



Taxation formula for tobacco in Sri Lanka

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Abstract

Article 06 of the WHO Framework Convention on Tobacco control emphasizes the importance of implementing effective tax and price policies for Tobacco products. To fight against the Tobacco epidemic WHO has introduced the MPOWER package which R stands for raising taxes on Tobacco. According to WHO standards, 70% of the excise tax from the retail price will contribute to an effective Tobacco tax indexation policy. National Authority on Tobacco and Alcohol organized Tobacco Taxation and Illicit Trade virtual workshop with the collaboration of WHO FCTC Knowledge Hub on Tobacco Taxation, Research Unit on the Economics of Excisable Products, University of Cape Town. The developed Tobacco tax indexation formula of the National Authority on Tobacco and Alcohol was modified by including exogenous factor with the guidance of experts of WHO FCTC Secretariat Knowledge Hub on tobacco taxation. Tobacco tax simulation modeling can be used to predict how much tobacco consumption will decrease, and government revenue will increase if there is a change in the tobacco excise tax structure and an increase in the level of taxation. Preliminary evidence from the TETSIM model predicts that a 91.6 to 124.6 billion increase in tobacco excise taxation from the current 2022 to 2026 would lead to a 1.1 % drop in consumption and approximately 101.8 to 136.9 billion increases in government revenue. The finding of the modeling of Tobacco taxes with the TETSIM model will lead to an increase in Tobacco tax revenue and decrease Tobacco consumption in Sri Lanka.

Keywords: Tobacco. Taxation. TESTSiM Model. Formula.

Introduction

Sri Lanka being the first in Asia & fourth in the world to ratify the first ever public health treaty under the World Health Organization (WHO). The World Health Organization's Framework Convention on Tobacco Control (FCTC) is a strong party to set treaty [1]. Out of the provisions to be implemented, most of the provisions have been adhered to name few pictorial warning (80%), comprehensive law (enactment of tobacco law), continued tax policy, prohibition of advertising, promotion & sponsorships etc. According to the WHO increasing tax measures is the most effective way to reduce tobacco consumption. As there is complexity in tobacco taxation in Sri Lanka, formulation of simple and transparent tobacco taxation formula is in need to achieve the prospects of article 06 in FCTC [2].

The WHO Framework Convention on Tobacco Control (WHO FCTC) is the first treaty negotiated under the auspices of the World Health Organization. The WHO FCTC is an evidencebased treaty that reaffirms the right of all people to the highest standard of health. The WHO FCTC represents a paradigm shift in developing a regulatory strategy to address addictive substances; in contrast to previous drug control treaties, the WHO FCTC asserts the importance of demand reduction strategies as well as supply issues [1,2].

The National Authority on Tobacco and Alcohol (NATA) is the pioneer government institution which was

established by the National Authority on Tobacco and Alcohol Act, No. 27 of 2006 for the purpose of enactment of the legal aspects for alcohol and tobacco prevention in Sri Lanka. The establishment of the NATA in 2006 as the national coordinating mechanism is a testament to the WHO FCTC's role in facilitating multi sectorial coordination and cooperation in tobacco control [1].

WHO is helping countries fight tobacco use and the tobacco industry's marketing of its deadly product. In May 2003, the WHO World Health Assembly unanimously adopted the WHO Framework Convention on Tobacco Control. Current Tobacco taxation in Sri Lanka levies a mixture of taxes on tobacco (Exercise specific, VAT etc). A tobacco tax of Sri Lanka was activated through the gazette No. 2151/60- December 2019 which was indicated as exercise (special provision) act. In Sri Lanka, the excise tax is a specific tax on tobacco products that varies across cigarettes of different lengths. Tax charges are levied on 1000 cigarettes [2].

Methods

The National Authority on Tobacco and Alcohol (NATA) established a subcommittee to develop taxation formula for tobacco and alcohol. In April 2020, the board approval was given to form a subcommittee to develop taxation formula for tobacco and alcohol. Experts of the subject were appointed as subcommittee members and gathered to formulate tobacco tax indexation for Sri Lanka. The subcommittee comprised with the following members.

01. Chairperson – Dr. Samadhi W.Rajapaksa, Chairman, NATA
02. Subcommittee Members
 - a. Subcommittee member – Prof. K.Amirthalingam, Department of Economics, University of Colombo
 - b. Subcommittee member – Dr.M.K.C.Senanayake, Director General, Department of Fiscal Policy
 - c. Subcommittee member – Dr.Dileep De Silva, Head,Health Human Resource Division, Ministry of Health
03. Expert invitee from professional body– Ms.Harini Weerasekera, Research Economist, Institute of Policy Studies of Sri Lanka

The subcommittee “Develop Taxation Formula for Tobacco and Alcohol” developed a tobacco tax formula for tobacco. When developing this indexation formula/policy proposal consulted international experts from the WHO FCTC Knowledge Hub on Tobacco Taxation at the University of Cape Town (UCT), KIVU

International, School of Public Health at the University of Illinois at Chicago (UIC) and the WHO FCTC-2030 coordinator for Sri Lanka.

An effective indexation policy would be an affordability-based indexation mechanism, where the cigarette tax rate is increases by the inflation rate and the GDP growth rate. That is, indexing cigarette taxes to the sum of the inflation rate and the GDP growth rate of the current year, to adjust rates for the next year. If any of the rates are negative, then they are taken as zero, in order to avoid any tax decreases.

This is represented in the below formula:

$$T_{t+1} = T_t \times \{ 1 + \max [0, \pi_t] + \max [0, g_t] \} + 4\%$$

Where;

T = cigarette tax rate	t+1 = next year
π_t = inflation rate	t = current year
g_t = GDP growth rate	4% = Exogenous factor

The affordability literature provides much support for an index based on both inflation and GDP growth. All experts consulted (Institute of Policy Studies of Sri Lanka (IPS), KIVU International, UIC, UCT, WHO) felt it is important to include both inflation and GDP growth, along with a condition that prevents taxes from reducing when growth is negative.

Also, π_t is calculated by averaging the monthly year-on-year (y-o-y) inflation rates (based on headline CCPI) for the most recently available 12-months at the time of adjustment, in end of current year t. For example, in November 2021, if monthly inflation data is available up to October 2021, then the monthly y-o-y inflation rates from November 2020 to October 2021 are averaged to get π_t . When it comes to g_t there are delays in releasing GDP data in Sri Lanka. As at November of the current year, GDP data will likely be available only up to the 2nd quarter (Q2). Hence, the growth rate between Q2 GDP of the current year and Q2 GDP of the previous year can be used as a proxy for g_t .

Before finalizing the tobacco tax formula, the subcommittee members consider about the inflation rate and conducted several calculations assuming that the tax rate is indexed only to inflation, (without including GDP) to predict the impact on government revenue. The NATA taken necessary steps to obtain the expert knowledge from the international expertise. So, NATA conducted an online workshop on Tobacco taxation modelling hosted by WHO FCTC KH on Tobacco taxation and Illicit trade. The workshop had policy makers and tobacco taxation experts drawn from WHO FCTC KH.

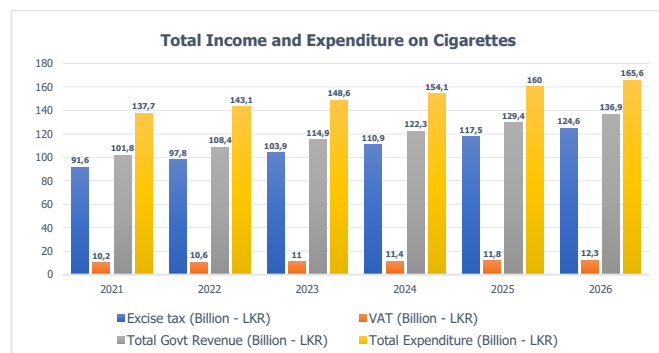
Experts in WHO FCTC Knowledge Hub on Tobacco Taxation, Research Unit on the Economics of Excisable Products, University of Cape Town guided modifying the tax indexation formula and introducing the TETSIM model to modify the Tobacco tax indexation. With the discussions of WHO experts, we modified the formula with an exogenous factor of 4%. Tobacco tax simulation modeling can be used to predict how much tobacco consumption will decrease, and government revenue will increase if there is a change in the tobacco excise tax structure and an increase in the level of taxation.

Results

Tobacco tax simulation modelling can be used to predict by how much tobacco consumption will decrease, and government revenue will increase, if there is a change in the tobacco excise tax structure and an increase in the level of taxation. An example of the tool if the TETSIM model, designed by researchers at the Research Unit on the Economics of Excisable Products.

Preliminary evidence from the TETSIM model predicts that a 91.6 to 124.6 billion increase in tobacco excise taxation from the current 2021 to 2026 would lead to a 1.1 % drop in consumption and approximately 101.8 to 136.9 billion increases in government revenue (Figure 1).

Figure 1, Total Income & Expenditure on Cigarettes from 2021 to 2026.



The tiered tax structure is complex to enforce as the industry will have an upper hand in manipulating the system, making imperative to adopt a unit tax system. Tiers will be totally removed within four years by implementing the tobacco tax formula in Sri Lanka.

Discussion

According to the MPOWER measures "R" stands for raise taxes on tobacco. Increasing the price of tobacco through higher taxes is the single most effective way to decrease consumption and encourage tobacco users to quit. Significant increase in tobacco product taxes and prices has been demonstrated to be the single most effective and cost-effective intervention for reducing

tobacco use, particularly among the young and the poor.

Since 1984 to 2018 there were eight ministers of finance working under the government of Sri Lanka. During this 34 years CTC has been making profits. Even though average production of cigarettes has not varied when compared to the profit of CTC, the average profit has seen an increase throughout these years [1-3].

The myth in the tobacco industry's economic importance argument is that a significant economic presence necessarily implies significant economic dependence [3-6]. Implicit in the industry's argument is the notion that a decline in tobacco economic activity will entail a comparable decline in the economy of the country in question [7-11].

Above mentioned myth has been buried among the Sri Lanka. So, there are myths have been circulated rather than the reality. Significant increases in the taxes and prices of tobacco products are the most cost-effective measure to reduce tobacco use [12-15]. This, combined with other tobacco control measures, such as advertising bans and public smoking prohibitions help ensures the effectiveness of tobacco control demand reduction measures [16-19].

Evidence from countries of all income levels shows that price increases on cigarettes are highly effective in reducing demand. Higher prices encourage cessation and prevent initiation of tobacco use. They also reduce relapse among those who have quit and reduce consumption among continuing users. On average, a 10% price increase on a pack of cigarettes would be expected to reduce demand for cigarettes by about 4% in high-income countries and by about 5% in low- and middle-income countries, where lower incomes tend to make people more sensitive to price changes [3,5-7].

Article 06 of FCTC emphasizes the need of proper tax measure to reduce the demand of tobacco. In Sri Lanka, tobacco is levied on a specific tax on a tiered tax structure based on length of cigarettes. The tiered tax structure is complex to enforce as the industry will have an upper hand in manipulating the system., making imperative to adopt a unit tax system [1].

Implementation of this tax formula results in the elimination of a complex tiered tax structure in Sri Lanka, and it would be easy for the ministry of finance to take necessary actions to collect taxes easily. Meanwhile, the government earns more revenue from the tobacco taxes according to this formula, and consumption of tobacco can be reduced which caused a severe health cost burden to the country.

Conclusion

The purpose of this report was to implement the revised tobacco tax formula for Sri Lanka. It can be concluded that there are plenty of example countries

which have obtained the positive impacts through modification of tobacco taxes. Implementation of this tobacco tax indexation could be useful to increase government revenue and this could improve the lives of tobacco users by reducing the consumption.

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Informed consent

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Data sharing statement

No additional data are available.

Conflict of interest

The authors declare no conflict of interest.

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