The Price We Pay:

Six Industry Pricing Strategies That Undermine Life-Saving Tobacco Taxes

STOP. A GLOBAL TOBACCO INDUSTRY WATCHDOG

Contents

Executive Summary

Article 6 of the WHO Framework Convention on Tobacco Control (WHO FCTC) commits Parties to the treaty to using tax and price policies to reduce tobacco consumption. Not only are such measures effective at reducing tobacco use, they are also an efficient way of generating government revenues. However, the success of any tobacco taxation policy largely depends on the extent to which the tax is passed onto the consumers in the form of higher prices. Multiple internal industry documents reviewed over decades have shown that the tobacco industry is fully aware of the massive impact of tax increases in driving down consumption. It is therefore not surprising that the industry employs strategies to circumvent and undermine tax policies, effectively minimising the effects of tobacco tax increases.

This report explores the tobacco industry's response to increases in tobacco excise taxes by examining the pricing strategies it employs to undermine the effects of the higher taxation. Drawing on several recent academic studies, it describes six pricing strategies employed by tobacco companies worldwide: differential tax shifting; introducing new brands, segments or products; price discrimination and price-related promotions; price smoothing; shrinkflation; and changing product attributes or production processes. The report is intended for non-governmental organisations working on tobacco control and/or taxation, as well as government officials and policymakers charged with developing and administering government tax policies. It aims to alert readers to these industry strategies and highlight the need to monitor the industry's pricing tactics. In addition to making regular, consistent and uniform adjustments to the tobacco tax structures, these industry responses should also be exposed in order to ensure that stronger tobacco control policies can be implemented.

The discussion on each industry strategy describes the tactic in detail, the consequences of the strategy and provides real-world illustrations of its use with one or more country examples. We also provide country/region-specific case studies to offer in-depth illustrations of the issues. The report concludes with policy recommendations and highlights the need to gather more empirical evidence on the tobacco industry's actions in response to planned tobacco tax increases in order to formulate effective responses.

Introduction

Taxation on tobacco products is by far the most powerful and effective public health measure to control the tobacco epidemic and related morbidities.[1-3] Increasing tobacco taxes increases the price of tobacco products for consumers and therefore reduces affordability and ultimately the quantity consumed.[4, 5] It is also an efficient source of generating government revenues, which can then be earmarked for several essential public health programs including tobacco cessation services for further health gains.[6] The higher price not only encourages existing smokers to quit, but also deters individuals from starting smoking, with cost being a particular barrier for young people.[7] The associated decline in smoking rates is particularly pronounced in low- and middle-income countries (LMICs) where a 10% increase in price reduces consumption by 5-8%.[8] The WHO Framework Convention on Tobacco Control (WHO FCTC) recognises the importance of this policy in Article 6, which calls on governments to use tax and price policies in order to reduce tobacco related morbidity and mortality.[9] However, it is still a relatively underutilised tobacco control measure,[10, 11] with only 13% of the world's population living in the 40 countries in 2021 that met WHO's recommendation of having tax account for at least 75% of the retail price of the most popular cigarette brands.[12, 13]

Given the oligopolistic nature of the tobacco markets with limited competition, tobacco companies enjoy significant pricing power and profitability, and are further aided by the relatively inelastic demand of their products with few available substitutes.[14, 15] This pricing power of the industry should not be overlooked when tax policies are formulated, as the success of this crucial public health policy is largely dependent on the extent to which the tobacco industry passes the increase in taxes onto the consumers.

A thorough examination of the internal tobacco industry documents acquired through litigation revealed tobacco companies' knowledge of the influence of price (and hence tax) on cigarette demand and the behaviour of the consumers.[16-18] Thus, in the interest of protecting its profits, the tobacco industry makes calculated, strategic attempts to undermine this policy. The most frequently employed non-pricing tobacco industry strategies have been well established all over the world and include smuggling of illicit tobacco, contesting and opposing the implementation of any public health measure, targeting new markets and recruiting younger smokers, refuting adverse outcomes of smoking, sponsoring professionals and academic organisations as advocates to act in its support, and trying to gain political influence to persuade governments to delay tobacco control legislation.[19-21] However, studies exploring the industry's price-based responses to tax increases that are used by tobacco manufacturers to make tobacco excise policies less effective in terms of their public health impact are a relatively recent area of academic enquiry. As such, they have tended to focus on particular countries, notably high-income countries (HICs), with the U.S.A. and the U.K. being the most extensively studied markets.

Understanding tobacco industry pricing has become of paramount importance and an area of increasing concern worldwide, especially in the context of LMICs where 80% of the world's smokers are located, and where cigarette price differentials—the gap between the most expensive and least expensive cigarettes—are generally larger than many HICs.[22, 23]

This report is intended for non-governmental organisations working on tobacco control and/or taxation, as well as government officials and policymakers charged with developing and administering government tax policies. It offers an overview of the international tobacco industry's price-based responses to increases in tobacco taxation policies to mitigate their impact. It provides a summary of the available evidence and whether the patterns of industry behaviour vary by country, income group, over time and across price segments and products. It therefore aids the development of effective counter measures to such actions and hence can help progress towards ending the tobacco epidemic. With taxes being an efficient tool to also reduce the consumption of other products such as alcohol and sugar that contribute to non-communicable diseases, the insights herein can also inform policy development in other health-related areas.

Pricing Strategies

A review study carried out in 2021 by the researchers at the Tobacco Control Research Group (TCRG) at the University of Bath systematically assessed global literature on the tobacco industry's response to excise tax policies.[24] The findings suggested that the industry responds to tax increases by utilising six broad pricing strategies in both HICs and LMICs that balance enhancing its revenues with maintaining the volume of its markets. As mentioned earlier, the majority of the studies in the review are based in HICs such as the U.S.A. and the U.K., hence they are quoted as examples in almost all the strategies. However, this does not signify that they are not used elsewhere, but rather just that they have not been documented in other countries/ markets (as studies might not yet have been looking for them). The six identified strategies are:

1. Differential shifting of tax

The industry increases the price of products above that required by the tax increase, or absorbs the tax increase.

2. Introducing new brands/segments/products

The industry increases opportunities for smokers to down-trade instead of quitting.

3. Price discrimination and promotions

The industry offers discounts to some customers but charges full price to others.

4. Price smoothing

The industry avoids a large jump in prices via smaller, incremental price adjustments.

5. Shrinkflation

The industry disguises price increases by reducing the number of cigarettes or the amount of loose tobacco per pack.

6. Changing product attributes

The industry changes physical attributes or production methods to achieve a lower tax rate.

1.
Differential “shifting” of taxes between brands/products

Differential shifting of taxes is the most frequently employed strategy of the tobacco industry where instead of passing on the exact tax increase on tobacco products to consumers, the industry may decide to vary the extent to which it passes on the tax increases. Price increases therefore vary between brands/brand variants and/or products. This has been identified in multiple countries worldwide and the industry was found to either over- or undershift taxes, or both:

> **Overshifting:** Takes place when the tobacco industry increases the price of products above that required by the tax increase. The burden of the tax increase (and more) falls entirely on the consumers rather than the producers. This is frequently observed in HICs, presumably as a strategy to maximise profits in such settings.

In many HICs, the industry persistently increases tobacco prices by overshifting tax increases on premium products (those at the higher end of the market) but undershifting on “budget” products (those at the lowest price segments) in order to keep their prices low and hence affordable for consumers. This results in an increasing price gap between premium and budget products. This pattern has been observed in the U.K.,[25-28] Ireland,[29] the U.S.A.,[30-35] New Zealand,[36-38] and several continental European countries including the Czech Republic[39] and Ukraine.[40]

> **Undershifting:** Occurs when the industry absorbs tax increases (to some extent), thus delaying/preventing the intended rise in tobacco price. In this scenario, the producers bear at least part of the cost of the tax increase. Research has found this behaviour is frequently observed in LMICs, where the primary goal of the tobacco companies appears to have been to maximise demand of the products to expand their markets, as opposed to increasing their profits. Therefore, tax increases are mostly absorbed by the tobacco companies for brands across all price categories. This was observed in South Africa,[41] Mexico,[42, 43] Indonesia,[44, 45] Turkey,[46] Thailand,[47] Bangladesh,[48] Pakistan[49] and Mauritius.[49]

This pattern varies slightly with state-owned tobacco monopolies such as in China, Vietnam and Thailand where the state has a pivotal role in setting both prices and taxes, and hence faces a different set of incentives than privately owned tobacco companies.[50] For example, in China, between 2009 and 2015 while the excise tax increased, the state decided against increasing prices, which resulted in reduced profits for the industry. Consequently, as expected, there were no changes in the rates of cigarette consumption.[51]

There is also evidence to suggest that when the near-monopoly environment of the tobacco industry is under threat from changes in market dynamics (e.g., from legal or illicit low-cost providers) this will also change the observed industry pricing strategies over time. For example, in South Africa there was a switch from overshifting to undershifting in 2010, which coincided with increased competition from domestic low-cost producers and a rapid increase in illicit trade.[41]

2. Introducing new brands, variants, segments or products

In markets where multiple types of tobacco products are available, the increase in taxes on one product can encourage consumers to substitute (or down-trade) to cheaper products, such as changing from factory made cigarettes (FM) to roll-your-own (fine-cut) tobacco (RYO). This consumer behaviour has been observed in the U.K.,[26, 52] Spain[53] and Thailand,[47] as a result of the tobacco industry's launch of cheaper substitutes. These include new and cheaper FM and RYO products, involving, for instance, cheaper variants of existing brands and/or new brands sold at new price segments, increasing the opportunities for smokers to down-trade instead of quitting. This industry strategy helps retain customers who no longer want, or are unable, to pay for higher-priced products. At the same time, they continue to offer more expensive premium products that allow the industry to profit from those who are willing to pay higher prices for "luxury" brands.

Moreover, the industry also targets different socioeconomic groups and helps sustain widespread inequalities by categorising its products into different price segments, ranging from highly priced premium products to economy, mid- and "ultra-low-priced" cigarettes.[25] The industry has also increased the market shares of its ultra-low-priced products to make them more affordable and potentially target those groups in society who are more sensitive to price increases, while simultaneously increasing revenues on premium products. There is also a significant gap between the price of FM cigarettes and RYO tobacco in many parts of the world, often facilitated by different tax rates, despite them being similar in terms of their risk profiles. Consequently, there is frequently a down-trading of consumers to more affordable forms of tobacco, including more people shifting to smoking RYO, where they can further reduce the price by adjusting the amount of tobacco in each cigarette.[52]

There is evidence of similar brand substitution in Bangladesh between 2006 and 2017.[54] At the same time there was also a shift from bidis to FM cigarettes, indicating growth in people's incomes and shifting preferences. Therefore, the manufacturers of tobacco created two different pathways for consumers as they looked to maintain sales volumes and profitability: By offering low-priced cigarettes, they could generate new sales by encouraging a shift from bidis (which are generally independently made and very low-priced); and low-priced FM offered smokers of premium cigarettes a cheaper option instead of quitting.

3. Price discrimination and price-related promotions

Following a tax increase, the industry may use price discrimination or price-related promotions, wherein it sells the same product at different prices to different customers, often through targeted promotions, in order to keep products affordable across all income groups. This helps to prevent price-sensitive users from quitting or reducing consumption, ensures potential new customers are not deterred by high prices, as well as allows the industry to take advantage of those less sensitive to price.

Evidence from the U.S.A., Canada and the U.K., highlights the industry's targeted promotional activities.[33] These are targeted at price-sensitive consumers with certain products discounted through coupons, bulk purchase offers on cartons or free gifts. Different prices for the same product are also offered to consumers in different store types and locations, such as Native American/First Nations reservations in the U.S.A. and Canada.[30, 55, 56]

4. Price smoothing

Price smoothing occurs when a tobacco company raises its prices incrementally and regularly after a tax increase to avoid a big jump in prices that may discourage smoking. Sometimes even starting before the tax increase comes into effect, tobacco companies "smooth" price increases by implementing price rises throughout the year by employing smaller, more frequent increases. This ensures that smokers never face a sudden, large price increase, which could encourage quitting. This strategy has been observed in the U.K., alongside undershifting.[57, 58]

5. Shrinkflation

Tobacco companies may reduce, or "shrink," the number of sticks in a pack or the weight of tobacco per pack to disguise a price increase, by, for example, selling a 19-stick pack at the same price as a 20-stick pack was previously sold. This makes the change in price harder for smokers to identify and prevents the cost of a packet of tobacco from being tipped over a certain psychological level. In the U.K., tobacco manufacturers masked price increases by charging the same pack prices that were charged before the tax increase. The manufacturers saved money by reducing the size of a FM pack from the standard 20 sticks to 19, 18 or even 17 sticks per pack and the size of a RYO pouch of tobacco from the typical 12.5 to 10 grams.[26] This strategy was more common with "budget" and mid-priced products. Thus, despite the rise in price per stick, the real pack prices of the cheapest FM and RYO products remained static in the U.K. between 2012 and 2017.[58]

6.
Changing product attributes or production processes

In response to a tax increase, the industry may exploit tobacco tax structures that levy different tax rates based on product characteristics (e.g., length, weight, price or product type). Companies therefore change the physical attributes of their products or alter the production methods in order to achieve lower tax rate brackets or categories. In the U.K., cigars were subject to relatively lower taxation than cigarettes, and were also exempt from some of the wider tobacco control restrictions on cigarettes (some of which applied to all of the European Union, such as the ban on small cigarette packets).[26] Tobacco companies took advantage of these differences in legislation by launching economy cigars and low-priced cigarette-like filtered cigarillo products from 2010.[59] Marketing these under existing cigarette brand names in 2020 also helped them to circumvent the EU menthol ban.

Tobacco companies may also reclassify their products in order to avoid higher taxes. In the U.S.A., from 2009 to 2013, tax on RYO tobacco was higher than for pipe tobacco, so the industry relabeled RYO as pipe tobacco, thereby reducing its tax liability. As a result, sales of RYO tobacco fell while sales of pipe tobacco increased.[60, 61]

A complex taxation system, with differential tax rates for each type of product, provides opportunities for tax avoidance and favours this pricing strategy. For example, up until 2009, Indonesia had an elaborate multitiered tax system, with varied tax rates by different product types (such as cigarette or kretek), by mode of production as well as by the manufacturing facilities. The government policies were designed to protect and favour smaller scale production facilities as opposed to large firms. The differential tax rates by production scales provided the industry a tax incentive to reduce its production levels to fall within low tax brackets and to split production between large numbers of small-scale producers.[62] As a result, during this time there was an increase in the number of firms in the small and very small production scale to avoid paying excise tax duties and hence keep retail prices low.

Overall Reflection

The results of the review showed that the most popular strategy was differential price shifting, with overshifting being more common in HICs, and undershifting being more common in LMICs, signifying that the industry uses different strategies for different markets. Industry pricing will likely vary as it shifts from demand maximisation to profit maximisation, a deliberate choice by tobacco companies to prioritise expanding lower-income markets over maximising profits, in new markets as opposed to more mature ones. The review revealed how the tobacco industry takes advantage of legislative loopholes in some countries such as providing product promotions in lower-tax jurisdictions (Native American/First Nation reservations in the U.S.A. and Canada) or changing product classification to launch economy cigars and low-priced cigarette-like filtered cigarillo products, as they are taxed at a lower rate than cigarettes, in the U.K.

The review also highlighted the need for more relevant research in this area, most especially in LMICs which are the new targets for the transnational tobacco companies (TTCs). The majority of the studies included in the review that explore these pricing strategies are based in HICs, with such activity in LMICs explored to a lesser extent. Moreover, apart from the tactic of differential shifting of tax increases, most of the other strategies identified were either more common in HICs (changing product attributes and production processes) or were only found to be present in HICs (price promotions, price smoothing and shrinkflation). This may indicate the absence of these strategies in LMICs, but may more likely also simply be a result of their not yet being considered by the research from these jurisdictions.

Country/Region-Specific Case Studies

Colombia

A 2022 academic paper published in the journal *Tobacco Control* explored the industry's pricing strategies in response to tobacco tax increases in Colombia, and whether they differed by price categories/segments (cigarettes differentiated by prices such as premium, mid-price and economy) or presentation (packs or individual sticks).[63] Single sticks, while illegal in this market (and hence an enforcement issue) are in practice freely available, so offer a further opportunity for the use of the six price-based responses to taxation mentioned above. Furthermore, any of the strategies adopted could differ relative to those used with cigarettes sold in packs. It is the first such academic study in Latin America and the first anywhere in the world to explore the pricing of single sticks.

Excise taxes on tobacco products in Colombia fall short of the 75% WHO benchmark.[13] The country scored 3.38 out of 5 on the 2021 Tobacconomics cigarette tax scorecard which assesses countries' cigarette tax policies in relation to widely accepted best practices. In 2017, as part of a larger fiscal reform, a major excise tax increase on tobacco products was introduced along with an increase in the general value-added tax (VAT). The reform doubled the specific component of the excise tax from COP $700 (US $0.23) to COP $1400 (US $0.47) per 20-stick pack (the ad valorem tax remained unchanged at 10% of the retail price charged to the public), while VAT was increased from 16% to 19% of the base price. The specific tax increased to COP $2100 (US $0.74) in 2018, and from 2019 an annual tax escalator was implemented where the specific tax is increased by the country's annual rate of inflation plus four percentage points each year. These changes in tax were expected to substantially decrease tobacco consumption by increasing the retail price of tobacco.

The research study found that the tobacco industry in Colombia employed targeted pricing strategies after the tobacco tax increases[64] in the country between 2017 and 2020: differential tax shifting; and launching new brands/brand variants. The industry overshifted taxes when increases were smaller and predictable but used undershifting more when there was a larger increase in tax. The prices for single sticks, however, increased more than the tax increase required but this was accompanied by an increase in their consumption (at the expense of sales in packs). This was likely because the increase in the cost of buying in packs resulted in some smokers switching to single sticks rather than quitting. Such findings highlight the importance of understanding the totality of the pricing strategies that the industry uses both for packs and single cigarettes to undermine taxation, and the need for further increases in excise taxes in such settings. If the industry is able to overshift at any point, it is increasing its profit margins which could have been captured by governments had tax increases been greater.

Africa

Although smoking prevalence in the African region (18.5% in 2020)[65] is lowest amongst all the WHO regions, a significant upsurge is predicted as a result of the rapid growth in population and because of economic development.[66] Despite 44 countries in the region ratifying the WHO FCTC, implementing and enforcing tobacco control policies has been a huge challenge for these countries, coupled with the intense market penetration of the TTCs.[11, 12] Taxation in Africa still shows insufficient progress relative to WHO best practice, with the lowest regional total tax-share (40.7%) and the lowest ranks on the Tobacconomics "Cigarette Tax Scorecard" (1.64 out of 5.00).[67] Average cigarette prices in Africa (International Dollar $4.10) are the cheapest in the world. Furthermore, there is widespread variation in the level and structure (specific, ad valorem or mixed excises) of taxes across the region, which has created price gaps among brands as well as provided an opportunity for the industry to practice the strategies outlined above that undermine taxation policies. The TTCs enjoy extensive power in the region due to their revenues transcending the gross national income of many African countries thus establishing them as key revenue contributors.[20]

A forthcoming study carried out by researchers at the University of Bath and [the University of Cape Town]() explored how cigarette prices changed in response to increased taxes in 12 African countries including Botswana, Ethiopia, Lesotho, Madagascar, Malawi, Mozambique, Namibia, Nigeria, South Africa, Tanzania, Zambia and Zimbabwe. Cigarette prices were obtained from the African Cigarette Prices (ACP) Project[68] data along with regional taxation information from the WHO's Global Tobacco Epidemic Reports (GTR), to synthesize the evidence regarding the tobacco industry's tax pass-through to smokers and whether it uses pricing strategies on cigarettes, both for packs and single sticks. This is the first multi-country study from Africa that looks at the industry's pricing response to taxation in 12 countries simultaneously and also is the second ever study of any market/region that includes markets for single sticks. In these markets, single stick sales are prohibited but are nevertheless extremely common.

The results showed that the tobacco industry employs differential tax shifting practices of either over- or undershifting, or both, in all the countries examined, presumably targeted according to the different market dynamics. Countries that predominantly show a pattern of undershifting are Namibia (after 2017), Lesotho (except 2019), South Africa (except 2019), Nigeria (in 2020), Zambia (2017-2019), Mozambique (2020) and Ethiopia (2020). In contrast, countries where overshifting was dominant are Tanzania (2018-2020) and Madagascar (2020). When looking at the market for single sticks, it was found that tax increases were absorbed in almost all of the cases examined, possibly to offer cheaper cigarettes to consumers and maintain their smoking habits (for example in Botswana, Zambia, Mozambique and Ethiopia). It might also have been due to wanting to avoid tipping the price of single sticks over certain price points in the market.

In both of the above case studies, the availability of single sticks and their high prevalence among smokers complicated the market. Anecdotal evidence indicates that the tobacco industry has been known to use such informal channels to obscure its pricing tactics, since the pricing of single sticks is not so visible. Furthermore, the very existence of such informal channels (whether legal or not) encourages loose-cigarette sales, thereby weakening the impact of tax increases. From a retailer's perspective, the profit margins on selling single sticks are substantially more than on packs,[69] therefore making compliance with the existing law that bans such sales harder to achieve.[70, 71] Furthermore, such sales may potentially cause a loss of government revenues as it becomes difficult to assess whether taxes have been paid on single sticks or not (some sales will have paid some taxation where legal purchases of multistick packs have been resold as single sticks).

Policy Recommendations

There is a dire need to figure out what is happening in any given country in order to effectively combat the industry and ultimately get the maximum impact of tobacco excise tax policies. Therefore governments and policymakers must be on alert and monitor the industry's price-based response to taxation. Policy measures should be developed and implemented to address the different pricing tactics such as:

- **limiting the number of times the industry can change its prices to tackle price smoothing;**
- **specifying tobacco pack size to remove the possibility of shrinkflation;**
- **equivalising tax between products (with a similar risk profile) in order to counter downtrading;**
- **banning promotional discounts and freezing/ limiting the tobacco markets to prevent new brands/brand variants from being introduced;**
- **introducing bigger tax increases so governments, not the industry, get the benefit of higher prices; and**
- **closely monitoring and ideally ending the sale of single cigarettes as their availability hinders any tobacco control policy.**

Ultimately the strongest response would be to directly set tobacco prices so such pricing strategies were no longer an industry weapon.

Tobacco control advocates, civil society organisations such as non-governmental organisations, and research institutions such as universities and think tanks need to be collectively mobilised as they can play an exemplary role in supporting the implementation of such policies to improve health. They can also produce a robust scientific evidence base to inform policy development, which requires their being appropriately funded to enable them to conduct the research needed to generate evidence and, importantly, use the evidence to advocate for tobacco control policies. Creating a cohesive and collaborative approach that would involve all the relevant stakeholders, across all sectors being harmed by tobacco, is the need of the hour and would prove to be beneficial to counter the efforts of the tobacco industry. The approach to policy change must be context-specific: Policymakers need to assess the local situation carefully and see what approaches are required for multi-sectoral policy development.

Conclusion

This report is based on the observed global behaviour of the tobacco industry in response to tobacco excise tax policies and demonstrates it uses multifaceted price-based approaches and strategies to undermine the positive impact of tobacco excise policies all over the world, thereby increasing tobacco consumption and the associated harms. It also highlights that we don't yet know enough detail on these pricing practices, most especially in LMICs, and hence that these pricing strategies must be routinely monitored and understood so that effective tobacco excise policies can be developed. Given observed industry behaviour, it seems like there is still ample room in many countries to increase tobacco taxation, ideally to WHO's recommended benchmark of at least 75% of the retail price.

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