

Balanced Approach Regulatory Measures for Excise Tax on Tobacco and Nicotine-Based Products with Differential Degrees of Harm

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Abstract

This paper reports a study that analyses regulatory measures for excise tax on tobacco and nicotine-based products in Malaysia. The study highlights current non-optimal nature of excise tax due to a lack of differentiation between the varying degrees of harm caused by different tobacco and nicotine-based products within a given category. The study aims to address this issue by proposing a regulatory measure that adopts a balanced approach to taxing harmful tobacco and nicotine-based products. A focus group discussion involving a group of experts in tax and excise tax, medical and pharmacology, and law and policy was conducted to gather expert inputs on policy compliance with international standards for excise tax on tobacco and nicotine-based products; effectiveness of current policies in addressing harm differentials; and setting excise tax rates to balance harm levels and combat illicit trade. This study concludes that, Malaysia should adopt a balanced approach regulatory measures to combat illicit tobacco trade and promote harm reduction and equitable public health outcomes. This study recommends a differentiated excise tax for tobacco products in Malaysia based on harm and addiction levels, aiming to balance the excise-duty with differential degrees of harm and optimize policy effectiveness towards achieving a smoke-free Malaysia by 2040. The proposed recommendation is aligned with Article 6 Guidelines of the World Health Organization Framework Convention on Tobacco Control.

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1. Introduction

Tobacco induced and tobacco related diseases, have been identified as a significant contributor to disability-adjusted life years and years of life lost among the Malaysian population.¹ As part of regulatory measures to prevent and reduce public consumption of tobacco and nicotine-based products such as e-cigarettes and vapes, the Malaysian government-imposed excise duties on these unhealthy products.

As a signatory to the World Health Organization Framework Convention on Tobacco Control (FCTC), Malaysia is obligated to pursue the goal of ensuring that the total tax constitutes 70% of the retail price for tobacco and nicotine-based products, as recommended by the FCTC. The Malaysian Tobacco Control Strategic Plan, implemented from 2015 to 2020, adopted the Raised Tax strategy, intending to elevate cigarette tax to a maximum of 75% of the retail selling price.² This aligns with the WHO's stance, categorizing countries with taxes at least 75% of the retail price as the highest achievers in terms of tax share.³

As part of regulatory measures, Chapter 24 of the Malaysian Excise Duty Order 2017 imposed an excise tax on tobacco and manufactured tobacco substitutes, calculated according to a percentage of the value of the goods or an amount charged for each unit manufactured or imported. Since 1 July 2019, the government has imposed 10% excise tax on all types of electronic and non-electronic cigarettes, including vapes, starting from 2020. Additionally, an excise tax of 40 cents per millilitre has been imposed on the liquid used in electronic cigarettes since 1 January 2022.

The prevailing regulatory measures in Malaysia is known to set differential rates of excise tax for different categories of tobacco and tobacco substitutes. The classification of tobacco and nicotine-based products in Malaysia is based on Section IV of the

¹ Kuang Hock Lim et al., "Assessment of Association between Smoking and All-Cause mortality among Malaysian Adult Population: Findings from Retrospective Cohort Study," *Tobacco Induced Diseases* 20, no. May (May 31, 2022): 1–10, <https://doi.org/10.18332/tid/147656>.

² Pei Kuan Lai et al., "Translation of Scientific Evidence into Tobacco Control Policy in Malaysia: A Narrative Review," *Journal of Health and Translational Medicine (JUMMEC)* 25, no. 1 (January 20, 2022): 89–96, <https://doi.org/10.22452/jummec.vol25no1.15>.

³ Frank Chaloupka et al., *Tobacconomics Cigarette Tax Scorecard (2nd Ed.)* (Chicago: IL, Health Policy Center, Institute for Health Research and Policy, University of Illinois Chicago, 2021), <https://tobacconomics.org/files/research/738/tobacco-scorecard-report-2nd-ed-eng-v5.0-final-1.pdf>.

Customs Duties Order 2022. Chapter 24 of this section categorizes 56 tobacco and tobacco substitute products into three main groups: unmanufactured tobacco and tobacco refuse; cigars, cheroots, cigarillos, and cigarettes made from tobacco or tobacco substitutes; and products containing tobacco, reconstituted tobacco, nicotine, or substitutes intended for inhalation without combustion, as well as other nicotine-containing products for human consumption.

The Malaysian regulatory measures for excise tax on tobacco and nicotine-based products is deemed responsive to the consumption of harmful products. However, the method used to fix the different rates for different levels of harm has been a matter of debate.⁴ While the value of any tobacco or manufactured tobacco substitutes is fixed based on the price that a purchaser would pay in the open market, the principle used by the Minister to fix the rate of excise duties to be levied on tobacco and manufactured tobacco substitutes is largely unknown to the industry.

Existing regulatory measures does not make it clear whether the determination of an effective rate adopts a revenue-maximizing tax rate (RMTR); a socially optimal tax rate (OTR); or a politically 'acceptable' tax rate (PATR).⁵ It is also unknown what types of data were relied upon by the Minister prior to the determination of the effective rate.

Evidence gathered in Malaysia suggests that increasing taxes on tobacco has so far been regressive as local study finds that while sales of legitimate cigarettes have dropped by one-third, illegal cigarette consumption has increased by seven percent annually for the past six years. The report further finds that 60% of Malaysia's cigarette market was transacted illegally, and the tax forgone due to the illicit cigarette trade in the year 2018 alone was over RM 5.1 billion.⁶ A local advocacy group calls for reform of the tobacco

⁴ Patrick Petit and Janos Nagy, "How to Design and Enforce Tobacco Excises?" (Washington, DC: Fiscal Affairs Department, International Monetary Fund, 2016), <https://www.imf.org/external/pubs/ft/howtonotes/2016/howtonote1603.pdf>.

⁵ Richard M. Bird, "Tobacco and Alcohol Excise Taxes for Improving Public Health and Revenue Outcomes: Marrying Sin and Virtue?" (Rochester, NY, November 23, 2015), <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/577831467986372982/tobacco-and-alcohol-excise-taxes-for-improving-public-health-and-revenue-outcomes-marrying-sin-and-virtue>.

⁶ Oxford Economics, "The Economics of the Illicit Tobacco Trade in Malaysia," 2019, <https://www.oxfordeconomics.com/resource/the-economics-of-the-illicit-tobacco-trade-in-malaysia/>.

tax structure to curb the influx of illicit cigarettes in the local market.⁷

The study reported in this paper focuses on re-assessing the regulatory measures that impose differential excise tax arrangements for different degrees of harm caused by tobacco and nicotine-based products in Malaysia. The study seeks to find whether the excise tax regime in Malaysia differentiates between the varying degrees of harm caused by various products within a given category of tobacco/nicotine related products. The study aims to recommend a balanced approach measures for tobacco price control to address differential excise tax based on perceived level of harm. To achieve this aim, it becomes the study examined the current differential excise tax arrangements for the different levels of harm in tobacco use in Malaysia.

2. Problem Statement

Among the tobacco industry players, there is a fear that the regulatory measures seeking to reduce external costs will increase the cost past the break-even point.⁸ The industry considers that the excise tax is not reflective of the external cost associated with the consumption or production of the goods/products. There is no evidence that excise tax distinguishes the marginal social costs and negative externality of various product types.⁹

Furthermore, international studies show that the differential treatment of combustible and non-combustible tobacco products has resulted in price differences between the products.¹⁰ Low prices on Electronic Nicotine Delivery Systems (ENDS) and non-cigarette tobacco products encourage the initiation and the uptake of vaping among younger generations. Another study reports that tax increases are not being passed on to cheaper tobacco products; rather they tend to be strategically shifted onto premium

⁷ Sinar Harian, "Kaji Semula Kesan Cukai Terhadap Produk Tembakau - Sinar Harian," December 2020, <https://www.sinarharian.com.my/article/114612/berita/nasional/kaji-semula-kesan-cukai-terhadap-produk-tembakau>.

⁸ Kirsten Van Der Zee, Corné Van Walbeek, and Hana Ross, "How Much to Pay for a Track and Trace System: A Simulation Model for South Africa," *Tobacco Control* 33, no. 2 (March 2024): 252–57, <https://doi.org/10.1136/tc-2022-057550>.

⁹ Philip DeCicca, Donald Kenkel, and Michael F. Lovenheim, "The Economics of Tobacco Regulation: A Comprehensive Review," *Journal of Economic Literature* 60, no. 3 (September 1, 2022): 883–970, <https://doi.org/10.1257/jel.20201482>.

¹⁰ Ruoyan Sun, David Mendez, and Kenneth E. Warner, "Trends in Nicotine Product Use Among US Adolescents, 1999-2020," *JAMA Network Open* 4, no. 8 (August 25, 2021): e2118788, <https://doi.org/10.1001/jamanetworkopen.2021.18788>.

products. A further study finds that differential tax treatment has resulted in product substitution between conventional cigarettes and e-cigarettes.¹¹ Similarly, another study reports that rather than reducing consumption, consumers respond to differential tax structures and rates by selecting a cheaper brand or version of the harmful products.¹²

While studies find that excise tax have been effective in reducing the consumption of unhealthy products and providing fiscal revenue, Jain et. al point out that the current approach does not distribute the tax burden across income groups in an efficient and equitable manner.¹³ The resulting price differential between cheap and premium tobacco has the effect of maintaining and widening health inequalities between various demographics.¹⁴ The persistence of lower-priced products, disproportionately purchased by lower-income smokers, in jurisdictions with high excise tax is an Achilles heel for tobacco regulatory measures.¹⁵

A leading tax consultant report indicates that a differential level of tax based purely on the harmful substance content-level is not workable for tobacco related products.¹⁶ Unlike alcohol or sugar consumption, the risk arising from consumption of tobacco/nicotine related products is not dependent on their contents per se, but also

¹¹ Chad Cotti et al., "The Effects of E-Cigarette Taxes on E-Cigarette Prices and Tobacco Product Sales: Evidence from Retail Panel Data," *Journal of Health Economics* 86 (December 2022): 102676, <https://doi.org/10.1016/j.jhealeco.2022.102676>.

¹² Sarah D Kowitt et al., "Impact of an E-Cigarette Tax on Cigarette and E-Cigarette Use in a Middle-Income Country: A Study from Indonesia Using a Pre-Post Design," *BMJ Open* 12, no. 5 (May 2022): e055483, <https://doi.org/10.1136/bmjopen-2021-055483>.

¹³ Vageesh Jain et al., "Distributional Equity as a Consideration in Economic and Modelling Evaluations of Health Taxes: A Systematic Review," *Health Policy* 124, no. 9 (September 2020): 919-31, <https://doi.org/10.1016/j.healthpol.2020.05.022>.

¹⁴ Ross Whitehead et al., "Rapid Evidence Review - Strengths and Limitations of Tobacco Taxation and Pricing Strategies," May 17, 2018, <https://www.research.ed.ac.uk/en/publications/rapid-evidence-review-strengths-and-limitations-of-tobacco-taxati>.

¹⁵ Kurt M Ribisl et al., "Addressing Lower-Priced Cigarette Products Through Three-Pronged Comprehensive Regulation on Excise Taxes, Minimum Price Policies and Restrictions on Price Promotions," *Tobacco Control* 31, no. 2 (March 2022): 229-34, <https://doi.org/10.1136/tobaccocontrol-2021-056553>.

¹⁶ Ernst and Young Bulgaria EOOD, "Differentiated Taxation of Products with Harmful Externalities," 2023, https://assets.ey.com/content/dam/ey-sites/ey-com/en_bg/topics/tax/ey-pmi-analysis-differentiated-taxation-harmful-en.pdf.

depends on the mode of delivery for consumption.¹⁷ The study reported in this paper thus calls for the reform of regulatory measures on harmful products through the formulation and/or adoption of alternative approaches in the tax treatment of harmful products.

3. Methods

A Focus Group Discussion (FGD) was employed to gather insights from a panel of experts regarding the proposed reform of regulatory measures for excise tax on tobacco and nicotine-based products. The objective was to strike a balance in excise tax on tobacco and nicotine-based products, considering their varying degrees of harm. The FGD consisted of two sessions, each lasting approximately three hours and involving a diverse group of experts. Participants included experts in tax and excise tax experts, medical and pharmacology, as well as law and policy.

In the first session, experts were grouped into three teams, each comprising individuals with similar expertise. Each group had a facilitator and a minute taker. Participants were tasked with evaluating the compliance level of existing policies and regulations regarding excise tax, assessing their alignment with international standards and practices related to tobacco and nicotine-based products. The evaluation utilized a scale ranging from 1 (beyond compliance) to 5 (unknown compliance level). Reference standards included the WHO FCTC 2005, Art. 6 of the WHO FCTC Guidelines, the WHO Protocol to Eliminate Illicit Trade in Tobacco Products 2013, and the SEATCA Recommendations.

In the second session, all experts were regrouped, and participants assessed the sufficiency of current regulatory measures in establishing excise tax arrangements based on the varying harm levels of tobacco and nicotine-based products in Malaysia. Using a scale of 1 to 5, participants rated perceived harm risks compared to cigarette smoking and assessed perceived harm levels based on equivalent unit assumptions for 43 products. Participants were also asked to recommend appropriate quantity units

¹⁷ Mariaelvina Sala and Cecilia Gotti, "Electronic Nicotine Delivery Systems (Ends): A Convenient Means of Smoking?," *Pharmacological Research* 195 (September 2023): 106885, <https://doi.org/10.1016/j.phrs.2023.106885>.

and provide recommendations regarding import duty, excise tax, and sales tax for 47 types of tobacco and nicotine-based products.

To guide discussions, participants were provided with two FGD templates. The first template focused on compliance levels, evidence, and reasons for non-compliance. The second template addressed perceived risks, harm levels, and the adequacy of existing duty rates across different categories. Relevant international standards and practices, along with information on current import duty, excise tax, and sales tax, were made available for reference.

Following the second session, a designated representative presented recommendations on adjusting import duty, excise tax, and sales tax rates based on perceived risks and harm levels across 27 categories of tobacco and nicotine-based products. The overarching objective was to strike a balance between addressing varying levels of harm and mitigating the risk of illicit trade in the tobacco and nicotine-based products market.

4. The Current Policies and Regulations of Excise Tax in The Malaysian Tobacco and Nicotine-Based Product

This section delves into the crucial research question: how should a policy related to excise tax in the Malaysian tobacco and nicotine-based product industry be recommended? The experts group offered invaluable feedback on three key issues:

- i) To what extent do the current policy and regulations related to excise tax in the Malaysian tobacco and nicotine-based product industry comply with international standards and practices?
- ii) To what extent do the current policy and regulations provide differential excise tax arrangements for varying levels of harm from tobacco and nicotine-based products?
- iii) What excise tax rates would appropriately balance the need to address various levels of harm caused by tobacco and nicotine-based products with the influx of illicit trade?

In evaluating the perceived harm and risk of specific tobacco and nicotine-based products compared to traditional cigarettes, medical practitioners, pharmacologists, and chemists, who participated in the FGD made nuanced distinctions across various categories. These included distinctions between filter and non-filter tobacco products, burning and heating cigarettes, oral consumption and smoking, and products containing nicotine and those without.

Notably, non-filter tobacco products delivered through burning were perceived as having a higher risk of harm compared to filtered counterparts, aligning with studies indicating elevated risks associated with unfiltered cigarettes.¹⁸ Similarly, products such as cigars, cigarillos, and smoking pipe tobacco, also delivered through burning, were deemed to carry higher risks compared to conventional cigarettes.

Concerning heated products like Heat Stick, PLOOM, Capsule pod, iFuse - Hybrid E Cigarette, and Neo Sticks, participants perceived slightly lower risks than traditional cigarettes, consistent with reports highlighting reduced harm associated with e-cigarettes compared to traditional smoking.

Orally consumed tobacco products were considered to pose slightly higher risks than conventional cigarettes, in line with studies associating oral consumption with adverse health effects, including cardiovascular issues and oral cancers.

Participants considered nicotine-free nanopods/cartridges delivered through vaping to carry much lower risks than conventional cigarettes. However, any product, irrespective of tobacco content and delivery method, was perceived as having higher risks if it contained nicotine, consistent with studies highlighting potential adverse effects of nicotine use.

Additionally, participants acknowledged the varied levels of harm within nicotine-based products, with distinctions based on tobacco content and delivery methods.

¹⁸ Nichole T. Tanner et al., "Association of Cigarette Type With Lung Cancer Incidence and Mortality: Secondary Analysis of the National Lung Screening Trial," *JAMA Internal Medicine* 179, no. 12 (December 1, 2019): 1710, <https://doi.org/10.1001/jamainternmed.2019.3487>; See also Eyal Oren et al., "Effects of Unfiltered Cigarettes on Smoking Behavior and Toxicant Exposure: Protocol for a Randomized Crossover Clinical Trial," *JMIR Research Protocols* 9, no. 12 (December 8, 2020): e19603, <https://doi.org/10.2196/19603>.

Despite similar perceived harm risks, products like Ifuse hybrid e-cigarettes and neo-sticks were perceived to have moderately higher harm levels compared to green tea cigarettes, honeyrose ginseng herbal cigarettes, and non-tobacco cigars/cheroots.

In analyzing excise tax adequacy, participants considered current tax rates published by the Royal Malaysian Custom Department. Notably, they refrained from recommending excise tax increases based solely on external costs or inelastic demand. Instead, they navigated the Laffer Curve effects, recognizing that excessive tax rates could lead to diminished revenues due to a contracting tax base. In determining optimal excise tax rates, participants factored in the risk of smokers turning to illicit or more harmful products if taxes were excessively high, emphasizing the importance of encouraging harm reduction.

Participants acknowledged the potential negative consequences of adopting Pigouvian or Ramsey rule prescriptions, as these may inadvertently drive consumers toward illicit or more harmful alternatives. Earlier studies reported the inelastic demand among Malaysian smokers, as a significant percentage indicated they would continue purchasing tobacco products despite tax-driven price increases.

With the demand for tobacco and nicotine-based products deemed inelastic in Malaysia, the potential for increased prices to significantly impact quantity demanded remained limited. Earlier study also indicated that, in response to excise tax hikes, Malaysian smokers would first explore illicit markets before considering cheaper, lower-quality brands.¹⁹ The prevalence of clove cigarettes, known for being cheaper and lower quality, further underscored the importance of carefully navigating excise tax rates to discourage the influx of potentially harmful alternatives.

The findings of the FGD indicate an urgent need to regulate excise tax on tobacco and nicotine-based products in Malaysia to implement tax rates based on level of harm, and balance public health goals and revenue needs. A well-designed excise tax policy can reduce harmful tobacco consumption, decrease illicit trade, and promote healthier alternatives, benefiting both public health and economy.

¹⁹ Malaysia Kini, "Smokers Turn to Cheap Smuggled Cigarettes Due to Price Factor," 2020, <https://www.malaysiakini.com/announcement/537250..>

5. A Balanced-Approach Regulatory Recommendations

The recommendations for a balanced-approach regulatory measures encompass five key areas: regulatory strategy, regulatory approach, regulatory aim, excise tax structure and tax rate level. These recommendations are formulated based on insights gathered from the experts in FGD, literature review, official reports and scientific studies on tobacco and nicotine-based products. Additionally, the challenges posed by the illicit cigarette trade in the Malaysian tobacco marketplace and the inelastic demand for tobacco products among Malaysian smokers are crucial factors considered in crafting these recommendations.

Furthermore, the recommendations take into account the growing prevalence of vape and e-cigarette usage, particularly among non-smokers, youth, schoolchildren, and women. To address these evolving dynamics, the proposed regulatory measures aim to establish an appropriate excise tax that not only addresses the varying levels of harm associated with tobacco and nicotine-based products but also tackles the rising threat of illicit trade in these commodities.

5.1 Regulatory Strategy

For the long-term taxation framework of tobacco and nicotine-based products, Malaysia's policy should strike a balance between addressing varying levels of harm caused by these products and mitigating the impact of illicit trade. Simultaneously, the objective is to progressively increase the share of excise tax in retail prices up to the 75% threshold. A 2019 study by Leong underscores the inherent connection between the effectiveness of tobacco taxation and the prevalence of illicit cigarettes.²⁰ A well-calibrated long-term regulatory measures can incrementally raise tobacco taxation, recognizing distinct harm levels associated with different modes of consumption. This approach must be complemented by robust measures to control illicit cigarettes, ensuring the efficacy of price-based tobacco usage reduction strategies.

²⁰ Tan Wei Leong, "The Financial and Welfare Impact of Household Tobacco Expenditure in Malaysia" (The Degree of Doctor of Public Health, Kuala Lumpur, Faculty of Medicine, University of Malaya, 2019), http://studentsrepo.um.edu.my/11496/4/wei_leong.pdf.

To address the demand side, Malaysia should adopt harm reduction strategies facilitating the transition of smokers to low-risk nicotine-based products like e-cigarettes.²¹ Malaysia should establish an equitable and adaptive regulatory measures for tobacco harm reduction products (HRPs) such as electronic cigarettes and heat-not-burn (HNB) products. Over time, Malaysia should introduce a graduated taxation system for HRPs, considering HNB products as lower-risk options and fostering innovation in tobacco harm reduction products. While current data may not precisely measure the health benefits of such products compared to combustible tobacco, sufficient evidence supports their lower harm levels. Additional research can explore and quantify these gains, paving the way for a graduated tax rate structure for such products.

The regulatory measures should also strike a delicate balance, making electronic nicotine delivery systems (ENDS) less accessible and affordable to youth while enhancing affordability for economically disadvantaged adult smokers, including women and those with lower incomes, thereby maximizing public health benefits.

5.2 Regulatory Approach

Elevating prices on tobacco and nicotine-based products stands out as the most potent strategy for price control. Consequently, the predominant policy approach towards these products is to heighten their prices through taxation. The efficacy of this approach is gauged by the reduction in the number of active smokers and the simultaneous growth in tax and duty revenue. It is noteworthy, however, that while the prevalence of active smoking may diminish, there could be an upswing in the use of vaping. Unfortunately, in Malaysia, the regulatory measures has inadvertently exposed vulnerable segments of the population, particularly youth, schoolchildren, and lower-income groups, to vaping and illicit cigarettes.²²

²¹ CSF Global, "Malaysia Country Report 2022," 2022, https://www.smokefreeworld.org/wp-content/uploads/2022/02/Malaysia_Country_Report_03.21.22.pdf.

²² Miaw Yn Jane Ling et al., "Current E-Cigarette Use Among in-School Adolescents in West Malaysia: Examining the Interactions Between Sociodemographic Characteristics and Lifestyle Risk Behaviours," ed. Hoh Boon-Peng, *PLOS ONE* 17, no. 1 (January 31, 2022): e0263355, <https://doi.org/10.1371/journal.pone.0263355>; See also Li-Ming Ho et al., "Raising Cigarette Excise Tax to Reduce Consumption in Low-and Middle-Income Countries of the Asia-Pacific Region:A Simulation of

Policymakers should opt for a risk-based approach in determining tax rates for tobacco and nicotine-based products. Products carrying higher risk factors should incur higher tax rates than less harmful alternatives. Although the current excise policy in Malaysia acknowledges varying levels of harm in setting tax rates, it appears that crucial segments of more harmful products are undertaxed, and the risk differential is not accurately assessed.

Moreover, the existing tobacco control tax measures seem to overlook the risks associated with an escalation in illicit trade and the potential shift of smokers towards cheaper yet more harmful tobacco and nicotine-based products. A tax system neglecting these risks adversely affects public health by reversing the trend of smokers transitioning to less harmful alternatives like smokeless tobacco products. Regulatory measures should avoid differential tax treatment that inadvertently leads to the substitution of products with cheaper or more harmful tobacco and nicotine-based alternatives.

Malaysia should adopt a more efficient, equitable, and balanced approach to its regulatory measures for tobacco and nicotine-based products. This balanced approach entails addressing various levels of harm caused by these products while simultaneously managing the surge in illicit trade. A more equitable and balanced regulatory measures would prevent the tobacco tax from becoming regressive, averting a decline in the sales of legitimate cigarettes and a concurrent rise in illicit cigarette consumption.²³ The tax becomes regressive if the policy aims to reduce external costs beyond the break-even point.

the Anticipated Health and Taxation Revenues Impacts," *BMC Public Health* 18, no. 1 (December 2018): 1187, <https://doi.org/10.1186/s12889-018-6096-z>.

²³ Violeta Vulovic and Frank J Chaloupka, "Questioning the Regressivity of Tobacco Taxes: A Distributional Accounting Impact Model of Increased Tobacco Taxation—Commentary," *Tobacco Control* 30, no. 3 (May 2021): 260–61, <https://doi.org/10.1136/tobaccocontrol-2020-055733>; See also E. Sunley, "Excise Taxes on Tobacco and Other Products," *conomics of Ending Smoking Proceedings of the Fall 2020 Economics of Ending Smoking Webinar Series*, 2021, https://www.smokefreeworld.org/wp-content/uploads/2021/04/Economics_Webinar_Summary.pdf.

5.3 Regulatory Aim

Excise tax is an externality tax that target consumer goods with negative externalities, encompassing items like tobacco products, alcoholic beverages, and motor fuel.²⁴ The current regulatory measures in Malaysia establishes varying rates of excise tax for different types of tobacco and tobacco substitutes. However, there exists no evidence demonstrating that the excise tax adequately considers the marginal social costs and negative externalities associated with diverse types of tobacco and nicotine-based products.

Applying differential tax levels based on the content of harmful substances proves inappropriate for tobacco and nicotine-based products. In contrast to alcohol or sugar consumption, the risks linked to the use of these products extend beyond their contents and also hinge on the mode of delivery for consumption. The regulatory measures should steer clear of isolating differential tax levels solely based on harmful substance content, instead ensuring that the excise tax reflects the varying degrees of harm attributable to different products within a given category of tobacco and nicotine-based products.

The regulatory measures for tobacco and nicotine-based products should internalize externalities tied to consumption, considering ongoing health risks associated with regular use and the quantity consumed by smokers. Numerous studies highlight nicotine addiction among smokers of tobacco and nicotine-based products, with their cause of death often traced back to the consequences of inhaling smoke.²⁵ The regulatory measures should aim to ensure that the excise tax mirrors the external costs linked to the consumption or production of these tobacco and nicotine-based products. Additionally, the regulatory measures should aim to ensure that the excise tax distinguishes the marginal social costs and negative externalities associated with various types of products.

²⁴ İhsan Cemil Demir and Ali Balki, "Is the Excise Tax Perceived as an Externality Tax? An Empirical Study on Turkey," *Ege Akademik Bakis (Ege Academic Review)* 3, no. 02 (March 11, 2023), <https://doi.org/10.21121/eab.1165418>.

²⁵ D. T. Sweanor, "A Rational Approach to Tobacco Harm Reduction Policies," *The Economics of Ending Smoking: Proceedings of the Fall 2020 Economics of Ending Smoking Webinar Series*, 2021, https://www.smokefreeworld.org/wp-content/uploads/2021/04/Economics_Webinar_Summary.pdf.

5.4 Excise Tax Structure

Despite the merits of the ad valorem excise tax, the specific excise tax structure holds greater popularity. The proportion of FCTC member countries implementing a fully ad valorem tax has decreased from 29% in 2008 to 24% in 2016.²⁶ Specific excise tax is favored for its uniform charge per cigarette, effectively discouraging consumption. It also proves more administratively convenient than the ad valorem structure, reducing price differentials between high-priced and low-priced cigarettes, thereby minimizing brand switching and price wars.²⁷

Globally, the prevalence of the specific excise tax system is on the rise, increasing from 32% in 2008 to 36% in 2016.²⁸ Imposed based on weight or pieces, specific excise tax leads to relatively consistent price increases across all tobacco product categories. Compared to ad valorem taxes, specific taxes are more manageable from an administrative standpoint and provide a more predictable revenue stream. However, a potential drawback is their vulnerability to inflation, necessitating regular nominal excise tax increases. Yet, Malaysia should refrain from adopting automatic excise tax hikes as any increase in specific excise tax must carefully consider the price differentials between legal and illicit products to prevent smokers from switching to cheaper, illegal cigarettes with higher nicotine content.²⁹

In reforming its approach, Malaysia should decrease the specific tax on tobacco and nicotine-based products based on their weight. Instead, it should transition to a specific excise tax per stick, which proves more straightforward in administration by counting sticks without the need for weighing.³⁰ Furthermore, Malaysia should adopt a comparable taxation approach for both tobacco products (cigarettes, bidis, cheroots, cigars, cigarillos, pipes, and other tobacco products) and nicotine-based products. This

²⁶ Corne Van Walbeek and Samantha Filby, "Analysis of Article 6 (Tax and Price Measures to Reduce the Demand for Tobacco Products) of the WHO Framework Convention on Tobacco Control," *Tobacco Control* 28, no. Suppl 2 (June 2019): s97–103, <https://doi.org/10.1136/tobaccocontrol-2018-054462>.

²⁷ Sunley, "Excise Taxes on Tobacco and Other Products."

²⁸ Sunley.

²⁹ Van Walbeek and Filby, "Analysis of Article 6 (Tax and Price Measures to Reduce the Demand for Tobacco Products) of the WHO Framework Convention on Tobacco Control."

³⁰ Norashidah Mohamed Nor et al., "An Optimal Cigarette Tax in Malaysia," *International Journal of Economics and Management* 7 (December 1, 2013): 205–20, <http://www.ijem.upm.edu.my/vol7no2/bab02.pdf>.

ensures uniform treatment, mitigating the risk of substitution to products with equivalent harm levels.

Shang et al study finds that a uniform and specific tax structure is the most effective tax structure for reducing tobacco consumption.³¹ Malaysia is recommended to adopt either a uniform specific tax system or a hybrid system incorporating a minimum specific tax floor. These systems exhibit superior administrative efficiency and prove more effective in advancing public health goals. Studies by Shang et al. underscores that deviating from a uniform, specific tax structure introduces more opportunities for tax avoidance and brand switching.³²The same study also reveals that tax structures like ad valorem uniform taxation, mixed taxation (integrating ad valorem and specific taxes), and tiered tax structures involving specific, ad valorem, and mixed taxation tend to yield price distributions with greater variability compared to specific uniform taxation.

The World Bank's Cigarette Tax Scorecard assigns the highest score to two types of excise tax. The first is a uniform specific excise tax that operates automatically. The second is a mixed excise tax, featuring a predominant share for the specific component alongside a minimum tax, automatic adjustments to the specific tax component, and utilization of the retail price as the base for the ad valorem tax component.³³ Opting for a taxation system that applies uniform tax rates, as opposed to differential rates based on brand characteristics, may reduce switching costs and manufacturers' incentives to minimize tax liabilities through pricing strategies.³⁴

To forestall potential substitution and mitigate the impact of higher taxes, Malaysia should uniformly apply tax rates to all tobacco and nicotine-based products,

³¹ Ce Shang et al., "Association Between Tax Structure and Cigarette Consumption: Findings from the International Tobacco Control Policy Evaluation (ITC) Project," *Tobacco Control* 28, no. Suppl 1 (May 2019): s31-36, <https://doi.org/10.1136/tobaccocontrol-2017-054160>.

³² Shang et al.

³³ Chaloupka et al., *Tobacconomics Cigarette Tax Scorecard (2nd Ed.)*.

³⁴ Ce Shang et al., "The Distribution of Cigarette Prices Under Different Tax Structures: Findings from the International Tobacco Control Policy Evaluation (ITC) Project," *Tobacco Control* 23, no. suppl 1 (March 2014): i23-29, <https://doi.org/10.1136/tobaccocontrol-2013-050966>.

incorporating regular increases to significantly curtail the affordability of cigarettes.³⁵ A similar paradigm shift can be observed in the Philippines, which transitioned from a multi-tiered system with tax rates linked to product prices to a single tax rate for all similar products through the implementation of its Sin Tax Law in 2012.³⁶

5.5 Tax Rate Level

The current tax rate structure for tobacco and nicotine-based products in Malaysia seems to be determined on an ad hoc basis. Despite calls for annual excise tax increases on tobacco products, it is advisable for Malaysia to maintain the current excise tax rate for cigarettes. This cautious approach is intended to prevent further widening of the price gaps between legal and illicit trade, considering the prevalence of illicit cigarette trading in Malaysia, making it the leading market for illegal cigarette trade globally.³⁷

An international study conducted in 2021, analyzing data from 71 countries, suggests that a 10% increase in cigarette prices relative to consumers' income could lead to a nearly 7% growth in the share of illicit trade.³⁸ To overcome illicit trade, Malaysia should consider adjusting the duty on roll-your-own and other tobacco products without filters, aiming to reduce the price differential between cigarettes and other more harmful tobacco products.

The tax structure for tobacco and nicotine-based products may vary based on factors such as retail and manufacturer's price levels, product length, or the presence/absence of a filter.³⁹ To optimize tax revenue from these products, the tax rate should be determined based on the Laffer curve principle, recognizing that excessively high tax

³⁵ G. S. Yee and F. M. Hairi, "Higher Tobacco Taxes Can Benefit Health, Economy," *New Straits Times*, August 30, 2021, <https://www.nst.com.my/opinion/letters/2021/08/722497/higher-tobacco-taxes-can-benefit-health-economy>.

³⁶ Jo-Ann L Diosana, "Raising Tobacco Taxes: The Philippine Experience," *Asian Pacific Journal of Cancer Prevention* 21, no. S1 (July 1, 2020): 27–31, <https://doi.org/10.31557/APJCP.2020.21.S1.27>.

³⁷ CSF Global, "Malaysia Country Report 2022."

³⁸ Edrei Y. Udaundo and Pamela Diaz-Manalo, "An Evaluation of Sin Taxes' Implementation and Health Expenditure Earmarking." (Manila: Congressional Policy and Budget Research Department, n.d.), https://econgress.gov.ph/wp-content/uploads/publications/PB2022-03%20An%20Evaluation%20of%20Sin%20Taxes_%20Implementation%20and%20Health%20Expenditure%20Earmarking.pdf.

³⁹ Chaloupka et al., *Tobacconomics Cigarette Tax Scorecard (2nd Ed.)*.

rates could eliminate the tax base and reduce revenue to zero.⁴⁰

In evaluating the effectiveness of a tobacco regulatory measures, it is suggested to consider the final retail price and a measure of the affordability of cigarettes, rather than focusing solely on the excise tax burden.⁴¹ The Laffer curve principle guides this assessment, aiming to strike a balance that maximizes revenue without undermining the tax base. Additionally, tobacco and nicotine-based products should be excluded from the consumer price index (CPI) to allow for targeted tax increases without influencing inflation, particularly for products more harmful than filter cigarettes.

6. Conclusion

In conclusion, this study recommends a differentiated excise tax for tobacco products in Malaysia based on the Pigouvian prescription, considering both harmful substance content and mode of delivery. Acknowledging the need to address similar external costs, the study proposes a tax policy aiming to equalize rates for products posing comparable harm risks. Adhering to the Ramsey principle, higher taxes are suggested for addictive products, while considering the Laffer curve to optimize rates, preventing a shift to cheaper, illicit alternatives. This research is vital for shaping effective tobacco policies in Malaysia, identifying key factors influencing consumption behavior, aiding in the formulation of successful policies, and contributing to the nation's goal of becoming smoke-free by 2040.

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⁴⁰ Sophia Delipalla, "Tobacco Taxes and Laffer Curve: Theoretical Background and Empirical Applications" (Second Regional Policy Dialogue on Tobacco Economics in Southeastern Europe, Skopje, 2019), http://tobaccotaxation.org/cms_upload/pages/files/185_laffer-curve-delipalla-12-12-19.pdf.

⁴¹ Nigar Nargis et al., "Price, Income, and Affordability as the Determinants of Tobacco Consumption: A Practitioner's Guide to Tobacco Taxation," *Nicotine & Tobacco Research* 23, no. 1 (January 7, 2021): 40-47, <https://doi.org/10.1093/ntr/ntaa134>.

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