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## Higher Cigarette Tax Has Led to More Tax Revenue, More Tax Evasion

IN FEBRUARY 2007 TESTIMONY before the state Assembly's Ways and Means Committee, Mayor Michael Bloomberg proposed a 50-cent increase in the city's tax on cigarettes. The Mayor argued that raising the price of cigarettes—by increasing taxes—has proven to be a very effective method of reducing smoking. He contends that his latest proposal will further curb smoking among New Yorkers and has promised that the additional tax revenue generated —\$20 million if the proposal, which has not yet been enacted, had been in effect at the start of this fiscal year would be used to expand anti-smoking public health efforts.

There is considerable evidence that supports the Mayor's enthusiasm: increases in cigarette excise taxes result in reduced rates of smoking among adults and by an even greater margin among youth.<sup>1</sup> Data compiled by the New York City Department of Health and Mental Hygiene suggest that in the year immediately following the implementation of cigarette tax increases in calendar year 2002, the proportion of New Yorkers who smoked dropped from 21.5 percent to 19.2 percent. In a 2006 survey by the New York State Department of Health, about 60 percent of New York smokers who reported making an attempt to quit cited the rising cost of cigarettes as their primary reason for trying to quit.

Even as smoking declined, cigarette tax revenue climbed from less than \$30 million prior to the 2002 increase to \$123 million last year. But raising cigarette prices through higher taxes also increases incentives for buyers to seek low-tax or untaxed cigarettes.<sup>2</sup> IBO estimates that roughly \$40 million in city revenue was lost last year due to evasion of cigarette taxes—a loss that is greater than the tax brought in prior to the 2002 increase.

A Growing Tax. Since the early 1920s states and localities around the country have been imposing cigarette and tobacco taxes. In 1938, with an average pack of cigarettes costing about 15 cents, the city imposed a 1 cent per pack tax. The state followed in 1939 with its own 1 cent tax. Both of these cigarette taxes are levied in addition to the city and state general sales tax. The city tax grew, gradually reaching 8 cents in 1975, while the state tax grew faster reaching 15 cents by that time. The 1980s and 1990s were marked by state tax hikes while the city tax rate was unchanged, its real value eroding due to inflation. A new round of rate increases began in 2002 when both New York State and New York City raised their cigarette tax rates to \$1.50. In the city it meant a combined city/state cigarette tax of \$3.00 per pack—\$1.50 for New York State tax and another \$1.50 for New York City tax.

In reality, much of the \$1.50 identified as the city tax actually flows to the state rather than to the city's coffers. The city was forced to give up a substantial portion of the increased revenue in order to get the higher tax enacted because, as with most city tax policy, changes in the city's cigarette tax required legislation by the state. The state wanted compensation for revenue it expected to

Supplemental details available. . . Rising Cigarette Taxes— A National Trend and Cigarette Taxes and the Law ... at www.ibo.nyc.ny.us

New York City Independent Budget Office Ronnie Lowenstein, Director George Sweeting, Deputy Director 110 William St., 14th Floor New York, NY 10038 Tel. (212) 442-0632 Fax (212) 442-0350 e-mail: iboenews@ibo.nyc.ny.us http://www.ibo.nyc.ny.us lose as smokers cut back on taxed purchases in response to the nearly 18-fold increase in the city tax. Under the final legislation, 46 percent of annual city cigarette tax revenues are redirected to the state. In recent years, the redirected revenues have been part of the funds controlled under the state's Health Care Reform Act and are used for health related purposes. (For more details on cigarette taxes click here.)

**Enforcing Cigarette Tax Laws.** With cigarette taxes higher here than in other jurisdictions, there is an increase in demand for cigarettes purchased from low tax regions and Indian reservations and transported to the city. High city and state taxes also increase the potential profits for those engaged in illegal cigarette smuggling. Savings resulting from facilitating tax evasion—usually the only competitive advantage enjoyed by Internet and other vendors—deprives the city and state governments of tax revenues that are due on sales to city customers. Even a casual Internet search reveals a multitude of Web sites selling "tax-free" cigarettes. In reality, with few exceptions, no cigarettes available to New Yorkers are legally free from taxation by the city and state.

The sales of cigarettes and tobacco products in New York City are regulated by city, state, and federal law. Under state and city law, cigarettes purchased in New York, including Internet and mail order cigarettes shipped to New York addresses, are subject to state and city tax. New York law declares, "[i]t is intended that the ultimate incidence of and liability for the tax shall be upon the consumer," although in most cases, the tax is collected at the wholesale level, in order to simplify collection and enforcement. Tax stamps affixed to the package indicate that the appropriate tax has been paid. In theory, if New York residents have in their possession more than two cartons of cigarettes on which the tax was not paid, they are required to pay a use tax, equivalent to the regular cigarette tax. (For more details on enforcing cigarette tax laws click here.)

*Where New Yorkers Buy Their Smokes.* While higher taxes have increased the economic incentives for smokers to evade the taxes, it doesn't follow that all or even a majority of smokers actually do so. Surveys of smokers by New York State and New York City provide evidence on where smokers actually purchase their cigarettes and what they pay for them. The majority of New York City smokers buy their cigarettes from convenience and grocery stores, supermarkets, pharmacies, gas stations, and discount stores in the city where the price includes the city and state sales taxes. Yet a sizable portion of the smoking population favors alternative sources that offer low-tax or untaxed cigarettes. (For simplicity, the term *under-taxed* will be used to describe both low-tax and untaxed cigarettes in the rest of the report.)



City smokers are less likely to purchase under-taxed cigarettes than smokers elsewhere in New York State. In the state's 2006 Adult Tobacco Survey (ATS), smokers were asked whether they had purchased cigarettes from low or untaxed sources over the past 12 months. Those who responded affirmatively were then asked whether they had always, sometimes, or rarely purchased under-taxed cigarettes over the same period. Although 27 percent of city smokers reported buying under-taxed tobacco, the state percentage is larger—with more than 34 percent paying less for their cigarettes some or all of the time. Although the share who report always buying under-taxed cigarettes in the city is half the share elsewhere, it still amounts to one in ten of the city smokers who report they always evade the tax.<sup>3</sup>

Among smokers who sometimes or always purchase under-taxed cigarettes, city residents were most likely to buy from out of state sources, while residents in the rest of the state more often relied on purchases from Indian reservations. ATS respondents were asked to identify their sources for under-taxed cigarettes by choosing one or more from a list that included out of state, Indian reservations, duty-free stores, toll-free numbers, or the Internet. Among city residents who at times purchased under-taxed cigarettes, 71 percent reported buying from out-of-state vendors, which covers retailers in neighboring states as well as those in states further away, particularly those in the South with very low cigarette taxes.

Indian reservations and duty free stores were also identified as major sources of under-taxed cigarettes; 31 percent of city residents who at times purchased under-taxed cigarettes reported buying from reservations and 24 percent from duty free shops. New York State smokers outside the city rely heavily on Indian reservations: 75 percent of smokers who always or sometimes bought under-taxed cigarettes report that they purchased from Indian reservations.

## City Smokers Who Purchase Undertaxed Cigarettes Rely Heavily on Out of State Vendors

		New York State
	New York City	excluding NYC
Out-of-State	71%	10%
Indian Reservations	31%	75%
Duty-Free Stores	24%	10%
Toll Free Numbers	8%	7%
Internet	6%	5%
NOTE: Percentages are of those smokers who report		
sometimes or always buying under-taxed cigarettes in the		
12 months prior to interview. Some smokers report using		
more than one source of undertaxed cigarettes.		
SOURCE: NYS Adult Tobacco Survey 2006.		

Another source of under-taxed cigarettes is sales on the street from unlicensed vendors who typically sell bootlegged or counterfeit cigarettes. Although these sales were not separately reported in the state ATS survey, the city health department's annual Community Health Survey, which includes questions on smoking habits and sources of cigarettes, among many other health-related subjects, sheds some light on this issue. The corresponding question in the city survey asks "Where did you *get* the last cigarette?" The list of possible answers combines "another person" and street vendors as possible sources. The survey's data indicate that 9 percent of city smokers got their last cigarette from either a street vendor or another person.

According to the ATS data, there are variations in the percentage of city smokers who avoid paying the taxes not only across the state, but also within the city. Smokers in Queens are more likely to buy under-taxed cigarettes than residents of other boroughs. In general, more highly educated smokers appear more likely to buy under-taxed cigarettes: according to the survey, 20 percent of smokers without high school diplomas reported evading cigarette number of cigarette packs sold in the city on which applicable taxes have been collected; despite the decline in taxed sales, city cigarette tax revenues have increased. As the combined city and state tax rate grew by 90 percent between city fiscal years 2002 and 2003, total taxed city sales fell sharply from about 343 million cigarette packs to 197 million packs, a decline of 42 percent. The graph below illustrates both recent changes in taxes and the corresponding dramatic drop in sales of taxed cigarettes. Proponents of cigarette tax hikes use such drops in sales of cigarettes to justify heavy taxation of tobacco products.

But the same tax increase that leads some smokers to quit leads others to search for lower-cost cigarettes. Moreover, the tax hike and resulting increase in price also make it more lucrative to supply under-taxed cigarettes. Opponents of cigarette tax increases point to the switch from taxed to under-taxed sales to argue against higher taxes, sometimes even claiming that declines in taxed sales could be great enough to result in lower tax revenues as more smokers switch to buying cigarettes from under-taxed sources.

As shown in the graph on page 4, raising the city tax from 8 cents to \$1.50 lifted the city's cigarette tax revenues from less than \$30 million a year to almost \$160 million *even after accounting for the state capturing 46 percent of the revenue that resulted from the city's tax increase*. The following years saw a gradual decline, but city cigarette tax revenue remains above \$120 million annually. The redistribution to the state is intended to hold the state harmless for the decline in state cigarette and sales tax revenues as a result of the city tax increase. In 2006, \$105 million of the city's cigarette tax collections were redirected to the state, leaving the city with net revenue of \$123 million.

*Lost Tax Revenue.* Sales of under-taxed cigarettes means that there is a loss in potential revenue for the city and the state, but measuring that lost revenue requires knowing—or at



Effect of Higher Taxes on Cigarette Sales and Tax Revenue. Large increases in both the state and city taxes have been accompanied by a large drop in the



least estimating—the number of under-taxed sales that occur. While the state's ATS survey provides considerable detail on the consumers and suppliers of under-taxed cigarettes, it does not provide information on the total quantity of under-taxed cigarettes purchased. In order to estimate the revenue loss from under-taxed sales, the state health department instead uses a methodology that relies on assumptions about the number of cigarettes purchased from each of the under-taxed sources as reported in its ATS survey. Using a range of assumptions, the department estimated the total state revenue loss from all undertaxed sources to be between \$419 million and \$552 million in 2004. For New York State, the sales of cigarettes by Indian reservations account for the largest portion—more than 50 percent—of revenue losses, and Internet sales account for about one-fourth of the lost tax revenue.

Using a different methodology, IBO has estimated the potential city revenue lost from under-taxed sales in the city. We began by estimating annual cigarette consumption by New York City residents as measured in the ATS survey, regardless of where the cigarettes were purchased. We then calculated the potential city cigarette tax revenue, implied by that number of sales and compared it to the actual revenue collected. Thus, based on the 2006 ATS, IBO estimates that New Yorkers bought a total of 207 million packs of cigarettes. If all of those cigarettes were properly taxed by the city, the revenue—after accounting for the 46 percent redirected to the state—would total almost \$167 million. Instead, the city collected a little more than \$123 million. Based on this methodology, there was \$43 million in city cigarette tax revenue that went uncollected due to purchases from under-taxed sources in 2006.<sup>4</sup>

Applying this same methodology to the data from the city's Community Health Survey, IBO estimates a loss of \$37 million in city cigarette tax revenue for 2006. Because the level of cigarette consumption reported in the city survey is below that reported in the ATS, the estimate of revenue loss derived from the Community Health Survey is lower as well.

Recent research found evidence that a significant amount of cigarette consumption goes underreported in surveys similar to the ones used in this report.<sup>5</sup> If the levels of smoking reflected in surveys understate the actual level of cigarette purchases, then the amount of tax reveune loses would be even higher.

While the Mayor's proposal to again increase the local cigarette tax assumes that higher prices will further discourage New Yorkers from smoking, it may also encourage more city smokers to seek under-taxed cigarettes. The availability of under-taxed and therefore cheaper cigarettes undermines the city's efforts to reduce smoking and deprives the city of funds that would be otherwise directed towards public health initiatives.

#### This report prepared by Eldar Beiseitov

### END NOTES

<sup>1</sup>Tauras, J, "Public Policy and Smoking Cessation Among Young adults in the United States," *Health Policy 6*\*:321-32, 2004; Emery, S, et al., "Does Cigarette Price Influence Adolescent Experimentation?," *Journal of Health Economics* 20:261-270, 2001; Harris, J & Chan, S, "The Continuum-of-Addiction: Cigarette Smoking in Relation to Price Among Americans Aged 15-29," *Health Economics Letters* 2(2):3-12, February 1998, Chaloupka, F, "Macro-Social Influences: The Effects of Prices and Tobacco Control Policies on the Demand for Tobacco Products," Nicotine and Tobacco Research, 1999.

<sup>2</sup>A 2007 study of smokers in Central Harlem, "The \$5 Man: The Underground Economic Response to a Large Cigarette Tax Increase in New York City" conducted by researchers at Columbia University, concluded that "increasing cigarette taxes was an effective strategy for reducing tobacco use," but the authors also observed "a dramatic rise in illegal street sales of under-taxed cigarettes was reported among minority low-income persons immediately after the price increase," *American Journal of Public Health*, August 2007.

<sup>3</sup> Because the ATS is primarily concerned with the state level, it does not identify city residents who buy their cigarettes from New York sources that are outside the city, thus evading the city tax but not the state tax.

<sup>4</sup> The estimate of revenue loss, which depends on the measure of cigarette consumption reported in the ATS, ranges from \$14 million to \$75 million using a

95 percent confidence interval for the consumption variable. <sup>5</sup>M.Stehr, in 2005 *Journal of Health Economics* (Volume 24, pp 277–297), found that because of under-reporting, the cigarette consumption data in the Behavioral Risk Factor Surveillance System (BRFSS) overstates the decline in smoking. Both the city and state data, on which this report is based, align closely with the information in the BRFSS's sample of New York City smokers.

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**Higher City Cigarette Tax Translates** City Cigarette Tax Revenues (in millions) City Cigarette Into Higher Cigarette Tax Revenue for the City Tax Rate Pack \$160 \$140 \$1.60 \$1.40 City Cigarette Tax Per City Cigarette \$120 \$1.20 Tax Revenues \$100 \$1.00 \$0.80 \$80 \$60 \$0.60 \$40 \$0.40 \$0.20 \$20 \$-Śr ph ₽<sup>6</sup>0 P<sup>b</sup> Fiscal Year NOTE: Revenue totals reflect redistribution to New York State. SOURCES: IBO; New York City Office of Management and Budget.