Original Article

Fiscal Regulation and Tobacco Consumption in India

Running Title: Fiscal Regulation and Tobacco Consumption

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Abstract

*Background***:** India is a land of diversity and tobacco consumption in India reflects this diversity, with widespread availability of cheap indigenous tobacco preparations, such as bidis, betel, mishri, khaini, gutka, snuff, etc. India is the second largest consumer of tobacco worldwide, and tobacco is the single largest risk factor for Non-Communicable Diseases (NCDs) in the country, with attributable economic costs amounting to USD 22.4 billion for adults aged 35-69 years. To tackle this growing burden, the Indian government has implemented the tobacco taxation and regulation policy. *Objectives***:** This study aimed to understand the effect of cigarette taxation policies on smoked tobacco consumption in India. *Methodology***:** Secondary literature on fiscal policies on smoked tobacco, economic and epidemiological data and smoked tobacco consumption over the last two decades were analyzed. *Findings***:** There is a skewed tax base for tobacco consumption, with the taxation focusing on 14% of cigarette smokers, while leaving 85% of bidi smokers outside the tax net since the bidi industry is a large unorganized sector that pays little or no tax due to exemptions or evasions. Bidi smoking causes greater health damage than cigarettes. Hence, not only the revenue collections from tobacco taxation are sub-optimized but also the adverse impact on health is greater. In addition, political gains are prioritized since most of these bidi manufacturing industries are owned by politicians or their relatives, and thus serve as vote banks. *Conclusions***:** Analysis of tobacco fiscal regulatory policy implementation over the past two decades reveals a complex picture. Political, social, and behavioral factors along with economic and epidemiological evidence suggest that India's tobacco taxation policies are sub-optimal. *Recommendations***:** In order to make a meaningful impact to reduce smoked tobacco consumption in India, the fiscal policy regulation needs to target bidis. An increase in tax on bidis or a bidi ban would be more effective. While e-cigarettes have been recently banned in India, a ban on bidis is more difficult to achieve considering the complex socio-political and ethical implications. The ethical implications of increasing bidi taxation involve potential loss of livelihood of workers engaged in bidi manufacturing, which can be addressed by implementing alternative livelihood policies.

Key Words: Tobacco; Taxation; Bidis; India; Smoking; Price Elasticity; Non-Communicable Diseases

Introduction

In India, various forms of tobacco are consumed, including smoked products such as bidis, cigarettes as well as smokeless products such as betel quid chewing, mishri, khaini, gutka, snuff, and as an ingredient of pan masala [1]. Bidi is an indigenous tobacco preparation in India made by rolling a dried piece of Temburini leaf (*Diospyros melanoxylon*) with 0.15–0.25 g of sun-dried tobacco flakes and securing the roll with a thread [2]. In India, bidis are more popular than cigarettes and account for 85% of the total smoked tobacco consumption [3]. India is the second largest exporter of tobacco/tobacco products in the world, with exports of USD 934.23 million in 2017-18 [4], and the second largest consumer of tobacco worldwide. The total economic costs attributable to tobacco use among all diseases in India in the year 2011 amounted to USD 22.4 billion for adults aged 35-69 years [5]. To address this issue, the Indian government has implemented the tobacco taxation policy for over two decades. A nationwide uniform Goods and Service Tax (GST) was implemented in July 2017 [6], subsuming the state taxes. In this context, this article reviews the evidence for the following objectives.

Objectives

To understand smoked tobacco consumption patterns in India.
To assess the effect of cigarette taxation policies on smoked tobacco consumption in India.

Methodology

A review of literature on fiscal policies, economic and epidemiological evidence, and tobacco consumption and manufacturing patterns in India was conducted to analyze the impact of tobacco taxation regulation on tobacco consumption in India.

Results and Discussion

NCDs contribute to about 5.87 million deaths and account for 60% of all deaths in India. India contributes to more than two-third of the total deaths due to NCDs in the South-East Asia Region (SEAR) of WHO. Tobacco use is identified as the single largest risk factor attributable to NCDs [7]. With the increasing burden of NCDs in India and the well-established association of tobacco consumption with NCDs, the Indian government has implemented many policies for decreasing tobacco consumption. One of these is the policy on increasing taxes on tobacco and tobacco products.

Smoked tobacco products in India have been subject to a complex schedule of excise taxes imposed by both the Central and State governments based on length, category and tier levied as INR amounts per 1000 sticks, which are particularly low for bidis.

The tax base of tobacco in India is heavily dependent on about 14% of tobacco users, who smoke cigarettes [8]. Although, bidis contribute to 85% of smoked tobacco consumption in India, the bidi industry remains a large unorganized sector that pays little tax either due to tax exemptions or due to evasions [9]. Section 3A of the Bidi Workers Welfare Cess Act 1976 [10], allows for Cess and excise exemption for manufacturing units producing less than two million unbranded bidis a year, a loophole that has been historically misused. A Labour Ministry report of 2011, records the deliberate manipulation by larger bidi manufacturing units to split into smaller units resulting in more than 55% of the bidis consumed in India being either excise tax exempted or evaded [11].

Epidemiological studies [12-14] suggest that the all-cause mortality among bidi smokers is at least as high as that among cigarette smokers.

Using Mumbai's voters list, a prospective cohort study of 99,750 individuals aged 35 years or older, found that the adjusted relative risk was 1.64 for men who smoked bidis and 1.37 for men who smoked cigarettes, as compared to 1.00 for men who never smoked [12]. Compared to non-smokers, bidi-smoking males and females lose six and eight years of life, respectively [13]. Bidi smoking causes greater nicotine and tar inhalation than conventional cigarettes due to greater puff frequency needed to keep the bidi alight, and lesser air dilution [14]. Hence, the revenue collections from bidis are sub-optimized although the adverse impact on health is greater as compared to cigarettes.

Economic studies have shown that the total central excise revenue from all tobacco products in 2011 was INR 174 billion (USD 3.73 billion approx.), which was only 17% of the estimated economic costs of diseases due to tobacco use in the same year [5]. Another study on fiscal policies and tobacco control in India, found that bidi excise tax can be increased by 100% before tax revenues from these products would begin to decline. Additionally, such increase in taxes can reduce consumption of bidis by 40% [15]. Another study on the price and consumption of bidis and cigarettes across four states in India found that bidis were significantly cheaper (INR 0.39) than cigarettes (INR 3.1). The daily consumption was higher among bidi smokers than cigarette smokers, and the unit price of bidis did not influence their daily consumption [16]. An empirical analysis of tobacco taxes in India revealed that the current tax rates on tobacco products are unlikely to make them less affordable even to the poorer households [17]. Bidi prices are low across different cities in India, with price per stick as low as INR 0.20, and the pack is priced between INR 3–20 (USD 0.05–0.83), which makes them affordable even to lower socioeconomic population. Excise taxes on bidis are less than 1% of the tax on cigarettes [18]. In the fiscal year 2015-16, the central excise tax was INR 16 per 1000 handmade bidi sticks, while it was INR 3790 for 1000 cigarettes of ≥75 mm lengths [19]. Among the different types of bidis, handmade bidis (98% of all bidis) are subject to lower excise taxes as compared to machine-made bidis. In 2010, taxes on bidis averaged only 9% of the retail price, while cigarette taxes accounted for approximately 38% of the retail price [20]. Excise taxes on cigarettes have increased over time, while the tax on bidis remained unchanged from 2012 to 2016 [11].

A study on the demand price elasticity estimates of different tobacco products in India found that price elasticity ranged between −0.4 to −0.9, with elasticities of bidis close to unity, while cigarette being least price elastic [8]. Poorer group elasticities were the highest, indicating that poorer consumers are more price-responsive. Elasticity estimates show positive distributional effects of bidi and cigarette taxation on the poorest consumers, as their consumption is the most affected due to increases in taxation [21]. A 10% increase in tobacco price is estimated to reduce bidi consumption by 9.1% and cigarette consumption by 2.6%. In terms of socioeconomic differential impact, it is estimated that this 10% increase would reduce cigarette consumption by 3.4% in rural India and 1.9% in urban India, while it would reduce bidi consumption by 9.2% and 8.5% in rural and urban India, respectively [22].

It is also estimated that the tax on bidis can be increased to INR 100 per 1000 sticks and the tax on an average cigarette can be increased to INR 3.5 per stick, without concerns over revenue loss [8]. The benefits of these increases in price are substantial. The increase in taxation would save 18.9 million lives in India and provide the Indian government with an additional INR 183.2 billion (USD 3.9 billion) in tax revenue. Increasing bidi taxes to 40% of retail price would increase government revenue by INR 36.9 billion (USD 0.8 billion). The price increase would avert up to 15.5 million premature deaths caused by bidi smoking. A cigarette tax increase to 78% of retail price would avert 3.4 million premature tobacco-related deaths, and simultaneously raise about INR 146.3 billion (USD 3.1 billion) in government revenue each year [20]. Another study estimated that increasing the tax as a percentage of retail price to 33% for bidis and 58% for cigarettes would lead to about 14 million smokers quitting and 27 million children never starting, thereby saving about 69 million years of healthy life over the next 40 years. This tax increase would also raise about INR 73 billion, while incurring no or minimal economic harm [22]. Given the low average prices of both bidis and cigarettes, neither of these percentage increases is a very large price change in INR equivalents.

The nationwide implementation of the GST in July 2017 has also not helped the situation. All tobacco-related products have been placed in the 28% tax slab plus a compensation Cess charged per 1000 sticks based on product category and length. The ironical post-implementation GST effect is that there has been a price drop in the smallest pack size of bidi and only a marginal increase in the price of bidi for other pack sizes. The price of an average bidi pack has been increased by only INR 0.2. Hence, the impact has been negligible in the case of bidis [23]. A study has estimated that post-GST, Indian states will experience a fall in tax revenue from tobacco products by more than 50% as compared to the value-added tax revenue that was collected pre-GST [24]. By weight, bidis account for 77% of the market for smoked tobacco in India [25].

However, bidis are least taxed among all tobacco products in India and this remains the biggest challenge in effective implementation of the tobacco taxation policy in India. Although prevalence of smokeless tobacco use is double that of smokers in India [26], reducing oral tobacco consumption through taxes, is not as feasible as reducing smoked tobacco consumption, due to the large and informal market of suppliers and very low price of smokeless tobacco [22]. Another disturbing fact is that higher income levels have expanded the tobacco purchasing power of Indian women and youth, and suggests that the present taxation system does not motivate quitting [27]. One of the main reasons for low taxes on bidis is a conflict of interest with the politicians, as politicians or their relatives own most of these bidi manufacturing units [28]. Hence, taxation laws on bidi are very lenient in India. Under the current law, handmade bidis (98% of all bidis) are taxed at a lower rate than machine-made bidis, and overall the tax rate is much lower than that of cigarettes. Also, bidis produced by manufacturers producing less than two million bidis a year are exempt from excise duty.

As the manufacturing of bidis is highly fragmented, excise officers cannot maintain physical control over each bidi manufacturing facility, as they do in the case of cigarette manufacturing facilities. There are about 7000 bidi manufacturing units in India as against 40 cigarette manufacturing units. With no health benefits or alternate livelihood available, the community of bidi workers is trapped in an inter-generation cycle and thus feels that increased taxation of bidis is against its interests [28]. Also, there is opposition from owners of bidi manufacturing units. Manufacturers have moved from manufacturing plant-based to home-based production, to circumvent the law [29].

Conclusions

The tobacco taxation policy intervention in India has historically been very controversial and underutilized. Understanding the tobacco taxation in India throws light on important contextual, cultural and behavioral factors that are unique to this sub-continent. It also exposes the underlying political support to informal tobacco manufacturing unique to India, which makes use of the loophole in the tobacco taxation policy and undermines its impact on tobacco consumption in the country. The average unit price of a bidi and smokeless tobacco is significantly lower than of a cigarette and thus a cheaper source for consumers who are mostly from the low-income segment of society. Taxes are based on type of product, length and quantity of tobacco. Longer cigarettes are taxed at higher rates, so companies manufacture shorter lengths to retain their customer base and consumers shift to the cheaper options.

The tax on bidis in India is minimal, although they constitute 85% of the smoked tobacco market in India. An estimated 52–70% of all bidis are not taxed because of non-compliance or small producer exemption. Though 10 bidis are smoked for every cigarette in India, yet bidis account for only 5.7% of the excise revenue from smoked tobacco products [30]. Higher bidi taxes would have been cost-effective, by raising revenues as well as averting deaths. The present tobacco taxation system does not motivate quitting. The tobacco taxation policy is directed only at a minor proportion of actual consumers of tobacco.

The bulk of tobacco consumed is largely produced in the unorganized sector, which has neither compliance nor enforcement. Consequently, while the revenue collection is being sub-optimized, the overall tobacco consumption is not impacted by taxation. Attempts to regulate tobacco use, without significant tax increases on bidis or a ban on bidis, will not yield desired results. However, banning bidis is a much more complex political exercise than banning e-cigarettes because unlike e-cigarettes, bidis are manufactured in India. India has more than 3.6 million bidi workers who are engaged in bidi rolling [29], while living under acute poverty and extremely hazardous conditions [28].

Increased bidi taxation has implications on their employment. Bidi labour union and associations are against any move, which affect sales of bidis claiming that their livelihoods will be affected. Hence, absence of any alternative livelihood policies for these workers is a barrier and an ethical dilemma that needs to be urgently tackled.

Ethical approval

Not Applicable

Conflict of interest Nil

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