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Illicit Trade in Tobacco Products

In Low- and Middle-Income Countries

Hana Ross, PhD

July 16, 2019



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Outline

- Terminology
- Why is illicit trade an issue for tobacco control economics?
- The magnitude of the problem
- Measuring illicit trade
- Tobacco industry use of illicit trade to fight higher tobacco taxes
- Controlling illicit trade



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Terminology

- Many terms used:
 - Illicit trade, contraband, smuggling, bootlegging, counterfeit, etc.
- Tax Avoidance
 - Legal methods for avoiding tobacco taxes
- Tax Evasion
 - Illegal methods for avoiding tobacco taxes
 - Often referred to as 'diversion' or 'trafficking'



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What is Illicit Trade in Tobacco Products?

- The WHO FCTC defines it as
“...a practice or a conduct prohibited by law which relates to production, shipment, receipt, possession, distribution, sale or purchase of tobacco products, including any practice or conduct intended to facilitate such activity.”
- “Illicit tobacco trade” covers all illegal activities related to the tobacco trade.



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Why to Study Illicit Tobacco Trade?

- Public health
 - Increased affordability
 - Increased accessibility=>Increased consumption of tobacco products
- Loss in government revenue
- Link with organized crime
 - Profits from illicit trade fund other criminal activities



Illicit trade undermines the effectiveness of tobacco control policies and reduce the health and economic benefits that result from these policies. Gender issues (who is selling and who is making profit?)



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What is the Size of the Illicit Tobacco Market – Do We Really Know?

Income groups	Illicit market share (Based on 2000 – 2007 data)	Revenue lost to government (US\$)
World	11.6%	40.5 billion
High income	9.8%	17.6 billion
Low and middle income	12.1%	22.9 billion

If illicit trade were eliminated, governments worldwide could gain at least USD 30 billion a year in tax revenue.

Comparable to 2017 WB report (10–12%); EM estimated 10.6% (2016) and 10.3% (2017) saying that it grew by 1.4%, or 4.3% excluding China ???

GlobalData does not provide global estimate.



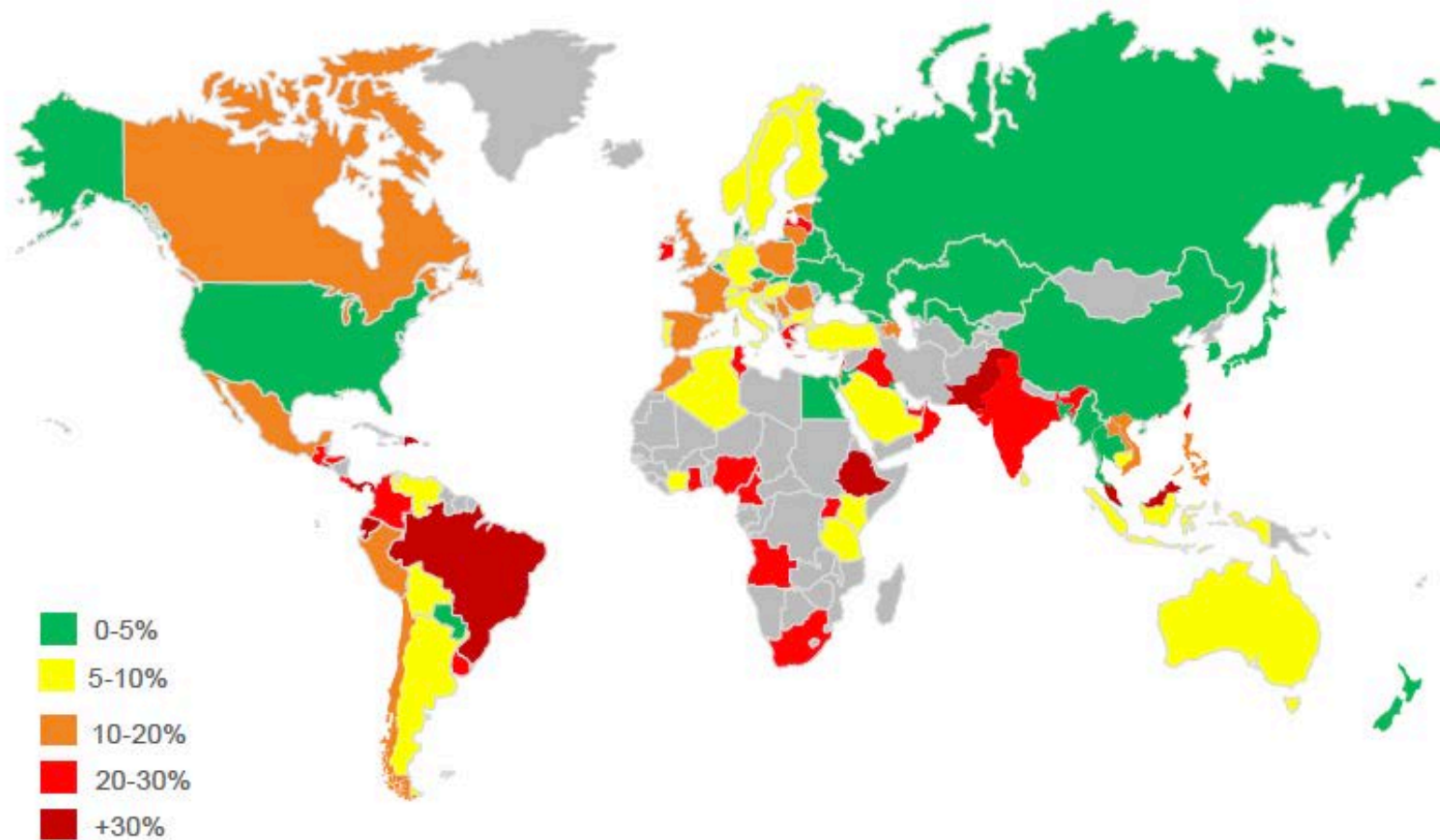
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Euromonitor Illicit Trade Penetration 2017

(what it “penetration”?)





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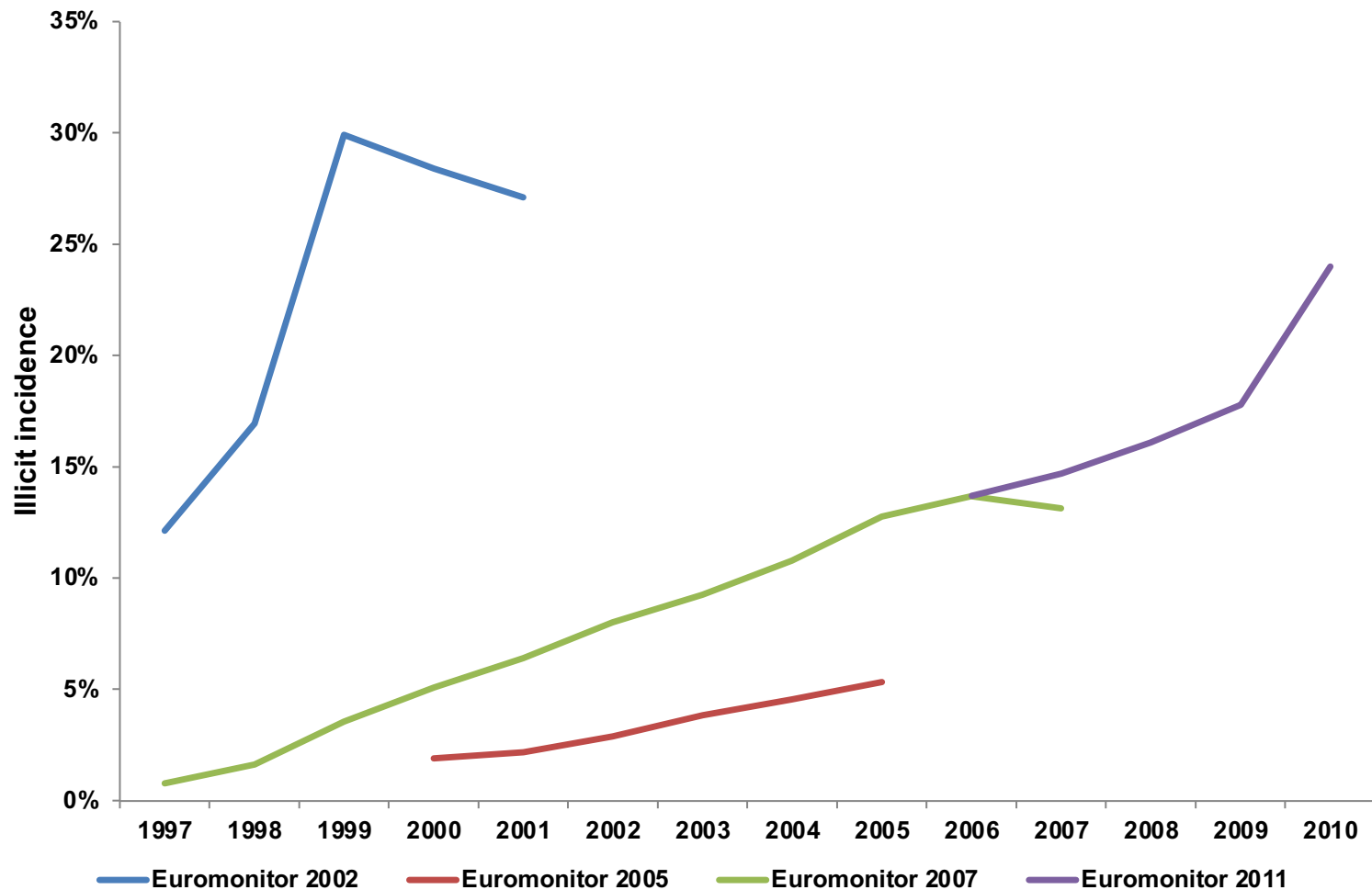
Euromonitor: Change in Illicit Trade 2012 – 2017, and can we believe it?





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How Reliable Are the Estimates? Euromonitor in South Africa



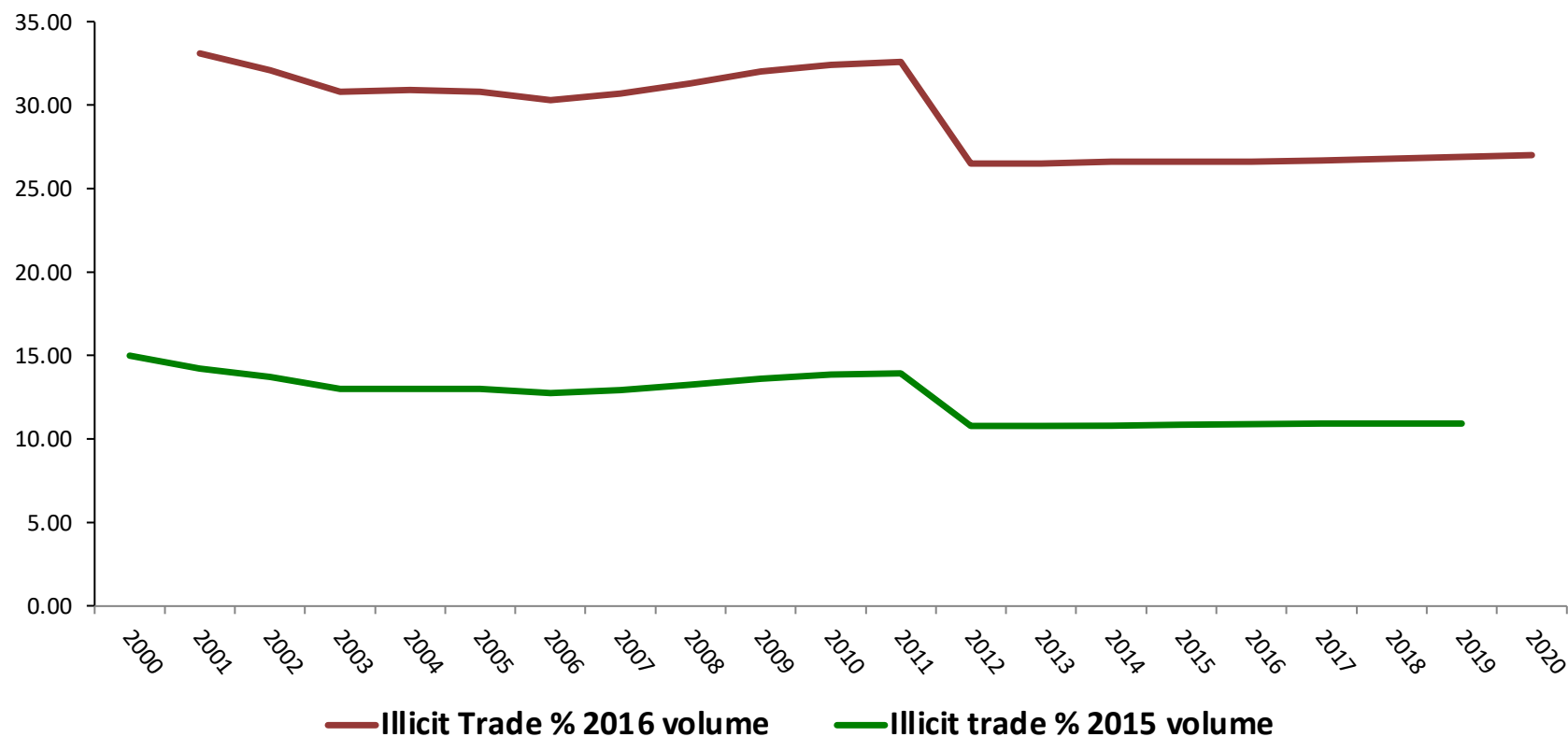


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How Reliable Are the Estimates?

Euromonitor in Kenya

EM: Illicit Cigarette Market Shares in Kenya

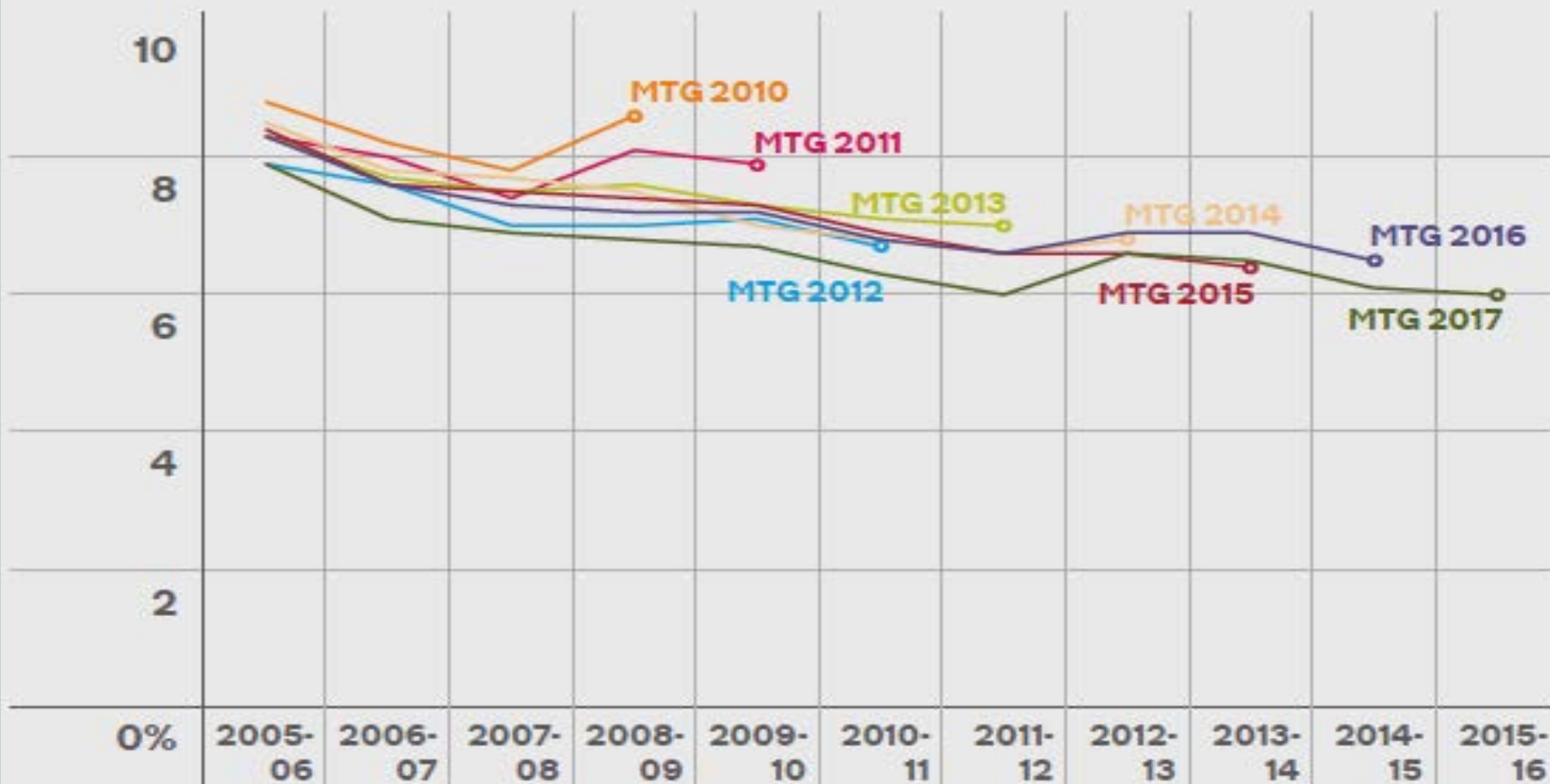




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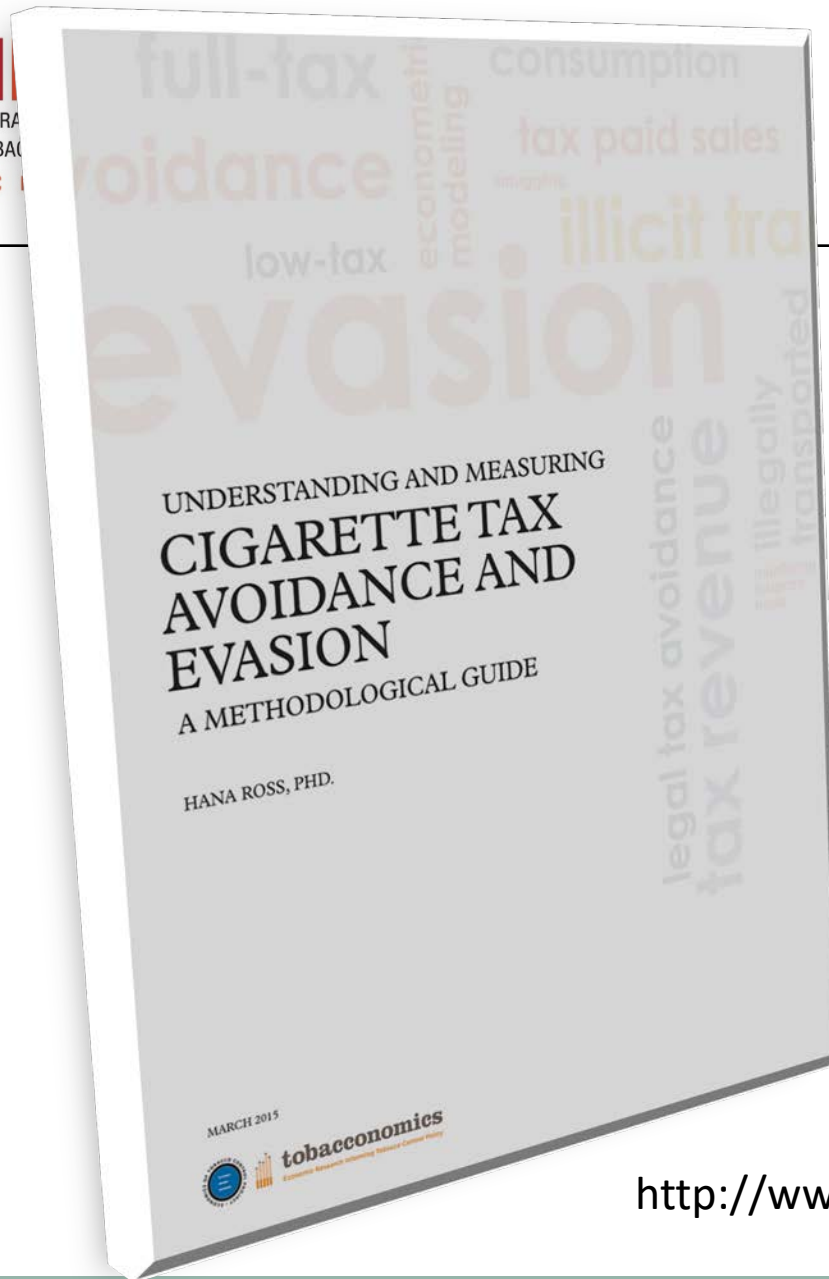
Professional Estimate Adjustments - UK

Figure 1.9: Revisions to the tax gap as a percentage of liabilities compared to previous editions¹





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<http://www.tobaccoecon.uct.ac.za/>



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11 Methods to Estimate the Scope of Tax Avoidance/Evasion

- Surveys of tobacco users (WB)
- Examination of cigarette packs obtained from smokers (WB)
- Examination of discarded cigarette packs
- Examination of cigarette packs obtained from retail (*later adapted for single cigarette sale*)
- Comparison of sales with consumption (Gap Analysis) (WB)
- Econometric modeling (WB)
- Comparison of tax paid sales with estimated consumption
- Comparison of actual and projected tobacco tax revenue
- Key informant interviews (WB)
- Monitoring tobacco trade (WB)
- Analyzing seizures of illegally transported tobacco



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Examination of Cigarette Packs (3 Methods)

When to use:

- Pack's features allow determination whether taxes were paid
- Budget considerations: costs depend on the sources of packs and the representativeness of the sample
- Estimates are not needed quickly



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Examination of Cigarette Packs (continued)

Observational study: classifying packs as low-tax or full-tax products

Source of packs:

- tobacco users;
- retail outlets;
- collected on the street and in trash

Costs can be reduced if data collection added to an existing survey; packs from streets are cheaper compared to packs from users, but representativeness of the sample limited.



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Examination of Cigarette Packs (continued)

Features to examine:

- the absence of the correct tax stamp,
- an incorrect health warning,
- markings of a duty free store,
- missing price information (if required by the law),
- low price
- other features of a pack required by the law.



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RESEARCH
UK

Collecting Packs in Mongolia





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Tax Stamp Mongolia



Authenticity can
be verified by
a smart phone
app.

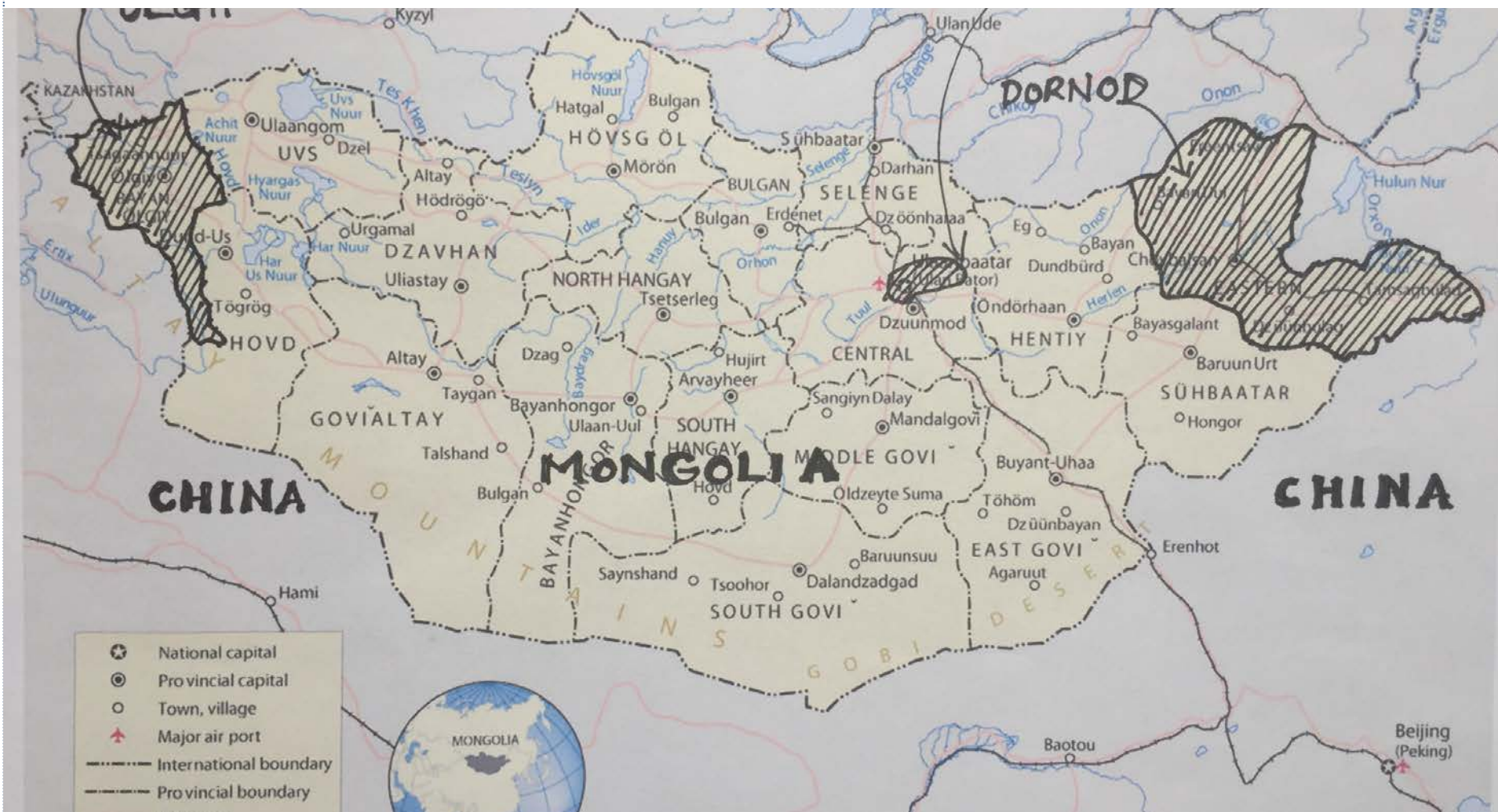


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Collecting Side in Mongolia





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Mongolia Timeline

May 2017
CIF increased
from 5% to 30%

1 January 2018
10% increase in
excise tax

April 2017
W1 data collection

August/Sept 2017
W2 data collection

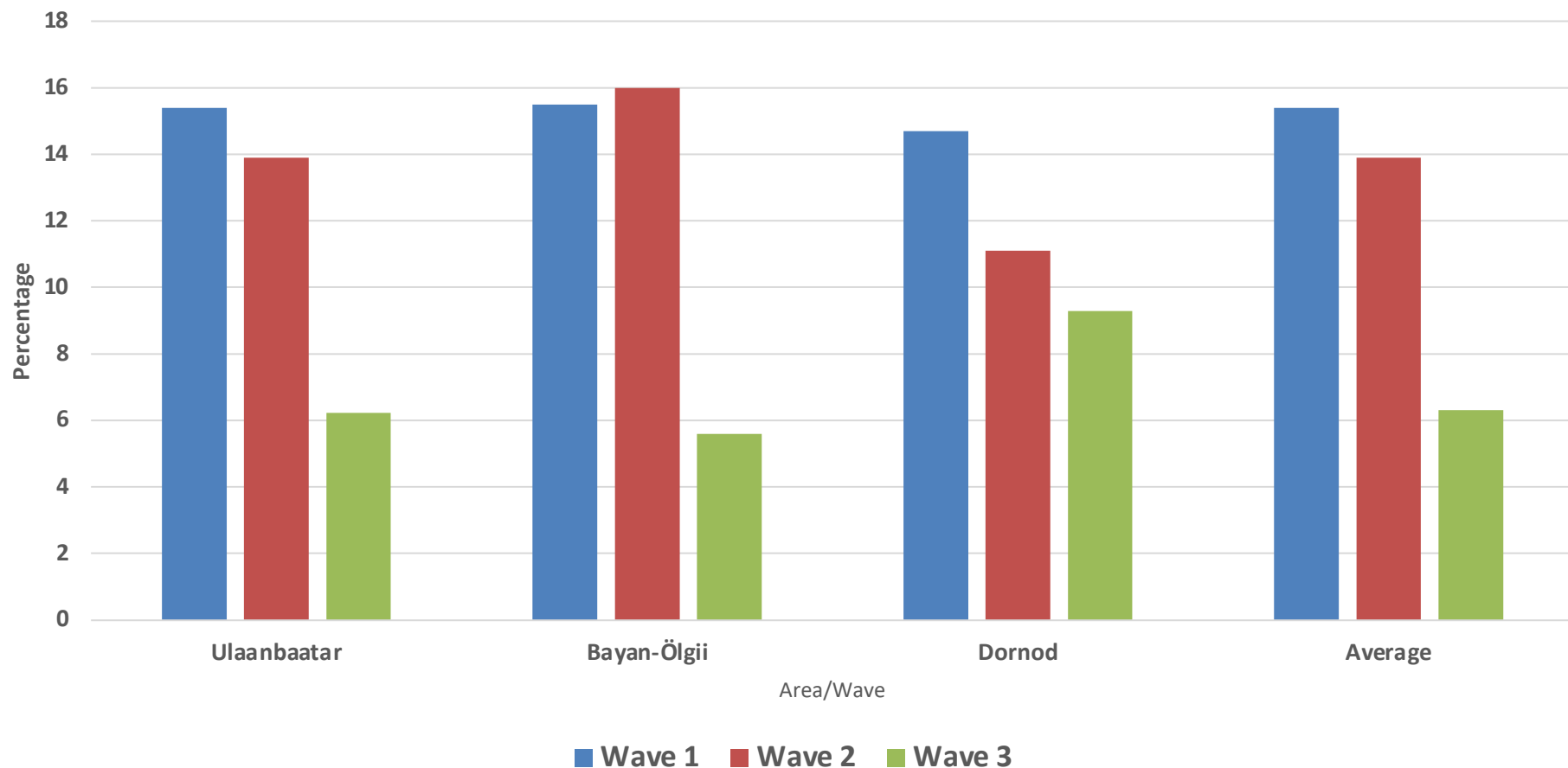
May/June 2018
W3 data collection



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Mongolia Results (1)

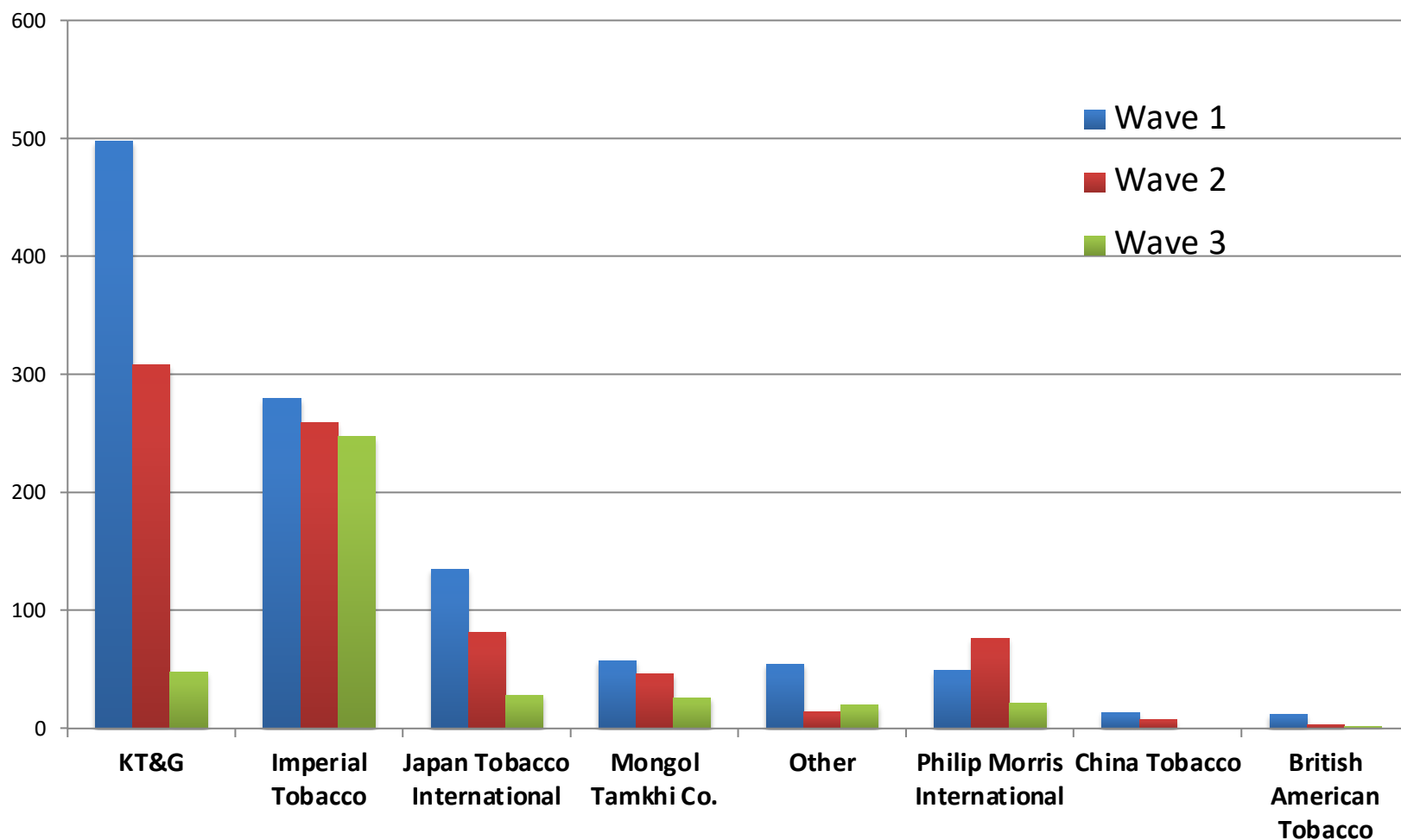
Prevalence of illicit cigarette packs before and after tax increases





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Mongolia Results (2)





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Mongolia Study - Limitations

- Not nationally representative (but covering 52% of the population)
- Cannot distinguish between tax evasion and tax avoidance.
- Cannot test the authenticity of the tax stamps.
- Had to assume the presence of a tax stamp if a glue residual was present.



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Surveys of Tobacco Users

Smokers can tell us what they smoke, where they bought it, how much it cost.

When to use:

- When the users' purchasing behaviour and/or the self-reported features of a cigarette pack allow one to determine whether taxes were paid
- Budget considerations: generating a representative sample can be costly
- Estimates are not needed quickly



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Georgia: Methods

- 4345 households surveys in November 2017 across Georgia.
- 2997 completed the interviews (excluded non-smoking HHs and 12% HHs refused).
- Respondents (smokers) were asked to show all cigarette packs currently available in the house.
- Given the tax stamps and health warnings in Georgian, it is easy to quickly identify an illicit pack.



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Georgia: Survey Sites





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Georgia: Results

- 0.2% (SE 0.1%) of the packs examined were missing both a Georgian tax stamp *and* a Georgian health warning,
- 1.5% (SE 0.2%) of the packs were missing *either* the Georgian tax stamp or the Georgian health warning or it was unclear.
- Regional variation: 6% of smokers in Zugdidi (close to Abkhazia) showed an illicit cigarette pack.



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Georgia Study - Limitations

- Although not nationally representative, the sample approximated the national averages across a range of characteristics.
- Only about 71% (SE 0.8%) of smokers agreed to show their packs.
- 28% (SE 0.8%) smokers claimed that there was no pack available in the house and 1% (SE 0.2%) either refused to show a pack or said they did not know if there was one in the house.



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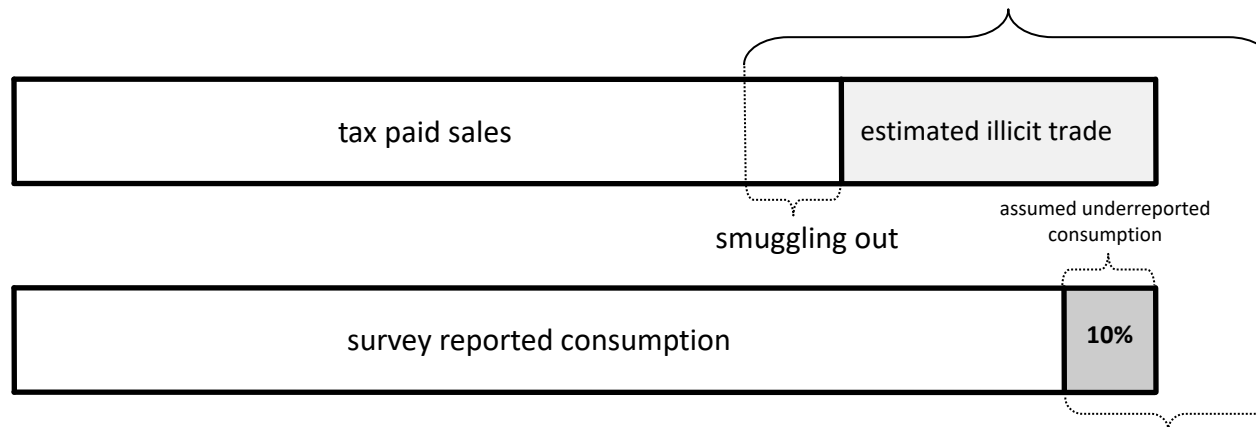
Gap Analysis

Survey data capture the total market, not just legal market

If we know the size of the legal market, we can calculate the size of the illegal market

When to use: available reliable and consistent estimates of tobacco consumption over time and unbiased records of tax-paid sales during the same period

Gap Analysis



- Illicit export and higher rate of underreporting would increase the estimate of the size of illicit trade.
- If these are not taken into account, the estimates of tax avoidance and tax evasion are conservative.



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Gap Method – Example

- If 20% of the population smoke, 1 million people, 200,000 smokers
- If each smoker smokes 3,000 cigarettes per year, (< 10/day) we know the total market is 600 million cigarettes
- If the legal market is 500 million, then the illicit market is 100 million or 17%



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UK: Estimated Illicit Cigarette Market Shares, 2000-17

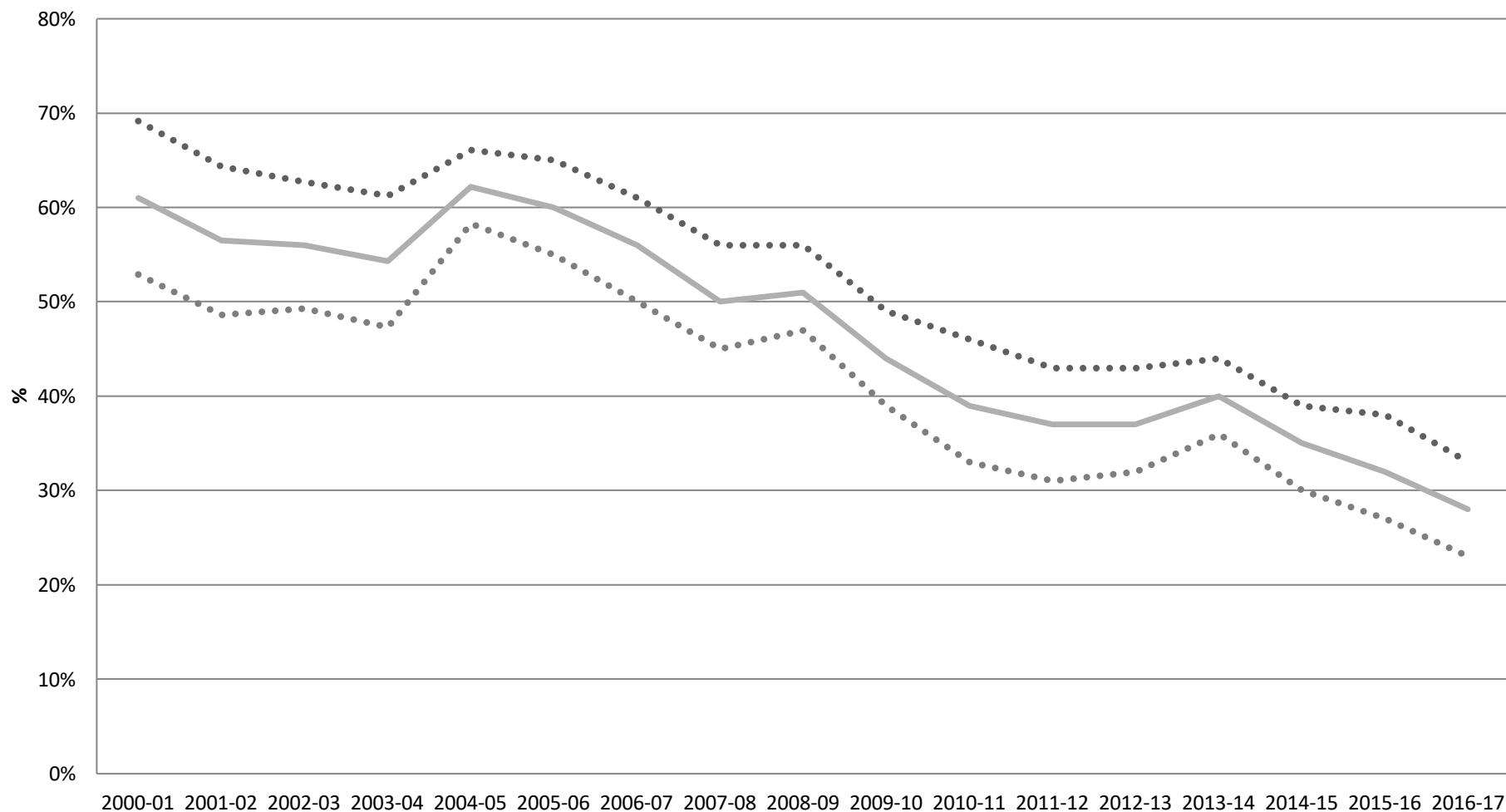


Source: HMRC. Measuring tax gaps 2017 edition



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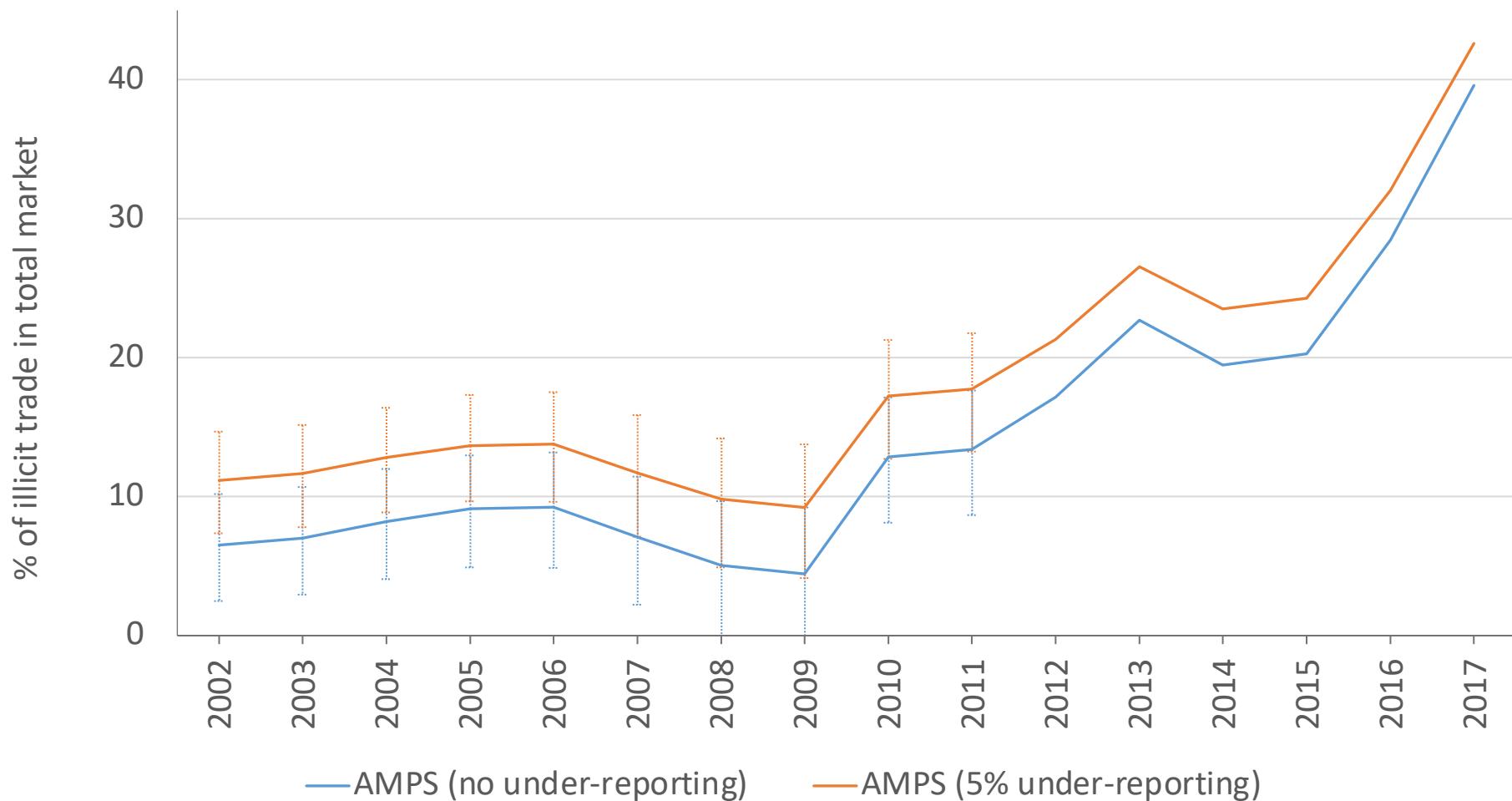
UK: Estimated Illicit HRT Market Shares, 2000-17





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Gap Analysis SA: 2002 – 2017





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Gap Analysis (continued)

Advantages:

- Transparency, replicability, and low costs.
- This is one of the few methods that captures illicit domestic production

Disadvantages:

- People may not report correctly their consumption
- Surveys may not be representative
- It is better in measuring any deviation from the trend; may not provide the accurate scope.
- Cannot distinguish between tax avoidance and tax evasion



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Which Methods to Avoid

- Key informant interviews (WB) – can obtain background information, but potentially very biased.
- Monitoring tobacco trade (WB) – the quality of data, and seasonality is the main issue.
- Analyzing seizures of illegally transported tobacco – need to control for the level of effort; data needed for long period to control for probability of detection.



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Methods - Summary

- No single method will produce a definitive answer because each has pluses and minuses
- Weakness of a particular approach can be exacerbated by specific market conditions, so it is important to use local specific knowledge and creativity when applying these methods.
- It is important to triangulate the estimates of the scope of the problem using different methods
- Many studies apply the same method over time to capture changes in the scope of tax avoidance/evasion rather than generating a single point estimate (addresses methods' weaknesses, evaluates the impact of policies and other factors)



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Academic vs. Industry Estimates

Country	Academic Estimate (%)	Industry Estimate (%)
Australia (2013)	3	14.7
Colombia (2016)	3.5	20
France (2010)	2.1	13.7
India (2016)	3	20
Hong Kong (2012)	12	36
Poland (2011)	15	23
UK (2016)	13	14.3

PMI IMPACT: USD 100 million for three funding rounds starting 2016; Project STAR/SUN in Europe since 2010; PWC, Deloitte, KPMG in Australia since 2010; ITIC, Oxford Economics in Asia since 2012



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Contrasting academic and tobacco industry estimates of illicit cigarette trade: evidence from Warsaw, Poland (2011)



Michał Stokłosa



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A Critique of the ITIC/OE Asia-14 Illicit Tobacco Indicator 2013

Asia-14 Illicit Tobacco Indicator 2013

Prepared by the International Tax and Investment Center and Oxford Economics
September 2014

FAILED





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Understanding Existing Evidence on the Size of Illicit Cigarette Trade

A set of criteria to assess the existing evidence:

- Peer review
- Funding source
- Transparency and replicability
- Correct measurements (distinguishing between tax avoidance, tax evasion, counterfeits)
- Presentation of results (range, confidence interval, testing assumptions)
- Cross-validation of results using multiple methods/change over time
- Acknowledgement of limitations



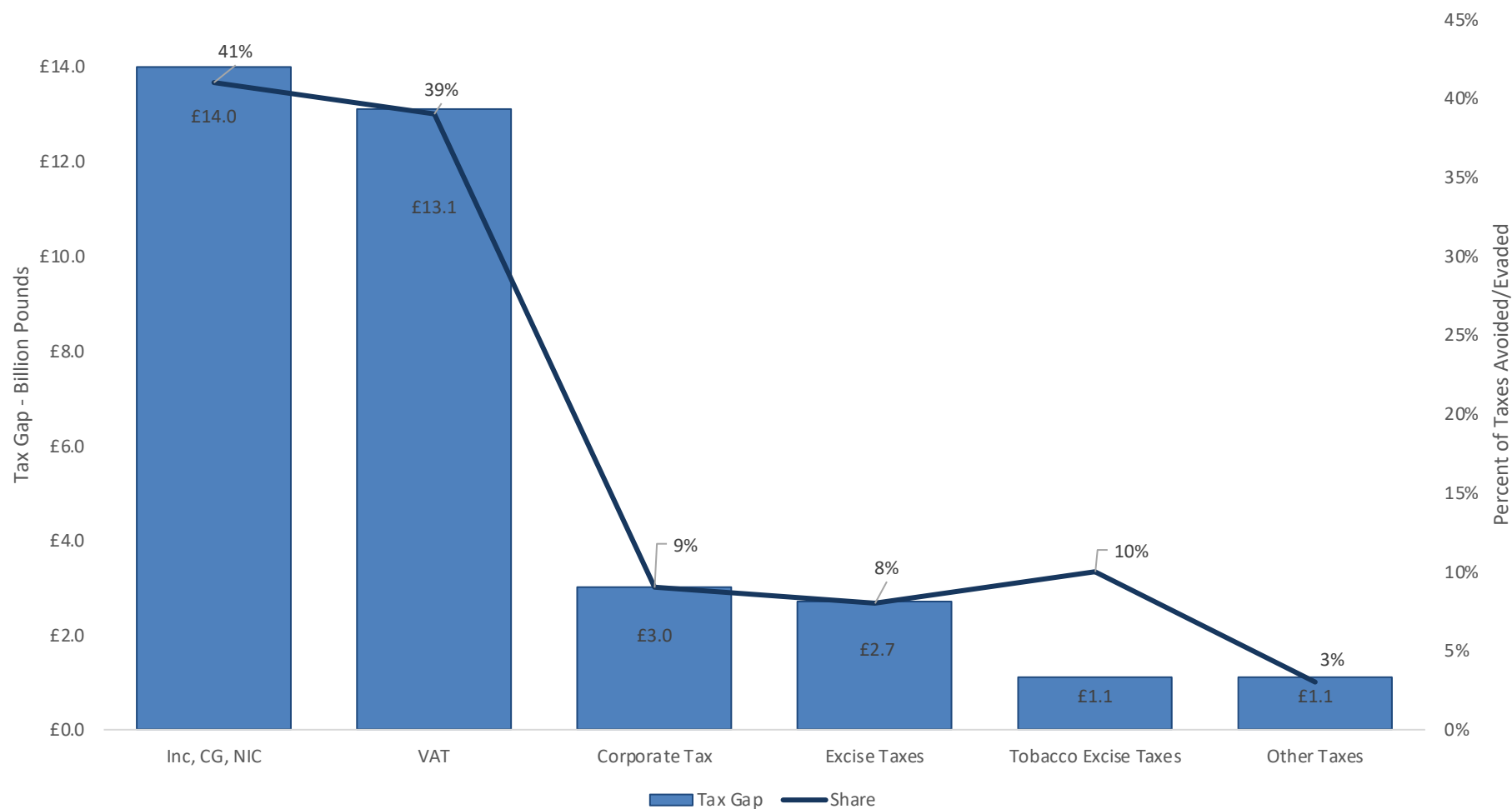
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How Big is the Cigarette Illicit Problem Compared to Tax Evasion?

- US 2010-11: illicit cigarette market about 8.8% (revenue loss \$1.6 billion); income tax evasion - 18-19% of income in USA is not properly reported (revenue loss \$500 billion).
- UK 2012-13: illicit cigarette market about 9% (revenue loss £ 0.9 billion); 16.9% of self-assessed income taxes and 8.7% of corporate taxes were not paid (revenue loss £ 8.9 billion).



Tax Gap Estimates, UK, 2013-14





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The Extend of Cigarette Tax Evasion

- In the US, about 17% of adults smoke. 8% of them consume illegal products.
- In UK, about 15.8% of adults smoke; 13% of them consume illegal products in 2016.
- This means that 1.4% of US adults are involved with the illegal cigarette market, and about 2% of British.



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Industry Behaviour

- 50 years of experience in organizing smuggling.
- More than US\$ 3 billion in payments and fines in EU and Canada to settle five smuggling lawsuits.
- Lawsuit against RJ Reynolds on smuggling charges involving Colombian and Russian crime syndicates.
- An investigation on the role in smuggling of JTI is ongoing since 2011.
- Mounting evidence of industry tax evasion in SA.



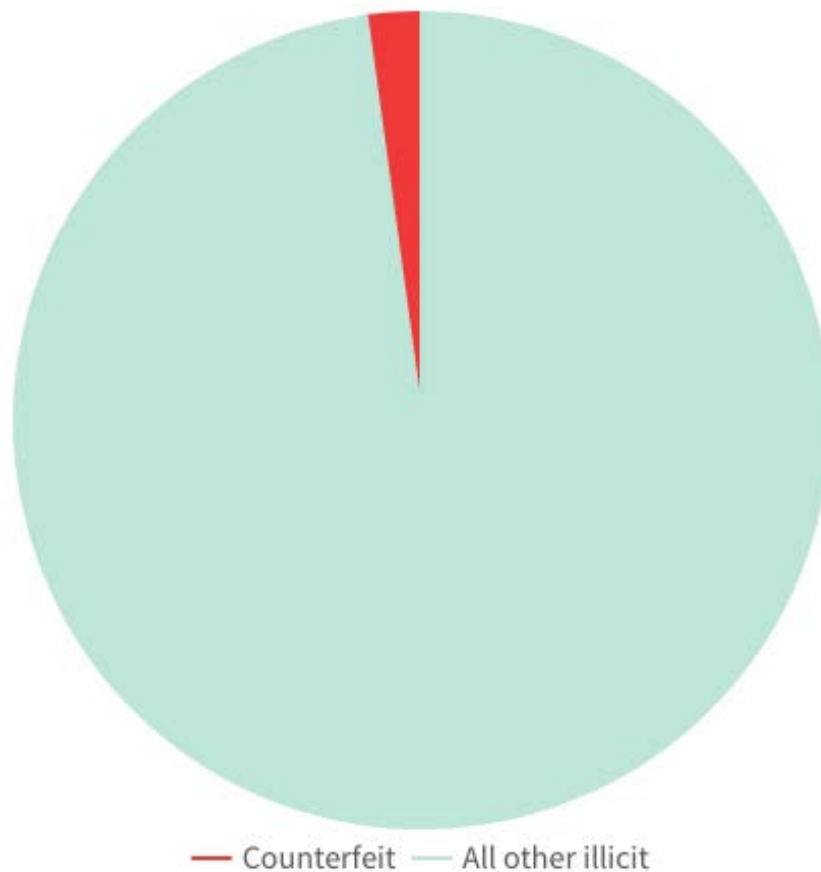
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Global Illicit Cigarette Seizures

98% of illicit cigarettes traded globally are products of legitimate tobacco manufacturer.

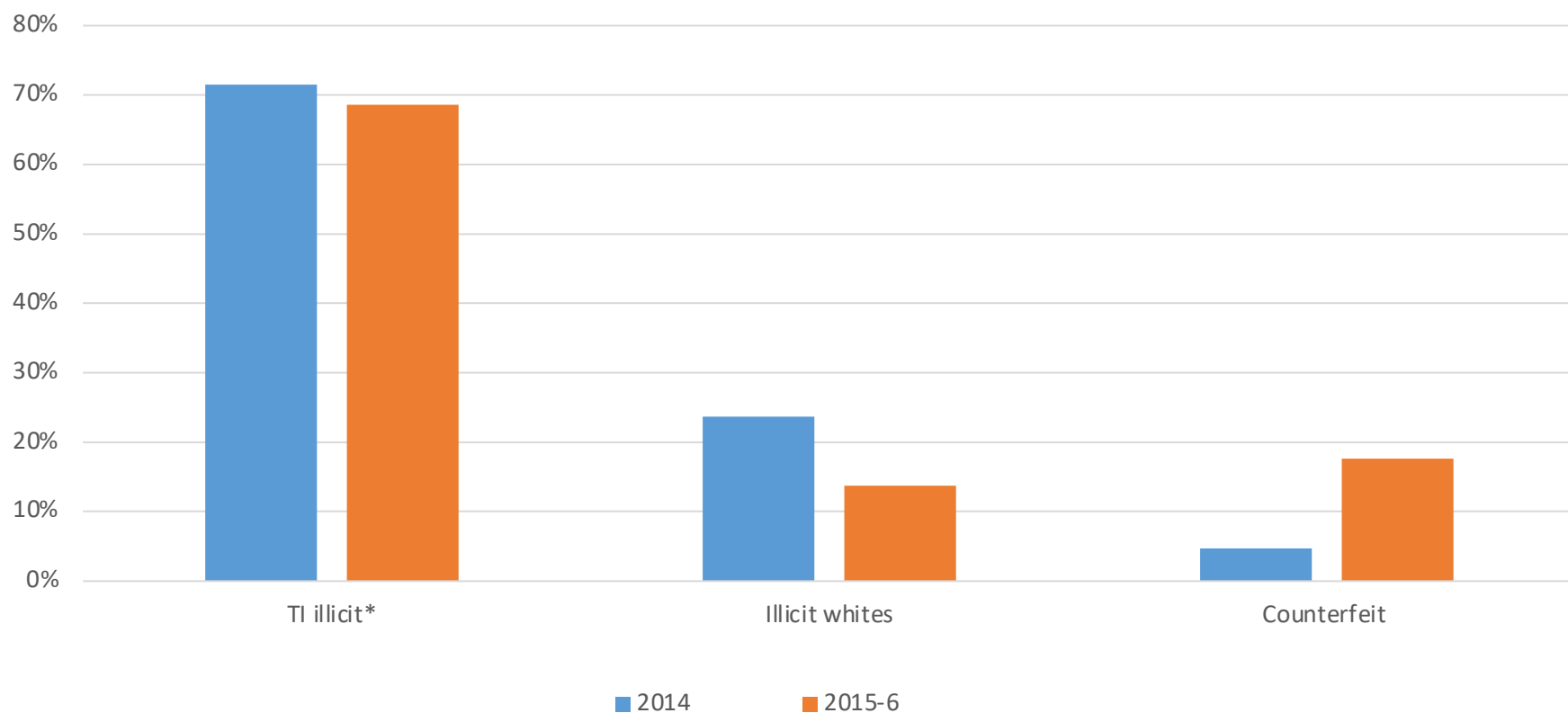


Source: World Custom Organization, 2015



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UK Seizures - % Share Of Illicit Market By Type





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Does Illicit Cigarette Market Matter?

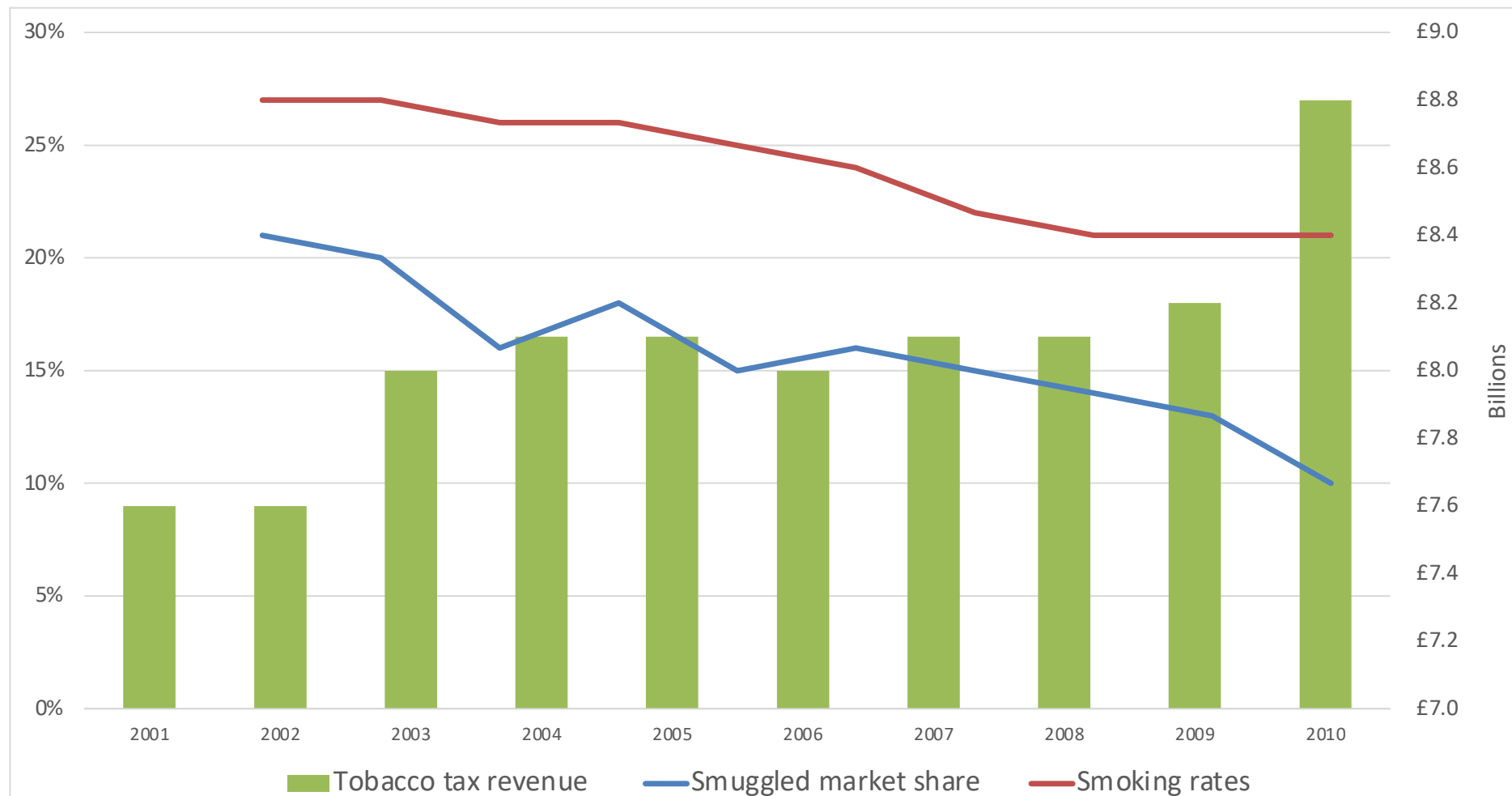
Experiences in many countries show that governments can raise tobacco taxes and gain health and economic benefits from these higher taxes even in the presence of illicit trade.

Government efforts to improve tax administration and implementing and enforcing strong measures to control illicit will further increase the impact of higher taxes on health and revenue.



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Impact of Tax Increases: UK



Source: HM Customs & Revenue. ASH.



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Brazil 2010 - 2014



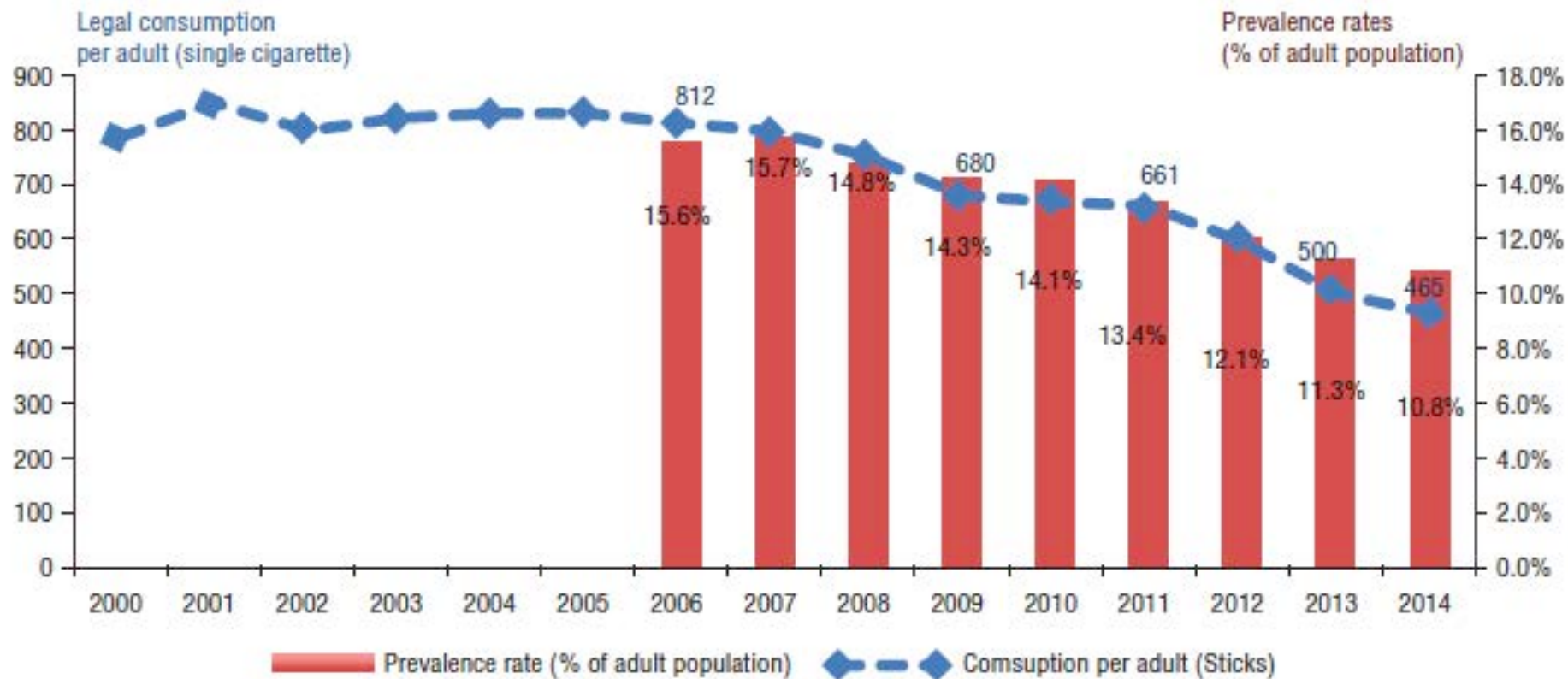


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Brazil 2000 - 2014



Source: Iglesias, 2016



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Brazil – Estimates

Estimated % of Illegal Cigarette Use

2012	2013 ^d	2014	2015	2016
28.6	32.3	28.8	36.5	42.8
27.9	32.3	28.1	35.8	42.2
27.2	32.3	27.5	35.2	41.7
26.5	32.3	26.8	34.6	41.2
25.8	32.3	26.2	34.0	40.6

Assumptions
related to
underreporting

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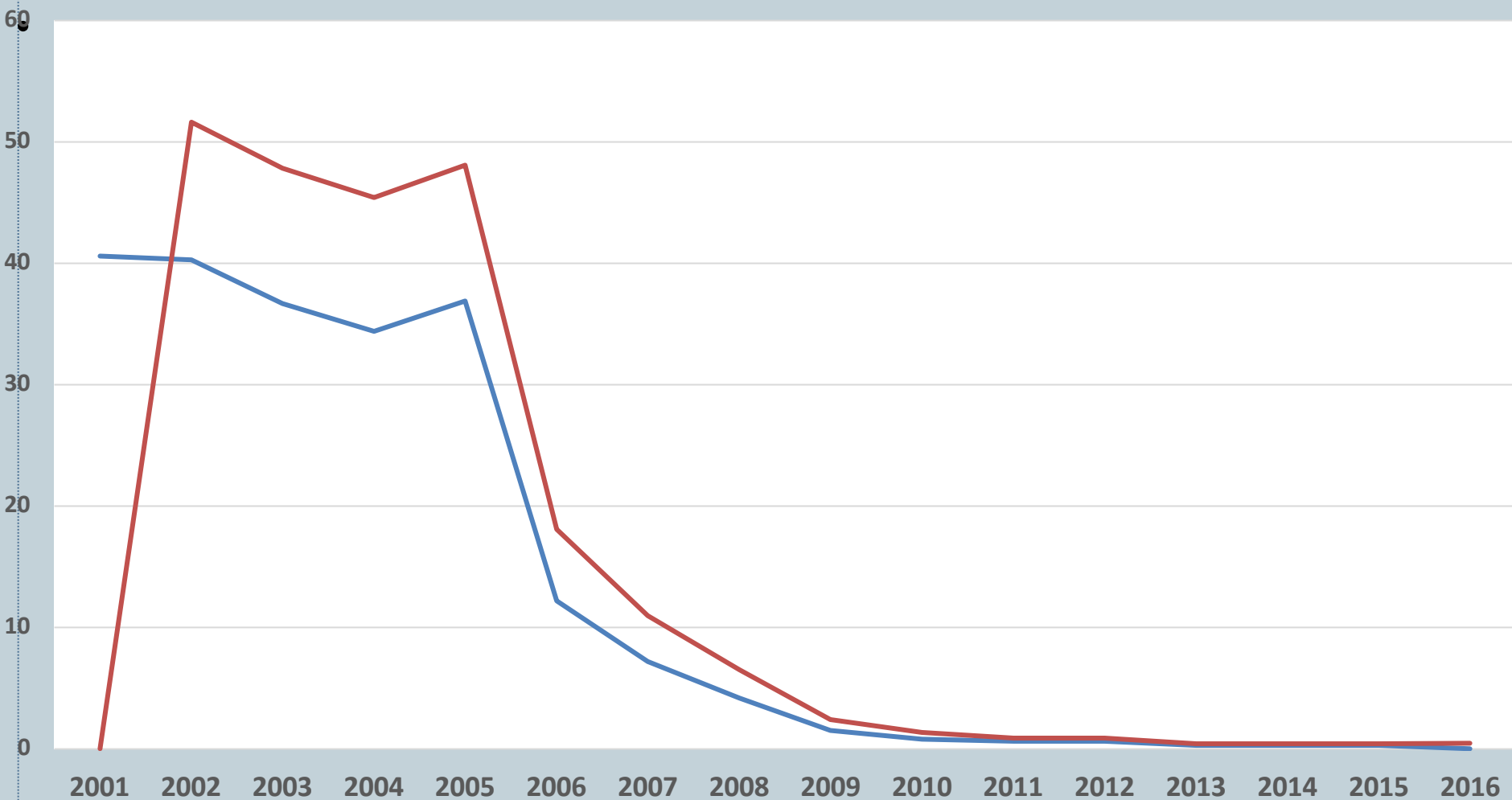
Illicit Cigarette Market In Georgia

- Early 2000s surveys indicated a substantial penetration of illicit cigarettes in Georgia: 1/3 – 2/3 of the total market.
- 2004 reforms (fight against corruption and better tax administration including tax stamps) reduced the size of the illicit cigarette market.
- A politician in 2017 said that the illicit cigarette market share was less than 3% of total market.



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Illicit Cigarette Market Share in Georgia



Source: Euromonitor 2016 & 2017

— Share of illicit % (2016) — Share of illicit % (2017)



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Real Cigarette Taxes in Georgia

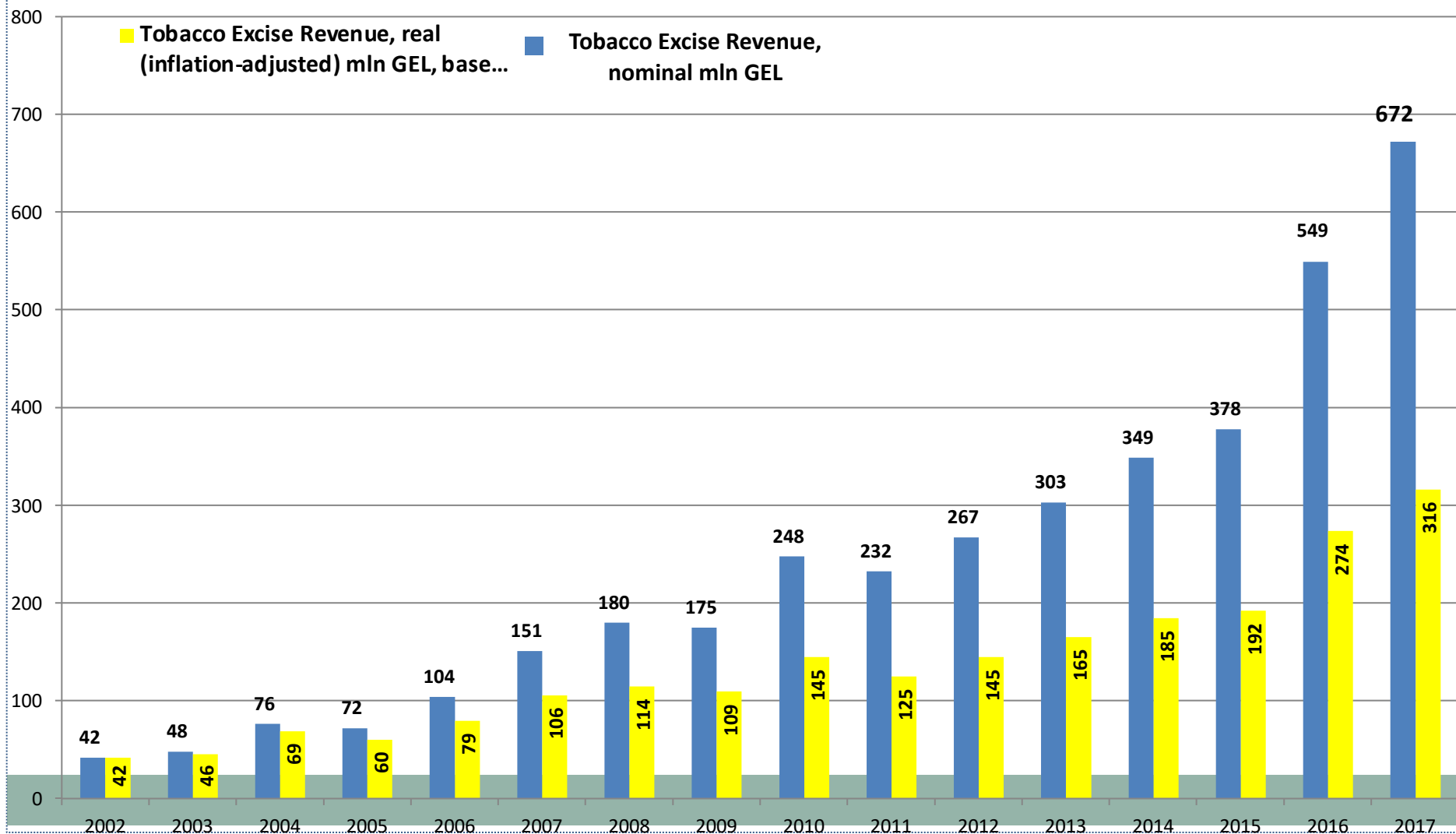
Real Cigarette Tax (Base Year = 2001)





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Tobacco Excise Revenue in Georgia 2002-2017, mln GEL



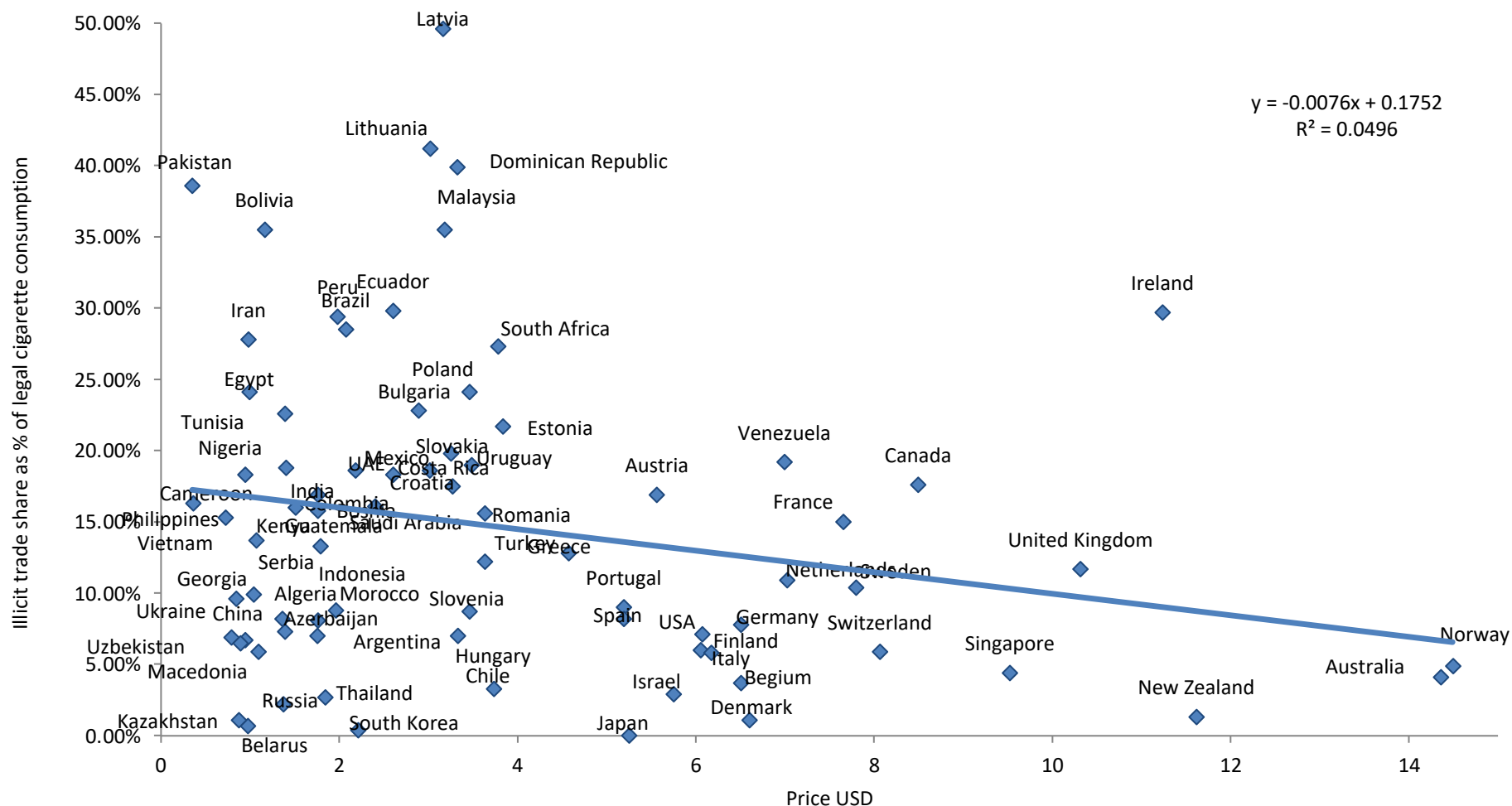


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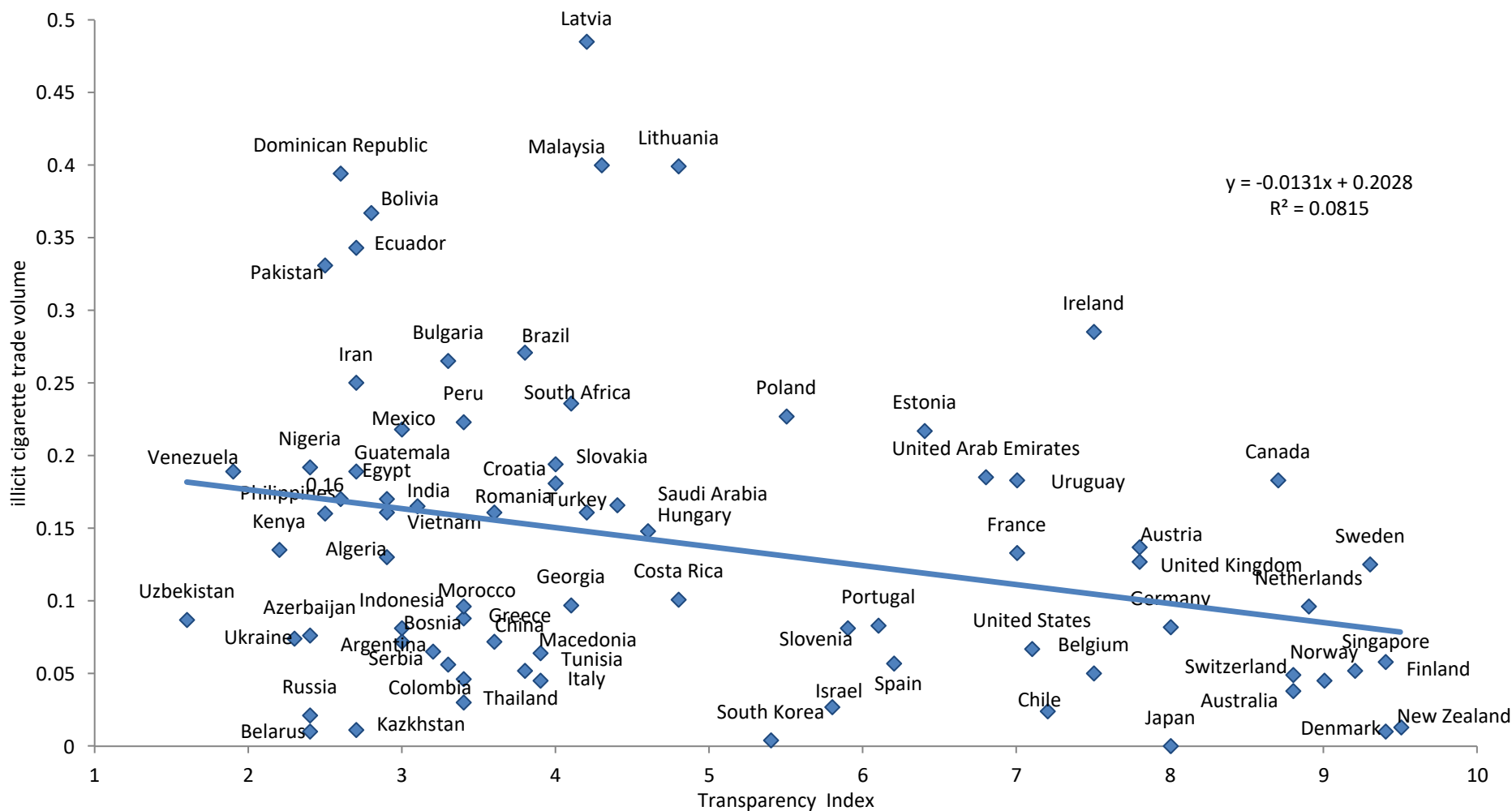
Illicit Cigarette Market Share & Cigarette Prices, 2012





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Smuggling and Corruption, 2011



Sources: Euromonitor, Transparency International



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Summary

- Critically review any estimates of the size of illegal tobacco products market; beware the industry motivation to overstate the problem
- There are scientific methods that can provide reliable estimates of the illicit market.
- Creativity, local specific knowledge, and funding are required.
- Interpret the size of tax evasion in the context of the overall economy.
- Tax increases improve public health even in the presence of tax evasion/avoidance.



Thank you!

Hana Ross
hzarub1@yahoo.com