

The illegal cigarette market in a socioeconomically deprived inner-city area: the case of the South Bronx¹

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ABSTRACT

Objective: To determine the scope of the cigarette black market in a socioeconomically deprived inner-city area in the US, taking the South Bronx in New York City as a case study.

Design: The South Bronx Litter Pack Survey collected discarded cigarette packs (n=497) along 30 randomised census tracts to quantify the prevalence of counterfeit, legal and out-of-state tax stamps.

Results: It was found that 76.2% of cigarette packs collected avoided the combined New York City and State tax. More specifically, 57.9% were untaxed (counterfeit or bearing no tax stamp), for 15.8% taxes were paid outside of New York City (including other states and New York State only). Only 19.4% of tax stamps collected indicated that New York City and New York State taxes were paid. 4.4% of the cigarette packs could not be analysed because the tax stamps were not discernible. The finding that the majority of cigarettes did not have a tax stamp or bore a counterfeit tax stamp suggests that these cigarettes were being bootlegged, most likely from Native American Reservations.

Conclusions: The present study highlights the importance of examining the illegal cigarette market in socioeconomically deprived regions of the US, where tax avoidance and black market activities appear to far exceed levels found elsewhere in the country including Chicago and New York City at large.

INTRODUCTION

The main factors believed to contribute to the illegal cigarette market in the US include poverty, high rates of cigarette consumption, social acceptability of illicit activities, high tax rates as well as high tax-induced cross-border price differentials.^{1,2} These variables are highly prevalent in the South Bronx area of New York City. New York City has the highest tax rates on cigarettes nationwide. Cigarettes sold in New York City in 2011 have been subject to a combined New York State (US\$4.35) and New York City tax (US\$1.50).³ At the same time, New York City is in relatively close proximity to low-tax jurisdictions, namely Native American Reservations in New York State. In addition, the South Bronx currently has the highest rates of smokers in New York City and also the highest rates of poverty in the nation.^{4,5} We therefore assume that nowhere else in the US is it more likely to find a highly prevalent and well entrenched cigarette black market, which makes the South Bronx an obvious starting point for studying local cigarette black markets in the US. The main aim of our study is to provide, for the first time, a detailed

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empirical analysis of a local cigarette black market in the US. More specifically we quantify the prevalence of illegal cigarettes in the South Bronx.

DATA AND METHODS

South Bronx litter pack survey (SBLPS)

The South Bronx was geographically defined using the New York City Department of Health and Mental Hygiene's District Public Health Office boundaries (zip codes 10451-10457, 10459, 10460 and 10474).⁶ Zip codes were further coded into census tracts (n=163). Overall, 30 census tracts comprising a combined total of 371 blocks were chosen using probability proportion to sampling size (PPS), where census tracts with large populations had a higher probability of being selected.

In March of 2011, all sidewalks within each census tract were walked and all discarded cigarette packs that were visible and accessible on sidewalks and streets, 497 packs in all, were collected. The number of packs collected per census tract ranged from 6 to 39 with an average of 17 (SD=8.5).

Of the 497 collected packs, 329 (66.2%) still had a cellophane wrapper and were eligible for further analysis with a view to the cigarette brand and the presence or absence as well as type of tax stamp affixed to the cellophane wrapper. Those cigarette packs that had a New York State (NYS) only tax stamp or a combined New York City and New York State (NYC/NYS) tax stamp were sent to the New York State Department of Taxation and Finance (NYSDTF) for analysis where field investigators used forensic tools to determine whether the tax stamps were genuine or counterfeit.

RESULTS

In order to generalise from the 30 selected census tracts included in the South Bronx Litter Pack Survey to the 163 tracts that define the South Bronx, each cigarette pack was assigned a sampling weight. On this basis we estimate (as shown in table 1) that, as per March 2011, 42% of the cigarette packs discarded in the South Bronx do not have any tax stamp, that 15.8% of the packs bear a tax stamp from another state, primarily from Virginia and neighbouring New Jersey, that 0.2% bear a tax stamp from another country (Dominican Republic), 2.3% have only a genuine NYS tax stamp and 19.4% have a genuine combined NYC/ NYS tax stamp. We also estimate, based on the identifiable tax stamps in our sample, that in March 2011 15.9% of the tax stamps on cigarette packs discarded in the South Bronx were counterfeit. 4.4% of the tax stamps could not be identified. Overall, this means that 57.9% of the cigarette packs were untaxed (no tax stamp or counterfeit), for 15.8% taxes were paid in another state or country or in New York State outside of New York City (New York State tax stamp only) and for only 19.4% the taxes mandated for retail sale in New York City were paid (genuine NYC/NYS tax stamp).

Table 1 South Bronx litter pack survey

Tax stamp	Percentage
Untaxed	
No tax stamp	42%***
NYC/NYS (counterfeit)	14.1%***
NYS (counterfeit)	1.8%
Total	57.9%
Out of New York City taxes paid	
Ohio	0.2%
Tennessee	0.2%
Georgia	0.6%
Indiana	0.7%
Delaware	0.6%
New Jersey	4.4%***
Virginia	9.1%***
Dominican republic	0.2%
NYS only (genuine)	2.3%*
Total	15.8%
New York City taxes paid	
NYC/NYS (genuine)	19.4%***
Total	19.4%
Unknown cigarettes	
Unknown	4.4%**
Total	4.4%
Total	100%

SE * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.
 NYC, New York City; NYS, New York State.

In the analysed sample, there were 14 different types of cigarette brands, although Newport and (to a lesser extent) Marlboro were found to dominate the South Bronx cigarette market. In fact, 86% of cigarette packs were Newport (menthol), 7% regular Marlboro, (commonly termed 'reds') and 3.3% were Marlboro Light.

DISCUSSION

The findings that 76.2% of discarded packs in the South Bronx were not legally sold within New York City confirms the general expectation that where taxes are high and income levels low, a cigarette black market of significant proportions develops. Our research suggests that tax avoidance in the South Bronx exceeds the levels of previous estimates for the US,¹⁷ and also the levels of about 50% found in recent research in New York City.¹² Although tax avoidance rates mirror those found in Chicago, the rate of counterfeit tax stamps is higher.⁸

The finding that 42% of discarded cigarette packs do not have a tax stamp and 15.9% bear counterfeit tax stamps confirms recent research and anecdotal evidence that Native

American Reservations have been the main source of contraband cigarettes for the black market in New York City.^{9 12}

For example, William Comiskey, former Deputy Commissioner of Tax Enforcement at the New York State Department of Taxation and Finance, testified before the US Senate that since the late 1990s an increasing share of cigarettes shipped to New York State have gone through Native American Reservations. The share increased from 2.9% (5.7 million cartons) in 1988 to 34.1% (27.5 million cartons) in 2008.¹⁰ Of the 80 New York State licensed stamping agents, 10 sold over 122 million cartons of untaxed cigarettes to Native American Reservations from January 2006 to August 2009.¹⁰ Cigarettes sold on Native American Reservations are subject to federal but not state excise taxes and, until a recent change in law, did not have to bear tax stamps. Considering the geographical proximity of the Native American Reservations, including two that are in close driving distance from the South Bronx (68.2 and 94 miles), they are the more likely source than states where tax stamps are not traditionally affixed, that is, North Carolina, South Carolina and North Dakota.³

Given recent changes in the legal framework the reported trend may no longer be true. Under amended tax law, confirmed by a US Court of Appeals on 9 May 2011, Native American Reservations now have to prepay taxes on all cigarettes to be sold to tribal and non-tribal members except for small amounts which may still be obtained from wholesale dealers without tax stamps.¹¹ Future research is needed in order to understand if bootlegging patterns have shifted from Native American Reservations to low-tax states such as Virginia, Georgia, North Carolina and South Carolina.

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