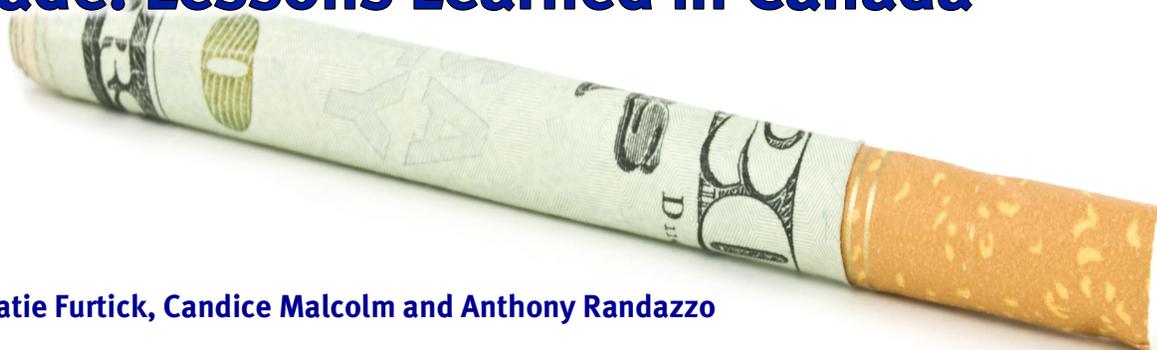




Reason Foundation

The Effect of Cigarette Tax Rates on Illicit Trade: Lessons Learned in Canada



By Katie Furtick, Candice Malcolm and Anthony Randazzo

Introduction

U.S. President Barack Obama is proposing to raise the federal cigarette tax by nearly \$1.00 per pack, hoping to bring in additional tax revenue to help fund universal preschool. Likewise, last year legislators in Massachusetts, Minnesota and New Hampshire put forth—and passed—proposals to increase their state’s cigarette tax.¹ Such proposals to increase cigarette or tobacco taxes are a politically expedient way to add to state or federal coffers while ostensibly reducing consumption. Since 2000, U.S. states have increased state cigarette tax rates more than 100 times and, generally, smoking prevalence in the U.S. has continued to decline, but is this decline caused by the increase in taxes? If so, what would happen to tobacco consumption if tax rates on cigarettes are cut?

An understandably instinctive answer is that consumption would rise, as the price of cigarettes would presumably fall with the tax cut. However, this instinctive answer assumes that smokers purchase all of their cigarettes through legal means where the sale is taxed. In reality, this is not necessarily the case.

Taxes have been shown to increase the size of black markets and to cause economic activity to move underground as price-sensitive individuals look for creative ways to evade taxation.² Studies have shown that in the tobacco industry, consumers' willingness to switch from smoking legally purchased cigarettes and tobacco to contraband products increases with tax hikes.³ Econometric analysis conducted by Jean-Francois Ouellet, Associate Professor of Marketing at HEC Montreal, and his co-authors Mariachiara Restuccia, Alexandre Tellier and Caroline Lacroix, found that each additional dollar in final applicable taxes raises the propensity to resort to consuming contraband cigarettes by 5.1 percent.⁴

This is consistent with the literature pertaining to counterfeit products—that for a product yielding the same benefit, consumers will typically consider a lower-priced option despite the fact that it is illegal.⁵ And where there is consumer demand for cheaper products, despite legality, there is profit incentive for players to provide those products on the black market.

High cigarette taxes lead to inflated prices, which allow smugglers to profit from bringing cigarettes out of lower-taxed areas and re-selling them into higher-taxed jurisdictions.⁶ For instance, in the United States, cigarette prices differ from state to state depending on the states' cigarette tax regimes. Therefore, cigarettes sold in states with low tax rates can be bought and re-sold on the black market in states with high tax rates, yielding a profit for the seller.

High taxes also increase the incentive for producing illegal cigarettes completely outside the tax regime.⁷ In this case, cigarettes are produced in illegal, unregulated factories and sold on the black market.

The sum effect of these factors suggests that it is possible that rather than reducing cigarette consumption, high taxes might shift some consumption from the legal to the black market—that is, to smuggled and/or illegally produced cigarettes. The corollary of this is that tax cuts could drive out illicit trade without increasing overall cigarette consumption.

Due to its dramatically varied cigarette taxation rates over the past two decades, Canada has witnessed first-hand the effects that taxes can have on illegal tobacco sales. It therefore provides an excellent case study of the effects of both increasing and decreasing such taxes. This policy brief begins with some background on tobacco taxes in Canadian history. It then analyzes how various changes in the law, both tax increases and cuts, have affected illicit trade, informing policy-makers on likely effects of taxation.

Cigarette Taxes and Illicit Trade in Canada

In 1994, a resident of Niagara Falls, Ontario could drive across the border to Niagara Falls, New York and buy cigarettes taxed at a mere \$0.36 per pack.⁸ At home, the same individual would have faced a combined provincial and federal tax rate of CAD \$1.92 per pack—roughly US \$1.45.⁹ Unsurprisingly, such behavior was not uncommon. Worse, smuggling became a major enterprise.

At the height of the problem in the early 1990s, law enforcement officials reported that the high rates of smuggling attracted organized-crime gangs, bringing violence to the area, and creating hardships for corner store operators whose livelihoods depend in part on selling cigarettes.¹⁰ According to a Fraser Institute study, contraband cigarettes increased from one percent of total market share in 1987 to about 31 percent in 1993.¹¹ The rise of cigarette smuggling also led to a reduction of millions of dollars of revenue from provincial and federal treasuries.

In an effort to combat widespread cigarette smuggling across the United States border, in 1994 Canada's federal government cut excise tax rates on cigarettes in half, from CAD \$10.36 per carton to CAD \$5.36 per carton (of 20 packs—i.e. 400 cigarettes).¹² Meanwhile, half of Canada's provinces also subsequently reduced their cigarette tax rates—as can be seen in Table 1. On average, Canada's federal and provincial cigarette taxes decreased by 29 percent—a substantial reduction. Removing those provinces that left their rate unchanged, the tax rate, on average, decreased by 54 percent.

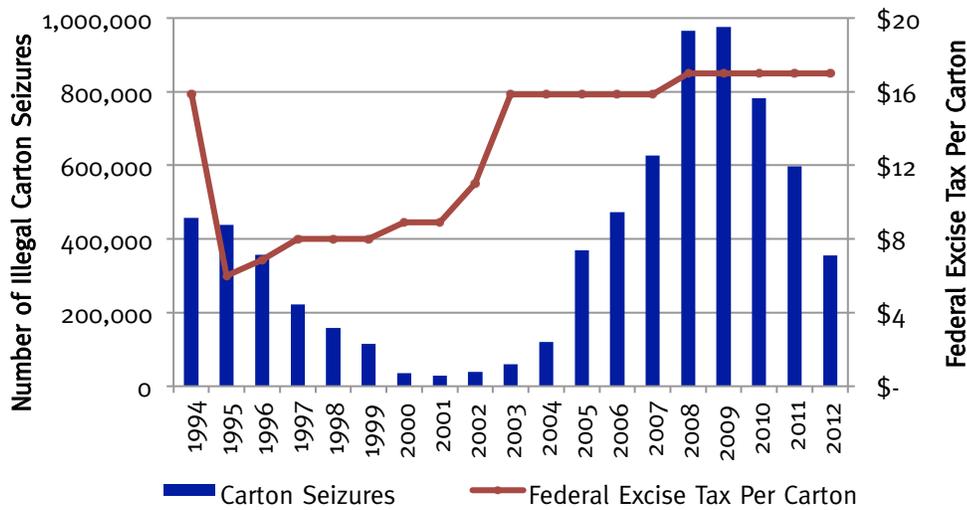
In 1994, the RCMP seized 456,000 cartons of illegal cigarettes.¹³ Following the 1994 tax decrease, seizures declined rapidly, dropping to only 29,000 in 2001—a 93.6 percent decrease between 1994 and 2001. Figure 1 illustrates the RCMP cigarette seizure levels between 1994 and 2012 relative to federal excise tax rates at the same time.

Table 1: Cigarette Excise Tax Reductions, Canada and Provinces, 1994

Province	Pre-Decrease Rate (CAD\$ per carton)	Post-Decrease Rate (CAD\$ per carton)	% Decrease
Federal (CANADA)	\$10.36	\$5.36	-48.26%
Quebec	\$29.61	\$8.61	-70.92%
New Brunswick	\$29.45	\$15.45	-47.54%
Ontario	\$28.85	\$9.65	-66.55%
Prince Edward Is.	\$35.45	\$21.20	-40.20%
Nova Scotia	\$29.45	\$15.45	-47.54%
Newfoundland	\$36.41	\$36.41	0.00%
Manitoba	\$31.85	\$31.85	0.00%
Saskatchewan	\$31.85	\$31.85	0.00%
Alberta	\$29.85	\$29.85	0.00%
British Columbia	\$37.85	\$37.85	0.00%
Average 1 (All Provinces & Federal)	\$30.09	\$22.14	-29.18%
Average 2 (Only Provinces That Changed Rates & Federal)	\$27.20	\$12.62	-53.50%

Source: Jean-François Ouellet, Mariachiara Restuccia, Alexandre Tellier and Caroline Lacroix, *The Impact of Cigarette Tax Reduction on Consumption Behavior*.

Figure 1: Canada's Federal Excise Tax Per Carton of Cigarettes versus RCMP Illegal Carton Seizures: 1994–2012



Source: National RCMP Contraband Tobacco Seizures 2008–2012, RCMP 2011 Contraband Tobacco Statistics, Nova Scotia Canada: Finance

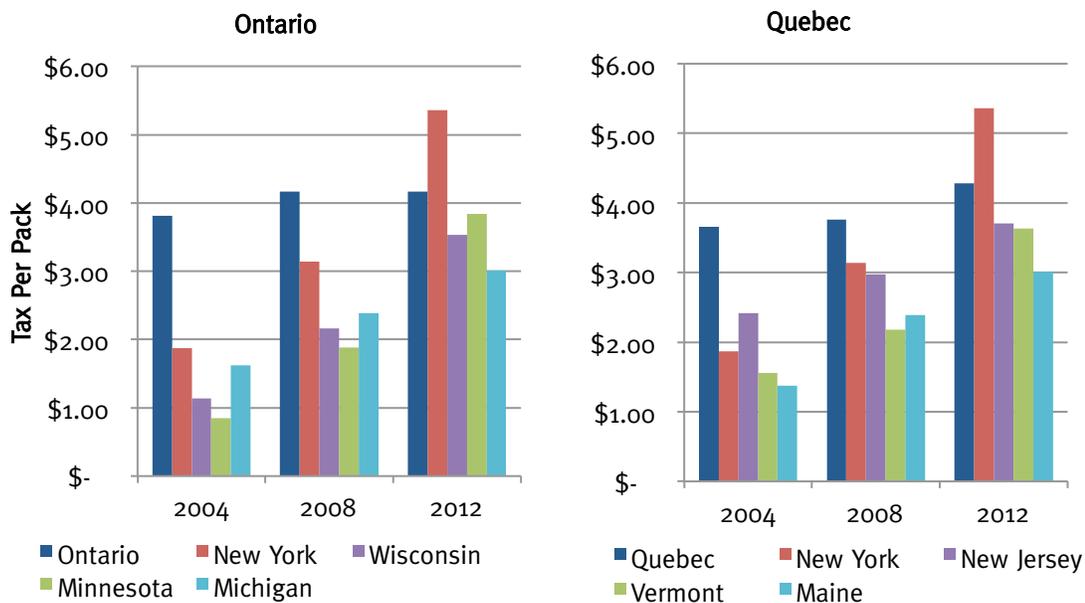
But after 2001, seizures of illicit cigarettes began to rise again and by 2008 were back to pre-tax-cut highs. So, what happened? In April 2001, the *Federal Tobacco Control Strategy* (FTCS), in combination with federal lobbying groups, proposed increasing the cigarette tax rate to help discourage smoking.¹⁴ In response, in 2002 the federal government introduced significant and rapid tax increases; by July 2002, the federal excise tax rate was CAD \$15.85 per carton, nearly twice the post-cut rate and about 50 percent more than the pre-cut rate. As of 2008, the federal rate had risen to \$17 CAD per carton.¹⁵ And in that year, RCMP seized 965,000 cartons of smuggled cigarettes.

But after 2009, carton seizures began to fall again, even though cigarette taxes remained high. One possible explanation is increased enforcement against tobacco smugglers. In 2008, the RCMP implemented the *Contraband Tobacco Enforcement Strategy*, which aimed to combat the increased rates of black-market tobacco smugglers by seizing the cars of anyone caught with contraband tobacco, not just the cartons themselves. Then, in 2010, additional resources were dedicated to a three-year *Contraband Tobacco Initiative*, which aimed “to bring together federal, provincial and municipal enforcement agencies to target organized crime involved in contraband tobacco smuggling.”¹⁶ In the years following the initiative, illegal carton seizures have decreased from a record 978,000 cartons in 2009 to 356,000 in 2012.

Enforcement is not the only possible cause of this decline in carton seizures, however. Another likely cause is rising tobacco taxes in neighboring U.S. states. RCMP reports show that approximately 81 percent of all cigarette seizures are in southeastern Ontario and southwestern Quebec—provinces with the majority of high-volume smuggling points.¹⁷ Since 2004, U.S. states bordering Ontario and Quebec have raised their tobacco tax rates, causing the disparity in price between the U.S. and Canada’s cigarette prices to shrink. By 2012 New York’s cigarette taxes actually surpassed Canadian rates. The shrinking price disparities shown in Figure 2 likely created a disincentive for cross-border cigarette smuggling, leading to a decline in carton seizures.

A third possible explanation for the decline in carton seizures is the use of different and perhaps more sophisticated *forms* of illicit trade, which the RCMP is less able to tackle. Some evidence to support this contention comes from a 2011 report by Statistics Canada, which showed that the share of contraband tobacco within the overall underground economy in Canada has been on the rise since 2002.¹⁸

Figure 2: Cigarette Price Disparity between U.S. States and Ontario and Quebec



Source: Tobacco Free Kids, Nova Scotia Finance Comparative Taxation Rates. Note: Tax per pack is the combined federal and state/province tax rate per pack of 20 cigarettes.

One factor may be the growing role of Aboriginal reserves in the illicit tobacco trade. The RCMP and Criminal Intelligence Service Canada have identified (a) cigarettes unlawfully manufactured on bordering Aboriginal territories in the United States and (b) cigarettes designated for sale on Canadian Aboriginal reserves (and thus exempt from provincial excise taxes) that are diverted into the black market, as two of the five primary sources of contraband tobacco in Canada. Law enforcement officials find enforcement very difficult in Aboriginal territories, with the RCMP estimating that more than half of all contraband cigarettes distributed in Canada are smuggled through Aboriginal territories in south-central Ontario and Quebec.¹⁹

The Ontario government's Cigarette Allocation System, which distributes hundreds of millions of cigarettes to Aboriginal Reserves across Ontario tax-free for personal consumption by Status Indian residents of reserves, may be partly to blame for this problem. According to a 2012 report by the Canadian Taxpayers Federation, the Allocation System provides enough cigarettes for each Aboriginal Reserve resident—including children—to smoke just under three packs per day. In reality, up to 79 percent of these cigarettes are diverted and sold illegally to people who are not Status Indian.²⁰

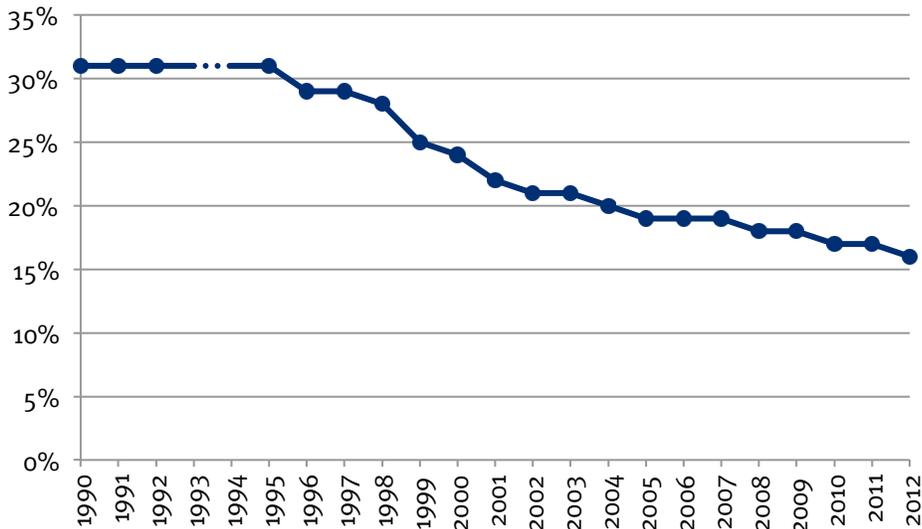
Analysis

Whatever the reason for falling carton seizures since 2009, there nevertheless seems to be strong empirical evidence from the period 1994–2008 to support the contention that higher cigarette taxes encouraged illicit trade, while lower cigarette taxes discouraged it. The sharp decline in smuggled cigarette seizures from 1994 to 2001 corresponds with the decline in cigarette tax rates, while the subsequent rise in seizures of smuggled cigarettes followed tax increases from 2002 onwards. This suggests there is a strong relationship between the tax rate and illegal activity.

The RCMP itself acknowledges that the tax rate level was the clear driver of the smuggling activity (and decline in activity), observing, in a 2008 *Tobacco Enforcement Strategy* document, that "when the tax rollbacks were implemented, smuggling of tobacco [in the Cornwall/Vallyfield region] disappeared almost overnight."²¹ And this is supported by econometric analysis conducted by Jean-Francois Ouellet, Associate Professor of Marketing at HEC Montreal, and his co-authors Mariachiara Restuccia, Alexandre Tellier and Caroline Lacroix. Ouellet et al. found that each dollar of cigarette tax cuts increased the chance of ending a consumer's use of smuggled cigarettes by 13.2 percent.²² Equally as important, Ouellet found the opposite to be true as well—an increase in cigarette taxes will boost consumption of smuggled cigarettes, thereby encouraging previously legal cigarette consumers to start using contraband cigarettes.

Despite this finding, tax increase advocates continue to argue that the return to high tax rates is necessary to discourage smoking, claiming that the 1994 tax cuts spurred more Canadians to smoke. However, data from Health Canada's Canadian Tobacco Use and Monitoring Survey (CTUMS), in Figure 3 below, shows that smoking has been steadily declining since 1995.

According to responses collected in the survey, it seems that in fact the decline in taxes did not have a long-term effect, if it had any effect at all on smoking rates in Canada. Between 1994 and 2001, smoking prevalence decreased by 29 percent, compared to only an 18.2 percent decrease between 2001 and 2008—when tax rates were rapidly increasing.

Figure 3: Prevalence of Smoking among Canadians, 1990–2012

Source: Health Canada, Canadian Tobacco Use and Monitoring Survey 2012 (1990: Canada's Health Promotion Survey 1990: Technical Report (Health and Welfare Canada, 1993); 1991: General Social Survey Supplement; 1994 (May) Survey on Smoking in Canada (SOSIC); 1994/95, 96/97, 98/99: National Population Health Survey public use files; 1999-2011 Canadian Tobacco Use Monitoring Survey, Annual Results.) Data not available for 1993 and 1994 as indicated by dashed line.

Jean-François Ouellet and his co-authors also concluded that there was little evidence that the mid-1990's lower tax rates encouraged more smoking, finding that taxes in general had no impact on consumption one way or the other. Instead, they attribute demographic factors, such as age, to the decision to smoke or quit.

On the other hand, there is evidence to suggest that illicit trade—which appears to be encouraged by high taxes—undermines public health efforts to reduce the prevalence of tobacco use: a study published by the Canadian Medical Association found that smoking contraband cigarettes is negatively associated with short-term smoking cessation.²³ Moreover, a 2009 study by Canadian advocacy group the *National Coalition Against Contraband Tobacco* concluded that of cigarette butts found at 110 Ontario high schools, 30 percent were contraband and that 45 percent of discarded cigarette butts at 75 high schools in Quebec were contraband.²⁴ These examples suggest that contraband tobacco is easily accessible to under-age smokers, with illicit trade allowing them to circumvent laws intended to protect them.²⁵

Policy Implications

Besides the direct and indirect social costs of criminal behavior, Canadian governments and legitimate manufacturers and retailers continue to sustain a significant loss in legitimate sales and tax revenue due to illegal, tax-free sales.

In a 2008 report by the Office of Auditor General of Ontario, it was estimated that if tobacco consumption in 1999 remained constant, given increased tax rates, that tobacco tax revenue in FY 06-07 would have been CAD \$2.2 billion rather than the approximate CAD \$1.2 billion collected.²⁶ Taking into account an approximate 27 percent decrease in consumption from 1999 to 2007 (according to Health Canada's annual Tobacco Use and Monitoring Surveys), tax revenues still should have been as much as CAD \$1.7 billion in 2007.²⁷ That suggests a reduction of CAD \$500 million in tax revenue. More recently, the Canadian Taxpayers Federation has suggested that in Ontario the federal and provincial governments forgo up to CAD \$1.1 billion per year in reduced tax revenue from the overall contraband tobacco trade.²⁸ Adjusted for inflation, had Canada and its provinces kept their low 1994 cigarette tax rates, tax revenues would actually be higher given that the lower taxes significantly reduced the black market sales.

In Quebec, the Ministry of Finance estimates that CAD \$125 million in cigarette excise taxes were left uncollected in 2011 due to the presence of contraband products.²⁹ And among legitimate manufacturers and retailers throughout Canada, Imperial Tobacco Canada reports that the tobacco industry loses CAD \$900 million and convenience store owners lose an astounding CAD \$2.5 billion in revenue to black market sales.³⁰

Excessively high taxes on tobacco products in Canada have resulted in a booming illicit trade. When taxes were reduced, the illicit trade collapsed and rates of smoking continued to decline. Since taxes started rising again, the decline in rates of smoking has slowed. One possible explanation is that consumers have been more readily able to access tobacco products due to the widespread illegal supply chain. In spite of increased enforcement, the number of smuggled cigarettes captured by the RCMP remains far higher than during the lower-tax period. The most sensible policy response would seem to be a reduction in federal and state taxes, in order to eliminate the incentives to supply illegal tobacco products.

The lesson for policymakers is that higher taxes do not necessarily lead to lower consumption or to higher revenues. Meanwhile, they clearly risk unintended consequences—including the influx of contraband tobacco on the black market, and increased demand for tax-free illicit cigarette and tobacco products. Moreover, lower taxes do not mean lower revenue for the government, as the smokers who relied on illicit, tax-free cigarettes have an incentive to switch to licit, taxed sales.

About the Authors

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