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Contraband Tobacco in Canada Tax Policies and Black Market Incentives

by Nachum Gabler and Diane Katz



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Contents

Executive summary / 1

Introduction / 3

The contraband market / 5

Tobacco taxes / 10

Smoking prevalence / 25

The legal status and tax obligations of Aboriginal Canadians / 35

Conclusions / 38

References / 39

About the authors / 63

Acknowledgments / 64

Publishing information / 66

Supporting the Fraser Institute / 67

About the Fraser Institute / 68

Editorial Advisory Board / 69

Executive summary

The growing black market for cigarettes in Canada is becoming increasingly problematic for the country. It is a source of violent crime and economic losses, and it poses a threat to public health. The easy availability of cheap contraband tobacco products also undermines the two primary objectives of federal and provincial excise taxes on tobacco: reducing smoking prevalence and generating government revenue.

The design and implementation of effective policies to control the contraband market requires a thorough understanding of the scope of the problem and the forces that produced it and maintain it. This study provides those elements as a prelude to our analysis of various policy options, which will be published in another study later this year.

Our analysis identifies tobacco excise taxes as an important factor in the development and persistence of the contraband tobacco market. By inflating the cost of lawful cigarettes, such taxes do discourage smoking to some extent, but they also create powerful incentives to buy and sell contraband tobacco products.

This dynamic was recognized by government officials in the mid-1990s, and tobacco excise taxes were reduced in order to weaken incentives to purchase, manufacture, distribute, and smuggle contraband tobacco. But the federal government began to raise tobacco taxes again in the early 2000s. Predictably, the higher taxes stimulated trade in contraband tobacco, resulting in a flourishing black market that now constitutes an estimated 27% share of the overall tobacco market.

Research shows that a 10% increase in the price of tobacco products can reduce lawful cigarette sales by about 3% to 10%, depending on various geographic and demographic factors. To the extent that smokers evade excise taxes by purchasing contraband, the use of excise taxes to discourage smoking and increase government revenues is rendered ineffective.

Higher tobacco excise taxes can also induce criminal activity alongside the contraband market. For example, law enforcement officials in Quebec recently implicated the Hells Angels Motorcycle Club for allegedly using proceeds from the sale of contraband cigarettes to finance sales of narcotics and firearms. In addition, there is evidence that some contraband tobacco profits may be funding terrorist activities. The RCMP, in cooperation with US law enforcement, recently apprehended several individuals who allegedly used the proceeds of tobacco smuggling to fund the activities of Hezbollah, an organization the Canadian and American governments have deemed to be a perpetrator of terrorism. Criminal syndicates have also been connected

with the theft of cigarettes from lawful retailers and with the highjacking of trucks that transport cigarettes between wholesalers and their retail clientele.

Although seizures of contraband tobacco in Canada are at record levels, efforts to curtail the market are hampered by long-standing territorial disputes between the federal and provincial governments and some Aboriginal communities, where substantial contraband trafficking takes place.

Based on the available evidence, we conclude that while tobacco taxes clearly reduce lawful tobacco sales, their impact on smoking prevalence is less clear, especially when the effects of other anti-smoking initiatives are taken into consideration. What is clear is that while several factors have facilitated the exploding contraband tobacco trade in Canada, increases in tobacco excise taxes were the spark that ignited the explosion.

Introduction

The unlawful production, distribution, and sale of cigarettes in Canada appear to have reached unprecedented levels in recent years (RCMP, 2008a), creating challenges for public health officials, law enforcement, tax authorities, policy makers, and the public (Health Canada, 2009; Canada Revenue Agency, 2008, 2009; Canada, *House of Commons Debates*, 20 November 2009; RCMP, 2008a, 2008b; Public Safety Canada, 2008; NSRA, 2008, 2009; Ontario Campaign for Action on Tobacco, 2009). Our research identifies federal and provincial tobacco excise taxes as a primary precipitating factor in the growth of this black market.¹

A comprehensive assessment of this contraband market and the various factors that influence it—including tobacco tax rates, anti-smoking initiatives, and the demographics of smokers—is necessary to counteract the crime and other ill effects that result from unlawful tobacco trafficking. Given the importance of this issue to elected officials, the law enforcement community, the anti-smoking lobby, and the public, it is also necessary to evaluate a range of policy options (Health Canada, 2009; Canada Revenue Agency, 2008, 2009; Canada, *House of Commons Debates*, 20 November 2009; RCMP, 2008a, 2008b; Public Safety Canada, 2008; NSRA, 2008, 2009; Ontario Campaign for Action on Tobacco, 2009).

Anti-smoking advocates and public health officials have long regarded tobacco taxes as an effective way to curb smoking. However, the imposition of taxes to combat smoking, while effective, does have drawbacks, just as taxation in general often provokes unintended consequences. For example, taxes spur black market activity as price-sensitive consumers seek to evade taxation (Mirus and Smith, 1981, 1997; Mirus et al., 1994). Research by Peter S. Spiro (1993, 1997) reveals that a significant number of commercial transactions moved underground following the imposition of the federal goods and services tax (GST) in 1991. Specifically, Spiro found that the total underground economy in Canada grew by upwards of 1.6% to 1.9%, or nearly \$14 billion, between 1991 and 1993, equal to 8% to 11% of Canada's gross domestic product (GDP) in 1993 (Spiro, 1994, 1996).

¹ A black market is broadly defined as economic activity that either escapes a tax levy or goes unreported in conventional economic accounting (Gutmann, 1977; Fiege, 1979, 1994, 1997; Mirus and Smith, 1981, 1997; Mirus et al., 1994; Smith, 1997; Schneider and Enste, 2000; Easton and Veldhuis, 2001). Black market activity encompasses both trade in illicit goods and services and trade that involves otherwise legal commodities but evades taxation (Mirus et al., 1994; Mirus and Smith, 1997; Smith, 1997; Easton and Veldhuis, 2001).

The effects of tax policy on the contraband tobacco trade became particularly apparent in Canada in the late 1980s and early 1990s, when tobacco excise taxes were increased and subsequently rolled back. At the time, organized criminal outfits, along with some within the tobacco industry, recognized the substantial profits that could be made by sidestepping tax and regulatory requirements and selling tobacco products at a discount, i.e., tax-free. Trade in contraband cigarettes became prevalent, displacing lawful cigarette sales. In 1994, the federal government, unable to obstruct the black market trade, resolved to reduce tobacco excise taxes in order to weaken incentives to smuggle and distribute contraband cigarettes (Canada, *House of Commons Debates*, 8 February 1994; Dupuis, 1998). The provinces followed suit shortly thereafter. By the late 1990s, the contraband market had receded substantially.

The respite would not prove permanent, however. In the early 2000s, at the insistence of the anti-smoking lobby, the federal government began raising tobacco taxes again. Mirroring previous experience, the higher taxes stimulated trade in contraband tobacco, resulting in a flourishing black market for tobacco products that persists today.

This report provides an overview of the various federal and provincial tobacco tax policies and anti-smoking initiatives that have been implemented in Canada over the years. The sections that follow describe the contraband market, present data on smoking prevalence and lawful cigarette sales, and analyze the economic impacts of tobacco taxation. The report also reviews the history of the contraband cigarette trade in Canada and governmental efforts to suppress it. A summary of the mechanics of cigarette smuggling is presented, along with a brief examination of the challenges to law enforcement posed by Status Indian rights and Aboriginal territorial autonomy.

It is hoped that this evaluation will stimulate public discussion about the extent of the contraband tobacco problem. A follow-up to this study, to be published later this year, will evaluate various policy options.

The contraband market

Illicit tobacco markets have become increasingly common throughout the world over the past several decades, and Canada is no exception. Physicians for a Smoke-Free Canada estimates that contraband cigarettes comprise 27% of total cigarette sales in Canada (Physicians for a Smoke-Free Canada, 2008), while GFK Research has pegged the market share of contraband tobacco at nearly 33% (CCSA, 2009b).

Some of the black market activity involves simple bootlegging between various jurisdictions—for example, the smuggling of cigarettes into New York State from North Carolina, West Virginia, and other low-tax states (Fleenor, 1998, 2003). Other operations are more complex. In England, for example, the trade in contraband tobacco was initially dominated by cross-border shopping and “returning exports,”² but now includes large shipments of foreign and counterfeit cigarettes smuggled into the country by criminal syndicates using freight containers (Her Majesty’s Treasury, 2006; Her Majesty’s Revenue and Customs, 2008). The contraband market in Australia, on the other hand, is primarily a domestic enterprise, with raw tobacco leaf being diverted into the underground market by domestic growers (Auditor-General of Australia, 2002; Geis, 2005).

Contraband tobacco is defined as any product that violates federal and provincial regulatory statutes pertaining to taxes and cigarette manufacturing and distribution. Contraband tobacco is primarily composed of cigarettes and loose tobacco (Criminal Intelligence Service Canada, 2005; RCMP, 2008a). The RCMP and Criminal Intelligence Service Canada have identified five primary sources of contraband tobacco:

- Cigarettes unlawfully manufactured on Aboriginal territories in the United States that border Canada (primarily the Akwesasne reserve).
- Cigarettes lawfully manufactured in the United States, purchased primarily in relatively low-tax states (such as North Carolina and West Virginia), and smuggled into Canada.
- Tobacco products manufactured under counterfeit brand names (primarily in China).
- Tobacco products designated for sale on Native reserves (and thus exempt from federal and provincial excise taxes) that are diverted to the black market.

2 “Returning exports” entails legally exporting domestically manufactured cigarettes across a border to avoid domestic tobacco taxes, and then smuggling the cigarettes back into the market of origin where they can be sold at a discount (i.e., tax-free).

- Tobacco products stolen from convenience stores or cargo trucks carrying tobacco shipments (Criminal Intelligence Service Canada, 2005; RCMP, 2008a).

There are three primary retail channels for contraband tobacco:

- “Above-ground” retailers who sell untaxed cigarettes “under the counter.”
- Underground dealers who sell bags of cigarettes—typically in units of 200—in public venues such as bingo parlors, billiard halls, coffee shops, and on the street.
- Smoke shops on Native reserves that sell untaxed tobacco products to non-Natives (RCMP, 2008a, 2008b).

The contraband tobacco trade has posed a serious challenge to Canadian policy makers for more than two decades. In the mid-1980s, RCMP detachments in Ontario and Quebec noticed an expanding trade in the black market for cigarettes. By the early 1990s, the trade in contraband cigarettes was flourishing as tobacco excise taxes rose steadily (Cunningham, 1996). Increasing the cost of tobacco products to deter smoking created a powerful incentive for people to sell untaxed cigarettes on the black market. Similarly, tobacco excise tax hikes in the mid-1980s and early 1990s made contraband cigarettes increasingly appealing to price-sensitive smokers.

The challenges faced by law enforcement became particularly evident in the late 1980s with the advent of a smuggling scheme known as “returning exports.” This smuggling operation entailed legally exporting domestically manufactured cigarettes across a jurisdictional border to avoid the domestic tobacco excise tax, and then smuggling the cigarettes back into the market of origin where they could be sold at a discount (i.e., tax-free).

Three tobacco companies—RJR MacDonald, Imperial Tobacco Canada, and Rothmans Benson & Hedges Inc.—were accused by the Canadian government of being complicit in the returning exports scheme (Canada, *House of Commons Debates*, 8 February 1994; CRA, 1999; Marsden, 1999, Dec. 18). The companies allegedly benefited from a parallel black market because flooding the market with cheap contraband cigarettes lowered average cigarette prices (for both lawful and unlawful cigarettes) and increased sales. Another alleged benefit for the tobacco companies was the undermining of the federal and provincial governments’ ability to effectively enforce tobacco excise tax regimes (Jha and Chaloupka, 1999; Joossens et al., 2000).

The Attorney General of Canada filed a lawsuit in the United States District Court of New York against the Canadian Tobacco Manufacturing Council, RJR MacDonald, and several of its subsidiaries for engaging in smuggling (Case Summary, *Attorney General of Canada v. R.J. Reynolds Tobacco Holdings, Inc., et al.*; Complaint, *Attorney General of Canada v. R.J. Reynolds Tobacco Holdings, Inc., et al.*; CRA, 1999; Dickson-Gilmore, 2003). Eventually, an affiliate of RJR MacDonald, Northern Brands Inc., pled guilty and paid

\$15 million in fines and forfeitures³ (United States Department of Justice, 1998; Drew, 1998, Dec. 23). In 2008, Imperial Tobacco Canada and Rothmans, Benson & Hedges, Inc. were convicted of violating the Excise Tax Act for facilitating contraband tobacco smuggling and distribution during the late 1980s and early 1990s (Canada Revenue Agency, 2008a, 2008b; NSRA, 2009). A plea bargain agreement called for the companies to pay \$1.15 billion in fines and civil settlements to the federal and provincial governments.

Much of the exported cigarettes returning to Canada were smuggled through Aboriginal territories that straddle the Canada-US border. As such, physically obstructing the contraband traffic proved nearly impossible, prompting the federal government to re-evaluate its tobacco tax policy (Canada, *House of Commons Debates*, 8 February 1994; CRA, 1994; Dupuis, 1998). In February 1994, the federal government slashed tobacco excise taxes and offered to match any provincial tax cuts up to \$5 per carton (Canada, *House of Commons Debates*, 8 February 1994; CRA, 1994; Dupuis, 1998). By reducing the price of cigarettes, the government intended to reduce the profitability of contraband tobacco and thus eliminate the crime associated with the black market.⁴ A marked decline in the volume of contraband seizures following the tax rollback suggests that the repeal reduced contraband trafficking until the early 2000s (Cunningham, 1996; RCMP, 2010b).

Observing the returning exports phenomenon, several analysts posited that the volume of cigarette exports would be useful in calculating the size of Canada's contraband market. In other words, the volume of cigarettes exported to the United States—and intended for re-importation into Canada—could be used as a proxy for the volume of contraband cigarettes available on the black market. Statistics Canada (1994a) and Galbraith and Kaiserman (1997) accounted for returning exports in their analyses. Statistics Canada (1994a) calculated that Canada's contraband tobacco market increased from 1% of total market share in 1987 to about 31% by the end of 1993, coinciding with increased tobacco taxation.

After subsiding during the late 1990s and early 2000s, the underground market for cigarettes has experienced a resurgence (Criminal Intelligence Service Canada, 2005; Sweeting et al., 2009). The greater volume of contraband sales coincides with the reinstatement of relatively high tobacco taxes (RCMP, 2008a; Canada, Department of Finance, 2009). Thus, the smuggling

3 The tobacco industry later entered into informal memorandums of understanding with the federal government, promising to ensure more effective monitoring and control of their distribution channels (Canada, 1992; Cunningham, 1996).

4 In 1992, the federal government attempted to obstruct returning exports by imposing an export tax of \$8 per carton. However, the initiative prompted strong opposition from the tobacco industry, and the export tax was repealed shortly thereafter (Canada, 1992; Physicians for a Smoke-Free Canada, 2000).

and trafficking of contraband cigarettes is an unintended consequence of Canadian tax policy.

Organized criminal networks have come to dominate this black market (Criminal Intelligence Service Canada, 2005; RCMP, 2008a, 2008b). Smaller-scale operations have either consolidated or been driven from the trade by larger traffickers. Today, different components of the supply chain tend to be controlled by particular criminal organizations. For example, some Aboriginals, primarily in south-central Ontario, dominate the manufacture and smuggling of contraband cigarettes. Law enforcement has recently linked motorcycle gangs and about 100 other organized criminal associations to the distribution of contraband cigarettes. These crime syndicates have also been involved in drugs and weapons smuggling, as well as armed robbery, assault, and homicide (Criminal Intelligence Service Canada, 2005; RCMP, 2008a, 2008b).

Law enforcement officials in Quebec recently implicated the Hells Angels Motorcycle Club in the contraband trade. Several members and their affiliates allegedly used proceeds from the sale of contraband cigarettes to finance the sale of narcotics and firearms, while using violence and intimidation to secure their share of the contraband tobacco market (Cherry and White, 2009, Mar. 12; Ravensbergen and Harrold, 2009, May 19; Marsden, 2009, Apr. 28; Center for Public Integrity, 2008).

Criminal syndicates have also been connected to the theft of cigarettes from lawful retailers and the highjacking of trucks that transport cigarettes between wholesalers and their retail clientele (RCMP, 2008a). The links between organized crime and contraband tobacco were explicitly acknowledged by the federal Ministry of Public Safety in 2008 when it launched a special ministry task force to combat the contraband tobacco trade (Public Safety Canada, 2008).

In addition, there is evidence that some contraband tobacco profits are funding terrorist activities. The RCMP, in cooperation with US law enforcement, recently apprehended several individuals who allegedly used the proceeds of tobacco smuggling to fund the activities of Hezbollah, an organization the Canadian and American governments have deemed to be a perpetrator of terrorism (Horwitz, 2004, June 8; RCMP, 2008a; Barrera and Branswell, 2009, Oct. 27; White, 2009, Jan. 12).

The RCMP and the Non-Smokers' Rights Association (NSRA) have asserted that much of Canada's contraband woes emanate from Ontario and Quebec, where problems related to the manufacturing, smuggling, and consumption of contraband tobacco are particularly acute. The RCMP and the NSRA further contend that more than half of all contraband cigarettes distributed in Canada are smuggled through Aboriginal territories in south-central Ontario and Quebec (RCMP, 2008a; Sweeting et al., 2009; NSRA, 2009).

Cornwall, Ontario, is "ground zero" in the contraband trade. It is situated on the banks of the St. Lawrence River, across the water from New York

State and just a few kilometres from the Quebec border. Cornwall is also close to the Akwesasne reserve, which straddles the border between Ontario, New York State, and Quebec, and the Tyendinaga reserve, near Belleville, Ontario. These reserves have been identified as key points of contraband smuggling into Canada (Luk et al., 2007; RCMP, 2008a, 2009a, b, c, d). Contraband distributors are also active on the Six Nations reserve near Brantford, Ontario, and the Kahnawake reserve, west of Montreal. Of these four key reservations, the Akwesasne reserve has been identified by RCMP as the most active conduit for cigarettes smuggled into Canada.

The RCMP detachment in Cornwall is at the forefront of law enforcement's efforts to curtail cigarette smuggling. With 35 officers, the Cornwall RCMP is one of the larger attachments in Ontario.⁵ Since 2002, the Cornwall detachment has seized approximately half of all contraband tobacco products confiscated across Canada (RCMP, 2008a). In May 2009, the detachment made its largest seizure to date: 65,700 cartons of contraband cigarettes discovered outside of a residence in Long Sault, Ontario (13.5km west of Cornwall) (RCMP, 2009d; *Ottawa Citizen*, 2009, May 4).

5 The Toronto detachment is the largest in Ontario, with more than 600 officers, followed by Windsor, with about 50 officers. The Sault Ste. Marie detachment is the smallest in Ontario, employing just nine officers (RCMP, 2010a).

Tobacco taxes

Taxes serve a multitude of purposes—for example, funding universal education, national defence, and welfare services, and financing interest payments on accumulated national debt (Horry and Walker, 1994). Income taxes are the primary source of revenue for both the federal and provincial governments, while municipal governments get most of their revenues through intergovernmental transfers from federal and provincial coffers and, to a lesser extent, from property taxes (Veldhuis and Walker, 2006). All levels of government can impose excise taxes to curtail the use of products whose consumption has been deemed undesirable⁶ (Hillman, 2003).

The detrimental health effects of tobacco are routinely cited as justification for increasing tobacco excise taxes to deter price-sensitive smokers and improve public health (Chaloupka et al., 2000; Chaloupka et al., 2002). Numerous studies over the past several decades have exposed the health risks associated with tobacco consumption, which include lung cancer, emphysema, and heart disease. Smoking has been identified as the leading cause of preventable deaths in Canada (Physicians for a Smoke-Free Canada, 2003a).⁷

Previous research has shown that excise taxes increase the real price of tobacco products (Poterba, 1989; Evans et al., 1999; Jha and Chaloupka, 1999; Chaloupka et al., 2000), and that higher taxes reduce cigarette sales.⁸ Proponents of tobacco taxation contend that higher excise taxes are particularly effective at curbing smoking among young people, due to their greater sensitivity to changes in price.⁹

Another common justification for raising tobacco taxes is the potential revenue that can be generated for government (Hillman, 2003; Chaloupka et al., 2000; Chaloupka et al., 2002). A long-standing principle in public finance is that governments should tax goods and services that are relatively

6 For example, Toronto recently imposed a tax on plastic shopping bags to discourage the use of such bags (City of Toronto, 2009).

7 One study found that the average number of deaths attributable to smoking in Canada amounts to more than 45,000 annually (Ellison et al., 1995; Dunsmuir et al., 1998).

8 Such research includes Jha and Chaloupka, 1999; US Dept. of Health and Human Services, 2000; Lanoie and Leclair, 1998; Lewit and Coate, 1982; Chaloupka and Warner, 2000; Hyland et al., 2005; Chaloupka et al., 2000; Jha and Chaloupka, 2000; Chaloupka et al., 2002; Gruber and Koszegi, 2002; and American Lung Association, 2010.

9 Such research includes Lewit et al., 1981; Lewit and Coate, 1982; Lewit et al., 1997; Glied, 2003; Farrelly and Bray, 1998; Chaloupka and Grossman, 1996; Chaloupka and Wechsler, 1997; Chaloupka et al., 1997; Chaloupka et al., 2000; Gruber, 2001; Grossman and Chaloupka, 1997; and Physicians for a Smoke-Free Canada, 2003a.

unresponsive to changes in price; that is, goods for which a change in price has a limited effect on demand should be subjected to higher taxes in order to maximize the amount of revenue collected.¹⁰ Researchers have consistently found that demand for tobacco products is relatively unresponsive to changes in price (Chaloupka et al., 2000). Thus, tobacco taxes are appealing because they have the potential to generate significant tax revenues.

Another argument in support of tobacco taxes is the economic efficiency that can be gained by taxing goods that generate “negative externalities.”¹¹ Economic theory holds that when the parties to a transaction do not bear all of the costs of the transaction, more such transactions take place than if the parties incurred all of the costs associated with their transaction.¹² The purpose of a tax on goods that generate negative externalities is to re-impose all of the costs on the parties to an exchange.

The extent to which tobacco consumption generates negative externalities remains a contentious issue. However, the costs smoking imposes on health care systems and other publicly funded programs are commonly cited as significant negative externalities. Nevertheless, analysts remain divided over how to calculate precisely the magnitude of the costs associated with these negative externalities (Chaloupka et al., 2000).

Opponents of tobacco taxes stress the regressivity¹³ of tobacco taxation, which is generally considered to be an undesirable characteristic for a tax. Numerous studies have documented the regressivity of tobacco taxes (Poterba, 1989; Fullerton and Rogers, 1993; Evans et al., 1999; NCPA, 2007). A recent study by Gospodinov and Irvine (2009) found that Canadian tobacco taxes impose a disproportionately large burden on low income populations. On the other hand, research has also shown that there is an inverse relationship between sensitivity to changes in cigarette prices and socio-economic status—that is, tobacco taxation appears to have the largest impact in terms of reducing tobacco use among low income smokers (Chaloupka, 1991; Townsend et al., 1994; United States Center for Disease Control and Prevention, 1998; Gruber et al., 2003). Therefore, the regressivity of tobacco taxation is ameliorated somewhat by the relatively large reductions in tobacco

10 This principle has come to be known as the Ramsey Rule for consumption taxes as it was first described by Frank P. Ramsey (1927).

11 “Negative externalities” occur when a market transaction has a negative effect (i.e., imposes costs) on a third party that is not involved in the transaction or on society in general.

12 The argument for taxing goods that generate negative externalities was first articulated by Pigou (1962). This kind of taxation is known as “Pigouvian taxation.”

13 Taxes are considered to be regressive if the incidence of taxation falls disproportionately on lower socio-economic groups.

use among low income smokers because of the relatively high price sensitivity of these smokers (Chaloupka et al., 2002).

Tobacco taxes in Canada

During the mid-1980s, Canadian lawmakers began to see tobacco taxation as an important source of revenue and a means to discourage smoking. The federal excise tax on a carton of cigarettes was raised from \$6.01 per carton to \$9.18 per carton (in real 2002 Canadian dollars), an increase of 52.8%, between April and June 1985. An increase in March 1986 raised the federal excise tax to \$9.35 per carton, and in May 1989, the tax was raised to \$13.06 per carton. Between 1985 and early 1991, the federal excise tax per carton of cigarettes increased by 107.3%.

The federal excise tax was raised again on February 27, 1991, to \$19.14 per carton (in real 2002 Canadian dollars). This rate remained in effect until October 1994, when it was reduced to \$7.29 per carton (Canada, Department of Finance, 2009).

Taxes stayed relatively low until 1999, by which time incremental increases to offset inflation had raised the federal excise tax on cigarettes to \$8.77 per carton (in real 2002 Canadian dollars). By the end of 1999, the federal excise tax had reached \$9.41 per carton (Canada, Department of Finance, 2009). By 2001, a series of tax increases reflecting a renewed attempt to discourage smoking across Canada had pushed cigarette taxes above \$10 per carton.

In April 2001, the federal government introduced the Federal Tobacco Control Strategy (FTCS), which delineated five anti-smoking objectives. To accomplish these objectives, the strategy was organized into four strategic components, shown in table 1. A total of 15 recommendations and directives were prescribed, including the provision of federal resources to municipalities to implement anti-smoking laws and to counter information disseminated by cigarette manufacturers. The strategy also proposed higher tobacco taxes to reduce smoking prevalence in Canada to 20% of the population, and to reduce the number of cigarettes sold in Canada by 30% between 2001 and 2011. The first of the two goals—reduced smoking prevalence—was achieved in 2004 (Health Canada, 2010b), while the second goal ostensibly was achieved in 2007 when lawful cigarette sales fell to 144 million cartons.

The first tax hike introduced under the Federal Tobacco Control Strategy was enacted in April 2001, raising the excise tax to \$10.65 per carton. A month later, the federal excise tax was raised to \$10.99 per carton, and by the end of 2001, it reached \$12.62. In June 2002, it was raised to \$13.86 per carton and, a month later, to \$15.85 per carton.

Since 2002, the federal government has continued to implement small increases in the nominal level of tobacco taxation to offset inflation and thus

Table 1: Outline of the Federal Tobacco Control Strategy (FTCS)

Five objectives of the FTCS (2001–2011)	Four strategic components of the FTCS
1. Reduce smoking prevalence from 25% to 20%.	1. Protection
2. Reduce the number of cigarettes sold by 30%.	2. Prevention
3. Increase retailer compliance regarding youth access to tobacco from 69% to 80%.	3. Cessation
4. Reduce the number of people exposed to environmental tobacco smoke in closed public spaces.	4. Harm Reduction
5. Explore how to mandate changes to tobacco products to reduce health hazards.	

Source: Health Canada, 2002a.

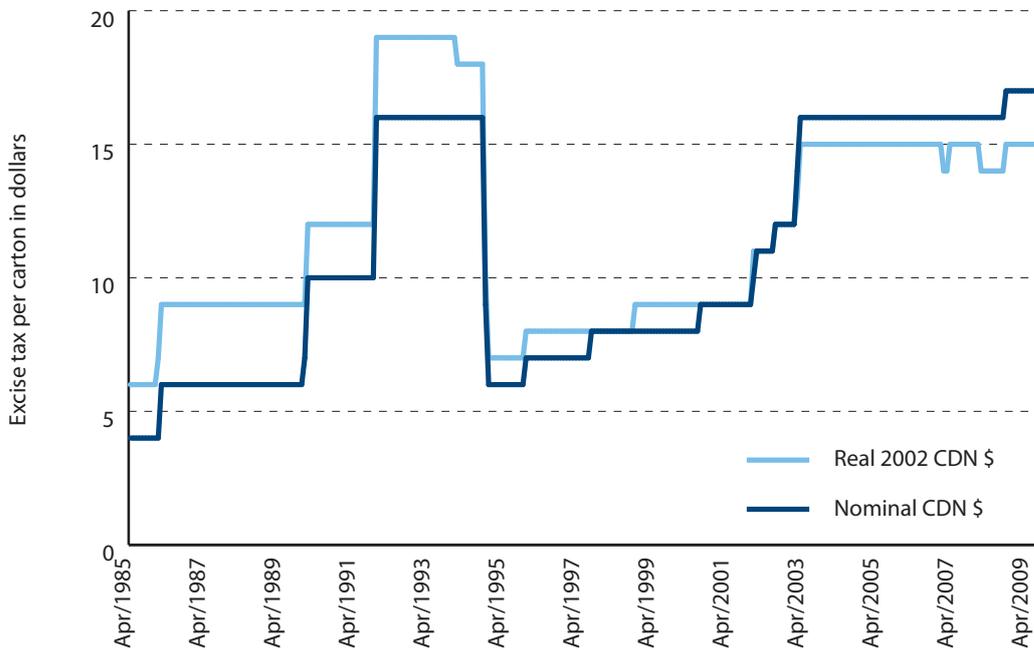
maintain the real level of federal excise taxes on cigarettes at about \$15 per carton (in real 2002 Canadian dollars) (Canada, Department of Finance, 2009). The levels of nominal and real federal excise taxes per carton between 1985 and 2009 are shown in figure 1.

The provinces, following the lead of the federal government, also increased excise taxes on cigarettes. However, there was considerable inter-province variation in the magnitude of the increases. The largest increase was implemented in Ontario, where taxes were raised from \$9.10 per carton to \$21.65 per carton (in real 2002 Canadian dollars) between 2001 and 2008, an increase of 137.9% (Ontario, Ministry of Finance, 2009a). The smallest increase was implemented in New Brunswick, where the tax rose from \$14.83 per carton to \$20.60 per carton (in real 2002 Canadian dollars) over the same period, an increase of 38.9% (New Brunswick, Department of Finance, 2009a). The tax increases and percentage change in tax rates for each province are presented in figures 2 and 3.

Taxes and the price of cigarettes

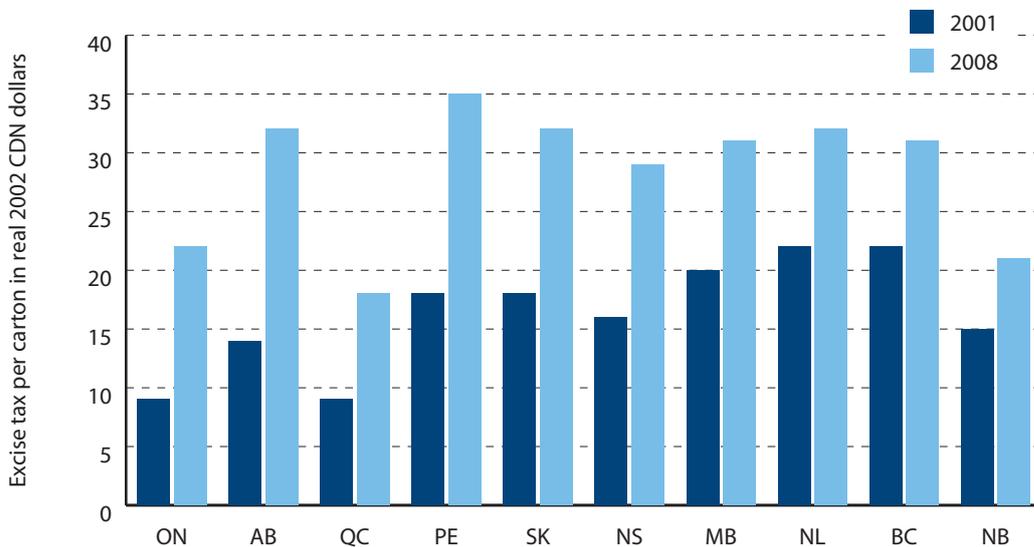
The retail price of tobacco products is comprised of several components, including manufacturing and distribution costs, profit margins earned by producers, and excise taxes levied by federal and provincial governments. As chronicled above, excise taxes have been used to inflate the price of cigarettes above the price that would otherwise prevail in an unrestricted market (Poterba, 1989; Evans et al., 1999; Jha and Chaloupka, 1999; Chaloupka et al., 2000). Indeed, changes in cigarette prices have significantly outpaced changes in prices generally in the Canadian economy (Statistics Canada, 2010a, 2010b).

Figure 1: Federal tobacco excise tax rates per carton, 1985 to 2009



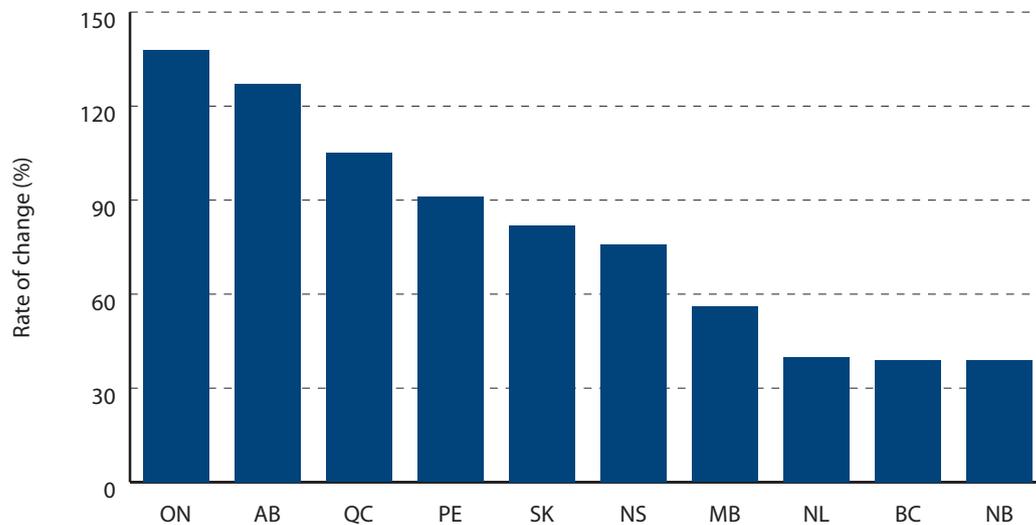
Source: Canada, Department of Finance, 2009.

Figure 2: Provincial tobacco excise tax rates per carton, 2001 and 2008



Sources: Ontario, Ministry of Finance, 2009a; Manitoba, Ministry of Finance, 2009a; Quebec, Ministry of Finance, 2009a; British Columbia, Ministry of Finance, 2009a; Alberta, Ministry of Finance and Enterprise, 2009a; Saskatchewan, Ministry of Finance, 2009a; Newfoundland and Labrador, Department of Finance, 2009a; Nova Scotia, Department of Finance, 2009a; New Brunswick, Department of Finance, 2009a; Prince Edward Island, Department of the Provincial Treasury, 2009a.

Figure 3: Percentage change in provincial tobacco excise tax rates per carton, between 2001 and 2008

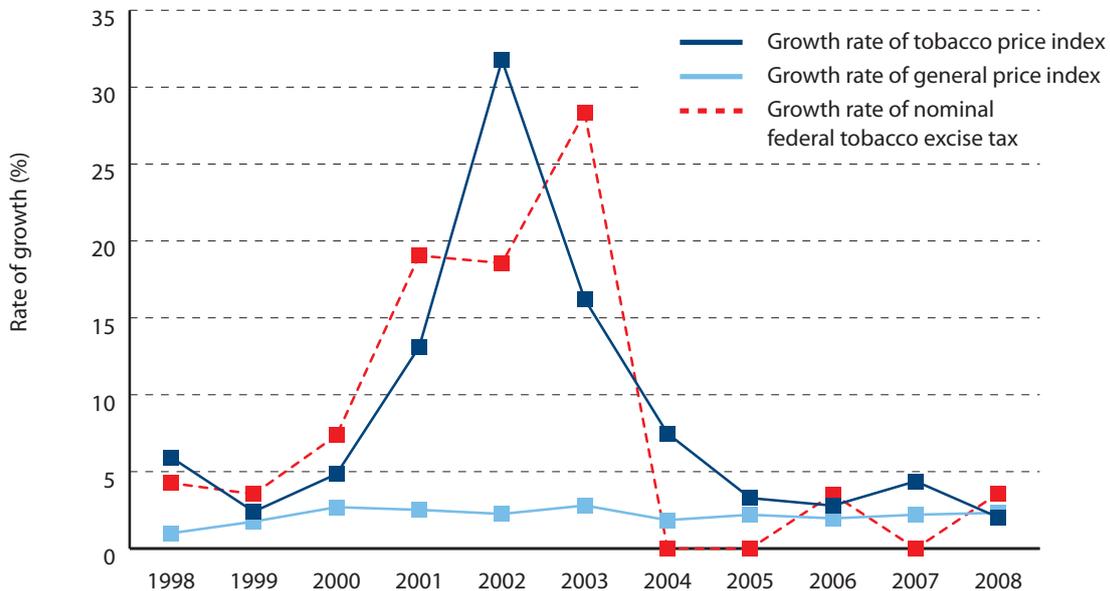


Sources: Ontario, Ministry of Finance, 2009a; Manitoba, Ministry of Finance, 2009a; Quebec, Ministry of Finance, 2009a; British Columbia, Ministry of Finance, 2009a; Alberta, Ministry of Finance and Enterprise, 2009a; Saskatchewan, Ministry of Finance, 2009a; Newfoundland and Labrador, Department of Finance, 2009a; Nova Scotia, Department of Finance, 2009a; New Brunswick, Department of Finance, 2009a; Prince Edward Island, Department of the Provincial Treasury, 2009a.

There are two possible reasons why the retail price of tobacco has been increasing faster than the retail prices of other products. The first possibility is that the price of inputs for production and the margin of profit earned by producers have grown at a faster pace for tobacco than for other products. This scenario is unlikely because the inputs used in tobacco production are fairly generic and can easily be directed towards alternate uses. Tobacco production requires relatively unskilled labour, relatively primitive production equipment, and, of course, raw tobacco leaf, the price of which is determined by market forces. Similarly, it is unlikely that any growth in producer profit margins has significantly increased tobacco retail prices. The tobacco industry has maintained fairly steady profit margins despite being subjected to relentless litigation, fines, and other financial penalties (Physicians for a Smoke-Free Canada, 2003b; Alberta Alcohol and Drug Abuse Commission, 2006). Therefore, there is no reason to believe that producer profit margins are the primary cause of higher tobacco retail prices.

The second possibility is that the retail price of tobacco products has been inflated by the levying of excise taxes. This scenario is more likely. Because excise taxes make up such a large proportion of tobacco retail prices, policy makers and tax authorities can influence the retail prices of tobacco products. Thus, along with excise tax hikes, increases in the retail prices of

Figure 4: Growth rates for federal tobacco excise taxes, retail tobacco prices, and prices generally across the Canadian economy, 1998 to 2008



Sources: Statistics Canada, 2010a, 2010b; Canada, Department of Finance, 2009.

tobacco products have exceeded the rate of general price increases across the Canadian economy.

Figure 4 compares growth rates for federal tobacco excise taxes, retail tobacco prices, and prices generally across the Canadian economy.¹⁴ The fluctuations in the retail price of cigarettes are nearly identical to the fluctuations in the federal tobacco excise tax rate (Statistics Canada, 2010a; Canada, Department of Finance, 2009). In contrast, overall prices have held fairly constant, and increases in prices overall have generally been lower than increases in cigarette prices (Statistics Canada, 2010a, 2010b).

Taxes and contraband seizures

Following the reduction of tobacco taxes in 1994, seizures of contraband cigarettes declined steadily from a record-setting 456,333 cartons nationwide in 1994 to 222,228 cartons in 1997. By 2001, seven years after the excise tax

¹⁴ The index used for the general price levels is the Canadian Consumer Price Index (CPI); the index used for retail tobacco prices is the tobacco product component of the CPI.

rollback, the number of contraband cartons seized by the RCMP had dropped to just 28,966 nationwide.

The recent resurgence of the contraband tobacco trade has forced the RCMP and other law enforcement agencies to step up interdiction efforts. For example, the RCMP confiscated 39,773 cartons of cigarettes in 2002, 119,968 cartons in 2004, and a whopping 965,688 cartons in 2008, a new annual seizure record (RCMP, 2010b).

It is difficult to determine whether the increase in contraband seizures can be attributed to increased black market activity or to increased interdiction efforts by law enforcement—or both. As a result, contraband seizures are not a perfect reflection of the size of Canada's black market for tobacco. However, it seems likely that the increase in tobacco seizures is indicative, to some extent, of increased contraband trade.

As figure 5 shows, fluctuations in contraband tobacco seizures appear to follow changes in the rate of tobacco taxation within a span of about three years. There are two possible explanations for this slightly lagged effect: (1) it takes time for black market entrepreneurs to enter the trade, e.g., to secure sources of supply and establish a distribution network; and/or (2) it takes law enforcement time to catch up with the expansion in trade, e.g., to conduct surveillance, gather intelligence, and build cases.

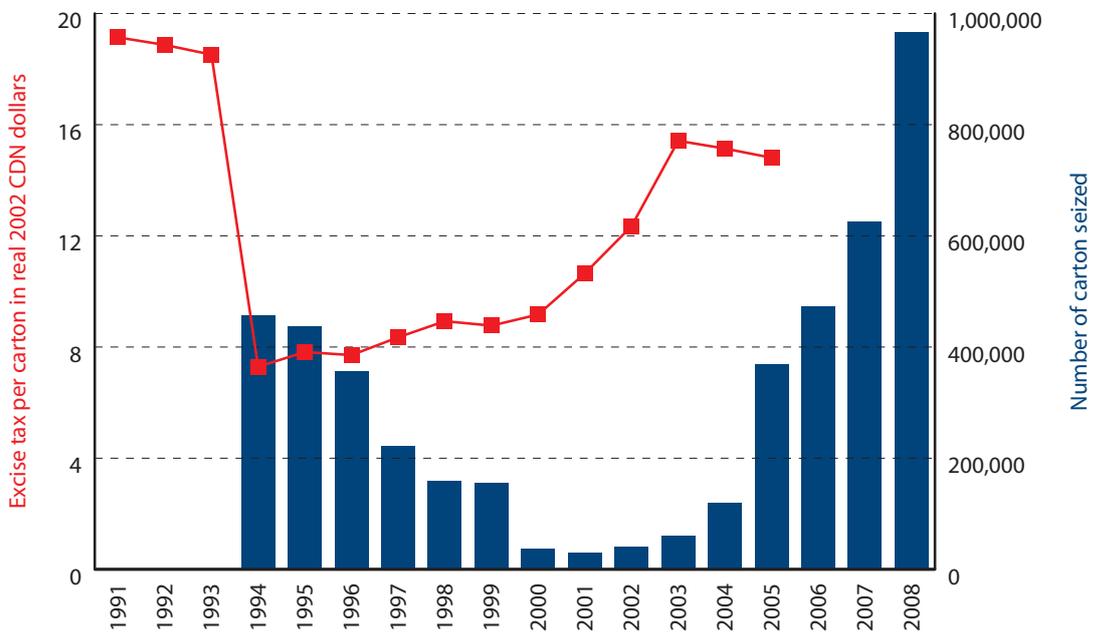
Tobacco tax revenues

Between 2001 and 2008, federal tobacco taxes generated nearly \$204 billion in revenue (in real 2002 Canadian dollars). However, federal tobacco tax revenue peaked in 2005 and has been declining ever since (figure 6). Between 2005 and 2008, federal tobacco tax revenues fell by nearly a third, shrinking from \$31.1 billion to \$21.1 billion (in real 2002 Canadian dollars) (Statistics Canada, 2010c).

A similar pattern is evident in most of the provinces (figures 7 and 8). Tobacco tax revenues for Ontario, Quebec, Manitoba, Nova Scotia, New Brunswick, and Prince Edward Island began to climb around 2000/2001, peaked in 2004/2005, and have since declined. Similarly, tobacco tax revenues for British Columbia and Newfoundland and Labrador peaked in 2005/2006 and have fallen steadily ever since. Alberta and Saskatchewan seem to be the only exceptions to the trend; after an initial climb, tobacco tax revenues have remained relatively stable in both provinces since 2002/2003.

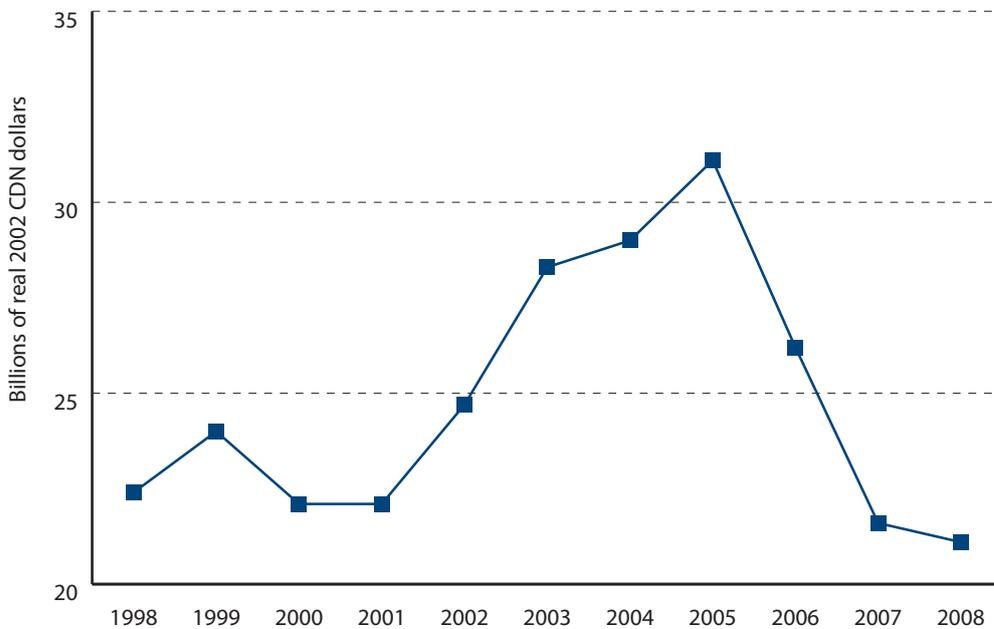
Due to a combination of population size and other demographics, Ontario, Quebec, British Columbia, and Alberta have consistently generated the highest annual revenues from tobacco taxes. Between 1998 and 2008, annual tobacco tax revenues for each of these provinces usually exceeded \$400 million (in real 2002 Canadian dollars) (figure 7).

Figure 5: Federal tobacco excise tax rate per carton, 1991 to 2005; and cigarette carton seizures across Canada, 1994 to 2008



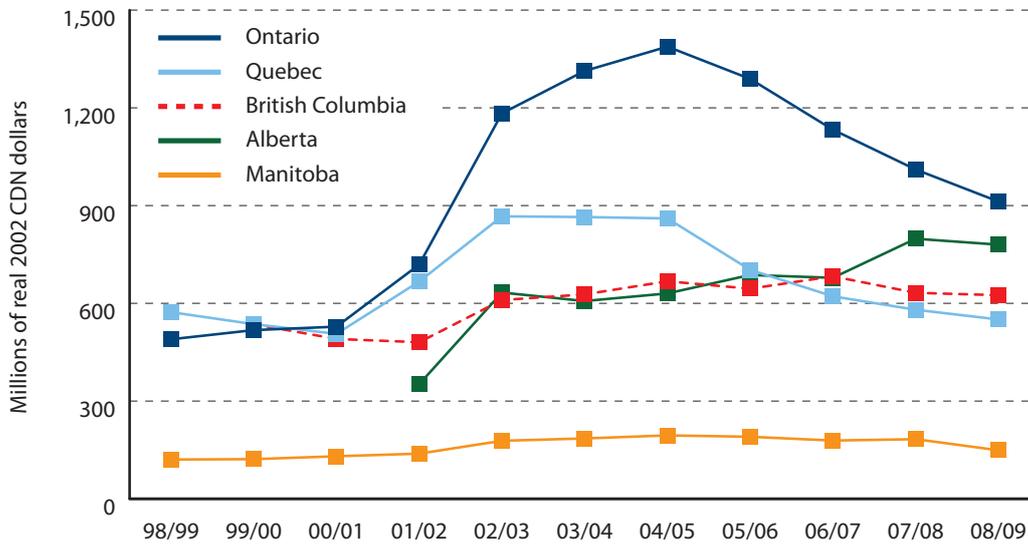
Sources: RCMP, 2010b; Canada, Department of Finance, 2009.

Figure 6: Federal tobacco tax revenue, 1998 to 2008



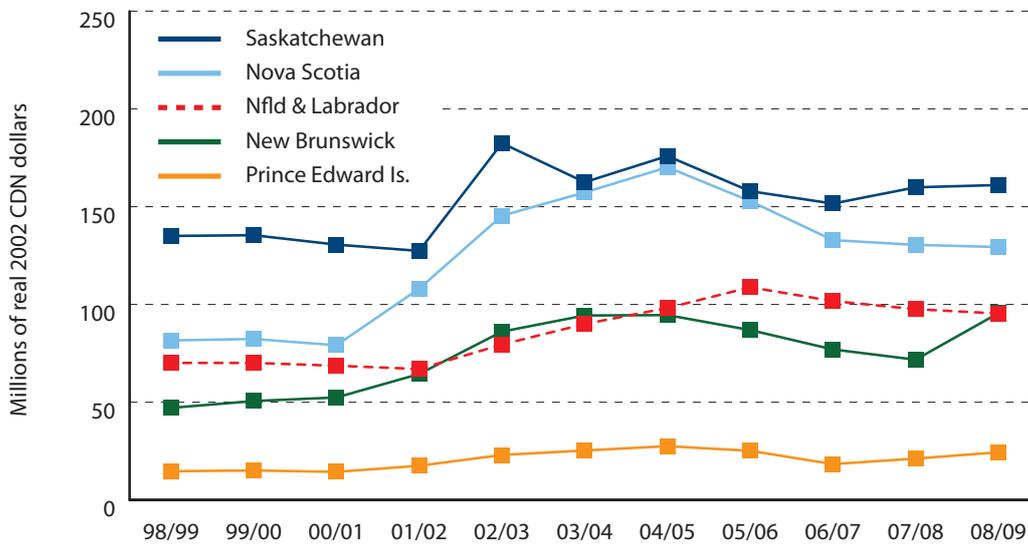
Source: Statistics Canada, 2010c.

Figure 7: Tobacco tax revenue in Ontario, Quebec, British Columbia, Alberta, and Manitoba, 1998/1999 to 2008/2009



Sources: Ontario, Ministry of Finance, 1999-2009b; Quebec, Ministry of Finance, 1999-2009b; British Columbia, Ministry of Finance, 1999-2009b; Alberta, Ministry of Finance and Enterprise, 2001-2009b; Manitoba, Ministry of Finance, 1999-2009b.

Figure 8: Tobacco tax revenue in Saskatchewan, Nova Scotia, Newfoundland and Labrador, New Brunswick, and Prince Edward Island, 1998/1999 to 2008/2009



Sources: Saskatchewan, Ministry of Finance, 1999-2009b; Nova Scotia, Department of Finance, 1999-2009b; Newfoundland and Labrador, Department of Finance, 1999-2009b; New Brunswick, Department of Finance, 1999-2009b; Prince Edward Island, Department of the Provincial Treasury, 1999-2009b.

The decline in tobacco tax revenues after 2005 reflects, in part, a reduction in lawful sales of cigarettes (i.e., a shrinking tax base prompted by the higher taxes), just as anti-smoking advocates envisioned. As mentioned earlier, reducing tobacco use has long been the primary justification for higher tobacco taxes (Health Canada, 2002a, 2002b, 2006a, 2006b; US Dept. of Health and Human Services, 2000; NSRA, 2007, 2008). The decline in revenue is an unavoidable trade-off resulting from the competing objectives of tobacco taxation. If tobacco taxes successfully discourage smoking, then sales and therefore tax revenue will decline. Thus, the dual goals of increased tax revenues and reduced smoking prevalence are mutually exclusive (Williams and Christ, 2009).

There is also reason to suspect that tobacco tax revenues dwindled after 2005 because of unlawful cigarette sales. Specifically, it is likely that reductions in lawful cigarette sales in combination with the expansion of the contraband market lowered excise tax receipts after 2005. Unlike the decline in cigarette sales, however, the growth of the black market for cigarettes is not at all beneficial. To the extent that smokers evade excise taxes by purchasing contraband, the use of excise taxes to discourage smoking is rendered ineffective. As such, the market for contraband cigarettes simultaneously undermines both of the major policy objectives of tobacco taxation: additional tax revenue and reduced smoking.

Lawful cigarette sales across Canada

The imposition of higher tobacco taxes has a significant impact on the lawful sale of cigarettes across Canada. Between 1983 and 1990, prior to any substantial tax increases, lawful cigarette sales fell by 32%, from 13.12 cartons per capita to 8.38 cartons per capita—an average annual rate of decline of 4%. Coinciding with increased hikes in tobacco excise taxes, cigarette sales began to decrease more rapidly in 1991. In 1991 alone, the number of cigarette cartons sold across Canada fell by 16.7% to 6.98 cartons per capita. Sales declined by another 11.1% in 1992 to 6.2 cartons per capita, and by 14.7% in 1993 to 5.29 cartons per capita. As such, lawful sales fell by an average of 9.2% per year between 1991 and 1993—a rate that is 5 percentage points higher than the annual rate of decline that prevailed during the lower tax period of 1983 to 1990.

Coinciding with the rollback of tobacco taxes in 1994, cigarette sales across Canada soared by 50% to 7.92 cartons per capita. Lawful cigarette sales continued to increase until 1996, when the number of cartons sold reached 7.99 cartons per capita, before reverting back to a consistent annual decline (Health Canada, 2010a). Between 1997 and 2000, cigarette sales declined from 7.63 cartons per capita to 7.06 cartons, a modest 7.3% drop over the period.

Tobacco tax hikes in 2001 again coincided with an accelerated decline in lawful cigarette sales, from an average rate of 1.8% per year between 1997 and 2000 to an average rate of 4.8% per year between 2001 and 2008. In 2002, cigarette sales fell by 11.5% to 5.99 cartons per capita, and continued to decline over the next few years, falling to 4.1 cartons per capita by 2008—a 31% reduction in lawful cigarette sales over seven years. Figure 9 illustrates the annual changes in lawful cigarette sales across Canada between 1980 and 2008 (Health Canada, 2010a).

Lawful cigarette sales by province

Cigarette sales in Ontario and Quebec drive the national trends.^{15, 16} Between 1983 and 1990, lawful cigarette sales in Ontario fell by 26%, from 11.71 cartons per capita to 8.66 cartons per capita; cigarette sales in Quebec fell by 34.2%, from 13.27 cartons per capita to 8.73 cartons per capita. The average annual rate of decline in cigarette cartons sold over this period was 3.25% in Ontario and 4.28% in Quebec (Health Canada, 2010a).

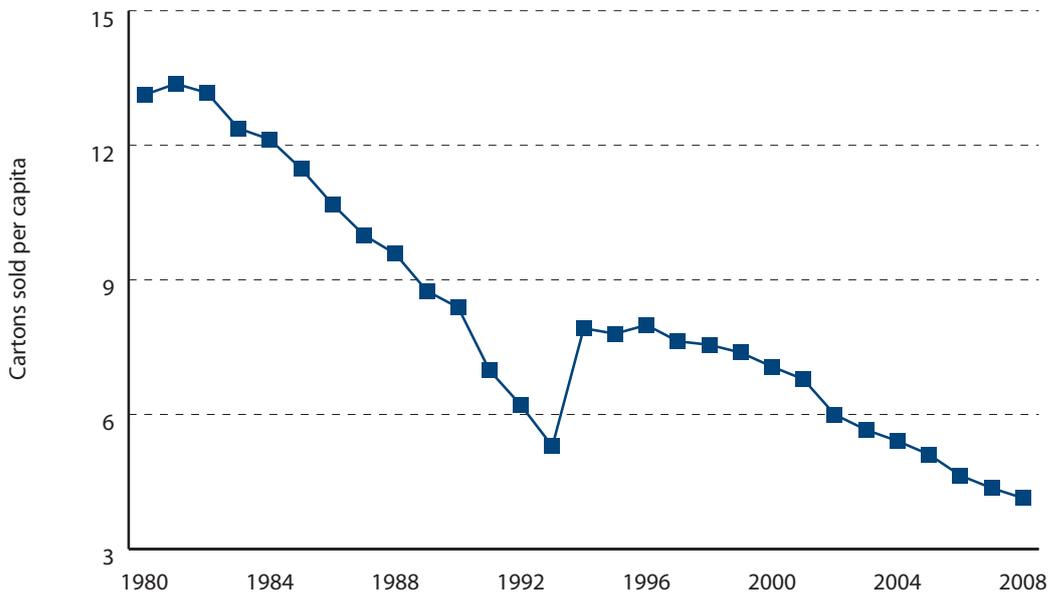
Coinciding with increases in federal and provincial tobacco excise taxes in the early 1990s, cigarette sales in most provinces began to fall at an increasingly rapid pace. In 1991, sales of cigarette cartons in Ontario fell by 13.7% to 7.47 cartons per capita, and in Quebec by 25.2% to 6.52 cartons per capita. In 1992, cigarette sales in Ontario declined by another 9.2% to 6.77 cartons per capita, and in Quebec by 29.2% to 4.61 cartons per capita. Ontario saw another drop of 17.5% in 1993 to 5.59 cartons per capita, while sales in Quebec dropped by another 28.1% to 3.31 cigarette cartons per capita (Health Canada, 2010a).

Conversely, the tax cuts introduced in 1994 coincided with a spike in lawful cigarette sales in seven provinces. After the tobacco tax rollbacks in 1994, lawful cigarette sales rose by 51.3% in Ontario to 8.46 cartons per capita, and by 175.7% in Quebec to 9.13 cartons per capita. Cigarette sales continued to increase slightly until 1996, when the number of cartons sold reached 8.84 cartons per capita in Ontario and 9.22 cartons per capita in Quebec.

Lawful cigarette sales then returned to a nearly consistent annual decline (Health Canada, 2010a). Between 1997 and 2001, cigarette sales fell from 8.33 cartons per capita to 7.39 cartons per capita in Ontario, and from 8.69 cartons per capita to 6.88 cartons per capita in Quebec, a drop of 11.2% and 20.8%, respectively. The tobacco tax hikes introduced in 2001

¹⁵ There are no provincial lawful tobacco sales data for 1987 and 1988.

¹⁶ Relatively high cigarette sales in Ontario and Quebec are mainly due to the relatively large populations of those two provinces. However, neither Ontario nor Quebec is the province with the highest cigarette sales per capita.

Figure 9: Cigarette cartons sold per capita across Canada, 1980 to 2008

Sources: Health Canada, 2010a; Statistics Canada, 2005, 2009.

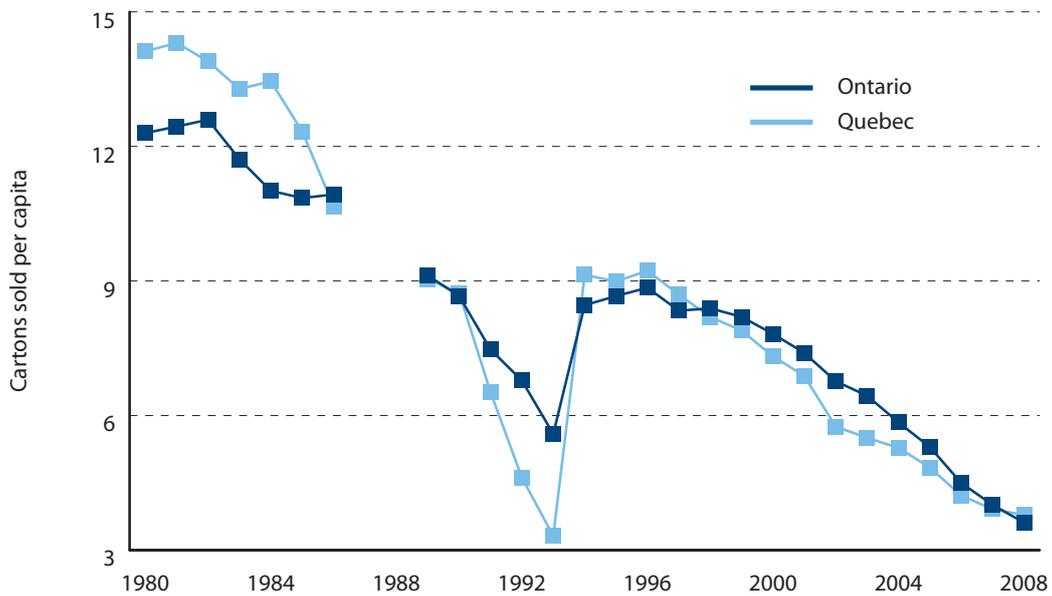
accelerated the decline, from an average rate of 2.2% per year in Ontario and 4.1% in Quebec between 1997 and 2001, to an average rate of 6.6% per year in Ontario and 4.8% in Quebec between 2002 and 2008. In 2002, cigarette sales fell to 6.76 cartons per capita in Ontario and 5.75 cartons per capita in Quebec; by 2008, they were down to 3.61 cartons per capita in Ontario and 3.78 cartons per capita in Quebec (Health Canada, 2010a). The changes in lawful cigarette sales in the two provinces over time are shown in figure 10.

Significantly smaller quantities of cigarettes were purchased in the other provinces.¹⁷ However, on a per capita basis, cigarette sales in most provinces were in the same range as lawful cigarette sales in Ontario and Quebec (figures 11 and 12). Moreover, as with Ontario and Quebec, most other provinces did see a discernible spike in legal cigarette sales following the partial repeal of tobacco taxes in 1994 and a drop in cigarette sales following the excise tax increases in the early 1990s and the early 2000s.

One possible reason why cigarette sales seem to fluctuate in tandem with changes in tobacco taxes in most provinces, but not in all, is the extent to which smokers can obtain contraband cigarettes. The ready availability of

¹⁷ Relatively low cigarette sales are primarily due to the smaller populations of the other provinces.

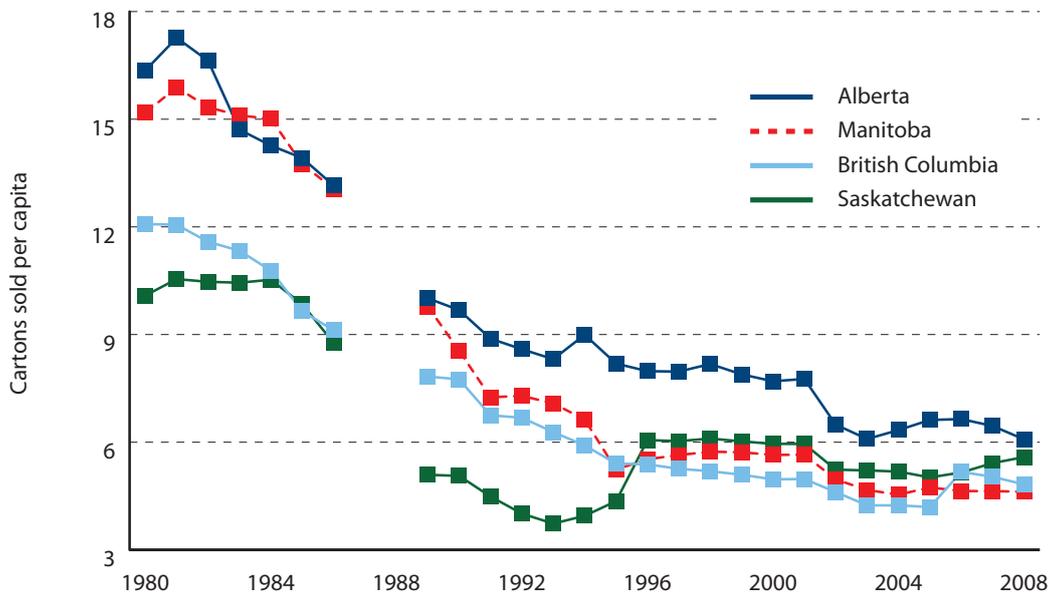
Figure 10: Cigarette cartons sold per capita in Ontario and Quebec, 1980 to 2008



Note: There are no provincial lawful tobacco sales data for 1987 and 1988.

Sources: Health Canada, 2010a; Statistics Canada, 2005, 2009.

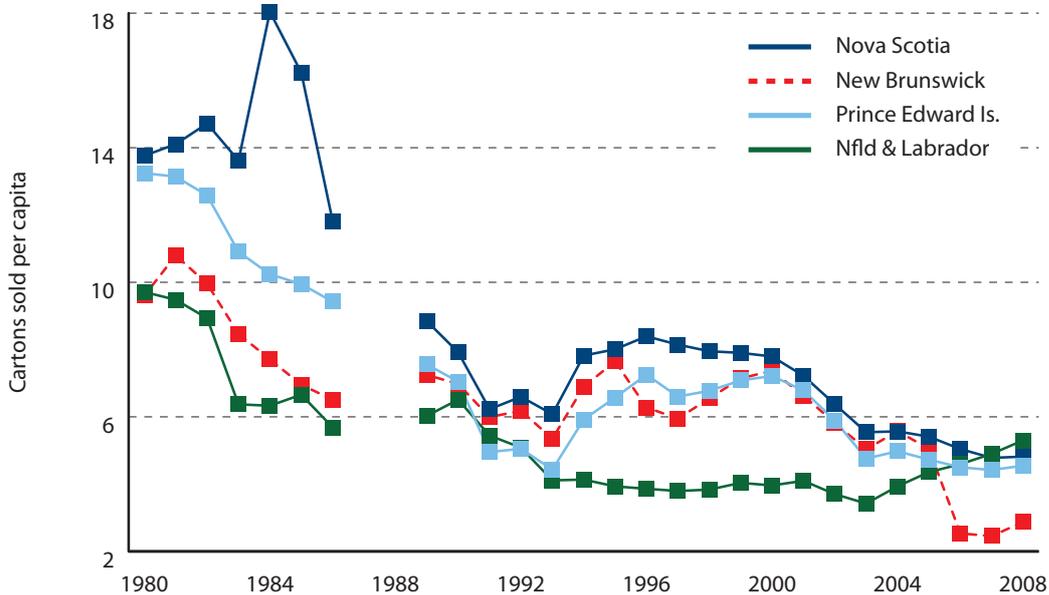
Figure 11: Cigarette cartons sold per capita in Alberta, British Columbia, Manitoba, and Saskatchewan, 1980 to 2008



Note: There are no provincial lawful tobacco sales data for 1987 and 1988.

Sources: Health Canada, 2010a; Statistics Canada, 2005, 2009.

Figure 12: Cigarette cartons sold per capita in Nova Scotia, New Brunswick, Prince Edward Island, and Newfoundland and Labrador, 1980 to 2008



Note: There are no provincial lawful tobacco sales data for 1987 and 1988.

Sources: Health Canada, 2010a; Statistics Canada, 2005, 2009.

contraband tobacco allows smokers to avoid buying costlier lawful cigarettes. In provinces with particularly serious contraband problems, such as Ontario, Quebec, and the Maritimes, we observe marked changes in lawful tobacco sales following changes in tobacco taxes. Because contraband tobacco markets are not as entrenched in other provinces, we would expect to see less substitution away from lawful cigarettes and, consequently, less change in lawful cigarette sales following changes in tobacco excise taxes. Therefore, policy makers must recognize that cigarette sales often fluctuate in tandem with changes in tax rates, but that the magnitude of any fluctuation is variable and may depend, in part, on the extent to which smokers have ready access to contraband cigarettes.

Smoking prevalence

The Canadian government has compiled data on smoking prevalence as part of several different health surveys. As a result, interpretation of the data is complicated by differences in survey objectives and design.¹⁸ Only limited data on smoking prevalence was initially collected as part of comprehensive national surveys such as the National Population Health Survey and the General Social Survey. To improve smoking prevalence data, Health Canada and Statistics Canada now conduct detailed surveys on smoking that document prevalence patterns within various geographic and demographic groups. The Canadian Tobacco Use Monitoring Survey, administered bi-annually since 1999, compiles detailed data on the characteristics of Canadian smokers. Unfortunately, none of the Canadian surveys on smoking prevalence distinguish between smokers who use lawfully purchased cigarettes and smokers who use contraband products.

This failure to distinguish between lawful and contraband tobacco use is significant. If Canadians do not perceive a material difference between contraband and lawful tobacco, but regard the two as close substitutes, then the data documenting smoking prevalence in Canada will capture the prevalence of both lawful and contraband tobacco consumption. Researchers from Leger Marketing have found that Canadian smokers do not perceive a material difference between contraband tobacco and lawful tobacco, apart from a difference in price (CCSA, 2009b).

Based on these national surveys, smoking prevalence¹⁹ in Canada has been declining since the mid-1960s, falling from nearly 50% of Canadians aged 15 and over in 1965 to 17% by 2009 (Stephens, 1988; Health and Welfare Canada, 1992, 1993; Health Canada, 2010b; Statistics Canada, 1994b, 1995a, 1995b, 1997, 1998a, 1998b; Physicians for a Smoke-Free Canada, 2009). There was considerable variation in the extent to which cigarette consumption fell across the provinces, as well as across gender and other cohorts.

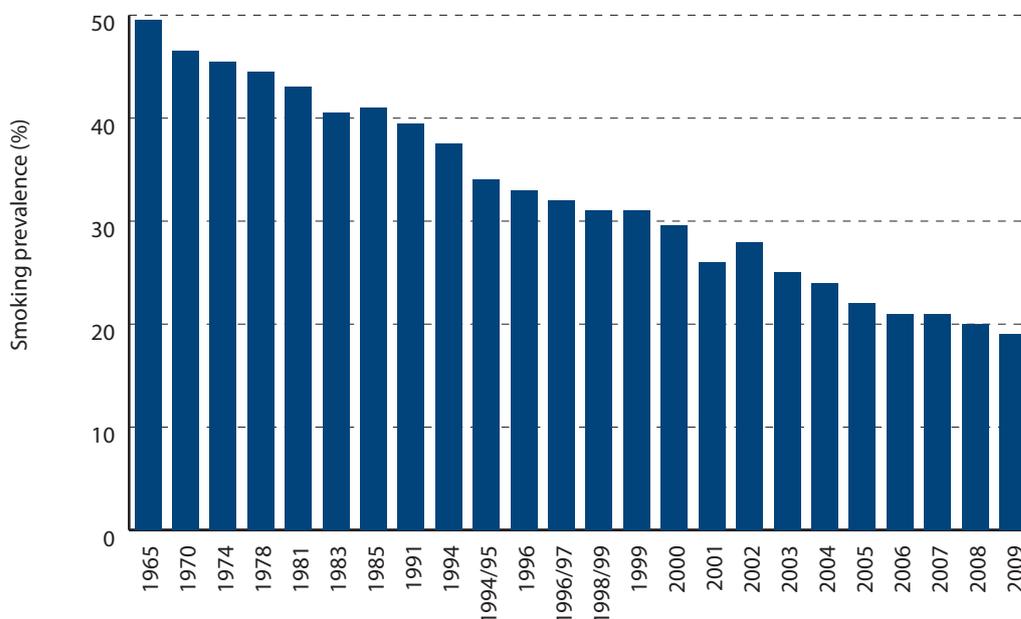
-
- 18 A note of caution must be made with respect to interpreting the data. In many cases, year-to-year observations of smoking prevalence show small incremental differences. Each annual observation is an average value at the center of a range of possible estimated values. Often these ranges overlap. As such, there may be, in fact, only negligible differences in year to year observations, smaller in magnitude than the difference in the reported year to year averages. In formal statistical language, the estimated confidence intervals overlap.
- 19 Smoking prevalence, as defined by the Canadian Tobacco Use Monitoring Survey, is the “number of smokers in a specified group, divided by the total population of that group, expressed as a percentage” (Health Canada, 2010b).

Since 1996, the prevalence of smoking among Canadians aged 15 and over has diminished by more than one-third, falling from 27% in 1996 to 17% in 2009. A significant part of the decline occurred between 1996 and 2001, when the prevalence of smoking among Canadians aged 15 and over decreased from 27% to 22% (Health Canada, 2010b; Statistics Canada, 1998a, 1998b). However, the decline in smoking prevalence has tapered off since 2005 (figure 13).

Smoking by age

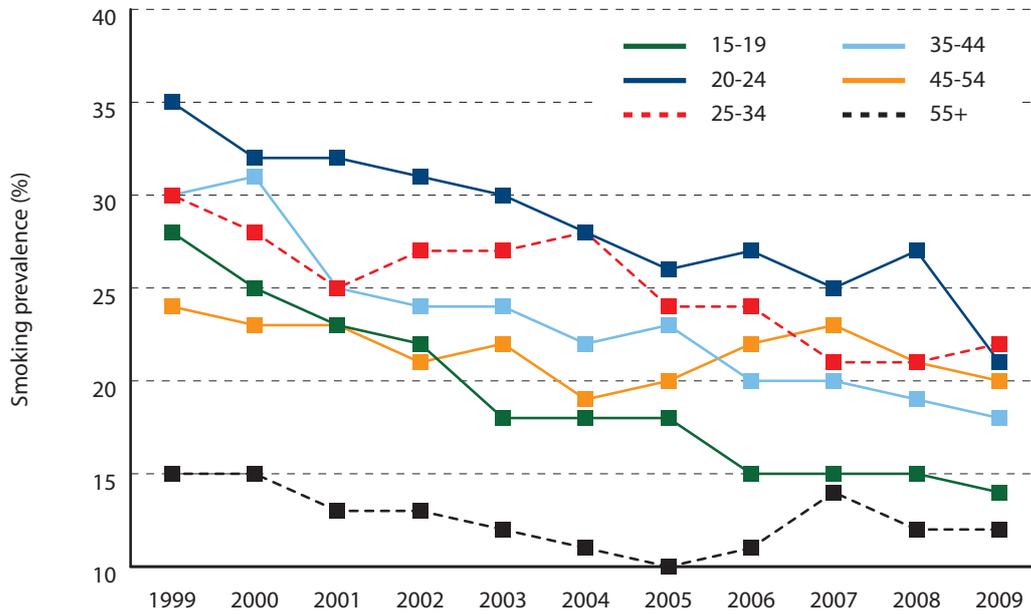
There has been a striking decline in smoking prevalence among Canadians aged 15 to 19; between 1999 and 2009, smoking prevalence among this group declined from 28% to 14% (Health Canada, 2010b). No other cohort experienced as sharp a drop in smoking prevalence. Conversely, the smallest decline occurred among adults aged 45 to 54; smoking prevalence among this cohort decreased from 23% to 20% between 1999 and 2009. Moderate reductions in smoking prevalence were recorded for other age groups (figures 14 and 15).

Figure 13: Smoking prevalence among Canadians aged 15 and over, 1965 to 2009



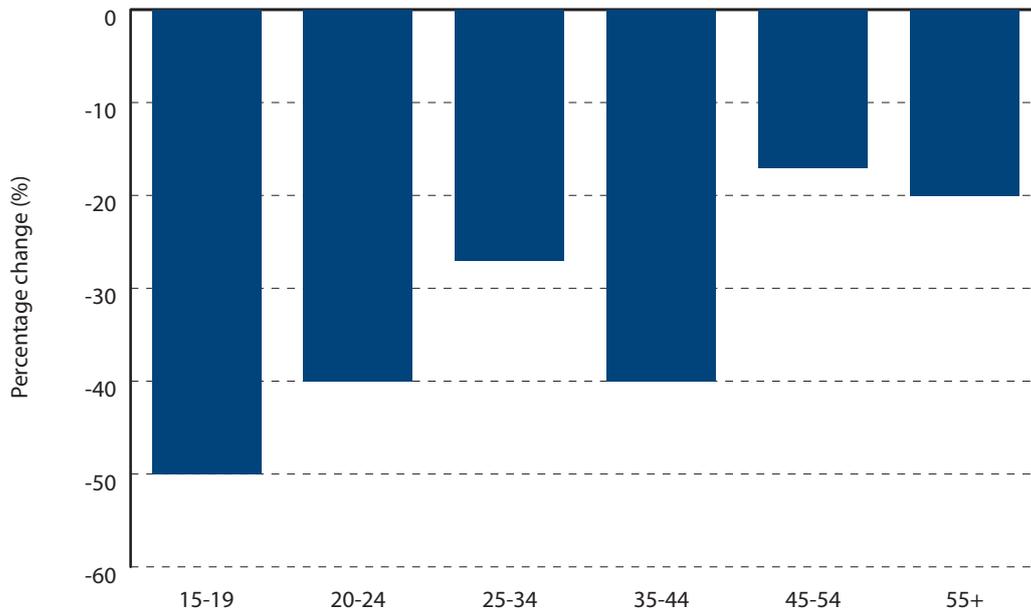
Sources: Stephens, 1988; Health and Welfare Canada, 1992, 1993; Health Canada, 2010b; Statistics Canada, 1994b, 1995a, 1995b, 1997, 1998a, 1998b; Physicians for a Smoke-Free Canada, 2009.

Figure 14: Smoking prevalence in Canada by age bracket, 1999 to 2009



Source: Health Canada, 2010b.

Figure 15: Percentage change in smoking prevalence in Canada by age bracket, 1999 to 2009



Source: Health Canada, 2010b.

Smoking by gender

In the past, smoking prevalence has been higher among men than women (figure 16). Between 1999 and 2009, for example, smoking prevalence among women aged 15 and over fell from 23% to 16%, whereas smoking prevalence among men aged 15 and over fell from 27% to 19% (Health Canada, 2010b).

However, until 2005, the prevalence of smoking among female teens was greater than that among male teens. In 1999, the prevalence of smoking among females aged 15 to 19 was 29%, while the prevalence among male teens was 27%. Since 2005, the prevalence of smoking among male teens has equaled or surpassed smoking prevalence among female teens (Health Canada, 2010b). Figure 17 shows the changes in teen smoking prevalence by gender between 1965 and 2009.

Smoking by province

Significant variation in smoking prevalence exists among Canada's provinces. Between 1999 and 2009, every province experienced some reduction in smoking prevalence (figures 18 and 19). The biggest decline occurred in Quebec, where smoking prevalence among residents aged 15 and over plunged by 12 percentage points, falling from 30% to 18% (a decline of 40%). The smallest declines occurred in Saskatchewan and New Brunswick, where smoking prevalence decreased by five percentage points, falling from 26% to 21%, between 1999 and 2009 (a decline of 19%) (Health Canada, 2010b). Figures 20 and 21 show the changes in smoking prevalence over the past decade for all provinces.

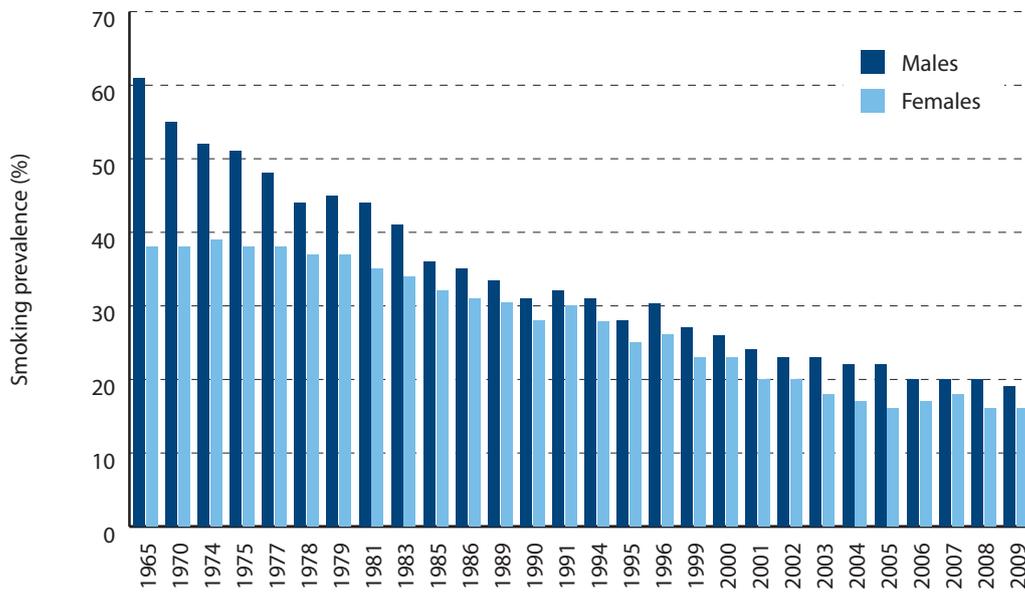
The impact of taxes on smoking prevalence

Public health officials and anti-smoking advocates have long argued for higher taxes on tobacco products to deter people from smoking (Hillman, 2003). Earlier research has confirmed that taxes can discourage the use of tobacco,²⁰ and that higher taxes are particularly effective at curbing smoking among youth and low income smokers.²¹

20 Such research includes Lewit and Coate, 1982; Lanoie and Leclair, 1998; Jha and Chaloupka, 1999; Chaloupka et al., 2000; Jha and Chaloupka, 2000; Stephens et al., 2001; Chaloupka et al., 2002; and Hyland et al., 2005.

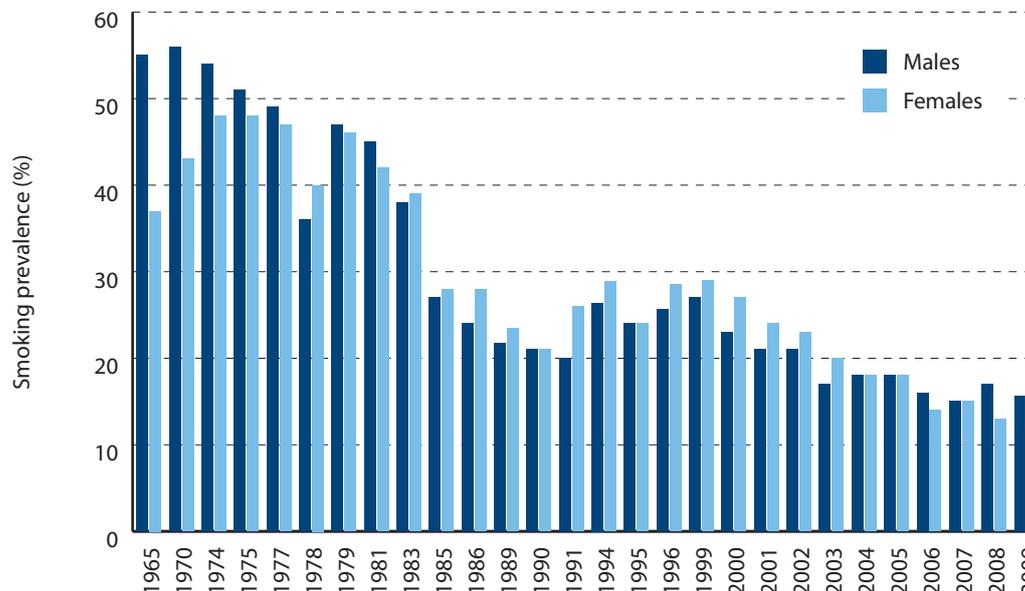
21 Such research includes Lewit et al., 1981; Lewit and Coate, 1982; Chaloupka and Grossman, 1996; Chaloupka and Wechsler, 1997; Lewit et al., 1997; Chaloupka et al., 1997; United States Center for Disease Control and Prevention, 1998; and Chaloupka et al., 2000.

Figure 16: Smoking prevalence among Canadians aged 15 and over, by gender, 1965 to 2009



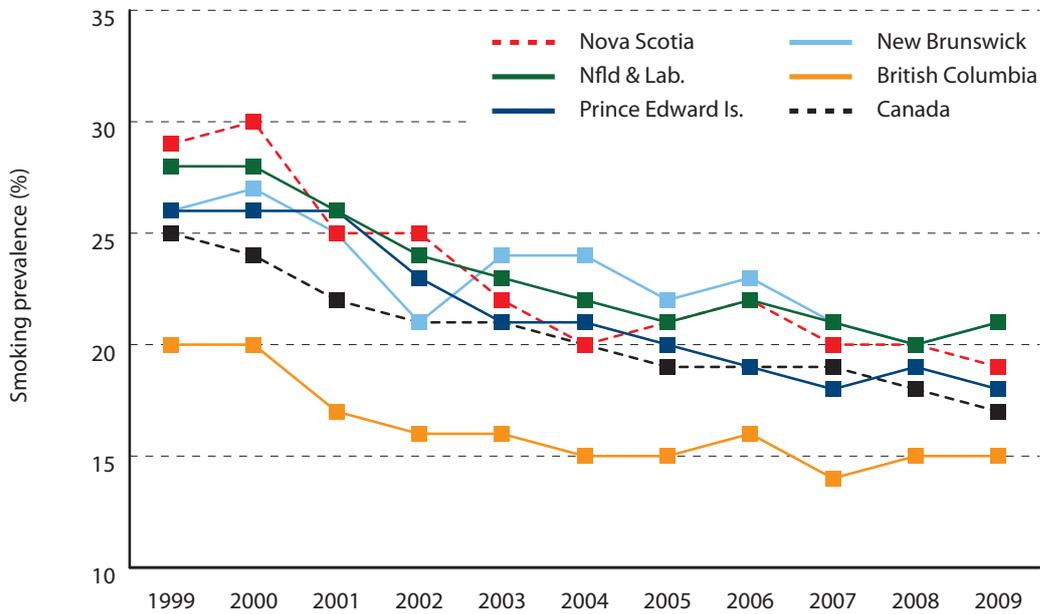
Sources: Stephens, 1988; Health and Welfare Canada, 1992, 1993; Health Canada, 2010b; Statistics Canada, 1994b, 1995a, 1995b, 1997, 1998a, 1998b; Physicians for a Smoke-Free Canada, 2009.

Figure 17: Smoking prevalence among Canadians aged 15 to 19, by gender, 1965 to 2009



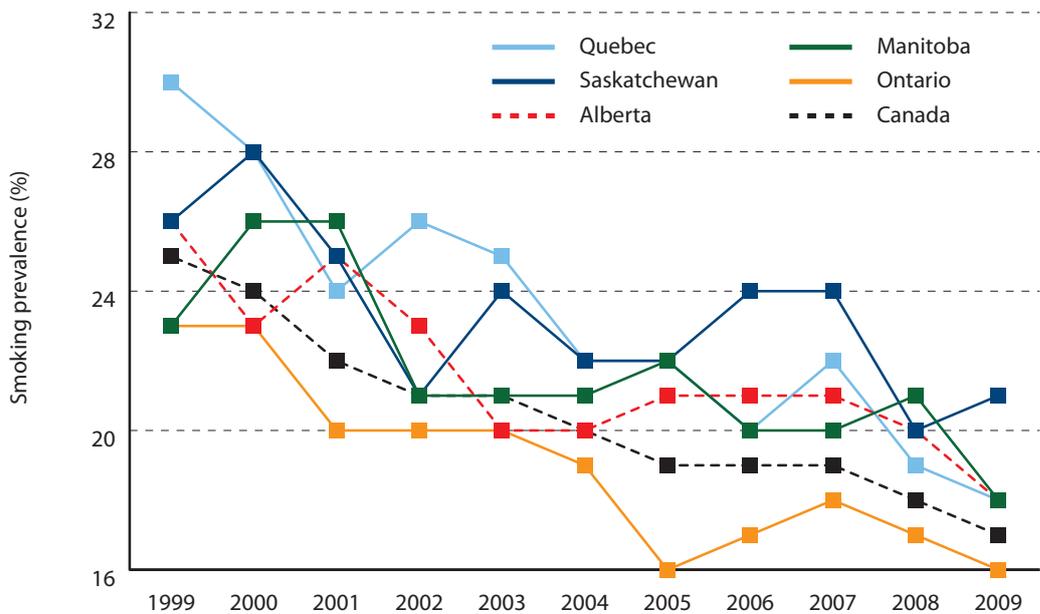
Sources: Stephens, 1988; Health and Welfare Canada, 1992, 1993; Health Canada, 2010b; Statistics Canada, 1994b, 1995a, 1995b, 1997, 1998a, 1998b; Physicians for a Smoke-Free Canada, 2009.

Figure 18: Smoking prevalence among residents of Nova Scotia, Newfoundland and Labrador, New Brunswick, Prince Edward Island, British Columbia, and Canada, 1999 to 2009



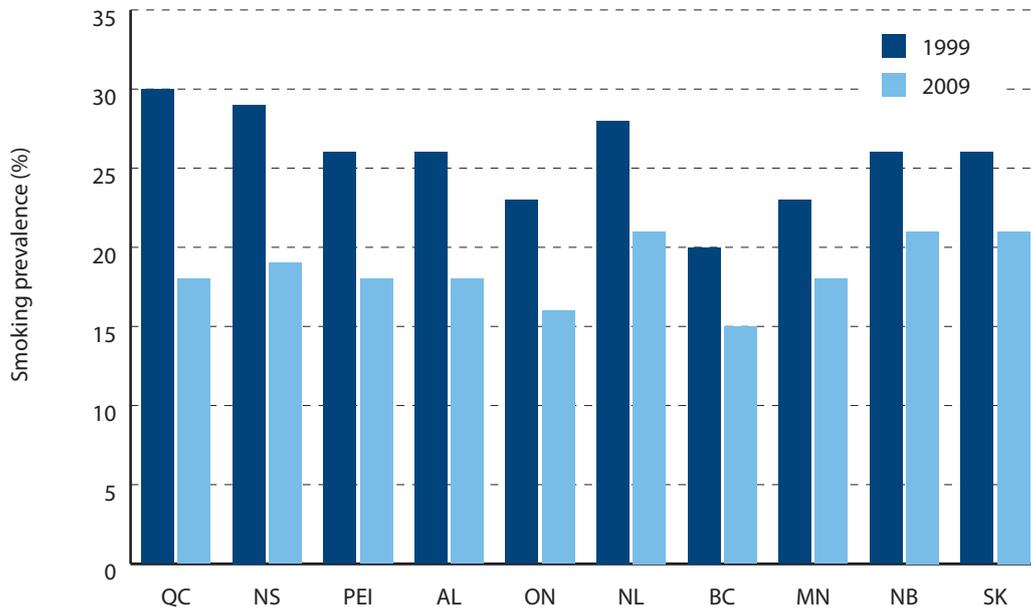
Source: Health Canada, 2010b.

Figure 19: Smoking prevalence among residents of Quebec, Saskatchewan, Alberta, Manitoba, Ontario, and Canada, 1999 to 2009



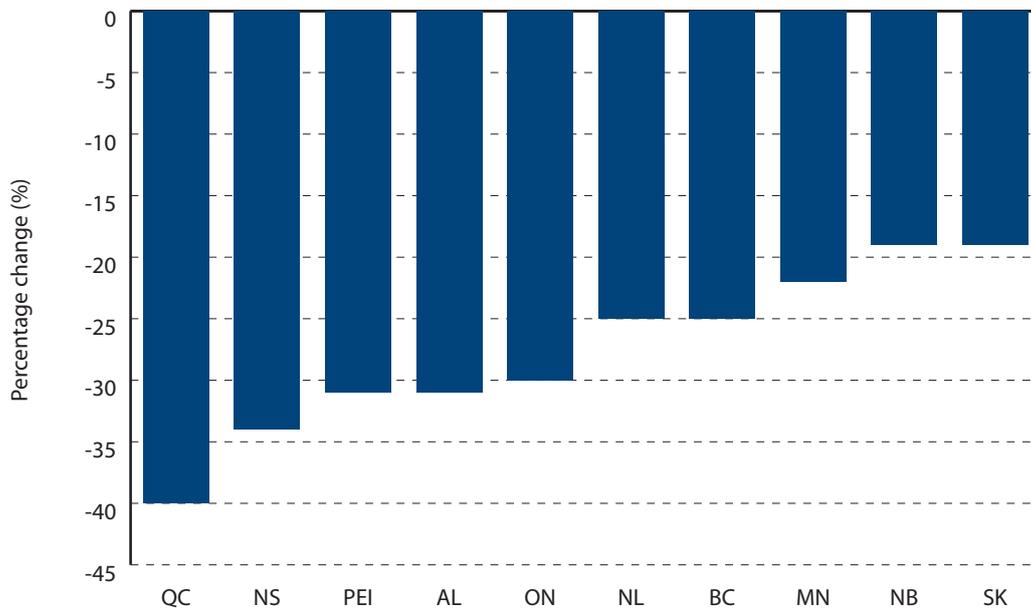
Source: Health Canada, 2010b.

Figure 20: Smoking prevalence by province, 1999 and 2009



Source: Health Canada, 2010b.

Figure 21: Percentage change in smoking prevalence by province, 1999 to 2009



Source: Health Canada, 2010b.

There have been numerous studies analyzing the “responsiveness” of tobacco demand—that is, the degree to which smokers change their purchasing of cigarettes in response to changes in cigarette prices. Analyses of this responsiveness in the United States have consistently found an inverse relationship between the cost of cigarettes and sales volumes. Numerous estimates undertaken in both developed and developing countries have found that a 10% price increase can cause tobacco demand (i.e., tobacco sales) to drop by 2.5% to 10% (Chaloupka and Warner, 2000; Chaloupka et al., 2000; Yurekli and Zhang, 2000). Most estimates for the United States, Canada, and other developed countries have tended to fall in the 2.5% to 5% range, with several estimates clustered around 4% to 4.5% (Chaloupka et al., 2000; Chaloupka and Warner, 2000). The estimates for price sensitivity in developing countries have tended to be somewhat higher, usually in the 5% to 10% range (Chaloupka et al., 2000; Chaloupka and Warner, 2000).

Jonathan Gruber and his colleagues (2003) factored in the underground market in cigarettes when calculating the responsiveness of Canadian smokers to price fluctuations and found that a 10% price increase reduces sales by 4.5% to 4.7%. Their analysis suggests that estimates of responsiveness will be biased upwards unless contraband tobacco is properly accounted for (Chaloupka et al., 2002).

These and other studies show that cigarette sales conform to the “law of demand” (Jha and Chaloupka, 1999; Chaloupka et al., 2002), which states that an increase in the price of a commodity will be met by a reduction in demand. This law holds for many goods and services.

Recent studies by Gospodinov and Irvine (2004, 2005) have found that the long-term responsiveness of tobacco demand has fallen to about 3% for every 10% change in the price of tobacco. On the other hand, other tobacco control measures have had a significant impact on smoking prevalence, but that impact appears to be slow, cumulative, and difficult to isolate. Thus, the impact of anti-smoking initiatives seems to have been gradual and protracted, while the impact of tobacco taxes has waned over time.

Further investigation is necessary to determine the precise extent to which higher taxes induce smokers to alter their tobacco consumption. Unfortunately, a more in-depth longitudinal econometric analysis distinguishing between the effects of tobacco taxation and other anti-smoking initiatives is not possible at present, given the limitations of Canada’s smoking prevalence data and of other variables.

Just as anti-smoking advocates contend that higher taxes induce smokers to quit, they also claim that fewer smokers will quit if tobacco taxes are lowered. However, this assertion has not been proven. In fact, the opposite might be true. Despite the substantial cuts in tobacco excise taxes in 1994, smoking prevalence among Canadians has continuously decreased (Health Canada, 2010b; Statistics Canada, 1998a, 1998b). One recent study found that

the 1994 tax cuts had no major impact on either adult or youth smoking in Canada; these tax cuts certainly did not encourage greater tobacco consumption (Ouellet, 2010).

Conversely, another study found that the 1994 repeal of tobacco excise taxes did, in fact, slow the pace of decline in smoking prevalence across Canada (Hamilton et al., 1997). That study also found that the incidence of smoking cessation was lower and the incidence of smoking initiation was higher in the provinces that significantly lowered their provincial tobacco taxes. Therefore, the impact of tobacco tax cuts on smoking prevalence remains uncertain.

There is concrete evidence that teens are increasingly heavy consumers of contraband cigarettes. Researchers with the Arcus Group have collected cigarette butts from the grounds of more than 100 high schools in Ontario and Quebec on an annual basis to determine the extent to which teens are smoking contraband cigarettes.^{22, 23} Between 2007 and 2008, the proportion of contraband in Quebec increased by one percentage point, from 35% to 36%, and in Ontario by two percentage points, from 24% to 26% (CCSA, 2008).

The most recent study, conducted in 2009, found a dramatic increase in the presence of contraband tobacco. In Quebec, for example, the proportion of contraband cigarettes increased from 36% in 2008 to 45% in 2009. In Ontario, the percentage of contraband cigarettes rose from 26% in 2008 to 30% in 2009 (CCSA, 2008, 2009a).

The cigarette butt studies have consistently found that the presence of contraband is relatively high in lower income areas and relatively low in higher income areas. And while smoking prevalence among teens has been falling overall, the butt studies reveal that the teens who continue to smoke are increasingly consuming contraband cigarettes.

Reducing the prevalence of smoking among teens has been a long-standing priority of public health officials. However, the evidence suggests that the use of taxes to curb teen smoking has had unintended consequences—that is, teens have easy access to the black market for cigarettes, in part, because of tax policies that are intended to reduce smoking prevalence.

The butt studies also demonstrate the ease with which teenage smokers can substitute lawful cigarettes with contraband products. If smokers do not perceive any substantial quality difference between lawful and black market cigarettes, but regard the two as substitutes, it is reasonable to expect that there will be more substitution as the price of lawful cigarettes increases. This phenomenon is referred to as the “substitution effect.” The lack of a perceived

22 The studies were commissioned by the Canadian Convenience Stores Association (CCSA).

23 The butts are classified as contraband if they have not incurred the relevant government excise tax or duty, have no brand marking, are of foreign origin, are counterfeit, or appear to be an untaxed tobacco product manufactured on a Native reserve (CCSA, 2008).

difference between lawful cigarettes and contraband, apart from price, was recently documented in a survey by Leger Marketing (CCSA, 2009b).

Other anti-smoking initiatives

The decline in smoking prevalence across Canada indicates that anti-smoking efforts have been effective. A constellation of initiatives, including health risks awareness campaigns, smoking bans, restrictions on cigarette vending and advertising, and warning labels, rather than tobacco taxes alone, are commonly cited in relation to the decline in smoking rates (Health Canada, 2002a, 2002b, 2006a, 2006b; US Dept. of Health and Human Services, 2000; NSRA, 2007, 2008).

There is no shortage of research attributing the decline in lawful sales of cigarettes and smoking prevalence to increased awareness of tobacco risks and smoking restrictions (Hamilton, 1974; Warner, 1977; Schneider et al., 1981; Jha and Chaloupka, 1999). For example, smoking bans in public venues have been found to reinforce anti-smoking norms and increase the likelihood that recidivist smokers will attempt to quit again (Woollery et al., 2000; Yurekli and Zhang, 2000; Levy and Friend, 2003; Shields, 2007; Albers et al., 2007). Moreover, the consequences of violating restrictions on tobacco marketing have grown more costly. Indeed, there are at least 120 pieces of federal and provincial legislation governing tobacco manufacturing, distribution, and use (CCTC, 2009). Under Ontario's Tobacco Act of 1994 and the more recent Smoke-Free Ontario Act of 2005, penalties for individuals include a fine of \$4,000 for a first offense and a fine of \$100,000 for three or more offenses. Penalties for corporate violators include a maximum fine of \$10,000 for a first offense and a fine of \$150,000 for three or more offenses.

Numerous anti-smoking educational campaigns have been undertaken over the years. Recent legislation has also mandated the placement of warning labels and chilling images on cigarette packaging. A study by Gospodinov and Irvine (2004) found that warning labels and disturbing images have reduced smoking prevalence in Canada somewhat, but the impact has not been very strong or significant. Several restrictions on tobacco sales have also been enacted; these include requiring proof of age to purchase tobacco products, forcing retailers to hide tobacco products from public view (in Ontario and British Columbia, for example), the mandatory posting of "no smoking" signs in retail establishments, and smoking bans in most enclosed workplaces and public venues, including bars and restaurants.

It is extremely difficult to distinguish between the effects on smoking prevalence of higher tobacco taxes, public awareness of smoking risks, and restrictions on tobacco sales and use. All of these initiatives likely work in tandem.

The legal status and tax obligations of Aboriginal Canadians

The central role played by some Aboriginals in the contraband cigarette trade poses an important challenge for law enforcement.

Exemption from some legal obligations for Canada's Aboriginals dates back to the Royal Proclamation of 1763. Exemption from specific taxes was first granted in 1850 to "Status Indians"²⁴ living on reserves. The Act for the Better Protection of Land and Properties of Indians in Lower Canada also exempted Status Indians on reserves from judgment and seizure of property.

The concept of self-governance for Aboriginals was introduced in 1868, with the passage of the Act for the Gradual Enfranchisement of Indians and the Better Management of Indian Affairs. This was followed by the Indian Act of 1876, which consolidated earlier statutes pertaining to Native rights, set forth the legal definitions of "Status" and "Non-Status" Indians, and, more generally, created regulations that would govern nearly all aspects of Indian life (even the purchase of alcohol).

Under the act, Status Indians did not possess the same civic entitlements as other Canadians; for example, Status Indians were denied federal voting privileges (until a 1960 amendment granted that right), and they were not covered under the Canadian Charter of Rights and Freedoms. The Indian Act also created "Indian agents" to act as liaisons between the reserves and the federal government.²⁵

Several amendments to the Indian Act have been made over the years, the most recent being Bill C-31, passed in 1985, which instituted uniform legal treatment for all Status Indians. The bill also recognized the right of Aboriginal women who marry non-Aboriginal men to retain their Indian Status and pass it on to their children.

In 2001, the federal Minister of Indian and Northern Affairs proposed legislation that would have imposed municipal and provincial authority over reserves. The proposal also would have abolished tax immunity on reserves and imposed income taxes on all Natives. However, the proposed legislation never passed.

24 "Status Indians" are members of Aboriginal communities who are part of the Indian register and hold a certificate of Indian Status identity card.

25 The presence of Indian agents on reserves and their participation in various aspects of reserve governance compromised the autonomy of Status Indians. The use of Indian agents was eliminated in 1969.

Status Indians remain exempt from federal and provincial sales taxes when purchasing goods and services on reserves, including sales taxes on tobacco. However, merchants on a reserve are obligated to collect sales taxes when selling goods and services to Aboriginals without Indian Status and non-Aboriginals. Status Indians are also exempt from provincial excise taxes, but are required to pay federal excise taxes, including taxes on tobacco products, both on and off a reserve. In reality, however, Canadian law enforcement is effectively powerless to enforce tax obligations on Aboriginal territory because of Aboriginal territorial autonomy and charter rights. This lack of power was particularly evident in the aftermath of the “Oka standoff” between the government and the Mohawks of Kanesatake, Quebec (Cunningham, 1996).

The Oka standoff

The Oka standoff, which took place between March and September 1990, represents one of the worst episodes in Canada-Aboriginal relations in modern times. The incident led to deep mistrust and animosity between many Aboriginals and Canadian authorities, especially Quebec’s provincial police and the RCMP.

The standoff began after the Oka town council approved an expansion for a local golf course. The Mohawks of Kanesatake claimed the property appropriated for the expansion encompassed a burial site and thus was consecrated land. Negotiations ensued, but the dispute went unresolved.

With the municipality and the Kanesatake leaders at an impasse, residents of the reservation erected armed checkpoints and patrols to prevent construction crews from entering the area designated for the golf course expansion. Provincial law enforcement and the Canadian armed forces were called in, but the standoff persisted. Aboriginals from other reservations across Canada protested in solidarity with the Mohawks of Kanesatake, and the Mohawks of Kahnawake blocked traffic on the Mercier Bridge south of Montreal until late August. The standoff lasted for 78 days, ending on September 26, 1990. The armed men from Kanesatake abandoned their positions outside the disputed land and returned to the reservation. Ultimately, the standoff proved successful for the Aboriginals of Kanesatake—the proposed expansion of the golf course never took place.

The Oka standoff exacerbated long-standing tensions between Aboriginal communities and Canadian law enforcement. This tension has not entirely subsided, and it has impeded law enforcement efforts against cigarette smuggling. In the aftermath of the Oka standoff, the “First Nation Policing Policy” was introduced. This policy created law enforcement detachments that could secure civic order on reserves. However, these

detachments have not proven to be effective in combating the contraband cigarette trade.

Some Aboriginals contend that the production and sale of cigarettes does not contravene any laws because the commerce takes place on reserve territory and is, therefore, outside the jurisdiction of Revenue Canada and any other Canadian tax authority (RCMP, 2008a; Sweeting et al., 2009; Marsden, 2009, Apr. 28). They regard cigarettes as a cornerstone of reserve culture and as a stimulus for economic development (Jamieson, 1999; Dickson-Gilmore, 2003; Kahnawake Tobacco Association, 2010). Some reserves have even established tobacco associations to harness the trade for economic development.

Such problems with jurisdictional authority extend far beyond contraband cigarettes. A solution to the underlying problem must somehow reconcile Aboriginal territorial autonomy and treaty rights with Canadian law.

Conclusions

In April 2001, the federal government, prompted by public health officials and the anti-smoking lobby, introduced the first in a series of tobacco excise tax hikes with the objective of reducing the prevalence of smoking in Canada and generating tax revenue. However, both of these goals are compromised when tobacco excise taxes stimulate a black market for contraband cigarettes.

Attempting to suppress the contraband trade has proven to be a particularly difficult challenge in Canada. Contraband cigarettes are perceived to be a near-perfect substitute for lawfully purchased cigarettes. As such, contraband tobacco use neutralizes the deterrent effect of higher taxes. Moreover, the tobacco tax revenues sought by politicians shrink when the contraband market enables smokers to evade taxation.

Thus, as the evidence in this report indicates, anti-smoking initiatives grounded in taxation policy are not as effective as they would be if it were possible to suppress the contraband trade. Combating the contraband trade is particularly difficult given the tax environments of neighbouring jurisdictions. A price differential between domestic and smuggled cigarettes increases opportunities for black market profit.

However, the existence of such a price differential in and of itself is not sufficient for a contraband market to flourish. The ability to organize smuggling operations and establish underground distribution networks is also necessary to support a contraband market. In this regard, the tensions between Canadian law enforcement and Aboriginal communities actually facilitate the trafficking of contraband tobacco products. Simply put, it is exceedingly difficult for law enforcement to obstruct illicit trade and smuggling activities if they lack access to the territory on which it takes place and do not possess the clear authority to take enforcement actions.

Another factor that enables the contraband trade is smokers' perception of contraband cigarettes. If smokers fail to perceive a difference in quality between lawful and contraband cigarettes, and if they do not acknowledge any harm associated with the black market, then there is little reason for them to cease their participation in the black market.

With all of these factors at play, the contraband market will continue to grow, smugglers will continue to prosper, smokers will continue to consume contraband cigarettes, and the policy objectives of Canada's tobacco tax regime will go unfulfilled.

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