Study on Effects of Tobacco Taxation on Tobacco Consumption in Kenya

Zero Draft Report

Submitted to:
The National Taxpayers Association
admin@nta.or.ke

Submitted by:
Email: bomunga@gmail.com

April 2019

Contents

1 Background

1.1 Introduction

Over 1.1 billion people are current users of tobacco globally and about 5.7 trillion cigarettes were smoked worldwide in 2016. Although, global consumption declined slightly over the past few years leading to 2017, Africa's trends indicate an increase in consumption of tobacco. A major contributor to these varying trends in tobacco consumption can be explained by more effective interventions put in place in the more developed regions (Drope et al. 2018; WHO, 2015).

In per person terms, Kenya is one of the highest consumers of tobacco in sub-Saharan Africa (SSA) (Table 1.1). The number of cigarettes smoked per person per year was 257 in 2014 and rose to 264 in 2016. These quantities were larger than those of most of its comparator countries in the region (such as Uganda and Tanzania). With respect to prevalence, about 14 percent of Kenya's population or approximately 3.2 million persons smoked in 2010 – and is expected to decline to 11.1 per cent in 2015 (WHO, 2015).

Table 1.1: Tobacco Use among Adults in Selected Countries/Regions 2010 and Projections for 2025 and consumption per person per year 2014 and 2016

Country	Estimated Prevalence, 2010 (%)	Projected prevalence, 2025 (%)	Number of cigarettes smoked per person per year aged 15+ (2014)*	Number of cigarettes smoked per person per year aged 15+ (2016)*
Ethiopia	4.3	4.3	75.8	115
Ghana	5.4	8.0	120.85	41
Kenya	**13.5**	**11.1**	**256.57**	**264**
South Africa	19.4	16.5	537.03	510
Tanzania	16.2	12.6	101.12	182
Uganda	10.2	6.2	41.08	196
Sub Sahara Africa (SSA)	12.8	18.1		
EURO**	29.6	23.3		
Global	22.1	18.9		

Sources: WHO (2015) and *http://www.tobaccoatlas.org/topic/cigarette-use-globally/

Note: **EURO encompasses the European countries

On a global scale, tobacco consumption has and is expected to present numerous socio-economic challenges over the medium to long term - since it is associated directly and indirectly with negative welfare effects to users and non-users. As examples, tobacco is the single most preventable cause of death in the world today. Both tobacco use and the effects of exposure to second hand smoke are estimated to account for an estimated 7 million global deaths every year (Drope et al, 2018). In addition, tobacco use may, among other effects, adversely impact on: consumption of essential goods; health; productivity; and poverty.

Its adverse impacts are more damaging for low and middle-income countries since around 80 per cent of the 1.1 billion smokers worldwide are in these regions. The use of tobacco may thus negatively impact on progress towards achievement of development goals such as the Sustainable Development Goals (WHO, 2014, 2015).

At the domestic level, tobacco-caused diseases were estimated to kill more than 6,000 Kenyans in 2014 (World Tobacco Atlas) – which is 2.6 times greater than the reported deaths (of 2,251) that resulted from road accidents in that year. Tobacco is thus likely to impact on Kenya's national development agenda negatively.

It is for these and other reasons that relatively massive global attention has been paid to tobacco control measures (WHO, 2015). One broad intervention in controlling the use of tobacco is the World Health Organization (WHO) Framework Convention on Tobacco Control (FCTC) that came into force in 2005. An overriding objective of the WHO FCTC and its protocols is to protect humanity from the health, social, environmental and economic consequences of tobacco consumption and exposure to tobacco smoke. The instrument, provides a framework "to reduce continually and substantially the prevalence of tobacco use and exposure to tobacco smoke" (WHO, 2013).

As part of a comprehensive approach to implement the FCTC, the WHO developed six tobacco control measures of proven cost-effectiveness and ability to save lives commonly referred to using the acronym MPOWER. These six measures are: Monitor tobacco use; Protect people from tobacco smoke; Offer help to quit; Warn about the dangers of tobacco; Enforce bans on advertising; and, Raise tobacco taxes. If implemented as a package, these measures are expected to effectively protect against the illness and death that the tobacco epidemic will otherwise inevitably bring. The international instruments alluded to above are

supported by domestic laws in Kenya. The foremost legal instrument is the Tobacco Control Act which was enacted by Kenya in 2007 and conforms to the main principles contained in the WHO FCTC. Another legislative intervention is the Tobacco Control Regulations, 2014.

With respect to the basket of tobacco control interventions, price and tax measures are recognized as effective and vital means of reducing tobacco consumption by Article 6 of the WHO FCTC. This is supported by studies that consistently show that raising taxes on tobacco is the most cost-effective measure for reducing tobacco use (WHO, 2012; Eriksen, Mackay and Ross, 2012).

Despite this common understanding about the effectiveness of taxation, many countries including Kenya are grappling for answers regarding the optimal tax structure for cigarettes that does not negatively impact on markets and tax revenues as well as public health objectives.[1] A well administered cigarette tax can lead to the desired result of reducing consumption and its adverse health consequences. It can also curtail non-communicable diseases and promote public health in general (WHO, 2011).

1.2 **Objectives of the study**

The purpose of this study is to examine cigarette taxation in Kenya and how it affects cigarette consumption. The study analyzes the probable effects of recent cigarette tax policy changes on both tax revenue and cigarette consumption. The study will thus enable readers, particularly policy makers, to reform towards the design of an improved tobacco tax structure for Kenya.

The specific objectives/tasks of the study are:

(i) To review tobacco taxation and consumption in Kenya;

(ii) To analyze the effects on tobacco taxes on tobacco consumption; and to

(iii) To review of stakeholders involved in tax advocacy.

The paper focuses on cigarettes, rather than other tobacco products. Cigarettes are given special attention because of a couple of reasons. First, like in many other countries, cigarettes are the main tobacco product consumed in Kenya. Secondly, cigarettes generate the highest excise revenue and have the biggest public health impact among tobacco products.

[1] One of the health objectives is reflected in the Sustainable Development Goals (SDGs) target 3.4 which is "to reduce premature mortality from NCDs by one third

1.3 **Organization of the study**

After this broad introduction, the rest of this study is organized as follows. Section 2 focuses on tobacco taxation and consumption from a theoretical and empirical perspective before a discussion of tobacco taxation and consumption in Kenya in Section 3. The fourth section presents results of a simulation of the effects of taxation on consumption using two tax scenarios. The fifth section offers a brief review of stakeholders involved in tax advocacy measures before concluding the report in section six.

2 Tobacco Taxation and Consumption – Theoretical and Empirical Perspectives

Tobacco taxation is known as the most effective tobacco control strategy available. Even so, a key challenge for most countries is how to choose which type of excise to levy and at what rate. In addition, it is a challenge to find the appropriate balance between specific and ad valorem taxation. It is also a problem to decipher whether to apply a uniform tax or a differential rate system (WHO, 2011).

Theoretical and empirical findings suggest a number of broad conclusions regarding the choice between specific and ad valorem excises. But as shall be evident in the subsequent discussions, each choice has certain advantages and disadvantages. The subsequent discussions shall examine effects that the two types of excises have on consumption through their effects on price of tobacco, variety of tobacco products, and on tax administration.

2.1 The appropriate type of excise on tobacco products

The choice of specific and ad valorem excises is a long-standing issue in tax policy and has effects on price, variety of tobacco products, and tax administration (WHO, 2011). These three broad tax policy effects do, in one way or another, impact on tobacco consumption.

Price effects of excise taxes

Specific excises are known to increase consumer prices relatively more than ad valorem excises, and hence lead to relatively higher reduction in consumption. This is because under specific taxation, “an increase in the producer price will go to the producer as revenue – and thus would increase the producer’s incentive to raise prices of their products.”

For ad valorem taxes on the other hand, part of the increase in prices accrues to governments as tax revenue and hence a tax increase may not have a similar impact as that of a specific tax. This is supported by studies including WHO (2011) which indicates that when income level of countries is accounted for, the average retail price is much higher for countries that rely solely on specific taxes (at USD 2.46) relative to those that rely solely on ad valorem excises (at USD 1.29).

Effects of excises on variety of tobacco products

Product variety is important in the tobacco control perspective since it enhances the appeal of the products – and in this case the cigarettes. This is especially the case when referring to the younger age groups and more affluent tobacco users – who have a preference for higher priced more heavily marked cigarettes. A narrower range of products would reduce consumption by depressing among others the market power and product appeal.

Evidence indicates that ad valorem excises may perform better than a specific price in affecting product variety. Conceptually, an increase in ad valorem tax "makes markets relatively more competitive which may induce the exit of some brands hence reducing product variety in the market" (WHO, 2011). On the other hand, specific excises provide incentives for more appealing and higher priced products as well as greater product variety.

Effects of excises on tax administration

Specific taxes are easier to administer as government revenue can be collected at a designated stage (e.g. at manufacturer or retailer level). Ad valorem taxes are prone to undervaluation since the tax authority relies on declaration of price to determine the tax due. For this reason, ad valorem taxes require strong tax administration with high technical capacity. Thus, in relative terms, specific taxes are more likely to enhance tax effectiveness and thus have greater impact on consumption of cigarettes.

Other effects

Consumers of tobacco products may reduce consumption of their preferred brand or may switch consumption to lower brands when facing tax and price increases. Specific excises are less likely to induce substitution from high to low priced brands or switching down. This is because a uniform specific tax would reduce the relative price of higher to lower priced brands. With an ad valorem tax, the relative prices shall remain unchanged hence providing more room for switching down.

Ad valorem taxes do have a couple of advantages too. A particularly important one is that an ad valorem tax maintains revenue value under high inflation given that the amount of the tax increases as the prices increase. On the other hand, specific taxes need to be adjusted with the

consumer Price Index (CPI) to keep pace with inflation. Many tax systems that rely on specific taxes, overcome this challenge by introducing an automatic inflation adjustment.

2.2 **The choice between uniform and a differential rate tax system**

With respect to the choice of excise tax systems, the global trend is for governments to simplify their excise tax systems by adopting a uniform tax. However, many countries still differentiate within brands and among products by taxing them at different rates as well as levying different types of excises such as Kenya, Egypt and Russia. A tiered tax system, whether specific or ad valorem, may be an outcome of various reasons. The most common reasons are the need to protect local producers or poorer consumers.

In relative terms, studies point to the fact that a simple and unified excise tax system that taxes all cigarettes (or tobacco products) at the same level is more appropriate for reducing smoking (WHO, 2011). Its obvious advantages include: reducing incentives for substitution among different brands; reducing non-compliance and eliminating incentives for various pricing strategies by manufacturers to reduce their tax liability; and thus creating a more effective tax administration thus higher tax revenue.

Although tiered systems are widely used, these tax systems provide incentives for price manipulations to the extent that manufacturers can alter their pricing or production behavior to avoid higher tax liabilities. To overcome this challenge, some countries (such as Egypt, Poland, Russia and Turkey) have reformed excises in a way that reduces the price gap among brands (WHO, 2011). This has consequently put pressure on companies to increase prices on the economy brands.

3 Tobacco Taxation and Consumption in Kenya

This section discusses the evolution of tobacco taxes since the 1990s with a focus on more recent experiences. The section also discusses recent developments in tobacco consumption but notes that very few studies have examined the link between tobacco taxes and tobacco consumption.

3.1 Evolution of tobacco taxation in Kenya

For a long time, Kenya has had a relatively complex excise tax system for tobacco products. In the period leading up to 1993, Kenya had ad valorem excise at the rate of 130 per cent of the ex-factory price of tobacco products. In 1993, a new tiered specific tax regime based on banded retail selling price (RSP) was introduced and stayed in force until 2007. In this period, there were only minor adjustments in the tax rate in certain bands. The rate on other manufactured tobacco remained at 130 per cent of the ex-factory price.

Between 2007 and 2011, the Kenyan government experimented with various models of the tiered excise tax system for cigarettes. The criteria for excise tax were based on the physical characteristics of cigarettes as well as the RSP. In the Finance Bill 2007, the Minister for Finance made a proposal to Parliament to amend the tax structure from RSP to one based purely on packaging characteristics. However, this proposal was overturned by Parliament, which instead reinstated the earlier tax structure based on RSP.

In 2008, the Treasury again amended the tax structure from pure RSP to a hybrid system based on both RSP and packaging characteristics with the latter being predominant. However, an attempt by Parliament to return to a tax structure based only on RSP led to a compromised structure described in Table 3.1, which was predominantly based on packaging characteristics of the cigarettes.

Table 3.1: The tiered specific cigarette tax system in Kenya based on a mix of retail selling price and packaging characteristics with emphasis on packaging characteristics, 2008

Band	Description	Excise Duty per mille
A	Plain cigarettes or plain cigarettes of RSP of up to Kshs. 2,500	700
B	Soft cap cigarettes of 72mm or less or sof cap cigarettes of 72mm or less with RSP of Kshs. 2,501-3,500	1,200
C	Soft cap cigarettes of more than 72mm or soft cap cigarettes of more than 72mm of RSP of Kshs. 3,501-4,500	1,500

D	Hinge lid cigarettes or hinge lid cigarettes of RSP of more than Kshs. 4,500	2,500

In the Finance Act 2010, Parliament amended the tax structure of cigarettes by shifting it back to a predominantly RSP structure. In addition, a 16 per cent VAT on the producer price and 30 per cent import duty on the CIF (cost, insurance and freight) value of the products imported from outside of East African Community (EAC) were applied. The excise duty on other manufactured tobacco products was charged at 130 per cent of the ex-factory price. In addition to these taxes, all imports attracted an import declaration fee of 2.25 per cent irrespective of the origin.

In 2012, the government attempted to simplify the cigarette four tier tax structure, whereby Kshs. 1,200 per mille or 35 per cent of retail selling price was charged, whichever was higher (Kieyah *et al*, 2014). This single tier system was introduced using the Finance Act of 2012 – and it also provided for changing the tax rate to adjust automatically for inflation.

The Excise Duty Bill of 2015 attempted to further improve the tax system. The Bill introduced a uniform specific rate of Kshs. 2,500 per mille aimed at simplifying the tax structure (Government of Kenya, 2015).[2] However; the implementation of the uniform rate was short-lived as the government in the same year reverted to tiered specific excise tax system, which was ostensibly aimed at cushioning the economy brands and hence poorer households (Nargis *et al*, 2015). The tiered specific excise system for cigarettes and other tobacco products are represented in Table 3.2.

Table 3.2: Tobacco Products Excise Duty Rates, 2015

Category of Cigarettes	**Excise Duty**
Cigarette with filters (Hinge lid and soft cap)	Kshs. 2,500 per mille
Cigarettes without filters (Plain cigarettes)	Kshs. 1,800 per mille
Cigars, cheroots, cigarillos containing tobacco or tobacco substitutes	Kshs. 10,000 per Kg
Electronic cigarettes	Kshs. 3,000 per unit
Cartridge for use in electronic cigarettes	Kshs. 2,000 per unit
Other manufactured tobacco and manufactured tobacco substitutes; "homogenous" and "reconstituted tobacco"; tobacco extracts and essences	Kshs. 7,000 per Kg

Source: Government of Kenya (2017), Government of Kenya (2015)

[2] It should be noted that the Excise Duty Act, 2015 repealed and replaced the Customs and Excise Act.

In 2017, the cigarette excise structure changed to a two-tier specific structure of Kshs. 2,500 per mille for filtered and Kshs. 1,800 per mille for unfiltered cigarettes. This marks the most recent change in the tax structure.

A broad observation that can be made on the reforms of the excise tax on tobacco for the last decade is that tobacco excise tax system has remained relatively complex for most of the period. This has definitely acted as an obstacle in the use of tobacco taxation to achieve much lower consumption and public health objectives. It also created significant administrative burden on tax administrators which has been made all the more onerous by the frequent amendments to the Excise Act, following the annual budget statements (Kieyah *et al*, 2014). To some degree, the excise regime is viewed as unstable by the players as reported by Nargis et al. (2015).

3.2 **Tobacco consumption in Kenya**

Cigarette consumption is the main form of tobacco use in Kenya. Cigarette consumption can be estimated if there is data on the adult population, smoking prevalence, and smoking intensity. Smoking prevalence and smoking intensity are best measured using nationaly representative survey data.

Some of the available datasets that can provide a glimpse of cigarette consumption in Kenya include the Kenya Integrated Household Budget Survey (KIHBS) 2005/06, and 2015/16 the Kenya Demographic and Health Surveys (KDHS) of 2008/9 and 2014, and the Kenya Global Adult Tobacco Survey (GATS) of 2014.

KIHBS 2005/06 collected household information on consumption of various household items including tobacco. Overall, about 17 percent of sampled Kenyan households were estimated to have non-zero expenditures on tobacco. Generally, as the age category of the household head rises from 15-19 to 50-54 years, the proportion of households with non-zero tobacco use increased.

The 2008-09 Kenya Demographic and Health Survey (KDHS) was a nationally representative sample survey of 8,444 women aged 15 to 49 and 3,465 men aged 15 to 54 selected from 400 sample points (or clusters) throughout Kenya. Among the males aged 15-49, 19 percent were

current users of tobacco products while 18 percent smoked cigarettes. Less than 1 percent of women said they used cigarettes and less than 2 percent said they used tobacco of any kind (KNBS and ICF macro, 2010).

The findings from the KDHS (2014) were more or less similar. It is reported therein that 16 per cent of men age 15-49 smoked cigarettes. Use of tobacco is more common among men with no education and those in the lower wealth quintiles. Among men who smoke cigarettes, 28 per cent smoked more than 10 cigarettes in the past 24 hours.

The results of several surveys reported by the WHO (2015) are reproduced in Table 3.3. The surveys include the Kenya GATS (2014) and the World Health Survey (2004). Although the surveys are not strictly comparable, the overall finding from these surveys reaffirms the findings from the KIHBS 2005/06 and KDHS 2008/09. Among adults, current tobacco use or cigarette smoking is mainly restricted to the men with prevalence rates ranging from 15.1 percent to 26 percent. Women have a prevalence rate that is estimated at about 2 percent for the World Health Survey but less that 1 percent for all the other surveys.

Table 3.3: Tobacco Use: Recent National Surveys Among Adults in Kenya

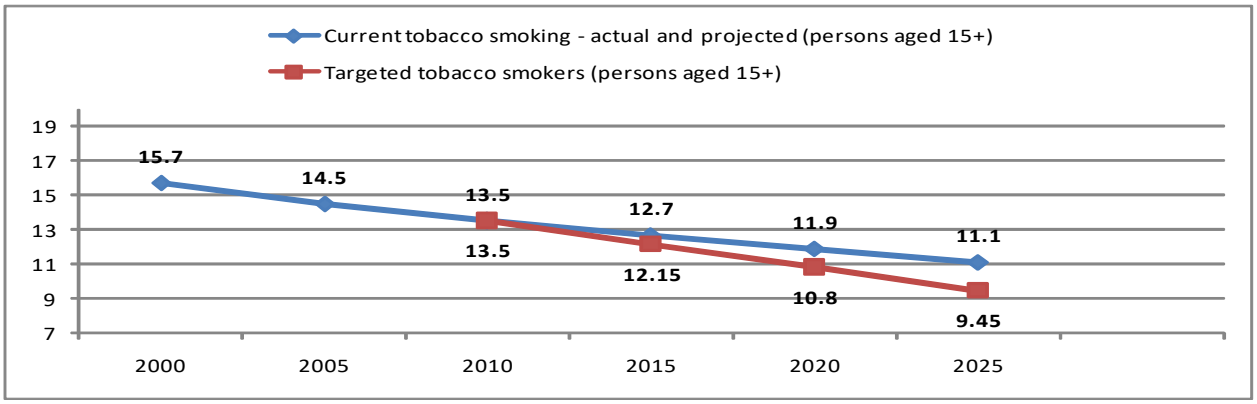
Survey name	Survey year	Age	Tobacco type	Current use		Daily use	
				Men	Women	Men	Women
Kenya GATS	2014	15+	Tobacco smoking	15.1	0.8	11.6	0.6
Kenya Demographic and Health Survey	2008/09	15-49	Cigarette smoking	18.2	0.3	18.1	0.3
World Health Survey, Kenya	2004	18+	Tobacco smoking	26.2	1.9	21.2	0.9
Kenya Demographic and Health Survey	2003	15-49	Cigarette smoking	22.9	0.7	…	0.6

Source: WHO (2015)

A relatively new phenomenon is the use of smokeless tobacco. Data on smokeless tobacco use was only available for the Kenya GATS (2014) survey which revealed that the prevalence of its use among those aged 15 and above was 5.3 percent for men and 3.8 percent for women.
It is also important to observe that information on the use of smokeless tobacco has rarely been captured in most of the surveys done in Kenya so far. The global youth tobacco survey (and the Kenya GATS, 2014) indicates evidence of use of smokeless tobacco among the youth as well as adults. Relative to "tobacco use" use of "smokeless tobacco" appears to be higher among females.

Based on data from WHO (2015) current estimates put Kenya as one of the highest consumers of tobacco in sub-Saharan Africa (SSA). It was estimated that about 14 percent of Kenya's population or approximately 3.2 million persons smoked in 2010 (WHO, 2015). The WHO (2015) projects that by 2025 around 11 percent of the population or about 4.1 million persons will be smokers. Relative to the adopted voluntary global target to reduce tobacco use by 30 percent by 2025 (relative to the 2010 rate), Kenya will not be able to achieve the smoking component of the target based on current trends as illustrated in Figure 3.1.

Figure 3.1: Current tobacco smoking (actual, projected and targeted) 2000-2025 (%)



Source: Data obtained from WHO (2015) and author computations

In more recent estimates, Drope et al (2018) estimated that Kenyans smoked 264 cigarettes per person per year in 2016. The estimated consumption was higher than most of those of its neighbors including Ethiopia (115), Rwanda (94), Tanzania (182) and Uganda (196).

3.3 Effects of tobacco tax on consumption of tobacco

Although there have been numerous changes or reforms in the tobacco tax system, there were very few studies on the impacts of the tax changes on consumption. Consumption could only be gleaned from time to time from some of the national surveys summarized in the foregoing section.

Empirically, only a few studies have examined the consumption effects of the changes in cigarette taxes. The only study this review came across and a particularly important one was that by Nargis et al (2015) which examined cigarette taxation in Kenya making use of a simulation model.

Nargis et al (2015) observed that the tiered tax structure created incentives for manufacturers to reposition their brands for maximum gain – which is a common practice to reduce the RSP of lead brands in order to be eligible for a lower tax rate. In this way, the tiered tax structure ultimately induces smokers to switch to cheaper brands instead of quitting in the event of tax and price increase.

The analysis by Nargis et al (2015) concludes that the tiered specific excise taxes on cigarettes are not effective for tobacco control as they would lead to higher levels of cigarette consumption as well as lowered revenue levels. Their analysis advocates for a uniform specific excise which is identified as best practice in tobacco control and excise revenue maximization.

4 Tobacco Tax Measures and Consumption Effects

This section advances the previous sections by examining more closely the link between tobacco taxes and consumption using a simulation model. Simulations are an efficient way of determining the effect of excise taxes on key variables in a context characterised by limited survey data. In most contexts, data on smoking prevalence is only available in a national survey and national surveys are conducted after long durations. In Kenya for instance, the last representative national surveys where prevalence data can be computed were implemented in 2014-2016 period.

4.1 The WHO Tobacco Simulation Model (WHO TaxSiM)

The WHO Tax Simulation Model (TaXSiM) is used to examine the effects of cigarette tax policy changes on cigarette consumption in Kenya. The effects are analysed using two separate simulation scenarios that refer to a benchmark or base scenario that prevailed prior to changes made in the Excise Duty Act No. 23 of 2015. It should be noted that a simulation is simply an approximate imitation of the actual operation of a process or system.

The simulation performed in this study is different from the one by Nargis et al (2015) which focused on two scenarios the first of which was the introduction of an ad valorem excise on cigarettes in 2011 to 2014. The second was the introduction of a uniform specific excise for cigarettes of Kshs. 2,500 per 1,000 and subsequent uniform tax increases adjusted to inflation up to 2025. The focus of the current simulation is to examine the tax effects on consumption of two separate scenarios which are: an introduction of a uniform specific tax on the one hand and the introduction of a tiered specific excise rate (which was actually introduced in 2015). In this analysis, unlike the one by Nargis, there is only one base period i.e. the year 2015.

The year 2015 is appropriate for a base period for at least one reason. It is a year for which estimates of consumption of cigarettes/tobacco are available from the GATS, KDHS and KIHBS data and/or analytical reports. The simulation model uses the GATS prevalence rates.[3]

In 2015, Kenya's population was estimated at about 45.371 million with 22.393 men and 22.997 women respectively. Individuals aged 15 years and over were 59.0 per cent of the

[3] The prevalence rates did not vary widely across the surveys

population (KIHBS, 2015/16). Thus, a smoking prevalence of 7.8 per cent, implied that there were about 1.95 million adult smokers in Kenya in 2015.

Although the focus shall be on tax effects on consumption this study also examined the effects on prices and expected tax revenues. The two scenarios allowed for a comparison of the outcomes that would have resulted had what is commonly accepted as the best practice scenario (i.e. a uniform specific excise) – been implemented consistently relative to a tiered excise system.

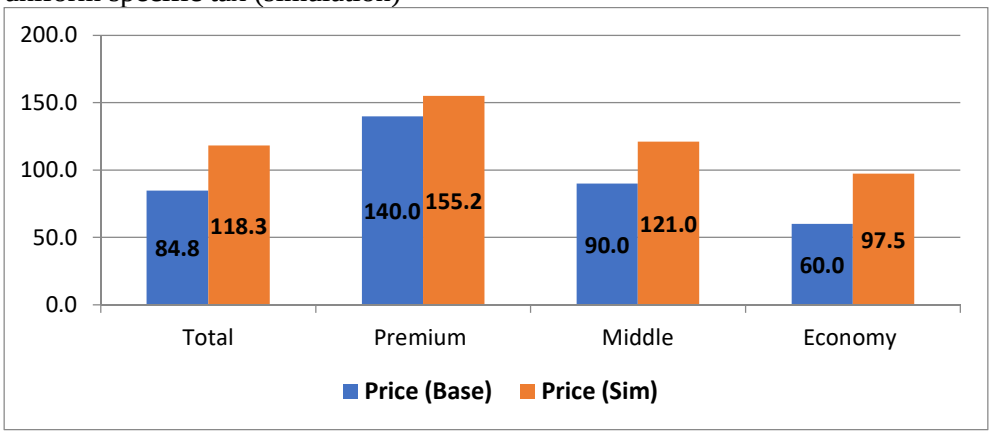
The cigarette market is segmented into Premium, Middle and Economy brands. The analysis uses elasticities similar to those of Nargis et al (2015) of -0.1, -0.3 and -0.5 for the Premium, Middle and Economy brands respectively.

4.2 The WHO Tobacco Simulation Model Results

Price Effects of the tax systems

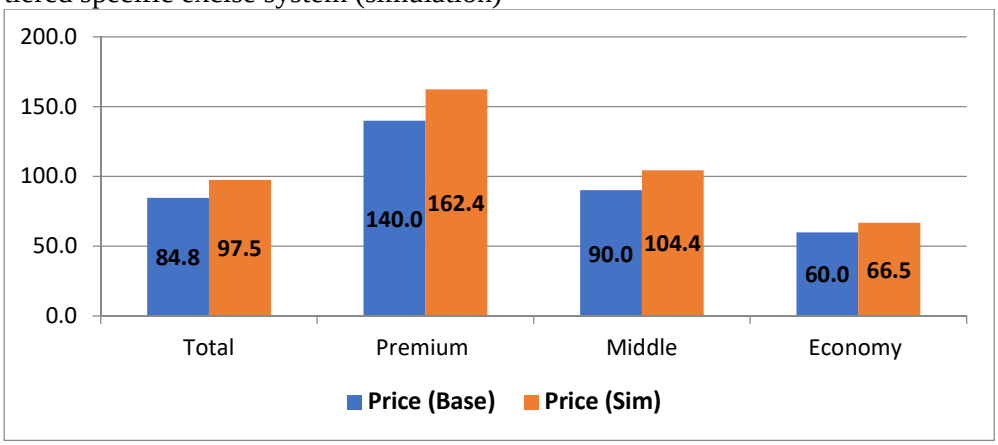
Relative to the tiered specific excise system, a uniform tax results in a larger increase in the price of a pack of cigarettes (Figures 4.1a and 4.1b). The shift to a uniform specific tax of Ksh. 2,500 per 1,000 cigarettes from a single tax rate increases the average price of a pack of cigarettes by 39 per cent (from Kshs. 85 to Kshs. 118). On the other hand, the tiered specific excise system increases price by 15 per cent (from Kshs. 85 to ksh. 97.5).

Figure 4.1a: Average price broken down by segment – from single tax rate (base) to a uniform specific tax (simulation)



Source: Author computations using the WHO Tobacco Simulation Model

Figure 4.1b: Average price broken down by segment – from a single tax rate (base) to a tiered specific excise system (simulation)



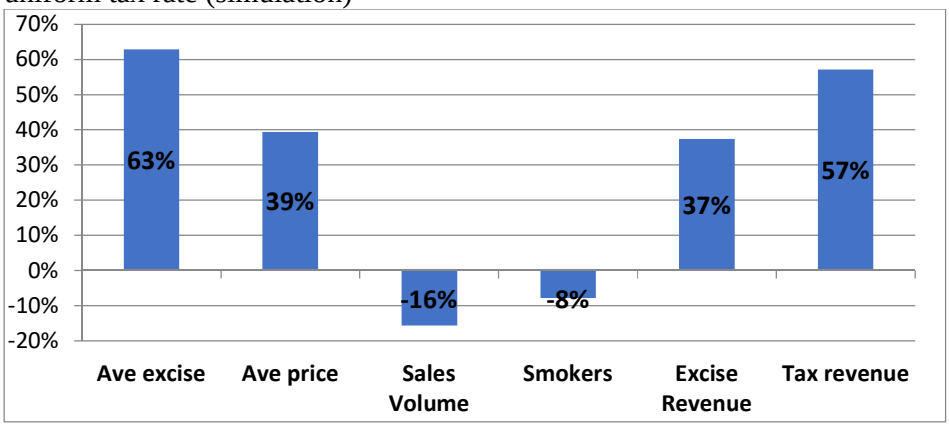
Source: Author computations using the WHO Tobacco Simulation Model

The price increase, following the introduction of a uniform tax rate, is highest for the Economy brands followed by the Middle brands. This is the exact opposite of the effects of the tired excise system for which the highest price increase is for the Premium and Middle brands (price increase of 16.0 percent). The Economy brands had a price increase of 10.8 per cent for the tiered excise system (Figure 4.1b).

Figures 4.2a and 4.2b summarize the impact of the uniform tax (figure 4.2a) and the tiered excise system (figure 4.2b) on key market indicators including average excise, average price, sales volume, number of smokers, excise revenue and tax revenue.

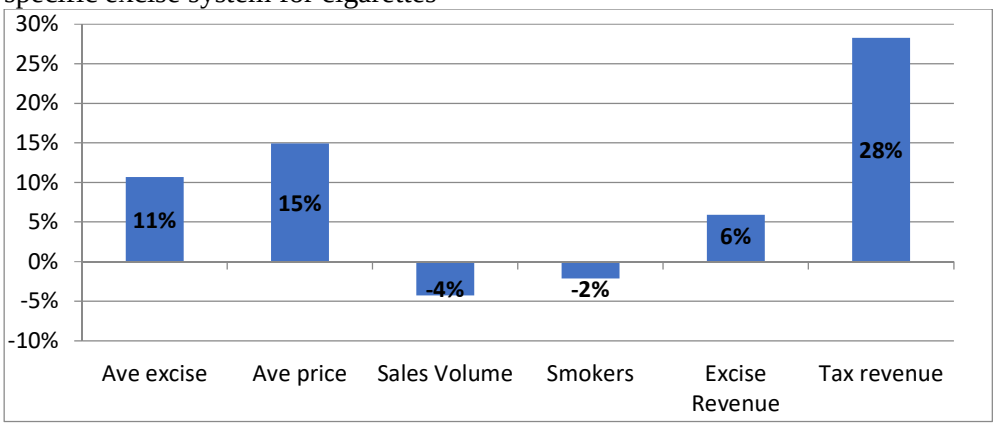
Although, the number of smokers would reduce for both simulation scenarios i.e. use of a uniform tax rate and/or a tiered specific excise system, the uniform tax rate would result in a larger reduction in the number of smokers (Figure 4.2a and 4.2b). Specifically, the number of smokers would reduce by 8 per cent following the introduction of the uniform tax relative to a reduction of 2 per cent following the introduction of the tiered specific excise system.

Table 4.2a: Percentage change in key market indicators – from single tax rate (base) to a uniform tax rate (simulation)



Source: Author computations using the WHO Tobacco Simulation Model

Figure 4.2b: Percentage change in key market indicators – from single tax rate to tiered specific excise system for cigarettes



Source: Author computations using the WHO Tobacco Simulation Model

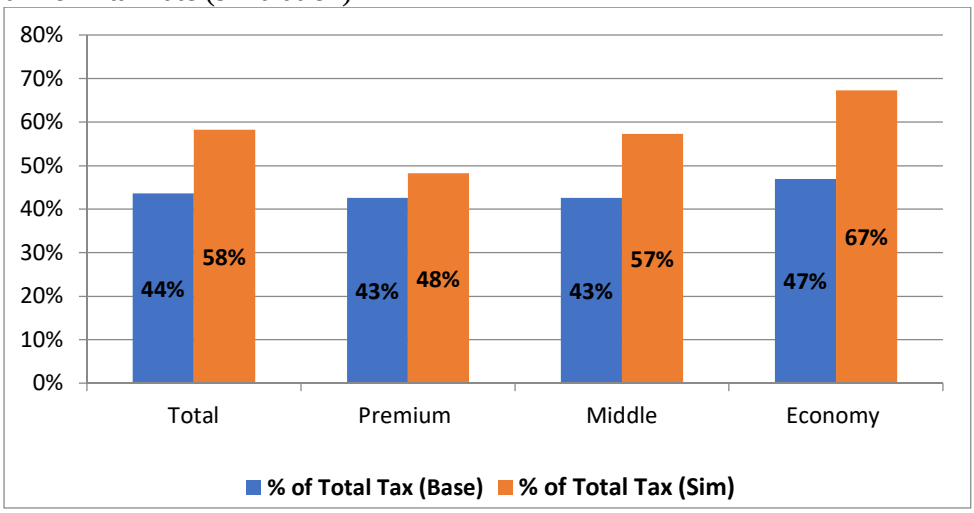
The prospective excise tax revenue increases in both scenario i.e. use of a uniform tax rate and/or a tiered specific excise system – but the uniform tax rate results in a much larger excise tax increase of 37 per cent relative to 6 per cent for the tiered specific excise system (Figure 4.2a and 4.2b). In addition, tax revenue increases by 57 per cent in the uniform tax scenario relative to an increase of 28 per cent for the tiered specific excise system.

In 1999, the World Bank announced a yardstick after observing that the tax accounts for two thirds to four fifths of the relative price of cigarettes in countries with comprehensive tobacco control policies. This informs the WHO FCTC recommendation that at least 70 percent of the retail price of tobacco products comes from excise taxes. As of 2012 only about 5 nations had achieved this best practice standard.

Kenya's baseline scenario indicates that on aggregate, the share of total tax on cigarettes was about 44 percent in 2015. A uniform tax rate of 2,500 per 1000 cigarettes would have pushed this share to about 58 per cent which would still be below the best practice standard (Figure 4.3a). The increase in the total tax share would have been highest for the economy brands (20 per cent increase) and lowest for premium brands (a 5 percent increase). All excise tax shares would still be below the best practice standard. This is interpreted to suggest that Kenya has ample room to increase its tax rates.

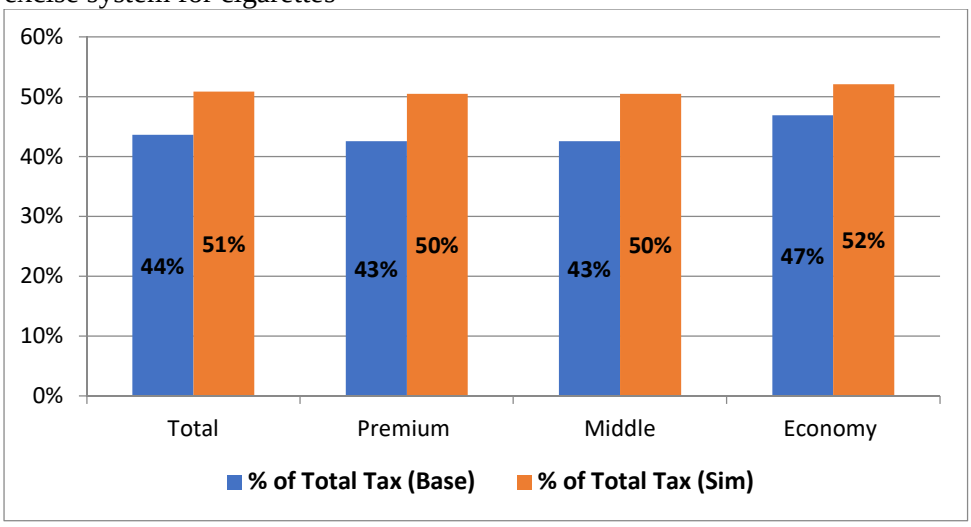
On the other hand, for the tiered excise system, the share of total tax on cigarettes would have increased by 7 per cent for both the premium and middle brands and by 5 percent for the economy brands (Figure 4.3b).

Figure 4.3a: Total tax share broken down by segment – from single tax rate (base) to a uniform tax rate (simulation)



Source: Author computations using the WHO Tobacco Simulation Model

Figure 4.3b: Total tax share broken down by segment – from single tax rate to tiered specific excise system for cigarettes



Source: Author computations using the WHO Tobacco Simulation Model

Thus, the uniform tax performs better on account of increasing product prices, increasing excise revenue and the total tax share in cigarette prices.

The argument that the tiered system protects the poor is weak and is not supported by any evidence. It may in fact harm the poor more in the medium term to long term by resulting in relatively higher levels of consumption among the poor than would have been the case if a uniform tax was applied. The relatively larger consumption may result in increased loss of income due to tobacco attributable diseases; loss in productivity and increased poverty.

It may be averred that the tiered tax is inferior to the uniform tax with respect to the achievement of SDG target 3.4 “to reduce premature mortality from NCDs by one third and SDG target 3.a – to strengthen country level implementation of the WHO FCTC.

5 Stakeholders in Tax Enhancement Advocacy Measures

There have been a number of key stakeholders in the tax enhancement advocacy efforts. These include: The Government of Kenya whose main agencies are the Ministry of Health (MoH), the National Treasury, and the Kenya Revenue Authority. Other key public sector affiliated bodies include: the Kenya Institute for Public policy Research and Analysis (KIPPRA), and the National and County Assemblies and particularly the Health Committees of these assemblies. In this list can be added the Tobacco Control Board which was established by the Tobacco Control Act, 2007.

The roles/mandate of these public and quasi-public organizations encompass health policy and health regulation (MoH and Parliament); capacity building and technical assistance (MoH, KIPPRA); policy research (KIPPRA) and advisory roles to the Minister in charge of health (Tobacco Control Board and KIPPRA).

Some of the conspicuous locally based civil society organizations/non-governmental stakeholders include: the International Institute for Legislative Affairs (IILA), the Kenya Tobacco Control Alliance (KETCA), Non-Communicable Diseases Alliance of Kenya (NCDAK), and the National Taxpayers Association (NTA). These organisations have been effective in among other interventions: engaging and collaborating with local and international partners; mobilizing resources to support tobacco control efforts; developing capacity for tobacco control; and conducting policy relevant studies and campaigns in tobacco tax advocacy.

Advocacy measures by locally based CSOs have also focused on the use of fiscal policy to promote public health and the role of the National Treasury. Stakeholders have organised several interventions towards enhancing the role of the National Treasury. This include training workshops for Ministers in charge of finance, trade and health. The collapse of the tax structure from a four tier to a single tier system (and the provision to adjust the tax increases to account for inflation) in 2012 is attributed to one such training effort.

The CSOs have also been strong lobbyists for reform of the tax structure to best practice. As an example, the transition to a uniform specific rate of excise tax in 2015 was a result of

strong lobbying from locally based CSOs. However, this apparent success was short-lived as the tax structure was revised to a tiered structure by Parliament.

There are also a host of international organizations including: the World Health Organisation (WHO), the Centre for Tobacco Control in Africa (CTCA), the University of Cape town, the American Cancer Society, and the Campaign for Tobacco Free Kids (CTFK) all of which have been instrumental in various aspects of technical support and/or provision of funding for research on tobacco control.

6 Conclusions (preliminary)

The paper examines recent changes in tax policy and how the changes affect key market indicators including retail price of cigarettes, cigarette consumption and excise tax revenues from cigarettes. The analyses focus on the effects of a tax policy change from a single tax rate (used as base) to a tiered specific excise or to a uniform excise tax system.

The proposed uniform tax rate of Ksh. 2,500 per 1,000 cigarettes, outperforms the tiered specific system in all the indicators considered. This include in price changes, cigarette consumption, and excise revenues. In the proposed uniform system, the number of smokers would reduce by a larger margin.

The results indicate a win-win scenario as the excise tax revenue would also rise significantly by 37 per cent.

Despite the large increase in revenues, there would still be room to increase the excise rates further (for Middle and Premium brands) as the share of excise to the retail price (at about 58 per cent) shall still be below the World Bank yardstick of two thirds to four fifths of the relative price of cigarettes and the WHO recommendation of at least 70 percent.

The tiered system enhances affordability of cigarettes among the poor. It may thus lead to: relatively higher levels of consumption especially among the poor, increased initiation of cigarette use by the youth, increased loss of income due to tobacco attributable diseases; loss in productivity and increased poverty. The tiered tax is inferior to the uniform tax with respect to the achievement of SDG target 3.4 “to reduce premature mortality from NCDs by one third and SDG target 3.a – to strengthen country level implementation of the WHO FCTC. It is expected that the tiered tax shall be relatively more prone to tax avoidance, evasion and corruption.

References

Drope J, Schluger N, Cahn Z, Drope J, Hamill S, Islami F, Liber A, Nargis N, Stoklosa M. 2018. The Tobacco Atlas. Atlanta: American Cancer Society and Vital Strategies.

Government of Kenya (2015). Excise Duty Act No. 23 of 2015. Nairobi: The Government Printer.

Government of Kenya (2017). The Finance Act, 2017. Nairobi: The Government Printer.

Kenya National Bureau of Statistics (KNBS) (2007). *Basic Report on Well Being in Kenya: Based on the Kenya Integrated Household Budget Survey (KIHBS) 2005/06.* Nairobi: KNBS.

Kenya National Bureau of Statistics (KNBS) and ICF Macro (2010). *Kenya Demographic and Health Survey 2008-09*. Calverton, Maryland: KNBS and ICF Macro.

Kenya Tobacco Control Analysis Consortium (2008). Report of the Baseline Assessment titled "Situational Analysis of Tobacco Control in Kenya."

Kieyah, J., Shibia, A.G. and Gitonga, A. (2014). Situational Analysis of Illicit Trade in Tobacco Products in Kenya. KIPPRA Special Paper No. 15.

Nargis, N., Stoklosa, M., Drope, J., Ikamari, L., Ong'ang'o, J.R., Fong, G.T., Kimosop, V., and Chaloupka, F.J. (2015). Cigarette Taxation in Kenya at the Crossroads: Evidence and Policy Implications. University of Waterloo, Waterloo, Ontario, Canada.

WHO (2003). WHO Framework Convention on Tobacco Control, Geneva, Switzerland.

WHO (2011). WHO Technical Manual on Tobacco Tax Administration.

WHO (2013). WHO Framework Convention on Tobacco Control. Guidelines for implementing article 6. WHO. FCTC/16.7

World Health Organization (WHO), (2014). Global Status Report on non-Communicable Diseases, 2010.

WHO (2015). Global report on trends in prevalence of tobacco smoking 2015.

WHO (2013). Protocol to Eliminate Illicit Trade in Tobacco Products.

Yen, S.T. (2005) Zero observations and gender differences in cigarette consumption, Applied Economics, 37, 1839–1849