



STUDY ON EFFECTS OF TOBACCO TAXATION ON TOBACCO CONSUMPTION IN KENYA

NTA IN BRIEF

The National Taxpayers Association (NTA) is an independent, non-partisan organization focused on promoting good governance in Kenya through citizen empowerment, enhancing public service delivery and partnership building. Since 2006 NTA has implemented programmes focused on building citizen demand and strengthening government service delivery performance to enhance accountability through monitoring of the quality of public services and management of devolved funds. NTA envisions a taxpayer responsive government delivering quality services to all. Its mission is to undertake taxpayer-transforming research & capacity building through partnerships to influence government policy & strategy.



TAX JUSTICE NETWORK AFRICA IN BRIEF



Tax Justice Network Africa (TJNA) is a pan-African research and advocacy organisation established in 2007 and a member of the Global Alliance for Tax Justice (GATJ). Through its Nairobi Secretariat, TJNA collaborates closely with its member organisations and other civil society partners across Africa to curb Illicit Financial Flows (IFFs) and promote progressive taxation systems. TJNA advocates for pro-poor tax policies and the strengthening of tax systems to promote Domestic Resource Mobilisation (DRM).

The NTA in partnership with Tax Justice Network Africa (TJNA) implemented this study in Kenya. The institutions are currently implementing a project on Tobacco Tax Advocacy in Africa. The overall goal of the project is discourage the use of tobacco and tobacco products which are known to be harmful to households and economies. Tobacco tax is a central factor in pricing and therefore, can be used to reduce tobacco affordability through price increase.



EXECUTIVE SUMMARY

INTRODUCTION

This study set out to review and examine cigarette taxation in Kenya and how it affects cigarette consumption. The study examined the effects of recent cigarette tax policy changes on both tax revenue and cigarette consumption. The study results are expected to inform progress towards reform to a better tobacco tax structure for Kenya.

METHODOLOGY

The study used the WHO Tobacco Tax Simulation Model (TaXSiM) to examine the effects of cigarette tax policy changes on cigarette consumption in Kenya. The effects of cigarette taxes were analyzed 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. Besides the simulation model, the study also undertook an extensive review of the literature on tobacco taxation focusing on Kenya experiences.

OBSERVATIONS AND FINDINGS

A key observation of the study's review is that although tobacco taxation is recognized as the most effective control measure of reducing tobacco consumption by Article 6 of the WHO FCTC – the tiered tax structure that Kenya uses is known to be inferior to a uniform tax in reducing consumption of tobacco and enhancing excise tax revenue. This is supported by the tobacco tax simulation results whose key findings were:

- (1) The uniform tax performs better on account of increasing cigarette prices, increasing cigarette excise revenue and the total tax share in cigarette prices.
- (2) A uniform tax would result in a larger reduction in the number of smokers and larger reduction in the consumption of cigarettes. Under a uniform excise tax rate of Ksh. 2,500 consumption of cigarettes would reduce by 3 million relative to 761 thousand for the tiered tax.
- (3) A uniform tax rate of 2,500 per 1,000 cigarettes would have pushed the share of total taxes to the retail price of cigarettes to about 58 per cent (which is lower than the recommended 70 per cent share). This suggests that the country has ample room to increase its tax rates above the current applicable rates.
- (4) The uniform tax results in a much larger excise tax revenue increase of 37 per cent relative to 6 per cent increase in revenues for the tiered specific excise system.



RECOMMENDATIONS

The findings led to the following recommendations:

- (1) That the government through the National Treasury and Planning Ministry should reform the tax structure to conform to best practice by introducing a uniform tax rate that gradually moves the country to achieve the 70 per cent share of tax in the total retail price of cigarettes.
- (2) In a related vein, that the government through the National Treasury and Planning Ministry avoids frequent amendments in the tax structure to create a simple system that deters tax avoidance or evasion.
- (3) That all stakeholders (including the National Treasury and Planning Ministry, Ministry of Health and Civil Society Organizations) should work to reorient tobacco control policy to protect consumers rather than tobacco firms. This should stem the recent Budget Policy statements in the 2017/18 Budget that were focused on protecting tobacco firms. This reorientation shall be in line with international conventions and protocols for which Kenya is a signatory.
- (4) Introduce or enhance tobacco control interventions as suggested above and also including education and awareness campaigns to enable the country to achieve its adopted voluntary target to reduce tobacco use by 30 per cent by 2025 (relative to the 2010 rate) – which shall not be achieved if the current rates of decline in prevalence are maintained.



Reduce tobacco use by 30 per cent by 2025

ACRONYMS AND ABBREVIATIONS

CIF	Cost, Insurance and Freight
CPI	Consumer Price Index
CSO	Civil Society Organization
CTCA	Centre for Tobacco Control in Africa
CTFK	Campaign for Tobacco Free Kids
EAC	East African Community
EU	European Union
FCTC	Framework Convention on Tobacco Control
GATS	Kenya Global Adult Tobacco Survey
IILA	International Institute for Legislative Affairs
KDHS	Kenya Demographic and Health Surveys
KETCA	Kenya Tobacco Control Alliance
KIHBS	Kenya Integrated Household Budget Survey
KIPPRA	Kenya Institute for Public policy Research and Analysis
KNBS	Kenya National Bureau of Statistics
MoH	Ministry of Health
NACADA	National Authority for the Campaign Against Alcohol and Drug Abuse
NCD	Non-Communicable Disease
NCDAK	Non-Communicable Diseases Alliance of Kenya
NTA	National Taxpayers Association
RSP	Retail Selling Price
SDG	Sustainable Development Goals
SSA	Sub-Saharan Africa
TaxSim	Tobacco Tax Simulation Model
USD	United States Dollar
VAT	Value Added Tax
WHO	World Health Organization

FOREWORD



This report presents the analyses and findings of the effects of tobacco taxation on tobacco consumption in Kenya and makes recommendations on the preferred tax structure for Kenya. The study generates evidence in support of Article 6 of the World Health Organization (WHO) Framework Convention for Tobacco Control (FCTC) which recommends price and tax measures as the most effective way to reduce tobacco consumption especially among the youth.

Marginal price increase yields positive outcome through reduction of consumption of tobacco. In addition, tax policy measures – such as an increase in excise duty - are effective in correcting negative externalities (such as exposure to second hand smoke) resulting from tobacco use. Under the

WHO FCTC, Kenya is obligated to protect present and future generations from the devastating health, social, environmental and economic consequences of tobacco consumption and exposure to tobacco smoke. Significant efforts have been made by Kenya to increase tobacco taxes, however, the prevailing rates which account for about 52 per cent of the retail selling price, still fall below the recommended WHO minimum of 70 per cent.

Despite concerted efforts to control tobacco consumption in Kenya over the last decade, it is estimated that over 2.5 million adults use tobacco products – mainly cigarettes. It is also estimated that 5 per cent of all deaths from non-communicable diseases in Kenya result from tobacco use, while 55 per cent of all deaths from cancers of the trachea, bronchitis, and the lung are attributable to tobacco use.

It is in view of the above that the National Taxpayers Association undertook this study. The study reviewed selected relevant existing documents on tobacco taxation and consumption in Kenya. The study also examined tobacco taxation and consumption from a theoretical and empirical perspective and carried out a review of stakeholders involved in tobacco control advocacy. Overall, the study provides an informed entry point for advocating for not only a change in the structure but also an increase in the rate of tobacco taxes in Kenya.

We envision that the findings of this study will build on the efforts made by Kenya in controlling consumption of tobacco products, generate evidence and demonstrate opportunities to advocate for increase in tobacco taxes so as to discourage its consumption and attain the WHO FCTC recommended tax share of 70 per cent of the final consumer price of cigarettes.

MS IRENE OTIENO
NATIONAL COORDINATOR (NTA)

ACKNOWLEDGMENTS

The National Taxpayers Association – NTA wishes to acknowledge the contribution of various individuals who made this publication possible.

Special thanks to the NTA National Governing Council under the leadership of **Mr. Peter Kubebea** for their continued support and leadership. We also take note of the strategic advice from **Mr. Michael Otieno**, NTA's governance advisor.

We also extend our great appreciation to all stakeholders who participated in the consultative and validation meetings. NTA would therefore like to acknowledge Mr. Boaz Munga KIPPRA, Ms. Emma Wanyonyi – Institute for Legislative Affairs (ILA), Dr. Eric Kibet – United States International University (USIU)-Africa, Dr. Salome Nyambura – Kenyatta University (KU), Dr. Tabitha Wangeri – Kenyatta University (KU), Mr. Achieng Otieno – Kenya Tobacco Control Alliance (KETCA), Mr. Vincent Kimosop – Tax Justice Network Africa (TJNA), Hellen Wamuyu – Non-Communicable Disease Alliance - (NCDAA) and Mr. Adrian Njenga – National Authority for the Campaign against Alcohol and Drug Abuse (NACADA) for their invaluable contribution towards the successful completion of the report.

NTA would therefore like to acknowledge contributions from **Ms. Francisah Marabu**, the project officer and **Ms. Marion Ngayi**, the project assistant who steered the project. We also extend our acknowledgments to all the NTA staff at the Regional offices and at the Secretariat led by the National Coordinator **Ms. Irene Otieno**.

Our sincere gratitude goes to Tax Justice Network Africa (TJNA) whose financial and technical support made this study report possible. We are most grateful to **Mr. Vincent Kimosop**-TJNA Technical Tax Advisor for his valuable advice and guidance throughout the process of this study.

To all those who participated in one way or the other, we appreciate and thank you for making the development and completion of this study report a reality.

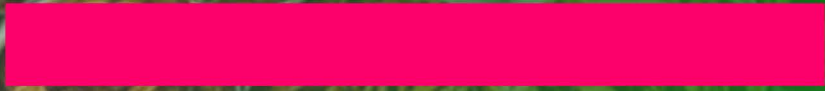
CONTENTS

Executive Summary	iv
Acronyms and Abbreviations	vi
Acknowledgments	viii
1 Background	1
1.1 Introduction	1
1.2 Objectives of the study	3
1.3 Organization of the study	4
2 Tobacco Taxation and Consumption – Theoretical and Empirical Perspectives	6
2.1 The appropriate type of excise on tobacco products	6
2.2 The choice between uniform and a differential rate tax system	8
3 Tobacco Taxation and Consumption in Kenya	10
3.1 Evolution of tobacco taxation in Kenya	10
3.2 Tobacco consumption in Kenya	12
3.3 Effects of tobacco tax on consumption of tobacco	14
4 Tobacco Tax Measures and Consumption Effects	16
4.1 The WHO Tobacco Tax Simulation Model (WHO TaxSiM)	16
4.2 The WHO Tobacco Simulation Model Results	17
4.2.1 Effects of the tax structures on price of cigarettes	17
4.2.2 Effects of the tax systems on number of smokers and consumption	18
4.2.3 Effects of the tax structures on average excise and share of tax in total retail price of cigarettes	20
5 Conclusions and Recommendations	24
5.1 Conclusions	24
5.2 Recommendations	25
References	27
Annex 1: Stakeholders in Tax Enhancement Advocacy Measures	28



1

BACKGROUND

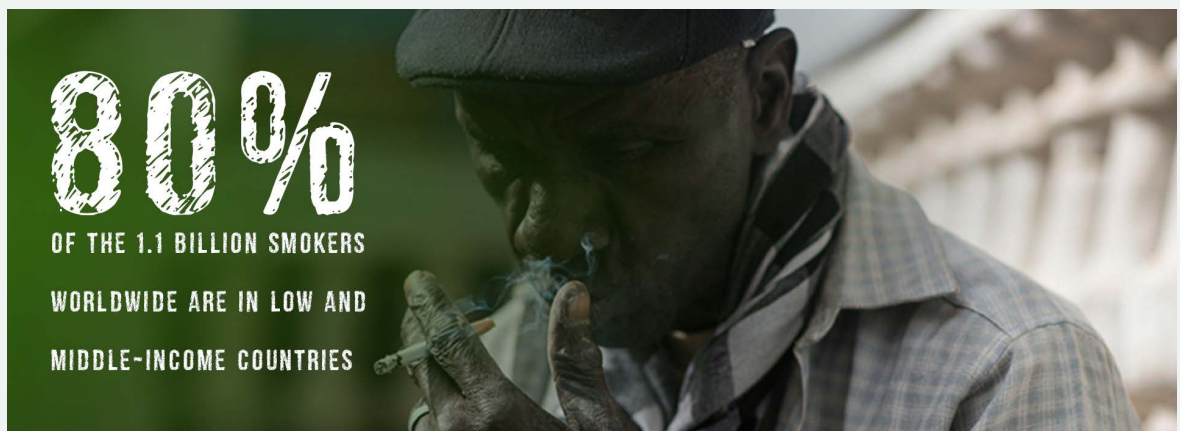


1 BACKGROUND

1.1 Introduction

Over 1.1 billion people are current users of tobacco globally and about 5.7 trillion cigarettes sticks were smoked worldwide in 2016. Although, global consumption declined slightly over the past few years leading to 2017, more developed regions experienced decreasing consumption while 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).

On a global scale, tobacco consumption has, and is expected to present numerous socio-economic challenges over the medium to long term. This is because tobacco use 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.*



The use of tobacco may thus negatively impact on progress towards achievement of development goals such as the Sustainable Development Goals (WHO, 2014, 2015).

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 – and for which Kenya is a signatory. 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).*

With respect to the basket of tobacco control interventions, tobacco taxation is identified as one of the six core tobacco demand reduction measures. Taxation of tobacco is recognized as the most effective control measure of reducing tobacco consumption by Article 6 of the WHO FCTC. The importance of tax policies 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).

Besides the tax measures, the WHO FCTC also notes the importance of non-price measures to reduce demand for tobacco in Article 7. The specific interventions through legislation, administrative or other measures encompass: protection from exposure to tobacco smoke (Article 8), regulation of

the contents of tobacco products (Article 9), regulation of tobacco product disclosures (Article 10), and packaging and labelling of tobacco products (Article 11). Also included in the basket of interventions is the need to promote and strengthen public awareness of tobacco control issues – through education, communication, training and public awareness (Article 12) and a comprehensive ban on advertising, promotion and sponsorship of all tobacco products (Article 13).

The WHO FCTC is supported by domestic laws in Kenya. The foremost legal instrument is the Tobacco Control Act of 2007, which conforms to the main principles contained in the WHO FCTC. Other interventions in the legislative landscape include: The Tobacco Control Regulations, 2014; the National Policy on Tobacco Control; and the National Action Plan on Tobacco Control.

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 sticks 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 including Uganda and Tanzania.

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	6.5	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		
EU*	29.6	23.3		
Global	22.1	18.9		

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

Note: *EU encompasses the European countries

With respect to prevalence, about 14 per cent of Kenya’s population or approximately 3.2 million persons smoked in 2010 – and is expected to decline to 11.1 per cent in 2025 (WHO, 2015). Even then, if current declines in prevalence are maintained, Kenya shall not achieve the voluntary global target of reducing prevalence rates by 30 per cent by 2025 relative to the 2010 prevalence rates. This state of affairs calls for more concerted efforts in the control of tobacco use in Kenya.

With respect to effects of consumption, 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.



With respect to the control of tobacco use, Kenya is still 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 objectives¹.

This is evident from the numerous amendments to the Customs and Excise Act, following the annual budget statement causing changes in cigarette tax structure. As examples, from 2008 to 2011, the criteria for excise tax were based on the physical characteristics of cigarette retail selling price. The cigarette tax structure changed in 2012 and Kshs. 1,200 per mile or 35 per cent of retail selling price was charged, whichever was higher. Changes were also implemented in 2015 and 2017 respectively.

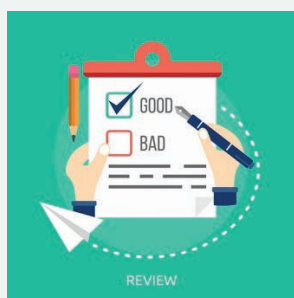
Kenya, like most countries, faces the challenge of how to choose which type of excise to levy (Ad Valorem versus Specific) and at what rate. In addition, it is a challenge to find the appropriate balance between ad valorem and specific taxation. Although a uniform tax is known to be superior to a differential rate, Kenya still applies a tiered or differentiated excise tax for cigarettes (WHO, 2011; Government of Kenya, 2015).

This study seeks to address the gap around the choice of the most appropriate tax with the understanding that 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).

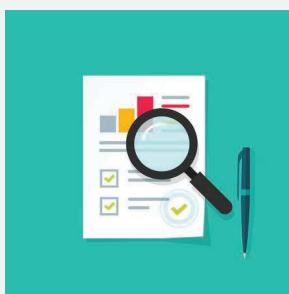
1.2 OBJECTIVES OF THE STUDY

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:



To review tobacco taxation and consumption in Kenya;



To analyze the effects of tobacco taxes on tobacco consumption.

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 – accounting for an estimated 90 per cent of the tobacco product market. Secondly, cigarettes generate the highest excise revenue and have the biggest public health impact among tobacco products.

¹One 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 explanations of terms used in the study and also on tobacco taxation and consumption from a theoretical and empirical perspective. A discussion of cigarette taxation and consumption in Kenya is provided in Section 3 while the fourth section describes the simulation approach used and presents results of the simulation (of the effects of taxation on consumption) using two tax scenarios. The fifth section presents the conclusions and recommendations. A brief review of stakeholders involved in tax advocacy measures is summarized in annex 1.



2

TOBACCO TAXATION AND CONSUMPTION Theoretical and Empirical Perspectives

2. TOBACCO TAXATION AND CONSUMPTION – THEORETICAL AND EMPIRICAL PERSPECTIVES.

Tobacco taxation is known as the **most effective tobacco control strategy available**. Excise taxes are the most common form of taxes applied across the globe for tobacco products. The excise tax refers to an indirect type of duty imposed on the manufacture, sale or use of certain goods and services. The tax is indirect because the manufacturer or seller has to charge the purchaser tax for the item and pass the payment to the tax authority.

There are two main types of excises, ad valorem and specific excises. Ad valorem is Latin for “*according to value*” and as the name suggests is levied on a fixed percentage of the value of a good or service. Specific excise is charged per unit sold. An example is a tax of Ksh. 1,200 per 1,000 cigarettes (or Ksh. 1.2 per cigarette). Excise taxes are often used as a mechanism to curb consumption of goods or services considered harmful or unnecessary (and are commonly referred to as the “*sin taxes*”) or act an earmarked tax to fund a public good or even correct for a negative externality of consumption.

Tobacco has become one of the goods that is taxed to achieve both fiscal and public health objectives. The idea is to compensate the government for the cost of dealing with the use of these products that are deemed harmful. The objective of imposing the excise taxes is also to impact on prices and thus stifle consumption by reducing the affordability of tobacco products.

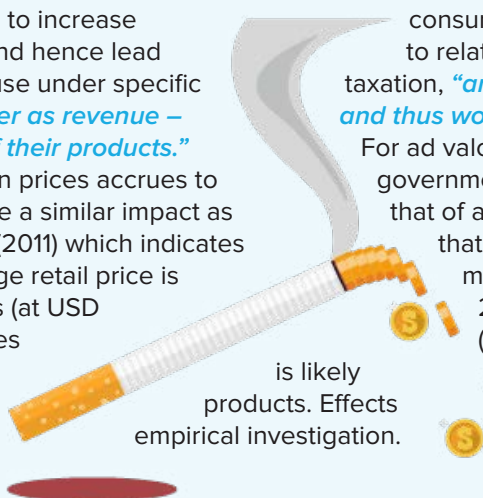
Theoretical and empirical findings suggest a number of broad conclusions regarding the choice between specific and ad valorem excises. But as shall be evident in the subsequent discussions, each choice has certain advantages and disadvantages. The subsequent discussions shall examine effects that the 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 (Chaloupka et al 2010; WHO, 2011). These three broad tax policy effects do, in one way or another, impact on tobacco consumption.

PRICE, CONSUMPTION AND REVENUE EFFECTS OF EXCISE TAXES

Specific excises are known to increase than ad valorem excises, and hence lead consumption. This is because under specific *price will go to the producer as revenue – incentive to raise prices of their products.*” hand, part of the increase in prices accrues to a tax increase may not have a similar impact as by studies including WHO (2011) which indicates is accounted for, the average retail price is rely solely on specific taxes (at USD solely on ad valorem excises effect of specific excise tax consumption of tobacco be ascertained from an



consumer prices relatively more to relatively higher reduction in taxation, “*an increase in the producer and thus would increase the producer’s*” For ad valorem taxes on the other governments as tax revenue and hence that of a specific tax. This is supported that when income level of countries much higher for countries that 2.46) relative to those that rely (at USD 1.29). This larger price to lead to a larger fall in on revenue could only

is likely products. Effects empirical investigation.

Posen, Jodie and van Walbeek (2014) proposed a model to predict the likely impacts of tobacco tax increases and harmonization in the East African Community. The study examined the effects of using a uniform specific tax versus use of a mixed tax structure (i.e. a specific rate of USD 0.60 or an ad valorem excise of 40 per cent of the retail selling price, whichever is higher). The study finds that a uniform tax is the most preferable with respect to impact on consumption and excise tax revenues.

Chaloupka F. J. (2010) examined tax impacts for 21 European Union (EU) countries using time series data from 1998 to 2007. They find that greater reliance on a specific tax has greater impact on cigarette smoking with this impact decreasing with the growth of manufacturers market power. Their study provides evidence that the countries with greater reliance on ad valorem tax experience greater instability of government tax revenues from cigarette excise taxes.

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 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 among the diverse group of consumers.

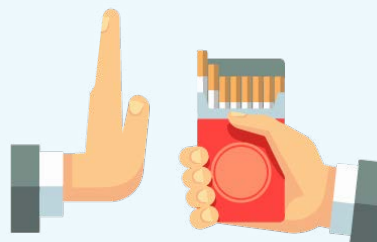
Evidence indicates that ad valorem excises may perform better than a specific price in affecting product variety. Conceptually, an increase in ad valorem tax *“makes markets relatively more competitive which may induce the exit of some brands hence reducing product variety in the market”* (WHO, 2011). 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 to the levied tax.

2.2 THE CHOICE BETWEEN UNIFORM AND A DIFFERENTIAL RATE TAX SYSTEM

With respect to the choice of excise tax structures, the global trend is for governments to simplify their excise tax systems by adopting a uniform tax that applies to all brands. However, many countries still differentiate within cigarette 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. One of the most common supposed reason is the need to protect local producers or poorer consumers.

Even so, studies indicate that the poor bear the brunt of tobacco use. Tobacco use can increase poverty since resources spent on tobacco can have a high opportunity cost especially among poorer households. Usually, among the poor, tobacco expenditures are likely to displace expenditures in basic necessities such as food and health care. In some cases, the diversion of income can be from expenditures that are important for future generations to come out of poverty – such as education expenditure. This effect is likely to be more pronounced among poorer households (Munga, forthcoming; Efrogmson et al., 2001; Aloui, 2003; WHO, 2004).² The increased risk of falling ill or dying from tobacco related diseases presents an additional channel through which tobacco may drive individuals and households into poverty. Illness implies additional health care costs and could be associated with reduced productivity and earnings, as well as lower levels of investments and consumption. Consequently, more tobacco use can not be “protective” as suggested by certain recent policy statements in Kenya.



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 and hence 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.

Overall, the discussions point to a preference for specific uniform tax over ad valorem excises and tiered excise taxes for cigarettes.

² Munga (forthcoming) estimates that the share of expenditure on tobacco was about 30% of per adult equivalent expenditure on food for the poorest households relative to 11% to 22% for the other quintiles. The study also finds that tobacco use worsens the poverty gap across all quintiles in urban and rural areas with particularly larger effects for the lower quintile groups (1 to 3) in rural areas.



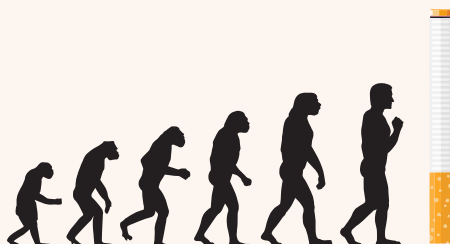
3

TOBACCO TAXATION AND CONSUMPTION IN KENYA

3 TOBACCO TAXATION AND CONSUMPTION IN KENYA

This section discusses the evolution of tobacco taxes in Kenya 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 price 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 retail selling price (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 soft 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 cost, insurance and freight (CIF) 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 by introducing a single tier. In this new regime, 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 – which 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).³ 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). 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. 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, 2017

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 "re constituted tobacco"; tobacco extracts and essences	Kshs. 7,000 per Kg

Source: Government of Kenya (2017)

A broad observation that can be made on the reforms of the excise tax on tobacco for the last decade (2008 through 2018) 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). As a result of these frequent changes in its structure, the excise regime is viewed as unstable by the players as reported by Nargis et al. (2015).

The reality of instability in the applicable taxes has continued beyond 2015 with evidence of wavering government policy. This can be viewed as an indicator of successful lobbying by the tobacco firms and a big loss to the society. As an example, in 2015 the government introduced a uniform tax system through the Excise Duty Bill of 2015 and in the budget speech the Finance Minister justified this tax reform by stating in part that this was to “*...deepen tax administration reforms and ease compliance*” and also protect local consumers.

This apparent breakthrough was short-lived and in the 2017/18 Budget Speech the government seemed to backtrack on its own policy stance and the Minister re-introduced the two-tier tax structure ostensibly to “*cushion the local cigarette manufacturers from the adverse financial effects due to*

³ It should be noted that the Excise Duty Act, 2015 repealed and replaced the Customs and Excise Act.

loss in market...” and the tax measure was to “ensure equity and fairness in the tobacco industry and prevent job losses in the sector.” The uniform tax was described as “inequitable” and one that “adversely affected demand for locally produced low value cigarette.”

The policy stance implied in the statements made in 2017, suggests there is significant work required in placing government policy stance in regard to tobacco taxation on firmer ground. Specifically, the government of Kenya has an obligation to *“reduce continually and substantially the prevalence of tobacco use and exposure to tobacco smoke”* as espoused in the WHO Framework Convention on Tobacco Control (FCTC) WHO FCTC – for which Kenya is a signatory. Protecting the interests of consumers is also the only known path to achieve the SDGs for which the country subscribes.

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. A product of these three variables provides an estimate of cigarette consumption. Smoking prevalence and smoking intensity are best measured using nationally 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 and various studies by NACADA including the Rapid Situation Assessments conducted in 2007, 2012, and 2017.

KIHBS 2005/06 collected household information on consumption of various household items including tobacco. Overall, about 17 per cent 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 adult population (15+) was estimated at 20.5 million while the smoking intensity was 10 cigarettes per adult per day. This resulted in an estimated consumption of nearly 35 million cigarettes in 2005/06.

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 estimated consumption by both men and women would be nearly 40 million cigarettes – assuming each smoker uses 10 cigarettes each day.



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 than 1 percent for all the other surveys.

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

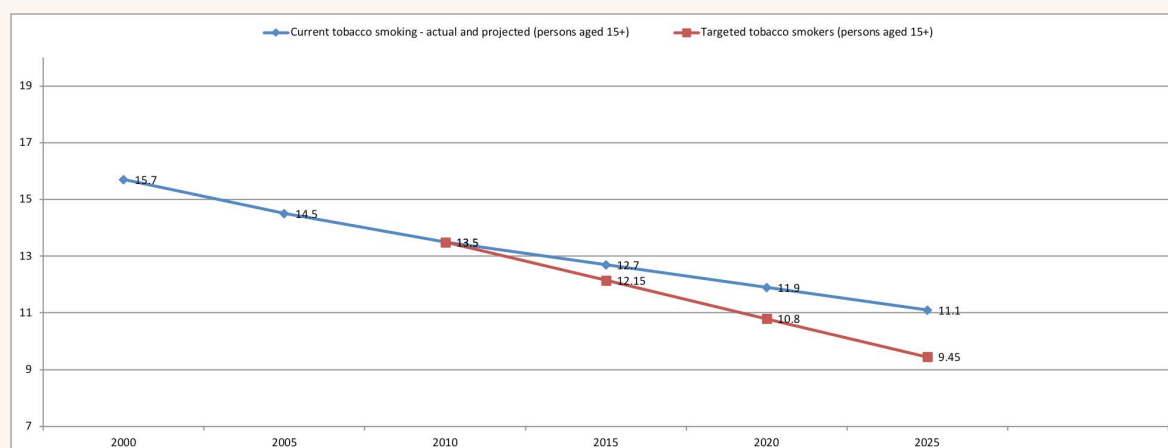
Survey name	Survey year	Age	Tobacco type	Current use		Daily use	
				Men	Women	Men	Women
Kenya GATS	2014 1	5+	Tobacco smoking	15.10	.81	1.6	0.6
Kenya Demographic and Health Survey	2008/09	15-49	Cigarette smoking	18.2	0.3	18.1	0.3
World Health Survey, Kenya	2004 1	8+	Tobacco smoking	26.21	.92	1.2	0.9
Kenya Demographic and Health Survey	2003	15-49	Cigarette smoking	22.9	0.7	...	0.6

Source: WHO (2015)

Although this study is focusing on cigarettes, it is important to note that other forms of tobacco products (such as smokeless tobacco) are reported to have increasing prevalence rates in Kenya. The prevalence of the use of smokeless tobacco among those aged 15 and above was 5.3 percent for men and 3.8 percent for women based on the Kenya GATS (2014) survey. Relative to “*tobacco use*” use of “*smokeless tobacco*” appears to be higher among females.

As pointed out in the introduction, current estimates put Kenya as one of the highest consumers of tobacco in sub-Saharan Africa (SSA). It was estimated that about 14 per cent of Kenya’s population or approximately 3.2 million persons smoked in 2010 (WHO, 2015). The WHO (2015) projects that by 2025 around 11 per cent of the population or about 4.1 million persons will be smokers (Figure 3.1).

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



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

The generally declining prevalence of tobacco use is supported by studies conducted by NACADA in 2007, 2012 and 2017 respectively. The results of the Rapid Situation Assessments for respondents aged 15-65 years indicate that ever use of cigarettes dropped from 21.7 per cent in 2007 to 14.9 per cent in 2012. Current use dropped from 9.1 per cent in 2012 to 8.3 per cent in 2017. The 2017 results indicated that 8.3 per cent of respondents aged 15 – 65 years were currently using tobacco.

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 neighboring countries 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 since 2008, there were very few studies on the impacts of the tax changes on consumption during this period. One of the challenges is that consumption could only be gleaned from time to time from some of the national surveys summarized in the preceding section.

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 retail selling price (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 likely impact of policy changes on the goal of interest.

4.1 THE WHO TOBACCO TAX SIMULATION MODEL (WHO TAXSIM)

The WHO Tobacco Tax Simulation Model (TaXSiM) is used to examine the effects of cigarette tax policy changes on cigarette consumption in Kenya. It should be noted that a simulation is simply an approximate imitation of the actual operation of a process or system. In this case, the process of interest is the working of the tax system. The effects of cigarette taxes 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.

The focus of 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 cigarettes 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. Both of these tax regimes were actually introduced in 2015 but the uniform tax rate was not sustained beyond one year. 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.⁴

In 2015, Kenya's population was estimated at about 45.371 million with 22.393 million men and 22.997 million women respectively. Individuals aged 15 years and over were 59.0 per cent of the 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 cigarette prices and expected cigarette excise 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 relative to a tiered excise system (that is currently in place).

For modelling purposes, the cigarette market was 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. The relative market shares used for the three segments are 10 per cent, 56 per cent and 34 per cent respectively.

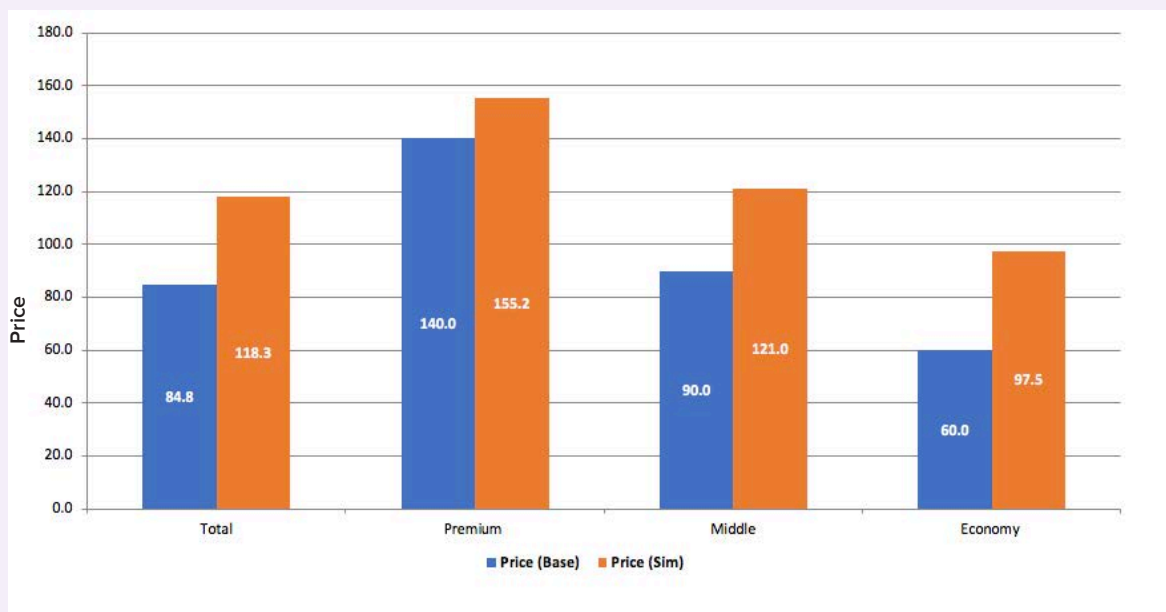
⁴ The prevalence rates did not vary widely across the surveys

4.2 THE WHO TOBACCO SIMULATION MODEL RESULTS

4.2.1 EFFECTS OF THE TAX STRUCTURES ON PRICE OF CIGARETTES

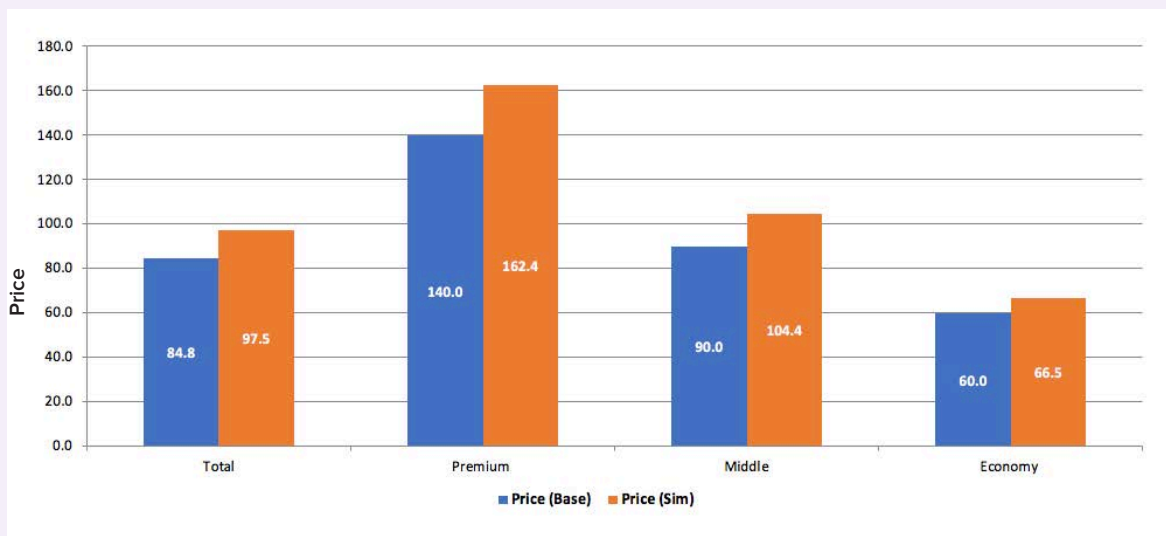
The simulation exercise was used to check the relative effects on prices of cigarettes following the introduction of either a tiered excise tax or a uniform tax rate. The base scenario was the single tax rate that prevailed up to 2015 June. The results indicate that relative to the tiered specific excise system, a uniform tax results in a larger increase in the price of a pack of cigarettes (Figures 4.1a and 4.1b). The introduction of 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). It should be noted that the tiered tax was Kshs. 1,800 per 1000 cigarettes for the economy brands and Kshs. 2,500 for the middle and premium brands.

Figure 4.1a: Effect on average prices of cigarettes - moving from a single tax rate to a uniform tax, total and by market segment (base year =2015)



Source: Author computations using the WHO Tobacco Simulation Model

Figure 4.1b: Effect on average prices of cigarettes - moving from a single tax rate to a tiered specific excise system, total and by market segment (base year = 2015)



Author computations using the WHO Tobacco Simulation Model

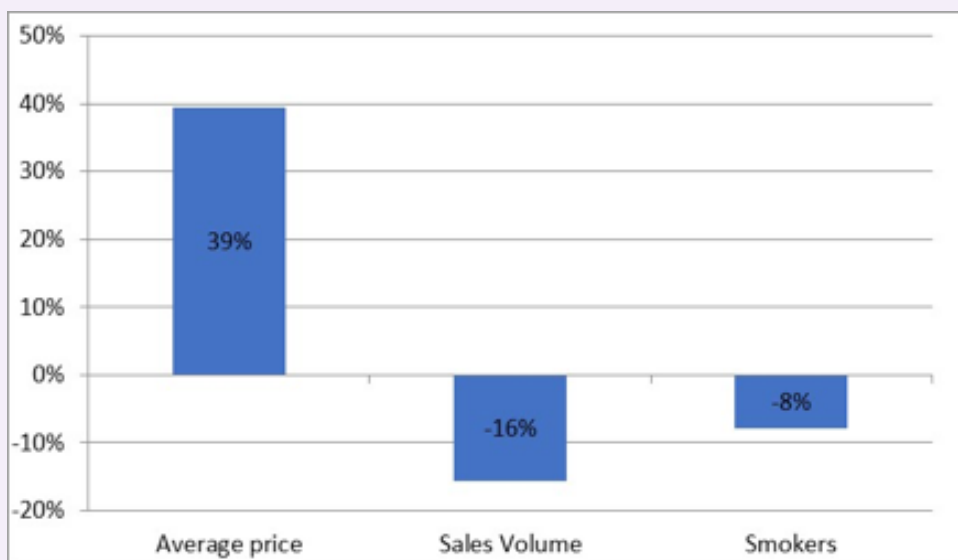
With respect to the market segments, the price increase, following the introduction of a uniform tax rate, is highest for the Economy brands followed by the Middle brands. This is the exact opposite of the effects of the tiered excise system for which the highest price increase is for the Premium and 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). Thus, the tiered specific excise system would be less effective in reducing consumption among poor households relative to the uniform tax.

4.2.2 EFFECTS OF THE TAX SYSTEMS ON NUMBER OF SMOKERS AND CONSUMPTION

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 the number of smokers. From the estimated population (or number of smokers) and a given smoking prevalence and/or smoking intensity we can deduce the consumption before and after the introduction of a new tax structure.

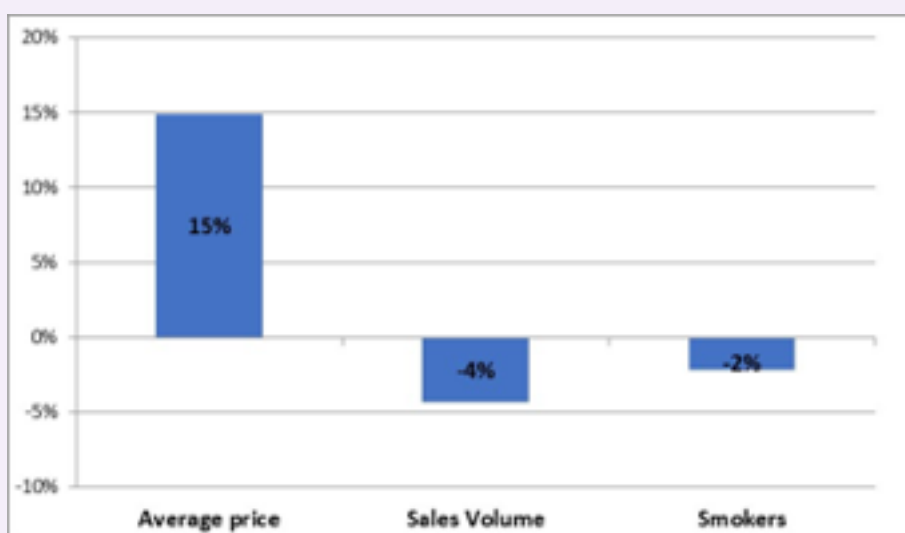
Although, the number of smokers would reduce for both simulation scenarios i.e. use of a uniform tax rate and/or a tiered specific excise system, the uniform tax rate would result in a larger reduction in the number of smokers (Figure 4.2a and 4.2b). Specifically, smokers would reduce by 8 per cent following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

Figure 4.2a: Percentage change in average price, sales volume and smokers – from single tax rate (base) to a uniform tax rate



Source: Author computations using the WHO Tobacco Simulation Model

Figure 4.2b: Percentage change in average price, sales volume and smokers – from single tax rate to tiered specific excise system for cigarettes



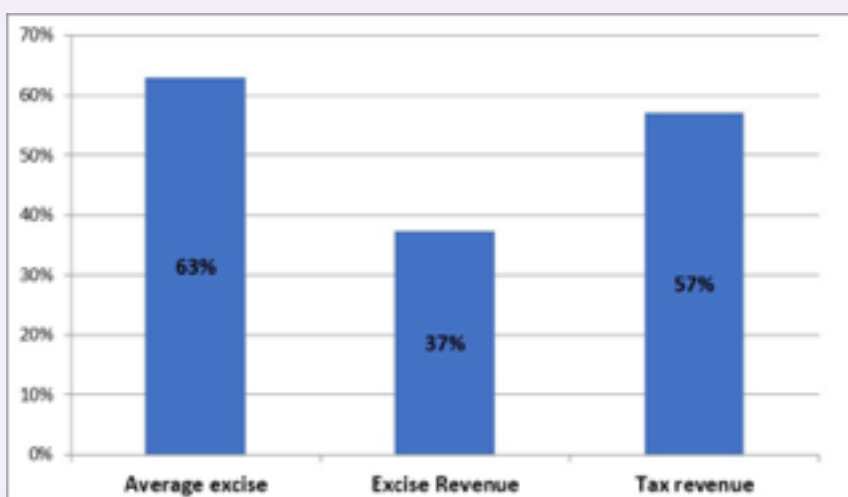
Source: Author computations using the WHO Tobacco Simulation Model

If the smoking intensity is assumed to be about 10 cigarettes sticks per day for each smoker (as found in the 2015/16 KIHBS), the consumption of cigarettes would reduce by nearly 3 million (from 36 million to 33 million cigarettes sticks) if a uniform tax is applied. The smoking prevalence would reduce from 7.9 per cent to 7.2 per cent. On the other hand, a tiered specific excise system would result in the reduction of consumption of about 761 thousand cigarettes sticks (from 3.56 million to 3.49 million cigarettes sticks) and a fall in prevalence from 7.9 per cent to 7.7 per cent. Clearly, the uniform tax would be more potent in reducing consumption of cigarettes.

4.2.3 EFFECTS OF THE TAX STRUCTURES ON AVERAGE EXCISE AND SHARE OF TAX IN TOTAL RETAIL PRICE OF CIGARETTES

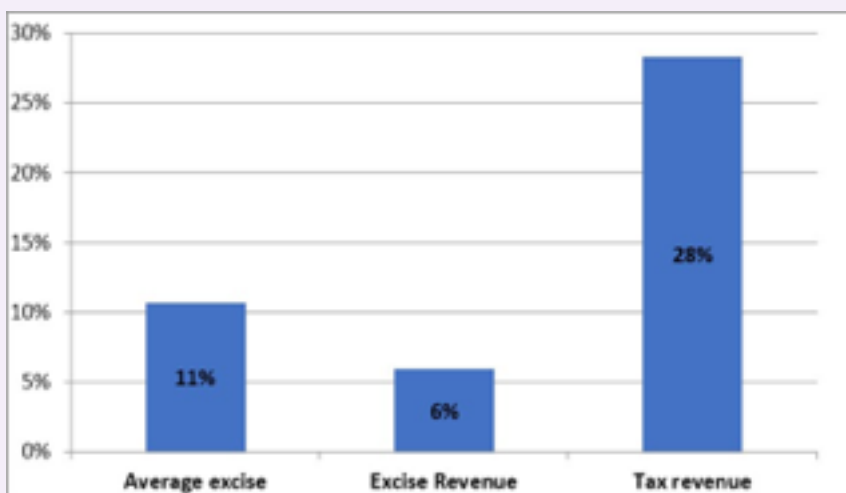
The simulations enabled an examination of the impact of the excise tax structures on average excise revenue. The prospective excise tax revenue increases in both scenarios i.e. use of a uniform tax rate and/or a tiered specific excise system – but the uniform tax rate results in a much larger excise tax increase of 37 per cent relative to 6 per cent increase 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.

Figure 4.3a: Percentage change in key market indicators – from single tax rate (base) to a uniform tax rate



Source: Author computations using the WHO Tobacco Simulation Model

Figure 4.3b: Percentage change in key market indicators – from single tax rate to tiered specific excise system for cigarettes

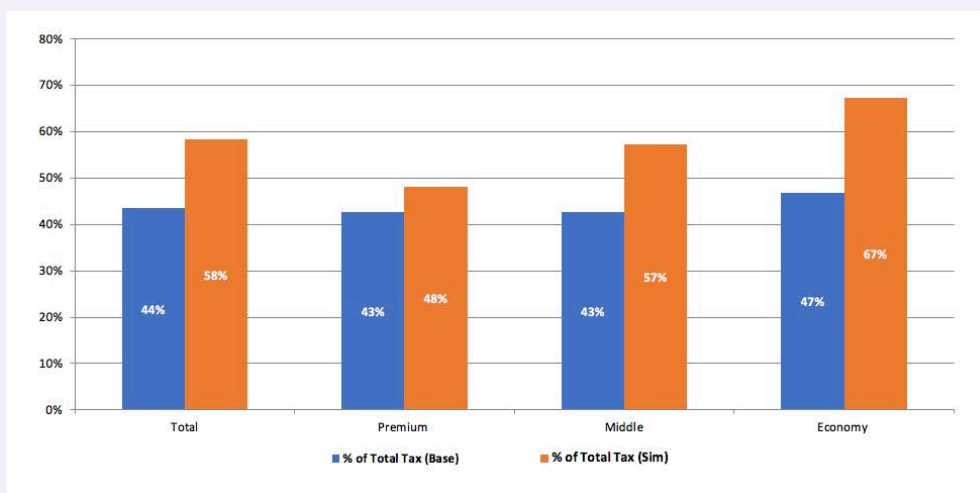


Source: Author computations using the WHO Tobacco Simulation Model

In 1999, the World Bank announced a yardstick after observing that tax accounts for two thirds to four fifths of the relative price of cigarettes in countries with comprehensive tobacco control policies. The WHO FCTC recommends that at least 70 per cent 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 4.4a). 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 above the current applicable rates (of Kshs. 2,500 pe mille).

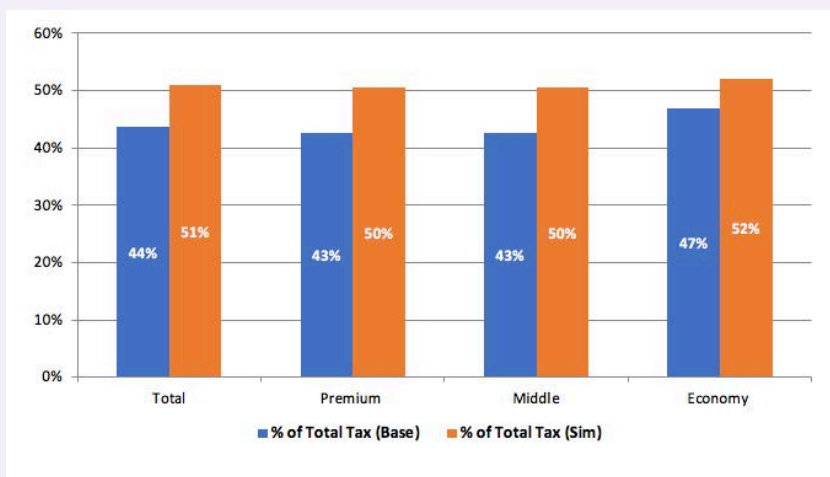
Figure 4.4a: Total tax share broken down by segment – from single tax rate (base) to a uniform tax rate (simulation)



Source: Author computations using the WHO Tobacco Simulation Model

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 4.4b).

Figure 4.4b: 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

**CONCLUSIONS
&
RECOMMENDATIONS**

5 CONCLUSIONS AND RECOMMENDATIONS

5.1 CONCLUSIONS

Kenya is one of the highest consumers of tobacco in sub-Saharan Africa. Although the prevalence of cigarette use is on a decline, the country may not achieve its adopted voluntary target to reduce tobacco use by 30 per cent by 2025 (relative to the 2010 rate) if the rate of decline remains the same. Tobacco is likely to impact on Kenya's national development agenda negatively given that tobacco caused disease kills more than 6,000 individuals annually, worsens poverty, and impacts negatively on productivity.

Tobacco taxation is identified as one of the six core tobacco demand reduction measures and is recognized as the most effective control measure of reducing tobacco consumption by Article 6 of the WHO FCTC. Even so, Kenya is still 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. Kenya still applies a specific tiered excise tax on cigarettes, yet a uniform tax rate is generally accepted as the superior form of tax with respect to controlling consumption and maximizing revenues.

The study reviewed tobacco taxation and consumption in Kenya and analyzed the effects of cigarette taxes on cigarette consumption. With respect to the review of taxation and consumption the following were the key results.

- (i) Specific excises are known to increase consumer prices relatively more than ad valorem excises, and hence lead to relatively higher reduction in consumption. A uniform tax is the most preferable with respect to impact on consumption and excise tax revenues.
- (ii) Specific taxes are easier to administer as government revenue can be collected at a designated stage (e.g. at manufacturer or retailer level) while ad valorem taxes are prone to undervaluation. Thus, specific taxes are more likely to enhance tax effectiveness and thus have greater impact on consumption of cigarettes.
- (iii) Specific excises are less likely to induce substitution from high to low priced brands or switching down.
- (iv) Even so, specific taxes need to be adjusted with the consumer Price Index (CPI) to keep pace with inflation. This has already been applied in Kenya's case.
- (v) A uniform specific tax is preferred to a differential tax rate and is known to be more appropriate for reducing smoking.

The study examined 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 and prevailed prior to 2015 when the Excise Duty Act No 23 was introduced) to a tiered specific excise or to a uniform excise tax system. The study made use of the WHO Tax Simulation Model (TaXSiM). The key findings of the simulations were:

- (a) The uniform tax performs better on account of increasing product prices, increasing excise revenue and the total tax share in cigarette prices.
- (i) A uniform tax results in a larger increase in the price of a pack of cigarettes. A uniform tax would therefore be superior to the tiered specific excise tax with respect to protecting users from the effects of tobacco use. Specifically, the uniform tax would result in a larger

reduction in the number of smokers and larger reduction in the consumption of cigarettes (3 million relative to 761 thousand for the tiered tax).

- (ii) The uniform tax results in a much larger excise tax revenue increase of 37 per cent relative to 6 per cent increase in revenues for the tiered specific excise system.
- (iii) A uniform tax rate of 2,500 per 1,000 cigarettes would have pushed the share of total taxes to the retail price of cigarettes to about 58 per cent. Thus, Kenya has ample room to increase its tax rates above the current applicable rates.

We could infer that 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.

All evidence indicates that the tiered tax is inferior to the uniform tax with respect to the achievement of SDG target 3.4 which seeks to “reduce premature mortality from NCDs by one third” and SDG target 3.a which seeks 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. In addition, there is possibility of political interference by the powerful tobacco companies given the recent changes in government stance in tax policy.

5.2 RECOMMENDATIONS

The following strategies have been proposed to ensure that the issues emerging from the analysis are addressed.

Issue	Recommendation	Action (Responsibility)	Timelines
Need to reform the tax structure to conform to best practice	Introduce a uniform tax rate that gradually moves Kenya to achieve the 70 per cent share of tax in the total retail price of cigarettes. The simulation results indicate that the uniform tax rate of Ksh. 2,500 per mille performs better than the current two-tier tax.	National Treasury and Planning Ministry	Continuous
Although a specific tax is proposed, it is more likely to be affected by inflation. The introduction of the automatic adjustment since 2015 is welcome but this can be supported by other policies	Complementary policies should be developed to reduce price manipulation by the relatively powerful tobacco firms.	National Treasury and Planning Ministry	Continuous

<p>Although available data indicates that the prevalence of cigarette use is on a decline, the country may not achieve its adopted voluntary target to reduce tobacco use by 30 per cent by 2025 (relative to the 2010 rate) if the rate of decline remains the same.</p>	<p>More elaborate interventions are required including a more effective tax structure and education and awareness campaigns</p>	<p>National Treasury and Planning Ministry; Civil Society Organizations including NTA; NACADA; The media; and County Governments</p>	<p>Continuous</p>
<p>In the last decade (2008 through 2018) tobacco excise tax system has remained relatively complex for most of the period. This is an obstacle in the use of tobacco taxation to achieve much lower consumption and public health objectives.</p>	<p>Avoid frequent amendments in the tax structure – and set up a uniform tax</p>	<p>National Treasury</p>	<p>Immediate</p>
<p>Evidence of wavering policy stance from the government in its Budget Policy statements – marked by backtracking on best practice tobacco control initiatives in 2017/18 budget statement</p>	<p>Reorient tobacco control policy to protect consumers rather than tobacco firms – which shall be in line with international conventions and protocols of which Kenya is a signatory</p>	<p>National Treasury; Ministry of Health; CSOs including policy research organizations such as KIPPRA</p>	<p>Immediate</p>

REFERENCES

- Aloui, O. (2003). Analysis of the Economics of Tobacco in Morocco. HNP Discussion Paper. Economics of Tobacco Control Paper No. 7
- 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.
- Efroymsen D, Ahmed S, Townsend J, Alam S. M, Dey A. R, Saha R, Dhar B, Sujon A. I, Ahmed K. U, Rahman O. (2001), Hungry for tobacco: an analysis of the economic impact of tobacco consumption on the poor in Bangladesh. *Tobacco Control*, 10(3), 212-217.
- 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.
- World Health Organization, (2004) Tobacco and Poverty – A Vicious Circle, WHO.
- Yen, S.T. (2005) Zero observations and gender differences in cigarette consumption, *Applied Economics*, 37, 1839–1849
- Posen, J. and van Walbeek, C. (2014). The impact of Cigarette Excise Tax Increases and Harmonization in the East African Community, SALDRU Working Papers 130, Southern Africa Labour and Development Research Unit, University of Cape Town.
- Laffer, A. B. (2016). Handbook of Tobacco Taxation: Theory and Practice (Economic Theory of Taxation). Economic Policy, Russian Presidential Academy of National Economy and Public Administration, Vol. 5, pages 50-67, October.
- Chaloupka F. J., Peck R., Tauras J. A., Xu Xin and Yurekli A., (2010). Cigarette Excise Taxation: The Impact of Tax Structure on Prices, Revenues, and Cigarette Smoking NBER Working Paper No. 16287 August 2010 JEL No. H2,I18

ANNEX 1: 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. A key agency is the National Authority for the Campaign Against Alcohol and Drug Abuse (NACADA) which is a state corporation established to coordinate a multi sectoral effort at preventing, controlling and mitigating drug abuse in Kenya. 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, and NACADA); policy research (KIPPRA and NACADA) 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), Tax Justice Network Africa, 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 research, technical support and/or provision of funding for research on tobacco control.

Table A1: List and contacts of key stakeholders

	Stakeholder Name	Website
1	The Ministry of Health (MoH)	https://www.health.go.ke
2	The National Treasury (NT)	https://www.treasury.go.ke
3	The Kenya Revenue Authority (KRA)	https://www.kra.go.ke
4	National Authority for the Campaign Against Alcohol and Drug Abuse (NACADA)	https://www.nacada.go.ke
5	Kenya Institute for Public policy Research and Analysis (KIPPR)	https://www.kippra.or.ke
6	National and County Assemblies and particularly the Health Committees	https://www.parliament.go.ke
7	Tobacco Control Board (TCB)	https://www.health.go.ke
8	International Institute for Legislative Affairs (IILA)	https://www.iilakenya.org
9	Kenya Tobacco Control Alliance (KETCA)	https://www.ketca.org
10	Non-Communicable Diseases Alliance of Kenya (NCDAK)	https://ncdak.org
11	National Taxpayers Association (NTA)	https://www.nta.or.ke
12	Centre for Tobacco Control in Africa (CTCA),	https://ctc-africa.org
13	Tax Justice Network Africa	https://taxjusticeafrica.net
14	University of Cape Town	https://www.uct.ac.za
15	American Cancer Society	https://cancer.org
16	Campaign for Tobacco Free Kids (CTFK)	https://www.tobaccofreekids.org
17	World Health Organisation (WHO)	https://www.who.int

NOTES

NOTES

NOTES

Designed and Printed By
HUSH CREATIVES KE
P.O.Box 35122 - 00200
Nairobi Kenya
+254724615069

