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Abstract

This paper explores the excise taxation systems for tobacco products in Kenya, focusing on reform of the tobacco taxation system to achieve equity in taxation by changing the tax structure to be based on optimal tax rates and reviewing the considerations for filter and non-filter cigarettes. Utilizing a proprietary elasticity estimation nuanced by a literature review to generate joint Laffer curves, we identify potential adjustments that could increase government revenue without causing significant market disruptions. From the comprehensive review of the excise tax system on tobacco products, there are strong arguments in favor of equal treatment of cigarette brands and a uniform tax structure for filter and non-filter cigarettes. The empirical analysis suggests that there is a scope to raise taxes on tobacco, which could not only boost fiscal income but also improve public health outcomes by discouraging excessive consumption. However, it is worth considering that the policy considerations and the resulting revenue projections will change depending on the enforcement policies accompanying them. Therefore, it is important for the government to strengthen enforcement measures to curb illicit tobacco trade and protect the legal market.

1. Introduction

Tobacco taxation serves the dual purpose of promoting public health and generating revenue. Taxes on tobacco aim to account for negative externalities not absorbed by the market mechanism of tobacco products (International Institute for Legislative Affairs (ILA), 2011). In other words, excise taxes levied on tobacco products can generate revenue and reduce consumption by impacting the price of such products. In Kenya, tobacco products are produced by a small number of manufacturers and/or imported by a few importers. They have relatively few close substitutes and exhibit relatively inelastic demand. Thus, tobacco products are relatively easy to tax compared to other goods.

Excise duties can be conducive to economic growth in Kenya and their optimization can have the twofold impact of also improving public health (Afuberoh and Okoye 2014; Owino, 2019). Numerous different methodologies have been employed by researchers in the region to assess taxes levied on tobacco products, but the market conditions in Kenya merit a mix of proprietary approaches for calculating elasticities and laffer curves and conducting a literature review to ensure that calculations are accurate when used to make policy suggestions (Chapman and Richardson 1990; Nagis et. al., 2015).

This paper aimed to look at how to reform the tobacco taxation system to achieve equity in taxation by changing the tax structure to be based on optimal tax rates and reviewing the considerations for filter and non-filter cigarettes. Also, the paper sought to align Kenya's excise tax system with international best practices and to provide a more stable and predictable system for firms. By combining data obtained from the Kenya Revenue Authority (KRA), the Kenya National Bureau of Statistics (KNBS), and Tobacco industry, this paper analyses the current tobacco excise tax structure in Kenya and proposes ways to redesign the excise tax system. This paper thus serves to contribute valuable policy advice while also contributing to literature dedicated to understanding excise taxes in East Africa.

The rest of the paper is structured as follows. First, we briefly look at tax on tobacco and describe motivations for the taxation of tobacco products. We then present an analysis of the price elasticities in the tobacco industry, develop relevant Laffer curves, and put forward the policy opportunities. Finally, we conclude with a summary of our findings as they relate to the policy environment in Kenya.

2. Taxing Tobacco Products

In this section, we begin by outlining the current policy as well as the motivation for the reform of the current excise structure. We also present specific concerns for the government and stakeholders.

The Current Excise on Tobacco

The main taxes levied on tobacco products in Kenya are excise duty, Value Added Tax (VAT) and import duty. For locally manufactured excisable goods, the excise tax rate is charged on the ex-factory selling price. All manufacturers, providers and importers of excisable goods and services pay excise duty. The VAT is levied at the point of sale.

The excise tax system for tobacco products in Kenya has undergone several reforms, switching from specific rates to ad valorem rates before switching back to specific rates. The tax rates have fluctuated between uniform rates and differential rates in an ad hoc manner. More recently, a mixture of both specific and ad valorem rates has been levied on various tobacco products. Moreover, rates have fluctuated between uniform and differential rates. This has complicated collections for the Kenya Revenue Authority (KRA) and hindered the ability of producers to make long-term projections and investments. The current excise levied on tobacco products stems from a 2015 reform (which has been severally amended) but essentially taxes the numerous products that contain tobacco at either a single rate per mille or at a percentage of the selling price.

As presented in the table 1 in Annex 1, there have been frequent changes in excise tax rates on tobacco products in Kenya in the recent years, resulting in an uncertain and unpredictable excise tax system. Prior to 2022, the excise duty on tobacco products were adjusted twice in a year, with the first change coming in via the Finance Acts implemented in July every year and the second change coming in with the inflation adjustments around October. However, the inflation adjustment was dropped in the Finance Act 2023. The table in Annex 1 also shows that Kenya's tobacco tax regime remains complex with different tax rates based on the type of cigarette and the retail selling price. This system is challenging to comply with and enforce, potentially leading to lost revenue for the Government of Kenya (GOK) and causing confusion in the industry.

Motivation for Taxing Tobacco Products

Tobacco consumption poses a significant threat to public health, leading to a myriad of diseases and placing an undue burden on healthcare systems and domestic revenues. In Kenya, the excise tax on tobacco products should be optimized to ensure the tax can fulfil its mandate of accounting for these negative externalities and generating revenue. A re-evaluation of the current tax structure can be a powerful instrument, not only in countering tobacco-related illnesses but also generating crucial revenue.

Excise taxes can impact consumption rates while also providing a direct source of funding for the healthcare systems burdened by tobacco consumption. However, it is important to note that the tobacco industry in Kenya does support livelihoods and generate economic outputs that are not insignificant for the country. Thus, it is

important to engage stakeholders on all sides of the issue of tobacco taxation to ensure reforms are well-informed and do not place undue burdens on any one party. These engagements further motivated our study.

Minimizing the adverse effects of tobacco mainly necessitates lowering aggregate cigarette consumption through an effective excise tax system. There are arguments about whether filtered or unfiltered cigarettes have larger adverse health effects and thus larger externalities (Novotny & Hamzai, 2023; Schulz et al., 2016). There is, however, no consensus on this issue which motivates the choice of this paper to focus on selected brands of filtered and unfiltered cigarettes. To make informed decisions on increasing revenue, policymakers should first examine the demand elasticities for tobacco products, as these indicate how consumers will respond to price changes resulting from excise tax policies. Uncovering these elasticities will inform policymakers of the probability that further excise tax increases will bolster revenues. These revenue considerations must be considered in tandem with stakeholder concerns regarding the consumption of illegally imported tobacco products.

Issues Facing Policy Makers and Stakeholders

Complex Tax Structure

The difficult task facing policymakers is to choose a tax structure that accomplishes three things simultaneously:

1. Minimizes the adverse health externalities of tobacco.
2. Generates the necessary tax revenue to align with the targets of the Medium-Term Revenue Strategy (MTRS).
3. Aligns with the best international practices and protects domestic production from growing illicit tobacco trade.

Kenya's tobacco tax regime remains complex with different tax rates based on the type of cigarette. As pointed out in a report by ILA (2011), such differential tax structures create incentives for substitution among different brands, increase non-compliance and introduce incentives for various pricing strategies by manufacturers to reduce tax liability. A tiered tax structure creates an incentive for the repositioning of brands with some manufacturers reducing the retail selling price of their lead brands to qualify 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 increases thus making excise taxation an ineffective tool for controlling cigarettes consumption.

The current excise tax on tobacco products is not uniform which can present challenges for the tax administration and producers. It is generally accepted that specific excise rates are more effective for raising consumer prices and reducing consumption (Nagis et al., 2015). However, it should be noted that overtaxing to reduce consumption could have negative impacts on the revenues associated with

the excise tax on tobacco products. A uniform tax structure is easier to implement compared to ad valorem and tiered systems, reducing the costs of collection. Moreover, it reduces price variability and effectively raises the prices of tobacco products. By reducing price variability, it is more difficult for tobacco users to switch to cheaper brands in response to price increases. Finally, the uniform system is easier to comply with and can provide stable revenue forecasting (Shang et al., 2019; 2014; Nagis et al., 2015; WHO, 2010; 2014; 2021).

The global trend is for governments to simplify their excise tax systems into a unified system that taxes all cigarettes and tobacco products at the same level, which is easier to administer and eliminates incentives for various pricing strategies to reduce tax liability. An IMF assessment report on Kenya's tax policy reforms by Gerson et al. (2010) pointed out that the simplest and most transparent method to achieve a consistent tax based on the volume of tobacco could be a tax based on the weight of the product applied to both cigarettes and cigars.

Stakeholders' Concerns

In recent years, stakeholders have raised significant concerns regarding the frequent changes and prevailing uncertainty in Kenya's Excise Tax System, particularly affecting the tobacco industry. The industry players emphasize the need for stability/certainty and predictability of the tax system to support the growth of the local manufacturing sector and to enable the government and the businesses to effectively plan while at the same time minimizing any potential unintended consequences such as an increase in illicit trade in cigarettes. The government has made some steps in improving excise tax certainty and predictability by repealing Section 10 of the Excise Duty Act and not revising the excise rates on tobacco products in the Finance Act 2023.

One of the major challenges in the tobacco market is the illicit trade in cigarettes, which negatively affects the demand for legitimate tobacco products. According to BAT Kenya, in their analysis, the legal domestic market for tobacco products in Kenya declined by about 36% in the period 2018 – 2022, while the illicit trade incidence increased from 12% in 2017 to 28% in 2023. The increase in the estimated market share of the illicit tobacco was accompanied with a stagnated growth in the market size for the tobacco products in Kenya and a general decline in excise duty paid by BAT Kenya. According to the tobacco industry players, the biggest driver of illicit tobacco trade in Kenya is tax-evaded cigarettes, that is, cigarettes with fake tax stamps, cigarettes for export that are not sold in their destination market and cigarettes smuggled into Kenya. They attribute this increase to the tax differentials between Kenya and other East African Community (EAC) Partner States (with majority of the illicit tobacco originating from Uganda), which exacerbate the challenge of smuggling and illicit trade. Such activities not only undermine legal market operations but also pose significant health and economic risks to the nation. The government multi-agency team set up in 2018 to fight trade in illicit and

counterfeit goods has made some significant gains though this is largely curative. Therefore, it is important to have fiscal policies that will facilitate legitimate trade while at the same time limiting/eliminating the incentives for illicit trade.

Across the EAC region, tax treatment of raw materials used in production of excisable products, particularly tobacco products, is also a concern. In Kenya, Section 14 (1) of the Excise Duty Act provides for relief of excise duty paid in respect of excisable goods imported into or manufactured in Kenya by a licensed manufacturer and which have been used as a raw material in the manufacture of other excisable goods, against which the excise duty is payable on the finished goods. The Excise Duty Act allows for the offset of excise duty on raw materials but does not explicitly include packaging materials. According to the industry players, unlike other products, a cigarette pack forms part of the raw materials in compliance with the Tobacco Control Act 2007, which requires manufacturers to adhere to strict labelling requirements on the packaging of tobacco products. Hence, the industry's suggestion that the packaging materials should be considered for a relief on excise duty paid under Section 14 (1).

To dis-incentivize cross-border illicit trade in tobacco, there are efforts by the EAC countries to harmonize the excise taxation of tobacco products across the region to: eliminate distortions that could undermine the implementation of the EAC Common Market Protocol and the EAC Monetary Union Protocol; facilitate cross-border trade and investment to promote sustainable growth and a fair distribution of available resources in the region; avoid harmful tax competition that may artificially render one partner state more attractive than the others and erode the tax bases; enhance tax compliance and enforcement; ensure a predictable and simple tax system, and promote the region as a single investment destination. The suggestions are to set a minimum harmonized rate at an amount per kilogram of tobacco and this rate be used to apply risk-based taxation to other tobacco and nicotine products. This rate will apply irrespective of whether the tobacco or nicotine product is produced locally or imported to abide by Section 83 of the EAC Treaty and the WTO rules. The key guiding principles are a gradual approach to harmonization and a sufficiently flexible approach leaving partner states some room to set tax rates (subject to the agreed minimum rates).

On the other hand, the stakeholders under the Tobacco Control Community emphasize the need for higher taxation of tobacco products, arguing that the resulting price increases are considered the most effective means of controlling tobacco consumption. According to the Tobacco Control Community, the taxation of cigarettes in Kenya is still low compared to global benchmarks such as Bosnia, Israel and Slovakia who have their tobacco taxes as a percentage of retail prices above the 75% mark recommended by World Health Organization (WHO). Another concern of the Tobacco Control Community is that the affordability of cigarettes (measured by the inverse of the ratio of the cost of 100 packs of cigarettes to GDP per

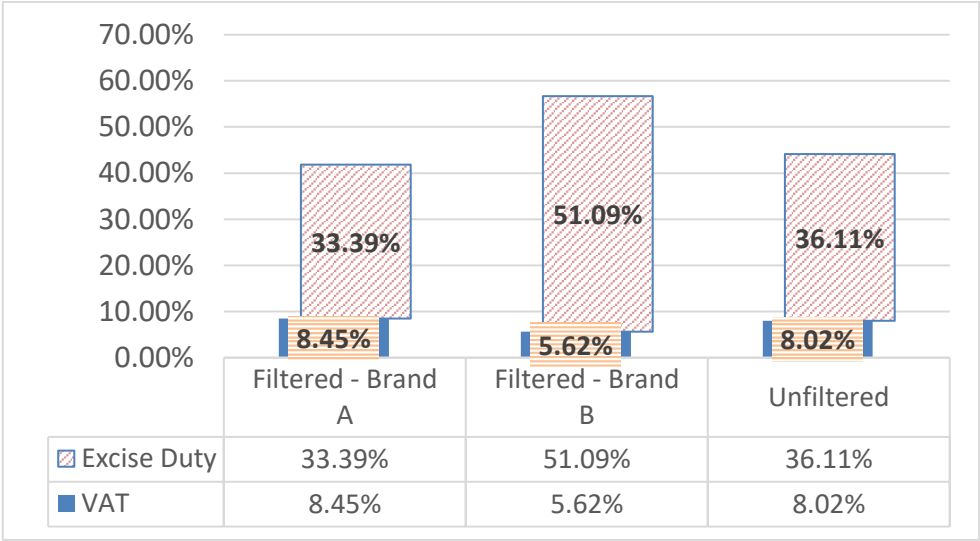
capita) remains steady - Kenya's affordability percentage of GDP per capita required to purchase 2,000 cigarettes of the most sold brand, stood at an average of 11.4 per cent in 2022. Low cost of cigarettes in Kenya, sold as a single stick instead of a pack (as required by law) is keeping smokers in the habit. There is also need for focus on the evolving landscape of tobacco products, including the transition to alternatives like nicotine pouches.

4. Findings and Policy Options

Proportion of Tax on Tobacco Prices

Kenya's excise rates on tobacco products are relatively higher than that of the other East Africa Community (EAC) partner states as shown in Annex 2. However, the proportion of tax in the ex-factory price per mille is below the World Health Organization (WHO) standard of 75 percent, implying that there is still scope for increasing excise taxes on the tobacco products towards the WHO standard provided that the challenges posed by illicit tobacco trade are adequately addressed. The proportion of VAT and excise tax in the ex-factory prices for two brands of filtered cigarettes and one brand of unfiltered cigarette is shown in Figure 1.

Figure 1: Proportion of VAT and Excise Tax in Ex-Factory Price per Mille



	Filtered - Brand A	Filtered - Brand B	Unfiltered
Excise Duty	33.39%	51.09%	36.11%
VAT	8.45%	5.62%	8.02%

Source: KRA and BAT

Figure 1 shows the proportion of VAT and excise duty in the ex-factory price of Brand A of filtered cigarette is 41.84 percent, Brand B of filtered cigarette is 56.71 percent, while that of the unfiltered brand is 44.12 percent. The average for the three brands is 47.56 percent. As pointed out by the World Health Organization(WHO, 2024b), currently, the tax share of cigarette prices of 41-56% for filtered cigarettes is broadly in-line with the average for other LMICs while the rate of 44% for unfiltered cigarettes

is slightly lower than the LMIC average of 56.5%. However, it is worth noting that the computed tax burden does not include the solatium levy and tax on other inputs such as tax on packaging materials. Under Section 7 of the Tobacco Control Act, 2007, tobacco manufacturers pay a solatium levy that goes to the Tobacco Control Fund. This was operationalized by the Tobacco Control Regulations 2014, to address the negative impacts of tobacco consumption in Kenya. The BAT Kenya (2022) reported to have paid a solatium levy of KShs. 230 million in 2020 and KShs. 250 million in 2021.

Price Elasticities

The central parameters for ascertaining the revenue implications of any reform of the excise system are the own- and cross-price elasticities of filtered and unfiltered cigarettes respectively. These will also identify the revenue maximizing tax rate. Many previous attempts have been made to identify these key elasticities as is summarized in the table below.

Table 1: Estimates of Price Elasticities of Demand for Tobacco products in Kenya

Author /country	Method/data	Tobacco Product	Price Elasticity
MSocSci & Walbeek (2022) Selected African countries	Probit model (smoking participation) Generalized linear model (conditional cigarette demand) Global Youth Tobacco Survey	Local brand Foreign brand	-0.70 Participation -0.44 conditional -0.71 Participation -0.75 conditional Total price elasticity -1.14 local brand -1.46 foreign brand
Ochieng & Agwaya, (2021) Kenya	Deaton's Almost Ideal Demand System model Kenya Integrated Household Budget Survey data	Tobacco Cigarette	-1.05 -0.92
Kiringai *et al*. (2002) Kenya	Ordinary Least Square Monthly data	All cigarette types Filter cigarettes	-1.78 -1.36
Okello (2001) Kenya	Error Correction Model Annual time series	Filter cigarettes Plain cigarettes	-0.36 (longrun) -0.40 (Shortrun) -0.26 (longrun) -0.35 (shortrun)

Sources: Authors' Compilation

While these are broadly well-identified and useful studies, our estimations contribute in several ways. First, we estimate models that are co-integrated and robust to fractionally integrated variables, which may be an issue with the time

series available. We use real excise rates as an instrumental variable for the Kenyan market, setting our study apart and further linking the research to policy advising. Lastly, our estimations utilize the latest available data, generating an up-to-date picture of elasticities. Whilst our estimations improve upon the previous best estimates, they remain somewhat uncertain due to limited data availability and should be interpreted with due caution. Below is a table of the estimated elasticities.

Table 2: Supply Elasticities

	Filtered	Unfiltered
Own-price	-0.691	-1.01
	[-0.29 ; -1.01]	[-1.67; -0.37]
Cross-price	0.124	0.959
	[-0.27, 0.52]	[0.48; 1.44]

Reported intervals are 95% CI with Huber-White robust std. errors

These moderately negative own-price elasticities and moderate positive cross-price elasticities are reasonable and fit well with the conventional literature on the subject. We thus use these proprietary elasticities moving forward.

Tax Bases and Revenue Implications

Using the set of estimated elasticities, we compute the Laffer curves showing the predicted revenues for excise taxation. These of course only speak to the revenue implications of the excise tax and not the aggregate welfare consequences.

To calculate the tax projections, we make several assumptions. First, we assume that the elasticity is constant across consumption levels, Second, we assume that the excise rate has a pass-through rate of 100%. This is more likely to be true in the long run than in the short run. Lastly, we assume that the VAT rate remains constant across reforms, and we count VAT revenue on tobacco as excise revenue since the changes in excise rates will impact the VAT revenue as well. Neglecting to account for the negative spillovers on the VAT tax base from increased excise taxation would overestimate the tax revenue gained from increasing excise rates. Below are the partial Laffer curves and demand functions.

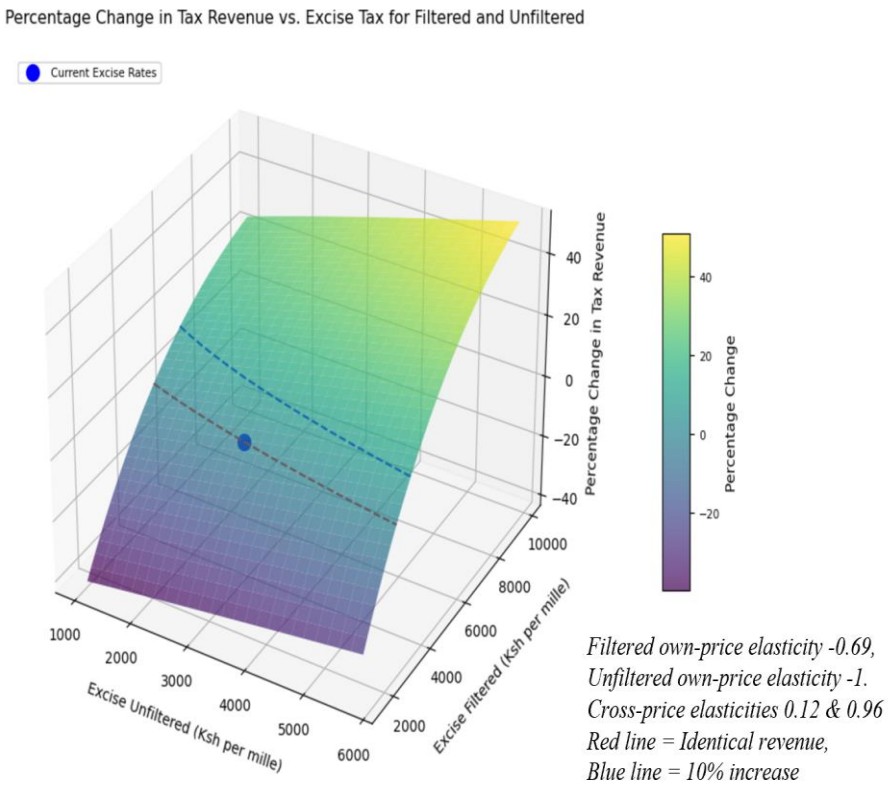
Figure 2: Partial Laffer Curves for Filtered Cigarettes

Figure 3: Partial Laffer Curves for Unfiltered Cigarettes

We estimate that when only looking at one excise rates at a time, both excise rates are currently below their maximizing level. The rate for filtered cigarettes is further from the maximizing rate as the demand for this type of cigarette is less elastic.

While these partial projections are useful, they omit a central component from the analysis. Since filtered and unfiltered cigarettes have positive cross-price elasticities, any increase in the excise rate of one will increase demand for the other. Thus, a joint approach is merited.

Figure 4: Joint Laffer Curve



Here we see that there is ample space to increase revenues in the baseline scenario. The highest likelihood of revenue increase occurs when excise for both goods is increased simultaneously with a larger increase for filtered cigarettes. Using this framework, we present some prospective policies:

Reform 1 – 5% Increase in revenues:

In these two scenarios the government achieves a projected 5% increase in tobacco-related revenue. In reform 1.A, excise rates for filtered and unfiltered cigarettes are increased by 8% and 13% respectively. This reform has the benefit of being robust as even in the case with moderately high elasticities it corresponds to a projected 2.4% increase in revenues. In comparison the gain achieved in reform 1.B is less robust but this reform does have the notable advantage of achieving uniform rates on cigarettes. This will move Kenya into compliance with the international best practice tax-structure.

Reform 1.A

Excise Rates:
Filtered: 4400 Ksh/mille
- *+8% Increase in baseline excise*
- *+4% Increase in price*

Unfiltered: 3300 Ksh/mille
- *+13% Increase in baseline excise*
- *+5% Increase in price*

Projected Revenue Change:
Baseline: **+5%**
Moderate pessimistic: **+2.4%**
Very pessimistic: 0%

Reform 1.B

Excise Rates:
Filtered: 4100 Ksh/mille
- *+1% Increase in baseline excise*
- *+0.3% Increase in price*

Unfiltered: 4100 Ksh/mille
- *+40% Increase in baseline excise*
- *+14% Increase in price*

Projected Revenue Change :
Baseline: **+5%**
Moderate Pessimistic: **+0.3%**
Very pessimistic: +0.1%

Reform 2 – 10% Increase in revenues:

In reform 2 a similar picture arises. Reform 2.A achieves a more robust and plausibly more equitable increase in revenues at the cost of maintaining a tiered tax system. Reform 2.B achieves uniformity but may set the prices for unfiltered cigarettes abnormally high thus creating opportunities for illicit cigarette trade.

Reform 2.A

Excise Rates:
Filtered: 4900 Ksh/mille
- *+20% Increase in baseline excise*
- *+9% Increase in price*

Unfiltered: 3400 Ksh/mille
- *+16% Increase in baseline excise*
- *+6% Increase in price*

Projected Revenue Change:
Baseline: **+10%**
Moderate pessimistic: **+5.4%**
Very pessimistic: -0.8%

Reform 2.B

Excise Rates:
Filtered: 4450 Ksh/mille
- *+9% Increase in baseline excise*
- *+4% Increase in price*

Unfiltered: 4450 Ksh/mille
- *+52% Increase in baseline excise*
- *+19% Increase in price*

Projected Revenue Change :
Baseline: **+10%**
Moderate Pessimistic: **+2.7%**
Very pessimistic: 0%

It is important to consider that the revenue projections of every scenario are sensitive to the enforcement policy chosen. If enforcement measures against illicit cigarettes are strengthened alongside the reforms, then the increase in revenue is likely to be larger.

5. Conclusion and Policy Implications

The long-term benefits of unifying the excise tax on tobacco can generate more revenue and bring the tax in line with the health and revenue needs of the country. This study delves into the stakeholder and government concerns to ensure that policy recommendations are not made without full consideration of their broad impact. Specifically, Issues surrounding illicit trade due to tax differentials with East African Community (EAC) partner states merit further investigation. Addressing porous borders must go hand in hand with any tax reforms.

From the comprehensive review of the excise tax system on tobacco products, there are strong arguments in favor of equal treatment of cigarette brands and a uniform tax structure for filter and non-filter cigarettes. The global trend is for governments to simplify their excise tax systems into a unified system that taxes all cigarettes and tobacco products at the same level, which is easier to administer and eliminates incentives for various pricing strategies to reduce tax liability. To improve the effectiveness of tobacco taxation in discouraging cigarette consumption, there is need to harmonize the excise rates between the cigarette brands to prevent tobacco users from switching tobacco brands and types due to price differences. These can be achieved with either reform 1.B or 2.B, each offering an increase in revenues from the excise tax on tobacco and unifying the system with the best international practices and domestic goals. In Reform 1.B the government achieves a projected 5% revenue gain by setting uniform rates at 4,100 Ksh/mille. Reform 2.B achieves a considerably larger 10% revenue gain by setting uniform rates at 4,450 Ksh/mille.

We find that there is room, according to joint Laffer curve calculations, to increase the tax on tobacco products. We present scenarios for this that might increase government revenues without introducing large shocks in the tobacco market. However, it is worth considering that these policy scenarios and the resulting revenue projections will change depending on the enforcement policies accompanying them. If there is strong enforcement on illicit tobacco products, then the revenue gains are likely to be significantly larger. The opposite will be the case for tax enforcement policies. Also, the decision to adopt any of the policy options or use the calculations in this paper to inform other policy scenarios should account for stakeholder and consumer concerns as well as government needs.

It is important for the Government of Kenya to consider converting the excise rates in milles to kilograms and retain the specific rates that are not subject to price changes given the evidence of potential industry price wars. This could help to achieve a consistent excise tax based on the weight of the product applied to both filtered and unfiltered cigarettes, and cigars. This will align with the ongoing work for harmonization of excise rates in the EAC region that is set to recommend a minimum rate based on an excise rate per gram. Typically, a cigarette weighs approximately 1 gram of which the tobacco content can vary between 65-100%

depending on the type of cigarette. A full pack of 20 standard Filter cigarettes weighs approximately 24.3 grams. The empty packet weighs about 6.1 grams; thus 20 cigarette sticks weigh approximately. 18.2 grams (just under 1 gram) but this varies between brands and manufacturers. Therefore, a mille that consists of 1,000 cigarette sticks weighs approximately 1,000 grams (one Kilogram). This proposal is also supported by the literature - an IMF assessment report on Kenya's tax policy reforms by Gerson et al. (2010) pointed out that the simplest and most transparent method to achieve a consistent tax based on the volume of tobacco could be a tax based on the weight of the product applied to both cigarettes and cigars.

In line with the recommendation to continue applying the specific excise rates, the Government of Kenya should also consider internal mechanism for automatic inflationary adjustments to the excise rates to preserve the real value of the excise taxes and ensure that excise taxation remains an effective tool in controlling the consumption of tobacco products. Moreover, this simplifies the process for producers and allows them to make longer-term financial projections.

Finally, the GOK can seek to strengthen enforcement to curb illicit trade and protect the legal market. The illicit trade of cigarettes is presenting two key problems: negative health externalities, and economic costs. Producers, healthcare systems, and the KRA are all impacted by the illicit trade of cigarettes and curbing such trade, especially across international borders, should be a priority of the government to ensure the excise system and other policies can be effective. To achieve this, the government should consider:

(i). Implementing well-targeted strategies to disrupt the illicit supply chain at source. Government to enhance its efforts in ramping up multi-stakeholders and cross-border collaboration to ensure effective enforcement and enhancement of anti-illicit trade regulations.

(ii) Enhancing collaboration between the government's multi-agency team, the cross-border agencies and the industry players in intelligence sharing and research to support the fight against illicit tobacco products.

(iii). Improving the capacity of the multi-agency teams for market surveillance, for example using drones to aid in patrol of the porous borders.

(iv). Ensuring that all the EAC partner states consider implementing a track-and-trace solution to enable them to combat smuggling, illicit trade, and suppression of production. Further, the partner states should explore the possibility of having a single EAC Track and Trace solution that can be used across the region.

(iv). Strengthening enforcement of the ban on single stick sales as provided in the Tobacco Control Act.

Bibliography

Afuberoh, D., & Okoye, E. (2014). The impact of taxation on revenue generation in Nigeria. A study of Federal Capital Territory and selected states. *International Journal of Public Administration and Management Research, 2*(2), 22-47.

BAT Kenya (2022). A Better Tomorrow: BAT Kenya Sustainability Report 2022. British American Tobacco Kenya PLC, Nairobi, Kenya.

Chapman, S., & Richardson, J. (1990). Tobacco excise and declining tobacco consumption: The case of Papua New Guinea. *American Journal of Public Health, 80*(5), 537-540.

Gerson P., Grote, M. and E. Hutton (2010). Kenya: Tax Policy Reform. Fiscal Affairs Department, International monetary Fund."

International Institute for Legislative Affairs (ILA) (2011). Economics of Tobacco Taxation in Kenya. Nairobi: International Institute for Legislative Affairs.

Kiringai, J., Ndung'u, S., & Karingi, S. N. (2002). *Tobacco Excise Tax in Kenya: An Appraisal.* Nairobi: Kenya Institiute for Public Policy Research and Analysis.

MSocSci, S. F., & Walbeek, C. (2022). Cigarette Prices and Smoking among Youth in 16 African Countries: Evidence from the Global Youth Tobacco survey. *Nicotine and Tobacco Research, 24*(8), 1218-1227. doi: https://doi.org/10.1093/ntr/ntac017.

Nagis, et al. (2015). Research: Cigarette taxation in Kenya at the crossroads: Evidence and policy implications.

Novotny, T. E., & Hamzai, L. (2023). Cellulose acetate cigarette filter is hazardous to human health. *Tobacco Control*.

Ochieng, J., & Agwaya, R. (2021). Demand elasticities of excisable goods in Kenya: Estimation using almost ideal demand system. *Journal of Financing for Development, 1*(3), 16-32.

Okello, A. K. (2001). An analysis of excise taxation in Kenya. African Economic Policy Discussion Paper Number 73.

Owino, Omondi. (2019). The effect of custom and excise duties on economic growth in Kenya. *International Journal of Scientific and Research Publications (IJSRP), 9*, 8564. https://doi.org/10.29322/IJSRP.9.01.2019.p8564

Schulz, M., Gerber, A., & Groneberg, D. A. (2016). Are filter-tipped cigarettes still less harmful than non-filter cigarettes? A laser spectrometric particulate matter analysis from the non-smoker's point of view. *International Journal of Environmental Research and Public Health, 13*(4), 429.

Shang, C., Chaloupka, F. J., Zahra, N., & Fong, G. T. (2014). The distribution of cigarette prices under different tax structures: Findings from the

International Tobacco Control Policy Evaluation (ITC) Project. *Tobacco Control, 23*(Suppl 1), i23-i29.

Shang, C., Lee, H. M., Chaloupka, F. J., Fong, G. T., Thompson, M., & O'Connor, R. J. (2019). Association between tax structure and cigarette consumption: Findings from the International Tobacco Control Policy Evaluation (ITC) Project. *Tobacco Control, 28*(Suppl 1), s31-s36.

WHO. (2010). *WHO technical manual on tobacco tax administration*.

WHO. (2014). *Guidelines for implementation of Article 6 of the WHO Framework Convention on Tobacco Control*.

WHO. (2021). *WHO technical manual on tobacco tax policy and administration*.

WHO. (2024). Raise taxes on tobacco. Retrieved from https://www.who.int/data/gho/data/themes/topics/raise-taxes-on-tobacco

Annexes

Annex 1: Recent Changes in Excise Tax Rates for Tobacco Products in Kenya

Description	2020	2021	2022 - 2023
Cigarette with filters(Hinge lid and soft cap)	KSh. 3,312.96 per mille effective October 2020	KSh. 3,312.96 per mille	KSh. 3,825.99 per mille effective July 2022 KSh. 4,067.03 per mille effective October 2022
Cigarettes without filters (plain cigarettes)	KSh. 2,272.00 per mille effective July 2020 KSh. 2,384.24 per mille effective October 2020	KSh. 2,384.24 per mille	KSh. 2,752.97 per mille effective July 2022 KSh. 2,926.41 per mille effective October 2022
Cigars, cheroots, cigarillos, containing tobacco or tobacco substitutes	KSh. 12,624.00 per Kg effective July 2020 KSh. 13,247.63 per Kg effective October 2020	KSh. 13,247.63 per kg	KSh. 15,296.6 per Kg effective July 2022 KSh. 16,260.29 per Kg effective October 2022
Electronic cigarettes and other nicotine delivery devices	KSh. 3,787.00 per unit effective July 2020 KSh. 3,974.08 per unit effective October 2020	KSh. 3,974.08 per unit	40%
Liquid nicotine for electronic cigarettes			Ksh. 70 per millilitre
Cartridge for use in electronic cigarettes	KSh. 2,525.00 per unit effective July 2020 KSh. 2,649.74 per unit effective October 2020	KSh. 2,649.74 per unit	KSh. 2,649.74 per unit
Other manufactured tobacco and manufactured tobacco substitutes; "homogenous" and "reconstituted tobacco"; tobacco extracts and essences	KSh. 8,837.00 per Kg effective July 2020 KSh. 9,273.55 per Kg effective October 2020	KSh. 9,273.55 per Kg	KSh. 10,707.88 per Kg effective July 2022 KSh. 11,382.48 per Kg effective October 2022
Products containing nicotine or nicotine substitutes intended for inhalation without combustion or oral application but excluding medicinal products		KSh. 1,200 per Kg	KSh. 1,500.00 per Kg effective July 2022 KSh. 1,595.00 per kg effective October 2022

Source: Excise Tax Act, 2015; Finance Acts 2020 - 2023

Annex 2: Excise Rates for Tobacco Products in EAC Region, 2022/23

Country	Description	Rate in 2022/23
Kenya	Cigarettes –with filter	KShs 4,067.03 per mille
	Cigarettes- without filter	KShs 2,926.41 per mille
	Cigars, cheroots, cigarillos…	KShs 16,260.29 per kg
	Electronic nicotine (liquid)	KShs 70 per millilitre
	Electronic cigarettes	40%
	Other manufactured tobacco and manufactured tobacco substitutes	KShs 11,382.48 per kg
	Products containing nicotine or nicotine substitutes	KShs 1,595.00 per kg
Rwanda	Cigarettes	36% of retail price and FRW 130 (Approx. Kshs 15.85) per pack of 20 cigarettes (Approx. Kshs 792.50 per mille)
Tanzania	Cigars, cheroots, cigarillos and cigarettes, of tobacco or of tobacco	Cigars containing tobacco 30% Locally Produced without filter TShs 12,447.00 (Approx. Kshs 715.34) per mille With filter TShs 29,425.00 (Approx. Kshs 1691.09) per mille Imported & Others TShs 55,896.75 (Approx. Kshs 3,212.46) per mille
Uganda	Soft cup; Locally manufactured cigarette	UGShs 55,000 (Approx. Kshs 2,052.24) per 1000 sticks
	Soft cup; Imported cigarette	UGShs 75,000 (Approx. Kshs 2,798.51) per 1000 sticks
	Hinged lid; Locally manufactured cigarette	UGShs 80,000 (Approx. Kshs 2,985.07) per 1000 sticks
	Hinged lid; Imported cigarette	UGhs 100,000 (Approx. Kshs 3,731.34) per 1000 sticks
	Cigars, cheroots and cigarillos containing tobacco	200%
	Smoking tobacco, whether or not containing tobacco substitutes any proportion	200%
	Homogenised or reconstituted tobacco and others	200%

Burundi	Tobacco	22 BIF/stem (Approx. Kshs 1.20/stem)
South Sudan	Tobacco/Cigarettes	100%
Note: Currency converted using January - December 2023 Average Exchange Rates where: One KShs is equivalent to UGShs 26.8; TShs 17.4; BIF 18.3; RWF 8.2		

Sources: EAC Countries' Excise Duty Laws

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