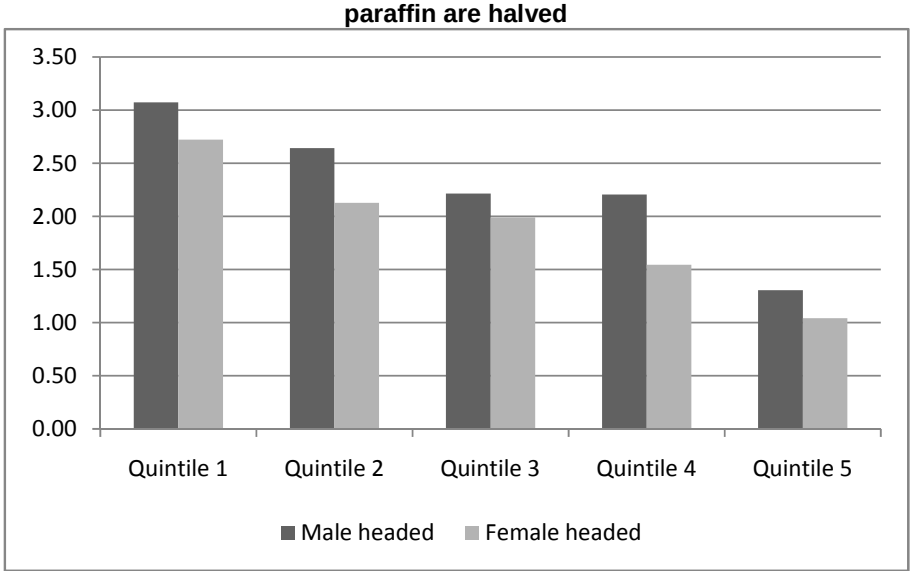


ii) *Reducing the levies on paraffin by 50%*

Duties on paraffin are levied on a per unit basis implying that as price increases consumption will gradually reduce in turn reduce government tax revenue. 'Oil lamp' (locally known as Tadobba) is the main source of lighting used by the majority of households in Uganda, especially those living in rural areas (79 percent). Only about 12 per cent of rural households use paraffin lanterns. While tadobba technology consumes less paraffin relative to lanterns, the saving is much less compared to the health hazards associated with such technologies. The situation has been exacerbated by the global financial crisis. The paraffin prices are beyond the reach of most rural hosueholds. This prompted the policy scenario of halving the current excise levy on paraffin of Shs200 per litre. This would result into a revenue loss of nearly Shs8bn per annum – which is almost half of unaccounted for community development fund given to members of parliament[6]. While there are no significant impacts on incidence of indirect tax, very significant reductions are observed for the fuel for household use consumption category. The benefits accruing to households with female heads are less than those of their male counterparts (Fig. 12). The benefits reduce with increasing income level.

[6] . Uganda has about 350 members of parliament. Each receives a community development fund of Shs10million per annum – translates into Shs3.5bn per annum.

Fig. 12: Percentage reduction in incidence rate of indirect tax when excise duties on paraffin are halved

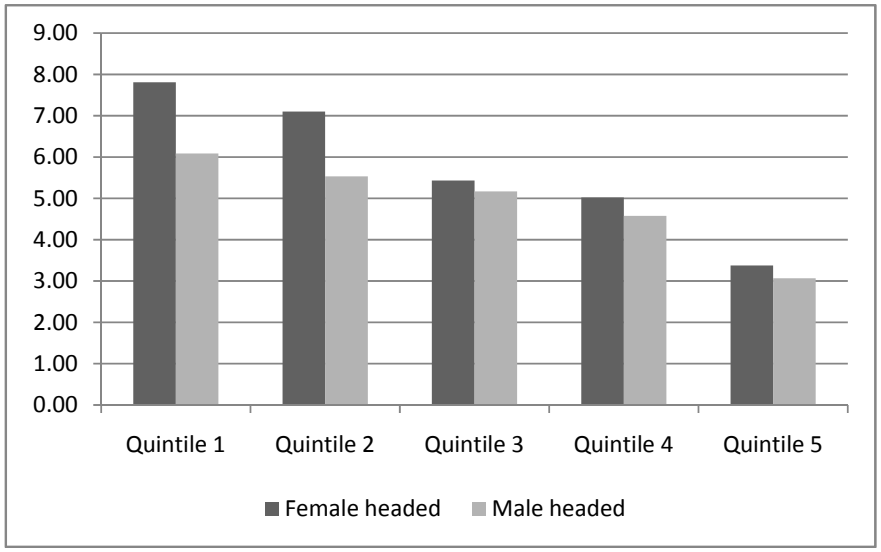


iii) Removal of VAT on children's clothing and footwear

The results in section 6.2.4 revealed that the incidence of tax was greater on households living with children relative to those households without children especially among the lower income quintiles. In addition, poverty studies on Uganda have reported that poorer households, on average, are likely to live with many children compared to households in richer quintiles. In 2005/06, households with female heads were significantly less likely than households with male heads to have each of their member to have at least one pair of shoe (54 percent) and to have at least two sets of clothing (17 percent). To ease the burden on these households and ensuring that children have the basic needs in life, we simulated VAT exemption on children's clothing and footwear.

However, this has significant implications on government domestic resource mobilization. The revenue forgone amounts to nearly Shs22bn, which is almost the total budget earmarked for the social development sector. Both male and female headed households in lower income levels enjoy significant reduction in incidence rate of VAT (Fig. 13). But percentage reduction in indirect tax incidence is greater for female headed households in the lower incomes compared to their male counterparts.

Fig. 13: Percentage reduction of incidence rate of VAT when children's clothing and footwear are VAT zero-rated

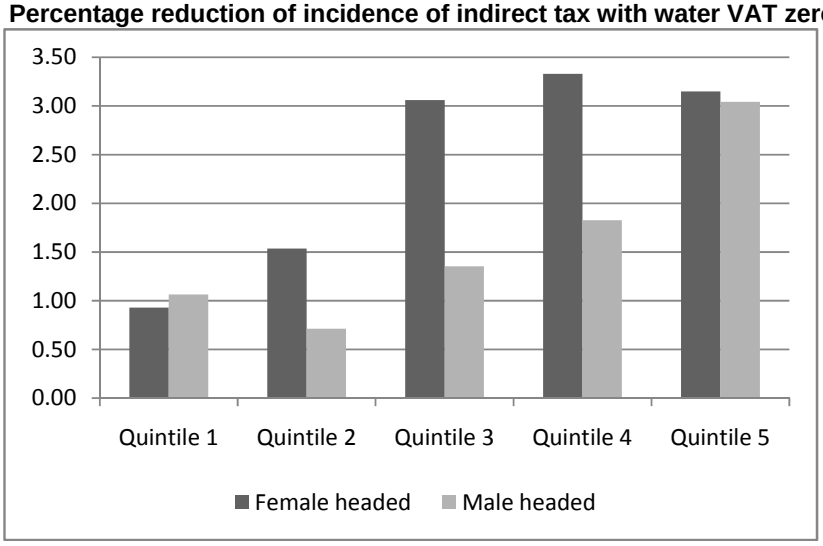


iv) Removal of VAT on piped water

Every Ugandan deserves the right to access safe water. Safe water matters for good health. The piped water coverage has increased over time with an urban bias. In 2005/06, only 10.9 per cent of the households had access to piped water – of which about 24 per cent were female headed households. A higher proportion of male headed households reported access to piped water (of 11.4 percent) than their female counterparts (of 9.7 percent). Put loosely, access to piped water remains limited to the better off urban households and male headed households. More important there is public outcry of removing VAT on piped water. This will not only increase access but will also indirectly reduce on water-related health risks such as cholera and in turn increase labour productivity. Put differently, the indirect costs averted as a result of dropping VAT on piped water will outweigh the direct benefits in terms of government revenue. Nearly Shs10.6bn government revenue will be forgone as a result of zero-rating piped water.

Fig. 14 depicts the percentage reduction in overall indirect tax by headship. The benefits are higher at higher income levels, with female headed households reporting greater reductions relative to their comparable male headed households. The households in the lowest income quintile have the least reduction, though this is not surprising since these households are less likely to access piped water due to high prices.

Fig. 14: Percentage reduction of incidence of indirect tax with water VAT zero-rated



In sum, the above proposed tax reforms will definitely impact negatively on the government domestic resource mobilization efforts. As already pointed out, public spending on social sector is donor/aid-supported. Uganda is more likely to suffer reduction in aid due to the global financial crisis, implying that government has to increase domestic resource mobilization and further improve the efficiency with which URA collects revenue. This has implications on funding of social investment strategies and in particular social protection for the most vulnerable groups. But government could do better by revisiting its prioritization of its expenditure. The option of increasing excise duties on *demerit* goods & service such as beers is very limited. As discussed in section 2, tax revenues from taxes on alcoholic beverages (especially beers) are a declining source of total government revenues. And the government further reduced excise duties on local beers to 10 per cent effective with FY2008/09.

7. Conclusion and recommendations

While taxation is one of the mechanisms of reducing inequalities and raising revenue for financing development efforts, little is known on its impact on gender. This paper provides insights into who bears the indirect tax burden and whether the Uganda tax system is gender responsive. If not, what options and actions are there for government?

Despite the fact that the data used in this paper were not meant to address the issues at hand, the findings provide a snapshot on the gender dimension in the Uganda tax system. We identified gender-based household typologies to demonstrate what happens to specific households within their families. We moved a step further to include children as a gendered group in their aggregation. Disaggregated analysis yields very useful results to inform options for indirect tax reforms in Uganda. The results reflect significant differences in the spending patterns between gender-based household typologies. Households with female heads spend more on food –especially the unprocessed food- than their male counterparts. On the other hand, male

headed households spend more on *demerit goods and services* than households with female heads.

While total household indirect taxes are progressive by expenditure quintile, similar patterns are not observed by gender-based household typologies except for fuel levy. From a gender perspective, the impact varies depending on the type of tax and consumption category. Since indirect taxes are consumption taxes, the magnitude of the impact depends largely on the share of goods and services in the overall consumption expenditure. The burden of indirect tax on households in the same quintile is quite different by gender.

Broadly speaking, there is evidence that incidence of tax is significantly lower for female based households than comparable male based households. This result holds even after controlling for presence of children. The results have also revealed that incidence of tax is significantly greater for households with adults in employment relative to those with no adults in employment. Implicit in this finding is that access to employment opportunities for all Uganda will raise income and in turn increase demand for taxable goods and services. This will lead to increased tax revenue, which government would invest into financing social protection interventions.

It is also widely known that the tax base for Uganda remains narrow. Much as indirect tax is difficult to evade, the poorer households seem to avoid consumption of the basic items such as paraffin, salt, piped water etc. There is no doubt that dropping taxes on selected goods will improve social welfare and in turn enable future savings on health care, education provision and other social economic needs and increase productivity. However, this will be at the expense of government losing out on tax revenue in the short-term.

Recommendations

Results of the gender analysis of the tax burden have reflected significant differences in the spending patterns between gender-based household typologies. Households with female heads spend more on food than their male counterparts. On the other hand, male headed households spend more on *demerit goods and services* than households with female heads. Future tax reforms should take these gender differences in account as a means of improving the social welfare of every Ugandan in ways that support health care, food security to name a few.

The paper provides an indication of gender differences in the burden of taxes and identifies the extent to which Uganda tax system is gender responsive. Below are options and actions that the government can undertake to address the gaps identified: a) maintain salt among the zero-rated items; b) reduce or scrap the duties imposed on paraffin; and c) Zero-rate piped water.

While government stands to lose on foregone revenue as a result of reduction or removal of taxes proposed, we argue that government need to revisit its expenditure prioritization and enforce cost saving measures. For instance, the need to reduce on luxurious public spending and public administration costs (of Shs131bn estimated to 2008/09) cannot be overemphasized. The last

resort option would be to keep the taxes on these items, and instead government provides assistance in terms of transfers (in terms of increased quality spending on education, health and expanded social protection) to compensate households for high taxes.

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Table A 1 Household consumption of goods and services (%), 2005/06

Food, beverages & tobacco						Frequently consumed goods and services & non-durables					Semi-durable and durables				
	Share (%) consuming	% from:					Share (%) consuming	% from:				Share (%) consuming	% from:		
Item		Purchases	Away	Own	Gifts/free	Item		Purchases	Away	Own	Item		Purchases	Away	Own
Matooke	48.3	36.9	0.0	57.7	5.5	Housing	100.0	14.9	78.4	6.6	Men's clothing	67.5	92.1	0.2	7.7
Sweet potatoes	53.2	26.3	0.2	67.1	6.4	maintenance and	6.7	59.1	0.0	40.9	Women's clothing	74.4	88.2	0.3	11.5
Cassava	54.0	33.2	0.1	61.7	5.0	Water	92.6	19.4	0.0	80.6	Children's clothing	73.8	89.0	0.2	10.7
Irish potatoes	10.3	55.9	0.0	39.9	4.2	Electricity	9.9	79.8	0.0	20.2	Other clothing & clothing material	37.8	96.1	0.2	3.7
Rice	24.8	90.4	0.0	5.1	4.5	generators/lawn	0.4	86.7	0.0	13.3	Tailoring material	21.8	94.4	1.1	4.5
Maize	67.8	57.0	0.2	32.1	10.8	paraffin (kerosene)	90.8	98.5	0.0	1.5	Men's footwear	34.0	96.7	0.1	3.2
Bread	19.3	95.8	0.5	1.0	2.8	Charcoal	20.4	96.2	1.5	2.3	Women's footwear	39.7	95.3	0.2	4.4
Millet	18.7	32.9	0.0	59.8	7.3	Firewood	79.9	11.5	10.1	78.4	Children's footwear	34.1	93.2	0.1	6.7
Sorghum	10.3	36.2	0.0	52.0	11.8	Others	2.7	96.5	0.5	2.9	Other footwear & repairs	38.0	96.0	0.6	3.4
Beef	32.2	96.5	0.2	0.4	2.9	Matches	97.9	98.9	0.0	1.1	Furniture	11.8	95.7	1.7	2.6
Pork	5.7	91.7	5.4	1.2	1.7	washing soap	99.6	96.6	0.0	3.4	Carpets, mats etc	25.0	90.9	4.7	4.3
Goat meat	6.2	89.3	0.2	6.1	4.4	bathing saop	36.3	98.8	0.0	1.2	Curtains, bed sheets etc	29.5	96.0	0.3	3.7
Other meat	1.5	83.4	0.0	5.4	11.2	tooth paste	45.7	99.0	0.0	1.0	Bedding mattresses	16.5	96.6	0.0	3.4
Chicken	7.6	31.9	0.2	63.3	4.5	Cosmetics	74.5	98.9	0.0	1.1	Blankets	23.8	80.7	0.3	19.1
Fish	39.6	94.4	0.1	1.6	3.9	handbags, travel	4.6	98.8	0.0	1.2	Others & repairs	2.1	87.4	1.3	11.3
Eggs	12.7	62.9	1.5	33.1	2.5	Batteries	52.9	99.0	0.0	1.0	Electric iron/kettles etc	2.3	90.0	0.0	10.0
Fresh milk	33.8	71.6	0.5	22.0	5.9	news papers and	5.0	94.7	0.0	5.3	Charcoal & kerosene stoves	5.5	97.7	0.0	2.3
Infant formula	0.3	86.2	0.0	0.0	13.8	Others	5.0	95.4	0.0	4.6	Electronic equipment (T.V)	2.1	94.8	0.0	5.2
Oil/fats	63.3	92.5	0.0	1.6	6.0	Tyres, tubes, spares	16.8	99.3	0.0	0.7	Bicycles	4.0	95.6	0.0	4.4
Passion fruits	12.5	64.9	0.6	29.1	5.4	petrol, diesel	2.7	94.9	0.0	5.1	Radio	9.8	97.8	0.0	2.2
Sweet banana	15.2	48.8	2.1	43.8	5.3	taxi fares	32.6	98.2	0.0	1.8	Motorcar, pick-ups etc	0.2	100.0	0.0	0.0
Mangoes	9.8	21.9	2.5	43.4	32.3	bus fares	4.1	98.0	0.0	2.0	Motor cycles	0.5	100.0	0.0	0.0
Oranges	7.0	56.3	0.8	25.5	17.4	boda boda fares	21.7	97.0	0.0	3.0	Computers for household use	0.1	100.0	0.0	0.0
Other fruits	20.9	28.3	0.6	57.6	13.5	stamps, envelope	1.4	92.4	0.0	7.6	Phone handsets	4.6	93.1	0.0	6.9
Onions	68.1	92.6	0.0	5.2	2.2	air time and ser	15.9	96.5	0.0	3.5	Other equipments & repairs	2.3	96.5	0.0	3.5
Tomatoes	67.5	91.6	0.0	5.6	2.7	Expenditure on p	20.1	97.7	0.0	2.3	Jewellery, watches, etc	7.4	97.4	0.0	2.6
Cabbages	16.3	91.2	0.0	5.4	3.4	Others	1.7	95.9	0.0	4.1	Plastic basins	53.3	94.4	0.3	5.3
Dodo	32.8	18.7	0.0	64.0	17.3	consultation fee	4.7	96.5	0.0	3.5	Plastic plates/tumblers	27.8	91.6	0.3	8.2
Other vegetables	35.3	41.0	0.0	45.9	13.1	Medicine	49.7	94.3	0.4	5.3	Jerry cans & plastic buckets	39.0	88.1	0.4	11.5
Beans	74.2	45.0	0.0	48.7	6.3	hospital /clinic	21.0	93.9	0.1	6.0	Enamel & metallic utensils	32.2	89.1	0.3	10.6
Groundnuts	41.9	69.9	0.1	25.9	4.2	traditional doctor	2.9	82.8	5.1	12.1	Switches, plugs, cables etc	2.3	88.4	0.4	11.2

Food, beverages & tobacco						Frequently consumed goods and services & non-durables					Semi-durable and durables				
	Share (%) consuming	% from:					Share (%) consuming	% from:				Share (%) consuming	% from:		
Item		Purchases	Away	Own	Gifts/free	Item		Purchases	Away	Own	Item		Purchases	Away	Own
Peas	9.6	39.1	0.0	28.1	32.8	combined (health	1.7	99.3	0.0	0.7	Others & repairs	2.8	94.4	0.0	5.6
Simsim	10.4	68.3	0.0	26.6	5.1	Others	16.6	95.9	0.9	3.3	School fees including PTA	44.2	95.4	0.0	4.6
Sugar	61.9	96.9	0.2	0.0	2.9	sports theatres	3.3	92.5	0.0	7.5	Boarding & lodging	4.0	95.5	0.0	4.5
Coffee	5.2	90.2	0.2	7.7	1.9	dry cleaning and	1.0	98.5	1.5	0.0	School uniforms	54.3	96.7	0.0	3.3
Tea	59.1	98.0	0.0	0.4	1.6	houseboys/girls,	2.8	94.2	0.8	5.0	Books & supplies	65.0	96.4	0.0	3.6
Salt	92.5	98.9	0.0	0.0	1.1	barber and beauty	43.3	91.4	2.3	6.3	Other education expenses	41.6	97.2	0.0	2.8
Soda	14.2	70.6	24.7	0.0	4.7	expenses in hotel	2.3	89.7	0.5	9.9	610	2.3	95.3	0.0	4.7
Beer	5.5	64.5	25.9	0.0	9.6						Expenditure on household functions	14.1	74.7	4.6	20.7
Other alcoholic	18.5	66.6	16.8	4.6	12.0						Insurance premiums	0.4	94.2	2.9	2.9
Other drinks	11.8	54.2	23.3	16.2	6.3						Other services	0.8	92.6	0.0	7.4
Cigarettes	18.7	81.8	4.7	4.9	8.5										
Rest food	17.8	30.0	55.7	1.9	12.5										
Other foods	13.4	50.1	10.9	15.6	23.4										

Source: Own calculations based on UNHS III
Notes: The shaded items do attract taxes.

Table A 2: Distribution of households typology by expenditure quintile, (%)

Household typology	All	Expenditure quintile					#households ('000)
		Q1	Q2	Q3	Q4	Q5	
Gender of head							
Female	26.9	17.8	16.6	17.7	21.4	26.5	1,408
Male	73.1	15.8	18.0	19.4	21.0	25.9	3,821
Sex composition							
Female majority	29.7	16.9	16.9	18.7	21.0	26.4	1,552
Male majority	20.1	9.2	12.1	15.1	20.3	43.4	1,050
Equal gender	50.2	18.8	20.3	20.6	21.4	18.9	2,627
Employment status							
Dual earners	54.0	18.2	20.4	21.4	21.5	18.5	2,826
Female breadwinner	21.1	19.0	16.7	18.7	19.0	26.5	1,104
Male breadwinner	16.0	7.8	9.3	11.4	20.8	50.7	836
No earning adult	8.9	13.7	17.7	17.9	24.3	26.6	463
With children							
Gender of head							
Female	26.3	21.2	19.0	18.8	20.5	20.6	1,142
Male	73.7	18.4	20.3	20.9	21.3	19.1	3,197
Sex composition							
Female majority	30.3	19.6	18.6	20.0	20.4	21.5	1,312
Male majority	14.1	14.1	17.7	19.1	22.1	27.0	613
Equal gender	55.6	20.1	21.3	20.9	21.1	16.6	2,414
Employment status							
Dual earners	61.6	19.2	21.2	21.7	20.9	17.0	2,672
Female breadwinner	22.2	21.6	18.8	20.2	19.3	20.3	961
Male breadwinner	10.3	12.9	14.2	15.5	25.5	31.9	446
No earning adult	6.0	20.3	21.6	15.8	21.2	21.2	260
With no children							
Gender of head							
Female	29.9	3.2	6.4	13.3	25.2	51.8	266
Male	70.1	2.6	6.0	11.5	19.4	60.6	624
Sex composition							
Female majority	27.0	2.6	7.5	11.9	24.4	53.7	240
Male majority	49.1	2.4	4.3	9.4	17.7	66.3	437
Equal gender	23.9	3.8	8.5	17.7	24.6	45.5	213
Employment status							
Dual earners	17.2	2.4	6.4	16.9	30.2	44.2	153
Female breadwinner	16.1	1.7	3.1	9.2	17.3	68.7	143
Male breadwinner	43.9	2.1	3.8	6.7	15.3	72.2	391
No earning adult	22.8	5.2	12.6	20.6	28.2	33.4	203
Total							*5,230*

Source: Own calculations based on UNHS III

Table A 3: Household composition by household typology

Household type	Children	Adults	All
	Mean (numbers)		
Gender of head			
Female	2.6	1.8	4.4
Male	3.1	2.4	5.5
Adult sex composition			
Female majority	3.1	2.2	5.3
Male majority	2.2	2.5	4.7
Equally dominated	3.2	2.1	5.3
Employment status			
Dual earners	3.7	2.6	6.3
Female breadwinner	2.9	1.8	4.7
Male breadwinner	1.5	1.8	3.4
None employed	1.6	1.4	3.0
	Percentage in total		
Gender of head			
Female	23.7	21.9	23.0
Male	76.3	78.1	77.0
Adult sex composition			
Female majority	31.1	28.9	30.2
Male majority	14.6	22.8	18.1
Equal gender	54.3	48.3	51.7
Employment status			
Dual earners	66.3	64.1	65.4
Female earners	20.8	16.8	19.1
Male earners	8.1	13.3	10.3
No earners	4.8	5.8	5.2

Source: Own calculations based on UNHS III

Table A 4: Incidence of non-zero tax by consumption category, %

		Place of residence		Gender of HH head	
Consumption category	All	Rural	Urban	Female	Male
Food	95.8	96.6	91.7	97.5	95.1
a) Processed foods	94.8	95.8	90.3	96.6	94.2
b) Sugar	61.7	58.1	78.7	60.6	62.1
c) Unprocessed foods	0.0	0.0	0.0	0.0	0.0
Meals out	0.0	0.0	0.0	0.0	0.0
Non-alcoholic beverages	66.6	63.0	83.9	64.4	67.4
Alcoholic beverages	19.4	19.4	19.4	10.4	22.7
a) Beer	5.2	4.0	11.1	3.1	6.0
b) Other alcoholic beverages	15.3	16.3	10.3	7.9	18.0
Tobacco & cigarettes	15.8	16.7	11.8	8.5	18.5
Clothing & footwear	93.4	93.2	93.9	90.2	94.5
a) Adults' clothing & footwear	86.2	86.0	87.1	78.1	89.2
b) Children's clothing & footwear	71.0	71.8	67.5	67.6	72.3
c) Others	36.7	36.0	40.1	34.0	37.7
Housing, water, electricity	21.9	12.1	67.9	22.4	21.7
a) Housing	0.0	0.0	0.0	0.0	0.0
b) Water & electricity	21.9	12.1	67.9	22.4	21.7
Fuel for house use	90.6	93.6	76.4	88.9	91.2
a) Paraffin/kerosene	90.5	93.5	76.2	88.7	91.1
b) Generator/lawn mower	0.3	0.3	0.6	0.3	0.4
c) Others	0.0	0.0	0.0	0.0	0.0
House furnishings, equipments & routine maintenance	81.4	81.7	79.9	77.7	82.8
Domestic services & household services	0.0	0.0	0.0	0.0	0.0
Health care	0.0	0.0	0.0	0.0	0.0
Transport	20.2	22.1	11.1	9.3	24.2
Fuel levy	45.4	40.8	67.1	40.8	47.1
Communication	37.6	31.3	67.0	28.8	40.8
Recreation and culture	7.0	4.8	17.4	4.1	8.0
Education	0.0	0.0	0.0	0.0	0.0
Personal care	0.0	0.0	0.0	0.0	0.0
Miscellaneous	99.7	99.7	100.0	99.5	99.8

Source: Own calculations based on UNHS III

Table A 5: Household with non-zero expenditures on selected taxable goods, %

	Rice	Bread	Cooking oil	Sugar	Salt	Soda	Beer	Other alcoholic	Cigarettes	Tobacco
All										
Quintile 1	5.6	2.3	50.2	31.8	95.2	8.1	0.5	21.1	6.9	17.6
Quintile 2	12.8	4.7	59.6	52.9	95.4	10.6	1.1	18.9	8.1	13.2
Quintile 3	20.3	13.3	62.5	63.1	94.9	17.3	2.6	19.0	8.3	10.2
Quintile 4	29.3	23.0	67.9	71.0	94.3	24.7	5.0	18.3	11.4	7.0
Quintile 5	44.3	40.9	70.7	77.7	85.5	43.6	13.0	10.0	9.0	3.4
Female headed										
Quintile 1	5.1	2.0	48.4	24.6	96.3	8.5	0.0	11.1	4.4	10.9
Quintile 2	9.7	5.1	60.0	51.4	95.3	9.7	0.3	11.2	3.6	7.1
Quintile 3	17.8	11.9	59.4	62.0	94.4	14.0	1.8	14.3	4.3	9.7
Quintile 4	29.4	20.3	64.1	68.1	94.4	15.6	2.8	7.4	4.4	4.8
Quintile 5	46.4	41.3	76.3	83.5	93.2	35.1	7.9	4.5	3.5	2.7
Male headed										
Quintile 1	5.8	2.4	51.0	34.8	94.8	7.9	0.7	25.3	7.9	20.4
Quintile 2	13.8	4.5	59.5	53.4	95.4	11.0	1.3	21.6	9.6	15.2
Quintile 3	21.2	13.7	63.6	63.5	95.1	18.4	2.8	20.6	9.7	10.4
Quintile 4	29.3	24.1	69.3	72.1	94.3	28.1	5.9	22.4	14.0	7.8
Quintile 5	43.5	40.7	68.6	75.5	82.6	46.8	14.9	12.1	11.0	3.6
All	24.7	19.2	63.3	61.7	92.5	23.0	5.2	16.8	8.9	9.5

Table A 6: Incidence of tax by gender based household typology by expenditure quintile, %

	Headship		Adult sex composition			Employment status				
	Female	Male	Female majority	Male majority	Equal gender	Dual earners	Female breadwinner	Male breadwinner	None-employed	ALL
All taxes										
Quintile 1	2.94	3.94	3.19	3.58	3.90	3.99	2.90	4.12	2.84	3.65
Quintile 2	3.50	4.48	3.75	3.86	4.56	4.39	3.49	5.83	3.30	4.23
Quintile 3	4.07	4.51	3.93	4.20	4.71	4.56	3.94	5.13	3.51	4.40
Quintile 4	4.24	5.28	4.26	5.04	5.41	5.12	4.33	6.32	3.55	5.00
Quintile 5	5.20	6.99	5.59	7.07	6.72	6.25	5.59	7.98	4.61	6.50
All	4.11	5.22	4.28	5.52	5.06	4.85	4.18	6.81	3.69	4.92
VAT										
Quintile 1	1.91	2.44	1.99	2.23	2.46	2.50	1.83	2.58	1.74	2.29
Quintile 2	2.30	2.75	2.42	2.36	2.81	2.75	2.29	3.29	2.02	2.64
Quintile 3	2.53	2.81	2.50	2.61	2.91	2.82	2.53	3.15	2.20	2.74
Quintile 4	2.62	3.12	2.65	2.80	3.25	3.04	2.79	3.62	2.09	2.99
Quintile 5	3.19	3.97	3.38	3.82	4.00	3.75	3.40	4.29	2.78	3.75
All	2.58	3.11	2.67	3.11	3.08	2.97	2.64	3.79	2.23	2.96
Excise duty										
Quintile 1	0.89	1.32	1.01	1.17	1.29	1.31	0.90	1.43	0.95	1.19
Quintile 2	0.94	1.44	1.03	1.34	1.45	1.34	0.93	2.27	1.08	1.31
Quintile 3	1.12	1.27	1.04	1.23	1.33	1.27	1.04	1.50	1.09	1.23
Quintile 4	1.06	1.50	0.98	1.70	1.48	1.35	0.99	2.05	1.18	1.38
Quintile 5	1.22	1.91	1.34	2.15	1.65	1.42	1.35	2.49	1.30	1.72
All	1.06	1.52	1.10	1.73	1.44	1.34	1.34	2.18	1.15	1.40
Fuel levy										
Quintile 1	0.13	0.18	0.18	0.18	0.16	0.18	0.16	0.11	0.16	0.17
Quintile 2	0.25	0.30	0.30	0.16	0.31	0.30	0.27	0.28	0.20	0.29
Quintile 3	0.41	0.43	0.38	0.35	0.47	0.47	0.36	0.48	0.22	0.43
Quintile 4	0.57	0.66	0.62	0.54	0.68	0.73	0.54	0.65	0.28	0.64
Quintile 5	0.78	1.11	0.87	1.09	1.07	1.09	0.84	1.20	0.53	1.02
All	0.47	0.59	0.52	0.67	0.54	0.55	0.47	0.83	0.31	0.56
Est. HH ('000)	1,408.5	3,820.8	1,552.4	1,049.8	2,627.1	2,825.8	1,104.1	836.3	463.1	5,229.3

Source: Own calculations based on UNHS III

Table A 7: Incidence of tax by gender of household head by presence of children, %

	Total tax		VAT		Excise duties		Fuel levy		
Quintile	Mean	Std err	Mean	Std err	Mean	Std err	Mean	Std err	HH ('000)
Male headed with children									
Quintile 1	3.95	0.10	2.46	0.06	1.31	0.05	0.19	0.02	586.8
Quintile 2	4.45	0.11	2.77	0.05	1.37	0.05	0.31	0.03	650.1
Quintile 3	4.55	0.09	2.86	0.07	1.26	0.03	0.44	0.03	668.8
Quintile 4	5.16	0.13	3.10	0.08	1.34	0.06	0.72	0.04	679.9
Quintile 5	6.53	0.16	3.86	0.08	1.56	0.10	1.11	0.05	611.3
All	*4.93*	*0.08*	*3.01*	*0.05*	*1.36*	*0.03*	*0.56*	*0.02*	3,196.8
Male headed without children									
Quintile 1	3.38	0.50	1.96	0.26	1.42	0.30	0.00	0.00	16.1
Quintile 2	5.04	0.70	2.40	0.27	2.60	0.47	0.04	0.02	37.4
Quintile 3	4.05	0.27	2.38	0.15	1.37	0.13	0.30	0.09	71.6
Quintile 4	5.96	0.27	3.27	0.14	2.38	0.18	0.32	0.07	120.9
Quintile 5	7.73	0.26	4.14	0.12	2.49	0.16	1.10	0.08	378.0
All	*6.69*	*0.18*	*3.61*	*0.09*	*2.32*	*0.11*	*0.77*	*0.06*	624.0
Female headed with children									
Quintile 1	2.97	0.11	1.94	0.06	0.89	0.06	0.14	0.03	242.2
Quintile 2	3.55	0.13	2.33	0.08	0.95	0.06	0.27	0.05	216.5
Quintile 3	4.04	0.13	2.56	0.09	1.06	0.06	0.42	0.06	214.5
Quintile 4	4.39	0.16	2.71	0.10	1.03	0.06	0.65	0.08	233.8
Quintile 5	4.64	0.19	2.95	0.12	0.96	0.05	0.73	0.06	235.4
All	*3.92*	*0.08*	*2.50*	*0.05*	*0.98*	*0.03*	*0.44*	*0.03*	1,142.4
Female headed without children									
Quintile 1	1.96	0.40	1.20	0.25	0.77	0.20	0.00	0.00	8.6
Quintile 2	2.87	0.39	2.00	0.26	0.86	0.16	0.01	0.01	17.1
Quintile 3	4.29	0.65	2.40	0.36	1.54	0.39	0.36	0.14	35.4
Quintile 4	3.73	0.27	2.30	0.16	1.16	0.13	0.27	0.08	67.2
Quintile 5	6.16	0.32	3.60	0.15	1.68	0.18	0.88	0.10	137.7
All	*4.95*	*0.22*	*2.93*	*0.12*	*1.45*	*0.11*	*0.57*	*0.06*	266.1

Source: Own calculations based on UNHS III

Table A 8: Incidence of tax by gender dominance by presence of children, %

	Total tax		VAT		Excise duties		Fuel levy		HH
Quintile	Mean	Std. err	Mean	Std. err	Mean	Std. err	Mean	Std. err	('000)
				Female majority with children					
Quintile 1	3.23	0.13	2.02	0.07	1.16	0.08	0.19	0.03	256.5
Quintile 2	3.80	0.14	2.45	0.09	1.25	0.08	0.32	0.05	244.2
Quintile 3	3.97	0.13	2.56	0.08	1.21	0.06	0.40	0.05	262.1
Quintile 4	4.42	0.16	2.76	0.10	1.15	0.05	0.70	0.08	268.0
Quintile 5	5.25	0.19	3.24	0.12	1.29	0.06	0.85	0.07	281.6
All	*4.16*	*0.09*	*2.62*	*0.05*	*1.04*	*0.03*	*0.50*	*0.03*	1,312.4
				Female majority without children					
Quintile 1	1.64	0.44	1.10	0.33	0.54	0.13	0.00	0.00	6.3
Quintile 2	3.10	0.37	2.05	0.24	1.10	0.20	0.06	0.04	17.9
Quintile 3	3.55	0.65	1.99	0.25	1.63	0.55	0.20	0.12	28.6
Quintile 4	3.50	0.26	2.19	0.17	1.21	0.14	0.28	0.09	58.5
Quintile 5	6.35	0.32	3.68	0.16	1.95	0.19	0.90	0.11	128.8
All	*4.95*	*0.22*	*2.92*	*0.12*	*1.45*	*0.12*	*0.58*	*0.06*	240.0
				Male majority with children					
Quintile 1	3.59	0.19	2.26	0.11	1.33	0.13	0.20	0.06	86.2
Quintile 2	3.58	0.19	2.36	0.12	1.25	0.10	0.19	0.04	108.4
Quintile 3	4.27	0.19	2.68	0.12	1.50	0.12	0.36	0.06	117.2
Quintile 4	4.53	0.28	2.64	0.14	1.41	0.14	0.67	0.08	135.6
Quintile 5	5.54	0.20	3.23	0.12	1.40	0.10	1.03	0.09	165.3
All	*4.45*	*0.10*	*2.70*	*0.06*	*1.18*	*0.04*	*0.56*	*0.04*	612.7
				Male majority without children					
Quintile 1	3.49	0.64	1.96	0.35	1.70	0.42	0.00	0.00	10.4
Quintile 2	5.53	1.16	2.37	0.45	3.58	0.94	0.00	0.00	18.6
Quintile 3	3.99	0.41	2.43	0.31	1.45	0.19	0.33	0.10	40.9
Quintile 4	5.94	0.35	3.08	0.19	3.03	0.27	0.30	0.08	77.3
Quintile 5	7.94	0.32	4.16	0.13	2.97	0.22	1.11	0.11	290.0
All	*7.01*	*0.24*	*3.68*	*0.11*	*2.50*	*0.14*	*0.82*	*0.07*	437.1
				Equal gender with children					
Quintile 1	3.91	0.10	2.47	0.06	1.50	0.06	0.00	0.00	486.3
Quintile 2	4.57	0.13	2.82	0.06	1.70	0.08	0.32	0.03	514.0
Quintile 3	4.70	0.12	2.93	0.07	1.56	0.06	0.47	0.03	503.9
Quintile 4	5.36	0.15	3.22	0.08	1.67	0.08	0.71	0.05	510.1
Quintile 5	6.73	0.23	4.02	0.11	1.79	0.15	1.08	0.07	399.8
All	*4.99*	*0.09*	*3.05*	*0.05*	*1.40*	*0.04*	*0.53*	*0.02*	2,414.1
				Equal gender without children					
Quintile 1	3.07	0.78	1.81	0.41	1.32	0.49	0.00	0.00	8.0
Quintile 2	4.40	0.85	2.39	0.36	2.55	0.74	0.03	0.02	18.1
Quintile 3	4.73	0.50	2.64	0.23	2.01	0.38	0.40	0.16	37.6
Quintile 4	5.89	0.44	3.51	0.19	2.46	0.33	0.32	0.10	52.3
Quintile 5	6.71	0.31	3.91	0.18	1.99	0.17	0.99	0.09	96.9
All	*5.83*	*0.23*	*3.38*	*0.12*	*1.84*	*0.13*	*0.61*	*0.06*	212.9

Source: Own calculations based on UNHS III

Table A 9: Incidence of tax by employment status by presence of children, %

	Total tax		VAT		Excise duties		Fuel levy		HH
	Mean	Std. err	Mean	Std. err	Mean	Std. err	Mean	Std. err	('000)
Dual earners with children									
Quintile 1	4.00	0.11	2.51	0.06	1.31	0.06	0.18	0.02	511.7
Quintile 2	4.39	0.11	2.75	0.05	1.33	0.06	0.31	0.03	567.0
Quintile 3	4.59	0.11	2.84	0.07	1.27	0.04	0.47	0.03	579.6
Quintile 4	5.05	0.11	3.00	0.06	1.30	0.05	0.75	0.05	559.7
Quintile 5	6.16	0.13	3.73	0.08	1.33	0.06	1.09	0.06	454.4
All	*4.80*	*0.07*	*2.94*	*0.04*	*1.31*	*0.02*	*0.55*	*0.02*	2,672.4
Dual earners without children									
Quintile 1	2.82	0.49	1.88	0.30	0.94	0.27	0.00	0.00	3.6
Quintile 2	4.37	0.78	2.55	0.33	1.77	0.46	0.05	0.04	9.7
Quintile 3	3.92	0.37	2.41	0.20	1.21	0.18	0.30	0.18	25.9
Quintile 4	5.94	0.47	3.47	0.26	2.00	0.28	0.48	0.12	46.4
Quintile 5	6.86	0.34	3.88	0.18	1.99	0.20	0.99	0.10	67.7
All	*5.83*	*0.23*	*3.37*	*0.12*	*1.82*	*0.12*	*0.64*	*0.07*	153.4
Female breadwinner with children									
Quintile 1	2.91	0.12	1.84	0.07	0.90	0.06	0.17	0.04	207.2
Quintile 2	3.52	0.17	2.30	0.11	0.94	0.07	0.28	0.05	180.3
Quintile 3	3.87	0.15	2.52	0.10	0.97	0.06	0.38	0.05	193.7
Quintile 4	4.34	0.16	2.81	0.10	0.95	0.06	0.58	0.06	185.1
Quintile 5	4.88	0.20	3.10	0.13	1.00	0.06	0.77	0.07	194.8
All	*3.89*	*0.09*	*2.51*	*0.05*	*0.95*	*0.03*	*0.43*	*0.03*	961.2
Female breadwinner without children									
Quintile 1	1.32	0.24	0.87	0.21	0.46	0.15	0.00	0.00	2.4
Quintile 2	2.45	0.52	1.75	0.34	0.61	0.15	0.08	0.06	4.5
Quintile 3	4.90	1.08	2.72	0.40	2.11	0.74	0.08	0.05	13.2
Quintile 4	4.25	0.35	2.65	0.21	1.31	0.15	0.29	0.11	24.7
Quintile 5	7.02	0.40	4.01	0.18	2.03	0.25	0.98	0.12	98.2
All	*6.11*	*0.32*	*3.53*	*0.15*	*1.84*	*0.19*	*0.73*	*0.09*	142.9
Male breadwinner with children									
Quintile 1	4.16	0.32	2.66	0.20	1.38	0.16	0.12	0.06	57.4
Quintile 2	5.45	0.42	2.16	0.13	1.82	0.21	0.33	0.08	63.2
Quintile 3	5.23	0.23	2.27	0.23	1.47	0.11	0.40	0.10	69.1
Quintile 4	6.43	0.40	3.80	0.20	1.76	0.23	0.86	0.11	113.8
Quintile 5	7.74	0.50	4.27	0.17	2.27	0.36	1.18	0.11	142.4
All	*6.23*	*0.23*	*3.66*	*0.11*	*1.84*	*0.14*	*0.73*	*0.06*	445.8
Male breadwinner without children									
Quintile 1	3.83	0.77	2.00	0.41	1.83	0.50	0.00	0.00	8.0
Quintile 2	7.47	1.50	3.25	0.57	4.17	1.03	0.05	0.05	14.8
Quintile 3	4.88	0.52	2.62	0.30	1.59	0.28	0.67	0.22	26.2
Quintile 4	6.11	0.40	3.28	0.19	2.59	0.26	0.24	0.08	59.7
Quintile 5	8.10	0.32	4.29	0.13	2.60	0.21	1.20	0.11	281.8
All	*7.46*	*0.25*	*3.94*	*0.11*	*2.57*	*0.15*	*0.95*	*0.08*	390.5
None employed with children									
Quintile 1	2.90	0.34	1.77	0.19	0.95	0.16	0.19	0.09	52.7
Quintile 2	3.49	0.21	2.16	0.13	1.03	0.09	0.30	0.11	56.1
Quintile 3	3.47	0.29	2.27	0.23	0.94	0.11	0.26	0.11	40.9
Quintile 4	3.13	0.33	1.95	0.19	0.84	0.14	0.34	0.10	55.0
Quintile 5	4.23	0.46	2.70	0.28	0.96	0.18	0.57	0.12	55.0
All	*3.45*	*0.20*	*2.17*	*0.11*	*0.94*	*0.07*	*0.34*	*0.05*	259.8
None-employed without children									
Quintile 1	2.54	0.64	1.58	0.38	0.97	0.29	0.00	0.00	10.6
Quintile 2	2.90	0.33	1.70	0.19	1.20	0.19	0.00	0.00	25.6
Quintile 3	3.55	0.50	2.12	0.31	1.24	0.24	0.19	0.09	41.8
Quintile 4	3.95	0.41	2.22	0.21	1.51	0.24	0.23	0.09	57.3
Quintile 5	4.92	0.37	2.84	0.23	1.58	0.20	0.50	0.11	68.0
All	*3.99*	*0.21*	*2.31*	*0.12*	*1.41*	*0.11*	*0.27*	*0.05*	203.3

Source: Own calculations based on UNHS III

Table A 10: Tax incidence by consumption category by gender of household head and quintile, %

							Female headed				Male headed			
	All		Female headed		Male headed		With children		Without children		With children		Without children	
Consumption category	Mean	s.e	Mean	s.e	Mean	s.e	Mean	s.e	Mean	s.e	Mean	s.e	Mean	s.e
All foods														
Quintile 1	0.75	0.03	0.66	0.05	0.79	0.04	0.67	0.05	0.20	0.05	0.80	0.04	0.41	0.22
Quintile 2	0.99	0.04	1.02	0.06	0.98	0.04	1.02	0.07	1.01	0.30	1.01	0.05	0.46	0.07
Quintile 3	1.08	0.03	1.05	0.06	1.09	0.04	1.11	0.06	0.69	0.16	1.11	0.04	0.88	0.11
Quintile 4	1.10	0.03	1.14	0.05	1.09	0.04	1.22	0.06	0.84	0.09	1.12	0.04	0.95	0.09
Quintile 5	0.96	0.02	1.09	0.04	0.92	0.03	1.07	0.05	1.11	0.07	1.02	0.03	0.75	0.04
All	*0.99*	*0.02*	*1.00*	*0.03*	*0.98*	*0.02*	*1.02*	*0.03*	*0.95*	*0.05*	*1.02*	*0.02*	*0.78*	*0.04*
a) Processed foods														
Quintile 1	0.47	0.02	0.43	0.04	0.49	0.03	0.44	0.04	0.18	0.04	0.50	0.03	0.21	0.06
Quintile 2	0.52	0.03	0.51	0.04	0.53	0.04	0.50	0.04	0.63	0.26	0.54	0.04	0.24	0.04
Quintile 3	0.57	0.02	0.53	0.04	0.58	0.02	0.56	0.04	0.31	0.09	0.59	0.03	0.52	0.08
Quintile 4	0.60	0.02	0.60	0.04	0.60	0.02	0.67	0.04	0.36	0.05	0.62	0.03	0.48	0.05
Quintile 5	0.56	0.02	0.62	0.03	0.54	0.02	0.64	0.04	0.60	0.05	0.61	0.02	0.42	0.03
All	*0.55*	*0.01*	*0.55*	*0.02*	*0.55*	*0.01*	*0.56*	*0.02*	*0.49*	*0.04*	*0.57*	*0.02*	*0.43*	*0.02*
b) Sugar														
Quintile 1	0.28	0.02	0.22	0.02	0.30	0.02	0.23	0.02	0.02	0.02	0.30	0.02	0.20	0.16
Quintile 2	0.47	0.02	0.51	0.04	0.46	0.02	0.52	0.04	0.38	0.16	0.47	0.02	0.22	0.06
Quintile 3	0.51	0.02	0.52	0.03	0.51	0.02	0.55	0.03	0.38	0.09	0.53	0.02	0.36	0.05
Quintile 4	0.50	0.02	0.54	0.03	0.49	0.02	0.55	0.03	0.48	0.07	0.49	0.02	0.47	0.06
Quintile 5	0.40	0.01	0.47	0.02	0.38	0.01	0.44	0.02	0.52	0.04	0.41	0.01	0.33	0.02
All	*0.44*	*0.01*	*0.46*	*0.01*	*0.43*	*0.01*	*0.45*	*0.02*	*0.47*	*0.03*	*0.44*	*0.01*	*0.35*	*0.02*
c) Unprocessed foods														
Quintile 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quintile 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quintile 3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quintile 4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quintile 5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
All	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Meals out														
Quintile 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quintile 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quintile 3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quintile 4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quintile 5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
All	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*

	All		Female headed		Male headed		Female headed				Male headed			
							With children		Without children		With children		Without children	
Consumption category	Mean	s.e	Mean	s.e	Mean	s.e	Mean	s.e	Mean	s.e	Mean	s.e	Mean	s.e
Non-Alcoholic beverages														
Quintile 1	0.13	0.02	0.15	0.04	0.13	0.02	0.15	0.04	0.02	0.02	0.13	0.02	0.09	0.06
Quintile 2	0.16	0.02	0.13	0.02	0.17	0.03	0.13	0.02	0.05	0.03	0.18	0.03	0.06	0.02
Quintile 3	0.19	0.01	0.17	0.02	0.19	0.02	0.18	0.03	0.10	0.03	0.19	0.02	0.20	0.06
Quintile 4	0.23	0.02	0.16	0.02	0.26	0.02	0.17	0.02	0.10	0.02	0.24	0.02	0.35	0.09
Quintile 5	0.43	0.02	0.30	0.03	0.48	0.03	0.26	0.03	0.37	0.06	0.32	0.02	0.74	0.07
All	*0.25*	*0.01*	*0.19*	*0.01*	*0.27*	*0.01*	*0.18*	*0.01*	*0.24*	*0.04*	*0.21*	*0.01*	*0.55*	*0.05*
Alcoholic beverages														
Quintile 1	0.40	0.04	0.17	0.05	0.50	0.05	0.17	0.05	0.04	0.04	0.51	0.05	0.26	0.20
Quintile 2	0.50	0.05	0.21	0.04	0.60	0.06	0.22	0.05	0.14	0.10	0.55	0.06	1.41	0.51
Quintile 3	0.46	0.04	0.33	0.07	0.51	0.04	0.24	0.06	0.91	0.40	0.51	0.04	0.47	0.11
Quintile 4	0.55	0.05	0.29	0.06	0.65	0.06	0.30	0.07	0.25	0.10	0.55	0.07	1.22	0.20
Quintile 5	0.87	0.08	0.46	0.11	1.03	0.10	0.22	0.05	0.86	0.27	0.77	0.12	1.46	0.16
All	*0.59*	*0.03*	*0.31*	*0.04*	*0.69*	*0.03*	*0.23*	*0.03*	*0.64*	*0.15*	*0.58*	*0.03*	*1.26*	*0.11*
a) Beer														
Quintile 1	0.02	0.01	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.00
Quintile 2	0.04	0.02	0.01	0.01	0.06	0.02	0.01	0.01	0.00	0.00	0.06	0.02	0.00	0.00
Quintile 3	0.09	0.02	0.06	0.02	0.10	0.02	0.07	0.03	0.00	0.00	0.11	0.03	0.02	0.02
Quintile 4	0.18	0.03	0.10	0.03	0.20	0.05	0.12	0.04	0.05	0.05	0.23	0.05	0.09	0.05
Quintile 5	0.63	0.08	0.39	0.10	0.72	0.10	0.18	0.04	0.77	0.26	0.64	0.12	0.85	0.14
All	*0.23*	*0.02*	*0.14*	*0.03*	*0.26*	*0.03*	*0.08*	*0.01*	*0.41*	*0.14*	*0.21*	*0.03*	*0.53*	*0.08*
b) Other alcoholic														
Quintile 1	0.39	0.04	0.17	0.05	0.48	0.05	0.17	0.05	0.04	0.04	0.48	0.05	0.26	0.20
Quintile 2	0.46	0.04	0.20	0.04	0.54	0.06	0.20	0.05	0.14	0.10	0.49	0.05	1.41	0.51
Quintile 3	0.37	0.03	0.28	0.07	0.40	0.04	0.17	0.05	0.91	0.40	0.40	0.04	0.45	0.11
Quintile 4	0.38	0.03	0.18	0.05	0.45	0.04	0.18	0.05	0.20	0.09	0.33	0.03	1.14	0.20
Quintile 5	0.24	0.03	0.06	0.02	0.31	0.04	0.04	0.02	0.10	0.04	0.13	0.02	0.61	0.09
All	*0.36*	*0.02*	*0.17*	*0.02*	*0.43*	*0.02*	*0.15*	*0.02*	*0.23*	*0.06*	*0.37*	*0.02*	*0.73*	*0.07*
Tobacco & cigarettes														
Quintile 1	0.36	0.04	0.22	0.05	0.42	0.05	0.21	0.05	0.40	0.20	0.41	0.05	0.73	0.35
Quintile 2	0.38	0.04	0.16	0.04	0.46	0.05	0.16	0.04	0.23	0.14	0.40	0.05	1.56	0.43
Quintile 3	0.26	0.03	0.25	0.06	0.26	0.03	0.20	0.06	0.55	0.24	0.25	0.03	0.36	0.10
Quintile 4	0.33	0.03	0.14	0.03	0.40	0.04	0.10	0.03	0.29	0.10	0.29	0.04	1.05	0.17
Quintile 5	0.30	0.04	0.09	0.03	0.38	0.05	0.05	0.02	0.16	0.07	0.23	0.04	0.62	0.10
All	*0.32*	*0.02*	*0.16*	*0.02*	*0.38*	*0.02*	*0.14*	*0.02*	*0.26*	*0.06*	*0.32*	*0.02*	*0.73*	*0.08*

	All		Female headed		Male headed		Female headed				Male headed			
							With children		Without children		With children		Without children	
Consumption category	Mean	s.e	Mean	s.e	Mean	s.e	Mean	s.e	Mean	s.e	Mean	s.e	Mean	s.e
Clothing & footwear														
Quintile 1	0.46	0.01	0.38	0.02	0.49	0.02	0.38	0.02	0.30	0.09	0.49	0.02	0.31	0.10
Quintile 2	0.52	0.01	0.44	0.03	0.55	0.02	0.46	0.03	0.17	0.06	0.56	0.02	0.29	0.04
Quintile 3	0.52	0.01	0.43	0.03	0.55	0.02	0.46	0.04	0.25	0.04	0.57	0.02	0.36	0.05
Quintile 4	0.54	0.01	0.46	0.02	0.57	0.02	0.49	0.02	0.38	0.06	0.59	0.02	0.44	0.03
Quintile 5	0.58	0.02	0.53	0.02	0.60	0.02	0.48	0.02	0.60	0.05	0.63	0.02	0.55	0.03
All	*0.53*	*0.01*	*0.45*	*0.01*	*0.56*	*0.01*	*0.45*	*0.01*	*0.46*	*0.03*	*0.57*	*0.01*	*0.48*	*0.02*
a) Adults' clothing, footwear														
Quintile 1	0.27	0.01	0.20	0.01	0.31	0.01	0.20	0.01	0.18	0.06	0.31	0.01	0.31	0.10
Quintile 2	0.33	0.01	0.24	0.02	0.36	0.01	0.24	0.03	0.15	0.06	0.37	0.01	0.26	0.04
Quintile 3	0.34	0.01	0.26	0.03	0.37	0.01	0.27	0.03	0.20	0.04	0.37	0.01	0.33	0.04
Quintile 4	0.36	0.01	0.29	0.02	0.39	0.01	0.28	0.01	0.31	0.05	0.39	0.01	0.42	0.03
Quintile 5	0.42	0.01	0.37	0.02	0.45	0.01	0.29	0.02	0.50	0.05	0.41	0.01	0.50	0.03
All	*0.35*	*0.01*	*0.28*	*0.01*	*0.38*	*0.01*	*0.25*	*0.01*	*0.38*	*0.03*	*0.37*	*0.01*	*0.44*	*0.02*
b) Children's clothing, footwear														
Quintile 1	0.15	0.01	0.15	0.01	0.15	0.01	0.15	0.01	0.05	0.04	0.15	0.01	0.00	0.00
Quintile 2	0.16	0.01	0.16	0.01	0.15	0.01	0.18	0.01	0.01	0.01	0.16	0.01	0.01	0.01
Quintile 3	0.14	0.01	0.14	0.01	0.15	0.01	0.16	0.01	0.02	0.02	0.16	0.01	0.02	0.01
Quintile 4	0.14	0.00	0.13	0.01	0.14	0.01	0.17	0.01	0.01	0.00	0.17	0.01	0.01	0.00
Quintile 5	0.12	0.01	0.11	0.01	0.12	0.01	0.15	0.01	0.03	0.01	0.18	0.01	0.02	0.01
All	*0.14*	*0.00*	*0.13*	*0.00*	*0.14*	*0.00*	*0.16*	*0.00*	*0.02*	*0.01*	*0.16*	*0.00*	*0.02*	*0.00*
c) Others														
Quintile 1	0.02	0.00	0.02	0.00	0.02	0.00	0.02	0.00	0.02	0.01	0.02	0.00	0.00	0.00
Quintile 2	0.02	0.00	0.02	0.00	0.02	0.00	0.03	0.00	0.01	0.00	0.02	0.00	0.01	0.00
Quintile 3	0.02	0.00	0.02	0.00	0.02	0.00	0.02	0.00	0.02	0.01	0.03	0.00	0.01	0.01
Quintile 4	0.02	0.00	0.02	0.00	0.02	0.00	0.02	0.00	0.02	0.00	0.02	0.00	0.01	0.00
Quintile 5	0.03	0.00	0.03	0.00	0.02	0.00	0.03	0.00	0.04	0.01	0.02	0.00	0.02	0.00
All	*0.02*	*0.00*	*0.03*	*0.00*	*0.02*	*0.00*	*0.02*	*0.00*	*0.03*	*0.00*	*0.02*	*0.00*	*0.02*	*0.00*
Housing, water, electricity														
Quintile 1	0.04	0.01	0.02	0.01	0.04	0.01	0.03	0.01	0.00	0.00	0.04	0.01	0.01	0.01
Quintile 2	0.04	0.01	0.06	0.01	0.03	0.01	0.06	0.01	0.01	0.01	0.04	0.01	0.00	0.00
Quintile 3	0.07	0.01	0.10	0.02	0.06	0.01	0.10	0.02	0.05	0.04	0.06	0.01	0.05	0.02
Quintile 4	0.11	0.01	0.12	0.02	0.10	0.02	0.14	0.03	0.07	0.02	0.11	0.02	0.07	0.02
Quintile 5	0.25	0.02	0.24	0.02	0.25	0.02	0.23	0.03	0.27	0.04	0.26	0.02	0.25	0.03
All	*0.11*	*0.01*	*0.12*	*0.01*	*0.11*	*0.01*	*0.11*	*0.01*	*0.17*	*0.02*	*0.10*	*0.01*	*0.17*	*0.02*

	All		Female headed		Male headed		Female headed				Male headed			
							With children		Without children		With children		Without children	
Consumption category	Mean	s.e	Mean	s.e	Mean	s.e	Mean	s.e	Mean	s.e	Mean	s.e	Mean	s.e
a) Housing														
Quintile 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quintile 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quintile 3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quintile 4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quintile 5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
All	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
b) Water & electricity														
Quintile 1	0.04	0.01	0.02	0.01	0.04	0.01	0.03	0.01	0.00	0.00	0.04	0.01	0.01	0.01
Quintile 2	0.04	0.01	0.06	0.01	0.03	0.01	0.06	0.01	0.01	0.01	0.04	0.01	0.00	0.00
Quintile 3	0.07	0.01	0.10	0.02	0.06	0.01	0.10	0.02	0.05	0.04	0.06	0.01	0.05	0.02
Quintile 4	0.11	0.01	0.12	0.02	0.10	0.02	0.14	0.03	0.07	0.02	0.11	0.02	0.07	0.02
Quintile 5	0.25	0.02	0.24	0.02	0.25	0.02	0.23	0.03	0.27	0.04	0.26	0.02	0.25	0.03
All	*0.11*	*0.01*	*0.12*	*0.01*	*0.11*	*0.01*	*0.11*	*0.01*	*0.17*	*0.02*	*0.10*	*0.01*	*0.17*	*0.02*
Fuel for house use														
Quintile 1	0.21	0.01	0.19	0.01	0.21	0.01	0.18	0.01	0.22	0.06	0.21	0.01	0.33	0.08
Quintile 2	0.19	0.00	0.19	0.01	0.18	0.01	0.19	0.01	0.18	0.03	0.18	0.01	0.21	0.03
Quintile 3	0.18	0.00	0.19	0.01	0.18	0.01	0.18	0.01	0.21	0.02	0.17	0.01	0.27	0.02
Quintile 4	0.16	0.00	0.19	0.01	0.15	0.00	0.16	0.01	0.30	0.04	0.13	0.01	0.21	0.01
Quintile 5	0.13	0.01	0.13	0.01	0.13	0.01	0.11	0.01	0.17	0.02	0.11	0.01	0.17	0.03
All	*0.17*	*0.00*	*0.17*	*0.00*	*0.17*	*0.00*	*0.16*	*0.00*	*0.21*	*0.01*	*0.16*	*0.00*	*0.20*	*0.02*
a) Paraffin														
Quintile 1	0.20	0.01	0.18	0.01	0.21	0.01	0.18	0.01	0.22	0.06	0.21	0.01	0.33	0.08
Quintile 2	0.19	0.00	0.19	0.01	0.18	0.01	0.19	0.01	0.18	0.03	0.18	0.01	0.21	0.03
Quintile 3	0.18	0.00	0.18	0.01	0.18	0.01	0.18	0.01	0.21	0.02	0.17	0.00	0.27	0.02
Quintile 4	0.15	0.00	0.19	0.01	0.14	0.00	0.16	0.01	0.30	0.04	0.13	0.00	0.21	0.01
Quintile 5	0.12	0.01	0.13	0.01	0.12	0.01	0.11	0.01	0.17	0.02	0.10	0.01	0.15	0.01
All	*0.16*	*0.00*	*0.17*	*0.00*	*0.16*	*0.00*	*0.16*	*0.00*	*0.21*	*0.01*	*0.16*	*0.00*	*0.18*	*0.01*
b) Generator/mowers														
Quintile 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quintile 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quintile 3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quintile 4	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Quintile 5	0.01	0.01	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.02	0.02
All	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.01*	*0.01*

Consumption category	All		Female headed		Male headed		Female headed				Male headed			
							With children		Without children		With children		Without children	
	Mean	s.e	Mean	s.e	Mean	s.e	Mean	s.e	Mean	s.e	Mean	s.e	Mean	s.e
c) Others														
Quintile 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quintile 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quintile 3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quintile 4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quintile 5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
All	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Furnishings, equip., maintenance														
Quintile 1	0.23	0.01	0.22	0.02	0.23	0.01	0.22	0.02	0.14	0.06	0.23	0.01	0.32	0.16
Quintile 2	0.23	0.01	0.23	0.02	0.23	0.01	0.21	0.02	0.47	0.16	0.23	0.01	0.21	0.05
Quintile 3	0.25	0.01	0.25	0.02	0.25	0.01	0.26	0.03	0.20	0.05	0.25	0.01	0.25	0.04
Quintile 4	0.26	0.01	0.23	0.03	0.28	0.01	0.23	0.03	0.21	0.05	0.28	0.02	0.25	0.03
Quintile 5	0.40	0.02	0.35	0.04	0.42	0.03	0.33	0.04	0.40	0.06	0.44	0.04	0.38	0.04
All	*0.29*	*0.01*	*0.26*	*0.01*	*0.29*	*0.01*	*0.25*	*0.01*	*0.32*	*0.04*	*0.29*	*0.01*	*0.33*	*0.03*
Domestic services, household services														
Quintile 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quintile 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quintile 3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quintile 4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quintile 5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
All	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Health care														
Quintile 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quintile 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quintile 3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quintile 4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quintile 5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
All	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Transport														
Quintile 1	0.10	0.01	0.05	0.02	0.12	0.01	0.05	0.02	0.00	0.00	0.12	0.01	0.00	0.00
Quintile 2	0.14	0.01	0.06	0.01	0.17	0.02	0.06	0.01	0.00	0.00	0.18	0.02	0.12	0.09
Quintile 3	0.14	0.01	0.07	0.01	0.16	0.01	0.07	0.02	0.04	0.03	0.17	0.02	0.07	0.03
Quintile 4	0.15	0.01	0.06	0.01	0.18	0.02	0.06	0.01	0.05	0.03	0.19	0.02	0.12	0.03
Quintile 5	0.24	0.02	0.09	0.03	0.29	0.03	0.13	0.05	0.03	0.01	0.36	0.04	0.19	0.03
All	*0.16*	*0.01*	*0.07*	*0.01*	*0.20*	*0.01*	*0.07*	*0.01*	*0.03*	*0.01*	*0.20*	*0.01*	*0.15*	*0.02*

	All		Female headed		Male headed		Female headed				Male headed			
							With children		Without children		With children		Without children	
Consumption category	Mean	s.e	Mean	s.e	Mean	s.e	Mean	s.e	Mean	s.e	Mean	s.e	Mean	s.e
Fuel levy														
Quintile 1	0.17	0.02	0.13	0.03	0.18	0.02	0.14	0.03	0.00	0.00	0.19	0.02	0.00	0.00
Quintile 2	0.29	0.02	0.25	0.04	0.30	0.02	0.27	0.05	0.01	0.01	0.31	0.03	0.04	0.02
Quintile 3	0.43	0.03	0.41	0.05	0.43	0.03	0.42	0.06	0.36	0.14	0.44	0.03	0.30	0.09
Quintile 4	0.64	0.03	0.57	0.06	0.66	0.04	0.65	0.08	0.27	0.08	0.72	0.04	0.32	0.07
Quintile 5	1.02	0.04	0.78	0.06	1.11	0.05	0.73	0.06	0.88	0.10	1.11	0.05	1.10	0.08
All	*0.56*	*0.02*	*0.47*	*0.03*	*0.59*	*0.02*	*0.44*	*0.03*	*0.57*	*0.06*	*0.56*	*0.02*	*0.77*	*0.06*
Communication														
Quintile 1	0.03	0.00	0.01	0.00	0.04	0.01	0.01	0.00	0.00	0.00	0.04	0.01	0.00	0.00
Quintile 2	0.06	0.01	0.03	0.01	0.07	0.01	0.04	0.01	0.00	0.00	0.07	0.01	0.03	0.02
Quintile 3	0.12	0.01	0.06	0.01	0.14	0.02	0.07	0.01	0.04	0.02	0.14	0.02	0.10	0.04
Quintile 4	0.21	0.02	0.13	0.02	0.24	0.02	0.15	0.02	0.04	0.02	0.26	0.02	0.10	0.03
Quintile 5	0.60	0.03	0.39	0.04	0.68	0.03	0.32	0.03	0.50	0.07	0.66	0.04	0.70	0.05
All	*0.24*	*0.01*	*0.15*	*0.01*	*0.27*	*0.02*	*0.12*	*0.01*	*0.28*	*0.04*	*0.24*	*0.01*	*0.46*	*0.04*
Recreation & culture														
Quintile 1	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quintile 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quintile 3	0.01	0.01	0.03	0.03	0.01	0.00	0.00	0.00	0.19	0.18	0.01	0.00	0.00	0.00
Quintile 4	0.02	0.00	0.01	0.00	0.03	0.01	0.01	0.01	0.01	0.01	0.03	0.01	0.01	0.01
Quintile 5	0.08	0.01	0.06	0.02	0.08	0.01	0.08	0.03	0.01	0.01	0.08	0.01	0.09	0.02
All	*0.03*	*0.00*	*0.02*	*0.01*	*0.03*	*0.00*	*0.02*	*0.01*	*0.03*	*0.03*	*0.03*	*0.00*	*0.06*	*0.01*
Education														
Quintile 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quintile 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quintile 3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quintile 4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quintile 5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
All	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Personal care														
Quintile 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quintile 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quintile 3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quintile 4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quintile 5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
All	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*

	All		Female headed		Male headed		Female headed				Male headed			
							With children		Without children		With children		Without children	
Consumption category	Mean	s.e	Mean	s.e	Mean	s.e	Mean	s.e	Mean	s.e	Mean	s.e	Mean	s.e
Miscellaneous														
Quintile 1	0.77	0.02	0.75	0.03	0.78	0.02	0.75	0.03	0.64	0.19	0.78	0.02	0.92	0.23
Quintile 2	0.72	0.01	0.72	0.02	0.72	0.01	0.73	0.03	0.59	0.10	0.73	0.01	0.66	0.06
Quintile 3	0.69	0.02	0.73	0.03	0.67	0.02	0.74	0.03	0.71	0.06	0.66	0.02	0.73	0.04
Quintile 4	0.70	0.02	0.76	0.03	0.67	0.02	0.72	0.03	0.91	0.06	0.64	0.02	0.86	0.06
Quintile 5	0.63	0.02	0.69	0.03	0.61	0.02	0.62	0.03	0.79	0.05	0.53	0.02	0.73	0.04
All	*0.69*	*0.01*	*0.73*	*0.01*	*0.68*	*0.01*	*0.71*	*0.01*	*0.79*	*0.03*	*0.67*	*0.01*	*0.76*	*0.03*

Source: Own calculations based on UNHS III
Notes: s.e refers to standard errors

Table A 11: Incidence of indirect tax by employment status, presence of children and quintile, %

	Expenditure quintile						Expenditure quintile						Expenditure quintile					
Consumption category	1	2	3	4	5	All	1	2	3	4	5	All	1	2	3	4	5	All
	All male breadwinners						**Male breadwinner with children**						**Male breadwinners without children**					
Food	0.84	1.16	1.33	1.26	0.83	1.01	0.93	1.32	1.50	1.45	1.08	1.25	0.20	0.44	0.88	0.88	0.71	0.73
a) Processed foods	0.58	0.71	0.71	0.73	0.50	0.60	0.64	0.85	0.79	0.85	0.68	0.76	0.14	0.12	0.51	0.49	0.41	0.41
b) Sugar	0.25	0.45	0.62	0.53	0.33	0.41	0.28	0.48	0.71	0.60	0.39	0.49	0.06	0.32	0.37	0.40	0.30	0.31
c) Unprocessed foods	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Meals out	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Non-alcoholic beverages	0.18	0.26	0.23	0.35	0.73	0.50	0.19	0.30	0.24	0.30	0.50	0.34	0.09	0.05	0.21	0.44	0.84	0.69
Alcoholic beverages	0.41	0.86	0.55	0.77	1.48	1.09	0.41	0.52	0.50	0.69	1.26	0.78	0.39	2.35	0.66	0.93	1.59	1.43
a) Beer	0.05	0.15	0.07	0.25	1.02	0.60	0.06	0.19	0.10	0.35	1.12	0.50	0.00	0.00	0.00	0.05	0.97	0.71
b) Other alcoholic beverages	0.36	0.71	0.47	0.53	0.46	0.49	0.35	0.33	0.40	0.34	0.14	0.29	0.39	2.35	0.66	0.88	0.62	0.72
Tobacco & cigarettes	0.55	1.16	0.30	0.82	0.55	0.63	0.44	0.77	0.26	0.45	0.48	0.48	1.28	2.83	0.40	1.52	0.59	0.82
Clothing & footwear	0.44	0.55	0.42	0.52	0.56	0.52	0.44	0.60	0.43	0.58	0.58	0.54	0.45	0.33	0.38	0.42	0.54	0.50
a) Adults' clothing & footwear	0.26	0.38	0.30	0.40	0.46	0.41	0.25	0.39	0.28	0.40	0.39	0.36	0.33	0.33	0.36	0.40	0.50	0.47
b) Children's clothing & footwear	0.15	0.14	0.10	0.10	0.07	0.09	0.16	0.17	0.13	0.15	0.16	0.15	0.05	0.00	0.00	0.00	0.02	0.02
c) Others	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.02	0.01	0.02	0.02
Housing, water, electricity	0.04	0.08	0.14	0.20	0.30	0.22	0.04	0.10	0.16	0.27	0.36	0.23	0.01	0.00	0.09	0.08	0.26	0.21
a) Housing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
b) Water & electricity	0.04	0.08	0.14	0.20	0.30	0.22	0.04	0.10	0.16	0.27	0.36	0.23	0.01	0.00	0.09	0.08	0.26	0.21
Fuel for house use	0.23	0.20	0.22	0.17	0.14	0.17	0.23	0.19	0.21	0.14	0.09	0.15	0.27	0.23	0.27	0.21	0.16	0.18
a) Paraffin/kerosene	0.23	0.20	0.22	0.17	0.13	0.16	0.23	0.19	0.21	0.14	0.09	0.15	0.27	0.23	0.27	0.21	0.16	0.18
b) Generator/lawn mower	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
c) Others	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
House furnishings, equipments & routine maintenance	0.22	0.24	0.34	0.25	0.36	0.31	0.18	0.24	0.36	0.28	0.30	0.28	0.47	0.22	0.30	0.21	0.38	0.35
Domestic services & household services	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Health care	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transport	0.20	0.20	0.10	0.14	0.20	0.17	0.23	0.19	0.12	0.13	0.23	0.18	0.00	0.27	0.03	0.15	0.18	0.17
Fuel levy	0.11	0.28	0.48	0.65	1.20	0.83	0.12	0.33	0.40	0.87	1.19	0.73	0.00	0.05	0.67	0.24	1.20	0.95
Communication	0.03	0.08	0.22	0.34	0.81	0.52	0.03	0.09	0.23	0.47	0.94	0.47	0.00	0.04	0.19	0.09	0.75	0.57
Recreation and culture	0.00	0.00	0.01	0.05	0.10	0.06	0.00	0.00	0.00	0.06	0.09	0.04	0.00	0.00	0.01	0.02	0.11	0.08
Education	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Personal care	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miscellaneous	0.88	0.76	0.80	0.81	0.73	0.77	0.91	0.79	0.81	0.75	0.63	0.75	0.67	0.64	0.79	0.93	0.78	0.79

	Expenditure quintile						Expenditure quintile						Expenditure quintile					
Consumption category	1	2	3	4	5	All	1	2	3	4	5	All	1	2	3	4	5	All
	All female breadwinner						**Female breadwinner with children**						**Female breadwinner without children**					
Food	0.62	1.04	1.04	1.25	1.11	1.02	0.63	1.05	1.06	1.29	1.10	1.02	0.14	0.84	0.84	0.88	1.13	1.03
a) Processed foods	0.40	0.54	0.53	0.67	0.63	0.56	0.40	0.54	0.55	0.69	0.65	0.56	0.14	0.54	0.28	0.54	0.60	0.55
b) Sugar	0.22	0.50	0.51	0.57	0.48	0.46	0.22	0.50	0.51	0.60	0.45	0.45	0.00	0.30	0.56	0.35	0.53	0.49
c) Unprocessed foods	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Meals out	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Non-alcoholic beverages	0.08	0.15	0.17	0.19	0.30	0.19	0.08	0.15	0.16	0.19	0.23	0.16	0.03	0.08	0.34	0.25	0.46	0.39
Alcoholic beverages	0.23	0.22	0.33	0.23	0.61	0.35	0.23	0.23	0.27	0.20	0.30	0.25	0.00	0.00	1.24	0.44	1.25	1.05
a) Beer	0.00	0.02	0.08	0.11	0.52	0.17	0.00	0.02	0.08	0.12	0.25	0.09	0.00	0.00	0.11	0.00	1.05	0.73
b) Other alcoholic beverages	0.23	0.21	0.26	0.12	0.09	0.17	0.23	0.21	0.20	0.08	0.04	0.15	0.00	0.00	1.13	0.44	0.20	0.32
Tobacco & cigarettes	0.23	0.15	0.14	0.07	0.07	0.13	0.23	0.16	0.10	0.06	0.04	0.12	0.00	0.07	0.76	0.15	0.13	0.18
Clothing & footwear	0.35	0.43	0.44	0.49	0.53	0.46	0.35	0.43	0.46	0.50	0.49	0.44	0.21	0.27	0.22	0.43	0.63	0.54
a) Adults' clothing & footwear	0.18	0.22	0.26	0.30	0.36	0.27	0.18	0.22	0.27	0.29	0.28	0.25	0.18	0.24	0.19	0.37	0.52	0.45
b) Children's clothing & footwear	0.14	0.17	0.15	0.16	0.12	0.14	0.14	0.17	0.16	0.18	0.16	0.16	0.00	0.00	0.00	0.01	0.04	0.03
c) Others	0.02	0.03	0.02	0.02	0.04	0.03	0.02	0.03	0.02	0.02	0.03	0.02	0.03	0.03	0.02	0.02	0.05	0.04
Housing, water, electricity	0.03	0.05	0.09	0.15	0.25	0.13	0.03	0.06	0.10	0.16	0.21	0.11	0.00	0.00	0.00	0.11	0.33	0.25
a) Housing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
b) Water & electricity	0.03	0.01	0.09	0.15	0.25	0.13	0.03	0.01	0.10	0.16	0.21	0.11	0.00	0.00	0.00	0.11	0.33	0.25
Fuel for house use	0.20	0.17	0.18	0.16	0.14	0.17	0.19	0.17	0.17	0.14	0.12	0.16	0.27	0.16	0.26	0.30	0.20	0.22
a) Paraffin/kerosene	0.19	0.17	0.17	0.16	0.14	0.17	0.19	0.17	0.17	0.14	0.12	0.16	0.27	0.16	0.26	0.30	0.19	0.22
b) Generator/lawn mower	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
c) Others	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
House furnishings, equipments & routine maintenance	0.21	0.21	0.26	0.25	0.39	0.28	0.22	0.21	0.25	0.25	0.39	0.27	0.07	0.24	0.31	0.22	0.40	0.35
Domestic services & household services	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Health care	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transport	0.03	0.06	0.09	0.06	0.13	0.08	0.03	0.06	0.09	0.07	0.18	0.08	0.00	0.00	0.14	0.00	0.01	0.02
Fuel levy	0.16	0.27	0.36	0.54	0.84	0.47	0.17	0.28	0.38	0.58	0.77	0.43	0.00	0.08	0.08	0.29	0.98	0.73
Communication	0.01	0.04	0.08	0.14	0.45	0.17	0.01	0.04	0.08	0.15	0.36	0.13	0.00	0.00	0.06	0.03	0.61	0.43
Recreation and culture	0.01	0.00	0.00	0.01	0.05	0.02	0.01	0.00	0.01	0.01	0.07	0.02	0.00	0.00	0.00	0.00	0.01	0.01
Education	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Personal care	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miscellaneous	0.75	0.70	0.74	0.78	0.72	0.74	0.75	0.70	0.75	0.74	0.63	0.71	0.59	0.70	0.66	1.14	0.89	0.90

Consumption category	Expenditure quintile 1	2	3	4	5	All	Expenditure quintile 1	2	3	4	5	All	Expenditure quintile 1	2	3	4	5	All
	All dual earners						**Dual earners with children**						**Dual earners without children**					
Food	0.83	0.98	1.09	1.07	0.99	1.00	0.83	0.98	1.09	1.07	1.00	1.00	0.21	0.74	0.95	1.08	0.90	0.94
a) Processed foods	0.52	0.51	0.58	0.59	0.59	0.56	0.52	0.51	0.58	0.60	0.60	0.56	0.17	0.49	0.61	0.57	0.49	0.53
b) Sugar	0.31	0.47	0.51	0.48	0.41	0.44	0.31	0.48	0.52	0.47	0.40	0.44	0.04	0.25	0.34	0.51	0.42	0.41
c) Unprocessed foods	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Meals out	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Non-alcoholic beverages	0.15	0.16	0.19	0.22	0.31	0.21	0.15	0.17	0.19	0.22	0.29	0.20	0.11	0.11	0.11	0.22	0.42	0.28
Alcoholic beverages	0.49	0.55	0.50	0.62	0.62	0.56	0.49	0.54	0.51	0.57	0.59	0.54	0.37	1.14	0.21	1.16	0.81	0.83
a) Beer	0.02	0.05	0.11	0.21	0.45	0.17	0.02	0.05	0.12	0.21	0.46	0.16	0.00	0.00	0.00	0.24	0.41	0.25
b) Other alcoholic beverages	0.47	0.51	0.39	0.40	0.17	0.39	0.47	0.50	0.40	0.36	0.13	0.38	0.37	1.14	0.21	0.93	0.40	0.57
Tobacco & cigarettes	0.39	0.36	0.29	0.28	0.21	0.31	0.40	0.36	0.29	0.26	0.16	0.30	0.13	0.47	0.38	0.52	0.52	0.49
Clothing & footwear	0.53	0.58	0.60	0.60	0.67	0.59	0.53	0.58	0.60	0.60	0.66	0.59	0.54	0.42	0.52	0.60	0.70	0.62
a) Adults' clothing & footwear	0.33	0.38	0.40	0.40	0.46	0.39	0.33	0.38	0.39	0.39	0.43	0.38	0.53	0.33	0.46	0.55	0.62	0.55
b) Children's clothing & footwear	0.16	0.16	0.16	0.16	0.16	0.17	0.16	0.17	0.16	0.16	0.17	0.19	0.00	0.04	0.02	0.02	0.01	0.04
c) Others	0.02	0.03	0.03	0.03	0.02	0.03	0.02	0.03	0.03	0.03	0.02	0.03	0.01	0.03	0.03	0.02	0.03	0.03
Housing, water, electricity	0.04	0.03	0.05	0.07	0.23	0.08	0.04	0.03	0.05	0.07	0.24	0.08	0.00	0.01	0.03	0.07	0.18	0.10
a) Housing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
b) Water & electricity	0.04	0.03	0.05	0.07	0.23	0.08	0.04	0.03	0.05	0.07	0.24	0.08	0.00	0.01	0.03	0.07	0.18	0.10
Fuel for house use	0.21	0.19	0.17	0.14	0.11	0.16	0.21	0.19	0.17	0.13	0.10	0.16	0.27	0.20	0.27	0.18	0.23	0.22
a) Paraffin/kerosene	0.21	0.19	0.17	0.13	0.09	0.16	0.21	0.19	0.16	0.13	0.09	0.16	0.27	0.20	0.27	0.18	0.12	0.17
b) Generator/lawn mower	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.11	0.00
c) Others	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
House furnishings, equipments & routine maintenance	0.24	0.24	0.24	0.29	0.46	0.29	0.24	0.23	0.25	0.28	0.47	0.29	0.16	0.40	0.15	0.37	0.42	0.35
Domestic services & household services	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Health care	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transport	0.11	0.18	0.17	0.20	0.36	0.20	0.11	0.18	0.17	0.20	0.37	0.20	0.00	0.04	0.16	0.16	0.28	0.20
Fuel levy	0.18	0.30	0.47	0.73	1.09	0.55	0.18	0.31	0.47	0.75	1.10	0.55	0.00	0.05	0.30	0.48	1.00	0.64
Communication	0.04	0.07	0.13	0.22	0.60	0.21	0.04	0.08	0.14	0.23	0.59	0.20	0.00	0.00	0.08	0.15	0.73	0.38
Recreation and culture	0.00	0.00	0.01	0.03	0.07	0.02	0.00	0.00	0.01	0.03	0.08	0.02	0.00	0.00	0.00	0.00	0.02	0.01
Education	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Personal care	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miscellaneous	0.78	0.74	0.66	0.65	0.53	0.00	0.78	0.74	0.65	0.63	0.51	0.00	1.03	0.78	0.75	0.96	0.65	0.00

Consumption category	Expenditure quintile 1	2	3	4	5	All	Expenditure quintile 1	2	3	4	5	All	Expenditure quintile 1	2	3	4	5	All
	All none employed						**None employed with children**						**None employed without children**					
Food	0.45	0.83	0.82	0.79	0.95	0.80	0.44	0.90	0.95	0.77	0.96	0.80	0.53	0.67	0.69	0.82	0.95	0.80
a) Processed foods	0.25	0.42	0.40	0.30	0.47	0.00	0.24	0.42	0.42	0.37	0.46	0.00	0.27	0.43	0.38	0.23	0.48	0.00
b) Sugar	0.20	0.41	0.42	0.49	0.48	0.42	0.19	0.48	0.54	0.39	0.50	0.42	0.26	0.24	0.32	0.58	0.47	0.43
c) Unprocessed foods	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Meals out	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Non-alcoholic beverages	0.11	0.09	0.17	0.16	0.27	0.17	0.13	0.11	0.22	0.20	0.21	0.17	0.04	0.04	0.13	0.12	0.32	0.18
Alcoholic beverages	0.24	0.39	0.43	0.49	0.49	0.43	0.29	0.41	0.21	0.19	0.29	0.28	0.00	0.37	0.64	0.77	0.65	0.61
a) Beer	0.00	0.00	0.00	0.00	0.29	0.08	0.00	0.00	0.00	0.01	0.25	0.05	0.00	0.00	0.00	0.00	0.33	0.11
b) Other alcoholic beverages	0.24	0.39	0.43	0.48	0.20	0.35	0.29	0.41	0.21	0.18	0.04	0.23	0.00	0.37	0.64	0.77	0.32	0.50
Tobacco & cigarettes	0.37	0.31	0.24	0.33	0.39	0.33	0.36	0.18	0.14	0.15	0.09	0.19	0.42	0.61	0.35	0.50	0.63	0.52
Clothing & footwear	0.26	0.31	0.27	0.33	0.39	0.32	0.28	0.38	0.35	0.37	0.41	0.36	0.14	0.14	0.20	0.28	0.38	0.27
a) Adults' clothing & footwear	0.12	0.19	0.18	0.22	0.29	0.21	0.12	0.22	0.18	0.21	0.24	0.20	0.14	0.13	0.17	0.22	0.33	0.23
b) Children's clothing & footwear	0.12	0.08	0.08	0.06	0.06	0.08	0.15	0.12	0.13	0.13	0.13	0.13	0.00	0.00	0.03	0.00	0.01	0.01
c) Others	0.01	0.01	0.01	0.01	0.03	0.01	0.01	0.02	0.02	0.01	0.03	0.02	0.00	0.01	0.00	0.01	0.02	0.01
Housing, water, electricity	0.01	0.03	0.10	0.06	0.17	0.09	0.02	0.03	0.15	0.09	0.19	0.09	0.00	0.01	0.06	0.03	0.16	0.08
a) Housing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
b) Water & electricity	0.01	0.03	0.10	0.06	0.17	0.09	0.02	0.03	0.15	0.09	0.19	0.09	0.00	0.01	0.06	0.03	0.16	0.08
Fuel for house use	0.19	0.20	0.21	0.23	0.16	0.20	0.16	0.21	0.21	0.18	0.20	0.19	0.31	0.19	0.22	0.29	0.14	0.21
a) Paraffin/kerosene	0.19	0.20	0.21	0.23	0.16	0.20	0.16	0.21	0.21	0.18	0.20	0.19	0.31	0.19	0.22	0.29	0.14	0.21
b) Generator/lawn mower	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
c) Others	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
House furnishings, equipments & routine maintenance	0.23	0.23	0.21	0.16	0.33	0.24	0.24	0.21	0.20	0.15	0.28	0.22	0.17	0.29	0.23	0.18	0.36	0.26
Domestic services & household services	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Health care	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transport	0.12	0.06	0.09	0.05	0.13	0.09	0.14	0.09	0.18	0.07	0.23	0.14	0.00	0.00	0.00	0.04	0.06	0.03
Fuel levy	0.16	0.20	0.22	0.28	0.53	0.31	0.19	0.30	0.26	0.34	0.57	0.34	0.00	0.00	0.19	0.23	0.50	0.27
Communication	0.01	0.03	0.02	0.05	0.20	0.08	0.01	0.03	0.03	0.07	0.18	0.07	0.00	0.02	0.02	0.04	0.21	0.08
Recreation and culture	0.00	0.00	0.08	0.00	0.09	0.04	0.00	0.00	0.00	0.01	0.15	0.03	0.00	0.00	0.16	0.00	0.05	0.05
Education	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Personal care	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miscellaneous	0.69	0.62	0.62	0.60	0.51	0.60	0.65	0.65	0.57	0.54	0.49	0.58	0.92	0.56	0.68	0.66	0.52	0.62

Source: Own calculations based on UNHS III

Table A 12: Incidence of indirect by consumption category, adult sex composition, presence of children and quintile, %

Consumption category	Expenditure quintile 1	2	3	4	5	All	Expenditure quintile 1	2	3	4	5	All	Expenditure quintile 1	2	3	4	5	All
	All male majority						**Male majority with children**						**Male majority without children**					
Food	0.67	0.78	1.01	0.90	0.75	0.82	0.69	0.86	1.05	0.94	0.92	0.91	0.56	0.28	0.88	0.82	0.66	0.69
a) Processed foods	0.39	0.34	0.53	0.45	0.44	0.44	0.40	0.38	0.55	0.50	0.56	0.49	0.25	0.14	0.49	0.36	0.38	0.37
b) Sugar	0.29	0.44	0.47	0.45	0.31	0.37	0.28	0.49	0.50	0.44	0.36	0.42	0.30	0.15	0.38	0.46	0.28	0.32
c) Unprocessed foods	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Meals out	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Non-alcoholic beverages	0.09	0.12	0.15	0.29	0.63	0.38	0.09	0.13	0.15	0.23	0.35	0.21	0.10	0.03	0.16	0.39	0.78	0.61
Alcoholic beverages	0.41	0.47	0.52	0.74	1.22	0.86	0.42	0.33	0.55	0.43	0.47	0.45	0.30	1.29	0.44	1.28	1.66	1.43
a) Beer	0.00	0.02	0.10	0.08	0.76	0.36	0.00	0.02	0.14	0.08	0.35	0.14	0.00	0.00	0.00	0.08	0.99	0.67
b) Other alcoholic beverages	0.41	0.46	0.42	0.66	0.47	0.49	0.42	0.31	0.42	0.35	0.12	0.30	0.30	1.29	0.44	1.20	0.67	0.76
Tobacco & cigarettes	0.39	0.63	0.25	0.68	0.51	0.51	0.33	0.31	0.27	0.32	0.18	0.27	0.82	2.52	0.20	1.33	0.69	0.84
Clothing & footwear	0.48	0.53	0.44	0.48	0.51	0.49	0.50	0.58	0.51	0.54	0.54	0.53	0.27	0.23	0.25	0.37	0.49	0.43
a) Adults' clothing & footwear	0.30	0.36	0.31	0.35	0.42	0.37	0.30	0.38	0.34	0.34	0.34	0.34	0.23	0.22	0.22	0.36	0.46	0.41
b) Children's clothing & footwear	0.15	0.14	0.10	0.10	0.07	0.10	0.16	0.17	0.14	0.15	0.17	0.16	0.04	0.01	0.02	0.00	0.01	0.01
c) Others	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.02	0.03	0.03	0.02	0.02	0.00	0.00	0.01	0.01	0.02	0.01
Housing, water, electricity	0.03	0.02	0.05	0.06	0.22	0.12	0.04	0.03	0.05	0.06	0.20	0.09	0.00	0.00	0.05	0.05	0.23	0.17
a) Housing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
b) Water & electricity	0.03	0.01	0.05	0.06	0.22	0.12	0.04	0.01	0.05	0.06	0.20	0.09	0.00	0.00	0.05	0.05	0.23	0.17
Fuel for house use	0.22	0.17	0.19	0.18	0.14	0.16	0.20	0.17	0.16	0.15	0.09	0.15	0.38	0.16	0.27	0.22	0.16	0.19
a) Paraffin/kerosene	0.22	0.17	0.19	0.16	0.13	0.16	0.20	0.17	0.16	0.12	0.09	0.14	0.38	0.16	0.27	0.22	0.16	0.19
b) Generator/lawn mower	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
c) Others	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
House furnishings, equipments & routine maintenance	0.20	0.19	0.28	0.22	0.39	0.29	0.20	0.19	0.27	0.24	0.35	0.26	0.21	0.19	0.32	0.18	0.40	0.34
Domestic services & household services	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Health care	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transport	0.13	0.15	0.11	0.14	0.23	0.18	0.14	0.15	0.13	0.15	0.30	0.19	0.00	0.19	0.04	0.11	0.20	0.16
Fuel levy	0.18	0.16	0.35	0.54	1.09	0.67	0.20	0.19	0.36	0.68	1.05	0.56	0.00	0.00	0.33	0.30	1.12	0.82
Communication	0.02	0.04	0.14	0.16	0.65	0.34	0.03	0.04	0.14	0.22	0.59	0.24	0.00	0.04	0.12	0.06	0.68	0.48
Recreation and culture	0.01	0.00	0.05	0.02	0.09	0.05	0.01	0.00	0.01	0.02	0.06	0.02	0.00	0.00	0.17	0.01	0.11	0.09
Education	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Personal care	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miscellaneous	0.74	0.59	0.65	0.65	0.64	0.65	0.73	0.59	0.62	0.55	0.45	0.57	0.85	0.59	0.76	0.81	0.75	0.75

Consumption category	Expenditure quintile 1	2	3	4	5	All	Expenditure quintile 1	2	3	4	5	All	Expenditure quintile 1	2	3	4	5	All
	All female majority						**Female majority with children**						**Female majority without children**					
Food	0.63	1.03	1.03	1.13	1.08	1.00	0.65	1.04	1.09	1.20	1.05	1.01	0.17	0.96	0.50	0.82	1.12	0.94
a) Processed foods	0.41	0.54	0.52	0.60	0.61	0.55	0.41	0.53	0.55	0.66	0.62	0.56	0.17	0.70	0.21	0.36	0.61	0.50
b) Sugar	0.23	0.49	0.52	0.53	0.46	0.45	0.23	0.50	0.54	0.54	0.44	0.45	0.00	0.25	0.30	0.46	0.51	0.44
c) Unprocessed foods	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Meals out	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Non-alcoholic beverages	0.16	0.12	0.18	0.16	0.28	0.19	0.16	0.12	0.18	0.18	0.23	0.17	0.00	0.09	0.22	0.09	0.41	0.28
Alcoholic beverages	0.29	0.32	0.32	0.26	0.61	0.38	0.30	0.33	0.28	0.27	0.45	0.33	0.00	0.17	0.68	0.24	0.96	0.67
a) Beer	0.02	0.02	0.06	0.14	0.54	0.19	0.02	0.02	0.06	0.17	0.40	0.14	0.00	0.00	0.05	0.03	0.85	0.47
b) Other alcoholic beverages	0.27	0.30	0.26	0.12	0.07	0.19	0.28	0.31	0.22	0.10	0.05	0.19	0.00	0.17	0.63	0.22	0.11	0.20
Tobacco & cigarettes	0.30	0.17	0.16	0.07	0.12	0.15	0.31	0.16	0.13	0.04	0.10	0.15	0.00	0.28	0.46	0.17	0.14	0.20
Clothing & footwear	0.37	0.46	0.45	0.48	0.55	0.47	0.37	0.48	0.47	0.50	0.53	0.47	0.27	0.19	0.21	0.35	0.60	0.45
a) Adults' clothing & footwear	0.19	0.26	0.26	0.29	0.38	0.29	0.19	0.26	0.27	0.29	0.32	0.27	0.16	0.16	0.16	0.27	0.51	0.37
b) Children's clothing & footwear	0.15	0.16	0.15	0.15	0.15	0.13	0.15	0.17	0.16	0.16	0.17	0.17	0.00	0.02	0.02	0.02	0.01	0.03
c) Others	0.02	0.03	0.03	0.02	0.03	0.03	0.02	0.03	0.03	0.02	0.03	0.02	0.03	0.01	0.02	0.02	0.05	0.03
Housing, water, electricity	0.04	0.05	0.10	0.11	0.27	0.13	0.04	0.06	0.10	0.12	0.26	0.12	0.00	0.00	0.05	0.07	0.29	0.18
a) Housing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
b) Water & electricity	0.04	0.05	0.10	0.11	0.27	0.13	0.04	0.06	0.10	0.12	0.26	0.12	0.00	0.00	0.05	0.07	0.29	0.18
Fuel for house use	0.18	0.18	0.18	0.17	0.12	0.16	0.18	0.18	0.18	0.14	0.10	0.15	0.27	0.18	0.22	0.30	0.18	0.21
a) Paraffin/kerosene	0.18	0.18	0.17	0.17	0.12	0.16	0.18	0.18	0.17	0.14	0.10	0.15	0.27	0.18	0.22	0.30	0.18	0.21
b) Generator/lawn mower	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
c) Others	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
House furnishings, equipments & routine maintenance	0.20	0.24	0.25	0.24	0.38	0.27	0.21	0.22	0.25	0.24	0.38	0.26	0.14	0.50	0.23	0.24	0.37	0.33
Domestic services & household services	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Health care	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transport	0.09	0.08	0.10	0.08	0.14	0.10	0.09	0.09	0.11	0.09	0.20	0.12	0.00	0.00	0.07	0.02	0.01	0.02
Fuel levy	0.18	0.30	0.38	0.62	0.87	0.52	0.19	0.32	0.40	0.70	0.86	0.50	0.00	0.06	0.20	0.28	0.91	0.58
Communication	0.02	0.07	0.08	0.19	0.47	0.19	0.02	0.08	0.08	0.23	0.45	0.18	0.00	0.00	0.03	0.02	0.51	0.28
Recreation and culture	0.01	0.00	0.00	0.02	0.07	0.02	0.01	0.00	0.00	0.02	0.10	0.03	0.00	0.00	0.00	0.00	0.01	0.01
Education	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Personal care	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miscellaneous	0.71	0.71	0.70	0.72	0.64	0.00	0.71	0.72	0.70	0.69	0.55	0.00	0.80	0.66	0.67	0.89	0.83	0.00

Consumption category	Expenditure quintile 1	2	3	4	5	All	Expenditure quintile 1	2	3	4	5	All	Expenditure quintile 1	2	3	4	5	All
	All equal gender						**Equal gender with children**						**Equal gender without children**					
Food	0.83	1.02	1.13	1.17	1.07	1.05	0.84	1.04	1.14	1.17	1.07	1.05	0.18	0.67	0.99	1.15	1.05	1.00
a) Processed foods	0.52	0.56	0.60	0.66	0.62	0.59	0.53	0.57	0.60	0.66	0.64	0.60	0.16	0.26	0.59	0.64	0.55	0.54
b) Sugar	0.30	0.47	0.52	0.51	0.45	0.45	0.31	0.47	0.53	0.51	0.43	0.45	0.02	0.41	0.40	0.52	0.51	0.46
c) Unprocessed foods	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Meals out	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Non-alcoholic beverages	0.13	0.19	0.20	0.25	0.38	0.23	0.13	0.20	0.20	0.25	0.35	0.22	0.08	0.06	0.14	0.28	0.54	0.34
Alcoholic beverages	0.46	0.60	0.52	0.65	0.77	0.60	0.46	0.56	0.50	0.62	0.80	0.58	0.17	1.55	0.75	0.98	0.67	0.82
a) Beer	0.02	0.06	0.10	0.23	0.59	0.20	0.02	0.07	0.11	0.25	0.65	0.20	0.00	0.00	0.00	0.11	0.32	0.17
b) Other alcoholic beverages	0.44	0.53	0.42	0.42	0.19	0.40	0.45	0.50	0.39	0.37	0.15	0.38	0.17	1.55	0.75	0.87	0.35	0.64
Tobacco & cigarettes	0.39	0.43	0.31	0.35	0.27	0.35	0.38	0.43	0.29	0.32	0.24	0.34	0.83	0.58	0.63	0.66	0.38	0.53
Clothing & footwear	0.50	0.55	0.58	0.60	0.66	0.58	0.50	0.56	0.59	0.60	0.66	0.58	0.39	0.33	0.49	0.57	0.69	0.59
a) Adults' clothing & footwear	0.31	0.36	0.39	0.41	0.47	0.39	0.31	0.36	0.39	0.40	0.44	0.38	0.38	0.31	0.45	0.53	0.60	0.52
b) Children's clothing & footwear	0.15	0.15	0.15	0.15	0.16	0.15	0.15	0.16	0.16	0.17	0.18	0.16	0.00	0.00	0.01	0.00	0.04	0.02
c) Others	0.02	0.02	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.02	0.03	0.02	0.04	0.03
Housing, water, electricity	0.03	0.04	0.06	0.12	0.26	0.10	0.03	0.04	0.06	0.12	0.26	0.10	0.01	0.01	0.05	0.09	0.27	0.15
a) Housing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
b) Water & electricity	0.03	0.04	0.06	0.12	0.26	0.10	0.03	0.04	0.06	0.12	0.26	0.10	0.01	0.01	0.05	0.09	0.27	0.15
Fuel for house use	0.21	0.19	0.18	0.14	0.13	0.17	0.21	0.19	0.17	0.14	0.12	0.17	0.19	0.26	0.25	0.19	0.19	0.21
a) Paraffin/kerosene	0.21	0.19	0.18	0.14	0.11	0.17	0.21	0.19	0.17	0.14	0.11	0.17	0.19	0.26	0.25	0.19	0.12	0.17
b) Generator/lawn mower	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.08	0.00
c) Others	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
House furnishings, equipments & routine maintenance	0.25	0.24	0.25	0.29	0.44	0.29	0.24	0.24	0.25	0.29	0.45	0.29	0.42	0.18	0.15	0.32	0.36	0.30
Domestic services & household services	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Health care	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transport	0.10	0.17	0.17	0.19	0.32	0.19	0.10	0.18	0.18	0.19	0.36	0.19	0.00	0.04	0.08	0.15	0.17	0.13
Fuel levy	0.16	0.31	0.47	0.68	1.07	0.54	0.16	0.32	0.47	0.72	1.09	0.53	0.00	0.03	0.40	0.32	1.00	0.61
Communication	0.04	0.06	0.14	0.24	0.66	0.22	0.04	0.07	0.15	0.24	0.64	0.21	0.00	0.02	0.08	0.18	0.72	0.39
Recreation and culture	0.00	0.00	0.01	0.03	0.07	0.02	0.00	0.00	0.01	0.03	0.08	0.02	0.00	0.00	0.00	0.01	0.02	0.01
Education	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Personal care	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miscellaneous	0.81	0.76	0.69	0.70	0.62	0.71	0.81	0.76	0.69	0.67	0.61	0.71	0.80	0.65	0.71	0.97	0.66	0.75

Source: Own calculations from UNHS III

Figure A 1: Share of difference types of Central Government taxes in total tax revenue (%)

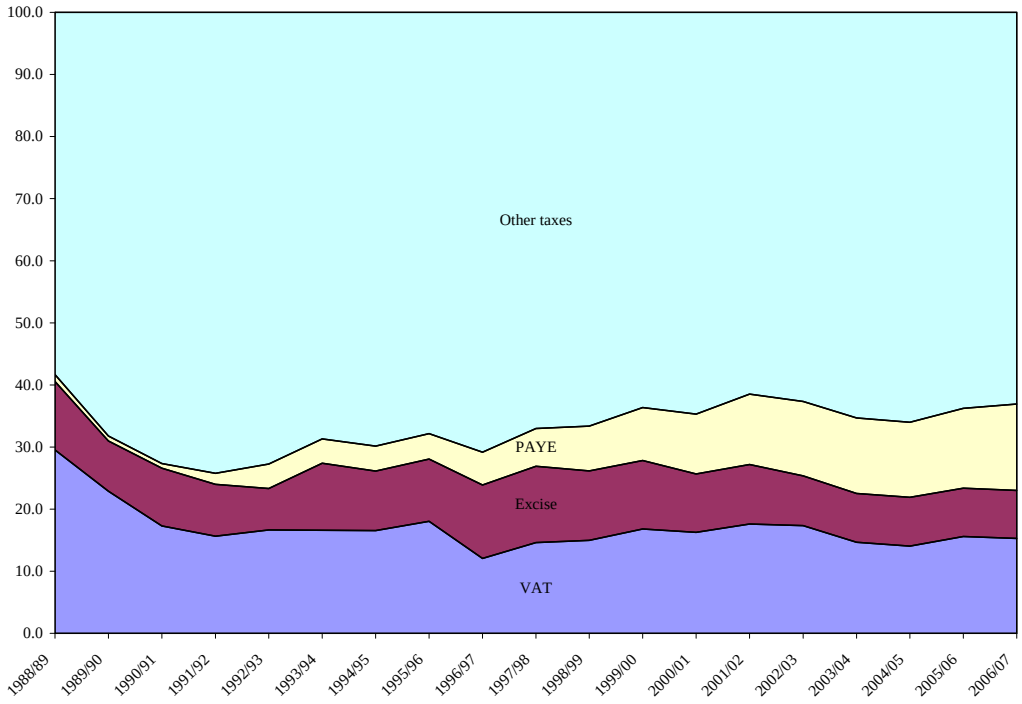
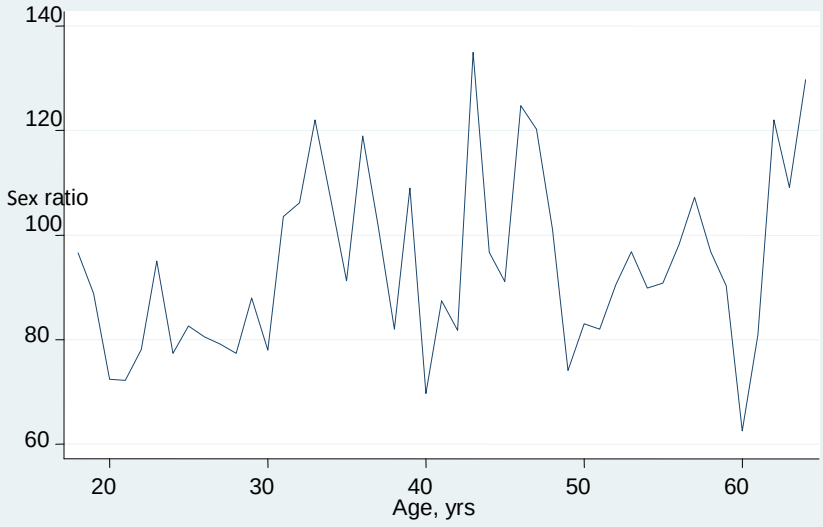


Fig. A2: Males per 100 females for persons aged 18-64 years, 2005/06



Source: Own calculations based on UNHS III

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