Illicit Trade in Tobacco Products

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Overview

- Tobacco taxes, tobacco use, and government revenues
- Types and Determinants of illicit trade
- Global evidence on extent of illicit trade
- US evidence on extent of illicit trade
- Policy options for curbing illicit trade in tobacco products
Taxes, Prices and Tobacco Use

- **Increases in tobacco product taxes and prices:**
  - Induce current users to try to quit
    - Many will be successful in long term
  - Keep former users from restarting
  - Prevent potential users from starting
    - Particularly effective in preventing transition from experimentation to regular use
  - Reduce consumption among those who continue to use
  - Particularly effective in reducing use in lower income, less educated populations
  - Lead to other changes in tobacco use behavior, including substitution to cheaper products or brands, changes in buying behavior, and compensation
Taxes, Prices and Tobacco Use

- **High-Income Countries**
  - Ten percent increase in price reduces overall consumption by 2.5 to 5 percent
  - About half of impact on prevalence
  - Youth are 2-3 times more price sensitive

- **Low/Middle-Income countries**
  - Generally more price responsive than HICs
  - Considerable variation across countries
  - Younger people more price sensitive
  - Lower income populations more responsive to price increases
Taxes, Prices and Tobacco Use

Cigarette Prices and Cigarette Sales
United States, 1970-2007

Source: Tax Burden on Tobacco, 2008, and author’s calculations
Taxes, Prices and Tobacco Use

Cigarette Prices and Cigarette Sales, New York, 1970-2007

Source: Tax Burden on Tobacco, 2008, and author’s calculations
Taxes, Prices and Tobacco Use

Inflation Adjusted Cigarette Prices and Cigarette Consumption, South Africa, 1960–2003

Source: Van Walbeek, 2003
Taxes, Prices and Tobacco Use

Cigarette Prices and Adult Smoking Prevalence, United States, 1970-2007

Source: *Tax Burden on Tobacco*, 2008, U.S. National Health Interview Survey, various years, and author’s calculations
Taxes, Prices and Tobacco Use

Cigarette Prices and Percentage of Ever Smokers Who Have Quit Smoking, U.S. States, 2005

Taxes, Prices and Tobacco Use

Cigarette Price and Youth Smoking Prevalence, United States, 1991-2007

Source: Tax Burden on Tobacco, 2008, U.S. Monitoring the Future Surveys, and author’s calculations
Tobacco Deaths and Tobacco Control

Source: Jha, et al., 2006
Tobacco Taxes and Revenues

• Increases in tobacco taxes lead to increases in tobacco tax revenues, despite reductions in tobacco use
  - Low share of tax in price in most countries
  - Fall in demand less than proportional to price increase in most countries
    • “inelastic” demand

• Evidence shows revenues rise even in presence of tax avoidance and smuggling
Tobacco Taxes and Revenues

Federal Cigarette Tax and Tax Revenues
Inflation Adjusted (Dec. 2007 dollars), 1955-2007

Source: Tax Burden on Tobacco, 2008, and author’s calculations
Tobacco Taxes and Revenues


Real excise rate (in constant 2000 cents)

Real excise revenue (R million, 2000 prices)

Source: Van Walbeek, 2003
Taxes and Tobacco Product Prices

- Tax levels and prices vary widely across countries

Price and Tax by Income Level, 2004-05

Source: Yurekli and Onder, 2006
Types of Illicit Trade

• **Individual tax avoidance**
  - Reservation, Internet and other direct, duty-free, and cross-border purchases
  - Generally not illegal, but states require local taxes to be paid

• **Bootlegging**
  - Small scale purchasing of cigarettes in low-tax/price jurisdictions for resale in high tax/price jurisdictions
Types of Illicit Trade

• Large scale, organized smuggling
  - Illegal transportation, distribution and sale of large consignments of tobacco products
  - Generally avoids all taxes

• Counterfeit
  - products bearing a trademark without the approval of the trademark owner
  - Often involved in organized smuggling
Organized Illicit Cigarette Trade Routes

**EUROPE**
- Belgium
  - Netherlands
- Iceland
- Spain
- West EU
  - East EU
  - North EU
  - South EU
  - Baltics

**ECA**
- Russia
  - Azerbaijan
  - Georgia
  - Yugoslavia
  - Benin
  - Latvia
- E. Central Asia
  - Estonia
  - Lithuania

**GULF**
- Qatar
  - Kuwait
  - S. Arabia
  - UAE
  - Bahrain
  - Oman
  - Djibouti
- Yemen
  - Africa
  - South Asia
  - Indonesia
  - Malaysia
  - Syria

**EAP**
- Singapore
  - Hong Kong
  - Micronesia
  - Macao
- E. Asia / Pacific
  - South Asia
  - Cambodia
- E. Asia
  - North Africa

**M. EAST**
- Israel
  - Lebanon
  - Cyprus
- Turkey
- Middle East
  - North Africa

**LAC**
- Panama
  - Neth. Antilles
  - Bermuda
  - Bahamas
  - Uruguay

**Source:** Yurekli and Sayginsoy 2006
Counterfeit Cigarette Trade:
China a major source of counterfeit cigarettes for EU and other countries:

Source: WCO Customs and Tobacco Report 2004
Determinants of Illicit Trade

• Tax and price differentials
  ■ More important for individual tax avoidance and bootlegging
  ■ Larger scale efforts avoid all taxes

• Presence of informal distribution channels
  ■ e.g. Street vendors, unlicensed distributors

• Presence of criminal networks
  ■ e.g. Organized crime, terrorist organizations
Determinants of Illicit Trade

- Weak tax administration
  - Absence of tax stamps; weak or non-existent physical controls; unlicensed manufacturers, distributors, retailers; weak customs authorities
- Poor enforcement
  - Limited resources for border patrols, customs authorities, etc; low penalties
- Corruption
Smuggling and Corruption

**Smuggling as a function of transparency index**

Source: Merriman et al., 2000
Extent of Illicit Trade

• Difficult to measure given illegality
• A variety of approaches have been used, including:
  ▪ Comparing recorded exports of tobacco products to recorded imports
    ▪ Difference reflects leakage into black markets
    ▪ Recent estimates suggest 20-30 percent of exports do not appear as imports
    ▪ 4-10 percent of global consumption
    ▪ Will be largely organized smuggling
Extent of Illicit Trade Globally

Increasing Gap in Quantity of Global Cigarette Trade
(Export minus Import) 1960-2003

- Highest gap in 1996: 399.6 billion pieces (36% of global exports)
- 2000: 14% trade gap (121 billion pieces)

Source: ECOSOC Trade Database: Ayda Yurekli
Extent of Illicit Trade

- Difficult to measure given illegality
- A variety of approaches have been used, including:
  - "Expert Opinions"
    - Customs officials, tobacco industry representatives, tax authorities, and others
    - Widely varying estimates across countries
    - Average: 8.5% (wtd) - 13.3% (unwtd) in mid-1990s
    - Again, largely reflecting organized smuggling
Extent of Illicit Trade

• Individual tax avoidance a bit easier to assess
  - Econometric analyses of tax paid sales that account for various factors, including:
    • tax/price differences
    • population density
    • travel patterns
    • Distance
  - US estimates suggest up to 12.5% of total consumption in early 2000s
Extent of Illicit Trade

- Individual tax avoidance – self-reported data
  - International Tobacco Control Policy Evaluation Study
    - Longitudinal, annual survey of smokers in numerous countries, including Canada and US
    - Includes questions on purchase locations, including Internet, telephone, cross-border, duty free, reservations, and more
Tax Avoidance and Enforcement
US Smokers’ Tax Avoidance,
Last Purchase, 2002-2007

Oct-Dec, 2002
May-Sep, 2003
June-Dec, 2004
Oct 2005-Jan 2006
Oct-Feb, 2007

Reservation
Internet/Direct
Cross Border
Other

Source, ITC project, US survey, Waves 1-5
Tax Avoidance and Enforcement

US Smokers' Tax Avoidance, Most Frequent Purchase Source, 2002-2007

Source, ITC project, US survey, Waves 1-5
Extent of Illicit Trade

• Individual tax avoidance – self-reported data
  - Tobacco Use Supplement to the Current Population Survey
    - Periodic state representative, cross-sectional samples
    - Includes questions on price paid, whether or not purchased in own state, other state or through other channels (e.g. Internet or phone) – 2003 and 2006/07 surveys only
    - Does not pick up in-state tax avoidance (e.g. reservation purchases)
    - 2003: 5.63%  2006/07: 5.19%
Tax Avoidance – United States

% Tax Avoiders, 2003

Source: Tax Burden on Tobacco, 2008 and TUS-CPS
Tax Avoidance – United States

% Tax Avoiders, 2006/07

Source: Tax Burden on Tobacco, 2008 and TUS-CPS
Tax Avoidance – United States

% Other Tax Avoiders, 2003

Source: Tax Burden on Tobacco, 2008 and TUS-CPS
Tax Avoidance – United States

% Other Tax Avoiders, 2006/07

Source: Tax Burden on Tobacco, 2008 and TUS-CPS
Extent of Illicit Trade

- Individual tax avoidance – self-reported data
  - TUS-CPS
    - Does not pick up within state tax avoidance (e.g. purchases on reservations)
    - Comparison of average price paid by smokers purchasing in state from TUS to average prices reported in *Tax Burden on Tobacco*
      - Difference accounted for by several factors, including reservation purchases
Tax Avoidance – United States

Difference in TBOT and TUS Prices, 2003

Source: Tax Burden on Tobacco, 2008 and TUS-CPS
Tax Avoidance – United States

Difference in TBOT and TUS Prices, 2006/07

Source: Tax Burden on Tobacco, 2008 and TUS-CPS
Tax Avoidance – United States

Cross Border Tax Avoidance and State Cigarette Taxes, 2006/07

Source: Tax Burden on Tobacco, 2008 and TUS-CPS
Tax Avoidance – United States

Other Tax Avoidance and State Cigarette Taxes, 2006/07

Source: Tax Burden on Tobacco, 2008 and TUS-CPS
Illicit Trade, Public Health, and Revenues

- Even in the presence of illicit trade, higher cigarette and other tobacco taxes lead to:
  - Reductions in youth and adult tobacco use
  - Increases in tobacco tax revenues
- Rather than forego tax increases, appropriate response is to crack down on illicit trade
Illicit Trade Does NOT Eliminate Health and Revenue Impact of Higher Taxes

Cigarette Prices and Adult Prevalence, New York, 1995-2007

Source: Tax Burden on Tobacco, 2008 and TUS-CPS
Tax Increases and Tax Avoidance

Cook County Cigarette Tax and Tax Revenues - FY01-FY06

- Chicago tax rises from 16 to 48 cents, 1/1/06
- Chicago tax up to 68 cents, 1/1/06
- Chicago smoking ban, 1/16/06
Tobacco Taxes and Revenues


Source: Tax Burden on Tobacco, 2008, and author’s calculations
Canada Sharply Reduced Taxes in 1993

Tax reduced in an attempt to counter smuggling

Sweden Reduced Cigarette Taxes by 17% in 1998


Combating Illicit Trade

- **Strong tax administration**
  - Prominent, high-tech tax stamps and other pack markings
  - Licensing of manufacturers, exporters, distributors, retailers
  - Export bonds
  - Unique identification codes on packages

- **Better enforcement**
  - Increased resources
  - Focus on large scale smuggling

- **Stronger penalties**

- **Multilateral tax increases**
Combating Illicit Trade

- California’s high-tech tax stamp
  - Adopted 2002; fully implemented 2005
  - Coupled with better licensing standards
  - Can be examined with hand-held scanners
  - Thousands of compliance checks, hundreds of citations
  - Generated over $124 million in revenues during 20 month period (mid-2004 through late 2005)
Combating Illicit Trade

- Spain
  - Reduced share of smuggled cigarettes from estimated 15% in 1995 to 5% in 1999
    - Focus on large scale, container smuggling
    - Strengthened tax administration with new technology and better enforcement
    - Collaboration with France, Andorra, Ireland, UK and the EU Anti-Fraud Office
    - Did NOT focus on individual tax avoidance, street sellers
Combating Illicit Trade

- **Framework Convention on Tobacco Control**
  - 1st global public health treaty
  - 162 countries representing over 85% of the world’s population have ratified
    - U.S. a notable exception
  - Calls for countries to adopt a comprehensive tobacco control policies
    - Higher taxes, bans on marketing, bans on smoking in public places/workplaces, support for cessation, and more
Combating Illicit Trade

- **FCTC and Illicit Trade**
  - Article 15 addresses illicit trade, calling for:
    - Pack markings to identify where intended for sale and to help identify illicit products
    - Adoption of ‘track and trace’ regime
    - Stronger penalties and better enforcement
    - Better tax administration
    - International cooperation
  - **High priority; negotiation of protocol ongoing**
Summary

• Higher tobacco product taxes and prices significantly reduce tobacco use
  - Illicit trade in tobacco products reduces but does NOT eliminate effectiveness of higher taxes in reducing use and raising revenue

• Extent of illicit trade difficult to determine
  - Organized smuggling as much as 10% globally
  - Individual tax avoidance, bootlegging may be at similar levels; varies widely across jurisdictions
Summary

• Tax and Price differences a significant factor in individual tax avoidance
  - Other factors as or more important in larger scale, organized smuggling

• Effective options exist for curbing smuggling
  - High tech tax stamps, licensing, enforcement, and higher penalties
  - Multilateral action most effective
  - FCTC Article 15