Objective: As JLN countries pursue their journey towards Universal Health Coverage (UHC), they face an increasing burden of Noncommunicable diseases (NCDs), which are now the leading cause of death in the world, killing 40 million people each year and representing 70% of all annual deaths. Eighty percent of NCD deaths occur in low- and middle-income countries, straining health care systems, contributing to poverty and posing a major barrier to development. Prevention and control of NCDs requires new approaches in the health sector, including using fiscal and regulatory policy instruments and other multisectoral interventions. Tobacco use, obesity and risky alcohol consumption are three leading risk factors for the development of NCDs that are amenable to use of such fiscal and regulatory policy instruments.

Given the human and economic toll, the prevention of NCDs — cancer, cardiovascular disease, chronic lung disease and diabetes — should be a public health imperative under the UHC agenda. The statistics on the big three are staggering:
- Tobacco use contributes to 7 million deaths annually.
- Obesity contributes to 4 million deaths annually.
- Alcohol consumption contributes to 3.3 million deaths annually.

Existing evidence indicates that using taxation to raise the price of products which may have negative health impacts is one of the most effective ways to reduce their use. However, fiscal measures, in the form of taxes, are underused, yet we know they work for two important reasons. First, prices on goods matter, especially to the younger and poorer populations. People, particularly the poor, will buy less if it is more expensive. Second, taxes on certain goods can be educative and signal disapproval. Nothing illustrates this more than gains we have seen from taxing tobacco over the past couple decades in many countries. The lessons learnt from the use of tobacco taxes, for instance, can also be used for other innovative uses of fiscal policy instruments for public health.

This learning exchange brings together delegations from a range of low and middle income countries who are members of the JLN. Its objective is to share country experiences and evidence on implementing tax and other fiscal policies for public health, with a focus on experiences from tobacco, alcohol and sugary drinks tax policies that optimally address the dual goals of tobacco, alcohol, and sugary drinks use reduction and domestic resource mobilization to fund priority investments and programs that benefit all. The session will also address barriers to implementation, and make recommendations on how countries can best leverage fiscal policies to yield improved health outcomes for their citizens with the added benefit of bringing in additional revenue.

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1 Prepared by Patricio V. Marquez, HNP GP, WBG, with comments from Somil Nagpal, HNP GP, WBG. January 31, 2018,
Format: This is a session organized with the support of the World Bank Group (WBG) Global Tobacco Control Program, and will be coordinated by Patricio V. Marquez, Lead Public Health Specialist, WBG. The running order of the session and list of presenters is attached below.

Materials: Related materials will be provided to participants prior to the event so that they familiarize with selected international experiences, and in a flash drive during the session.

Running Order of Session:

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00-8:30</td>
<td>Registration</td>
</tr>
<tr>
<td>8:30-9:00</td>
<td>Welcome and Overview of the JLN, the Health Financing Initiative and this Learning Exchange as part of the JLN: Somil Nagpal, Senior Health Specialist, HNP GP, World Bank</td>
</tr>
<tr>
<td>9:00-9:25</td>
<td>Tobacco Taxation: Global Experience on a Win-Win Fiscal Policy for Public Health and Domestic Resources Mobilization: Patricio Marquez, Lead Public Health Specialist, WBG</td>
</tr>
<tr>
<td>9:50-10:15</td>
<td>Taxing Tobacco: Malaysia's example of Fiscal Policy for Public Health: Nor Aryana Hassan, Senior Principal Assistant Director, FCTC &amp; Tobacco Control Unit, Disease Control Division (NCD), Ministry of Health Malaysia</td>
</tr>
<tr>
<td>10:15-10:40</td>
<td>Comments, Questions and Answers</td>
</tr>
<tr>
<td>10:40-11:00</td>
<td>Coffee/Tea Break</td>
</tr>
<tr>
<td>11:00-11:25</td>
<td>Modelling the Health and Cost Impacts of Increasing Tobacco Taxes: case studies from Ukraine and England: Laura Webber, Director, Public Health Modelling, U.K. Health Forum</td>
</tr>
<tr>
<td>11:25-11:50</td>
<td>Taxing Sodas: The Experience of Mexico, Berkeley, and Philadelphia: Lynn Silver, Public Health Institute, Berkeley, California</td>
</tr>
<tr>
<td>11:50-12:15</td>
<td>Health and Cost Impacts of Introducing an Alcohol Duty Escalator in the UK: Laura Webber, Director, Public Health Modelling, U.K. Health Forum</td>
</tr>
<tr>
<td>12:15-12:40</td>
<td>Comments, Questions and Answers</td>
</tr>
<tr>
<td>12:40-14:00</td>
<td>Lunch</td>
</tr>
<tr>
<td>14:00-14:40</td>
<td>Lessons Learned from the Tobacco Tax Reform in Kenya: Caxton Masudi Ngeywo, Chief Manager &amp; Head, Market Surveillance Division, Domestic Taxes Department, Kenya Revenue Authority, and Vincent Kimosop, SOVEREIGN INSIGHT, Nairobi</td>
</tr>
<tr>
<td>14:40-15:00</td>
<td>Comments, Questions and Answers</td>
</tr>
<tr>
<td>15:00-15:20</td>
<td>Coffee/Tea Break</td>
</tr>
<tr>
<td></td>
<td>Moderator will open the floor to elicit perspectives from members of country delegations on feasibility of adapting fiscal policies for health in their countries, focusing on factors that facilitate and/or hinder the adoption of fiscal policies for health in their countries, and suggestions for joint learning and knowledge sharing among countries on this topic</td>
</tr>
<tr>
<td>16:20-16:30</td>
<td>Closing of Session</td>
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</tbody>
</table>
Tobacco Taxation: Win-Win for Public Health and Domestic Resource Mobilization

Patricio V. Marquez
Lead Public Health Specialist
Coordinator Global Tobacco Control Program
World Bank Group
Presentation Delivered at JLN even in Nairobi, Kenya
February 13, 2018
Outline

• The Story of Tobacco Use: Addiction, Disease and Premature Death
• Social and Economic Impact
• Tobacco Control Works
• Taxation and the Financing for Development Agenda
• Results of Modelling Assessment for Trinidad and Tobago
• Take Away Message
Message 1: Low-and Middle-Income Countries (LMICs) across the world are facing an ominous triple burden of disease and injuries, at lower levels of income and resource capacity.
Changing health profile: a double or triple burden of disease and injuries in LMIC

• While progress has been achieved in reducing premature mortality from communicable, maternal, neonatal, and nutritional causes, ill health and deaths from non communicable diseases (NCDs) and road traffic injuries, have emerged as leading causes of years of life lost.

• Across LMICs five times as many people dying from NCDs as from all other illnesses combined. Ten times more people are dying from NCDs than from HIV/AIDS. NCDs represent not only the major causes of death, but are responsible for the greatest share of the burden of disease as measured in terms of disability adjusted life years lost.

• Leading causes of death—cerebrovascular disease, heart disease, cancer, and diabetes are all tobacco use-related.
An ominous health challenge

• While progress has been achieved in reducing premature mortality from communicable, maternal, neonatal, and nutritional causes, ill health and deaths from non communicable diseases (NCDs) and road traffic injuries, have emerged as leading causes of years of life lost.

• In the Caribbean region, five times as many people dying from NCDs as from all other illnesses combined. Ten times more people are dying from NCDs than from HIV/AIDS. NCDs represent not only the major causes of death, but are responsible for the greatest share of the burden of disease in the Caribbean region (65 percent).

• The leading causes of death and morbidity in the Caribbean are all NCDs – heart disease, stroke, cancer, chronic respiratory diseases, and diabetes. These conditions accounted for more than 50% of disability-adjusted life years lost in the region.

• The relative rise of NCDs have been influenced by aging of the population, rapid urbanization, change in diet, change in risk factors from poverty-related to behavior, and improvements in the control of communicable diseases that increase life expectancy.

• Risk factors of major concern for the Caribbean contributing to the NCDs are obesity, exposure to tobacco smoke, unhealthy diets, physical inactivity and alcohol abuse.
Message 2:

“Cigarettes are among the most addictive substances of abuse and by far the most deadly”

Thomas C. Shelling, 2005 Nobel Prize winner in Economics
A cigarette = poisonous chemicals, gases, and toxins that can have many major effects on your health.....
Risks from Smoking

Smoking can damage every part of the body

Cancers
- Head or Neck
- Lung
- Leukemia
- Stomach
- Kidney
- Pancreas
- Colon
- Bladder
- Cervix

Chronic Diseases
- Stroke
- Blindness
- Gum infection
- Aortic rupture
- Heart disease
- Pneumonia
- Hardening of the arteries
- Chronic lung disease & asthma
- Reduced fertility
- Hip fracture
Ashes to ashes
Rank of smoking among risk factors for death and ill health*
2015

Source: Institute for Health Metrics and Evaluation

*Measured in disability-adjusted life years
Tobacco Use: A Development Challenge

- Tobacco use is the largest cause of preventable disease and death in the world, killing 7 million people per year (WHO 2017).

- Smokers are 2 to 4 times more likely to get coronary heart disease; 2 to 4 times more likely to experience a stroke; and about 25 times more likely to develop lung cancer (CDC 2014).

- Recent research has shown that smoking can kill up to 2/3 of those who consume tobacco products (Banks et al. 2015).

- On average, smokers lose a decade of their life compared to non-smokers (Jha et al. 2013).
High health expenditures related to tobacco...LAC experience
(source: PAHO 2016)

<table>
<thead>
<tr>
<th>Country</th>
<th>As a percentage of GDP (%)</th>
<th>Percentage of expenditures recovered through taxes</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAC</td>
<td>0.7</td>
<td>35.0</td>
</tr>
<tr>
<td>Chile</td>
<td>0.9</td>
<td>63.4</td>
</tr>
<tr>
<td>Bolivia</td>
<td>0.8</td>
<td>8.1</td>
</tr>
<tr>
<td>Argentina</td>
<td>0.7</td>
<td>53.3</td>
</tr>
<tr>
<td>Colombia</td>
<td>0.6</td>
<td>8.7</td>
</tr>
<tr>
<td>Brazil</td>
<td>0.5</td>
<td>26.5</td>
</tr>
<tr>
<td>Mexico</td>
<td>0.4</td>
<td>45.5</td>
</tr>
<tr>
<td>Peru</td>
<td>0.4</td>
<td>9.1</td>
</tr>
</tbody>
</table>
PAHO 2016 estimates show that smoking consumes US$34 billion of LAC’S health budgets every year.

Latin America spends approximately 0.7% of the region’s GDP in health-related costs attributable to smoking, with some countries spending even more than 0.70% of their GDP; namely, Chile (0.9%), Bolivia (0.8%) and Argentina (0.7%).

The impact of smoking was homogeneous across the seven countries: nearly 10% of total health expenditure (6 to 13%) is attributable to this addiction, or approximately 1% (0.4 to 0.9%) of GDP.

However, in no country do the revenues from taxes on tobacco products offset the health expenditures that smoking generates in the health system.

The proportion of health expenditures recovered through taxes varies widely: only Chile and Argentina manage to recover over 50% (62% and 67%, respectively), while the figure in Mexico is 45%, in Brazil 27%, and in Colombia, Bolivia, and Peru, less than 10%.
Direct and Indirect Economic Costs of Tobacco Use

Evidence from the United States:

- Based on 2006–2010 data, it has been estimated that by 2010, 8.7% of annual health care spending could be attributed to cigarette smoking, amounting to as much as US$170 billion per year.

- An estimated 11.1% of inpatient healthcare spending; 10.4% of prescription spending; and 5.3% of medical spending on non-inpatient services (outpatient, physician and clinical services, and other professional services) were attributable to cigarette smoking.

- During 2000–2004, cigarette smoking and secondhand smoke exposure resulted annually in at least 443,000 premature deaths, 5.1 million years of productive life lost, and US$96.8 billion in productivity losses.

Source: Xu X et al. 2015
Economic loss totals US$ 1.4 trillion
Message 3:
Manipulation and deception in the marketplace influence decision to use tobacco, a legal product that kills
Ever since Adam Smith, the central teaching in economics has been that free markets provides us with material well-being as if by an invisible hand. But markets harm as well as help us.

As long as there is profit to be made, sellers will systematically exploit our psychological weaknesses and our ignorance through manipulation and deception.

Humans think in terms of stories, and decisions are consequently determined by the stories we tell ourselves. Advertisers use this to their advantage by “graph[ing] their story” onto ours, and thereby influencing the decisions we make”—in this case to consume tobacco products
Smoking will make you feel good
Smoking is Glamorous
Tobacco Marketing

Cigarette and smokeless tobacco companies spend billions of dollars each year to market their products. In 2014, US$9 billion on advertising and promotional expenses in the United States alone.

Marketing to Specific Populations

Youth and Young Adults: Scientific evidence shows that tobacco company advertising and promotion influences young people to start using tobacco.
- Adolescents who are exposed to cigarette advertising often find the ads appealing.
- Tobacco ads make smoking appear to be appealing, which can increase adolescents' desire to smoke.

Women: Women have been targeted, and tobacco companies have produced brands specifically for women. Marketing toward women is dominated by themes of social desirability and independence, which are conveyed by advertisements featuring slim, attractive, and athletic models.

Advertisement and promotion of certain tobacco products appear to be targeted to members of racial/minority communities.

Source: US CDC (https://www.cdc.gov/tobacco/data_statistics/fact_sheets/tobacco_industry/marketing/)
### Current Tobacco Smoking, by region, 2015
**No room for complacency**

<table>
<thead>
<tr>
<th>Region</th>
<th>Male Prevalence (%)</th>
<th>Female Prevalence (%)</th>
<th>Both Sexes (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>38</td>
<td>19</td>
<td>28</td>
</tr>
<tr>
<td>Western Pacific</td>
<td>48</td>
<td>3</td>
<td>26</td>
</tr>
<tr>
<td>Eastern Mediterranean</td>
<td>37</td>
<td>3</td>
<td>20</td>
</tr>
<tr>
<td>The Americas</td>
<td>22</td>
<td>13</td>
<td>17</td>
</tr>
<tr>
<td>South East Asia</td>
<td>32</td>
<td>2</td>
<td>17</td>
</tr>
<tr>
<td>Africa</td>
<td>25</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td>Global</td>
<td>36</td>
<td>7</td>
<td>21</td>
</tr>
</tbody>
</table>

*Source: WBO, 2015*
Message 4:

We know what to do: tobacco control works
Why Tobacco Regulation Matters?
Economic Rationale for Action

• Information failure about risks and addiction potential (adolescents)
• Externalities (second-hand smoking and pregnancy)
• Ill health, premature death, and disability at a productive age undermine human capital development
• Increasing costs of health care for families and countries, as well as for the economy as a whole
Traditional Public Regulation

- The public sector has traditionally regulated smoking in one of three ways (Gruber, 2002).
  - **The first, and most important, is excise taxation, at both the central and local levels.**
  - The second public regulation is restriction of smoking in public places---variety of restrictions on smoking in sites such as workplaces, restaurants, and public transportation.
  - The third set of smoking regulations involves restrictions on youths’ access to tobacco products.
Benefits of Tobacco Regulation

- The main benefits of regulations that reduce smoking are straightforward: improved health for smokers and also for non-smokers who are less likely to be exposed to secondhand smoke.

- **Tobacco companies, therefore, should be strictly regulated in ways that minimize the harm caused by their products.**
WHO FCTC Core Demand and Supply Reduction Measures

The core demand reduction provisions in the WHO FCTC are contained in articles 6-14:

• Price and tax measures to reduce the demand for tobacco, and
• Non-price measures to reduce the demand for tobacco, namely:
  • Protection from exposure to tobacco smoke;
  • Regulation of the contents of tobacco products;
  • Regulation of tobacco product disclosures;
  • Packaging and labelling of tobacco products;
  • Education, communication, training and public awareness;
  • Tobacco advertising, promotion and sponsorship; and,
  • Demand reduction measures concerning tobacco dependence and cessation.

The core supply reduction provisions in the WHO FCTC are contained in articles 15-17:

• Illicit trade in tobacco products;
• Sales to and by minors; and,
• Provision of support for economically viable alternative activities.
5. Taxing tobacco the most cost-effective measure to control tobacco use, but the most underused measure
Taxing tobacco: a win win for public health and domestic resources mobilization
“Tobacco tax programs are a win-win both for public health and domestic revenue generation”

-RAGE

Jim Yong Kim
President, World Bank Group
What is the main purpose of tobacco excises?

Tobacco excises

Restrict dangerous consumption

Increase state budget revenue

Tobacco taxation is a win-win policy measure!
“Sugar, rum, and tobacco, are commodities which are nowhere necessaries of life, [but] which are ... objects of almost universal consumption, and which are therefore extremely proper subjects of taxation.”

**Rationale for focusing on Tobacco Taxation**

- Higher tobacco taxes help hike up prices, which can contribute to significantly reduce prevalence and intensity of smoking in spite of the addictive nature of tobacco.
- The demand for tobacco products is relatively inelastic
  - Price elasticity of demand for high-income countries (HIC) is estimated to be -0.4 and between -0.6 and -0.8 in low and middle income countries (LMIC) (IARC, 2014)
- Poor and young are more responsive to price changes than the better off and old.
“In many countries, raising tobacco taxes can offer a “win–win”: higher revenue and positive health outcomes. Countries’ circumstances and governments’ weighting of revenue, health, and other objectives vary, and hence so too will the desirable level of tobacco tax rates.”

“In many cases, however, current tax rates are evidently far below what is feasible in terms of revenue potential. Thus, tax increases could serve revenue purposes as well as health and other objectives.”

“Of course, countries putting more weight on health objectives could raise taxes even further.”

Cigarette Taxes Play an Important Role in Cigarette Prices

Source: Orzechowski and Walker (2015); Bureau of Labor Statistics; CEA calculations.
Tax burden cigarettes in the European Union
2016, in % of the Weighted Average Price
As cigarettes become more affordable because the income increase outpaces the price increase, policy focus should shift from price-based policy solutions that adjust for inflation to affordability-based policy solutions, with the aim of making cigarettes less affordable.
**Growth rate of Cigarette Affordability in China**

China’s cigarette affordability has surged with the fastest economic growth rate in the world.

Price Plays an Important Role in Smoking

U.S. Cigarette Prices and Consumption, 1954-2014

Thousands of Cigarettes per Capita

Price per Pack, 2014 Dollars

Per Capita Cigarette Consumption (Left Axis)

Average Price per Pack (Right Axis)

Source: Orzechowski and Walker (2015); Bureau of Labor Statistics; CEA calculations.
Cigarette prices tripled, consumption halved, SOUTH AFRICA
Price and consumption of cigarettes
Mexico, 2001-2014, real prices

Sources: EIU, Euromonitor, and World Bank
Consumption levels for cigarettes in the European Union

Releases for consumption of cigarettes 2002-2015 (in 1000 pieces)
Cigarette Taxes Have Large Aggregate Benefits for Public Health

Changes in Smoking Behavior Due to 2009 Tax Increase

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-17</td>
<td></td>
</tr>
<tr>
<td>18-25</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Smoking initiation</th>
<th>Past-month smoking</th>
<th>Days smoked in 30 days (current smokers)</th>
<th>Cigarettes per day (daily smokers)</th>
<th>Cigarettes per day (nondaily smokers)</th>
</tr>
</thead>
<tbody>
<tr>
<td>-18</td>
<td>-15</td>
<td>-12</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: van Hasselt at al. (2015).
Years gained by quitting smoking by age

- 55-64: 4 years
- 45-54: 6 years
- 35-44: 9 years
- 25-34: 10 years

Source: Jha et al, NEJM, Jan 24, 2013
The estimated health impact of tax increase on tobacco in Ukraine

- The model estimated that by 2035 the recent 2017 tax increase would result in the avoidance of:
  - 126,730 new cases of smoking-related disease;
  - 29,172 premature deaths; and
  - 267,098 potential years of life lost relative to no change in tax.
- These reductions in disease and death will result 1.5bn UAH or about US$57 million in healthcare costs avoided, and
- 16.5bn or US$631 million premature mortality costs avoided (Webber et al. 2017).
The use and mortality reduction due to 2009 tax increase on tobacco in the United States

- Evidence suggests that the 2009 Federal cigarette tax increase could have plausibly reduced the number of smokers in a cohort of 18 year-olds by between 45,000 and 220,000 people, roughly 3 to 15 percent.

- Under the assumption that roughly one-third of youth smokers die prematurely due to smoking (U.S. Surgeon General 2014), the 2009 cigarette tax increase in the United States plausibly reduced the number of premature deaths due to smoking in each cohort by between 15,000 and 70,000.
Common objections to higher tobacco taxes

**Revenue loss:** “Laffer curve”- revenue declines not seen in practice nearly anywhere

**Hurts the poor:** poor more price responsive, and gain more of the health benefits than the rich

**Smuggling:** legitimate concern but consumption falls, revenue increases even with smuggling, and *can counter with labels with tax stamp, smart labels, and coordination*
Results of tobacco excise policy in Ukraine: 2008-2017

Cigarette sales, bln sticks
Average excise per 1000 cigarettes, UAH
Tobacco excise revenue, bln UAH
Number of daily smokers, mln

2017 is estimated based on WBG simulation.
Excise tax per pack and excise tax revenue

Excise tax per pack of 20 cigarettes (constant 2016 Rands)

Excise tax revenue (constant 2015 Rands, billions)

Source: The Economics of Tobacco Control Project at the University of Cape Town
3.2 Average revenue excise duties cigarettes

Excise duties collected per 1000 cigarettes
Why Government will not lose revenues if cigarette taxes are increased and people buy fewer cigarettes due to increased prices?

• Recent Credit Suisse assessment covering industries with data going back to 1990 showed that tobacco industry has performed best: annualized return of 14.6% compared with an average of 9.6%.

• Each US$ invested in tobacco companies in 1900 would have grown, with reinvested dividends, to US$38,255 by 2014, compared to US$1,225 invested in shipbuilding and shipping.

• Hence, tobacco was the best investment over the previous 100 years.

• The secret?.......cigarettes are cheap to make and highly addictive, which allows for FAT PROFITS

Source: Credit Suisse (2015), Broughton, P.D, (2016)
Tobacco taxation as source for increasing fiscal space to fund priority investments and essential services


- While it is recognized that domestic resources are first and foremost generated by economic growth,
  - grounded on macro-economic stability (fiscal space), and
  - supported by complementary measures, sound social, environmental and institutional policies, including good governance, and democratic and transparent institutions responsive to the needs of the people are ALL necessary to achieve the SDGs.

- In this context, Clause 32 states:
  - “Price and tax measures on tobacco can be an effective and important means to reduce tobacco consumption and health care costs, and represent a revenue stream for financing for development in many countries.”
With decreased fiscal space...tobacco tax revenue could help expand tax base...the example of LAC  
(Source: IDB 2018)


**Tobacco Taxes are Progressive**

When benefits of reduced mortality and morbidity are counted, these benefits are strongly progressive:

- First, smoking is more prevalent at lower incomes, so reductions in smoking are larger for poor since they are more sensitive to price increases.

- Second, estimates assume that dollar value of health benefit does not vary with income and thus is proportionately more important to lower-income households.

- Third, estimates take into account a “utility offset” reflecting the fact that people who stop smoking may lose some of the utility they would otherwise have derived from smoking.

- Fourth, estimates also incorporate not just the direct effects of the tax, but also the use of the revenue it generates—for example, expanding health insurance coverage for low- and moderate-income households.
Results: Total Direct and Indirect Effects of Tobacco Taxes in Ukraine

Total Income Effect: Direct and Indirect Effect of Taxes (tobacco price increase, medical expenditure and working years gained)

Source: Author estimation using a price shock of 25%
Results: Net Effect

Total Income Effect: Direct and Indirect Effect of Taxes
(tobacco price increase, medical expenditure and working years gained)

Source: Author’s estimation using a price shock of 25%
United States: Increase in Federal Tobacco Taxes to Paid for Health Insurance of Poor Children

- Positive impact of tobacco tax increases on tax revenues is seen in different countries.
- **United States:** Part of the 2009 reauthorization of the Children’s Health Insurance Program. Congress approved, and President Obama signed as the first law after being elected, a 62-cent per pack increase in the federal cigarette tax, increasing total federal cigarette tax to about US$1 a pack.
- Federal cigarette tax revenue rose by 129%, from US$6.8 billion to $15.5 billion, in the 12 months after the tax (April 2009 to March 2010). Cigarette pack sales declined by 8.3% in 2009—the largest decline since 1932.
- The Office of Management and Budget (OMB) projects that proposed federal tobacco tax increases will generate more than **US$95 billion in new revenues over ten years**; the rate increase would reduce the number of adult smokers by an estimated 2.6 million over 10 years, which would result in thousands of adults saved from premature death. The rate increase would also prevent many children from becoming smokers.
Tobacco Taxes Disproportionately Benefit Lower-Income Households

Illustrative Distribution of the 2009 Tobacco Tax Increase

Benefits as Percent of Pre-Tax Income

Source: CEA calculations.
Prevalence of smoking among adult Filipinos declined from 31.0% in 2008 to 25.4% in 2013, and then to 23.3% in 2015. There are about 4.0 million less smokers in the country because of the Sin Tax Law. The drop is mostly from people who avoid taking up smoking. At least 70,000 deaths have been averted since 2013. Health benefits were greatest in price sensitive populations – the poor, rural folk, the very old, and the very young.
Drivers of Illicit Tobacco

• Corruption
• Weak tax administration
• Poor enforcement
• Presence of informal distribution networks
• Presence of criminal networks
• Access to cheaper sources

Sources: NRC/IOM 2015; NCI/WHO 2016
Share of Illicit Trade Versus Corruption by Country, 2011

Sources: Euromonitor International 2011 and Transparency International 2011, done by UIC
Tobacco Taxes & Illicit Trade: Myth or Reality?

• While high taxes may create incentives for illicit trade, other factors have a much bigger effect, including: low capacity in a nation’s tax administration system, and low likelihood of being caught and punished (WHO 2016).

• Illicit trade can be controlled by: strong tax administration systems

• Countries need to ratify the FCTC’s Protocol on Illicit Trade in Tobacco Products approved in 2013:

  • Signatories: 54. Parties: 27 out of the 180 Parties to the FCTC

  • In ECA country that ratified include: Austria, European Union, France, Latvia, Lithuania, Finland, France, Germany, Greece, Ireland, Latvia, Lithuania, Spain, Turkmenistan
1. A strong legal framework

- Clear definitions in legislation - for products (e.g., cigarillos vs. cigars), tax base, rates, point of tax collection (factory? warehouse? point of import?), exemptions (travelers), etc.

- Identification of responsibilities: Which level of government, which agency does what?
Tax Administration issues (2)

2. Specialized excise administration and enforcement/audit services within the Revenue Administration
   - Administration focusing on early stages with minimum number of players

   - Empowerment of tax/excise/customs administration, special financial and administrative guarantees
   - Licenses for all operators, record-keeping, marking systems, management of supplies (warehouses, transit procedures), restrictions on out-of-network sales (internet, duty-free shops)
Tax Administration issues (3)

- Trained, experienced and dedicated staff
- Information gathering and analysis, intelligence, Cooperation with other agencies
- Well-equipped enforcement teams; Mobile patrols at bottlenecks
Tax Administration issues (4)

- Illicit operators always aim for the weakest point in the tax administration ➔ Overall progress in revenue administration sets a limit to improving control of the tobacco supply chain
- Adequate levels of penalties, administrative and criminal sanctions for illegal activities
- Administrative and criminal investigation capacities: Increase deterrence and reduce incentives (criminalization of excise fraud – investigation, seizure and confiscation of proceeds of crime – push the threshold higher!)
Evidence: Strong Tax Administration Works in Countries where High Tobacco Taxes.

➢ Since Her Majesty’s Revenue and Customs’ (HMRC) “Tackling Tobacco Smuggling” Strategy was introduced in the UK in 2000, the size of the illicit cigarette market has been cut by almost half, to a level of about 9%, with more than 26 billion cigarettes and over 4,300 tons of hand-rolling tobacco seized. Additionally, the U.K. has seen more than 4,000 criminal prosecutions for tobacco offences following action by law enforcement officers (see recent information at https://www.gov.uk/government/news/government-unveils-plans-to-stub-out-illicit-tobacco-trade). And the UK has one of the highest tax burdens on cigarettes (82% of to the total average retail price of a pack of 20-cigarettes).

➢ In Chile, a country that has one of the highest tax rates on cigarettes in the world (78% of the price of each pack), government has also experienced increased success in seizures of smuggled tobacco products and is helping curtail the slight growth in illicit trade observed after a 2013 increase in tobacco prices.
Take Away Messages (1)

Smokers die younger
The reality of tobacco use
World Bank Policy on Tobacco
(Operational Policy 4.76 of October 1999)

- The Bank does not lend directly for, invest in, or guarantee investments or loans for tobacco production, processing, or marketing.

- Unmanufactured and manufactured tobacco, tobacco processing machinery and equipment, and related services are included in the negative list of imports in projects.

- Bank activities, both analytical and operational, discourage the use of tobacco products, particularly through the use of tobacco taxation.
Take Away Messages:

Tobacco Taxation is a win-win policy measure that generates:

(i) Public health benefits by reducing consumption among smokers and preventing addiction among the youth; and

(ii) Additional tax revenue to expand the fiscal space to fund priority investments and programs that benefit all.

To achieve this over time:

(I) Effective strategies involve combining big initial tax increases with recurrent tax hikes over time, to adjust for inflation and rising per capita growth.

(II) To counter the tobacco industry's influence, use scientific evidence and accumulated country experiences, and leverage ministries of finance, health and other government agencies with support from international organizations and civil society, in the development of effective policies.
The end objective of tobacco taxation and control: a healthy, productive, prosperous, and happy population

“When health is absent, wisdom cannot reveal itself, art cannot become manifest, strength cannot fight, wealth become useless, and intelligence cannot be applied”.

Herophilus, 325 B.C.
Physician to Alexander the Great
THANK YOU!

Contact:

pmarquez@worldbank.org

World Bank Group Global Tobacco Control Program:
Ukraine Tobacco Taxation

Olena Doroshenko, Health Specialist

JLN Learning Exchange on Fiscal Policy for Public Health
February 13, 2018

WORLD BANK GROUP

Ukraine Tobacco taxation

Olena Doroshenko, Health Specialist
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Poverty team led by Alan Fuchs

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Feng Zhao, Olena Doroshenko

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Laura Webber

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Oksana Sapiga,
Kostyantyn Krasovskiy

NGO LIFE
Andriy Skipalskiy, Lilia Olefir, Oksana Totovytska
CONTENTS

• Country context
• Fiscal policies
• Results
• Conclusions
Ukraine

Eastern Europe country
Population: 42 million

Economic situation:

• GDP per capita $2,186 in 2016 ($8,271 PPP)
• economic crisis of 2014-2015 with GDP growth of – 9.8%
• poverty rates: 0.5% ($3.2 in 2011 PPP), or 7.8% ($5.5 in 2011 PPP)
• fiscal revenues 39% of GDP, expenditure 42%
• Conflict in the eastern part of Ukraine
Life expectancy at birth is 71.4 years (77 women, 67 men)

What causes the most premature death?

- Communicable, maternal, neonatal, and nutritional diseases
- Non-communicable diseases
- Injuries

<table>
<thead>
<tr>
<th>2005 ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ischemic heart disease</td>
</tr>
<tr>
<td>Cerebrovascular disease</td>
</tr>
<tr>
<td>Self-harm</td>
</tr>
<tr>
<td>Road injuries</td>
</tr>
<tr>
<td>Lung cancer</td>
</tr>
<tr>
<td>HIV/AIDS</td>
</tr>
<tr>
<td>COPD</td>
</tr>
<tr>
<td>Alcohol use disorders</td>
</tr>
<tr>
<td>Stomach cancer</td>
</tr>
<tr>
<td>Lower respiratory infect</td>
</tr>
<tr>
<td>Colorectal cancer</td>
</tr>
<tr>
<td>Cirrhosis alcohol</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2016 ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ischemic heart disease</td>
</tr>
<tr>
<td>Cerebrovascular disease</td>
</tr>
<tr>
<td>Self-harm</td>
</tr>
<tr>
<td>Lung cancer</td>
</tr>
<tr>
<td>HIV/AIDS</td>
</tr>
<tr>
<td>Alcohol use disorders</td>
</tr>
<tr>
<td>Colorectal cancer</td>
</tr>
<tr>
<td>Cirrhosis alcohol</td>
</tr>
<tr>
<td>Stomach cancer</td>
</tr>
<tr>
<td>COPD</td>
</tr>
<tr>
<td>Lower respiratory infect</td>
</tr>
</tbody>
</table>

% change 2005-2016

- Ischemic heart disease: -21.5%
- Cerebrovascular disease: -29.6%
- Self-harm: -32.6%
- Lung cancer: -26.0%
- HIV/AIDS: -22.1%
- Alcohol use disorders: -17.2%
- Colorectal cancer: -14.3%
- Cirrhosis alcohol: -23.6%
- Stomach cancer: -31.5%
- COPD: -45.8%
- Lower respiratory infect: -38.3%

Source: IHME Global burden of disease data
Tobacco-related deaths

14.4% of total deaths in Ukraine, or more than 100,000 deaths annually are attributable to smoking

Data from the IHME/GBD study
Key risk factors

What risk factors drive the most death and disability combined?

- Metabolic risks
- Environmental/occupational risks
- Behavioral risks

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>2005 Ranking</th>
<th>2016 Ranking</th>
<th>% change 2005-2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>High blood pressure</td>
<td>1</td>
<td>1</td>
<td>-22.1%</td>
</tr>
<tr>
<td>Dietary risks</td>
<td>2</td>
<td>2</td>
<td>-23.7%</td>
</tr>
<tr>
<td>Alcohol &amp; drug use</td>
<td>3</td>
<td>3</td>
<td>-23.0%</td>
</tr>
<tr>
<td>Tobacco</td>
<td>4</td>
<td>4</td>
<td>-24.2%</td>
</tr>
<tr>
<td>High total cholesterol</td>
<td>5</td>
<td>5</td>
<td>-32.0%</td>
</tr>
<tr>
<td>High body-mass index</td>
<td>6</td>
<td>6</td>
<td>-17.9%</td>
</tr>
<tr>
<td>Air pollution</td>
<td>7</td>
<td>7</td>
<td>-17.0%</td>
</tr>
<tr>
<td>High fasting plasma glucose</td>
<td>8</td>
<td>8</td>
<td>-30.3%</td>
</tr>
<tr>
<td>Impaired kidney function</td>
<td>9</td>
<td>9</td>
<td>-20.4%</td>
</tr>
<tr>
<td>Occupational risks</td>
<td>10</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Low physical activity</td>
<td>11</td>
<td>11</td>
<td>-18.3%</td>
</tr>
</tbody>
</table>

Smoking rates: 45% men and 11% women (2015)

Source: IHME Global burden of disease data
Tobacco industry in Ukraine

7 manufacturers, 99.5% of market share is after four largest companies (British American Tobacco, Philip Morris, JTI, Imperial Tobacco)

Low and medium price segment is dominating

Monopoly on cigarette distribution by one company (TEDIS, larger companies have shares in the company)

Very powerful lobby in the parliament

Government revenues from tobacco taxes make 2.3% of GDP (excise, VAT and levies)
### Average price and tax burden for a pack of 20 cigarettes (May 2017)

<table>
<thead>
<tr>
<th>Country</th>
<th>Average price, local currency</th>
<th>Total excise, local currency</th>
<th>Excise burden, %</th>
<th>Tax (excise + VAT) burden, %</th>
<th>Price, USD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ukraine</td>
<td>21</td>
<td>12,92</td>
<td>62</td>
<td>78</td>
<td>0,80</td>
</tr>
<tr>
<td>Russia</td>
<td>92</td>
<td>44,58</td>
<td>48</td>
<td>64</td>
<td>1,63</td>
</tr>
<tr>
<td>Belarus</td>
<td>1,11</td>
<td>0,316</td>
<td>28</td>
<td>45</td>
<td>0,60</td>
</tr>
<tr>
<td>Moldova</td>
<td>14</td>
<td>9,6</td>
<td>69</td>
<td>85</td>
<td>0,77</td>
</tr>
<tr>
<td>Poland</td>
<td>13,6</td>
<td>8,41</td>
<td>62</td>
<td>81</td>
<td>3,68</td>
</tr>
<tr>
<td>Slovakia</td>
<td>3,1</td>
<td>1,89</td>
<td>62</td>
<td>79</td>
<td>3,43</td>
</tr>
<tr>
<td>Hungary</td>
<td>1095</td>
<td>598</td>
<td>55</td>
<td>76</td>
<td>4,01</td>
</tr>
<tr>
<td>Romania</td>
<td>14,5</td>
<td>8,71</td>
<td>60</td>
<td>76</td>
<td>3,54</td>
</tr>
</tbody>
</table>

Recommended by WHO share of excise is 75%
Tobacco control efforts during last 10 years

- Significant tax increase
- Restaurants, workplaces, and other public places 100% smoke-free since 2012
- Textual warning labels on cigarette packs got 30% surface area in 2006 and 50% since 2012, also with graphics
- Ban on tobacco advertisement since 2006, deepened in 2012
Overview of tobacco control actions over last 10 days

Significant tax increase over the last years

Restaurants, workplaces, and other public places
100% smoke-free since 2012

Textual warning labels on cigarette packs (30% surface area in 2006 and 50% since 2012, also with graphics)

Ban on tobacco advertisement since 2006, deepened in 2012

Tobacco cessation counseling support launched in 2017
TOBACCO TAXATION IN UKRAINE
Results of tobacco excise policy in Ukraine in 2008-2015

Average excise rate for cigarettes: 10-fold increase
Annual tobacco excise revenue: 6-fold increase
Cigarette sales: 40% decrease
Daily smoking prevalence: 28% decrease

Source: Krasovskiy, MoH
Baseline for next policy decisions

Effective tobacco taxation increase in 2008-2015
Tax revenues for the government (excise, VAT and levies): about 2% of GDP
Ukraine’s prices for tobacco products still lower than in neighboring countries

Price per pack of 20 cigarettes (2015)
- Russia: $1.88
- Belarus: $1.41
- Moldova: $1.08
- Ukraine: $0.84
Recent developments of tobacco taxation policy in Ukraine

2015
- Excise rates for non-filter cigarettes increased to the rates of filter cigarettes
- Additional retail excise (5% of retail price) paid to local budgets introduced

2016
- Specific excise duties increased by 40%
- Ad valorem excise increased by 20%

2017
- Specific excise duties increased by 40%

2018
- Long-term excise policy: Specific increase by 29%
- Consequent years by 20%
  (to reach EU Association agreement target of 90 euro per 1,000)
Policy options

- Selection of tax combination: excise and ad valorem
- Selection of possible percentage increase in specific
- Overcoming pressures from the industry
- Deciding on earmarking of tobacco tax
Collaboration

**Government:** Ministry of Finance, Ministry of Health

**Parliament:** select MPs

**International partners:** WHO, Bloomberg, TFK, WB

**Local NGOs:** LIFE, Coalition for Ukraine free of tobacco smoke

**Interactions with media**
WB support to the GoU

Support in decision making for 2017 tobacco taxation increase (projections for 3 scenarios, one is picked up by the MoF and proposed for the 2017 Budget)

Discussion of the proposed scenarios and learning other countries’ cases for key stakeholders

Participation of Gov’t reps in the April 2017 Tobacco event during Spring meetings

Support in projecting 2018-2020 outcomes of the gradual annual increase of excise (specific and ad valorem to reach objectives of the EU Association agreement (\textit{gradual approximation of excise rates on tobacco products, in line with the WHO Framework Convention on Tobacco Control})
World Bank's projection
Three scenarios of tobacco tax increase in 2018

Increased tobacco taxes reduce cigarettes consumption and raise the State Budget revenue

<table>
<thead>
<tr>
<th>Scenario 1</th>
<th>Scenario 2</th>
<th>Scenario 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cigarette excise tax increase</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific excise tax, %</td>
<td>+29</td>
<td>+33</td>
</tr>
<tr>
<td>Minimum specific excise tax (UAH per 1000 cigarettes)</td>
<td>12</td>
<td>20</td>
</tr>
<tr>
<td><strong>Change in average cigarette price per pack in comparison with 2017</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The average cigarette price per pack is UAH 257 in 2017</td>
<td>+72 UAH</td>
<td>+910 UAH</td>
</tr>
<tr>
<td><strong>Change in total excise tax revenue in comparison with 2017, UAH</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In 2016, the total excise tax revenue amounted to UAH 33.2 billion; in 2017, this index is expected to reach UAH 43.1 billion</td>
<td>+9.6</td>
<td>+15</td>
</tr>
<tr>
<td><strong>Change in total cigarette production in comparison with 2017</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>By the end of 2017, the estimated total amount of sold and taxed cigarettes will be 70.5 billion packs</td>
<td>-4.6%</td>
<td>-5.8%</td>
</tr>
</tbody>
</table>

Scenario 3 has the most considerable national benefits from the point of view in tobacco consumption and increase in budget revenue. A recent World Bank estimate for Ukraine showed that by 2035 the continued tax increase would result in the avoidance of 1,767,750 new cases of smoking-related disease; 20,472 premature deaths; and 247,007 potential years of life lost, relative to no change in tax. These reductions in disease and death will avoid 3.5 billion UAH in healthcare costs and 16.5 billion UAH in premature mortality costs, respectively (http://tinyurl/9fg9FTCC).

The Ministry of Health, the World Health Organization, and the World Bank support the policy of tobacco excise tax increase.

Subject to article 31 of the EU-Ukraine Association Agreement, Ukraine shall harmonize tobacco excise tax rates with the EU (5% taxes on 1000 cigarettes).

Subject to article 6 of the FCTC, price and tax measures are effective and important means of reducing tobacco consumption.

Ukrainian experience: in 2008–2011, the average tobacco excise tax was increased by 39 times, consequently, budget tobacco tax revenue plummeted from UAH 15.6 billion in 2008 to more than UAH 53 billion in 2016, and smoking prevalence decreased (among people 13+ yrs) from 25.1% in 1995.
Rigorous analytics to support tobacco taxation

Bringing in international experts

Round tables

Analytical support:

• Progressivity of tobacco taxation

• Micro-simulation of tobacco policy benefits and their monetization
Long-term health and cost implications

WB-supported modeling study (micro-stimulation) in 2017. Impacts are calculated relative to the status quo before the tax hike, and are modeled beginning in 2017, for 2025 and 2035. Health outcomes are modeled for coronary heart disease (CHD), stroke, chronic obstructive pulmonary disease (COPD), and lung cancer.

The model estimated that by 2035 the specified tax increase would result in **avoidance of** (relative to no change in tax):
- 126,730 new cases of smoking-related disease;
- 29,172 premature deaths; and
- 267,098 potential years of life lost.

Reductions in disease and death will **save**:
- 1.5 billion UAH in healthcare costs and
- 16.5 billion UAH in premature mortality costs.
A study of progressivity of tobacco taxation in Ukraine
### Baseline Household Survey 2013

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Decile 1</th>
<th>Decile 2</th>
<th>Decile 3</th>
<th>Decile 4</th>
<th>Decile 5</th>
<th>Decile 6</th>
<th>Decile 7</th>
<th>Decile 8</th>
<th>Decile 9</th>
<th>Decile 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household expenditure (US$)</td>
<td>311</td>
<td>398</td>
<td>431</td>
<td>458</td>
<td>518</td>
<td>523</td>
<td>576</td>
<td>620</td>
<td>685</td>
<td>1282</td>
</tr>
<tr>
<td>Proportion tobaccoa</td>
<td>2.5</td>
<td>2.5</td>
<td>2.4</td>
<td>2.2</td>
<td>2.2</td>
<td>2.2</td>
<td>2.1</td>
<td>1.9</td>
<td>1.8</td>
<td>1.5</td>
</tr>
<tr>
<td>Households that smoke (%)</td>
<td>40</td>
<td>44</td>
<td>42</td>
<td>41</td>
<td>41</td>
<td>39</td>
<td>42</td>
<td>43</td>
<td>38</td>
<td>41</td>
</tr>
<tr>
<td>Woman-headed households (%)</td>
<td>55</td>
<td>52</td>
<td>51</td>
<td>56</td>
<td>54</td>
<td>57</td>
<td>58</td>
<td>57</td>
<td>54</td>
<td>57</td>
</tr>
<tr>
<td>Age, household head</td>
<td>51</td>
<td>50</td>
<td>51</td>
<td>53</td>
<td>52</td>
<td>53</td>
<td>54</td>
<td>54</td>
<td>53</td>
<td>51</td>
</tr>
<tr>
<td>Percentage HH with a Child 3–6 years of age</td>
<td>28</td>
<td>26</td>
<td>20</td>
<td>16</td>
<td>15</td>
<td>10</td>
<td>11</td>
<td>8</td>
<td>7</td>
<td>4</td>
</tr>
</tbody>
</table>
## Results: Ukraine Direct Effect of Tobacco Tax

<table>
<thead>
<tr>
<th>Price shock scenario</th>
<th>Decile 1</th>
<th>Decile 2</th>
<th>Decile 3</th>
<th>Decile 4</th>
<th>Decile 5</th>
<th>Decile 6</th>
<th>Decile 7</th>
<th>Decile 8</th>
<th>Decile 9</th>
<th>Decile 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete pass-through</td>
<td>0.62</td>
<td>0.62</td>
<td>0.60</td>
<td>0.56</td>
<td>0.56</td>
<td>0.55</td>
<td>0.53</td>
<td>0.48</td>
<td>0.45</td>
<td>0.37</td>
</tr>
<tr>
<td>Low-bound elasticity</td>
<td>0.32</td>
<td>0.38</td>
<td>0.36</td>
<td>0.38</td>
<td>0.39</td>
<td>0.39</td>
<td>0.39</td>
<td>0.35</td>
<td>0.36</td>
<td>0.31</td>
</tr>
<tr>
<td>Medium elasticity</td>
<td>0.16</td>
<td>0.22</td>
<td>0.21</td>
<td>0.24</td>
<td>0.25</td>
<td>0.25</td>
<td>0.25</td>
<td>0.23</td>
<td>0.25</td>
<td>0.22</td>
</tr>
<tr>
<td>Upper-bound elasticity</td>
<td>0.01</td>
<td>0.07</td>
<td>0.06</td>
<td>0.10</td>
<td>0.11</td>
<td>0.12</td>
<td>0.12</td>
<td>0.11</td>
<td>0.14</td>
<td>0.13</td>
</tr>
</tbody>
</table>

*Source:* Proportion of household budget. Based on data of the 2013 household budget survey.

*Note:* The table shows the share of total household budget for each decile. Complete pass-through refers to elasticity equal to zero; consumers pay all the increased prices.
Results: Reduction in Medical Expenditure

Reduction in Expenditure: Medical Costs of Tobacco Taxes
(Reduction of Medical Expenditures)

Results: Gains in productive years

Income Gains: Production During Years Lost
(Production during years lost by income decile)

Source: Author estimation using a price shock of 25%
Results: Total Direct and Indirect Effects of Tobacco Taxes

Summary and Conclusions of the Study

- Tobacco tax increase has a negligible effect in the presence of a low tobacco price elasticity
- Medium-bound elasticity: with variations across income deciles, tobacco tax generates welfare gains among lower-income groups
- Upper-bound elasticity: income gains across all groups of the population (more important for lower incomes)
- Results are in line with literature, showing benefits of reduction in tobacco consumption that may occur through diverse policy mechanisms
RESULTS of Tobacco taxation policies in Ukraine
Long-term achievements of 2008-2017

- the average rate of excise duty on a packet of cigarettes in Ukraine has increased by more than 20 times,
- Increase in revenue to the State Budget from 3.5 billion UAH to the projected 40 billion UAH in 2017,
- Decrease in the number of smokers in Ukraine from 10 million to 6.5 million (data from the State Statistics Service).
- GATS Ukraine in 2017 showed a 20% reduction in smoking prevalence among adults over the past 7 years.
Gradual decrease in smoking

Smoking prevalence among adults 18+

<table>
<thead>
<tr>
<th>Year</th>
<th>Men</th>
<th>Women</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>44.6%</td>
<td>11.2%</td>
<td>26.2%</td>
</tr>
<tr>
<td>2017</td>
<td>41.2%</td>
<td>9%</td>
<td>23.7%</td>
</tr>
</tbody>
</table>

Higher smoking decrease among younger population 18-30

<table>
<thead>
<tr>
<th>Year</th>
<th>Men</th>
<th>Women</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>53.6%</td>
<td>20%</td>
<td>37%</td>
</tr>
<tr>
<td>2017</td>
<td>40.3%</td>
<td>12.8%</td>
<td>26.7%</td>
</tr>
</tbody>
</table>

Data from Omnibus surveys, graphics from NGO LIFE
Most recent achievements: 40% increase of specific

- Revenues from tobacco excise duties in 2017 amounted to UAH 39.9 billion (1.7% of GDP), which is 20% more than in 2016.

- Consumption of cigarettes last year decreased to 67 billion units, or 14% less compared with 2016.
Industry’s response

- By all means keeping its clients: right after excise tax increased, the price went down
- Q1 2016 cigarette sales increased by 17%; overall in 2016 taxable cigarette sales increased by 5%
- Winners and losers:
  - Governmental tobacco excise revenue in 2016 increased to 33.2 billion UAH or by 50% (with excise rate increase 40%)
  - Philip Morris Ukraine declared 1 billion UAH losses in 2016, other tobacco corporations also did not get profits in 2016
  - In a short-term, daily smoking prevalence increased from 18.4% to 19.3%, but further decreased
Average cigarette prices in Ukraine in 2015-2016

Specific excise rate increased by 40%
Ad valorem excise rate increased by 20%

Price increase trajectory

Source: Krasovskiy, MoH
Cigarette consumption in Ukraine

Estimates of cigarette sales, consumption and smuggling in Ukraine

Source: Krasovskiy, MoH
Daily smoking prevalence by age groups (%), 2008-2016, National Statistic Service data

The fastest decline for all age groups observed in 2009-2010, when tobacco excise rate increased 6-fold in 2 years

Source: Krasovskiy, MoH
Decline in smoking prevalence was accompanied by morbidity and mortality decrease

Number of tobacco-related deaths in Ukraine in 2008-2013

Source: Krasovskyi, MoH
Number of deaths in fires decreased in Ukraine in 2008-2013 by 40% among men and by 32% among women.

Source: Krasovskiy, MoH
Outlook

Adopted scenario will help reach the EU Association target (90 euro per 1000 cigarettes or 1.8 euro per pack) by 2025:
Annual 20% excise after 2018 increase of 29%
Tobacco market will fall from current 70 billion cigarettes to 55 billion or less (due to decrease of cigarette smuggling out of Ukraine and tobacco use reduction)
The annual revenue will reach 3.6% GDP (from baseline of 2.3%)
Tobacco use will decrease by about 4-8% annually and will further reduce levels of tobacco-related diseases and deaths
New challenges

Adoption of WHO Protocol to Eliminate Illicit Trade in Tobacco Products

New law to:

- ban flavored cigarettes;
- increase graphic warnings about the dangers of smoking on packets of cigarettes and print them on both sides of the pack;
- obligate manufacturers of tobacco products to report on the composition of products and their impact on human health;
- prohibit sales of electronic cigarettes to minors, establish clear requirements for the content and labeling of these devices;
- ban tobacco advertising on the Internet.
Conclusions

INCREASING TOBACCO TAXES

A “WIN-WIN” FOR HEALTH AND THE ECONOMY

Higher taxes on tobacco products reduce tobacco consumption and improve public health, while also increasing government revenues that can be used to fund priority investments and programs that benefit the entire population.
Thank you!

Olena Doroshenko
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IMPLEMENTING ARTICLE 6 WHO FCTC
MALAYSIA EXPERIENCE

DR NOR ARYANA HASSAN
PUBLIC HEALTH MEDICINE CONSULTANT AND NCD EPIDEMIOLOGIST
TOBACCO CONTROL UNIT AND FCTC SECRETARIAT
MINISTRY OF HEALTH MALAYSIA
Graph 1: Trend of smoking among Malaysian adults aged 18 and older, 1996-2015
**Trend of smoking in Malaysia**

**Graph 2:** Trend of smoking among Malaysian youths aged 13 to 15, from 2003 to 2016
ARTICLE 6 WHO FCTC

• Implementation of Article 6 of the WHO FCTC is an essential element

• The WHO recommends that tobacco excise taxes account at least 70% of the retail prices of tobacco products

• Taxes need to be increased regularly to correct for inflation and consumer purchasing power
CHALLENGES TO INCREASING TOBACCO TAXES

- Is it Effective?
- Tobacco Industry **SCARE** tactics:
  - S – Smuggling & Illicit Trade;
  - C – Court & Legal Challenges;
  - A – Anti-poor Rhetoric;
  - R – Revenue Reduction;
  - E – Employment Impact
CURRENT TOBACCO TAXATION POLICY

- Cigarette tax is collected from cigarette manufacturers or cigarette importer.

- Government has still not adopted a structured tobacco tax policy.

- Revenue collected pooled under the consolidated fund
CURRENT TAX POLICIES

- Until 2003, taxes on tobacco was levied according to their weight
- In 2004, adopted a specific excise tax per stick
- In 2005, introduced ad valorem tax but abolished in 2015
- Introduced GST in 2015 (April).
- The latest increase of specific tax was in November 2015, increase of 42.8%
<table>
<thead>
<tr>
<th>Year</th>
<th>Specific excise Tax (RM/kg or RM/stick)</th>
<th>Sales Tax (%)</th>
<th>Ad Valorem Excise tax (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>13</td>
<td>15</td>
<td>-</td>
</tr>
<tr>
<td>1991</td>
<td>14</td>
<td>15</td>
<td>-</td>
</tr>
<tr>
<td>1992-1998</td>
<td>28.6</td>
<td>15</td>
<td>-</td>
</tr>
<tr>
<td>1999-2000</td>
<td>40</td>
<td>15</td>
<td>-</td>
</tr>
<tr>
<td>2001</td>
<td>40</td>
<td>25</td>
<td>-</td>
</tr>
<tr>
<td>2002</td>
<td>48</td>
<td>25</td>
<td>-</td>
</tr>
<tr>
<td>2003</td>
<td>58/kg</td>
<td>25</td>
<td>-</td>
</tr>
<tr>
<td>2004</td>
<td>0.081/stick*</td>
<td>25</td>
<td>-</td>
</tr>
<tr>
<td>2005</td>
<td>0.11</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td>2006</td>
<td>0.12</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td>2007</td>
<td>0.15</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td>2008</td>
<td>0.17</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td>2009</td>
<td>0.18</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td>2010</td>
<td>0.21</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td>2011</td>
<td>0.21</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td>2012</td>
<td>0.21</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td>2013</td>
<td>0.26</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td>2014</td>
<td>0.28</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td>2015</td>
<td>0.40</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>2016</td>
<td>0.40</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>2017</td>
<td>0.40</td>
<td>6</td>
<td>0</td>
</tr>
</tbody>
</table>

Note: *Specific tax per stick was introduced (1 kg = 1100 sticks)
Source: The Royal Malaysian Customs Department, Malaysia and The Confederation of Malaysia Tobacco (CMTM), various years.
Cheap Brand
RM 10 or 2.5 USD
80%

Value To Buy
RM 15.50 or 3.9 USD
52%

Premium
RM 17 or 4.3 USD
47%
Current studies in Malaysia focus on the impact of cigarette tax increases on:

i. A reduction in cigarette consumption.
ii. National revenue
iii. Illicit cigarettes
CIGARETTE CONSUMPTION
Figure 1. Malaysia: The Relationship Between Excise Tax Rate Per Pack, Retail Price And Total Consumption Of Cigarettes

Significant decline in consumption of cigarettes when excise tax increases but is inelastic (Ross and Al-Sadat 2007) and Mohamed Nor, Raja Abdullah and Yahya (2013).

Source: The Royal Malaysian Customs Department (various years).
TAX REVENUE
Excise tax enhances government tax revenue except for the year 2012 and 2013 since no changes in tax rate from 2010 until 2012.
ILLICIT CIGARETTE
Figure 3. The Relationship between excise tax and quantity of legal and illicit cigarettes

Source: The Euromonitor International and The Royal Malaysian Customs Department.
STRUCTURED TAXATION POLICY TO REDUCE PREVALENCE

The Malaysia Abridged SimSmoke Model
To achieve < 15% smoking prevalence in 2025, excise tax should be raised from the current rate of 47% to 78% of the retail price.

To achieve < 5% smoking prevalence in 2045, excise tax should be raised from the current rate of 47% to 88% of the retail price.

** only tax measures
PROPOSITION

✓ Increase current excise tax rate (47% of the retail price) to 60% of the retail price.

✓ The new proposed price for the current premium cigarette will increase from RM17.00 (4.3 USD) to RM22.00 (5.5 USD)

** combination with other non tax measures 100% Smoke-free area policy, A fully funded mass-media campaign and A comprehensive marketing ban policy
KIDDE PACK PROPOSAL BY INDUSTRY

Introducing 'kiddie pack' cigarettes the wrong way to go, says NCWO

Not 'kiddie pack' but mini pack, and there are reasons: Tobacco firms (corrected)

Not 'kiddie pack' but mini pack, and there are reasons: Tobacco firms (corrected)

Not 'kiddie pack' but mini pack, and there are reasons: Tobacco firms (corrected)

AETC: They obey history amid tight scrutiny for 'kiddie pack' cigarettes in Malaysia.

MSM: Following the 'kiddie pack' controversy, the tobacco industry has been trying to introduce mini packs to avoid the 'kiddie pack' ban.

NOTES

Thursday 7 Nov 2012

This is a response to the tobacco industry's statement.

There is no provision in the Tobacco Control Act for the production of mini packs or similar products.

There is a need for a comprehensive review of the tobacco control laws in Malaysia.

Firstly, there is a need for a comprehensive review of the tobacco control laws in Malaysia.

Secondly, there is a need for a comprehensive review of the tobacco control laws in Malaysia.

Thirdly, there is a need for a comprehensive review of the tobacco control laws in Malaysia.
EVIDENCE URGENTLY NEEDED

Structured tobacco tax policy and Willingness to Pay (WTP)

- To determine the willingness to pay (WTP) for a pack of cigarettes.
- Findings from the WTP study will guide our policy makers to implement structured tobacco tax policy.

Student’s daily pocket money and affordability in purchasing cigarette

- By conducting a study in assessing school children’s daily pocket money and its association in purchasing cigarette would help the policy maker to increase the tax and propose measures to curb this problem.
The cost of smoking and the impact on government resources

- The costs of smoking consist of direct costs (e.g. medical costs) and indirect costs (e.g. productivity, quality of life).
- The ‘net revenue’ from smoking in Malaysia and the extent of financial loss that smoking contributes to this country.

Illicit trade study and its association with cigarette tax

- Research from the WHO and the World Bank have long disputed this claim and demonstrated how raising tobacco taxes has zero correlation with illicit trade.
- An in-depth study in Malaysia would be able to convince the policy makers that raising tobacco tax is probably the sharpest tool to combat smoking in this country.
THANK YOU
Modeling the health and cost impacts of increasing tobacco taxes: case studies from Ukraine and UK

Laura Webber PhD, UK Health Forum
The UK Health Forum

• A charitable alliance of 70 national public and professional organisations – established mid-1980s
• Formerly the National Heart Forum
• Funded through grants and contracts
• Focus on Prevention of Non-Communicable Diseases
  1. Policy development and advocacy
  2. Information provision & research
  3. Modelling & forecasting
Methods summary

- Statistical model used to **forecast** trends in smoking prevalence into the future
- Create a **virtual population** of 20million+ individuals
- Validated model for a range of risk factors (smoking, obesity, alcohol consumption, physical inactivity, salt consumption)
- **Can test the health and cost impact of a range of public health interventions** including taxes: sugar sweetened beverage tax, alcohol tax, tobacco tax
- Implemented in over **70 countries, 50 US states**, England Local Authorities


- Two case studies: Ukraine and United Kingdom
- Review of fiscal policies for health
UKRAINE
BACKGROUND

- Ukraine has had one of the **fastest declines** in smoking prevalence in the world (WHO, 2011)
- Multi-faceted tobacco control legislation from **2005** onwards, corresponding to the **FCTC**
- Examples include: media campaigns, smoke-free places, textual tobacco warning labels, ban on outdoor tobacco advertising, taxes
- But Ukraine still has one of the highest smoking prevalence rates in Europe (**45%** in men, **11%** in women) (KIIS, Omnibus surveys).
AIM

• Model the long term health impacts of increasing tobacco tax in Ukraine

Specifically, the following two scenarios were run:

• **1. Baseline scenario** (2016): Ad valorem (12%) minimum specific (8.515 UAH/$0.35) and simple specific (6.365 UAH/$0.27)

• **2. Tax increase scenario**: Increase Ad valorem tax (15%), and 30% Increase in the minimum specific excise (11.08 UAH/$0.46), and simple specific (8.28 UAH/$0.34)
### Method

- Smoking prevalence data from 2015 (national data)
- Population data for Ukraine (UN population data)
- Disease data as below (literature)

<table>
<thead>
<tr>
<th>Disease</th>
<th>Incidence</th>
<th>Mortality</th>
<th>Survival</th>
<th>Direct healthcare costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHD</td>
<td>GBD 2015</td>
<td>GBD 2015</td>
<td>Converted from incidence and mortality</td>
<td>I Denisova, P Kuznetsova 2014</td>
</tr>
<tr>
<td>Stroke</td>
<td>GBD 2015</td>
<td>GBD 2015</td>
<td>Converted from incidence and mortality</td>
<td>I Denisova, P Kuznetsova 2014</td>
</tr>
<tr>
<td>COPD</td>
<td>GBD 2015</td>
<td>GBD 2015</td>
<td>Converted from incidence and mortality</td>
<td>I Denisova, P Kuznetsova 2014</td>
</tr>
<tr>
<td>Lung cancer</td>
<td>GBD 2015</td>
<td>GBD 2015</td>
<td>Converted from incidence and mortality</td>
<td>I Denisova, P Kuznetsova 2014</td>
</tr>
</tbody>
</table>
WHO TaXSiM model calculated that the tax increase would result in a reduction in tobacco consumption. This was used in the model to quantify the long-term health impact on disease and related health care costs.

### Summary of scenario

<table>
<thead>
<tr>
<th>% reduction in cigarette consumption</th>
<th>Estimated expected reduction in smoking (males)</th>
<th>Estimated expected reduction in smoking (females)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Uptake (%)</td>
<td>Number of cigarettes smoked (%)</td>
</tr>
<tr>
<td>Tax scenario</td>
<td>5.61</td>
<td>4.59</td>
</tr>
</tbody>
</table>
## Smoking prevalence by year

<table>
<thead>
<tr>
<th>Year</th>
<th>Scenario 0 (baseline)</th>
<th>Scenario 1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Total</td>
</tr>
<tr>
<td>2016</td>
<td>21.5</td>
<td>21.5</td>
</tr>
<tr>
<td>2020</td>
<td>21.1</td>
<td>19.8</td>
</tr>
<tr>
<td>2025</td>
<td>20.5</td>
<td>19.4</td>
</tr>
<tr>
<td>2030</td>
<td>20.1</td>
<td>19.2</td>
</tr>
<tr>
<td>2035</td>
<td>19.8</td>
<td>19.0</td>
</tr>
</tbody>
</table>
The increase in tobacco tax is predicted to result in the avoidance of ~**127,000** new cases of smoking-related diseases by **2035**

- **78,092** CHD: $47.6m/yr
- **25,881** COPD: $6.7m/yr
- **14,725** Lung Cancer: $6m/yr
- **8032** Stroke: $4.6m/yr
## RESULTS

<table>
<thead>
<tr>
<th></th>
<th>2025</th>
<th>Millions UAH</th>
<th>Millions US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cum. direct healthcare costs avoided</td>
<td>2025</td>
<td>542.2</td>
<td>22.8</td>
</tr>
<tr>
<td></td>
<td>2035</td>
<td>1545.8</td>
<td>65.0</td>
</tr>
<tr>
<td>Cumulative premature mortality costs</td>
<td>2025</td>
<td>3568.4</td>
<td>149.9</td>
</tr>
<tr>
<td></td>
<td>2035</td>
<td>16536.4</td>
<td>694.8</td>
</tr>
</tbody>
</table>

The exchange rate of 1US$/23.8 UAH is used here.
LIMITATIONS

• A number of data limitations

- No data on non-healthcare costs, e.g. lost productivity due to disease, were available, though we included lost salary.
- No data were available to explore differences by social groups.

• Only a one-time tax was implemented
• No change in second-hand smoke exposure is modeled.
• The simulation only includes four smoking-related diseases, so results are likely underestimates of the true effects.
• No in-depth uncertainty analysis was conducted.
• The model does not take account of future changes in policy or technology.
CONCLUSIONS

• Small changes can have important impacts on morbidity, premature mortality and related costs

• Continuous tobacco control measures are required

• Highlights the importance of gathering good quality surveillance data to make the most accurate estimates

• Future work could consider additional tax scenarios
ACKNOWLEDGEMENTS

Tatiana I. Andreeva, ADIC-Ukraine
Renzo Sotomayor, World Bank
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Lise Retat, UKHF
Michael Xu, UKHF
Konstantin Krasovsky, Ministry of Health, Ukraine
Joy Townsend, London School of Hygiene and Tropical Medicine

World Bank
Patricio Marquez
Alberto Gónima
Feng Zhao
Olena Doroshenko
UNITED KINGDOM
BACKGROUND

- UK has a comprehensive approach to tobacco control, with fiscal measures being the most effective policy lever to reduce disease burden.

- UK price level index of tobacco is the highest of the EU member states at 219% the EU average.
- Tobacco duty escalator that rises above CPI, continuously decreasing the affordability.
AIM

• Model the health and cost impact of increasing the tobacco duty escalator from 2% to 5%

• Can this intervention help the UK reach a ‘tobacco free society’ of 5% prevalence?
METHODS

• Modelling study from 2015-2035

• UK population, 100 million simulations

• Diseases included:

  - Coronary heart disease
  
  - Chronic Obstructive Pulmonary Disease (COPD)
  
  - Stroke
  
  - Cancers: (Acute Myeloid Leukaemia (AML), Bladder, Bowel, Cervical, Chronic Myeloid Leukaemia (CML), Gastric, Hepatic (liver), Laryngeal, Lung, Oesophagus, Oral, Ovarian, Pancreatic, Renal (kidney))
RESULTS

Smoking prevalence (%)

Year

MaleBL
FemaleBL
MaleTDE
FemaleTDE
RESULTS

EVEN IF CURRENT TRENDS OF DECREASING SMOKING PREVALENCE WERE TO CONTINUE:

- 1.35 MILLION NEW DISEASES BY 2035
- 580,600 CASES OF CANCER
- £3.6 BILLION IN 2035 ALONE
- £542 MILLION DIRECT HEALTH COSTS IN 2035 ALONE
- £3.0 BILLION INDIRECT HEALTH COSTS IN 2035 ALONE
RESULTS

INCREASING THE TOBACCO DUTY ESCALATOR TO 5% COULD AVOID...

- 31,068 cases of cancer
- 20,022 cases of stroke
- 20,022 cases of COPD
- 4,142 cases of CHD
- 75,254 cases of disease by 2035
- £6 million/year
- £10 million/year
- £9 million/year
- £5 million/year

£49 million direct health costs avoided

£0.2 billion indirect costs avoided
LIMITATIONS

- Data intensive
  - utility weights were from a US population
  - smoking prevalence from England scaled to UK

- Short time horizon of the study so only a modest impact on diseases

- Decay rates were applied to relative risks to account for time between cessation and reduction in risk i.e. this is a slow decrease in ex-smoker relative risk.

- Costs not discounted

- Update work ongoing to 2050 in each of the 4 UK countries (England, Scotland, Wales, Northern Ireland).
CONCLUSIONS

- 5% TDE supports tobacco free ambition by reaching 6% smoking prevalence by 2035

Knuchel-Takano et al (2017) Modelling the implications of reducing smoking prevalence: the benefits of increasing the UK tobacco duty escalator to public health and economic outcomes
www.ncbi.nlm.nih.gov/pubmed/29212863
ACKNOWLEDGMENTS

UK Health Forum Modelling team

Abbygail Jaccard
Lise Retat
Andre Knuchel-Takano
Arti Bhimjiyani

Cancer Research UK

Daniel Hunt
Chit Selvarajah
Katrina Brown
OTHER WORK
Fiscal and pricing policies to improve public health

Aim of project
Identify and assess fiscal or pricing policies that could improve England’s health

Objectives
• Develop a framework to help compare and analyse the impact of policies from different policy areas
• Review existing evidence from the UK and other economically developed countries on the health impacts of implementing such policies
• Summarise evidence through the framework lens to provide recommendations of policies to be implemented in England
Thank you!
The Spread of Taxes on Sugary Drinks: Experiences from the US and Mexico

Lynn Silver, MD, MPH, FAAP
World Bank Joint Learning Network
Nairobi, Kenya
February 13, 2018
One in eight of the world's adults were classified as obese in 2014

Percentage of men and women who are obese or underweight

Guardian graphic | Source: The Lancet | Ezzati, 2016
Global Trends in Child Obesity, 1972-2012

Putrajaya the obese-city

Malaysia has the highest percentage of overweight people in South-East Asia and the bulk of them are in Putrajaya. A survey has found that two out of five Malaysian civil servants are obese. The news is not good for the country’s health.

>See reports by NICHOLAS CHENG on Page 4
Obesity is one of the top three global social burdens generated by human beings

Estimated annual global direct economic impact and investment to mitigate selected global burdens, 2012

<table>
<thead>
<tr>
<th>Selected global social burdens</th>
<th>Share of global GDP</th>
<th>Historical trend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoking</td>
<td>2.1</td>
<td></td>
</tr>
<tr>
<td>Armed violence, war, and terrorism</td>
<td>2.1</td>
<td></td>
</tr>
<tr>
<td>Obesity</td>
<td>2.0</td>
<td></td>
</tr>
<tr>
<td>Alcoholism</td>
<td>1.4</td>
<td></td>
</tr>
<tr>
<td>Illiteracy</td>
<td>1.3</td>
<td></td>
</tr>
<tr>
<td>Climate change</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>Outdoor air pollution</td>
<td>0.9</td>
<td></td>
</tr>
<tr>
<td>Drug use</td>
<td>0.7</td>
<td></td>
</tr>
<tr>
<td>Road accidents</td>
<td>0.7</td>
<td></td>
</tr>
<tr>
<td>Workplace risks</td>
<td>0.4</td>
<td></td>
</tr>
<tr>
<td>Household air pollution</td>
<td>0.4</td>
<td></td>
</tr>
<tr>
<td>Child and maternal undernutrition</td>
<td>0.3</td>
<td></td>
</tr>
<tr>
<td>Unsafe sex</td>
<td>0.3</td>
<td></td>
</tr>
<tr>
<td>Poor water and sanitation</td>
<td>0.1</td>
<td></td>
</tr>
</tbody>
</table>

1 Based on 2010 disability-adjusted life years (DALY) data from the Global Burden of Disease database and 2012 economic indicators from the World Bank; excluding associated revenue or taxes; including lost productivity due to disability and death, direct cost, e.g., for health care, and direct investment to mitigate; GDP data on purchasing power parity basis.

Source: McKinsey Global Institute, 2014
People living with Diabetes in the World Rises from 108 to 422 million 1980-2014

Worldwide trends in diabetes since 1980: a pooled analysis of 751 population-based studies with 4.4 million participants in 146 countries

Costs to Universal Health Systems
Hemodialysis and Renal Transplant in Latin America 1991-2010

Fig. 1. Latin American Dialysis and Renal Transplantation Registry 1991–2010. RRT prevalence, all modalities.

Source: Rosa-Diez, 2014
Attaining the nine global noncommunicable disease targets: a shared responsibility

<table>
<thead>
<tr>
<th></th>
<th>Target Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A 25% relative reduction in the overall mortality from cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases</td>
</tr>
<tr>
<td>2</td>
<td>At least 10% relative reduction in the harmful use of alcohol, as appropriate, within the national context</td>
</tr>
<tr>
<td>3</td>
<td>A 10% relative reduction in prevalence of insufficient physical activity</td>
</tr>
<tr>
<td>4</td>
<td>A 30% relative reduction in mean population intake of salt/sodium</td>
</tr>
<tr>
<td>5</td>
<td>A 30% relative reduction in prevalence of current tobacco use</td>
</tr>
<tr>
<td>6</td>
<td>A 25% relative reduction in the prevalence of raised blood pressure or contain the prevalence of raised blood pressure, according to national circumstances</td>
</tr>
<tr>
<td>7</td>
<td>Halt the rise in diabetes and obesity</td>
</tr>
<tr>
<td>8</td>
<td>At least 50% of eligible people receive drug therapy and counselling (including glycaemic control) to prevent heart attacks and strokes</td>
</tr>
<tr>
<td>9</td>
<td>An 80% availability of the affordable basic technologies and essential medicines, including generics, required to treat major noncommunicable diseases in both public and private facilities</td>
</tr>
</tbody>
</table>
This is a problem that is too big and too expensive to ignore
What causes obesity?
Mostly: A toxic environment
Mostly: A toxic environment
• Poor quality food environment with inexpensive sugary drinks (SSBs), junk food, and other highly processed foods replacing traditional diets

• Reductions in physical activity due to changes in technology and transportation, violence and leisure time activities

• To a lesser extent, individual behavior, medications, genetics
Why taxes on sugary drinks?

• Sugar Sweetened Beverages (SSBs) are the single largest contributor of added sugar to the diet in the US and contribute little or nothing to nutrition

• Consumption increased enormously concomitantly with the obesity epidemic in the US and globally,

• Consumption has been clearly associated with obesity, diabetes, heart disease, cancer, tooth decay and arthritis risk

• It is the least complex behavior to change

• SSB taxes are an anti-obesity strategy which reaches the whole population at minimal cost while raising money for societal goals including health
40 year beverage trends in US: Soda Replaces Milk

Source: Calculated by ERS/USDA based on data from various sources (see http://www.ers.usda.gov/data-products/food-availability-(per-capita)-data-system/food-availability-documentation.aspx). Data last updated Feb. 1, 2016. Data for carbonated soft drinks (1947-2003) are from Census of Manufacturers. ERS has data from 2004 from the Beverage Marketing Corporation, but does not post/share this information as requested by the BMC Source: Shuwen Ng, UNC, 2016
México: Increasing spending on SSBs and refined carbohydrates replaces fruits and vegetables and dairy

% Change in household food expenditure between 1986 y 1998

Taxing Sugar Sweetened Beverages
Part of the Solution?
The Spread of SSB Taxes: Success Replaces Failure

Pre-2009
- Australia
- Denmark
- French Polynesia
- Ireland
- Nauru
- Norway
- Samoa

2009
- Arizona
- California
- Connecticut
- Hawaii
- Kansas
- Maine
- Mississippi
- New Hampshire
- New Mexico
- New York
- Rhode Island
- Washington, DC
- Philadelphia
- Finland
- France
- Hawaii
- Illinois
- Massachusetts
- Mississippi
- New Mexico
- Oregon
- Rhode Island
- Tennessee
- Texas
- Utah
- Vermont
- West Virginia
- Philadelphia
- Hawaii
- Mississippi
- Nebraska
- Rhode Island
- Vermont
- West Virginia
- Richmond CA
- El Monte CA
- Cook Islands
- Mauritius
- Mexico (10%)
- Tonga
- California
- Hawaii
- Connecticut
- Mississippi
- New York
- Oregon
- Rhode Island
- Texas
- Vermont
- West Virginia
- Chicago
- Telluride CO

Green = Passed
Red = Failed

Queen Elizabeth arrives in the House of Lords in 2016 proposing SSB Taxation (amongst other things)
SSB Tax Logic

SSB Excise Tax → Δ Price → Δ Consumption (or reformulation) → Δ Obesity → Δ QALY’s Δ DALY’s Δ Health Care Costs

Money → Social Investment and Change

Modified from Gortmaker, 2016
Cost Effectiveness Modeling US
Cost Effectiveness Estimates of a 1 cent per ounce SSB Tax in the US: 55:1 ROI at 10 years

Table 3. Mean Cost-Effectiveness Results With 95% Uncertainty Intervals

<table>
<thead>
<tr>
<th>Outcome Description</th>
<th>Value (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population reached (millions)</td>
<td>313</td>
</tr>
<tr>
<td>First-year intervention cost ($ millions)</td>
<td>51.0 (36.4, 65.5)</td>
</tr>
<tr>
<td>Ten-year intervention cost ($ millions)</td>
<td>430 (307, 552)</td>
</tr>
<tr>
<td>Annual revenue ($ billions)</td>
<td>12.5 (8.92, 14.1)</td>
</tr>
<tr>
<td>Mean per capita BMI unit reduction for adults &gt; 19 years of age</td>
<td>0.08 (0.03, 0.20)</td>
</tr>
<tr>
<td>Mean per capita BMI unit reduction for youth 2–19 years of age</td>
<td>0.16 (0.06, 0.37)</td>
</tr>
<tr>
<td>Total BMI units reduced (millions)</td>
<td>31.7 (12.7, 74.3)</td>
</tr>
<tr>
<td>Total BMI units reduced (millions) (youth only)</td>
<td>11.7 (4.21, 27.7)</td>
</tr>
<tr>
<td>Cost per BMI unit reduced <em>(a)</em> ($ (overall))</td>
<td>3.16 (1.24, 8.14)</td>
</tr>
<tr>
<td>Cost per BMI unit reduced <em>(a)</em> (youth only)</td>
<td>8.54 (3.33, 24.2)</td>
</tr>
<tr>
<td>Total LYS saved (thousands)</td>
<td>32.3 (11.1, 80.1)</td>
</tr>
<tr>
<td>Total DALYS*(b)* averted (thousands)</td>
<td>101 (34.8, 249)</td>
</tr>
<tr>
<td>Total QALYS*(b)* gained (thousands)</td>
<td>871 (342, 2,030)</td>
</tr>
<tr>
<td>Healthcare costs*(c)* ($ billions)</td>
<td>-23.6 (-54.9, -9.33)</td>
</tr>
<tr>
<td>Net costs*(d)* ($ billions)</td>
<td>-23.2 (-54.5, -8.88)</td>
</tr>
<tr>
<td>Healthcare cost savings per $ intervention cost ($)</td>
<td>55.0 (21.0, 140)</td>
</tr>
<tr>
<td>Net cost per LYS saved*(e)* ($)</td>
<td>Cost-saving</td>
</tr>
<tr>
<td>Net cost per DALY averted*(f)* ($)</td>
<td>Cost-saving</td>
</tr>
<tr>
<td>Net cost per QALY gained*(g)* ($)</td>
<td>Cost-saving</td>
</tr>
</tbody>
</table>

Source: Long, AJPM 2015
What is **old** in SSB Taxes?

- Low level, often ad valorem or specific excise taxes on non-alcoholic or carbonated beverages in general
- Inclusion of SSBs with other beverages and products in sales, value added taxes
- These do not incentivize consumers switching to healthier beverages or may not be high enough
What is new in SSB taxes?

• Higher 10%-100% excise taxes on manufacturers or distributors specifically for beverages with added sugar, may be volume based (Mexico) or ad valorem (Chile)

• May be additive with existing taxes (Berkeley)

• May be tiered by sugar content to encourage reformulation (UK, Ecuador, Thailand)

• May be combined with taxes on other unhealthy foods (Mexico, Hungary)

• Seeks to create differential pricing across healthy and unhealthy products
Are SSB taxes regressive?

• Obesity and diabetes are highly regressive diseases, generating expenses and lost income for the poor

• Like tobacco taxes, if lower income residents reduce consumption more than the wealthier, the benefit is greatest for those with lower incomes
Making a Soda Tax More Politically Palatable

Margot Sanger-Katz  @sangerkatz  APRIL 3, 2016

Mayor Jim Kenney was elected in Philadelphia last year after promising to bring the city universal prekindergarten, but he needed a way to pay for it.

Enter the soda tax. As part of his budget, introduced this month, Mr. Kenney has proposed taxing sugar-sweetened beverages at 3 cents an ounce, the highest soda tax proposed anywhere in the country.

The idea of a soda tax was introduced about a decade ago by public health researchers who were aiming to reduce consumption of sugary drinks, which they argued were causing increases in obesity and diabetes. But the message has been a tough political sell. Soda tax proposals, fought by the soda industry as nanny-state excess, have failed in New York State, San Francisco — and Philadelphia, twice. So far, the only American city to pass a soda tax is Berkeley, Calif.
Examples
México
El medio millón de muertos por diabetes en la administración de Felipe Calderón

Las muertes por diabetes en el sexenio de Felipe Calderón (2006-2012)

En el sexenio de Felipe Calderón se registraron 200,000 muertes atribuidas a la diabetes, lo que representa un incremento del 63% en comparación con el sexenio anterior, en el cual se tuvieron 146,000 muertes.

En el año 2000 el total de muertos por diabetes fue de 16,015. Se calculó que en 2012, las muertes por diabetes llegó a 71,114, un incremento mayor al 76% en solamente 12 años.

En 2000, la tasa de mortalidad por diabetes fue de 9,226; en 2012, fue de 38,498, lo que representa un incremento del 324%.

México: Use of research based reports

El fin del Acuerdo Nacional por la Salud Alimentaria (ANSA) y la necesidad de una ley y política integral de combate a la obesidad

RESPUESTA A LAS REFRESCADAS Y CANACITRA: LA INFELIZ VERDAD SOBRE LOS REFRESCOS

No. 1

MENTIRA "No existe evidencia científica consistente ni estadística de que el consumo de bebidas con contenido calórico sea el causante del alto crecimiento de los índices de la diabetes en México."

VERDAD En México, contamos con el estudio de Jiménez-Aguilar y colaboradores, quienes analizaron datos de 39,682 adolescentes de la Encuesta Nacional de Salud y Nutrición 2006, en el que el consumo de refrescos se asoció positivamente con el Índice de Mass Corporal (IMC) en varones adolescentes mexicanos, lo que el análisis mostró que para cada porción consumida de refresco, el IMC en los adolescentes varones aumentó 0.17 unidades.


VERDAD Un meta-análisis conducido por VanThen and Schwartz encontró nulos claros del consumo de refresco con el incremento de la ingesta de energía y peso corporal, y con el riesgo de diabetes, y otras enfermedades no transmisibles.


VERDAD Una revisión sistemática conducida por Malik y colaboradores demostró una consistente asociación positiva entre el consumo de bebidas azucaradas, la ganancia de peso y la obesidad en niños y adultos.


VERDAD Otro estudio realizado por Liedman y colaboradores en 1987, adolescentes que bebían refrescos más de un refresco diariamente, 25% más probabilidad de presentar sobrepeso y 52% más probabilidad de presentar obesidad.

Making the Harms Visible

November 2012

Aprovechan la fecha para protestar contra diabetes

Además, critican la falta de acciones por parte del gobierno federal para frenar el consumo de productos "chatarra". Integrantes de esta组织 colocan la tradicional ofrenda de Día de Muertos, con flores de calavera y velas, pero lo que más destaca es el montón de latas de refrescos que estaban siendo consumidos por los presentes.

Además, hubo una repre- sentación de manifestantes vestidos de negro que se implicaron en una felación con la frase: "La Secretaría de Salud y el consumo de refrescos y comida chatarra son 500 mil muertes".

Alejandro Caballero, director de la organización civil, ex- ploró que la utilización de refrescos en la ofrenda de in- vestigación es como un atributo de quienes son los productores de estos productos, los cuales, según el directo, están implicados en la generación de la epidemia de diabetes y que contribuyen a enfermedades en los consumidores.

El consumo de refrescos y comida chatarra es un problema serio que requiere atención. Las personas que han sido más afectadas por la obesi- dad y la diabetes incluyen a las personas que no pueden gestionar su salud adecuadamente. Desde su visión, no se han puesto en marcha programas para regular los productos chatarra y sólo se han traba- do a la autorregulación, algo que se ve reflejado en la muerte de 500 mil diabéticos que se han registrado en esta ad- ministración.

También, consideró que la secre- taría de salud no ha actuado para hacer cumplir el Acuerdo Nacional de Salud Alimentaria, que es- tablece el desarrollo de estru- diente para orientar a los consumidores. Al contrario, dice, se ha promovido que las empresas desarrollen sus pro- ductos etiquetados equivalentes.
México 2013 Media campaigns
Arresting the Junk Food Cartel
Performance and video against child targeted marketing
May 2013
México: Water is Life Campaign for Water in Schools and Public Spaces
The Soda Industry In the press

¡LO PAGAMOS TODOS!
El refresco que consumes ya paga 16% de IVA
De aprobarse un nuevo impuesto de cada peso que gastes en refrescos 35 centavos son de impuestos
NO MÁS IMPUESTOS AL REFRESCO
La justificación de salud para este impuesto no tiene fundamento

INDUSTRIA REFRESQUERA MEXICANA
BIENESTAR, VALOR, SUSTENTABILIDAD Y RESPONSABILIDAD SOCIAL
ASOCIACION NACIONAL DE PRODUCTORES DE REFRESCOS Y AGUAS CARBONATADAS A.C.
Starting Jan 1st, 2014: 1 peso/liter excise tax on SSBs (approx. 10%)

- Funds primarily general fund, some use for water in schools
- Concurrent 8% tax on non-essential energy dense food tax
- Pre-post comparison of purchases using observation data
- National, so no control (comparison group)

**Difference in Difference approach: Graphical illustration**

**Diff1:** Adjusted Observed rate of change in beverage purchase (% per month) during pre-tax period

**Diff2:** Adjusted Observed rate of change in beverage purchase (% per month) during post-tax period

**DinD = Diff2 - Diff1**

Source: Ng SBM 2016
México Key Evaluation Findings

Tax Pass Through Beverages
Complete for Carbonated, Less for other Drinks

Volume Sales
Sugary Drink Sales Down 6% Year 1
Sugary Drink Sales Down 9.7% Year 2
Untaxed up 4% Year 1
Water up 16% Year 1
Junk Food sales down 5%, 10% in lower income
No change in untaxed foods

Source: Colchero 2015, 2017, 2017,
Batis et al, PLOS Med 2016
2014 Berkeley Soda Tax

A second opportunity to evaluate public policy
Berkeley, California - 2014

- First successful large SSB tax in US with Navajo Nation
- 1 cent per ounce – Approx. 10%
- Sugary drinks only
- Unanimous support city council, school board, medical organization, churches, teachers union, police and firefighters, League of Women Voters
- Some small business support, mostly neutral
- Small, very progressive community
Berkeley vs. Big Soda: United at City Council
2/11/14
from Berkeley vs. Big Soda

Possible November '14 Ballot Measures.

Rev. Dr. Marvis Peoples

https://vimeo.com/95472278
What Happened?
Berkeley - Early Studies in First 4 months

Price Pass through - Falbe, et al. 2015 – tax partially passed through

Consumption
- Falbe et al., 2016: Street intercept interviews in low-income neighborhoods before and 4 months post-tax, Berkeley and neighboring controls
- 21% reduction in self-reported SSB consumption, increase in neighboring communities. Water consumption up.

-21% SSB consumption!

Fonte: Falbe AJPH 2016
Changes in prices, sales, consumer spending, and beverage consumption one year after a tax on sugar-sweetened beverages in Berkeley, California, US: A before-and-after study

Lynn D. Silver¹, Shu Wen Ng²,³, Suzanne Ryan-Ibarra¹, Lindsey Smith Taillie²,³, Marta Induni¹, Donna R. Miles³, Jennifer M. Poti², Barry M. Popkin²,³ *

¹ Public Health Institute, Oakland, California, United States of America, ² Department of Nutrition, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, United States of America, ³ Carolina Population Center, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, United States of America

Source: Silver, et al. PLOS Medicine 2017
Berkeley One Year Findings

Three before and after studies

1) Electronic scanner data for 15.5 million customer visits in 2 large supermarket chains in Berkeley and comparison cities 2013-2016

2) Price changes in 26 stores of different types

3) Random digit dial Telephone survey of consumption amongst Berkeley residents

Source: Silver, et al PLOS Medicine 2017
Tax was mostly passed through to taxed beverages and not untaxed ones

- 67% pass through in scanner data.
- Complete for sodas and energy drinks, less for other products

In 26 store study full pass through in large and small chain markets and gas stations, especially for soda
Partial in pharmacies
Not passed through in small independent stores and gas stations

Source: Silver, et al PLOS Medicine 2017
Sugary drink sales went down 9.6%, but all beverage sales rose

- **SSB sales in Berkeley**: -9.6%
- **Up in neighboring cities**: Untaxed drinks up +3.5%
- **All beverage sales up slightly**

Source: Silver, et al PLOS Medicine 2017
Healthier drinks increased, especially water

- Water up +15.6%
- Milk + 1%
- Diet down -9.2%

Source: Silver, et al. PLOS Medicine 2017
Grocery Bills Did Not Go Up

Consumer spending per transaction did not go up, nor did store revenue per transaction go down more in Berkeley
Self reported consumption in telephone survey

Self reported beverage consumption declined - 20% (p = 0.49) n.s.

Consumption of untaxed beverages increased significantly

Berkeley had very low consumption to start with

Source: Silver, et al. PLOS Medicine 2017
And the economy.....?

Increase in Food Sector Revenue: **15%**

Berkeley's business health is reflected in its sales tax revenue, which continued to increase after the tax. The tax became effective March 1, 2015. The greatest rise was precisely in the food products sector where sales tax revenue (this does not include the soda tax) went up 15% between July 2014 and December 2016, more than any other sector. Only about 5% of this increase can be attributed to sales taxes on the value of the soda tax passed through to beverage prices.

Revenue

The Berkeley Tax raised about $13 per capita per year

Even in a city with consumption that is only 1/3 of the national average, and only 10%

Source: Silver, et al. PLOS Medicine 2017
In 2017

• Training youth community nutrition educators

• School gardens and cooking classes

• Healthy black families program – multistrategy approach to reducing health inequities

• Diabetes Prevention Program

• Educational mass media campaigns promoting water

Source: City of Berkeley 2017
The Uber Driver

African American, in her 60s lived 40 years in Berkeley. She voted for Berkeley’s soda tax after some hesitation. She went to the doctor. and was told she has pre-diabetes. She was referred to the 16 week Diabetes Prevention Program at the YMCA. She went and learned how to eat differently. She asked: “How much does it cost?” The YMCA said “Nothing” She asked “Why?” “Because the City (of Berkeley) is paying with the soda tax money” She went back to the doctor. Her blood sugar had gone down And it is still down.

Source: Silver, 2017
<table>
<thead>
<tr>
<th>Jurisdiction (year)</th>
<th>Level of Tax</th>
<th>Products Covered</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Berkeley (2014)</td>
<td>1¢ per ounce</td>
<td>SSBs only &gt;25 cal/12 oz</td>
<td>General taxes with Advisory Committees or input guiding spending for health, obesity and diabetes prevention</td>
</tr>
<tr>
<td>San Francisco</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oakland</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Albany (CA)** (2016)</td>
<td></td>
<td>&gt;=2cal/oz</td>
<td></td>
</tr>
<tr>
<td>Navajo Nation (2014)</td>
<td>2% sales tax</td>
<td>Sweetened beverages and food of minimal nutritional value</td>
<td>Community Wellness Fund</td>
</tr>
<tr>
<td>Boulder (CO) (2016)</td>
<td>2¢ per ounce</td>
<td>SSBs only with &gt;=5gms added sweetener per 12 oz</td>
<td>Dedicated to health promotion, wellness and chronic disease prevention</td>
</tr>
<tr>
<td>Philadelphia (PA) (2016)</td>
<td>1.5¢ per ounce</td>
<td>SSBs and artificially sweetened beverages</td>
<td>Pre-Kindergarten Education, parks, libraries and community schools</td>
</tr>
<tr>
<td>Cook County (IL) (2016)</td>
<td>1¢ per ounce</td>
<td>SSBs and non-calorically sweetened beverages</td>
<td>General revenue, covering public safety and health needs</td>
</tr>
<tr>
<td>Seattle (WA) (2017)</td>
<td>1.75¢ per ounce</td>
<td>SSBs only &gt;=40 cal/12 oz</td>
<td>Childhood education &amp; healthy food, water access, support to people with diabetes and obesity</td>
</tr>
</tbody>
</table>
“The GROCERY TAX hurts my customers.”

PABLO MARTINEZ
Store Owner/
International
Produce Market

No Oakland Grocery Tax
The US Beverage Industry Spent Over $107 Million USD to Fight SSB Tax Campaigns 2009-2017

Source: Center for science in the Public Interest, 2016 and 2017
The Beverage Industry Spent over $120 Million USD for Lobbying in Washington 2009-2016

Source: Center for Science in the Public Interest, 2016
Philadelphia
1.5 cents per ounce, on sugar and non-calorically sweetened drinks (15% app)

Extraordinary Impact!
(I’ll tell you about it)
IT’S HERE!

It is time for the City of Philadelphia to tackle our largest and most crippling problems head-on.

Poverty, an inadequate education system, and struggling neighborhoods have held back Philadelphia for too long.

To address these challenges, the Philadelphia Beverage Tax will help fund much-needed investments in quality Pre-K, Community Schools and parks, rec centers and libraries.

REGISTER, FILE AND PAY »
Impact on Employment

Increase in Food Jobs: 7.2%

Similarly, employment across food sector establishments continued to rise overall by 7.2% between April 2014 and June 2016 with 469 jobs added. Employment in limited service restaurants rose by 18.9%, full service restaurants by 5.6%, and in supermarkets and grocery stores by 2.6%—the three largest employer types in the food sector.

Learn more at bit.ly/sodataxjobs
Philadelphia – Tax on Salaries Collected Q1, 2012-2017
Beverage Industry

Source: Philadelphia Dept of Revenue
México 2014

- No impact on jobs in manufacturing sectors for SSBs and junk food
- Small Increase employment in commercial stores
- No impact on overall unemployment rate

Source: Guerrero Lopez et al, 2017
Design Questions: How Big?

- Mexico, Berkeley, SF, Oakland, Albany 10%
- Boulder, Philadelphia, Seattle 15-20%
- India 40%
- Saudi Arabia & UAE 50%, up to 100%

- More effective when higher
- Recommend at least 20%
Design Questions:
Sugar only or Diet too?

- Mexico, Berkeley, SF, Oakland, Boulder  Albany  Sugar Only
- Philadelphia Sugar + Diet
- India - all carbonated
- Thailand and UK Sugar Only

- We don’t know yet
- Philadelphia appears to be working well for both
Design Questions:
Tax by volume, tiered or by sugar content?

- Mexico, Berkeley, SF, Oakland, Boulder, Philadelphia, Albany by SSB volume (ounces, liters)
- Others by value of sale
- UK, Ecuador, Thailand – Tiered by sugar content
- US Proposed Sweet Act – Proportional to sugar content

- *Stimulating reformulation magnifies health impact*
- *Best approach between tiered and proportional* uncertain
- *No data yet comparing*
Design Questions: What to spend on?

- Mexico – General Tax
- Berkeley, SF, Oakland, Boulder, Albany – go to prevention
- Philadelphia pre-kindergarten education, libraries, parks
- India – General
- UK – School physical activity

Urgent need for funding to prevent NCDs through healthier food, physical activity, reduced smoking and alcohol use
Design Questions:
How to optimize pass through?

Probably by working with and educating store owners

Philadelphia invested in this
Conclusions
Sweetened Beverage Taxes Don’t Make People Less Thirsty
Prices are mostly passed through to the unhealthy products
When prices are passed through consumption declines
These taxes are an option for funding prevention or other social needs
Complementary Strategies for Sugary Drinks and Unhealthy Foods

• Strong front of pack labeling (Chile, Ecuador, Bolivia)
• Size limits on bottles/cans/portions
• Public procurement guidelines
• School and other place based restrictions (US, Brazil, Chile)
• Ban marketing to children (Chile, Brazil)
• Creative education/social media campaigns
• Required warnings on products and ads (San Francisco)
• Promotion of traditional unprocessed foods and water
Chile Front of Pack Food Labeling
Prominent High Sugar, High Salt, High Saturated Fat Warnings

Found more effective than traffic light in children 8-13 years old

Source: Universidad de la República and Instituto Nacional de Alimentación/MIDES of Uruguay, presented 2016 - unpublished
## Limit Portion Size

<table>
<thead>
<tr>
<th>Size</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.5 oz</td>
<td>(1920s)</td>
</tr>
<tr>
<td>12 oz</td>
<td>(1960s)</td>
</tr>
<tr>
<td>20 oz</td>
<td>(1990s)</td>
</tr>
<tr>
<td>33 oz (1L)</td>
<td>Today</td>
</tr>
<tr>
<td>96 oz (3L)</td>
<td>Today</td>
</tr>
</tbody>
</table>
Like Smoke Free Air

*new ideas go from*

Ridiculous ➔ Possible ➔ Normal

*Tarja Halonen, former President, Finland*

Thank you

lsilver@phi.org
Berkeley Study Team at PHI and UNC:
Barry Popkin
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Cory Hamma
Marta Induni
Lindsey Taille
Emily Yoon
Donna Miles
Jennifer Poti
Collaborating Grocers and Businesses

Slides/Images:
El Poder del Consumidor, World Obesity, MGI, Simon Barquera, Steven Gortmaker,
Alejandro Calvillo, Rebecca Berner, Shuwen Ng, Hannah Lawman

Funding Berkeley Study: Bloomberg Philanthropies

Thank you
lsilver@phi.org
Health and Cost Impacts of Introducing an Alcohol Duty Escalator in the UK

Laura Webber PhD, UK Health Forum
BACKGROUND

- Non-communicable diseases (NCDs) are the biggest cause of mortality and premature mortality across the UK
- Many are preventable by reducing risk factors such as alcohol consumption, smoking, BMI and physical inactivity
- Monitoring trends in risk factors over time is important for policy and healthcare planning
- The present project included 24 different local authorities in England
- Results here focus on national results from England
AIM

Model the long term health impacts of introducing an alcohol duty escalator (ADE) in England

Specifically, the following three scenarios were run:

- **Baseline scenario** (no change in alcohol consumption)
- **Scenario 1. Tax increase scenario**: 1.3% ADE (2% decrease in consumption)
- **Scenario 2. Tax increase scenario**: 13.4% ADE (20% decrease in consumption)
RESULTS

CUMULATIVE INCIDENCE CASES AVOIDED RELATIVE TO BASELINE BY 2035

<table>
<thead>
<tr>
<th>Condition</th>
<th>Scenario 1</th>
<th>Scenario 2</th>
<th>Hypertension</th>
<th>Stroke</th>
<th>All cancers</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHD</td>
<td>0</td>
<td>3726</td>
<td>300585</td>
<td>25463</td>
<td>80115</td>
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<tr>
<td>Liver Disease</td>
<td>3105</td>
<td>42231</td>
<td>15526</td>
<td>6210</td>
<td>6831</td>
</tr>
<tr>
<td>All cancers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stroke</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hypertension</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CUMULATIVE INCIDENCE CASES AVOIDED RELATIVE TO BASELINE BY 2035

CHD | Liver Disease | Hypertension | Stroke | All cancers
---|---------------|--------------|--------|-------------
0   | 3105          | 15526        | 6210   | 6831        |
The increase in alcohol tax is predicted to result in the avoidance of:

- 2% decrease in new cases of alcohol-related diseases by 2035: 28,000
- 20% decrease in healthcare costs avoided by 2035: £621M

- 20% decrease in new cases of alcohol-related diseases by 2035: 455,225
- 20% decrease in healthcare costs avoided by 2035: £2.6bn
RESULTS

CUMULATIVE INCIDENCE CASES AVOIDED RELATIVE TO BASELINE BY 2035

<table>
<thead>
<tr>
<th></th>
<th>Road accidents</th>
<th>Violence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scenario 2</strong></td>
<td>85083</td>
<td>1353254</td>
</tr>
<tr>
<td><strong>Scenario 1</strong></td>
<td>6831</td>
<td>117377</td>
</tr>
</tbody>
</table>

Legend:
- Red: Scenario 2
- Blue: Scenario 1
LIMITATIONS

- A number of data limitations
- People under-report alcohol consumption by 35% so results likely underestimated
LIMITATIONS

- A number of **data limitations**

  - No data on non-healthcare costs, e.g. lost productivity due to disease, were available, though we included lost salary

  - No data were available to explore **differences by social groups**

  - No standardised protocol for measuring alcohol consumption

  - No relative risks by drinks type – is vodka worse for your health than wine per unit?
ACKNOWLEDGMENTS

UK Health Forum Modelling team

Abbygail Jaccard
Lise Retat
Andre Knuchel-Takano
Arti Bhimjiyani
Fiscal and pricing policies to improve public health

Aim of project

Identify and assess fiscal or pricing policies that could improve England’s health

Objectives

• Develop a framework to help compare and analyse the impact of policies from different policy areas

• Review existing evidence from the UK and other economically developed countries on the health impacts of implementing such policies

• Summarise evidence through the framework lens to provide recommendations of policies to be implemented in England
Thank you!
Fighting Illicit Trade in Tobacco products in Kenya

JOINT LEARNING NETWORK (JLN)
Learning Exchange on Fiscal Policy for Public Health
Tuesday February 13, 2018

Caxton M Ngeywo
Kenya Revenue Authority
Kenya- Illicit trade Context

- Conflicts in some countries in the Region (South Sudan, Somalia)
- Major Manufacturing Hub – Tobacco is supplied to 17 countries from Nairobi
- Shares porous borders with 4 countries
- Complex tax laws aid tax evasion
- Major transit corridor for 4 hinterland countries

Map of Kenya and neighboring countries highlighting geographic and economic factors related to illicit trade.
Illicit Trade in Tobacco In Kenya

- Undeclared imports
- Undeclared local Production
- Counterfeit brands – foreign production
- Under declared values – CIF and RSP

How Illicit Trade is conducted in Kenya
Administrative Controls
- Registration and control of importers
- Creation of Market Surveillance Office
- Customs Anti Counterfeit Office
- Licensing and monitoring of taxpayers compliance

Technological Interventions
- Deployment of Excisable Goods Management System
- Use of Electronic Cargo Tracking Systems
- Use of a modern tax management system – itax

Legislative
- Simplified tax structure (1200 per mille or 35% of RSP
- New Excise Bill 2014

Collaboration
- Industry engagement
- Intergovernmental agency enforcement (KEBs, ACA…)
- Single Customs Territory (payment of taxes upfront)

Kenya’s Response to Illicit Trade
Tax Stamps Programme 1993-2018

1993 Excise stamps introduced on cigarettes

2009 Audits reveal tax stamps grossly abused

2013 Excisable goods Management System

- Led to 50% increase in tax collection
- Counterfeiting and under declaration of values
- Introduced production accounting and tracking of products
1993 – prior, 130% of CIF or Ex-factory selling price; *transfer pricing and undervaluation were Major challenges*

1993-1998- excise charged on RSP banded into categories; *led to manipulation of RSP to qualify for tax at lower bands*

1998-2011; tax charged on product packaging characteristics; *definition of length of cigarettes became a challenge – with filter or not?*

2011 – Highbred system based on a minimum of Kshs 1200 or 35% of RSP; Revenue performance has been steady and predictable

2015– Single Specific rate of Kshs 2500 per mille introduced

2017– A two band system was introduced of Kshs 2500 per mille for filter and Kshs 1800 for non filter cigarettes

**Evolution of the tax structure on tobacco**
Challenges relating to new structure

• Emergence of ‘free flow’ cigarettes that have a but no filter
• Increase in illicit trade from in house estimates of 3% to approximately 10%
• Reduction in revenue collection
Excisable Goods Management System

- System is non intrusive; no intervention from manufacturer required
- Enables retailers and distributors to authenticate products by use of a validator
- Remote accounting and monitoring of production
- On the spot seizure of illicit products and arrest of offenders
- Management and control of field officers
- Business intelligence for informed interventions

EGMS Capabilities and advantages
Electronic Cargo Tracking System

Ensuring goods are moved on designated routes to the exit points

uses GPS, GPRs and RFID technologies

An electronic seal reports violation of the security of the cargo container

ECTS ensures facilitates business through –
-- faster movement of cargo
-- Reduction of insurance costs
-- reduction in wastages and pilferage
- - protects against misuse of vehicles
--- provides critical business intelligence to tax authority and business
Market Surveillance Office

❖ In 2013, KRA set up the Market Surveillance Office under the Investigations and Enforcement Department with a mandate to-
  ❖ Inspect excisable goods in the market for compliance with excise regulations
  ❖ Inspect excise premises for compliance with the licensing requirements and conditions
  ❖ Enforce the use of Electronic Tax Registers

❖ Current staffing stands at 56 personnel. 50 officers to be added this financial year. Total planned strength 300 officers
Customs Anti Counterfeit Office

Establishment of the Anti Illicit Trade office dealing with all issues to do with counterfeiting and smuggling.

- Unit coordinates anti-counterfeit activities within KRA & is based in the Investigations Dept.
- Training of staff in counterfeits:- in house and external training opportunities
- Joint border patrols:- patrols with Uganda Revenue Authority and Tanzania Revenue Authority
Kenya has signed various international agreements on information sharing. In 2003, three EAC countries introduced Single Customs Territory to collect taxes before transit goods leave the first port of entry into the territory or before exports are released. Tobacco was among the first products to be put under the arrangement. This initiate was aimed at:

- Lowering the cost of doing business in EAC
- Increased tax compliance
- Reduction in illicit trade (diversion of transit or export cargo)
- Faster movement of cargo
Seizures at Kilindini Port
Seizures at the Coast
Seizure of cigarettes, JKIA Airport
Lessons Learnt

✓ Half measures produce half results; eliminating illicit trade requires a comprehensive approach,
✓ Engagement with the industry especially on intelligence is crucial
✓ Illicit trade on tobacco is international fraud; which requires international response
✓ Simplified tax structure eases tax expectations *(easy to compute and verify)*
✓ Illicit trade requires access to formal distribution chains for maximum profits; market based enforcement is necessary
✓ A good enforcement structure (MSO, CACO)
✓ Technology can help eliminate human intervention and hence enhance process integrity (EGMS, ECTS, iTax)
✓ Intergovernmental agency enforcement critical
Have your say
TAX CAMPAIGN IN KENYA: MESSAGING & POSITIONING

Vincent K. Kimosop
Policy & Governance Expert

SOVEREIGN INSIGHT
# Overview: Tobacco Tax Restructuring

<table>
<thead>
<tr>
<th>Year</th>
<th>Tobacco Tax Structure Highlights</th>
</tr>
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<tbody>
<tr>
<td>1993-2010</td>
<td>• Kenya restructured its tobacco taxes system several times (e.g., changed from ad valorem to 4-tier specific, to hybrid (based on retail selling price [RSP] and packaging characteristics)</td>
</tr>
<tr>
<td></td>
<td>• <strong>Kenya signed and ratified WHO FCTC in 2004</strong></td>
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<tr>
<td></td>
<td>• Tobacco Control Act 2007 called for implementation of tobacco tax and established the Tobacco Control Fund, but was overturned by Parliament</td>
</tr>
<tr>
<td>2011</td>
<td><strong>Finance Act 2012</strong></td>
</tr>
<tr>
<td></td>
<td>• Simplified the tax structure by abolishing the 4 tiers</td>
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<tr>
<td></td>
<td>• Increased the specific tax to KShs1200/ mille or 35% of the RSP</td>
</tr>
<tr>
<td>2015</td>
<td><strong>Proposed Excise Duty Bill 2015</strong></td>
</tr>
<tr>
<td></td>
<td>• Switched the tax system from a mixed to a uniform specific rate of KShs 2,500/mille (equivalent to a 108% increase over previous Finance Act 2012 system)</td>
</tr>
<tr>
<td></td>
<td>• Adjust tax for changes in inflation</td>
</tr>
<tr>
<td></td>
<td><strong>President Assent of Excise Duty Bill 2015</strong></td>
</tr>
<tr>
<td></td>
<td>• Excise Duty Act 2015 went into effect December 1, 2015</td>
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</table>

*mille: 1,000 cigarettes*
## Excise Duty Bill 2015 Passage

<table>
<thead>
<tr>
<th>Year</th>
<th>Key Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td><strong>ILA submitted a tax proposal to the MoF for the Fiscal Year 2016</strong>&lt;br&gt;• Increase the specific tax to KShs 2000/mille* or 38.1% of the retail selling price</td>
</tr>
<tr>
<td>March</td>
<td><strong>ILA successfully lobbied for MoF to propose Excise Duty Bill 2015</strong></td>
</tr>
<tr>
<td>June</td>
<td><strong>MoF presented Excise Duty Bill 2015 to the National Assembly</strong>  &lt;br&gt;• “Flat” rate of KShs 2,500/mille (equivalent to a 108% tax increase)</td>
</tr>
<tr>
<td>July</td>
<td><strong>National Assembly modified the Excise Duty Bill 2015 (“National Assembly Order Paper”)</strong></td>
</tr>
<tr>
<td>August</td>
<td><strong>ILA media campaign calling for President not to assent the Bill with the amended language</strong></td>
</tr>
<tr>
<td>September</td>
<td><strong>October – November</strong>  &lt;br&gt;• President declined assent of the modified Excise Bill 2015 and referred it back to Parliament for reconsideration  &lt;br&gt;• Parliament passed the Bill with the recommendations of the President  &lt;br&gt;• President assented the Bill into an Act on November 6, 2015</td>
</tr>
<tr>
<td>November 6th</td>
<td><strong>Excise Duty Act 2015 gazetted</strong></td>
</tr>
<tr>
<td>December 1st</td>
<td><strong>Excise Duty Act 2015 went into effect</strong></td>
</tr>
</tbody>
</table>

Key Tax Campaign Strategy Components

- Successful Tax Campaign Strategy
  - High-level government commitment
  - Sophisticated local partners
  - Address potential TI pushback
  - Working coalition: civil society, MoF, WHO
  - Media
Partnership Amongst Sophisticated Local Partners

Macroeconomics Expertise: International Institute for Legislative Affairs (IILA)
- Created key partnerships with alliances (KETCA, NCDAK) to write letters and put pressure on the Presidency
- Cultivated relationships with MoF and other policy decision-makers (e.g., MoF, Members of Parliament, other govt officials)

Research Expertise: KIPPRA, UCT, CTCA
- Generated key data on several key TC issues
  ◦ Current status of cigarette affordability
  ◦ Illicit trade in Kenya
  ◦ Data were used to for TI pushback, media messaging, lobbying effort

Media Expertise: DB Agency
- Actively cultivated and mobilized strong public engagement and support on social media platforms
Working Coalition of Partners

- **Kenya-based Civil Society Organizations**
  - International Institute for Legislative Affairs (ILA)
  - Kenya Tobacco Control Alliance (KETCA)
  - Non-Communicable Diseases Alliance of Kenya (NCDAK)

- **International Civil Society Organizations**
  - American Cancer Society (ACS)
  - Campaign for Tobacco-Free Kids (CTFK)

- **Media**
  - Digital Branding Ltd (DB Agency)

- **Research & Technical Support**
  - Center for Tobacco Control in Africa (CTCA)
  - Kenya Institute for Public Policy Research and Analysis (KIPPRA)
  - University of Cape Town (UCT)

- **Kenya Government**
  - Kenya Revenue Authority (KRA)
  - Ministry of Health (MOH)
  - National Treasury - formerly Ministry of Finance NT (MoF)
Deepening Tax Administration Reforms to Ease Compliance

132. Mr. Speaker, after our Customs Law became part of the East African Community Customs Management Act in 2004, the Excise duty legislation remained under the Customs and Excise Law. This change necessitated the introduction of a simple and modern standalone Excise Bill incorporating International best practices. I can confirm that this Bill is being tabled in this House after undergoing public participation as required by the Constitution and Statutory Instruments Act.

133. Mr. Speaker, in this simplified and modern Bill, we are imposing excise duty to compensate for harmful effects caused by production, supply, consumption or use of goods and services, which costs are not directly reflected in their prices. Therefore, Mr. Speaker, through this Bill, we are introducing a new tax based on units of quantity only. As such the Bill imposes a charge on: (i) sticks of harmful cigarettes and tobacco; (ii) volumes of harmful alcoholic beverage and sugar sweetened beverage consumed; (iii) volume of polluting fossil fuels and age of motor vehicles purchased; and (iv) weight of environmentally damaging plastic bags.
High-Level Government Commitment

- MoF: IILA had several meetings with the MoF’s Department of Budget, Fiscal and Economic Affairs to advocate for tobacco tax proposal for FY 2015-2016

- MoH: Regular meetings with MoH (the Minister and TC Focal person) about the implementation of the Tobacco Control Act 2007 (e.g. regulations, GHWs, Tobacco Fund) and countering tobacco industry interference

- Parliament: Briefing with Chair of Committee on Delegated Legislation (Parliament) on TC developments & desire to see regulations finalized
Excise Duty Bill 2015 Champions

- Dorcas Kiptui (MoH)
- Caxton Masudi (KRA)
- Mr Justus Nyamunga (MoF) – Head of Budget, Fiscal & Economic Affairs
- Mr Joash Kosiba (Budget Office, National Assembly)
- Media:
  - John Muchangi (Star)
  - John Gachiri (Business Daily)
Messaging to Government

Message: The proposed higher tobacco prices will increase government revenue and contribute to TC objectives

- Public Health messaging
  - Prevent initiation among potential users
  - Decrease consumption
  - Saves lives
  - Help the young and the poor

- Fiscal messaging
  - IILA used highlights from the *Economics of Tobacco Taxation Study in Kenya* to support the passage of the Excise Duty Bill 2015
  - Tobacco consumption is increasing, especially among the youth in Kenya
  - Real cigarette tax revenues are shrinking even as consumption increases
  - Price on tobacco products has reduced and affordability increased
  - Growth of cigarette prices is lower than for basic commodities
Local Data to Pre-empt Potential Industry Pushback

• In anticipation of TI pushback, IILA commissioned several studies to generate Kenya-specific data related to tobacco control, including tobacco tax
  ◦ Published 2 reports on tobacco taxation in Kenya
    • *Economics of tobacco taxation in Kenya* (2011)
  ◦ IILA and KIPPRA collaborated on a study to generate reliable data on illicit trade in Kenya to address potential policy-maker concerns.

• IILA disseminated the Kenya-specific data for lobbying & advocacy efforts
  ◦ Developed policy brief for the MoF’s Department of Budget, Fiscal and Economic Affairs to support the passage of the Excise Duty Bill 2015
    • Policy brief included a findings from the *Economics of Tobacco Taxation Study in Kenya*
  ◦ Organized ½-day Project Dissemination and Stakeholders meeting (*Oct 2015*) to provide a forum for sharing of current status of TC in Kenya amongst the stakeholders
Challenges – Industry Interference

• August 2015 - The National Assembly (NA) made amendments to weaken the proposed Excise Duty Bill 2015, so that excise tax on cigarettes would be charged based on the nature of the cigarette vs. types and per kilogram

• This NA language is consistent with TI Arguments
  ◦ “…the move would give Kenyans access to bad cigarettes and deprive the government of revenue.” – (Member of Parliament and a former head of trade in Eastern Africa for BAT – Sept 2015)
  ◦ “We believe the proposed structure will reduce transparency and make it less predictable for government revenues.” – (Connie Anyika, BAT Kenya head of government affairs – Sept 2015)
Illicit trade: “…the government is currently losing revenue on account of illicit trade in smuggled and counterfeit cigarettes…as a result of the unitary tax regime introduced in 2011.”

Smokers’ constitutional rights: “…cigarette consumers are citizens of this country and have rights enshrined in the constitution, including the right not to be discriminated against in the bill of rights.”
Proactive Media Strategy

- Cultivate Message Champions
- Develop Strong Messages to Raise Public Awareness
- Counter Industry’s Arguments
- Media Outreach and Activities
- Direct Appeal to President
Cultivating Message Champions

TC advocates used traditional and social media platforms to inform and mobilize the public to show their support and send a strong message to decision-makers.

- Print & broadcast media featured stories on the tax campaign.
- Social media influencers:
  - DB cultivated key influencers to show their support by sharing posts with their followers:
    - DJ Joe Mfalme – 122k followers
    - DJ Soxxxy – 55k followers
    - Digital Humanitarian – 36k followers
    - Maskani Ya Taifa – 14k followers
    - Dj..Twitta – 6k followers
Develop Strong Messages to Raise Public Awareness

- Last minute introductions by lawmakers to amend original draft were not in good faith nor transparent
- KRA will collect less revenue
- Loss to public health as cigarettes would increasingly become affordable and youths will have easy access
- Used Kenya-specific data (e.g. GATS, a tobacco control taxation policy survey, etc.) to rally public support
- The President should not assent the Bill to Law as it is reversing the gains made by the Kenyan Government
Countering TI Arguments

International Institute for Legislative Affairs

Why the President should NOT sign Excise Duty Bill 2015

The Global Adult Tobacco Survey (GATS) conducted in 2014 found that 2.5 Million (11.6 per cent) of Kenyan adults used tobacco products. The Global Youth Tobacco Survey (GYTS) of 2013 showed that 12.8 per cent of boys and 6.7 per cent of girls aged between 13-15 years used tobacco products.

Kenya signed and ratified the WHO Framework Convention for Tobacco Control (FCTC) on 25th June 2004. This made it the second country after Norway to sign and ratify the treaty on the same day, an indication of the seriousness and commitment of the Kenyan Government to tackle the problem of tobacco use in the country. In 2007, the Tobacco control ACT was passed. Parties to this treaty are obligated to implement progressive measures to reduce demand and supply of tobacco products.

Meaningful increase in tobacco taxes are a highly effective tobacco control strategy. It leads to significant improvements in public health as well as increasing revenue for the Government. Global best practice for tobacco taxation has found that:

1. Higher tobacco product taxes and prices are effective in reducing tobacco use and its consequences, particularly among the poor and the young. They will also generate new revenues for the government.
2. Raising tobacco prices so that they account for at least 70 per cent of retail prices would lead to significant price increases and persuade many current users to quit, deter youth from taking up the habit (by reducing affordability) and increase government revenue significantly.
3. Complex tax structures are more difficult to administer. They create opportunities for tax avoidance and evasion, and are less effective in achieving public health and revenue goals. Structures with multiple tiers based on product price and/or characteristics are complex. A single uniform tax is most effective.
4. All tobacco products are equally harmful. Increasing excise tax on some products and not on others based on price differentials will only induce substitution from one product to another, and in effect defeat public health goals and reduce revenue projections.
5. Keeping tobacco taxes and prices low on some products to enhance affordability for the poor is NOT pro-poor, instead, it results in greater tobacco use among the poor, causing them to bear a disproportionate share of the health and economic burden and consequences of tobacco use, and increasing the likelihood of future poverty.

The GATS 2014 and a poll conducted by IILA the same year showed that over 80 per cent of Kenyans support increased taxation on tobacco products. Kenya has over the last several years made significant progress in tobacco taxation, which culminated in the restructuring to a uniform excise tax Rate of Sh.1200 per mille or 35 per cent of retail selling price for ALL tobacco products. The Excise Duty Bill, 2015 presented to the National Assembly by the Cabinet Secretary for Health built on these successes to propose a uniform Rate of Sh.2500 per mille for all cigarette brands.

AMENDMENTS TO THE EXCISE DUTY BILL 2015, (NATIONAL ASSEMBLY BILL NO. 38 OF 2015)

On Thursday 27th August 2015, the National Assembly passed the Excise Duty Bill, 2015, with the amendments below as proposed by the House Departmental Committee on Finance, Planning and Trade

<table>
<thead>
<tr>
<th>Description</th>
<th>Revised Excise Duty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plain cigarettes or cigarettes with ex-factory selling price of up to Sh2,750 per mille</td>
<td>Sh900 per mille</td>
</tr>
<tr>
<td>Soft cup cigarettes with ex-factory selling price of Sh2,751 to Shs.3,750 per mille</td>
<td>Sh1200 per mille</td>
</tr>
<tr>
<td>Soft cup cigarettes with ex-factory selling price of Sh3,751 to Shs.4,750 per mille</td>
<td>Sh1,800 per mille</td>
</tr>
<tr>
<td>Hinge lid cigarettes or cigarettes with ex-factory selling price of more than Sh4,750 per mille</td>
<td>Sh2,800 per mille</td>
</tr>
</tbody>
</table>

The adoption of this proposal by the National Assembly has huge negative ramifications, both to public health and fiscal objectives of the government, in the following ways:
Media Outreach and Activities

- IILA conducted print and radio interviews to expose tobacco interference tactics
- Advertorials in 2 leading newspapers (Daily Nation and The Standard)
- Appearances on TV and radio news shows with partners from the MoH
- Media breakfast meeting. Issued a press statement enumerating the items in the Bill that were detrimental to the country (Sept 1, 2015)
Facebook and Twitter

- Digital team kept the issue trending on social media by continually engaging the public
  - Held weekly Twitter chats, building public awareness, answering followers’ questions, and mobilizing public to share info with their own networks and reach out to the President
  - Advocates, champions, and followers directly tagged the President on his social networks and key influencers in his circle with posts, infographics, and personal messages, calling on him not to sign the weakened Bill
We call on @PresidentKE NOT to assent to the #ExciseDutyBill2015 instead stand for our mothers & kids #TCChat254

Do not assent the Excise Duty Bill, 2015

Increasing taxation of tobacco products is a win-win policy.

Evidence shows that increasing the price of tobacco products through taxation reduces tobacco consumption and its consequences - particularly among the poor and the young - while, at the same time, increasing revenue for the Government. Complex tax structures, as proposed by the Excise Duty Bill 2015, have been shown to be more difficult to administer, create opportunities for tax avoidance and evasion, and are less effective in achieving public health and revenue goals.

Thank you for standing up for our children

We commend the Government of Kenya for the ongoing efforts and commitment to the fight against drugs and substance abuse. We call on His Excellency, Mr. President, to send a strong message to all Kenyans on the importance of and investment in the health of us all who are suffering from the effects of tobacco consumption and exposure.

Dear Mr. President

We appeal to you NOT TO ASSENT to the Excise Duty Bill, 2015 as approved by the National Assembly on August 27th 2015. We request you to call on the National Assembly to consider reversing this proposal which retards the efforts made by Kenya to protect the health of its citizens as well as meeting its global obligations.

www.illakenya.org

International Institute for Legislative Affairs

MR. PRESIDENT PLEASE SAY NO EXCISE DUTY BILL 2015
#DoKenyaProud
Media campaign succeeds

- President refused to sign the weakened Excise Duty Bill and referred it back to Parliament for reconsideration.
LEGAL NOTICE NO. 245

THE EXCISE DUTY ACT
(No. 23 of 2105)

COMMENCEMENT

IN EXERCISE of the powers conferred by section 1 of the Excise Duty Act, the Cabinet Secretary for the National Treasury appoints the 1st December, 2015 to be the date the Act shall come into operation.

Dated the 25th November, 2015.

HENRY ROTICH,
Cabinet Secretary for the National Treasury.

A stronger Excise Duty Act 2015, supporting public health measures, was approved, and enacted, as of Dec 1, 2015.
Lessons Learned - Strategic

- Necessary elements for a successful tax campaign
  - Collaboration with a solid, technical in-country partner that can lead the effort on the ground (e.g. IILA)
  - Sustained advocacy and lobbying with key governments officials and/or stakeholders
  - Generating critical data to inform and support advocacy messaging
  - Constantly monitoring and countering industry interference
  - Exposing industry tactics
  - Proactively engage the public using appropriate media channels

- Build upon favorable TC environment due to advocacy efforts (e.g. SF campaign, advocating for WCTOH host, local data on illicit trade)

- Advocacy efforts must continuously apply pressure during the entire law-making process
Lessons Learned - Technical

- A solid in-country technical partner with microeconomics expertise (e.g. IILA) is critical for developing a successful tax proposal

- Engage the Finance Committee of the National Assembly BEFORE the Bills (e.g. Finance Bill, Excise Bill, etc.) are tabled before the MoH

- Partnership with the Ministry of Finance (e.g. Department of Budget Fiscal and Economic Affairs) is vital for any successful tax advocacy

- Build upon lessons learned during the tax advocacy campaign to strengthen the implementation process
Strategic Opportunity...??

Growth in revenues have not kept pace with robust GDP growth

Improvements to domestic revenue mobilization
- Rationalization of spending, in particular recurrent spending
- Reforms to domestic revenue mobilization are required through tax policy and administration reforms
- Enhancing collection for domestic revenue in the sectors where the losses in revenue are the greatest
- Widen the tax base, and improve compliance through various administrative measures could significantly boost revenues
- Rationalizing exemptions on Corporate Income tax (CIT) and Value Added Tax (VAT)

Source: Kenya National Bureau of Statistics
Advocacy : Say what you mean
Say it again
THANK YOU FOR YOUR ATTENTION!

Comments and Questions Welcome!
Revenue Mobilization and the IMF:

- Support SDGs and Addis Ababa Action Agenda to strengthen tax systems in developing countries

- Revenue mobilization has always been a priority at the IMF, but renewed interest is welcome:
  - Scaling up of technical assistance: currently to over 100 countries
  - Policy work (including for the Board)
  - Joint IMF/WB initiative on Domestic Resource Mobilization and Taxation Interagency Task Force on Financing Development
  - Platform for Collaboration on Tax (IMF, OECD, UN, World Bank)
    - Toolkits: (1) Options for Low Income Countries’ Effective and Efficient Use of Tax Incentives for Investment (2015); (2) Addressing Difficulties in Accessing Comparable Data for Transfer Pricing Analyses (+ Information gaps in resource taxation) (2017); (3) Report on Indirect transfers of assets (forthcoming), etc.
    - Outputs for the G-20: (1) Enhancing the effectiveness of external support in building tax capacity (2016); (2) Tax Certainty (forthcoming)
Excises and revenue mobilization

- Main taxes are: CIT, PIT, VAT, customs duties, fuel excises
- Tobacco taxes: 0 to 1 percent of GDP, except for high-income countries and a few middle-income countries
- Other sin taxes typically much lower and more difficult to enforce
- Yet...some upside potential (see graph): 1 to 2 percent of GDP?
- Calculation of tax potential needs to take into account administrative capacity and local conditions
Sin taxes and the IMF technical assistance (1)

Main policy objectives

- Realize the full short term revenue potential, given local administrative / enforcement capacity
- Take health considerations into account, which are compatible with revenue objectives: win-win
- Possible long term tension if revenue decline…but presumably growth in other revenues will offset this decline

Main considerations for revenue setting

- Level of tax: Importance of comparing with neighbors because of base erosion due to smuggling
- Composition of taxes: specific (amount per quantity) vs. ad valorem (percentage of value)
  - Specific taxes: easier to manage / compatible with health objectives / more stable revenue
    …but must be adjusted on a regular basis (automatic adjustments procedure could be in the excise law)
  - Ad valorem: takes inflation into account, base easier to define
Our experience with tobacco & other sin taxes

- Our member countries are overwhelmingly supportive of tax increases
- General preference for specific taxes in the case of tobacco (hence need for frequent adjustments) and ad-valorem for other sin taxes, given the greater difficulty defining the tax base

Strong concern for illicit trade among member countries

- Weak tax administration
- Preference for a gradual/simultaneous approach to tax increase and capacity building
Recent sin taxes and excises publications

Fiscal Fitness
The move to tax taxes to induce healthier behavior has its limits.

Patrick Dréze, Mari-Monika-with this article.

M sary has had some success in curbing the consumption of unhealthy goods. A study by the World Health Organization (WHO) found that a tax on sugar-sweetened beverages (SSB) reduced consumption by up to 20% in some countries. However, the success of such initiatives is limited by several factors, including the affordability of healthier options and the cultural acceptance of taxes on unhealthy goods.

There are important differences between tobacco and unhealthy food.

IMF Working Paper

How to Design and Enforce Tobacco Excises?

by Thomas Matsumasa and Patrick Poll

I N T E R N A T I O N A L M O N E T A R Y F U N D

WP/17/247

TAXING TELECOMMUNICATIONS IN DEVELOPING COUNTRIES

Taxing Telecommunications in Developing Countries

IMF Fiscal Affairs Department
Earmarking: What Do We Understand?

- Earmarking: dedicating the proceeds of a tax to a specific expenditure
  - **Hard earmarking**: uses a formal process that more or less bypasses the budget
  - **Soft earmarking**: does NOT use a formal process and proceeds from the tax thus transit though the central treasury account and are fully subject to annual parliamentary review
  - In reality, *spectrum of earmarking practices*, from very soft to very hard
- NOT a user fee (payment for a public good with private benefits)
- NOT a payment for fully funded future liabilities (e.g., pensions)
- Earmarking is significant, e.g.,
  - Wage taxes to finance social security and/or health in a pay-as-go system
  - Medicare, multiple excises in the USA (e.g., fuel excises earmarked for transport infrastructure)
  - Excises to finance development funds (road, telecom infrastructure, etc.)
  - Use of tobacco taxes to finance tobacco control and health spending in some countries
Sound Budget Formulation

- Economic & social development, and the budget process
  - Development is a multidimensional long term process requiring a long term Development Plan
  - The Medium-term Macroeconomic & Budget Frameworks follow from the Development Plan
  - The annual budget provides adjustments within the Medium-term frameworks

- Policy direction, democratic controls, and transparency
  - The Development Plan, Medium-term frameworks and budgets are subject to Parliamentary controls, in order to guarantee transparency and democratic controls
  - Steady policy direction is ensured by building a consensus around these elements

**Budgeting is a difficult process that involves many compromises but that fosters dialogue, consensus-building, transparency and democracy.**
The Budget Process and Earmarking

- Hard earmarking bypasses the budget
  - No or reduced parliamentary supervision ➔ deficient democratic controls
  - No full annual review ➔ difficulty adjusting to short / medium / long term circumstances
  - May not transit through central treasury account ➔ lack of transparency / governance issues

- There is no guarantee that earmarking will increase financing
  - Funds are fungible
  - Earmarks can eventually be more easily reversed than a budgeted expenditure anchored in a broad social and political consensus
  - Higher financing at times of increasing overall revenue could be limited by the earmark

- Earmarking, public finance, and the IMF
  - The IMF provides advice on overall public finance management,
    ➔ Key question: is earmarking sound advice for overall public finance management? NO
  - Tragedy of the Commons: All seeking own-benefit leads to collective tragedy
IMF Experience with Earmarking

- Earmarking may complicate fiscal management
  - Ecuador (late 1990s): earmarking of up to 50 percent of revenue (army, unions, local governments, etc.) hindered necessary fiscal adjustments (Jacome H., 2004)
  - Latin America (1990s, 1980s): Earmarking of central gvt revenue for transfers to provinces ➔ misalignment of revenue / expenditure in Centre/provinces ➔ Debt (Ahmad and Brosio, 2008)

- Earmarking reduces transparency and parliamentary controls
  - African countries (among others): earmarking of taxes for Road Funds / Telecoms infrastructure development / Airports… ➔ MoF / Parliament have no idea how funds are used

- Earmarking makes reform much more difficult
  - Wage taxes have a negative impact on employment (e.g., Europe) but remain difficult to reform because they generally finance health and social security
  - Eliminating taxes on investments in francophone Africa (e.g., Patente) is almost impossible, because part of the revenue is used to finance local governments
The Case for Soft Earmarking

- Ideally, concurrent political commitment to increase tax revenue and funding for a specific purpose by the same amount
- Open and flexible political commitment supports consensus building, improved allocation of resources and budget transparency & flexibility
  - Guinea (2015): simultaneous commitment to increase tobacco taxes by 40 billion GNF and take 16 billion GNF of this revenue to improve customs enforcement (boats, motorcycles, weapons, etc.)
  - Jamaica (2015): revenue from higher fuel prices partly dedicated to new energy sources
  - Philippines (2012): significant increase in health funding from tobacco taxes, while keeping annual budget controls and the possibility to reallocate funds (albeit within health sector) – WHO (2017)
  - “Earmarking has been more effective when practices come closer to standard budget processes – that is softer earmarks with broader expenditures purposes and more flexible revenue-expenditure links” – WHO (2017)
Existing, but limited revenue potential from sin taxes: probably not enough for large scale increase in healthcare financing

➤ BROADER REVENUE MOBILIZATION EFFORT IS NEEDED

The IMF has broad public finance perspective and concerns on earmarking

➤ Strengthening budget processes is a CORE CHALLENGE for development and democracy

➤ Hard earmarking clearly violates many basic principles of sound budget formulation and has been causing the IMF many headaches

➤ …But soft earmarking is more compatible with good budget processes
Thank you
References


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Adam Smith, the 18th-century social philosopher and political economist renowned as the father of modern economics, observed in his seminal work, The Wealth of Nations, that “sugar, rum, and tobacco are commodities which are nowhere necessaries of life, [but] which are ... objects of almost universal consumption, and which are therefore extremely proper subjects of taxation.”

Accumulated evidence on taxes from around the world, particularly on tobacco taxation, shows that taxing these products can offer a “win-win” for countries strengthening their health systems by increasing both positive health outcomes and domestic resources to fund priority investments and programs. The public health impact, revenue generation and increased equity that could result from taxing specific products all point to the value of a redoubled and sustained effort to support the utilization of this fiscal policy as a global public good.

To move this global agenda forward, 35 participants from 12 low- and middle-income countries came together in Nairobi, Kenya, on February 13, 2018, to participate in a learning exchange of country experiences organized by the Joint Learning Network for Universal Health Coverage (JLN) with support from the World Bank’s Global Tobacco Control Program and co-hosted by the Ministry of Health of Kenya. This event was the first offering of a new JLN collaborative on Fiscal Policy for Public Health.

The country experiences shared during this event demonstrated how increasing tobacco taxes plays an important role in raising the price of tobacco products and consequentially, reducing consumption and generating new revenue for the public sector. The evidence from taxing alcohol and sugar-sweetened beverages combined with non-fiscal measures such as regulations on advertising and sales to minors, strict enforcement of drunk-driver laws and educating consumers are also increasingly revealing a positive public health impact.

**Countries’ Experiences with Sin Taxes**

However, in the case of tobacco taxes, taxation policies remain underused globally – especially in low- and middle-income countries. The good news is that there is a growing interest among policymakers and public health professionals in leveraging these fiscal options to increase resources for health systems.
The range of experiences presented by Kenya, Malaysia, Mexico, Ukraine, the United Kingdom, and the United States at the JLN event established taxation as both an effective and progressive policy. For example, the significant increase in tobacco taxes in Ukraine over the past decade has generated tax revenues amounting to approximately 1.7 percent of the country’s GDP in 2017 and resulted in a 20 percent reduction in the proportion of the population who smoke tobacco daily. The progressive tobacco taxation in Ukraine benefits low-income Ukrainians 10 percent more when direct costs like out-of-pocket health care expenses are factored in and indirect costs such as lost days of work due to sickness are averted.

In the case of Malaysia, recent studies show that to achieve a further reduction in the overall prevalence of smoking among adults – from 24 percent in 2015 to 15 percent in 2025 – the excise tax should be raised from its current rate of 47 percent to 78 percent of the retail price.

An increase in alcohol taxes in the United Kingdom is predicted to reduce the consumption and avoidance of new cases of alcohol-related diseases and related health care costs. Similarly, to confront the alarming rise of obesity and diabetes in Mexico, taxes on sugar-sweetened beverages led to a 10 percent decrease in sales. Meanwhile, the city of Berkley, California documented a 21 percent reduction in self-reported sugar-sweetened beverage consumption over the initial implementation phase of a new tax.

Kenya offers important lessons on real-time political economy and implementation challenges, reiterating the difficult path to introducing new fiscal policies and the value of learning from other countries’ experiences.

The case of Kenya indicates that necessary elements for a successful tax campaign include collaboration with solid, technical in-country partners that can lead the effort on the ground, sustained advocacy and lobbying with key governments officials and stakeholders, the generation of critical data to inform and support advocacy messaging, constant monitoring and countering industry interference and tactics, and proactive public engagement through appropriate media channels.

**Key Conclusions on Fiscal Policies for Public Health**

During an interactive brainstorming session, JLN participants focused on the public health implications of fiscal policy measures in addition to their traditional role of raising revenue and shared their countries’ experiments with these approaches.

The participants identified several key take-home messages, including:
• As a major next step, considering taxing tobacco if it has not yet been implemented in countries and advocating for the introduction or increase of taxes on tobacco and sugary drink products to reduce health risks and the onset of related diseases to policymakers;

• Directing additional efforts to build capacity on the use of simulation models so that the expected impact of policy scenarios can be assessed;

• Documenting best practices, lessons learned and peer countries experiences in managing implementation challenges; and

• Exploring ways countries could work together on these issues.

The use of fiscal policies such as the taxation of products that pose major health risks for noncommunicable diseases is clearly among the most cost-effective measures for health systems as countries seek to achieve universal health coverage.

If these fiscal policies remain underutilized, the growing burden posed by tobacco and alcohol use and the consumption of sugary beverages will increase the number of people diagnosed with noncommunicable diseases, raising the demand and utilization of costly medical care and undermining the financial sustainability of entire health systems.

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