

Understanding the U.S. Illicit Tobacco Market: Characteristics, Policy Context, and Lessons from International Experiences

Committee on the Illicit Tobacco Market: Collection and Analysis of the International Experience

February 18, 2015

Study Background

- Sponsor: U.S. Food and Drug Administration (FDA)
- Collaboration: Division of Behavioral and Social Sciences and Education (DBASSE) & Institute of Medicine (IOM)
- Process:
 - Study began in August 2013
 - Study committee held four in-person meetings
 - Report has been peer-reviewed

Committee Members

- Peter Reuter (*Chair*), University of Maryland
- Martin Bouchard, Simon Fraser University
- Frank J. Chaloupka, University of Illinois at Chicago
- Philip J. Cook, Duke University
- Matthew C. Farrelly, RTI International
- Geoffrey T. Fong, University of Waterloo
- Rachel A. Harmon, University of Virginia Law School
- Edward R. Kleemans, VU University Amsterdam
- Conrad Phillip Kottak (*NAS*), University of Michigan
- Michael Levi, Cardiff University
- Emily Owens, University of Pennsylvania
- Vaughan W. Rees, Harvard School of Public Health
- Anthony So, Duke University
- Klaus von Lampe, John Jay College of Criminal Justice/CUNY
- Heather Wipfli, University of Southern California

Official Statement of Task

“An ad hoc committee will conduct a study and prepare a report that will assess the scope of the international illicit tobacco market, including demand, structure, volume, variations by country and the impact of changes in policy. The committee will examine existing literature and consult international experts on the illicit tobacco market. The committee may also examine specific case studies to assess various policy mechanisms and the impact on the illicit trade in tobacco products. The report will include recommendations about the strengths and weaknesses of the currently available research and the applicability of international experiences to the illicit tobacco market in the United States.”

Policy Background

- Existing illicit markets in the United States predominantly driven by price differentials created by tax policies.
- The FDA can regulate tobacco products. Future illicit markets may reflect non-price.
- The illicit tobacco trade has changed in response to incentives.

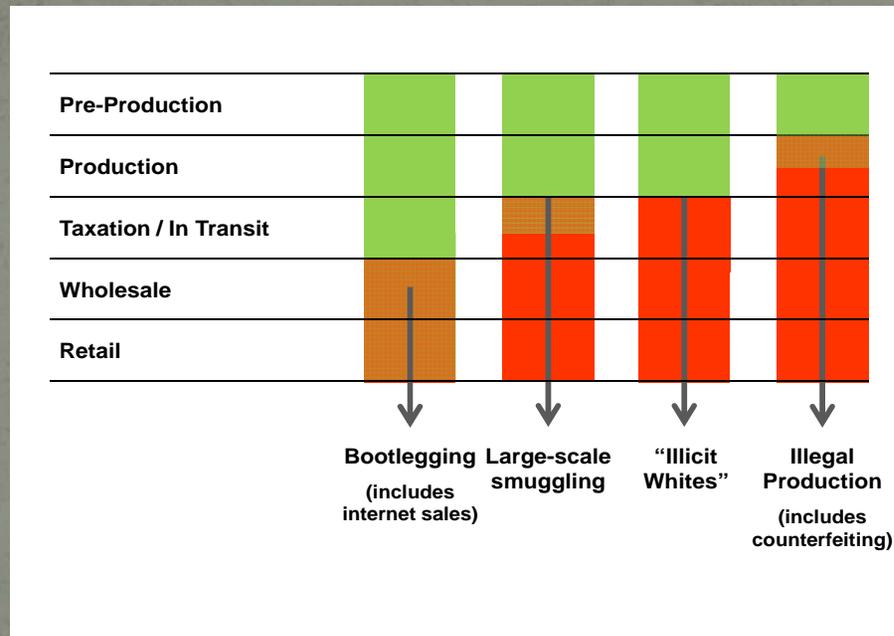
Definitions

- Illicit trade: “any practice or conduct prohibited by law which relates to production, shipment, receipt, possession, distribution, sale or purchase, including any practice or conduct intended to facilitate such activity” (WHO; Tobacco Control Act).
- Tax evasion: illegal methods of circumventing tobacco taxes, either by individuals or criminal organizations.
- Tax avoidance: legal activities and purchases to circumvent tobacco taxes, mostly by individual buyers
 - Small-scale tax avoidance is often technically tax evasion.
- Existing volume estimates often cannot distinguish between tax evasion and avoidance.

Why the Illicit Tobacco Trade Matters

- 1) “Lost Lives”: availability of illicit cigarettes erodes the benefits of tobacco control measures.
- 2) Lost Revenues: illicit markets reduce tax collection.
 - In the United States, losses mostly at state level.
 - Losses not evenly distributed across states – New York State accounts for about half of lost cigarette tax revenues.

Phases of the Cigarette Supply Chain



NOTE: Green indicates a legal path, red indicates an illegal path.

Main Illegal Procurement Schemes

- 1) Bootlegging – legal purchase of cigarettes in one jurisdiction and consumption or resale in another jurisdiction without payment of applicable taxes.
- 2) Large-scale smuggling – the sale of cigarettes without the payment of any taxes or duties, even in the country of their origin. International
- 3) Illicit whites – legally produced cigarettes with unique or no brand name, destined for illicit distribution.
- 4) Illegal production – two main forms:
 - i) Unlicensed or underreported production of illicit whites or regular brands;
 - ii) Production of counterfeit cigarettes.

Main U.S. Procurement Schemes

- Illicit tobacco market consists of bootlegging from Native American reservations and low-tax states to high-tax states
 - Native American reservations less important now
- In contrast to other countries U.S. does not see many
 - counterfeit cigarettes
 - illicit whites
 - large-scale smuggling of brand cigarettes

Why Do Domestic Sources Dominate U.S. Illicit Market?

- Ease of bootlegging compared to other procurement schemes?
 - Inter-state tax differences very large
- Preferences of U.S. consumers for cigarettes different from those sold in other countries?
 - Not much demand for imports
- Effectiveness of general border controls?
 - Tobacco bulky relative to major targets of controls

Role of Tax/Price and Non-Price Factors

- Tax and price differentials are principal determinants of the illicit trade in the United States.
- Internationally, “non-price” factors comparably important to price factors
 - Weak governance
 - Political corruption
 - Ease and cost of operating in a country
 - Availability of usable distribution networks

Violence and Terrorism

- People involved in the illicit trade rarely have serious criminal records.
- Illicit tobacco trade is not associated with violence.
- Link between U.S. illicit tobacco trade and terrorism appears to be minor
 - No evidence of sustained links between global illicit trade and terrorism

Role of the Tobacco Industry

- Smuggling legally manufactured cigarettes allows tobacco companies to expand market share and overall market
- Tobacco industry has been involved in global illicit trade but no evidence of direct involvement in the U.S
 - Billion dollar settlements in Europe and Canada ca. 2000
- Settlement gives industry role in providing estimates of the size of the illicit market
 - Estimates are inflated
 - Strengthens industry arguments against taxes and regulation

Consumption of Illicit Tobacco

- Little social stigma associated with consumption of illicit tobacco.
- Individuals with low socioeconomic status and limited education tend to purchase illegal cigarettes locally
 - behavior associated with tax evasion
- Higher SES smokers tend to purchase online or through travel
 - behavior associated with tax avoidance
- Purchases by youth constitute about 1 percent of the illicit market.
 - these transactions of particular public health concern.

Size of the U.S. Illicit Tobacco Market

- Multiple methods should be used to estimate the size of the illicit tobacco market. Differences in:
 - Sample sizes
 - Time periods covered
 - Scientific rigor
 - Sources of error
 - Results
- The committee determined that the percentage of the total market represented by illicit sales in the U.S. is between 8.5% and 21%.

Size of the U.S. Illicit Tobacco Market (continued)

- The high end of the range (21%) is consistent with a pack return survey conducted in the U.S.
- The low end of the range (8.5%), which is the committee's own estimate, is based on comparing self-reported consumption with tax-paid sales.
 - Will underestimate cross-border sales for states with both positive and negative tax differentials with bordering states.

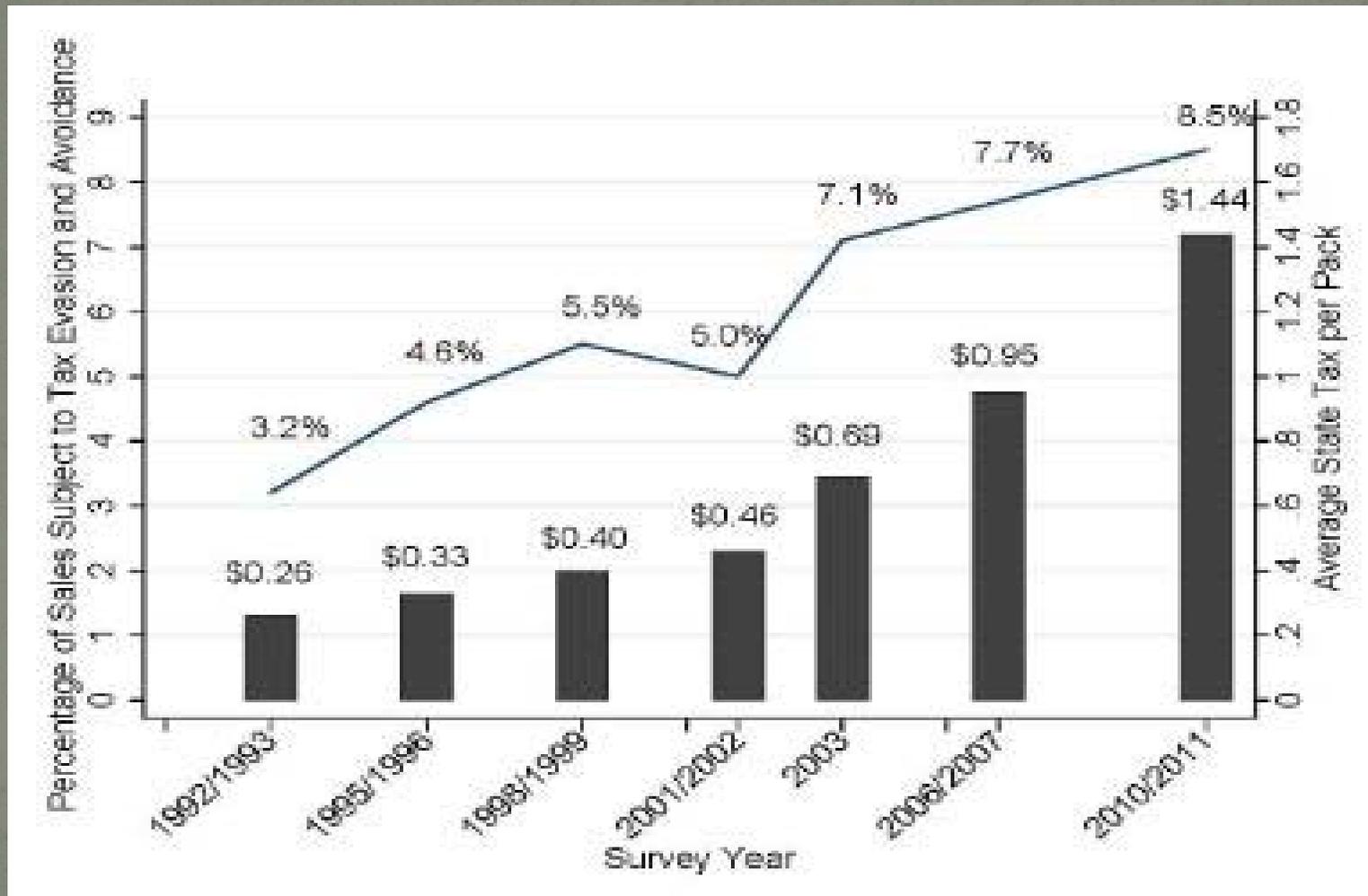
Size of the U.S. Illicit Tobacco Market (continued)

- The 8.5% to 21% range represents:
 - Between 1.24 to 2.91 billion packs of cigarettes annually.
 - Between \$2.95 billion and \$6.92 billion in lost gross state and local tax revenues.

Distribution of the U.S. Illicit Tobacco Market

| State | Self-Reported Consumption (millions of packs) | Tax-Paid Sales (millions of packs) | Adjusted SRC (millions of packs) | Adjusted SRC:TPS | Adjusted SRC-TPS (millions of packs) | 2011 State Excise Tax per Pack | Estimated State Revenue Lost or Gained (millions of dollars) |
|--|---|------------------------------------|----------------------------------|------------------|--------------------------------------|--------------------------------|--|
| Top Five Net Exporters (by revenue) | | | | | | | |
| California | 474.43 | 960.82 | 790.99 | 0.82 | -169.82 | \$0.87 | \$147.75 |
| South Carolina | 159.27 | 458.87 | 265.55 | 0.58 | -193.31 | \$0.57 | \$110.19 |
| New Hampshire | 42.31 | 126.60 | 70.54 | 0.56 | -56.05 | \$1.78 | \$99.77 |
| Virginia | 213.57 | 545.93 | 356.08 | 0.65 | -189.85 | \$0.30 | \$56.96 |
| Delaware | 27.52 | 79.93 | 45.88 | 0.57 | -34.05 | \$1.60 | \$54.48 |
| Top Five Net Importers (by revenue) | | | | | | | |
| New York | 424.47 | 389.45 | 707.70 | 1.82 | 318.25 | \$4.35 | \$(1,384.39) |
| Washington | 162.10 | 147.43 | 270.27 | 1.83 | 122.84 | \$3.03 | \$(371.58) |
| Ohio | 484.43 | 659.94 | 807.67 | 1.22 | 147.73 | \$1.25 | \$(184.67) |
| Michigan | 317.40 | 463.99 | 529.20 | 1.14 | 65.21 | \$2.00 | \$(130.41) |
| Arizona | 135.97 | 163.43 | 226.70 | 1.39 | 63.26 | \$2.00 | \$(126.53) |

Trends in Net Tax Avoidance and Evasion in the United States



Policy and Enforcement Interventions

- The government can control the supply chain through:
 - Licensing and regulatory requirements
 - Digital tax stamps with encrypted information
 - Tracking and tracing technologies

Policy and Enforcement Interventions (continued)

- Interventions can seek to undermine the conditions that make the illicit trade possible:
 - Tax harmonization programs
 - Public education campaigns aimed directly at the illicit trade

Policy and Enforcement Interventions (continued)

- A range of federal agencies are involved in enforcing federal laws that address the illicit trade:
 - ATF
 - ICE
 - CBP
 - TTB
- States and localities are also involved in enforcement.

Policy and Enforcement Interventions (continued)

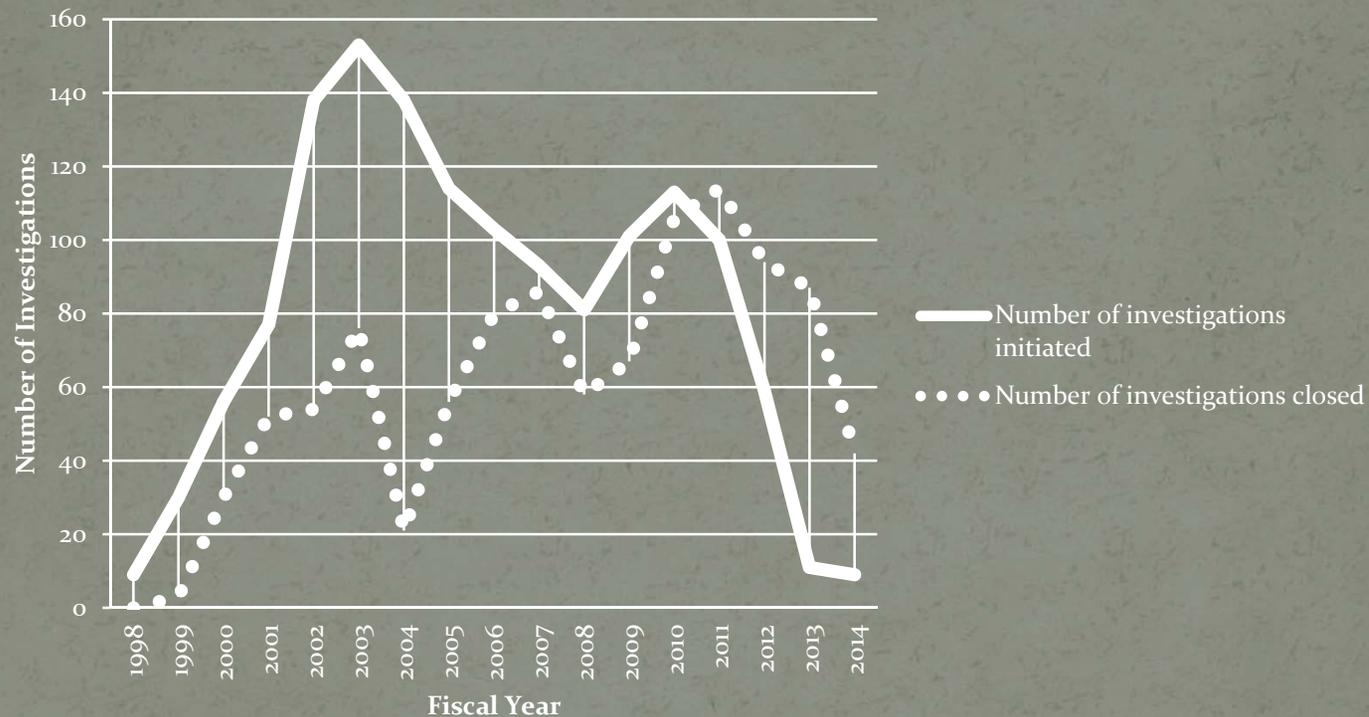
Enforcement against the illicit tobacco market faces at least three challenges:

- 1) The dynamic and adaptive nature of the illicit tobacco market.
- 2) The need to coordinate across various agencies, participants, and levels of government.
- 3) The low priority of the illicit tobacco trade for the federal and state governments.

Illicit Tobacco: A Low Enforcement Priority

- Possible Explanations:
 - Treated as an economic rather than criminal problem
 - Has been nonviolent
 - Only weakly opposed by social norms

Illicit Tobacco Enforcement: A Low Federal Priority



ATF tobacco investigations initiated and closed, 1998-2014

Policy and Enforcement: Examples of International Success

- Reductions in the illicit share of the tobacco market:
 - In Spain, from 15% in 1995 to 2% in 2001
 - In the United Kingdom, from 21% in 2000 to 9% in 2013
 - In Canada, from nearly 30% in the early 1990s to between 7.6% and 14.7% in 2010

International Interventions in the Illicit Tobacco Market

| Intervention | Spain | United Kingdom | European Union | Canada |
|--------------------------------|-------|----------------|----------------|--------|
| Licensing and Control Measures | x | | | x |
| Tax Stamps and Markings | | x | | x |
| Tracking and Tracing | | | x | |
| Enforcement | x | x | x | x |
| Tax Harmonization | | | x | x |
| Tribal Tax Revenue Agreements | | | | x |
| MOUs/Legal Agreements | x | x | x | x |
| Public Education Campaigns | | x | | x |

Consumer Response to Product Changes

- Key Question: Are consumers likely to participate in the illicit tobacco market if their preferred product characteristics are altered or eliminated by regulation?
- Existing research has not directly addressed this question.
- There is a body of work on the effects of variations in product design, formulation, and packaging on consumer preferences and smoking behavior.
- Findings from this work are suggestive but not conclusive for the question of emergence of illicit markets.

Product Appeal

- When taste and other chemosensory characteristics of cigarettes are negatively affected, product appeal is substantially diminished for some smokers.
- Other design changes, like reduced ignition propensity, have modest effect on product appeal.
- Graphic health warning reduce product appeal and increase awareness of health risks.

Limits on Demand for Illicit Products

- The extent that smokers quit.
- The extent that smokers continue to use modified product.
- The availability and appeal of legal alternatives (e.g., flavored little cigars or e-cigarettes).

Limits on Supply for Illicit Products

- The need for established distribution networks.
- The need for new sources of illicit product (either smuggled from other countries or produced illegally).
- The profit potential of a new type of illicit market would be limited by availability of legal alternatives and the robustness of enforcement.

Consumer Response to Product Changes: Available Evidence

- Regulations that have reduced ignition propensity and banned cigarette flavors have not led to demand for unregulated products from illicit sources.
- An illicit market response has not been observed following the introduction of plain packaging in Australia.

Consumer Response to Product Changes: Available Evidence (continued)

- There is insufficient evidence to draw strong conclusions about how the illicit market will adapt in response to permanent modifications to products.
- Nevertheless, the limited information available suggests that demand for illicit versions of conventional cigarettes may be modest.

Research and Data Collection: Key Areas of Inquiry

- Measurement
- Supply-side
- Demand-side

Recommendations for Research and Data Collection

(Recommendations are numbered according to the report chapter in which they are presented and discussed.)

Recommendation 2-1

Better information about the illicit tobacco market is needed to more accurately measure accounting profits of tobacco smugglers. For example, data could be systematically collected on the prices at which untaxed cigarettes are sold on the wholesale and retail levels, perhaps similar to the way in which the U.S. Drug Enforcement Agency collects information on heroin prices in large cities through its Domestic Monitoring Program, a component of the System to Retrieve Information from Drug Evidence (STRIDE) Program.

Recommendation 2-2

Research is needed on the extent to which consumer preferences explain why the United States appears to be less affected than other countries by large-scale smuggling of brand cigarettes and by counterfeit cigarettes and illicit whites. Research that directly tests the appeal and acceptability of a representative selection of non-American blend cigarettes, chosen from major international markets and Indian reservation producers, among U.S. consumers would shed light on this issue.

Recommendation 3-1

Research and data are needed about the individuals and criminal networks who traffic in illicit tobacco in the United States . A deeper understanding of these individuals and networks (criminal histories, motives, ties to organized crime, financing mechanisms, links to adjacent markets, etc.) would provide valuable knowledge about the supply chain and illicit procurement paths and the ways in which they may evolve in the future. Qualitative approaches should be complemented with quantitative approaches to measuring supply-side participation in illicit markets, such as surveys of retail store owners, wholesalers, and stamping agents and systematic data collection (with the assistance of enforcement and regulatory agencies) on items such as the number of licensed and unlicensed sellers in a market, location of sellers, and numbers of violations. Specific questions could be asked about such topics as the nature of their sales and where, from whom, and for how much they purchase cigarettes for resale. Since sellers might be hesitant to reveal their participation in the illegal market, survey techniques aimed at soliciting true participation in stigmatized activities would need to be used.

Recommendation 3-2

Because youths under age 18 are of particular concern to policy makers, research is needed about the extent to which they purchase cigarettes in the illicit market and how easily they do so. The National Youth Tobacco Survey should add items that would clarify the nature of the “other commercial sources” that have become more prevalent in recent years.

Recommendation 4-1

The Tobacco Use Supplement to the Current Population Survey should be expanded in both the number of questions and specificity of questions currently asked regarding tobacco use and illicit tobacco market participation. The survey should continue to include questions that garner information about price paid, location and place of purchase; it should add questions on frequency of purchase at certain locations, last purchase location and price, and nature of the purchase (i.e., licit or illicit). Other questions that should be added would cover the particular factors contributing to one's seeking out lower-priced products and what price levels might influence a consumer's decision to switch between the legal and illicit markets.

Recommendation 4-2

A large-scale pack swap survey that is representative of the U.S. population should be conducted. This survey could be integrated into a current nationwide survey capable of also providing state-level estimates, such as the Tobacco Use Supplement to the Current Population Survey, so that questions regarding a customer's last purchase would be coupled with a pack swap component that would allow researchers to examine stamps and markings to determine if appropriate taxes were paid, and conduct an analysis of the product's design characteristics and chemistry in order to determine if counterfeits or illicit whites had entered the market.

Recommendation 4-3

Methods should be improved in order to better differentiate between tax evasion and tax avoidance. More accurate estimates of the size of the illicit market separately attributable to tax avoidance and tax evasion could be obtained by combining more systematic data collection on discarded packs in states with significant illicit trade with (1) an expansion in the number and specificity of questions currently asked in representative population surveys regarding tobacco use and illicit tobacco market participation and (2) a large-scale pack swap survey that is similarly representative of the U.S. population.

Recommendation 6-1

Because an appropriately scaled and well-targeted enforcement effort against the illicit tobacco trade requires systematic data on the array of current efforts, the U.S. federal government should assemble and publish a periodic report on indicators of the extent of bootlegging, international smuggling, and illicit production, together with indicators of enforcement activities by the relevant federal agencies. The federal government should also consider developing a voluntary reporting system by state and local governments.

Recommendation 6-2

Systematic evaluations should be conducted of existing and future enforcement interventions in the illicit tobacco trade in the United States. State- and local-level efforts, such as the tobacco task force led by the New York City Sheriff's Office, should be evaluated by independent researchers.

Recommendation 8-1

Research is needed to examine how smokers respond to the permanent loss of specific product features that they have previously found desirable, as a result of bans and restrictions on key constituents and additives as well as changes to packaging. Research should assess consumer intentions to seek products with banned features through the illicit market in comparison with other options, such as quitting and using alternative products. Factors that promote individual variation in response should also be examined.

Recommendation 8-2

Research is needed on the relationship between the use of e-cigarettes and the use of conventional tobacco products and on the role of e-cigarettes as an alternative to participation in the illicit tobacco market. Longitudinal studies are needed to understand the dynamics of the relationship and to determine the extent of full substitution of e-cigarettes compared with dual use or reversion to conventional products. Such work will require improvements to sources of data, including unique coding for e-cigarettes in international commerce. Furthermore, although some current surveys include questions on e-cigarette use and awareness, more detailed questions are needed on factors that affect use and their relationship to the use of conventional cigarettes.

Recommendation 8-3

The paucity of studies on the supply side of the illicit tobacco market presents challenges for research, and creative methodologies will be needed. One potential source of needed information may come from reviews of analogous markets, perhaps in other countries, where existing products have been removed from the market, but similar or related products continue to be available in legal commerce, to determine what factors influenced the emergence of illegal supply.

Number of ATF tobacco investigations initiated and closed, 1998 through 2014.

