The Economics of Tobacco and Tobacco Taxation: Global Evidence and Implications for Indonesia

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Customs and Excise Directorate General, Ministry of Finance
Jakarta, Indonesia, 5 April 2017
Overview

• Economic costs of tobacco use
• Impact of tobacco taxes on tobacco use
• Myths & Facts on economic “costs” of tobacco taxation and tobacco control
• Implications for Indonesia
Economic Costs of Tobacco Use
Economic Rationale for Tobacco Control

Major Conclusion 2: Failures in the markets for tobacco products provide an economic rationale for governments to intervene in these markets.
Smoking-Attributable Spending as Share of Total Health Expenditures, 2012, by Income Group and WHO Region

Source: Goodchild, et al., 2017

[Bar chart showing the percentage of health expenditure attributable to smoking for different income groups and WHO regions, with values for LIC, LMIC, UMIC, HIC, World, AFR, AMR, EMR, EUR, SEAR, and WPR.]
Economic Costs of Smoking-Attributable Diseases as Share of GDP, 2012, by Income Group and WHO Region

Source: Goodchild, et al., 2017
Impact of Tobacco Tax Increases
"Sugar, rum, and tobacco, are commodities which are nowhere necessaries of life, which are become objects of almost universal consumption, and which are therefore extremely proper subjects of taxation."
Cigarette Price & Consumption
Mexico, 2001-2014, Inflation Adjusted

Sources: EIU, Euromonitor, and World Bank

www.tobacconomics.org
Percentage Change in Real Cigarette Prices vs. Percentage Change in Per Capita Consumption of Cigarettes, 1996–2011

Note: Country income group classification based on World Bank Analytical Classifications for 2011.
Sources: Economist Intelligence Unit 2012; ERC Group 2011; NCI & WHO Monograph, 2016

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Cigarette Price & Consumption
Indonesia, 2001-2014, Inflation Adjusted

Sources: EIU, Euromonitor, and World Bank

www.tobacconomics.org
Adult Smoking Prevalence & Price

Brazil, Inflation Adjusted, 2006-2013

Sources: Ministry of Health, Brazil; EIU; World Bank

www.tobacconomics.org
Cigarette Price & Adult Prevalence
Indonesia, 2001-2014, Inflation Adjusted

Sources: EIU, Euromonitor, and World Bank

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Monthly Quit Line Calls, United States
11/04-11/09

4/1/09 Federal Tax Increase
1/1/08 WI Tax Increase

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Cigarette Prices and Cessation
US States & DC, 2009

% Ever Smokers Who Have Quit

Average price (in cents)

y = 0.0283x + 43.083
R² = 0.37104

Source: BRFSS, Tax Burden on Tobacco, 2010, and author’s calculations

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Cigarette Price & Youth Smoking Prevalence
Chile, 2000-2015

Source: Paraje, 2017

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Price, Consumption & Lung Cancer
France, 1980-2010

Lung cancer death rates per 100,000 (divided by four): men age 35-44

Relative price

Sources: Jha & Hill, 2012

www.tobacconomics.org
Chapter 4, Conclusion 1:

A substantial body of research, which has accumulated over many decades and from many countries, shows that significantly increasing the excise tax and price of tobacco products is the single most consistently effective tool for reducing tobacco use.
Best Practices in Tobacco Taxation
Recommended

Section 3 – Tobacco taxation systems

“Parties should implement the simplest and most efficient system that meets their public health and fiscal needs, and taking into account their national circumstances. **Parties should consider implementing specific or mixed excise systems with a minimum specific tax floor**, as these systems have considerable advantages over purely ad valorem systems.”
## Excise systems for cigarettes 2014

<table>
<thead>
<tr>
<th></th>
<th>Number of countries (global)</th>
<th>Number of countries (Americas)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total covered</td>
<td>186</td>
<td>33</td>
</tr>
<tr>
<td>Specific excise only</td>
<td>61</td>
<td>15</td>
</tr>
<tr>
<td>Ad valorem excise only</td>
<td>46</td>
<td>9</td>
</tr>
<tr>
<td>Mixture of both excises</td>
<td>61</td>
<td>7</td>
</tr>
<tr>
<td>No Excise</td>
<td>18</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: WHO 2015

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Excise systems on cigarettes

<table>
<thead>
<tr>
<th>Base of tiers</th>
<th>Country</th>
<th># of countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail price</td>
<td>Bangladesh, Mozambique, Philippines, Belarus, Indonesia, Pakistan</td>
<td>6</td>
</tr>
<tr>
<td>High, standard and low end cigarettes</td>
<td>Burkina Faso, Senegal</td>
<td>2</td>
</tr>
<tr>
<td>Producer price</td>
<td>China</td>
<td>1</td>
</tr>
<tr>
<td>Production volume</td>
<td>Indonesia</td>
<td>1</td>
</tr>
<tr>
<td>Type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>filter/non filter</td>
<td>Armenia, Belarus, India, Nepal, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Papua New Guinea, Tajikistan, Ukraine</td>
<td>11</td>
</tr>
<tr>
<td>hand/machine made</td>
<td>Indonesia, India, Philippines</td>
<td>3</td>
</tr>
<tr>
<td>kretek/white cigarette, cheerot/cigarette</td>
<td>Indonesia, Myanmar</td>
<td>2</td>
</tr>
<tr>
<td>Tobacco content (dark/blonde or dark/light)</td>
<td>Andorra, Algeria</td>
<td>2</td>
</tr>
<tr>
<td>Packaging</td>
<td></td>
<td></td>
</tr>
<tr>
<td>soft/hard</td>
<td>Brazil, Mozambique, Uganda</td>
<td>3</td>
</tr>
<tr>
<td>Cigarette length</td>
<td>India, Nepal, Hong Kong, Sri Lanka</td>
<td>4</td>
</tr>
<tr>
<td>Trade (domestic/imported)</td>
<td>Andorra, Uzbekistan</td>
<td>2</td>
</tr>
<tr>
<td>Weight (tobacco content in cigarette)</td>
<td>Belize, New Zealand</td>
<td>2</td>
</tr>
<tr>
<td>Leaf content (domestic/imported)</td>
<td>Fiji</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: WHO 2015

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## Tax structure and nominal tax rates

<table>
<thead>
<tr>
<th>STRATA</th>
<th>Production (Stick/year)</th>
<th>EXCISE RATE (PER STICK)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SKM I</td>
<td>&gt; 2.0 Billion</td>
<td>290</td>
</tr>
<tr>
<td></td>
<td></td>
<td>280</td>
</tr>
<tr>
<td></td>
<td></td>
<td>260</td>
</tr>
<tr>
<td>SKM II</td>
<td>&lt; 2.0 Billion</td>
<td>210</td>
</tr>
<tr>
<td></td>
<td></td>
<td>175</td>
</tr>
<tr>
<td>SKT I</td>
<td>&gt; 2.0 Billion</td>
<td>200</td>
</tr>
<tr>
<td></td>
<td></td>
<td>150</td>
</tr>
<tr>
<td>SKT II</td>
<td>&gt; 300 Million &lt; 2.0 Billion</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td></td>
<td>80</td>
</tr>
<tr>
<td>SKT III</td>
<td>&lt; 300 Million</td>
<td>75</td>
</tr>
<tr>
<td>SPM I</td>
<td>&gt; 2.0 Billion</td>
<td>290</td>
</tr>
<tr>
<td></td>
<td></td>
<td>230</td>
</tr>
<tr>
<td>SPM II</td>
<td>&lt; 2.0 Billion</td>
<td>170</td>
</tr>
<tr>
<td></td>
<td></td>
<td>135</td>
</tr>
<tr>
<td>SPM III</td>
<td></td>
<td>80</td>
</tr>
</tbody>
</table>
## Tax structure and real tax rates (constant 2010 prices)

<table>
<thead>
<tr>
<th>STRATA</th>
<th>Production (Stick/year)</th>
<th>EXCISE RATE (PER STICK)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SKM</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>&gt; 2.0 Billion</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Machine-made kretakes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>403 410 408 428 424 399 415</td>
<td></td>
</tr>
<tr>
<td></td>
<td>389 397 396 415 402 378 391</td>
<td></td>
</tr>
<tr>
<td></td>
<td>362 370 370 391</td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>&lt; 2.0 Billion</td>
<td></td>
</tr>
<tr>
<td></td>
<td>292 304 308 325 323 303 305</td>
<td></td>
</tr>
<tr>
<td></td>
<td>243 258 264 283 277 261 265</td>
<td></td>
</tr>
<tr>
<td></td>
<td>188 205 213</td>
<td></td>
</tr>
<tr>
<td><strong>SKT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>&gt; 2.0 Billion</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hand-made kretakes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>278 284 295 307 311 292 290</td>
<td></td>
</tr>
<tr>
<td></td>
<td>209 218 226 235 232 218 220</td>
<td></td>
</tr>
<tr>
<td></td>
<td>181 192 195</td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>&gt; 300 Million &lt; 2.0 Billion</td>
<td></td>
</tr>
<tr>
<td></td>
<td>125 139 138 151 147 138 140</td>
<td></td>
</tr>
<tr>
<td></td>
<td>111 126 126 138 136 128 125</td>
<td></td>
</tr>
<tr>
<td></td>
<td>104 119 113 126 124 117</td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>&lt; 300 Million</td>
<td></td>
</tr>
<tr>
<td>IIIB</td>
<td></td>
<td>56</td>
</tr>
<tr>
<td><strong>SPM</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>&gt; 2.0 Billion</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Machine-made white cigarettes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>403 410 408 440 430 404 425</td>
<td></td>
</tr>
<tr>
<td></td>
<td>320 364 370</td>
<td></td>
</tr>
<tr>
<td></td>
<td>257 298 308</td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>&lt; 2.0 Billion</td>
<td></td>
</tr>
<tr>
<td></td>
<td>236 265 270 283 277 261 270</td>
<td></td>
</tr>
<tr>
<td></td>
<td>188 218 220 229 221 207 220</td>
<td></td>
</tr>
<tr>
<td></td>
<td>111 139 138 151</td>
<td></td>
</tr>
</tbody>
</table>
Excise tax structure: Specific and mixed relying more on the specific component tend to lead to higher prices

Source: WHO 2015
Excise tax structure: Simple specific and mixed relying more on specific tax to lead to less variable prices

Source: Chaloupka, et al., 2014
Excise tax structure: Specific and mixed relying more on the specific component tend to reduce price gaps

Source: WHO 2015

Notes: Data not reported/not available for: Democratic People’s Republic of Korea. It is illegal to sell cigarettes in Bhutan.
Recommendations

Section 2 – Relationship between tobacco taxes, price and public health:

“When establishing or increasing their national levels of taxation Parties should take into account – among other things – both price elasticity and income elasticity of demand, as well as inflation and changes in household income, to make tobacco products less affordable over time in order to reduce consumption and prevalence. Therefore, Parties should consider having regular adjustment processes or procedures for periodic revaluation of tobacco tax levels.”
“Parties should establish coherent long-term policies on their tobacco taxation structure and monitor on a regular basis including targets for their tax rates, in order to achieve their public health and fiscal objectives within a certain period of time.”

“Tax rates should be monitored, increased or adjusted on a regular basis, potentially annually, taking into account inflation and income growth developments in order to reduce consumption of tobacco products.”
Affordability and Tobacco Use
Bangladesh, 1997-2010

Affordability and Per Capita Consumption over time in Bangladesh from 1997 to 2010. The graph shows the dynamic relationship between affordability and per capita consumption, with affordability generally decreasing from 1997 to approximately 2003, followed by an increase towards 2007, and a sharp decline thereafter. Per capita consumption shows a more complex trend, initially increasing and then decreasing before rising significantly by 2009.

Source: Euromonitor, EIU, World Bank

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Cigarette Affordability
Selected Countries, by Country Income Group, 2000-2013

Notes: Relative income price is the percentage of annual per capita GDP required to buy 100 packs of cigarettes. Country income group classification based on World Bank Analytical Classifications for 2013.

Source: NCI & WHO 2016
Cigarette Affordability & Sales
Indonesia, 2001-2014

Sources: Euromonitor, EIU, World Bank

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“As recognized in Guiding Principle 1.1, Parties have the sovereign right to determine and establish their taxation policies, including the level of tax rates to apply. There is no single optimal level of tobacco taxes that applies to all countries because of differences in tax systems, in geographical and economic circumstances, and in national public health and fiscal objectives. In setting tobacco tax levels, consideration could be given to final retail prices rather than individual tax rates. In this regard, WHO had made recommendations on the share of excise taxes in the retail prices of tobacco products\(^1\).”

\(^1\) WHO technical manual on tobacco tax administration. Geneva, World Health Organization, 2010. (Recommends that tobacco excise taxes account for at least 70% of the retail prices for tobacco products).
Average Price of the Most Sold Brand & Excise Tax per pack, and Excise Tax Share

By Income Group 2014

Source: NCI & WHO 2016

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Average Price of the Most Sold Brand & Excise Tax per pack, and Excise Tax Share

By WHO Region 2014

Source: NCI & WHO, 2016
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Average Price of the Most Sold Brand & Excise Tax per pack, and Excise Tax Share

SOUTH-EAST ASIA: Share of total and excise taxes in the price of a pack* of the most sold brand of cigarettes, 2014

<table>
<thead>
<tr>
<th>Country</th>
<th>% Excise Tax</th>
<th>% All Other Taxes</th>
<th>Total Taxes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>61%</td>
<td>15%</td>
<td>76.0%</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>63%</td>
<td>14%</td>
<td>73.8%</td>
</tr>
<tr>
<td>Thailand</td>
<td>67%</td>
<td>9%</td>
<td>73.1%</td>
</tr>
<tr>
<td>Maldives</td>
<td>0%</td>
<td>100%</td>
<td>65.8%</td>
</tr>
<tr>
<td>India</td>
<td>44%</td>
<td>56%</td>
<td>60.4%</td>
</tr>
<tr>
<td>Indonesia</td>
<td>45%</td>
<td>55%</td>
<td>53.4%</td>
</tr>
<tr>
<td>Myanmar</td>
<td>50%</td>
<td>50%</td>
<td>50.0%</td>
</tr>
<tr>
<td>Timor-Leste</td>
<td>30%</td>
<td>70%</td>
<td>63.0%</td>
</tr>
<tr>
<td>Nepal</td>
<td>16%</td>
<td>84%</td>
<td>76.0%</td>
</tr>
</tbody>
</table>

Democratic People's Republic of Korea: 0% 0.0%

Source: WHO 2015
Note: It is illegal to sell cigarettes in Bhutan

www.tobacconomics.org
Recommendations

Section 3 – Tobacco taxation systems

“All tobacco products should be taxed in a comparable way as appropriate, in particular where the risk of substitution exists.”

“Parties should ensure that tax systems are designed in a way that minimises the incentive for users to shift to cheaper products in the same product category or to cheaper tobacco product categories as a response to tax or retail price increases or other related market effects.”

“In particular, the tax burden on all tobacco products should be regularly reviewed and, if necessary, increased and, where appropriate, be similar.”
Price & Other Tobacco Product Use

• Consistent evidence on own-price effects
  – Generally find demand for OTP and vaping products more responsive to price than cigarette demand

• Mixed evidence on substitution among products
  – Greater substitution among more similar products (e.g. cigarettes and other combustibles)
  – Some evidence of substitution between cigarettes and vaping products
  – Weak evidence of complementarity between combustibles and other non-combustibles

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Taxable RYO and Pipe Tobacco, US, 2008-2009

Source: US Treasury Department, Alcohol and Tobacco Tax and Trade Bureau

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“Parties should ensure that transparent licence or equivalent approval or control systems are in place.”

“Parties are urged to adopt and implement measures and systems of storage and production warehouses to facilitate excise controls on tobacco products.”

“In order to reduce the complexity of tax collection systems, excise taxes should be imposed at the point of manufacture, importation or release for consumption from the storage or production warehouses.”

“Tax payments should be required by law to be remitted at fixed intervals or on a fixed date each month and should ideally include reporting of production and/or sales volumes, and price by brands, taxes due and paid, and may include volumes of raw material inputs.”

“Tax authorities should also allow for the public disclosure of the information contained within the reports, through the available media, including those online, taking into account confidentiality rules in accordance with national law.”
“In anticipation of tax increases Parties should consider imposing effective anti-forestalling measures.”

“Where appropriate, Parties should consider requiring the application of fiscal markings to increase compliance with tax laws.”

“Parties should clearly designate and grant appropriate powers to tax enforcement authorities.”

“Parties should also provide for information sharing among enforcement agencies in accordance with national law.”

“In order to deter non-compliance with tax laws, Parties should provide for an appropriate range of penalties.”
Philippines Experience Stockpiling

Source: Ross & Tesche, 2015
California’s Encrypted Cigarette Tax Stamps

2005-2010

2011-present

Source: Chaloupka, et al., 2015
Cigarette Tax Stamps Sold
Projected and actual, California, 2000 - 2013

Cigarette Stamps Sold (in thousands)

Source: Chaloupka, et al., 2015
“Parties could consider, while bearing in mind Article 26.2 of the WHO FCTC, and in accordance with national law, dedicating revenue to tobacco-control programmes, such as those covering awareness raising, health promotion and disease prevention, cessation services, economically viable alternative activities, and financing of appropriate structures for tobacco control.”

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Taxes & Tax Revenues, South Africa

Excise Tax per Pack and Excise Tax Revenue South Africa, Inflation Adjusted, 1961-2012

Sources: Blecher & Van Walbeek, 2014

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Tobacco Taxes Popular

• Tobacco Excise Tax Increases:
  • Generally supported by the public
    • Including significant number of smokers
  • More support when framed in terms of impact on youth tobacco use
  • More support when some of new revenues are used to support tobacco control and/or other health-related activities
  • Greater support than for other revenue sources

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Support for 20% Price Increase
Non-Smokers, 2010

Source: Gallus, et al., 2012

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Support for 20% Price Increase
Current Smokers, 2010

Source: Gallus, et al., 2012

www.tobacconomics.org
“Parties should consider prohibiting or restricting the sale to and/or importation by international travellers, of tax-free or duty-free tobacco products.”
Oppositional Arguments

• Massive job losses as tobacco use falls in response to tobacco control policies
• Poor adversely affected by higher tobacco taxes
• Increased illicit trade in response to higher taxes and other tobacco control policies
Oppositional Arguments

Impact on Jobs, Business
Impact on Jobs

March 9, 2009 – Vanguard, AllAfrica.com

Nigeria Anti-Tobacco Bill – 400,000 Jobs on the Line

• “if passed into law, The National Tobacco Bill which is currently on the floor of the National Assembly will lead to at least 400,000 Nigerians being thrown into the unemployment market.”

• “This was the view expressed by the Chairman, Senate Committee on Industries, Senator Kamorudeen Adedbu, while speaking with reporters recently in Iselyn, Oyo State, while speaking at the 2008 Farmers Productivity Day Award Ceremony.”
Tobacco Control & Employment

• Tobacco control will lead to decreased consumption of tobacco products
  – Small loss of jobs in tobacco sector
• Money not spent on tobacco products will be spent on other goods and services
  – Gains in jobs in other sectors
• Increase in tobacco tax revenues will be spent by government
  – Additional job gains in other sectors
• Net increase in jobs in most countries
  – Use of tax revenues to support alternative livelihoods
Tobacco Control & Business

Impact of smoke-free policies on hospitality sector

- No or small positive impact of smoke-free policies on bar and restaurant business (IARC Handbook 13)

Impact of tobacco control policies on convenience stores (Huang and Chaloupka 2012)

- More business activity where cigarette taxes are higher
- No impact of smoke-free policies
- Overshifting and replacement purchase
Economic Impact of Tobacco Control

Major Conclusion #7:
Tobacco control does not harm economies.
Oppositional Arguments - Impact on the Poor
Impact on the Poor

July 23, 2010 – San Francisco Examiner

• “Democrats are relying more heavily in their midterm 2010 election message that Republicans care nothing about the poor. Conveniently absent from this analysis is Republican opposition to President Barack Obama’s cigarette tax increase…… While higher cigarette taxes do discourage smoking, they are highly regressive. Analyzing a slightly less severe proposal in 2007, the Tax Foundation noted that ‘no other tax hurts the poor more than the cigarette tax.’” Peyton R. Miller, special to the Examiner.
Impact on the Poor

• Concerns about the regressivity of higher tobacco taxes

  – Tobacco taxes are regressive, but tax increases can be progressive
  
  • Greater price sensitivity of poor – relatively large reductions in tobacco use among lowest income populations, small reductions among higher income populations
  
  • Health benefits that result from tax increase are progressive
Tobacco & Poverty

Forgone Income 1: More money spent on tobacco: high opportunity cost. Less money spent on education, nutrition, etc.

Forgone Income 2: Due to treatment cost and loss of work days

Forgone Income 3: Due to premature death

Breadwinner gets sick due to tobacco use

Higher prevalence and consumption level

Youth and women start smoking and men smoke more

Income increases

Family falls into poverty

Vicious Cycle of Tobacco and Poverty

Source: NCI & WHO 2016

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Who Pays & Who Benefits
Turkey - 25% Tax Increase

Change in Consumption
-35.3%

Change in Taxes Paid
-2.2%

Source: Adapted from Önder & Yürekli, 2014

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Impact of Tobacco Taxes on the Poor

Also depends on use of new tax revenues:

• Greater public support for tobacco tax increases when revenues are used for tobacco control and/or other health programs

• Net financial impact on low income households can be positive when taxes are used to support programs targeting the poor

• Concerns about regressivity offset by use of revenues for programs directed to poor
Philippines ‘Sin Tax’ Reform

Sin Tax Revenues for Health

<table>
<thead>
<tr>
<th>Year</th>
<th>Baseline</th>
<th>Sin Tax Rev for Health</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>53.2</td>
<td>53.2</td>
<td>106.4</td>
</tr>
<tr>
<td>2014</td>
<td>30.5</td>
<td>83.7</td>
<td>114.2</td>
</tr>
<tr>
<td>2015</td>
<td>33.8</td>
<td>87.0</td>
<td>120.8</td>
</tr>
<tr>
<td>2016</td>
<td>53.2</td>
<td>69.4</td>
<td>122.6</td>
</tr>
</tbody>
</table>

Prescribed Allocation

- Universal Health Care Expenditure: 80% = 55.5
- Medical Assistance & HEFP: 20% = 13.9

Total: 69.4

Source: Paul, 2016
Impact of Tobacco Control on the Poor

Major Conclusion #8:
Tobacco control reduces the disproportionate burden that tobacco use imposes on the poor.
Oppositional Arguments
- Illicit Trade
Franklin Murillo, the manager of British American Tobacco in Costa Rica, told La Nación on March 31 that “In the face of higher taxes on a legal product … an illicit market will arise that does not compete under equal conditions and provides products at lower prices and lower quality.”

This is a phenomenon that merits our attention. Since the enactment of the Anti-Tobacco Law in Costa Rica on March 2012, we’ve been under the impression that cigarette use has gone down. However, in reality, we’ve seen a dramatic increase in illegal smuggling, and all because of a lack of understanding of how the market works.

In Costa Rica, it was thought that if taxes on cigarettes were increased, no one would buy them anymore because of higher prices. People failed to realize that doing this would only lead to tobacco users turning to the black market.
Tax Avoidance & Evasion Do NOT Eliminate Health Impact of Higher Taxes

NYC Smoking Prevalence Declined as Price Increased

Source: Schroth, 2014

www.tobacconomics.org
Tax Avoidance & Evasion
Do NOT Eliminate Revenue Impact of Higher Taxes

Cook County Cigarette Tax and Tax Revenues - FY01-FY06

Chicago tax rises from 16 to 48 cents, 1/16/06
Chicago smoking ban, 1/16/06
Chicago tax up to 68 cents, 1/1/06
Illicit Cigarette Market Share & Cigarette Prices, 2012

Sources: NCI & WHO, 2016

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Determinants of Illicit Tobacco

- Corruption
- Weak tax administration
- Poor enforcement
- Presence of informal distribution networks
- Presence of criminal networks
- Access to cheaper sources
Illicit Cigarette Market Share and Percentage of Most Popular Price Category Accounted for by Taxes

Italy, 1991–2010

Source: NCI & WHO 2016

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Combating Illicit Tobacco Trade

• Illicit trade protocol to the WHO FCTC
  – Adopted November 2012; currently in process of being signed/ratified; provisions calling for:
  – Strong tax administration
    • Prominent, high-tech tax stamps and other pack markings
    • Licensing of manufacturers, exporters, distributors, retailers
    • Export bonds
    • Unique identification codes on packages
  – Better enforcement
    • Increased resources
    • Focus on large scale smuggling
  – Swift, severe penalties
  – Multilateral/intersectoral cooperation

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Major Conclusion #5:

Control of illicit trade in tobacco products, now the subject of its own international treaty, is the key supply-side policy to reduce tobacco use and its health and economic consequences.
Summary
Economic Impact of Tobacco Control

Tobacco tax increases and other effective tobacco control measures make good economic sense:

- Not just long-term public health, but near-term health and economic benefits
- Tobacco control will not harm economies
- Substantial impact in reducing health care costs, improving productivity, and fostering economic development.
Key Tobacco Control Policies
Cost-Effectiveness

Source: NCI & WHO, 2016

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Key Tobacco Control Policies
Cost-Effectiveness

Source: NCI & WHO, 2016

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Implications for Indonesia

- Simplify existing complex tax system
- Significantly increase tobacco taxes
- Regularly adjust taxes for inflation and income growth
- Dedicate revenues to tobacco control programs, support for cessation, and other health promotion efforts
- Strengthen tax administration in order to counter illicit trade
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