Monitoring of Illicit Trade

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Tobacco Control Monitoring – More than Measuring Tobacco Use
World Conference on Tobacco or Health
7 March 2018, Cape Town, South Africa
Industry Estimates vs. Independent Estimates

Source: Blanca Llorente, 2018
Monitoring Illicit Trade

- Many terms used for ‘illicit trade’
  - Smuggling, bootlegging, counterfeit, cross-border shopping, contraband……..

- Often combine legal activities from illegal activities
  - Tax avoidance vs. tax evasion

- Challenging to measure given the illegal nature of the behavior
Monitoring Illicit Trade

• Several alternative approaches
  – Expert opinions
  – Econometric modeling
  – Gap analyses
  – Surveys of tobacco users
  – Discarded pack collection
  – Pack collection/inspection
  – Combinations of these
Consumption & Sales Gap

• Comparing tax paid sales with consumption estimated from national survey
  – Difference reflects tax evasion
  – Complicated by underreporting in surveys
    • More useful in assessing deviations from trends
Estimated State Cigarette ‘Importing’ and ‘Exporting’, 2010-11

Note: “Importing states” are those where some consumers avoid or evade taxes by obtaining their tobacco products from states or federal tribal lands where taxes are lower. “Exporting states” are those where some tobacco products intended for consumption within that state are purchased by consumers from outside of the state to avoid or evade their “home” taxes.

Source: Created from data in National Research Council and Institute of Medicine, 2015.

Source: CDC, 2015
Trends in Net Tax Avoidance & Evasion in the United States

Source: National Research Council, 2015
Surveys of tobacco users

• Direct questions about purchase and/or consumption of contraband, counterfeit, illicit, etc.
  – Need to clearly define what is being asked about to avoid double counting
  – Unclear how well users can identify illicit products, counterfeit products

• Questions about purchase location, brand, and/or price
  – Mostly capture avoidance, some evasion
EU Tobacco/Economics Survey

Source: Gallus, et al., 2014
Pack Inspections

• Pack inspection as part of survey
  – Presence/absence of warning label in local language
  – Presence/absence of local tax stamp
  – Other local pack markings
## Pack Inspection: PPACTE Survey

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<th>Country</th>
<th>Local Stamp</th>
<th>Removed/destroyed</th>
<th>Foreign Stamp</th>
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**Source:** Gallus, et al., 2014
Pack Inspection: PPACTE Survey

Source: Gallus, et al., 2014
Combining Survey & Pack Inspection Data: PPACTE Survey Survey

Source: Joossens, et al., 2014
Measuring Avoidance & Evasion

• Pack collection
  – Mix of tax avoidance & evasion
  – International Tobacco Control Policy Evaluation Study
    • Pack mail in by US survey respondents, 2009 and 2010
    • Usual brand purchased from usual source
      – ~77% of those invited returned packs
    • ~20% of returned packs did not have stamp matching respondent’s state of residence
      – 37% from neighboring state
      – 35% with no stamp
      – 20% tribal stamp
      – 8% other stamp/marking

Source: Fix, et al., 2014
ITC: Classification Based on Tax Stamp

Likely Legitimate State Tax Stamp

Non-State Stamp

No Tax Stamp

Illegible Tax Stamp

Source: Fix et al., 2011
ITC: Classification Based on Tax Stamp
Sources of “Untaxed” Cigarettes

Source: Fix et al, 2014
Littered Pack Collection

• Can identify purchase location (based on pack markings) and use location (based on location of littered pack)

• Challenges:
  – Defining sampling area and approach

• Limitations:
  – Smokers who litter may differ from other smokers
  – Will overestimate given commuting patterns, tourism
  – Timing unknown
United States – 2012
Littered Cigarette Pack Collection

• One component of Bridging the Gap, NCI State and Community Tobacco Control program project

• Methodology:
  • Data collection teams used a strict protocol to collect littered cigarette packs at each BTG-COMP data collection site
  • Packs were returned to UIC and ~15 items of information relating to each pack were coded
  • Most important items were location found, whether cellophane was present and type of tax stamp found, if any

• Results:
  • 3,480 packs collected
  • 2,116 with cellophane
  • 20.6% (436 packs) avoided/evaded tax

Source: Wang, Merriman and Chaloupka, 2017
Summary
Monitoring Illicit Trade

- Industry misuses and overstate extent of illicit trade to deter governments from raising taxes and implementing other effective tobacco control policies.

- Several methods have been developed/evolved over time to measure extent of tax avoidance and evasion.

- Very useful to include illicit trade monitoring as part of a comprehensive tobacco control surveillance system.
For more information:

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