



Efficacy of Sin Tax and Recommendations for Implementation of Tobacco Tax Regimen in Pakistan

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ARTICLE INFO

Article History:

Received: April 16, 2022

Revised: May 20, 2022

Accepted: May 21, 2022

Available Online: May 22, 2022

Keywords:

Sin Tax

Tobacco

Tax Regimen

Pakistan

JEL Classification Codes:

H24, H51, H75, I18

Funding:

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

ABSTRACT

Behavioural economics is a comparatively recent topic that challenges the mainstream economics' basic assumptions. It emphasizes that humans aren't always rational, aren't always self-interested, and don't always have time-consistent preferences. A sin tax is a type of sumptuary tax that is imposed on some typically socially prohibited items and services, like liquor, cigarettes, SSBs, and gambling. Sumptuary taxes, which are a type of sumptuary regulation, are presumably meant to reduce transactions involving something that society finds undesirable. Tobacco usage continues to be one of Pakistan's most pressing development concerns. Tobacco products usage is the foremost reason of death from non-communicable diseases (NCDs), such as cancer, lingering breathing illnesses, and cardio vascular diseases (CVDs). Tobacco taxation, which is widely recognized as a fundamental component of tobacco regulating policy, is utilized in Pakistan to combat tobacco use with the dual goals of public health promotion and income collection. Behind the scenes, the tobacco industry's success is based on a lack of understanding of real economics. Despite the fact that tobacco usage is linked to a number of negative health outcomes, higher health costs, and overworked health systems, the tax incomes it creates often encourage policy inertia in low-income countries like Pakistan. It is important that while taxing the sin of tobacco consumption the basic goal should be discouraging the behaviour and not income generation.



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Citation: Munir, S., Waheed, K. Z., & Shakeel, M. (2022). Efficacy of Sin Tax and Recommendations for Implementation of Tobacco Tax Regimen in Pakistan. *iRASD Journal of Economics*, 4(2), 232–242. <https://doi.org/10.52131/joe.2022.0402.0075>

1. Introduction

Behavioural economics is a comparatively recent topic that challenges the mainstream economics' basic assumptions. It emphasizes that humans aren't always rational, aren't always self-interested, and don't always have time-consistent preferences. Because these ideas can influence policymakers' perceptions of how people behave, they have the potential to have a significant impact on how economic policies are implemented. Behavioural economics has had a significant impact on how taxes are administered and what items are taxed.

Morality is a decision, a determination of what is right and wrong. Morality is expressed by behaviour; therefore, sinful behaviour is immoral (Lorenzi, 2004). Economics is the science of decision-making and the distribution of limited resources. Economics is all about incentives (and disincentives). Public policy is an attempt to influence or govern the behaviour of a large group of individuals (Kay, 1990).

1.1 What is a Sin Tax?

"Sin" is a popular concept in the context of taxation, yet it is loaded and deceptive (Lorenzi, 2004). The sins in religions are banned altogether without allowance of being taxed and allowed, so a religious definition of sin isn't helpful. However, the usage of sin word here as—"addictive", "self-destructive", and "socially undesirable"—successfully defines the intended behaviour short of trespassing the religious territory.

A "sin tax" is an excise tax whose goal is to make customers less interested in purchasing things that are considered hazardous and fatal, like cigarettes and alcohol, as well as behaviours such as gambling.

A tax is a negative penalty imposed on a certain action. In behavioural management terms, the behaviour, not the person, is punished. Alcohol, tobacco and other commodities regarded as hazardous are usually focus of a sin tax. Governments support sin taxes because they generate a large amount of revenue. Society tolerates sin taxes because they can only affect those who use sin taxed things or engage in sin taxed behaviours. When a state's budget is in deficit, lawmakers frequently propose a sin tax as one of the first taxes to help bridge the gap.

A sin tax is a Pigouvian tax levied on enterprises that produce negative externalities as a result of their operations (Amadeo, 2020). The sin tax's advocates say that the behaviours and commodities targeted have negative externalities.

Lawmakers occasionally try to collect revenue for tight government budgets by placing abnormally large excise duties on tobacco, alcohol, gambling, and other items like Sugar-Sweetened Beverages (SSBs). This "sin tax," is attractive to people who see it as a tool to discourage the consumption of certain harmful products. It lowers the buyer's earnings, reduces the seller's earnings, resulting in less investment, wages, and jobs.

A sin tax is a type of sumptuary tax that is imposed on some typically socially prohibited items and services, like liquor, cigarettes, SSBs, and gambling. Sumptuary taxes, which are a type of sumptuary regulation, are presumably meant to reduce transactions involving something that society finds undesirable. The term "sin tax" refers to a levy on actions that are considered socially unwelcome. Alcohol, tobacco, gambling, and polluting automobiles are all common targets for sumptuary levies. There has also been talk of imposing a hefty charge on sugar and fizzy drinks. Taxes on illegal narcotics like cocaine and marijuana have also been imposed in some regions. Sin tax revenue is occasionally utilized for special health projects, although it could also be used in the regular budget. Sumptuary taxes may be more widely accepted than income or sales taxes.

1.2 Historical Background

It can be politically appealing to use the likelihood of harmful effects from taking a specific product as an excuse. This makes implementing an additional tax more convenient (or increase the prevailing one). This approach to raising tax revenue is not new. On the contrary, it has long been employed by governments who have levied a variety of similar taxes (Petkantchin, 2014).

Puritan efforts to limit luxury in American colonial times were credited with the first attempts to tax vices or other undesirable behaviours. Sin taxes, on the other hand, predate the Puritans. Prostitutes have apparently been taxed by the Popes to help pay for spiritual undertakings. Pope Leo X needed a large amount of money to fund his activities. Thousands of registered prostitutes were subjected to a sin tax. He boosted the number of people who bought indulgences.

Controlling alcohol use has been attempted for centuries. Alcohol, like tobacco, was targeted by prohibitionists. In 2200 B.C., the Chinese ruler reprimanded the inventor of rice wine. Spirit taxes were initial excise taxes imposed in England in eighteenth century and same was enacted in the United States in 1791, where it sparked the famous "Whisky Rebellion" among the general population as a form of protest.

The governments have targeted tobacco and cigarettes for a long time. Its use was widely stigmatized by civil and religious authorities after it arrived in Europe, with severe punishments ranging from excommunication to "anyone who may smoke in a religious building" (Kirsch, 2010). James, I increased tobacco import charges in England by 4,000 percent in 1604, claiming that smoking was "a custom disgusting to the eye, disagreeable to the nose, damaging to the brain, deadly to the lung" (Clarke, 2008). France likewise in 1629 took advantage of the potential to enhance tax income by taxing cigarette consumption.

Taxes on "sin" do not stop with alcohol and tobacco. Various additional products have been subjected to taxes under various pretexts. Protecting local producers from competition from new products has frequently been used as a justification, as has public health. In the late nineteenth century, the United States established a particular tax on margarine to combat the "unfair competition" it posed to domestic milk producers. Finland adopted a similar tax to protect native butter production, this excise levy was imposed to discourage the consumption of margarine made with imported ingredients (Juanto, 2003).

2. Criteria for Sin Taxes

Sin taxes are government revenues generated through the buying or use of commodities or services that meet the following criteria (Lorenzi, 2004):

- a. The demand curve for consumption is inelastic. It's difficult to stop doing it. That is, a little behaviour change can result in considerable tax income while not completely eliminating the habit.
- b. The activity is potentially self-damaging to the person. Sinful activities have instant or lasting harmful effects on the individual, such as ill health or obesity.
- c. The behaviour has negative externalities, which means that others are harmed.

2.1 Arguments About Taxes

Any discussion of penalizing undesirable actions elicits strong feelings. There are some basic justifications for not taxing sins. Because they are regressive, the tax on sin affects poor more than the rich. The poor use tobacco more than rich people, so they bear the brunt and pay more taxes. These taxes are "focused" on low-income people. So, in practice, if not in theory, sin taxes are regressive.

Instead of banning sin products, the government punishes and tax them. Governments become hypocritical when they impose sin taxes. People will just seek out other places to purchase the charged good or service if a sin tax is imposed on one location. When local law

enforcement cracks down on drug trafficking or a neighbouring nation government levies a large tax, the effect is smuggling and relocation of the issue rather than a resolution.

When a good's pricing is decoupled from economic realism due to excessive taxes, a revenue opportunity is created that smugglers or illicit traders will not falter to take advantage of, particularly if it outweighs dangers and expenses of being caught guilty. In general, the fact is frequently overlooked that the root of contraband is not nature of a sin taxed product but taxation, which is the adequate reason. If a commodity is severely taxed, even common items like salt or soap might soon become illegal. By imposing sin taxes, the black market is instantly opened.

2.2 Goals of Sin Taxes

Sin taxes are intended to achieve two objectives:

- a. Increase the price of undesirable goods to the point where rational customers are obliged to give up the addiction.
- b. Increase the tax rate on companies that produce these goods, which may be used to support other social initiatives.

2.3 Justifications of Sin Tax

Typically, two primary arguments are used to justify sin taxes. The first is based on the concept of externalities: people who smoke, drink, or overeat (until they are fat) impose costs on society that are greater than their personal costs. Corrective taxes produce revenue to reimburse the community for externalities while also reducing social costs by discouraging these actions. The second argument is about internalities: when people hurt themselves by making poor decisions or failing to exercise self-control, society has a role to play in restricting their destructive behaviour.

2.4 The "Social Cost" Dilemma

Government officials and advocates of behavioural excise duties argue for the existence of "social costs", in addition to religious and moral grounds. Vice product users are depicted as a financial drain on the society and a strain on public funds.

In 2008, \$147 billion amount was proposed as the price of externalities of people who were overweight in the United States, which was used to justify a new soft drink tax (Chaloupka, Powell, & Chriqui, 2011). In France, the annual health-care cost for obesity and excess weight could reach ten billion euros. For cigarettes and alcohol, similar numbers are shown. Between 2000 and 2004, the health costs of tobacco in US were projected to an amount of \$96 billion, with lost productivity reaching \$193 billion. Likewise, health insurance expenditure due to tobacco in France reached 12 billion euros in 2010. The "social" cost of tobacco and alcohol was 47.7 billion euros and 37 billion euros respectively (Kopp & Fenoglio, 2006).

3. Tobacco Taxation in Pakistan

Tobacco usage continues to be one of Pakistan's most pressing development concerns (Sabir, Saleem, Iqbal, & Aamir, 2021). Tobacco products usage is the foremost reason of death from non-communicable diseases (NCDs), such as cancer, lingering breathing illnesses, and cardio vascular diseases (CVDs) (Jafar et al., 2013). In Pakistan, tobacco usage is thought to have caused the premature deaths of over 160,000 people in 2017. Cigarette taxes are main part of the tobacco control policy, and serve the dual purposes of public health promotion and

income collection (Sabir et al., 2021). Tobacco is mostly consumed in Pakistan in two forms: cigarette smoking and chewing tobacco. Gutka, naswar, and paan are the most common smokeless tobacco products consumed by non-smokers (Burki et al., 2013). Tobacco is smoked by nearly a third of Pakistani men (32.4%) and 5.7 percent of women.

The price elasticity has shown to be negative and substantial for lower-income families living in rural areas, but inelastic for higher-income households in urban regions of Pakistan. There are also provincial disparities, with KP being the only province where the price elasticity of cigarettes is minor, whereas it is negative and considerable in the others (Nayab, Nasir, Memon, Khalid, & Hussain, 2018). Cigarette manufacturing employs less than 0.1 percent of Pakistan's total manufacturing workforce. In Pakistan, tobacco production employs only 0.4–0.5 percent of the country's agricultural workforce.

Pakistan's cigarette business is highly consolidated, with two corporations controlling 98 percent of the market: Pakistan Tobacco Company, a British American Tobacco subsidiary, and Philip Morris Pakistan Limited. Tobacco pricing and consumption patterns vary across regions and provinces. For example, the cost of cigarettes is slightly greater in rural areas than in metropolitan ones, whereas the cost of chewed tobacco does not differ considerably between regions. On the other hand, prices of cigarettes and chewed tobacco vary by province, with cigarettes and chewed tobacco being more expensive in Baluchistan and Sindh and less expensive in Khyber Pakhtunkhwa (KP).

Taxes on tobacco have been shown to reduce tobacco use in a number of nations, including Pakistan (Nayab et al., 2018). Despite evidence that tax policy reduces tobacco use and promotes public health, the country's tax regime is one of the weakest aspects of its tobacco-control plan. One possible explanation is that the government views the tobacco business as a key tax provider and is therefore hesitant to raise rates for fear of losing money. The government's aversion to changing tobacco tax policy stems from a lack of understanding of health and social costs due to smoking or smokeless tobacco use. As a result, its tax revenue benefit-cost analysis is flawed, and its health results are jeopardized. Tobacco use, in truth, comes at a high direct and indirect cost to those who use it. Direct costs include in- and outpatient hospital fees, whereas indirect costs include caregiving costs and the potential cost of patients' and caretakers' lost workdays.

The entire cost of smoking-related diseases and illnesses reach Rs 437.76 billion, that is 3.65 times greater than the tobacco industry's complete tax collection (120 billion in 2019). Direct mortality costs account for 23% of the total, while indirect mortality costs account for 64%. Rural residents pay 65 percent of the cost, men 87 percent, and people aged 35 to 64 pay 82 percent.

3.1 In Pakistan, How is Tobacco Taxed?

Tobacco taxation, which is widely recognized as a fundamental component of tobacco regulating policy, is utilized in Pakistan to combat tobacco use with the dual goals of public health promotion and income collection. Tobacco tax rates, on the other hand, are prone to fluctuating due to short term and un stable policy. When the federal budget is prepared for a new fiscal year, changes in tax rates and structures are usually implemented.

Tobacco is subject to a three-tiered excise tax in Pakistan. In 2017, a third tier was established, with the lowest tier being reduced. This resulted in a change in the most popular cigarette brand (MSB) and a drop in government revenue.

Table 1
Tiers of Tobacco Tax in Pakistan wef 18 Jul 2018*

Retail Price (PKR)	Excise Tax Per Pack (PKR)
< 58.50	17.08
58.50 – 90	35.52
> 90	79.40

* WHO's series of reports on the global tobacco epidemic, 2009–2019. Geneva: World Health Organization; 2009–2019

A minimum price law of 40.50 Pakistani rupees minus value-added tax (VAT) is in existence. Cigarettes are subject to VAT, which was raised from 16 percent to 17 percent in 2012. Since July 1, 2015, a 0.75 Pakistani rupee per stick tax has been levied on filtered sticks. In Pakistan, chewing tobacco is a popular tobacco product, yet it is fully unregulated.

3.2 Pakistan highlighted in the Cigarette Tax Scorecard

The Tobacconomics Cigarette Tax Scorecard assesses countries' cigarette tax regimes using a five-point rating system that integrates international tobacco tax recommendations and best practices. The five-point index is based on statistics and scores countries on four factors: cigarette price, changes in cigarette affordability over time, tax share in retail cigarette costs, and cigarette tax structure (Tobacconomics, 2020).

3.2.1 Overall Score 2020

In comparison to the average score of countries in its region, income group, or the world average, Pakistan does not rank well. Making considerable improvements to Pakistan's cigarette tax system would be beneficial.

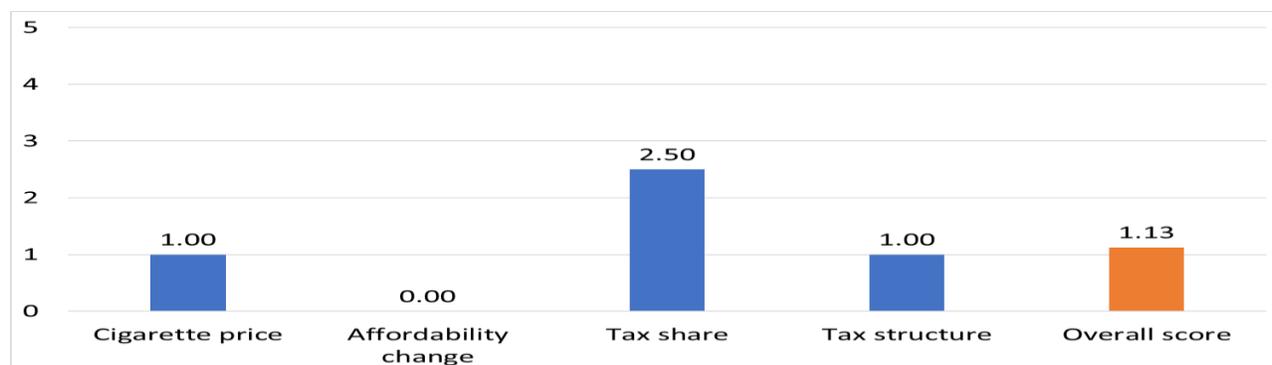


Figure 1: Cigarette Tax Policies in Pakistan (Tobacconomics, 2020)

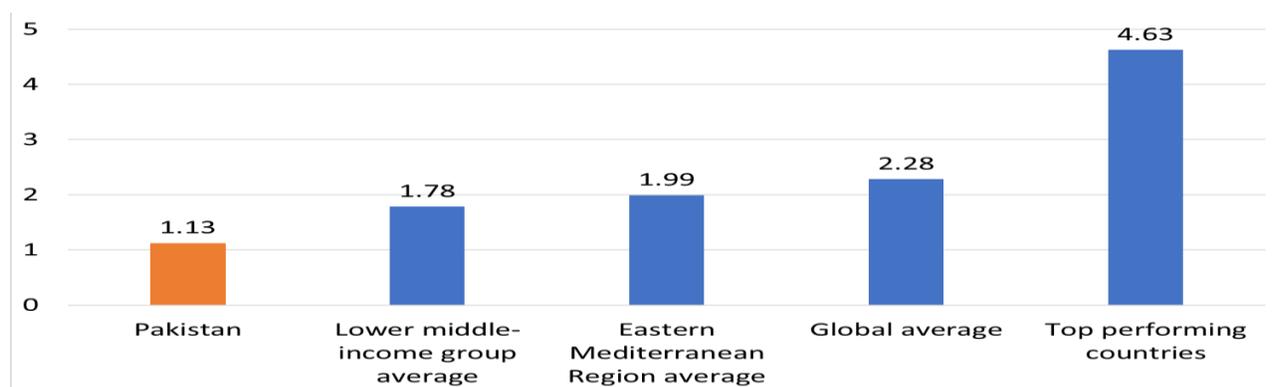


Figure 2: How Does Pakistan Compare to Other Countries?

3.2.2 Component Score 2020

Pakistan is in the middle of the pack in terms of tax share, but it lags behind in terms of cigarette cost, affordability change, and tax system. Cigarette prices can be raised, cigarette availability can be reduced, and the tax regime can be improved.

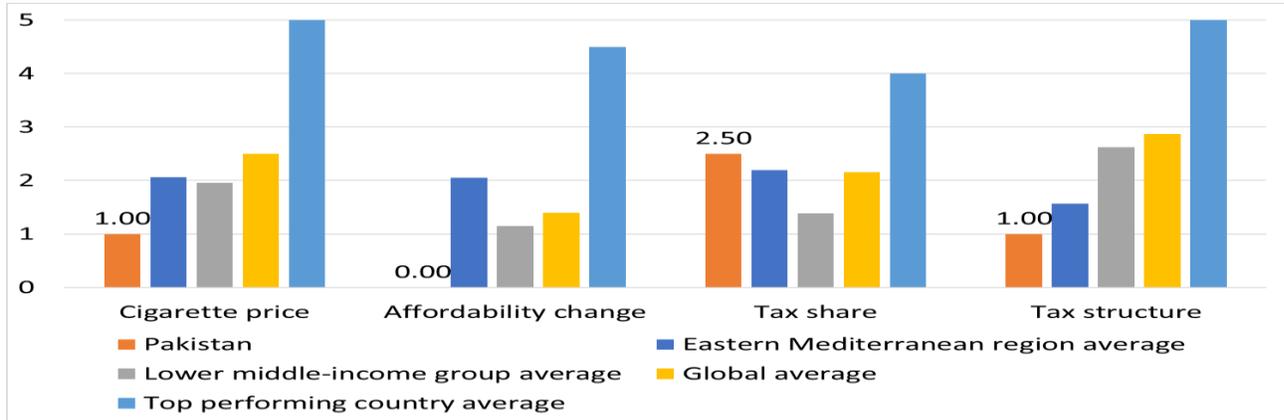


Figure 3: How Does Pakistan Compare to Other Countries? (Tobacconomics, 2020)

3.2.3 Scores Over Time

From 2014 through 2020, Pakistan's mean ratings changed. The cigarette cost, accessibility, and tax portion of price subscales all shifted over that period.

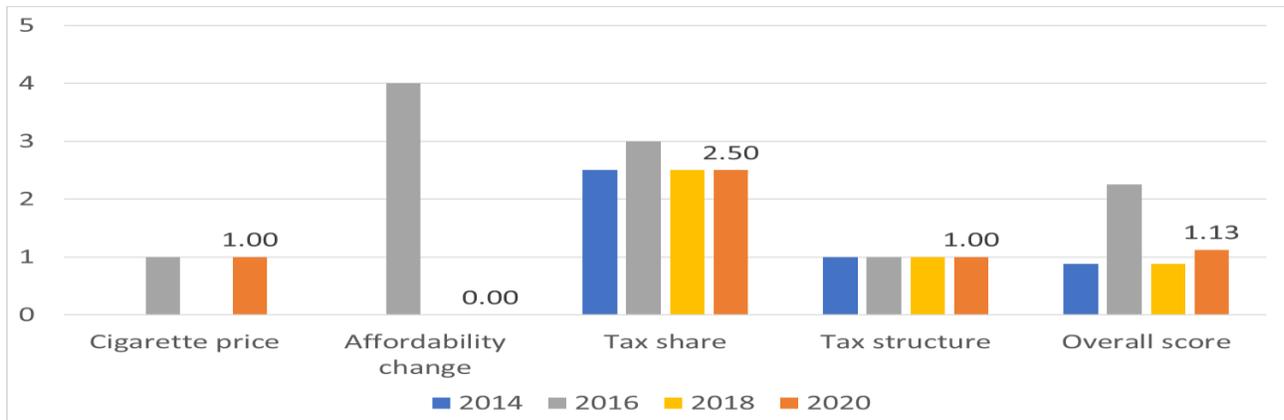


Figure 4: Pakistan's Cigarette Tax Policies Over Time (Tobacconomics, 2020)

3.3 Legislation on Tobacco Control

Pakistan joined the Framework Convention on Tobacco Control on February 27, 2005, and accepted the FCTC Protocol to Eliminate Illicit Trade in Tobacco Products on June 29, 2018. Tobacco control in Pakistan is governed by two primary ordinances. The following are the powers conferred by the two ordinances: The first important regulation is the "Cigarettes (Printing of Warning) Ordinance of 1979". "The Prohibition of Smoking in Enclosed Places and Protection of Non-smokers' Health Ordinance, 2002 (Ordinance No. LXXIV of 2002)" governs a variety of tobacco-related issues, including prohibition of smoking at public places, underage sales to children, and cigarette ads, marketing, and endorsement. In Pakistan, tobacco is subject to two

primary taxations: Federal Excise Duty (FED) and General Sales Tax (GST), with the FED accounting for over 80% of the industry's revenue.

3.4 Increased Taxes and Smuggling

Despite the fact that evidence reveals that tobacco excise duties have no major influence on the illegal sale of tobacco products in Pakistan, the cigarette industry often claims that higher prices stimulate illegal trading because users seek for non-taxed cigarettes since they are inexpensive. The Federal Board of Revenue (FBR) has also utilised this argument in the past. In Pakistan, the undocumented cigarette trade can be divided into two categories: under reported local manufacturing and undeclared imports, with the first accounting for the majority of the issue.

4. Recommendations for the Effective Tobacco tax Regimen in Pakistan

As per World health organisation guidelines (World Health Organization, 2010), following is suggested for effective tobacco taxation in Pakistan: -

4.1 Make Tobacco Less Accessible

In comparison to neighbouring nations, cigarettes are quite inexpensive in Pakistan, and they have grown much more affordable since 2016. The existing cigarette taxation scheme must be reviewed immediately. The price per cigarette is significantly lower than the MWTP average of Rs 35.80 per cigarette. An increase in tobacco taxes has the potential to raise cigarette prices significantly. According to the WHO standards, the excise tax threshold must be 70% of retail price.

4.2 Uniform Tax Structure

The existing three-tiered tax structure, which was enacted under the guise of combating illegal trade, has resulted in cigarette companies' "illicit profiteering." The Tobacco companies have raised their profit-to-tax ratios by tinkering with the retail pricing of cigarette goods. Pakistan's tiered specific excise tax structure should be replaced with a more efficient uniform specific excise tax structure because it would reduce the administrative burden of implementation, provide fewer incentives for tobacco corporations to change pricing, and raise the total tax rate.

4.3 All Tobacco Products to be Taxed

To successfully control tobacco, all tobacco products and qualities should be taxed uniformly. Snuff (chewing tobacco) is tax-free, which is alarming reducing the efficacy of tobacco taxes.

4.4 Increased on a Regular Basis

Consistent tax hikes in consonance with the gross domestic product (GDP) guarantee that tobacco products are less affordable and less consumed. Employ annual tobacco tax rate adjustments to ensure that they maintain their real worth over time, and are not undermined by inflation, and are at least as significant as increases in per capita earnings.

4.5 Domestic Tax

Taxation should be part of local legislations and laws and not be made part of a trade agreement. Custom duties are removed as result of trade treaties and as a result, they do not generate long-term revenue/ desired effects.

4.6 Tying up of Tobacco Tax Revenue with Health Expenditure

Tobacco taxes would be earmarked for health spending. Tobacco use leads to a loss of economic production owing to sickness and mortality caused by tobacco use. Tobacco causes not just lost productivity but also overburdens the health care system in countries like Pakistan, where tobacco usage is high and medical facilities are few. Cigarette revenue should be tied to the health expenditures incurred as a result of tobacco usage, with funds set aside for enhanced healthcare initiatives. Any cash earned without this earmarking will be offset if it results in rising economic health costs as a result of increasing tobacco smoking.

4.7 Political Will

Health-care taxation is, above all, a political problem that requires broad political backing. Political methods for passing health taxes are crucial, and they are frequently best informed by others' experiences. Documenting the experiences of nations that have attempted to raise health-care levies, as well as direct exchanges of information across countries, might help governments take more effective action.

4.8 Discouragement of the Youth

60% of smokers in Pakistan start young in their teens (Nayab, Nasir, Memon, & Siddique, 2021). Tobacco-prevention programs should be adjusted to effectively target youth, particularly those in their teens and early twenties. Because the availability of low-cost cigarettes is a major factor in youth smoking, raising taxes to make cigarettes more expensive is an efficient strategy to deter them from taking up the habit.

4.9 Restructuring of Federal Board of Revenue's (FBR)

While health is not a priority when taxing tobacco manufacturing in the country, and the FBR's effectiveness is measured against income objectives. The FBR also has serious capacity and resource restrictions when it comes to establishing effective monitoring, enforcement, and compliance mechanisms. As a result, tax administration operates through sectoral field formation, in which a single mid-career official is responsible for all aspects of tax revenue. The FBR, with its limited institutional capability and lack of political backing, is unable to overcome tobacco industry pressure, even when it is eager to do anything to reduce the tobacco epidemic. Furthermore, because the FBR's tax base is so limited, the tobacco industry frequently steps in to save the day when the FBR has to prove that revenue objectives are fulfilled.

4.10 Black Market and Smuggling

Smugglers bring in cheaper goods when the price of a commodity goes too high. As a result, rather than deterring consumption, the exorbitant prices stimulate it because illegal goods are so inexpensive. Taxes that are too high may result in less revenue. Consumption does not decrease; rather, it grows. People find alternative ways to smoke. Initially, sin taxes will bring in more income for the government, but due to smuggling, this will quickly decrease. It is

recommended that effective anti-smuggling measures be implemented along with enforcement of Tax laws.

4.11 The Bottom Line

The government's objective of lowering cigarette usage, as well as tobacco-related sickness, death, and economic expenses, would be aided by a 30% rise in the FED rate according to data modelling done in a policy brief by Social Policy and Development Centre (SPDC) (Research, 2021). Such an increase will benefit Pakistan while also bringing in much-needed funds to assist the country's budget imbalance be reduced. It would result in 219,000 less smokers; 3.8 % lower smoking prevalence and 6.4 % lower smoking intensity among adults; and 424,000 smoking-related fatalities would be prevented. Moreover, it would also generate an additional Rs 19 billion in income.

5. Conclusion

Behind the scenes, the tobacco industry's success is based on a lack of understanding of real economics. Despite the fact that tobacco usage is linked to a number of negative health outcomes, higher health costs (Sung, Wang, Jin, Hu, & Jiang, 2006), and overworked health systems (Amin et al., 2020), the tax incomes it creates often encourage policy inertia in low-income countries like Pakistan. It is important that while taxing the sin of tobacco consumption the basic goal should be discouraging the behaviour and not income generation.

5.1 Limitation

The paper is focused on efficacy of Sin taxes and existing tobacco taxation regimen in Pakistan only. Future research can encompass other sin taxes like SSBs, Alcohol and Gambling etc. in general and their taxation structure in Pakistan in particular.

Authors Contribution

Saqib Munir: literature search, study design and concept, drafting, paper setting

Khawaja Zeeshan Waheed: introduction, critical revision, incorporation of intellectual content

Muhammad Shakeel: literature search, drafting, proof reading, recommendations

Conflict of Interests/Disclosures

The authors declared no potential conflicts of interest w.r.t the research, authorship and/or publication of this article.

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