The Economics of Tobacco and Tobacco Taxation in the Philippines

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“Eliminating the price classification freeze and applying a uniform specific tax of 28.30 pesos per pack, which is further indexed for inflation, could avert over 3.5 million premature deaths in the current population while raising 53.8 billion pesos (US$ 1.2 billion) annually in excise tax revenues.”

One of a series of reports on tobacco taxation funded by Bloomberg Philanthropies and the Bill and Melinda Gates Foundation as part of the Bloomberg Initiative to Reduce Tobacco Use.
Overview

- Tobacco use and its consequences
- Cigarette taxes and prices
  - Tobacco tax structure: “Best Practices”
- Demand for cigarettes
  - Global evidence
  - Evidence from the Philippines
- Impact of cigarette tax increases
  - On consumption, tax revenues and public health
  - On the poor
- Recommendations for tobacco taxation
- Brief discussion of demand for alcohol
Tobacco Use and its Consequences in the Philippines
Tobacco Use in the Philippines

- One of the largest tobacco consuming countries in the Western Pacific region and in the world
- Little change in prevalence over past 15 or more years
- Declining consumption per smoker, but increases in overall consumption over past decade
- Significant tobacco use among youth
- Rising tobacco use among girls
Cigarette Smoking Prevalence
Philippines, 1995-2009

Cigarette Smoking Prevalence
Philippines, 2009, by Education, Wealth and Urban/Rural

Source: GTSS (2010b).
Youth Tobacco Use in the Philippines

- In 2007, among in-school youth ages 13-15 years:
  - 22.7% prevalence of tobacco use
    - Up from 15.9% in 2004
  - 17.5% prevalence of cigarette smoking
  - 12.9% of never smokers likely to smoke in next year
  - 86.0% tried to quit in past year
  - 88.1% wish to stop smoking

Youth Tobacco Use in the Philippines

Use among girls of particular concern

- 17.3% prevalence of tobacco use
  - Well above 10% prevalence rate for women 15 years and older, suggesting much higher future prevalence among adult women

Age of initiation falling

- Men: 17.9 years among 25-34 year olds vs. 19.1 among 45-54 year olds
- Women: 20.1 years among 25-34 year olds vs. 26.4 among 45-54 year olds

Sources: GYTS (2007), GATS (2009), and Giovino, et al. (2012).
Tax Paid Cigarette Sales
Philippines, 1997-2010

Health Consequences

- Globally, about 6 million deaths annually caused by tobacco use
  - About 70% in low/middle-income countries
  - Half of regular users die prematurely
  - About ½ in middle age, with average of 20-25 years of life lost
  - Quitting greatly reduces risks from tobacco use
    - Quitting before middle age avoids nearly all of excess risk
    - Quitting at later ages still beneficial
- 87,600 annual deaths from tobacco in the Philippines

Sources: Jha, et al. (2006); International Agency for Research on Cancer (2007)
Economic Consequences

- Considerable spending on health care to treat diseases caused by smoking
- Significant productivity losses from death and disease caused by tobacco use

In the Philippines, in 2003:
- 26.1-44.6 billion pesos spent treating 4 major diseases caused by tobacco use
- As much as 260 billion in lost productivity from premature deaths caused by tobacco use
- 9.6 billion pesos in lost productivity from tobacco caused diseases
- Together, over 7% of GDP

Sources: Tobacco and Poverty study, 2007
Economic Rationale for Intervention

- Significant market failures in tobacco product markets:
  - Imperfect information
    - About ¼ of Filipino smokers do not believe that smoking causes lung cancer
    - Almost 1/3 are not aware that smoking causes strokes
  - Addiction and initiation at early ages
    - Almost 90% of young smokers want to quit
  - Health and financial externalities
    - Over 1/2 of adult non-smokers exposed to tobacco smoke at home, and over 1/3 exposed at work
    - Publicly financed health care to treat diseases caused by tobacco use
Cigarette Taxes & Prices in the Philippines
Types of Tobacco Excise Taxes

Specific taxes:

- Easier to administer
  - No valuation issues
- Real value falls with inflation
- Smaller price gap between high/low priced brands
- Generally produce more stable stream of revenue
- Promote higher “quality” products
  - Producers keeps all of additional price from higher quality products
Types of Tobacco Excise Taxes

- *Ad valorem* taxes:
  - More difficult to administer
    - Valuation problems, abusive “transfer” pricing
    - May require minimum price policies
  - More likely to keep pace with inflation
  - More unstable revenues
    - Government subsidizes industry price cuts but benefits from industry price increases
  - Larger price gap
    - Greater potential for “switching down” in response to tax increase
  - Favor low “quality” products
    - Less incentive to invest in quality given price rises by more
  - May be protective for domestic industry
    - if imports or foreign-owned brands tend to be higher quality/price
  - More “equitable”
    - Absolute amount of tax higher on higher priced brands
Types of Tobacco Excise Taxes

- Mixed systems
  - More difficult to administer given variety of different prices
    - Valuation problems, abusive “transfer” pricing
  - Better able to keep pace with inflation
  - Somewhat less stable revenues
    - Government still subsidizes industry price cuts and benefits from industry price increases, just not as much
  - Reduced price gap
    - Relative to pure ad valorem
  - More protective for domestic industry
    - Relative to pure specific
  - Somewhat more “equitable”
Excise Taxes in the Philippines

- Current excise taxes set by Sin Tax Law of 2004
  - Complicated 4-tier specific tax structure with tax per pack rising with ‘net retail price’
  - Further complicated by ‘price classification freeze’
    - Fixes tax rate based on brand specific net retail price as of October 1, 1996
    - Significant barrier to new brands which are taxed based on net retail price at time of entry
  - Complicated tax structure result of crony capitalism and influence of Fortune Tobacco Company
- 12% VAT on sum of NRP and excise tax
Cigarette Prices in 2011
With and Without Price Classification Freeze

Source: Euromonitor (2011) and authors’ calculations
Share of Total and Excise Taxes in Cigarette Prices, Most Sold Brand, WPR, 2010

## Price of Pack of Most Sold and Cheapest Cigarettes, International Dollars, WPR, 2010

<table>
<thead>
<tr>
<th>Country</th>
<th>Cheapest brand</th>
<th>Most sold brand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singapore</td>
<td>$0</td>
<td>$11.30</td>
</tr>
<tr>
<td>Vanuatu</td>
<td>$1</td>
<td>$10.69</td>
</tr>
<tr>
<td>Australia</td>
<td>$2</td>
<td>$7.74</td>
</tr>
<tr>
<td>Tonga</td>
<td>$3</td>
<td>$7.43</td>
</tr>
<tr>
<td>New Zealand</td>
<td>$4</td>
<td>$6.95</td>
</tr>
<tr>
<td>Malaysia</td>
<td>$5</td>
<td>$5.54</td>
</tr>
<tr>
<td>Samoa</td>
<td>$6</td>
<td>$5.51</td>
</tr>
<tr>
<td>Japan</td>
<td>$7</td>
<td>$2.71</td>
</tr>
<tr>
<td>Brunei Darussalam</td>
<td>$8</td>
<td>$2.29</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>$9</td>
<td>$1.99</td>
</tr>
<tr>
<td>Mongolia</td>
<td>$10</td>
<td>$1.94</td>
</tr>
<tr>
<td>Lao People's Democratic Republic</td>
<td>$11</td>
<td>$1.46</td>
</tr>
<tr>
<td>China</td>
<td>$12</td>
<td>$1.29</td>
</tr>
<tr>
<td>Philippines</td>
<td>$0</td>
<td>$0.86</td>
</tr>
</tbody>
</table>

Best Practices

- For maximum public health impact:
  - Focus on excise taxes
  - Simple tax structure
  - Emphasize specific tax
  - Tax all tobacco products evenly
  - Regularly adjust for inflation and income growth
Demand for Tobacco Products: Global Evidence
Prices and Tobacco Use

- **Increases in tobacco product prices:**
  - Induce current users to try to quit
    - Many will be successful in long term
  - Keep former users from restarting
  - Prevent potential users from starting
    - Particularly effective in preventing transition from experimentation to regular use
  - Reduce consumption among those who continue to use
  - Lead to other changes in tobacco use behavior, including substitution to cheaper products or brands, changes in buying behavior, and compensation
Cigarette Prices and Cigarette Consumption, Guatemala, Inflation Adjusted, 2002-2010
Cigarette Prices and Adult Smoking Prevalence, United States, 1970-2010

Source: Tax Burden on Tobacco, 2011, National Health Interview Survey, and author’s calculations
Monthly Quit Line Calls, United States
11/04-11/09

- 4/1/09 Federal Tax Increase
- 1/1/08 WI Tax Increase
Cigarette Prices and Cessation
US States & DC, 2009

\[ y = 0.0283x + 43.083 \]

\[ R^2 = 0.371 \]

Source: BRFSS, *Tax Burden on Tobacco*, 2010, and author’s calculations
Source: MTF, *Tax Burden on Tobacco*, 2011, and author’s calculations

Source: Jha, 2009
Demand for Cigarettes in the Philippines
Cigarette Prices and Per Capita Cigarette Sales, Philippines, 2003-2010

Source: Euromonitor (2011), EUI (2011), World Bank (2011) and authors’ calculations
Cigarette Affordability and Per Capita Cigarette Sales, Philippines, 1997-2010

Source: Euromonitor (2011), EUI (2011), World Bank (2011) and authors’ calculations
Cigarette Demand in the Philippines

- Tobacco and Poverty in the Philippines Project
  - Alternative time-series models using annual data from 1997—2004
  - Estimates price elasticities range from -0.15 to -0.20

- Ministry of Finance, unpublished estimates
  - Time series modeling using aggregate tax paid sales data
  - Estimated elasticity of -0.58
Cigarette Demand in the Philippines

- New evidence from this study:
  - Uses 2003 Family Income and Expenditure Survey data
  - Adds provincial average prices from the National Statistics Office
  - Controls for variety of household characteristics

<table>
<thead>
<tr>
<th>Income Decile</th>
<th>ALL</th>
<th>1st - 3rd</th>
<th>4th - 6th</th>
<th>7th-9th</th>
<th>10th</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price elasticity of demand</td>
<td>-0.87</td>
<td>-1.09</td>
<td>-0.80</td>
<td>-0.74</td>
<td>-0.52</td>
</tr>
<tr>
<td>Income elasticity of demand</td>
<td>0.66</td>
<td>1.03</td>
<td>0.87</td>
<td>0.40</td>
<td>0.24</td>
</tr>
</tbody>
</table>
Impact of Cigarette Tax Increases
Impact of Tax Increases

- Model effects of alternative cigarette tax increases on:
  - Number of current and future smokers
  - Deaths caused by smoking in current population
  - Cigarette Tax Revenues

- Three scenarios:
  - uniform specific tax that accounts for 50% of average cigarette prices
  - Uniform specific tax of 28.3 pesos per pack
  - Uniform specific tax of 30 pesos per pack
Impact of Tax Increases

- Key assumptions:
  - Other determinants of demand are held constant, including income
  - No substitution to other tobacco products in response to tax increases
  - Tax increases are fully passed on to consumers in higher retail prices
  - Price elasticity is constant as price rises
  - Tax avoidance and evasion does not rise in response to higher taxes
Impact of Tax Increases

Key assumptions:

- Adult prevalence elasticity is half of overall elasticity
- Youth smoking is twice as sensitive to price as is adult smoking
- Youth take up smoking at same rate as adults
- Half of regular smokers die prematurely
- 70% of quitters who would have died prematurely avoid death caused by smoking
### Impact of Tax Increases

**Baseline Parameters:**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current smokers (millions)</td>
<td>19.0</td>
</tr>
<tr>
<td>Premature deaths in current smokers (millions)</td>
<td>9.5</td>
</tr>
<tr>
<td>Expected future smokers (millions)</td>
<td>9.9</td>
</tr>
<tr>
<td>Premature deaths in future smokers (millions)</td>
<td>5.0</td>
</tr>
<tr>
<td>Average cigarette excise tax</td>
<td>6.9</td>
</tr>
<tr>
<td>Average cigarette price</td>
<td>28.7</td>
</tr>
<tr>
<td>Excise tax as a percentage of price</td>
<td>24.1%</td>
</tr>
<tr>
<td>Price elasticity</td>
<td>-0.51</td>
</tr>
</tbody>
</table>
### Impact of Tax Increases

<table>
<thead>
<tr>
<th></th>
<th>50% of price accounted for by uniform tax</th>
<th>Uniform specific tax of 28.3 pesos per pack (current maximum)</th>
<th>Uniform specific tax of 30 pesos per pack</th>
</tr>
</thead>
<tbody>
<tr>
<td>New average cigarette tax</td>
<td>23.8</td>
<td>28.3</td>
<td>30.0</td>
</tr>
<tr>
<td>New average cigarette pack price</td>
<td>47.6</td>
<td>52.6</td>
<td>54.5</td>
</tr>
<tr>
<td>Cigarette excise tax as a percentage of price</td>
<td>50.0%</td>
<td>53.8%</td>
<td>55.0%</td>
</tr>
<tr>
<td>Reduction in number of current smokers (millions)</td>
<td>3.20</td>
<td>4.05</td>
<td>4.37</td>
</tr>
<tr>
<td>Reduction in number of future smokers (millions)</td>
<td>3.35</td>
<td>4.24</td>
<td>4.57</td>
</tr>
<tr>
<td>Total reduction in number of smokers (millions)</td>
<td>6.55</td>
<td>8.29</td>
<td>8.95</td>
</tr>
</tbody>
</table>
## Impact of Tax Increases

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</tr>
</thead>
<tbody>
<tr>
<td>Reduction in Premature Deaths Caused by Smoking among Current Smokers (Millions)</td>
<td>1.12</td>
<td>1.42</td>
<td>1.53</td>
</tr>
<tr>
<td>Reduction in Premature Deaths Caused by Smoking among Future Smokers (Millions)</td>
<td>1.67</td>
<td>2.12</td>
<td>2.29</td>
</tr>
<tr>
<td>Total Reduction in Premature Deaths Caused by Smoking (millions)</td>
<td>2.79</td>
<td>3.54</td>
<td>3.82</td>
</tr>
<tr>
<td>Percentage of premature deaths in current and future smokers averted by higher taxes</td>
<td>19.3%</td>
<td>24.4%</td>
<td>26.4%</td>
</tr>
<tr>
<td>Additional Excise Tax Revenues (PhP billions)</td>
<td>52.6</td>
<td>53.8</td>
<td>53.3</td>
</tr>
</tbody>
</table>
Impact on the Poor

- Greater price sensitivity among lower income groups implies:
  - Greater reductions in smoking among lower income populations
  - Burden of tax increase falls more heavily on higher income populations
  - Health benefits of reductions in smoking caused by tax increases greater among low income populations

- Concerns about regressivity can be addressed by spending new revenues progressively
  - Programs to help lower income smokers quit, education, health care, and poverty alleviation
Recommendations: Tobacco Taxation
Recommendations

- Eliminate the artificial price classification freeze and the use of historical net retail prices as the tax base.
- Adopt a uniform (unitary) specific cigarette excise tax that significantly raises cigarette prices and reduces tobacco use.
- Strengthen tobacco tax administration, increase enforcement, and tax duty free sales of tobacco products in order to reduce tax evasion and avoidance.
Recommendations

- Implement annual adjustments to the specific tax rates so that they retain their real value over time.
- Implement annual adjustments to cigarette tax rates so that they result in increases in tobacco product prices that are at least as large as increases in income.
- Increase taxes on cigars, water pipe tobacco and other tobacco products to be equivalent to cigarette taxes and to reduce the use of these products.
Recommendations

- Earmark a portion of tobacco tax revenues for health purposes, including health promotion and tobacco control
- Earmark a portion of tobacco tax revenues for programs that help those employed in tobacco-dependent sectors make the transition to alternative livelihoods
Impact of Tax and Price on Alcohol Use
Extensive econometric and other research shows that higher taxes and prices for alcoholic beverages significantly reduce drinking:

- 10 percent price increase would reduce:
  - Beer consumption by 1.7 to 4.6 percent
  - Wine consumption by 3.0 to 6.9 percent
  - Spirits consumption by 2.9 to 8.0 percent
  - Overall consumption by 4.4 percent
  - Heavy drinking by 2.8 percent
  - Generally larger effects on youth and young adults

Source: Wagenaar et al., 2009; Xu & Chaloupka, 2011
Beer Taxes and Binge Drinking

Graph 7. Current beer excise taxes and the percentage of 18-20 year olds that binge drink.

Source: CSPI Factbook on State Beer Taxes
Extensive econometric and other research shows that higher prices for alcoholic beverages significantly reduce:

- Drinking and driving, traffic crashes, and motor-vehicle accident fatalities

- Deaths from liver cirrhosis, acute alcohol poisoning, alcohol-related cancers, cardiovascular diseases, and other health consequences of excessive drinking

- Violence, including spouse abuse, child abuse, and suicides

- Other consequences of drinking, including work-place accidents, teenage pregnancy, and incidence of sexually transmitted diseases
The Economics of Tobacco and Tobacco Taxation In the Philippines

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http://www.tobaccofreeunion.org/content/en/217/
fjc@uic.edu
Extra Slides
Cigarette Smoking Prevalence
14 GATS Countries, US & UK

Source: Giovino, et al., 2012
Tax Paid Cigarette Sales
Philippines, 1997-2010, per capita & per smoker

Sales per Capita
Sales per Smoker

Opportunity Costs of Tobacco
Share of Income spent on Tobacco, by Quintile, 2003

Tobacco Control in the Philippines
Tobacco Control in the Philippines

- Party to the WHO Framework Convention on Tobacco Control
  - Signed Sept. 23, 2004; ratified June 6, 2005
- Limited national smoke-free policies
  - Do not include workplaces, restaurants, bars
  - Some stronger local policies
  - Considerable exposure to tobacco smoke among non-smokers, even in venues where smoking is prohibited
Tobacco Control in the Philippines

- **Health warnings**
  - General, rotating text warnings taking up 30% of front of pack
    - Effectiveness undermined by frequent purchases of single cigarettes
  - Efforts to adopt larger, graphic warning labels unsuccessful to date
  - Limited mass media public education campaigns

- **Marketing restrictions**
  - Ban on most advertising, but point-of-sale advertising allowed
    - 71.2% of adults report exposure to cigarette advertising, including 53.7% in stores
  - Promotions, sampling allowed for adults
Tobacco Control in the Philippines

■ Youth access
  • Sale to persons under 18 years of age prohibited
    ■ Almost ½ of 13-15 year olds report buying cigarettes in stores
    ■ Enforcement challenging given large number of sari-sari stores and street vendors

■ Support for cessation
  • No national cessation guidelines or quitline
  • Limited availability of pharmacotherapies

■ National Tobacco Control strategy
  • Limited resources for National Tobacco Control Coordinating Office, based in DoH
Supply of Tobacco and Tobacco Products in the Philippines
Tobacco Supply in the Philippines

- Major tobacco growing country
  - Production generally falling over past two decades
- Half or more of tobacco production exported
- Net importer of tobacco leaf
- Cigarette market nearly monopolized by Philip Morris-Fortune Tobacco Company
  - PMFTC formed by joint venture in 2010
  - Other local, multinational tobacco companies present in the market
- Net cigarette exporter
Tobacco Farming
Philippines, 1961-2010

Source: FAOSTAT, 2011.
Tobacco Leaf Trade
Philippines, 1990-2009

Source: FAOSTAT, 2011.
## Cigarette Company Market Shares
### Philippines, 2001-2010

<table>
<thead>
<tr>
<th>Company</th>
<th>2001</th>
<th>2003</th>
<th>2005</th>
<th>2007</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMFTC</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>81.6%</td>
</tr>
<tr>
<td>Fortune</td>
<td>41.6%</td>
<td>40.6%</td>
<td>42.2%</td>
<td>45.3%</td>
<td>48.2%</td>
<td>-</td>
</tr>
<tr>
<td>PMI</td>
<td>28.6%</td>
<td>29.3%</td>
<td>32.2%</td>
<td>29.0%</td>
<td>31.5%</td>
<td>-</td>
</tr>
<tr>
<td>JTI</td>
<td>12.0%</td>
<td>11.6%</td>
<td>12.0%</td>
<td>15.5%</td>
<td>7.1%</td>
<td>6.1%</td>
</tr>
<tr>
<td>La Suerte</td>
<td>5.4%</td>
<td>3.6%</td>
<td>1.6%</td>
<td>1.6%</td>
<td>1.6%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Mighty</td>
<td>1.6%</td>
<td>3.7%</td>
<td>4.8%</td>
<td>4.7%</td>
<td>4.9%</td>
<td>4.9%</td>
</tr>
<tr>
<td>Others</td>
<td>10.8%</td>
<td>10.8%</td>
<td>6.9%</td>
<td>6.6%</td>
<td>6.5%</td>
<td>5.7%</td>
</tr>
</tbody>
</table>

## Cigarette Brand Shares
### Philippines, 2001-2010

<table>
<thead>
<tr>
<th>Brand</th>
<th>Company</th>
<th>2001</th>
<th>2005</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fortune International</td>
<td>FTC/PMFTC</td>
<td>11.9%</td>
<td>18.6%</td>
<td>28.5%</td>
</tr>
<tr>
<td>Marlboro</td>
<td>PMI/PMFTC</td>
<td>20.7%</td>
<td>24.1%</td>
<td>25.7%</td>
</tr>
<tr>
<td>Hope</td>
<td>FTC/PMFTC</td>
<td>10.6%</td>
<td>11.4%</td>
<td>10.7%</td>
</tr>
<tr>
<td>Philip Morris</td>
<td>PMI/PMFTC</td>
<td>7.9%</td>
<td>7.8%</td>
<td>6.8%</td>
</tr>
<tr>
<td>Champion</td>
<td>FTC/PMFTC</td>
<td>14.9%</td>
<td>7.2%</td>
<td>6.6%</td>
</tr>
<tr>
<td>Winston</td>
<td>JTI</td>
<td>10.6%</td>
<td>10.9%</td>
<td>5.1%</td>
</tr>
<tr>
<td>Mighty</td>
<td>Mighty</td>
<td>1.6%</td>
<td>4.8%</td>
<td>4.9%</td>
</tr>
</tbody>
</table>

Cigarette Trade
Philippines, 1990-2009

Source: FAOSTAT, 2011.
WHO’s Best Practices in Tobacco Taxation

- Simpler is better
  - Complex tax structures more difficult to administer
  - Greater opportunities for tax evasion and tax avoidance under complex tax structures
  - Where existing structure is more complex, simplify over time with goal of achieving single uniform tax
WHO’s Best Practices in Tobacco Taxation

- Rely more on specific tobacco excises as the share of total excises in prices increases
  - Greater public health impact of specific excises given reduced opportunities for switching down in response to tax/price increases
  - Sends clear message that all brands are equally harmful
  - Where existing tax is ad valorem, adopt a specific tax and increase reliance on specific tax over time
WHO’s Best Practices in Tobacco Taxation

- Rely more on tobacco excise taxes rather than on import duties
  - Various trade agreements reducing import duties, implying reduced impact of tobacco product duties on price, revenues, and public health
  - Import duties create more opportunities for tax avoidance/evasion
  - Where existing system relies on import duties, adopt tobacco excises and increase reliance on excises over time
WHO’s Best Practices in Tobacco Taxation

- Adopt comparable taxes and tax increases on all tobacco products
  - Reduces potential for substitution to other products that would result from differential tax treatment and/or tax increases
  - Maximizes public health and revenue impact of taxes/tax increases
WHO’s Best Practices in Tobacco Taxation

- Automatically adjust specific tobacco taxes for inflation
  - Unless adjusted, real value falls over time, as does the real value of revenues generated by tax
  - Ensures the public health impact of tax is maintained
  - To date, not widely done (Australia, New Zealand)
WHO’s Best Practices in Tobacco Taxation

- Increase tobacco taxes by enough to reduce the affordability of tobacco products
  - In many low/middle income countries, positive relationship between income and tobacco use
  - Implies consumption increases even as taxes increase if increases in income larger
    - Depends on relative price, income elasticity
  - Increasing affordability will result in increasing tobacco use, consequences
WHO’s Best Practices in Tobacco Taxation

• Set tobacco excise tax levels so that they account for at least 70 percent of the retail prices for tobacco products
  • Update of World Bank ‘yardstick’ of any taxes accounting for 2/3 to 4/5 of retail prices
  • Well above where most countries are currently
  • Further increases in countries that do reach this target

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

\[ y = 0.0219x + 16.737 \]

\[ R^2 = 0.2306 \]
Who Pays & Who Benefits
Impact of Hypothetical Tax Increase Philippines

Percent change in taxes paid by wealth group

Tiered, local Model

Source: Li, Jha, Chaloupka et al., in progress;
Who Pays & Who Benefits
Impact of Hypothetical Tax Increase Philippines

Percent reduction in smoking deaths by wealth group

<table>
<thead>
<tr>
<th>Tiered, local Model</th>
<th>0%</th>
<th>1%</th>
<th>2%</th>
<th>3%</th>
<th>4%</th>
<th>5%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2.46%</td>
<td>3.44%</td>
<td>4.11%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Li, Jha, Chaloupka et al., in progress;
Impact on Illicit Trade

- Illicit trade in cigarettes a problem in the Philippines
  - As much as 20% of consumption untaxed, despite relatively low taxes and prices

- Contributing factors:
  - Absence of tax stamp on most cigarettes
  - Re-importing of cigarettes marked for export
  - Poor monitoring of production and distribution
  - Sizable informal distribution network
  - Lack of regional partnerships to curb illicit trade
Price of most sold brand, excise per pack and illicit trade by WHO region, 2010-11

Source: WHO report on the global tobacco epidemic, WHO TaXSIM model for the Philippines, and Euromonitor data on illicit trade.
Price of most sold brand, excise per pack and illicit trade in Asia and the Pacific, 2010-11

Source: WHO report on the global tobacco epidemic, WHO TaXSiM model for the Philippines, and Euromonitor data on illicit trade.
Curbing Illicit Trade

- Increased illicit trade would reduce but not eliminate public health and revenue impact of higher taxes
- Strengthened tax administration to curb illicit trade, including:
  - New generation of tax stamps on all cigarettes
  - Adoption of state-of-the-art systems for monitoring production and distribution
  - Licensing of all involved in manufacturing, distribution and retailing
  - Increased enforcement combined with swift, severe penalties for those caught engaging in illicit trade
  - Development of regional partnerships to curb illicit trade
Cigarette tax and illegal cigarette market, Spain 1991-2008

Spain: Size of contraband cigarette market & total tax level on cigarette price

Sources: Euromonitor and ERC databases.
Cigarette tax and illegal cigarette market, Italy, 1991-2008

Sources: Euromonitor and ERC databases.
Cigarette price and illegal cigarette market, United Kingdom 2000-2010

Sources: UK Customs and Excise 2010 and Euromonitor 2011.
Impact on Employment

- Tobacco-dependent employment small in the Philippines
  - 0.4% of agricultural employment, 0.3% of manufacturing employment; 0.16% of overall employment

- Reductions in tobacco-dependent employment offset by increases in other sectors
  - Money no longer spent on cigarettes spent on other goods and services
  - New tax revenues spent on more labor intensive activities

- Concerns about transition can be addressed by using some of new revenues to move tobacco farmers/others to other activities