ENHANCING HEALTH FINANCING THROUGH TOBACCO TAXATION

APRIL, 2022

CENTRE FOR TRADE POLICY AND DEVELOPMENT

TAX JUSTICE NETWORK AFRICA

EDITORIAL

Isaac Mwaipopo
Executive Director

Boyd Muleya
Head of Research

Isaiah Mbewe
Monitoring & Evaluation Specialist

DESIGN & LAYOUT

Blessings Mutale
Graphic Designer/Photographer

Table of Contents

Acknowledgement

The Centre for Trade Policy and Development would like to thank the Tax Justice Network Africa (TJNA) for the financial support that made conducting of this study possible.

The organization would also like to thank the Ministry of Health, Health Financing Division, Ministry of Commerce, Trade and Industry, Department of Industry, Zambia National Farmers Union, Zambia Revenue Authority, University of Cape Town and other stakeholders for providing valuable information and feedback through the different stages of the study.

Furthermore, the organization would like to acknowledge and thank the contribution of individuals who worked tirelessly for the completion of this study including: Herryman Moono, Peter Mumba, Isaiah Mbewe and Boyd Muleya. Lastly, the organization would like to extend their gratitude to the programs staff for making this publication a success.

Executive Summary

The burden of Non-Communicable Diseases (NCDs) in Zambia is on the rise, with 29% of all deaths attributable to NCDs. Given that NCDs are lifestyle diseases, this is a significantly high proportion, particularly that most of these diseases can be reduced by attending to the four main behavioural risk factors for NCDs which are tobacco use, harmful use of alcohol, unhealthy diets, and physical inactivity. Among the key risk factors for NCDs is Tobacco use, which is a major risk factor for lung cancer and cardiovascular diseases. Without deliberate policies to address the underlying risk factors, the burden of NCDs will continue to rise, leading to associated social and economic losses such as rising healthcare costs, productivity losses, household impoverishment and poverty.

The prevalence of tobacco use in Zambia is estimated at 23% for people aged 18 – 69 years, with men being the most users. The preferred form of tobacco use was manufactured cigarettes and hand rolled cigarettes, used by 59% and 39% of current smokers respectively. Compared with other countries, the price of tobacco in Zambia is very low. This is mainly attributed to effective taxes (37.3%) that are significantly lower than the WHO recommended 75% of the retail price.

To reduce tobacco consumption and its associated health risks and raise additional revenues for the health sector, this study recommends that the Zambian government should progressively increase the taxes on tobacco products. Given the behavioural nature of tobacco consumption, high effective taxation is the surest way of reducing all the health risks associated with its consumption while raising additional revenues for the health sector. In the design and implementation of the taxes, government should ensure that the design of the taxes is easy to administer and difficult to manipulate by tobacco suppliers. Such could be achieved through uniform taxes rather than the current multitiered taxes. Further, these must be regularly adjusted for inflation and incomes to make tobacco less affordable.

Introduction

Policymakers around the world are grappling with enormous challenges in financing health care, and Zambia is no different. The COVID-19 pandemic has adversely affected the health and economic conditions of the global community, consequently shaking health systems in many countries, particularly developing countries whose healthcare systems had been vulnerable prior to the pandemic. The COVID-19 pandemic has added a strain to already constrained healthcare systems with limited financial resources, underdeveloped healthcare systems and high levels of poverty, adding to the already high disease burden. Besides the COVID-19 pandemic, low - and middle-income countries especially those in Sub-Saharan Africa (SSA) including Zambia face high incidences of Human Immuno-Deficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS), malaria and measles. There is also a resurgence in Tuberculosis (TB), specifically in cases of Multi-Drug Resistant (MDR) and Extensively Drug-Resistant (XDR) TB which are very costly to treat. Relatedly, there has been a surge in Non- Communicable Diseases (NCDs), leading to a high dual burden of communicable and non – communicable diseases (Ministry of Health, 2020).

The World Health Organisation (WHO) (2013) notes that the scarcity of funds for health remains a major challenge in effectively improving health outcomes in SSA. More than a third of SSA countries have not been able to meet the Abuja declaration target of allocating 15% of its national budget to health. Most of the countries that have met the Abuja declaration target in at least one particular year which includes Zambia have done so with significant assistance from external funding sources according to (Odhiambo, 2014). However, in the recent past, total government allocation to the health sector as a percentage of the national budget in Zambia has remained below the Abuja declaration target.

In 2018, government allocated 9.5 percent of the national budget translating to K6.7 billion. In 2019, governments' allocation to health was 9.3 percent translating to K8.9 billion. In 2020, although the monetary allocation to health increased to K9.3 billion, this figure translated to 8.8 percent of the national budget. In 2021, government increased its allocation to health by approximately K300 million to K9.6 billion. However, despite the monetary increase, there was a reduction of this allocation as a ratio to the national budget to 8.1 percent from 8.8 percent in the previous year. For the year 2022, Government has planned to reduce this ratio to 8.0 percent translating to K13.9 billion (Ministry of Finance, 2021).

It must be pointed out, however, that excessive reliance on external funding to finance health service provision is unsustainable because Zambia is a lower middle-income country which is expected to graduate from donor financing in the near future (Masiye & Chansa, 2019). Therefore, it is imperative to devise innovative alternative health financing options to build a resilient and adequate pool of funds for health.

Identifying alternative health financing options remains a challenge in Zambia and Africa at large especially with the high poverty levels instigated by harsh economic conditions. Nonetheless, one major opportunity presents itself in the Tobacco industry. Tobacco farming remains an important economic activity in Zambia. Additionally, Zambia is a producer and net exporter of the tobacco leaf with approximately 12,000 small scale tobacco growers. It is labour intensive, hence, employs over 50,000 farmers annually. Therefore, in advancing the vision of Zambia becoming a 'middle-income country' by 2030, the Ministry of Commerce, Trade, and Industry (MCTI) references tobacco among one of the fastest growing industries in Zambia. Tobacco has been explicitly acknowledged as an important contributor to manufacturing value-add placing it within the agro-processing priority of the Ministry's industrial development goal (NDP 2017-2021).

The establishment of cigarette manufacturing and processing plants in 2018 and 2020 by British American Tobacco and Roland Imperial Tobacco respectively presented great opportunity for value addition in the tobacco industry. The two processing plants have a collective capacity to produce 20 million cigarettes a day aimed at both domestic and export markets (Tobacco Tactics, 2020). According to a report by Grand View Research, Inc., the global tobacco market is expected to grow to USD 1,073.79 billion by 2028. It is expected to expand at a Compound Annual Growth Rate of 1.8 percent from 2021 to 2028.

This growth presents itself as an opportunity for Zambia to maximize the possible revenue to be collected through taxation. This is attributed largely to the increased consumption among youth and in particular student populations, a trend which is prevalent in Zambia with young people increasingly consuming non-traditional tobacco products (Chizuni, 2017). Therefore, the need to control consumption of tobacco cannot be over emphasized as it is one of the biggest risk factors for non-communicable diseases.

Objectives of the Study

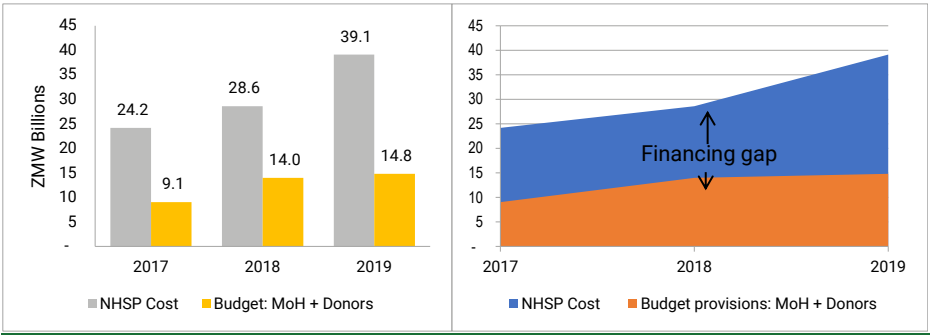
This paper aims to explore how the Zambian tobacco tax structure can be optimized to raise additional revenues for the health sector, reduce rise in non-communicable disease by reducing access to risk factors and thus effectively respond to the disease burden of the country. Specifically, the study aimed at:

(i). Examining the existing tax structure in relation to tobacco and sub sectors.
(ii). Review of best practices in different jurisdictions in relation to expanding the tax base and health financing from tobacco.
(iii). Identifying and propose a model of taxation to raise more revenue from tobacco taxation in Zambia.

Rationale of the Study

Adequate financing for the Zambian healthcare system remains a challenge, characterized by considerable reliance on donor funding due to poor economic conditions and high poverty levels. Annual budget allocations fall short of the 15% target set by the Abuja declaration target for health spending. The Mid Term Review of the 2017 – 2021 National Health Strategic Plan (NHSP) shows a significant deficit in financing of the plan.

Figure 1. NHSP Costs and Health Budget Allocation: 2017 – 2019



Source: Ministry of Health NHSP 2017 – 2021, Mid Term Review Report, 2020

Total budget allocations by the government and donors, Zambia's two largest financing sources for the health sector, totaled K9.1 billion, K14 billion, and K14.8 billion for the respective years, representing an average of 42 percent of what was mobilized by the government and its cooperating towards the NHSP against what was planned. The gap in financing calls for innovative additional revenues to fund the health sector sufficiently and sustainably.

Coincidentally, the prevalence of tobacco consumption in Zambia has been on the rise mainly due to low cigarette prices. A WHO (2015) report notes that Zambia has one of the lowest tax shares in the world. In 2016, tax comprised only 37 percent of the retail price of cigarettes of the most popular brand, compared to 56 percent

globally whilst the WHO recommended tax share is 75 percent. Meanwhile, consuming tobacco remains the largest preventable risk factor for non-communicable diseases (WHO, 2015). However, given the tobacco industry's position as a major source of financing, there is an opportunity for policies to raise additional resources from the tobacco industry to help the respond to the health funding challenge. The underlying theoretical proposition is that tobacco imposes negative externalities on society and thus optimization of tobacco taxation is essential in meeting socially desirable levels of both output and tax revenue to be earmarked for health.

Methodology

The study involved a desk review of existing policy and legal frameworks in relation to the taxation of tobacco as well as best practices from other jurisdictions. In addition, the study had high level interviews with policy makers in the Ministry of Health responsible for health financing policy formulation. Based on international best practices, the study recommended the enhancement of the tax level on tobacco products, coupled with earmarking of the revenues for NCDs prevention and treatment programmes.

The rest of the report is organised as follows; section 5 presents an overview of the current tobacco use and prevalence of NCDs in Zambia. Section 6 presents a snapshot of current tobacco taxation in Zambia while section 7 gives key highlights of international best practices in tobacco taxation that provides lessons for Zambia. Section 8 presents feasible options for effective tobacco taxation in Zambia to raise revenues for the health sector. Section 9 concludes the study.

Prevalence of Tobacco Use and NCDs in Zambia

The WHO Stepwise approach to Surveillance (STEPS) survey of 2017 investigated prevalence of tobacco use for people aged 18-69 in Zambia and found that 23% of Zambian men smoked tobacco compared to only 3% of women, with the preferred form of tobacco use being manufactured cigarettes and hand rolled cigarettes, used by 59% and 39% of current smokers respectively. These findings show that any policy aimed at reducing smoking should focus on manufactured cigarettes, as this will help to reduce both active and passive smoking. While Zambia has laws in place to control smoking in public places, the enforcement of these laws has been very weak. In view of the early age at which most people start smoking in Zambia, it is important to target prevention messages to young people in schools and communities before they pick up tobacco smoking habits. (Ministry of Health, 2017).

Figure 1: Current Tobacco Users by Age Group and Sex, Zambia, 2017

Age Group (years)	Men			Women			Both Sexes		
	n	% Current users	95% CI	N	% Current users	95% CI	n	% Current users	95% CI
18-29	597	19.6	15.6-23.6	3022	6.5	4.4-8.6	1619	13.0	10.6-15.4
30-44	578	25.8	21.7-30.0	932	6.2	4.5-7.9	1510	16.0	13.6-18.3
45-59	312	31.8	25.6-38.1	470	11.7	8.2-15.1	782	21.1	17.6-24.6
60-69	127	34.6	23.9-45.4	257	18.1	11.6-24.6	384	25.3	18.9-31.6
18-69	**1614**	**24.0**	**21.4-26.7**	**2681**	**7.8**	**6.4-9.2**	**4295**	**15.8**	**14.2-17.3**

Source: Ministry of Health, 2017

Zambia has a high disease burden of both communicable and non-communicable health conditions. While communicable diseases remain the major cause of morbidity and mortality, the burden of NCDs in Zambia is very high and increasing, with 29% of all deaths in attributed to NCDs. This is a significantly high

proportion, particularly that most of these diseases can be reduced by attending to the four main behavioural risk factors for NCDs which are tobacco use, harmful use of alcohol, unhealthy diets, and physical inactivity (WHO, 2016). Among the key risk factors for NCDs is Tobacco, which is a major risk factor for lung cancer and cardiovascular diseases. The 2017 WHO report on the global tobacco epidemic indicated that although the WHO Framework Convention on Tobacco Control (WHO FCTC) was ratified on 23rd May 2008, Zambia has not yet signed (WHO, 2017a). The report also stated that, despite the existence of a national agency or technical unit for tobacco control, no specific national government objectives in tobacco control exist, and that the government's tobacco control expenditure in 2008 was USD 37,257. (WHO, 2017c).

As aptly argued by WHO (2017), increasing taxes on health-harming products is one of the most effective measures a government can take to reduce consumption of such products, improving population health, while increasing government revenue for national development priorities. In view of the foregoing, price mechanisms which raise the costs of cigarettes is one effective way of reducing the consumption of cigarettes and the associated risk of tobacco induced NCDs.

Current Tobacco Taxation in Zambia

Zambia's current taxation on cigarettes comprises of import duty (25%), Excise tax (which is the greater tax (VAT) of either an ad valorem tax or specific excise tax), and Value Added Tax (16%). Although imported cigarettes are subject to a 25% import duty, this does not apply if the cigarettes come from a country that is a member of Zambia's Free Trade Area (FTA) (Moraes, 2017).
Table 1 below shows the performance of excise duty tax on tobacco from 2015 – 2021.

Table 1: Revenue Raised from Tobacco Excise Duty, 2015 – 2021

Year	Excise Duty - Cigarettes	Total Excise Duty	Excise Duty on Cigarettes as a percentage of Total Excise Duty
2015	115,616,852.70	3,253,900,000	4%
2016	188,645,631.00	3,250,700,000	6%
2017	122,341,785.59	3,170,300,000	4%
2018	60,331,521.00	3,429,500,000	2%
2019	109,403,369.00	3,989,870,000	3%
2020	113,118,784.28	4,661,100,000	2%
2021	123,309,811.81	4,321,900,000	3%

Source: Zambia Revenue Authority, 2022

From the table above, excise tax on tobacco does not contribute significantly to the total excise tax envelope. This is because on average, the excise tax rate is low compared to other countries in the region.

However, the Zambian government made specific changes to the taxation of cigarettes, unmanufactured tobacco, and other tobacco products in the 2022 National Budget, as shown in table 1. Furthermore, table 2 illustrates how the excise duty on these products is administered.

Table 2. Excise Duty

Item	2022 rate (%)	2021 rate (%)
Unmanufactured tobacco and tobacco refuse	K355 per kg	K240 per kg
Water pipe tobacco, cut-rag, other manufactured tobacco, manufactured tobacco substitutes, homogenized or reconstituted tobacco, tobacco extracts and essences	K355 per kg	K240 per kg
Products containing tobacco or nicotine or their substitutes, that are inhaled into the human body without combustion	145%	0%
Cigars, cheroots, cigarillos and cigarettes of tobacco or tobacco substitutes	K365 per mille	K302 per mille

Note. ZRA Practice Note No. 1/2022

Table 3. Administration of Excise duty

Item	Statistical Unit of Quantity	Rate
Tobacco refuse	Kg	K355 per Kg or 145% whichever is higher
Cigars, cheroots, cigarillos, and Cigarettes, of tobacco or tobacco substitutes	Mille	K355 per mille
Pipe Tobacco	Kg	K355 per Kg or 145% whichever is higher
Cut-rag and other tobacco products	Kg	K355 per Kg or 145% whichever is higher
Products containing tobacco, reconstituted tobacco, nicotine, or nicotine products	Kg	145%

Note. ZRA Practice Note No. 1/2022

The Tobacconomics Cigarette Tax Scorecard by Chaloupka et, al. (2021), provided a comprehensive, transparent, objective, and simple approach to assessing the strength of cigarette tax systems globally using four components, namely, (1) Cigarette

Price, (2) Changes in Cigarette Affordability, (3) Tax Shares and (4) Tax Structure.

Chaloupka et, al. (2021), acknowledged that Tobacco taxation is the most effective and cost-effective measure to reduce tobacco use. The price is a key determinant of tobacco use. While higher prices reduce consumption, cigarettes are relatively price inelastic, therefore an increase in price will result in a less-than-proportional decline in consumption. However, in addition to price, income also affects demand. Rapid economic growth resulting in increases in income can offset increases in taxes and prices and limit their impact on consumption. Chaloupka et, al. (2021), indicated that the tax shares should be high enough to reduce tobacco use while also allowing governments to gain revenue from the price increase. Further, appropriate tax structures are critical in ensuring that tax increases reduce tobacco use and increase government revenues. Table 3 summaries how Zambia performed on this Cigarette Tax Scorecard for the period 2014 to 2020.

Using data from the World Health Organization's biennial Report on the Global Tobacco Epidemic, the Tobacconomics Cigarette Tax Scorecard scores cigarette tax policy performance in more than 170 countries on a five-point scale (0 is the least score and 5 being highest score), providing policy makers with an actionable assessment of their country's cigarette tax policy.

Table 4. Summary of Zambia Cigarette Tax Scores.

Year	Absolute Price	Affordability Change	Tax Share	Tax Structure	Overall Score
2014	1	0	0	2	0.75
2016	2	0	0.5	2	1.13
2018	2	0	0.5	2	1.13
2020	1	0	0.5	4	1.38
Change overtime	1 point decrease	No Change	No Change	2-point increase	0.25-point increase

Note: Tobacconomics Cigarette Tax Scorecard, 2020 & 2021.

According to the Cigarette Tax Score Card, the low overall score of 1.38 in the year 2020 indicates that Zambia has not performed well. The price of cigarettes remains inexpensive, no change in the affordability of cigarettes and in the tax share in recent years with only a slight increase in the tax structure. In this regard, on average, tobacco products continue to be easily affordable in Zambia, making use and uptake, particularly among the youths, very high.

Tobacco Taxation and Health Financing in Selected Countries.

According to the World Health Organization (WHO) report on the Global Tobacco Epidemic of 2017, only 10% of the world's population is covered by sufficiently high levels of tobacco taxation. The same report stated that the tobacco industry undermined taxation efforts by lobbying policy makers and exaggerating their industry's economic value and the risk of illicit trade.

The WHO recommends 75% tax share on tobacco products. By 2018, WHO reported that 'only 38 countries, covering 14% of the global population had sufficiently high tobacco taxes - which means taxing at least 75% of the cost of these health-harming products. It was noted that by 'implementing proven policies like tobacco taxes, the costs created by the tobacco industry to local communities and nation can be avoidable. It is a win for population health, revenue and for development'. In 2016, Zambia's tobacco taxation comprised only 37% of the retail price of cigarettes of the most popular brand, compared with the 56% global average (Zambia Tobacco Atlas, 2019).

Most countries apply various tax types and levies on tobacco products, namely, import duties on imported products, VAT, and excise duties. However, some countries, especially those from

the West African Economic and Monetary Union (UEMOA) and Economic Community for West African States (ECOWAS) regions, are guided by the regional trade protocol prescriptions on levels and types of taxes they levy on tobacco products. For these regions, the commonly used excise duty types are ad valorem rates. UEMOA recommends a minimum of 50% and a maximum of 150% for its members. Apart from Senegal, which levies an excise duty of 65%, the rest have lower rates. Besides excise duty, they collect environmental taxes as well. ECOWAS countries and some UEMOA countries levy what they call "statistical levy".

Uganda charges an excise duty of 200% of Cost, Insurance and Freight (CIF) value for imports and specific rates apply for domestically produced cigarettes. An export levy of USD0.20/kg is applied on exports. Rwanda applies a hybrid regime that includes an ad valorem rate of 150% on CIF/ ex – factory value, and 36% of retail price of a pack of cigarettes. Botswana on the other hand, has a mix of ad valorem rates that include a 45% (CIF) customs duty, an escalating rate for raw tobacco, specific excise duty rates for locally produced tobacco, VAT, and a tobacco levy currently at 30% of customs duty. Below we provide five country specific cases selected for their tobacco taxation policies for reference.

(i). The Gambia

The Gambia is a small low-income country in West Africa, whose prices of cigarettes where in 2012 among the lowest in the African region. Cigarette taxes included excise, import duty, import sales tax (VAT from 2013), environmental tax, customs processing fee and ECOWAS levy. Between 2003 and 2012, the excise tax was based on weight (kg) and was increased gradually. In the 2013 Budget Statement, government changed the base of specific excise tax on cigarettes from weight to number of packs. With the support of WHO, Gambia's plans to raise price of cigarettes worked well such that by 2018, revenues raised went up almost threefold compared

to 2011. This also led to a reduction in cigarettes importation by over 60% (Nargis et al, 2016).

Gambia has demonstrated two best practices in tobacco taxation; First, it increased the specific excise tax on an annual basis, keeping pace with inflation and income growth, with a view to decreasing the affordability of tobacco product; and second, it harmonized the tax rates between cigarettes and other tobacco products to prevent substitution between tobacco products in the case of tax and price increase (Nargis et al, 2016). It also distinguished excise tax on tobacco products from environmental tax to attribute damage to public health to tobacco consumption over and above the environmental externalities it causes.

(ii). Sri Lanka

Sri Lanka which is a lower-middle-income country in South Asia has had the highest level of achievement of taxation for cigarettes, with taxes reaching 77% of the price of the most sold brand. The country primarily relies on a specific excise tax, meaning a tax is levied on selected products based on quantity, such as number of cigarettes or weight of tobacco. Sri Lanka increased the tax at regular intervals to effectively decrease the affordability, and consumption tobacco. In line with WHO recommendations, the Institute of Policy Studies of Sri Lanka (IPS) proposed that Sri Lanka implements an inflation-adjusted excise tax increases on all cigarettes, and gradually move towards collapsing the 5-tier cigarette tax rates to a uniform specific excise tax rate (IPS, 2020). See table 3.

Table 3. Cigarette Tax Policy 2020-2023

Policy Change	Year	Details
Policy Change 1 – Inflation adjusted excise tax increase	**2020**	Increase excise tax rates by 15% for all tiers
Policy Change 2 - Inflation adjusted excise tax increase	**2021**	Increase excise tax rates by 10% for all tiers
Policy Change 3 – Reduce number of tax tiers & Inflation adjusted excise tax increase	**2022**	Collapse two lower tiers into one. Increase tax for the four new tiers by 5%
Policy Change 4 – Adopt uniform tax rate & Inflation adjusted excise tax increase	**2023**	Collapse four tiers to one tier by increasing ax on all tiers up to rate of the highest tier

Note. IPS. Cigarette Tax Reforms to Reduce Tobacco Consumption and Increase Government Revenue, 2020.

(iii). Colombia

In 2016, Colombia which is classified as an upper middle-income economy in South America had the second-cheapest cigarettes in the Western hemisphere, second only to Paraguay (a large producer of tobacco products). As part of a larger fiscal reform in 2016, the specific tax rate for cigarettes was tripled from 2016 (700 Colombian Peso per pack) to 2018 (Colombian Peso 2,100 per pack), with a 4% real increase per year after 2019. Not only did cigarette consumption fall by 34% by 2018, but excise tax revenues, which are earmarked for funding of Universal Health Coverage (UHC), almost doubled. Therefore, the tobacco tax reform decreased tobacco consumption (along with associated death, disease, and costs); increased revenues; and contributed the financial sustainability of the UHC system (WHO, 2021).

(iv). Oman

The WHO estimates that the share of tax in the price of the most sold brand of cigarettes in Oman increased from 25% to almost 64% between 2018 and 2020 thanks to the introduction of the excise tax. The price of the most sold brand also almost doubled

from 1.2 to 2.2 Omani rials during that same period. This was expected to have a substantial impact on reducing tobacco use and uptake, especially the youth (WHO, 2021).

(v). Philippines

The Philippines which is a lower middle-income country in Southeast Asia introduced the famous 2012 "Sin Tax" reform which led to substantial reductions in tobacco use and increases in revenues used for UHC. These reforms have been very widely disseminated as a key success story on tobacco taxation.

In 2011, a popular brand of cigarettes sold for Philippian Peso (PhP) 12–25 (USD 0.27–0.56) while some brands were as inexpensive as PhP 8 (USD 0.18) per 20-pack. Excise taxes averaged 24.1% of cigarette retail prices. During the first year of implementation in 2013 of the sin tax reform act, revenue collections for tobacco and alcohol reached PhP 70.4 billion (USD 1.57 billion) and PhP 33.0 billion (USD 737.7 million), respectively with incremental tobacco tax revenues reaching 179% of the Bureau of Internal Revenue (BIR) projections. The total tobacco excise tax collection in 2013 represented a 114% increase over 2012 collections and Excise taxes comprised 53% of cigarette retail prices on average, which was a marked increase but still lower than the WHO target (GHD, 2015).

The Philippines also successfully foiled industry attempts to change the uniform tax structure for cigarettes under the Sin Tax Law of 2013. Also, excise taxes were collected on products when manufacturers removed cigarettes from the factory to sell on the market. Companies could not withdraw products from the factory unless they had paid the tax on them. With this measure, the government saw a decline in factory removals as further evidence that tax increases had discouraged consumption of cigarettes (Madore et, al. 2015).

Further the Philippines charged excise taxes on heated tobacco products and e-liquids used in electronic cigarettes. The structure for the excise tax on heated tobacco products is the same as for cigarettes, which is considered best practice. Moreover, unlike most countries, an excise tax is also imposed on those products' devices. With the tobacco and alcohol taxes earmarked for Universal Health Care, more revenue is being generated for the health sector. The cigarette taxes are now at their highest with increases of five pesos annually until 2023, and with automatic increases of 5% thereafter.

Options for Tobacco Taxation in Zambia

Some of the best practices in tobacco taxation and administration that Zambia can adopt are drawn from the other country experiences discussed earlier and the WHO's Technical Manual on Tobacco Tax Administration. According to the Pigouvian principle (Pigou,1920), excise tax is meant to be levied on the products or services that are socially undesirable (i.e., social costs are higher than private costs). Environmental tax, which is designed to equal the marginal damage caused by environmental pollution from the production, distribution and consumption of a product or a service, is one of this kind.

As alluded to earlier, Zambia's tobacco taxation comprised only 37% of the retail price of cigarettes of the most popular brand which is below the 56% global average and against the recommendation of 75% by WHO (Zambia Tobacco Atlas, 2019). The findings of the Tobacconomics Cigarette Tax Scorecard in table 2 and the Zambia Tobacco Atlas, (2019) suggests that Zambia need to raise the price and make it less affordable by setting tobacco excise tax to levels that will account for at least 75% of the retail prices for tobacco products. Further, there is need to use tobacco excise tax increases to achieve the public health goal of reducing the death

and disease caused by tobacco use. This is supported by Moraes (2017) who recommended an increase in excise tax to 70% (K473 per 1000 cigarettes).

Zambia can also learn from the best practices adopted by Gambia where specific tax was increased on an annual basis to keep pace with inflation and income growth and were the tax rates between cigarettes and other tobacco products were harmonized to prevent substitution. Environmental tax to attribute damage to public health to tobacco consumption over and above the environmental externalities it causes could also be considered.

With these tax measures coupled with other none – tax measures, Zambia can begin to reduce the prevalence of tobacco use; increase the number of tobacco users who quit; reduce the initiation of tobacco use among young people; Reduce tobacco-related morbidity and mortality; increase government revenues (Moraes, 2017).

Conclusion

Given the rapid increase in NCDs that Zambia has been experiencing which are rapidly transcending into diseases of significant public health concern, policies to reduce exposure to the risk factors by changing behavioural patterns are some of the most effective ways of not only reducing the disease burden, but also raising additional revenues for the healthcare system. As NCDs are a major cause of disability and premature death and contribute substantially to the escalating cost of health care, increasing taxation on unhealthy commodities such as tobacco will reduce consumption and consequently, reduce and eliminate health related harms. Further, increased taxation on the unhealthy commodities will provide revenue that can be earmarked for use to implement health related programmes and interventions to

address the impact of unhealthy commodities on the population.

Based on the review of the current Zambian tobacco taxation structure, what is clear is that the level of effective tobacco taxation is significantly below peer countries, and far lower than the recommend WHO level of 75% of retail price.

Increase in tobacco taxation from the current low levels to the standard international levels will have the following impact:

1. Reduce consumption of tobacco by:

    a). Encourage smokers to quit or reduce their smoking.
    b). Discourage ex-smokers from starting again.
    c). Deter non-smokers from starting.

2. Reduced incidences of Non – Communicable Diseases attributable to tobacco consumption, thereby creating savings on health expenses; and

3. Raise additional revenues for the healthcare system that can be earmarked for use to promote the health of the population and treat the affected users.

Given the international standards and practice of tobacco taxation, raising tobacco taxation and prices would provide an important additional revenue stream for the Zambian government as there is a significant gap between the current tax rate on tobacco (37.3% of retail price) and the WHO recommendation (75% minimum). Furthermore, the additional revenues can be raised without jeopardising the income generating and employment creation potential of tobacco in the agricultural sector.

Recommendations

Based on the review of the evidence and practice of other countries, the following recommendations are made:

1). Government should expedite the passing of the Tobacco Control Bill. The Tobacco Bill will declare tobacco product, tobacco device, nicotine product or nicotine device as a restricted product. Furthermore, the Bill will domesticate the World Health Organisation Framework Convention on Tobacco Control, including re-enforcing the implementation of the SI 39 OF 2008 that bans smoking in public.

2). The Zambian government should significantly increase tobacco taxes progressively over time from the current 37.3% of retail price to the WHO recommended of 75% of retail price to make tobacco products less affordable, reduce consumption, and prevent unnecessary NCDs and associated deaths. The additional revenues from should be ringfenced for the health sector for the prevention and treatment of NCDs. As this does not require parliamentary approval, the Ministry of Health could raise this as part of the government's Cabinet deliberations after consultation with key ministries such as the Ministry of Finance, Ministry of Agriculture, and others.

3). In the design and implementation of the taxes, government should ensure that the design of the taxes is easy to administer and difficult to manipulate by tobacco suppliers. Such could be achieved through uniform taxes rather than the current multitiered taxes. Further, these must be regularly adjusted for inflation and incomes to make tobacco less affordable.

References

Ayda Yurekli; Joy de Beyer; Wilkins, Nick; Yurekli, Ayda; Hu, Tehwei. Economic analysis of tobacco demand (English). World Bank economics of tobacco toolkit ; no. 3. demand analysis Washington,D.C.:WorldBankGroup.http://documents.worldbank.org/curated/en/390251468322463134/Economic-analysis-of-tobacco-demand

Chaloupka, F., Drope, J., Siu, E., Vulovic, V., Mirza, M., Rodriguez-Iglesias, G., Ngo, A., Laternser, C., Lee, H., Dorokhina, M., & Smith, M. (2021). Tobacconomics cigarette tax scorecard (2nd ed.). Chicago: IL, Health Policy Center, Institute for Health Research and Policy, University of Illinois Chicago. www.tobacconomics.org.

GHD-030 October 2015. "Sin Taxes" and Health Financing in the Philippines.
Madore A, Rosenberg J, Weintraub R. 2015. "Sin Taxes" and Health Financing in the Philippines. Harvard Business Publishing.

Masiye, Felix; Chansa, Collins. 2019. Health Financing in Zambia. World Bank, Washington, DC. © World Bank. https://openknowledge.worldbank.org/handle/10986/31786 License: CC BY 3.0 IGO."

Ministry of Health. (2017). National Strategic Plan for Tuberculosis Prevention, Care and Control (2017 2021). Lusaka: Ministry of Health.

Ministry of Health. (2020) A report of the under reporting of TB patients in Zambia. Lusaka: Ministry of Health. Moraes AN. Tax the smoker, save the smoker! -The health and economic benefits of increased tobacco tax in Zambia. Health Press Zambia Bull. 2017;1(5), pp6-8

Nargis N, Manneh Y, Krubally B, et al. How effective has tobacco tax increase been in the Gambia? A case study of tobacco control. BMJ Open 2016;6: e010413. doi:10.1136/ bmjopen-2015-010413

Pigou AC. The economics of welfare. London: Mcmillan, 1920.

Prevention and control of Noncommunicable Diseases in Zambia. The Case for Investment, Zambia, 2019. Geneva: World Health Organization; 2019 (WHO/UNIATF/19.94). Licence: CC BY-NC-SA 3.0 IGO.

Price Water House Coopers. Navigating The New Normal. National Budget Bulletin. September 2022

World Health Organisation Report 2021. www.http://who.int/news-room/feature-stories/detail/countries-share-examples-of-how-tobacco-tax-policies-create-win-wins-for-development-health-and-revenues.

World Health Organisation report on the global tobacco epidemic, 2017: Monitoring Tobacco Use and Prevention Policies. Geneva: World Health Organization, 2017.

World Health Organisation Technical manual on tobacco tax policy and administration. Geneva: World Health Organization; 2021. License: CC BY-NC-SA 3.0 IGO.

World Health Organization, Ministry of Health Zambia. Zambian STEPS 2017 Survey report. Government of Zambia. 2017.

Annex: Econometric Methods in the Estimation of Revenues from Tobacco Taxation

Excise taxes on cigarettes are good sources for generating revenue. Although the share of cigarette tax revenues in total tax revenues are low in all countries, given the level of total tax revenues in developed countries, that share indicates the significance of generating revenues from cigarette taxes. Practically, the contribution of cigarette excise taxes to total tax revenues depends on:

1. ***The tax rate, or proportion of the cigarette pack price that is due to excise tax,***
2. ***The amount of cigarette expenditures, and***
3. ***Other taxes paid for goods and services as a proportion of GDP.***

The demand for cigarettes which captures consumption can be estimated as follows:

$$Q_t=\beta_0+\beta_1 P_t+\beta_2 Y_t+\beta_3 Age+\beta_4 Sex+\beta_4 Q_{(t-1)}+\varepsilon_t$$

Where:
Qt = per capita consumption of cigarettes per adult in year
Pt = real price per pack of cigarette
Yt = real income per adult
Age = age of cigarette consumer, in years
Sex = sex of cigarette consumer, binary (male or female)
The performance of tobacco taxes can be estimated as follows:

$$TER/TTR=[TER/CSC]X[CSC/GDP]x[GDP/TTR]$$

Where:
TER = Cigarette excise tax revenue = number of packs of cigarettes consumed x rate

TTR = Total tax revenue = tax revenues from excise taxes, including cigarette excises and other goods and services

CSC = Consumer spending on cigarettes = number of packs of cigarettes consumed x cigarette price

GDP = Gross domestic product.

Furthermore, the performance of taxes on tobacco can be analyzed by expressing it as a percentage share of the total excise tax as follows:

TER/ER=[TER/CSC]X[CSC/GDP]x[GDP/TTR]x[TTR/ER]
Where ER = Excise Revenue

List of Interviews

Id	Organisation
1	Ministry of Health, Healthcare Financing Division
2	Ministry of Commerce, Trade and Industry, Department of Industry
3	Zambia National Farmers Union
4	Zambia Revenue Authority

Key Messages from the Qualitative Interviews:

The qualitative interviews revealed the policy dichotomy around tobacco taxation. While the Ministry of Health have been championing for the introduction of earmarked tobacco taxes as a way of preventing and financing NCDs, the Ministry of Commerce, Trade and Industry and the Zambia National Farmers Union are against the introduction of tobacco taxes, particularly on locally grown and produced tobacco as this is deemed to raise the cost of doing business and rob the country of additional revenues and jobs in the tobacco value chain. Any policy moves to increase the tobacco taxes, and earmark this for healthcare financing, therefore,

would require concerted efforts from civil society organisation to reinforce the call by the Ministry of Health in the prevention and control of tobacco induced NCDs. Specifically, civil society organizations such as CTPD can work with the Ministry of Health. Parliamentarians and other actors to drive for the passing of the tobacco control bill. By passing this piece of legislation, Zambia will fulfil its obligations under the WHO FCTC, drive sustainable development and meet its commitment to health in all policies.

CENTRE FOR TRADE POLICY AND DEVELOPMENT

FOR MORE INFORMATION:

EXECUTIVE DIRECTOR

The Centre for Trade Policy & Development
P.O. Box 50882
Lusaka, Zambia

Plot 3823, Manda Hill Road, Olympia Park
Tel: +260 211 264409
Email: info@ctpd.org.zm

www.ctpd.org.zm