Prohibitive Pricing of Tobacco Products
Part 1: Understanding the Challenges of the Canadian Market

Why prohibitive pricing

Prohibitive pricing is the pricing of tobacco products at a level high enough to serve as a motivator to reduce consumption, as a deterrent to continued use, and as a barrier to entry into the market.

> "Price is the key determinant of smoking uptake and cessation. Worldwide, a reduction of about a third [in the prevalence of smoking] could be achieved by doubling the inflation-adjusted price of cigarettes."[a]

Research consistently shows that the single most effective intervention to reduce tobacco use is to increase tobacco prices,[1] and the most common way for governments to raise the price of tobacco products is through increases in tobacco taxes. Most studies of high income countries show that a 10% tax increase yields a reduction in consumption among adults of 4%.[2] Studies have found that youth are two to three times more responsive to tax increases than adults, with higher taxes most effective at preventing young people from progressing from experimentation to regular use.[3] Low income earners have also been found to be more price sensitive and thus to respond more to a given increase in tax/price.[4] Evidence from around the world shows that about half of the drop in consumption is due to a decrease in the amount smoked by continuing smokers and the other half is from a reduction in prevalence, due to smokers quitting and youth not starting.[5]

Tax and retail price

To optimize the impact of taxation as a health intervention, various global authorities including the World Health Organization (WHO) recommend that taxes constitute *at least* 70% of the retail price of tobacco.[6] The proportion of the price that is tax is called tax incidence. In Canada, tax incidence varies by province, with the lowest tax incidence in Ontario and Quebec at 67% and 64%, respectively. Despite a national average tax incidence of 72.5%,[7] opportunity remains for significant tobacco tax increases across the country, for reasons discussed below.

Affordability

Tax incidence does not tell the whole story, since tobacco taxes and tax incidence can be increasing at the same time as tobacco products are becoming more affordable. There are several ways that this can happen:

- If the tobacco tax increases do not keep pace with inflation and real income;
- If tobacco companies do not pass on the full tax increase to their customers;
- If lower-priced tobacco products are available and are acceptable substitutes to consumers.

Thus, the real measure of the effectiveness of a tobacco taxation/pricing policy is the affordability of tobacco products. Growth in real income has a measurable impact on tobacco consumption just as changes in price do. Most estimates of the relationship between income and demand for tobacco indicate that the so-called 'income elasticity of demand for tobacco products' is between 0 and 1. This means that a 10% increase in income will result in a 5% increase in tobacco consumption.[8] Guidelines on tobacco tax policies under the Framework Convention on Tobacco Control (FCTC), the global tobacco control treaty, emphasize the need to factor affordability into tobacco tax/pricing policies:[9]

> *"Without price increases above the growth in income, tobacco products will inevitably become more affordable over time. This increase in afford-ability will generally result in growing consumption."*

Researchers Blecher and van Walbeek elaborate: "If policy makers aim to make cigarettes less affordable, they should raise taxes so that the nominal price of cigarettes increases by more than the sum of the inflation rate and the real per capita income growth rate."[10] The researchers concluded that cigarette prices in Canada from 1990-2006 became only marginally less affordable, with the Relative Income Price (RIP)[a] increasing an average of only 0.5% per year

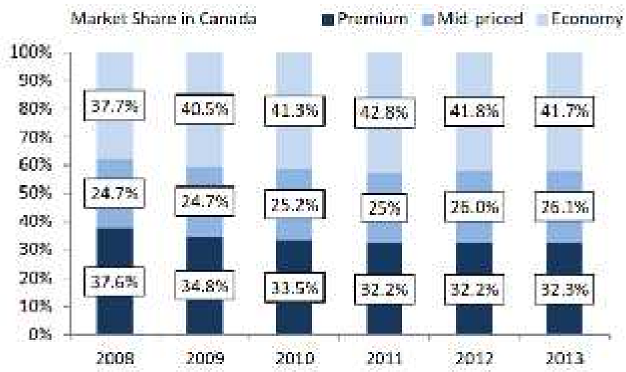
Discount brands

Whether or not the study by Blecher and van Walbeek provides an accurate assessment of the change in cigarette affordability in Canada depends largely on which brands were selected to determine price and where they were purchased. In the early 2000s, Canada's Big Three tobacco companies introduced a three-tier pricing model, offering premium, mid-priced (mid-tier/discount), and budget (value-for money/economy/price) brands. Prior to this time, all tobacco brands were priced exactly the same across the country. Below is a table showing the top-selling brands in Canada in 2013, with their ranking, by company and price tier:[11]

Tobacco Company	Price Tier		
	Premium	Mid-tier	Budget
Imperial Tobacco Canada Ltd. (ITL)	▪ du Maurier—1 ▪ Player's—2 ▪ Vogue—8	▪ Peter Jackson—3 ▪ John Player Special	▪ Pall Mall ▪ Viceroy
Rothmans, Benson & Hedges (RBH)	▪ Benson & Hedges—11 ▪ Belmont	▪ Canadian Classics—5 ▪ Number 7—7	▪ Next—4 ▪ Accord—9 ▪ Québec Classique—10
JTI-Macdonald (JTI-M)	▪ Export A—6 ▪ Camel	▪ Macdonald Special—12	

From 2003 to 2006, the market share for discount cigarettes increased from 10% to 49.6%. As the graph below illustrates, discount brands have continued to take market share away from premium brands and now account for 68% of the Canadian market.[12]

[a] Percentage of per capita Gross Domestic Product required to buy 100 packs of cigarettes (Blecher and van Walbeek)



A large multi-country study that included Canada by Nargis and colleagues found that the widened price difference between premium and discount brand cigarettes "was a major cause of an increased share of discount brand cigarette consumption in Canada ... during the period under observation (2002–2005)."[13]

When discount brands were first introduced, they sold for $1.25-$1.50 per pack less than premium brands.[14] An unscientific survey by the Non-Smokers' Rights Association in 2014 found a much more substantial difference, with the least expensive brands selling for about 60% of the price of the most expensive. The survey also revealed significant differences in the price of a brand at different stores and in different cities. For example, a pack of the budget brand Pall Mall varied from $5.32 to $8.00, while a pack of the premium brand Benson & Hedges ranged from $9.30 to $13.75.

As a result of the segmentation of the market by price and the increasing market dominance of discount brands over the past decade, as well as the notable variations in price by location, the true average price of a pack of cigarettes in Canada has not been known for some time. It is clear, however, that the average price is considerably lower than it would have been had Canada remained a single price market. Knowing the *real* average price of a pack of cigarettes is critical to assessing the impact–positive or negative—of industry pricing policies and government tobacco tax policies on tobacco consumption.

Given the relationship between price and tobacco use, it is not surprising that studies show that smokers who switch to discount brands are less likely to quit.[15] From their study, Nargis and colleagues concluded that "a change in the relative price of cigarette brands in favour of the use of discount brand cigarettes would lead to lower quit rates and greater smoking prevalence."[16] By segmenting the market into price tiers, tobacco companies can keep price-sensitive smokers in the market and continue to attract price-sensitive youth, undermining Canada's high tax policy.

Roll-your-own tobacco

Switching to lower-priced brands is one way that smokers are able to lessen the impact of a high tax/price policy on their wallets and their tobacco consumption. Another way is to switch to lower-priced products, such as roll-your-own tobacco (also known as fine-cut).

The WHO Technical Manual on Tax Administration recommends that all tobacco products be taxed consistently to reduce the incentive for users to switch to a lower-taxed product rather than quitting or reducing consumption. For many years, health groups in Canada have called on the federal government to tax roll-your-own tobacco such that the amount needed to roll one cigarette is equal to the tax on one manufactured cigarette.[17] However, on a per unit basis, the federal excise tax of $26.29 per 200g of roll-your-own remains considerably less than the $21.03 in excise tax on 200 cigarettes. This is because with changes in the processing of tobacco, it now takes only 0.5 grams of "expanded" fine cut tobacco to make one cigarette.[18]

A study by Leatherdale and Burkhalter of fine-cut tobacco use among Canadian youth found that half of youth smokers in grades 9-12 had ever used fine cut and one-quarter were current users. Youth who used roll-your-own tobacco tend to be heavier, more addicted smokers, to be younger, and to have less disposable income than youth who smoke manufactured cigarettes.[19]

Contraband

Tobacco companies around the world and their allies in the retail sector raise the spectre of a burgeoning contraband market to discourage governments from increasing tobacco taxes. This tactic worked in parts of Canada over the past decade, with the Ontario, Quebec, and federal governments imposing tax increases far less frequently than their provincial/territorial counterparts.[20] The research consistently demonstrates, however, that high tobacco taxes do not *cause* contraband.[21] Contraband sales are highest in Ontario and Quebec, the two provinces with the lowest tobacco taxes. Contraband flourishes where there is opportunity. A recent report by the Ontario Tobacco Research Unit explains:[22]

> *"Many factors are associated with contraband tobacco use, including: easy access, misconceptions about 'legal' purchase of cigarettes from First Nations' Reserves, insufficient enforcement and penalties, and organized criminal activity."*

The OTRU report, along with many others, concludes that increasing tobacco taxes and at the same time enhancing anti-contraband measures and public education will achieve two important public policy goals: decrease tobacco consumption and increase government revenues.

Conclusions

The body of evidence from around the world shows that the single most effective intervention to reduce tobacco use is to increase tobacco prices through tobacco tax increases. Over the past fifteen years, the effectiveness of Canada's high tax policy has been undermined for a number of reasons.

The tobacco industry's adoption of a three-tier pricing strategy in the early 2000s brought deeply discounted brands to the market, some for as little as sixty percent of the price of premium brands. By offering brands at three different price points, tobacco companies are able to keep price-sensitive smokers in the market and appeal to price-sensitive youth, seriously eroding the impact of high taxes.

The industry has also been largely responsible for discouraging some Canadian governments from following international best practices in tobacco taxation by promoting the spectre of a flourishing contraband market. As a result, the tax incidence on tobacco products in some provinces is lower than the minimum 75% recommendation.

As well, Canadian governments do not regularly ensure that tobacco products are not becoming more affordable, by adjusting tax rates to keep pace with both inflation and income growth. In addition, the taxing of roll-your-own tobacco at a lower per unit rate than manufactured cigarettes provides another lower priced alternative to price-sensitive smokers, similarly thwarting the intent of a high tax policy.

Ensuring both high taxes and high prices for tobacco products is critical to reducing tobacco use. Much more can and must be done to optimize Canada's use of price/tax policies to drive down the prevalence of tobacco use.

References

[1] International Agency for Research on Cancer, *IARC Handbooks of Cancer Prevention: Tobacco Control. Volume 14: Effectiveness of Tax and Price Policies in Tobacco Control*, 2011. http://www.iarc.fr/en/publications/list/handbooks.

[2] FJ Chaloupka, A Yurekli, GT Fong, "Tobacco taxes as a tobacco control strategy," *Tobacco Control* 2012; 21: 172-180.

[3] FJ Chaloupka et al, *Tobacco Control* 2012.

[4] FJ Chaloupka et al, *Tobacco Control* 2012.

[5] *IARC Handbooks of Cancer Prevention: Tobacco Control. Volume 14*.

[6] World Health Organization, *WHO Technical Manual On Tobacco Tax Administration*, 2011.

[7] Non-Smokers' Rights Association, "Tobacco Tax Map and Table," 1 May 2015.

[8] *Guidelines for Implementation of Article 6 of the WHO FCTC : Price and tax measures to reduce the demand for tobacco*, Framework Convention on Tobacco Control.

[9] FCTC Article 6 Guidelines.

[10] E Blecher and C van Walbeek, *An Analysis of Cigarette Affordability*, International Union Against Tuberculosis and Lung Disease, 2008.

[11] Non-Smokers' Rights Association, "Backgrounder on the Canadian Tobacco Market 2015," spring 2015. Source for brand rankings: Euromonitor International 2013.

[12] *ibid.* Source for figures Euromonitor International 2013.

[13] N Nargis, GT Fong, FJ Chaloupka, Q Li, "The choice of discount brand cigarettes: a comparative analysis of International Tobacco Control surveys in Canada and the USA (2002–2005)," *Tobacco Control* 2014; 23: i86–i96.

[14] Non-Smokers' Rights Association, "Discount cigarettes and other cheap tobacco products," 2004. N Nargis et al, *Tobacco Control* 2014.

[15] KM Cummings, A Hyland, E Lewit, et al, "Use of discount cigarettes by smokers in 20 communities in the United States, 1988–1993, *Tobacco Control* 1997; 6: s25–s30.

[16] N Nargis et al, *Tobacco Control* 2014.

[17] See, for example, Canadian Coalition for Action on Tobacco, "A win-win: Enhancing public health and public revenue: Recommendations to increase tobacco taxes," January 2004. http://www.nsra-adnf.ca/cms/file/files/pdf/taxreport2004.pdf.

[18] Federal Budget 2014, *The Road to Balance: Creating Jobs and Opportunities*, 11 February 2014. http://www.budget.gc.ca/2014/docs/plan/pdf/budget2014-eng.pdf.

[19] ST Leatherdale and R Burkhalter, "Roll-your-own tobacco use among Canadian youth: is it a bigger problem than we think?" *BMC Public Health* 2012; 12: 557.

[20] In the 2014 budget, the federal government increased the excise duty on cigarettes for the first time since 2002 to account for inflation over the previous 12 years. The lack of inflationary increases meant that the real rate of the excise duty had deteriorated by 23.7%.

[21] L Joossens, D Merriman, H Ross, M Raw, *How eliminating the global illicit cigarette trade would increase tax revenue and save lives*, 2009.

[22] B Zhang and R Schwartz, Ontario Tobacco Research Unit Special Report, "What Effect Does Tobacco Taxation Have on Contraband? Debunking the Taxation - Contraband Tobacco Myth," February 2015.