Economics of Tobacco Control

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Overview

- Why tax tobacco
- Types of tobacco taxes
- Impact of tobacco taxes on tobacco product prices
- Effects of taxes and prices on cigarette smoking and other tobacco use
- Myths and Facts about economic impact of tobacco taxes and tobacco control
Why Tax Tobacco?
Why Tax Tobacco?

- Efficient revenue generation
  - Primary motive historically and still true in many countries today
  - Very efficient source of revenue given:
    - Low share of tax in price in most countries
    - Relatively inelastic demand for tobacco products
    - Few producers and few close substitutes
  - “Sugar, rum and tobacco are commodities which are no where necessities of life, which are become objects of almost universal consumption, and which are therefore extremely proper subjects of taxation” (Adam Smith, *Wealth of Nations*, 1776)
Federal Cigarette Tax and Tax Revenues
Inflation Adjusted, 1955-2009

Source: *Tax Burden on Tobacco*, 2009, and author’s calculations
Tobacco Taxes and Revenues


Source: Van Walbeek, 2003
Why Tax Tobacco?

- **Promote public health**
  - Increasingly important motive for higher tobacco taxes in many high income countries
    - Emerging as important factor in some low and middle income countries
  - Based on substantial and growing evidence on the effects of tobacco taxes and prices on tobacco use
    - Particularly among young, less educated, and low income populations
  - “The Parties recognize that price and tax measures are an effective and important means of reducing tobacco consumption by various segments of the population, in particular young persons.” (Framework Convention on Tobacco Control, Article 6)
Taxes, Prices and Health: US, 1980-2005

Source: Nat Rev Cancer © 2009 Nature Publishing Group

Lung Cancer Deaths: males age 35-44
Relative Price
Number of cigarettes/adult/day

Source: Jha, 2009
Why Tax Tobacco?

- **Cover the external costs of tobacco**
  - Less frequently used motive
  - Account for costs resulting from tobacco use imposed on non-users
    - Increased health care costs, lost productivity from diseases/death caused by exposure to tobacco smoke
    - Increased financial costs related to publicly financed health care used to treat diseases caused by tobacco use
  - Can also include “internalities” that result from addiction and time inconsistent preferences
Why Tax Tobacco?

- **Other Motives affecting tax structure:**
  - To protect domestic industry and employment
  - To keep some brands/products affordable to the poor
WHO’s Best Practices in Tobacco Taxation

- Use tobacco excise tax increases to achieve the public health goal of reducing the death and disease caused by tobacco use
  - As called for in Article 6 of the WHO FCTC
  - Additional benefit of generating significant increases in tobacco tax revenues in short to medium term
Tobacco Taxes
Types of Tobacco Taxes

Variety of tobacco taxes

- Taxes on value of tobacco crop
- Customs duties on tobacco leaf imports and/or exports
- Customs duties on tobacco product imports and/or exports
- Sales taxes
- Value added taxes
- Implicit taxes when government monopolizes tobacco product production and/or distribution
- Tobacco excise taxes
  - Many of these are applied to variety of agricultural and/or consumer goods and services
  - Excise taxes are of most interest given specificity to tobacco products (and a few others products – e.g. alcoholic beverages, motor vehicle fuel)
Types of Tobacco Taxes

- **Tobacco Excise Taxes**

  - Two types of excises
    - **Specific Taxes**: excises based on quantity or weight (e.g. tax per pack of 20 cigarettes)
    - **Ad Valorem taxes**: excises based on value of tobacco products (e.g. a specific percentage of manufacturer’s prices for tobacco products)

  - Some countries use a mix of specific and *ad valorem* tobacco excises, differential taxes for different products of given type, minimum taxes, etc.

  - Many countries apply different types of taxes and/or tax rates on different types of tobacco products (e.g. manufactured cigarettes vs. bidis)
### Table 2: The types of cigarette excise taxes applied by income group and WHO region

<table>
<thead>
<tr>
<th>Income Group</th>
<th>Only Specific</th>
<th>Only Ad-Valorem</th>
<th>Both Specific and Ad-valorem</th>
<th>No Excise</th>
<th>Total countries *</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>11</td>
<td>2</td>
<td>25</td>
<td>7</td>
<td>45</td>
</tr>
<tr>
<td>Upper Middle</td>
<td>16</td>
<td>11</td>
<td>9</td>
<td>6</td>
<td>42</td>
</tr>
<tr>
<td>Lower Middle</td>
<td>18</td>
<td>19</td>
<td>12</td>
<td>3</td>
<td>52</td>
</tr>
<tr>
<td>Low</td>
<td>10</td>
<td>28</td>
<td>2</td>
<td>3</td>
<td>43</td>
</tr>
<tr>
<td><strong>By Region</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AFRO</td>
<td>14</td>
<td>29</td>
<td>1</td>
<td>2</td>
<td>46</td>
</tr>
<tr>
<td>AMRO</td>
<td>13</td>
<td>16</td>
<td>2</td>
<td>3</td>
<td>34</td>
</tr>
<tr>
<td>EMRO</td>
<td>1</td>
<td>7</td>
<td>5</td>
<td>7</td>
<td>20</td>
</tr>
<tr>
<td>EURO</td>
<td>10</td>
<td>3</td>
<td>36</td>
<td>0</td>
<td>49</td>
</tr>
<tr>
<td>SEARO</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>WPRO</td>
<td>14</td>
<td>3</td>
<td>2</td>
<td>6</td>
<td>25</td>
</tr>
<tr>
<td><strong>All Countries</strong></td>
<td><strong>55</strong></td>
<td><strong>60</strong></td>
<td><strong>48</strong></td>
<td><strong>19</strong></td>
<td><strong>182</strong></td>
</tr>
</tbody>
</table>

* Countries for which data are available

Source: WHO calculations using WHO GTCR 2009 data
### Cigarette Taxation Globally

#### Table 2: Different bases for tiered systems around the world

<table>
<thead>
<tr>
<th>Different Tax Bases</th>
<th>Number of countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total covered</td>
<td>156</td>
</tr>
<tr>
<td>With tiers</td>
<td>32</td>
</tr>
<tr>
<td>Base of tiers</td>
<td></td>
</tr>
<tr>
<td>Retail price</td>
<td>11</td>
</tr>
<tr>
<td>Producer price</td>
<td>2</td>
</tr>
<tr>
<td>Sales volume</td>
<td>1</td>
</tr>
<tr>
<td>Production volume</td>
<td>1</td>
</tr>
<tr>
<td>Type - filter/non filter</td>
<td>12</td>
</tr>
<tr>
<td>Type - hand/machine made</td>
<td>2</td>
</tr>
<tr>
<td>Type - kretik/white cigarette</td>
<td>1</td>
</tr>
<tr>
<td>Packaging</td>
<td>3</td>
</tr>
<tr>
<td>soft/hard</td>
<td></td>
</tr>
<tr>
<td>Cigarette length</td>
<td>4</td>
</tr>
<tr>
<td>Trade</td>
<td>1</td>
</tr>
<tr>
<td>domestic/imported</td>
<td></td>
</tr>
<tr>
<td>Weight (tobacco content in cigarette)</td>
<td>1</td>
</tr>
<tr>
<td>Leaf content (domestic/imported)</td>
<td>3</td>
</tr>
</tbody>
</table>

Note: Of the 155 countries with available data in TMA, 10 countries have no excise. Some countries differentiate based on more than one criteria. 8 countries differentiate their excises based on more than one criteria.

Source: TMA 2009
Types of Tobacco Taxes

- **Specific vs. *ad valorem* tobacco excises**
  - Specific taxes:
    - Generally produce more stable stream of revenue
    - Real value falls with inflation
    - Promote higher “quality” products
    - Easier to administer
  - *Ad valorem* taxes:
    - More unstable revenues
    - Government subsidizes industry price cuts
      - but benefits from industry price increases
    - More likely to keep pace with inflation
    - Potential for abusive “transfer” pricing
    - Greater potential for “switching down” in response to tax increase
      - May require minimum price policies
    - May be protective for domestic industry (if imports tend to be higher quality/price)
      - Can achieve similar impact with specific tax if customs duty imposed on imported products
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

- **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 “Best Practices” for Tobacco Excise Taxes

- Adopt comparable taxes and tax increases on all tobacco products
  - Maximizes public health impact of tobacco tax increases by minimizing opportunities for substitution
  - Harm reduction?
Tobacco Taxes and Tobacco Product Prices
State and Local Cigarette Taxes and Average Price per Pack
November 1, 2009

$3.95
$4.45
$4.95
$5.45
$5.95
$6.45
$6.95
$7.45

$0.00
$0.50
$1.00
$1.50
$2.00
$2.50
$3.00
$3.50

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

\[ y = 1.198x + 3.8852 \]
Cigarette Company Marketing Expenditures, by Category, 1975-2006

Source: author’s calculations from data reported in FTC (2009)
Cigarette Taxes and Prices Globally

Figure 1: Simple Average Price of the Most Sold Brand & Excise Tax per pack, and Total Tax Share by Income Group 2008

- Average Price per pack
- Excise tax per pack
- Total tax share (% of Price)

- High-income: $4.99, $2.66
- Upper-middle income: $2.48, $1.01
- Lower-middle income: $1.73, $0.54
- Low-income: $1.06, $0.27
- Global: $2.53, $0.95

63% 54% 45% 39% 50%
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
Tobacco Taxes, Prices and Tobacco Use
Taxes, Prices and Tobacco Use

**Increases in tobacco product taxes and 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
Taxes, Prices and Tobacco Use

- **Price & Tobacco Use in High-Income Countries**
  - Well over 100 studies from high income countries consistently find that:
    - Ten percent increase in price reduces overall consumption by 2.5 to 5 percent
      - Consensus estimate is 10 percent price increase reduces consumption by 4 percent
      - Estimated impact on tax paid sales higher in presence of significant tax avoidance and smuggling
      - Long run impact about twice as large as addicted users respond over time to permanent increases in taxes and prices
Cigarette Prices and Cigarette Sales, United States, 1970-2009

Source: *Tax Burden on Tobacco*, 2009, and author’s calculations
Taxes, Prices and Tobacco Use

- **Price & Tobacco Use in Low/Middle-Income Countries**
  - Growing evidence from low and middle income countries suggests that impact of tax and price increases is up to twice as large as in high-income countries
    - Consistent with predictions from economic theory that price sensitivity greater among those on lower incomes
    - A few elasticity estimates:
      - SE Asia: -0.6 to -0.9
      - China: -0.65 to -1.3
      - Indonesia: -0.27 to -0.67
      - South Africa: -0.6 to -0.7
      - Morocco: -0.5 to -1.5
      - Mexico: -0.5
      - India: Bidis: -0.95 to -1.0
        Cigarettes: -0.13 to -0.56
Taxes, Prices and Tobacco Use

Inflation Adjusted Cigarette Prices and Cigarette Consumption, South Africa, 1960-2003

Real price per pack of 20 (in constant 2000 cents)

Cigarette consumption (millions of packs)

Source: Van Walbeek, 2003
Taxes, Prices and Tobacco Use

- **Price, Smoking Prevalence, and Cessation**
  - Estimates suggest that about half of the impact of price on overall tobacco use result from changes in prevalence

  - Implies that a 10% price increase reduces prevalence by 1 - 2.5% in high-income countries
  - 2.5 - 5% in low/middle-income countries; fewer studies given general lack of necessary data
    - Myanmar: -1.28
    - Nepal -0.4 to -0.5
    - Turkey -0.4

  - Changes in prevalence in response to price increase largely result from cessation among current users
    - U.S. estimates suggest 10% price increase increases number of smokers trying to quit by more than 10%, with about 2% successful in long term
Cigarette Prices and Adult Smoking Prevalence, United States, 1970-2008

Source: NHIS, *Tax Burden on Tobacco*, 2009, and author’s calculations
Note: green data points for prevalence are interpolated assuming linear trend.
Cigarette Prices and Former Smoking Rates, 50 States & DC, 2007

\[ y = 1.6826x + 17.443 \]

\[ R^2 = 0.2317 \]

Source: BRFSS, *Tax Burden on Tobacco*, 2009, and author’s calculations
Taxes, Prices and Tobacco Use

- **Price sensitivity and age**
  - Evidence that tobacco use among younger persons 2 to 3 times more responsive to price than tobacco use among older persons
    - Largely based on studies from the U.S., but some evidence from other countries
    - Consistent with economic theory, given:
      - Lower incomes of youth
      - Greater importance of peer influences on youth
      - Influence of addiction
      - Greater preference for the present among youth
  - Changes in youth prevalence largely result from reductions in initiation of tobacco use
  - Evidence suggests that higher taxes and prices are most effective in preventing youth from moving beyond experimentation and into regular tobacco use
Cigarette Price and Youth Smoking Prevalence, United States, 1991-2008

Source: MTF, Tax Burden on Tobacco, 2009, and author’s calculations
Taxes, Prices and Tobacco Use

- **Price sensitivity and income/education**
  - A growing number of studies find that tobacco use among less-educated and/or lower-income persons more responsive to price
    - Predicted by economic theory
    - Confirmed by evidence from high-income countries
    - Similar evidence emerging in low/middle-income countries
      - South Africa –
        - -1.39 lowest quartile, -0.81 highest quartile
      - Turkey – overall elasticities
        - -1.10 for poorest, -0.82 for highest
      - Vietnam:
        - Male Participation: -1.16 lowest quintiles
          - -0.75 highest quintiles
        - Conditional demand: -0.57 to -0.84 lowest
          - -0.35 to -0.42 highest
Affordability and Tobacco Use

- Income also an important determinant of tobacco use

  - Generally a negative relationship in high income countries, but often positive in low and middle income countries
Adult Smoking Prevalence (%) by Per Capita GDP, 2000

Source: Nargis et al., forthcoming
Per Capita Cigarette Consumption by Per Capita GDP, 2000

Source: Nargis et al., forthcoming
Affordability and Tobacco Use

- Implies affordability (price relative to income) is important

- Alternative measures of affordability, based on:
  - “big mac” index
  - Measures of national income (e.g. per capita GDP)
  - Average earnings
  - Minutes of labor required to pay for pack of cigarettes

- More meaningful for looking within a country over time than comparing across countries
Figure 3: Cummulative Change in Affordability of Cigarettes, 1990-2006

Based on the percent change in the RIP across countries by income.

Source: Blecher and van Walbeek, 2008
Figure 4: Cumulative Change in Affordability of Cigarettes, 1996-2006

South Africa 68%
Thailand 57%
Turkey 40%

-18% India
-24% Indonesia
-40% Philippines
-41% Mexico
-64% Vietnam
-73% China
-74% Russia

relatively more affordable
relatively less affordable

Source: Blecher and van Walbeek, 2008
Cigarette Prices and Cigarette Consumption
China, 1996-2005

- Real Price per Pack
- Per Capita Consumption

1996: 0.97
1997: 1.17
1998: 1.37
1999: 1.57
2000: 1.77
2001: 1.97
2002: 1.97
2003: 1.97
2004: 70.9
2005: 70.9
Income and Cigarette Consumption
China, 1996-2005

Real Income per Capita
Per Capita Consumption


Packs per Capita

Income per Capita (1990 RMB)

2.8 3.3 3.8 4.3 4.8 5.3 5.8 6.3
Affordability and Cigarette Consumption
China, 1996-2005

Affordability
Per Capita Consumption

Affordability
(1990 = 1)

Packs Per Capita

1 2 3 4 5 6 7 8 9 10

1.89 1.94 1.99 2.04 2.09

1 2 3 4 5 6 7 8 9 10

60.9 62.9 64.9 66.9 68.9 70.9
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
Economic Impact of Tobacco Control

Myths & Facts
Tobacco Taxes and Tobacco Tax Revenues
AUGUSTA — “A coalition of health groups today urged lawmakers to increase the cigarette tax by a $1 per pack, saying the increase will encourage more people to quit smoking and generate more money for health programs.

Translation: Fewer people smoking equals more cigarette tax revenue? Someone needs a math lesson.”
Cigarette Tax and Tax Revenues
Georgia, 1965-2009

Tax Revenues (Millions)
Tax per Pack


Tax Revenues (Millions)

Tax per Pack
Positive Effect of Tax Increases on Revenues Results from:

Low share of tax in price:
- In US, state taxes account for about 25% of price on average
- Total taxes account for less than half of price, on average
- *Implies large tax increase has much smaller impact on price*

Less than proportionate decline in consumption:
- 10% price increase reduces consumption by 4%

Example:
- Price $4.00, State tax $1.00
  - Doubling of tax raises price to $5.00
    - 100% increase in tax; 25% increase in price
  - 25% price increase reduces sales by 10%
    - **90% of original sales at double the tax increases revenues by 80%**
Cigarette real price & real tax revenue (UK)

Source: Townsend, 2010
Tobacco excise tax revenue in Poland

The excise tax revenue is increasing along with the tax rates

Source: Stoklosa & Ciecierski, 2010

Percentage share of excise tax in retail price of MPPC cigarettes

Tobacco excise tax revenue in Poland (in mln PLN)
WHO “Best Practices” for Tobacco Excise Taxes

- **Earmark a portion of tobacco tax revenues for related/other tobacco control and/or health promotion efforts**
  
  • Maximizes the health impact of tobacco tax increases
Tobacco Taxes, Tobacco Control and Employment Concerns
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 Kamoruudeen Adedibu while speaking with reporters recently in Iseyin, Oyo State at the 2008 Farmers' Productivity Day/Award Ceremony.

Describing the bill as a "misplaced priority" for the country, Adedibu who represents Oyo South in the Senate also vowed to mobilize his colleagues in the upper legislative chamber to ensure that the bill is defeated.

"The bill is actually more than regulation. It is more than that. The bill if it goes through and Insha Allah, it won't, will render the tobacco companies useless. It is going to increase smuggling and most especially, it is going to stop the necessary means of livelihood for over 400,000 people," the Senator stated.
Impact of tobacco use on jobs?

• tobacco industry argues that tobacco makes significant economic contribution
  • employment in farming, manufacturing, distribution, and related sectors
  • multiplier effects as income earned in tobacco-related jobs spent on other goods & services

Tobacco Taxes and Jobs

• Tobacco-related employment generally falling in most countries
  - Privatization, direct investment
  - Technological advances
  - Capital intensive nature of production

• Economic presence does not imply economic dependence
  - Money spent on tobacco products will be spent on other goods/services as demand falls
Evidence on Employment Impact of Reduced Tobacco Consumption

<table>
<thead>
<tr>
<th>Type of Country</th>
<th>Name and year</th>
<th>Net change as % of employment in base year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Exporters</td>
<td></td>
<td></td>
</tr>
<tr>
<td>US (1993)</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>UK (1990)</td>
<td>0.5%</td>
<td></td>
</tr>
<tr>
<td>Zimbabwe (1980)</td>
<td>-12.4%</td>
<td></td>
</tr>
<tr>
<td>Balanced Tobacco</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Africa (1995)</td>
<td>0.4%</td>
<td></td>
</tr>
<tr>
<td>Scotland (1989)</td>
<td>0.3%</td>
<td></td>
</tr>
<tr>
<td>Net Importers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bangladesh (1994)</td>
<td>18.7%</td>
<td></td>
</tr>
</tbody>
</table>

Source: Jacobs, et al., 2000
WHO “Best Practices” for Tobacco Excise Taxes

- Do not allow concerns about employment impact to prevent tobacco tax increases

  - Reductions in tobacco-dependent employment are offset by increases in employment in other sectors; where concerns are significant, using some new revenues to support transitions from tobacco farming/manufacturing to other activities would be appropriate
Tobacco Taxes and Illicit Trade in Tobacco Products
Types of Illicit Trade

• **Individual tax avoidance**
  - Reservation, Internet and other direct, duty-free, and cross-border purchases
  - Generally not illegal, but states require local taxes to be paid

• **Bootlegging**
  - Small scale purchasing of cigarettes in low-tax/price jurisdictions for resale in high tax/price jurisdictions
Types of Illicit Trade

• Large scale, organized smuggling
  - Illegal transportation, distribution and sale of large consignments of tobacco products
  - Generally avoids all taxes

• Counterfeit
  - Products bearing a trademark without the approval of the trademark owner
  - Often involved in organized smuggling
Determinants of Illicit Trade

• Tax and price differentials
  - More important for individual tax avoidance and bootlegging
  - Larger scale efforts avoid all taxes
The illicit cigarette market share (%) and the average cigarette pack price($) in high, middle and low income countries in 2007.

Source: WHO & IUATLD, 2009
Determinants of Illicit Trade

• Presence of informal distribution channels
  - e.g. Street vendors, unlicensed distributors

• Presence of criminal networks
  - e.g. Organized crime, terrorist organizations

• Weak tax administration
  - Absence of tax stamps; weak or non-existent physical controls; unlicensed manufacturers, distributors, retailers; weak customs authorities

• Poor enforcement
  - Limited resources for border patrols, customs authorities, etc; low penalties

• Corruption
Smuggling and Corruption

Smuggling as a function of transparency index

Source: Merriman et al., 2000
Illicit Trade, Public Health, and Revenues

- Even in the presence of illicit trade, higher cigarette and other tobacco taxes lead to:
  - Reductions in youth and adult tobacco use
  - Increases in tobacco tax revenues

- Rather than forego tax increases, appropriate response is to crack down on illicit trade
Tax Increases and Tax Avoidance

Cook County Cigarette Tax and Tax Revenues - FY01-FY06

- Chicago tax rises from 16 to 48 cents
- Chicago tax up to 68 cents, 1/1/06
- Chicago smoking ban, 1/16/06

Fiscal Year

- Tax
- Revenues

$25,000,000
$45,000,000
$65,000,000
$85,000,000
$105,000,000
$125,000,000
$145,000,000
$165,000,000
$185,000,000
$205,000,000
$225,000,000

$0.15
$0.35
$0.55
$0.75
$0.95
$1.15
$1.35
$1.55
$1.75

2001
2002
2003
2004
2005
2006
Canada Sharply Reduced Taxes in 1993


Tax reduced in an attempt to counter smuggling

Real Price

Consumption

Annual cigarette consumption per capita (in packs)
WHO’s Best Practices in Tobacco Taxation

- Eliminate tax or duty free sales of tobacco products
  - As called for in Article 6 of FCTC
  - Reduces opportunities for individual tax avoidance
  - Maximizes public health and revenue impact of taxes/tax increases
WHO’s Best Practices in Tobacco Taxation

- Adopt new technologies to strengthen tobacco tax administration and minimize tax avoidance and evasion
  - Sophisticated tax stamps
  - Tracking and tracing technologies
  - Production monitoring technologies
WHO’s Best Practices in Tobacco Taxation

- Strengthen tobacco tax administrators’ capacity by licensing all involved in tobacco product manufacturing and distribution
  - Facilitates identification of those engaged in illegal trade
  - Enhances ability to penalize those engaged in illegal trade
    - License suspension, revocation
WHO’s Best Practices in Tobacco Taxation

- Ensure certain, swift and severe penalties for those caught engaging in illicit trade in tobacco products
  - Increased the expected costs of engaging in illicit trade
  - Administrative sanctions coupled with licensing
WHO’s Best Practices in Tobacco Taxation

- Strengthen tobacco tax administrators’ capacity to monitor tobacco product markets and evaluate the impact of tobacco tax increases
  - “Trust but verify”
  - Monitoring of tobacco production and distribution
  - Physical control over tobacco products
  - Periodic audits
  - Capacity to estimate impact of tax changes on consumption, revenues
  - Regional and international collaborations for monitoring, administration, enforcement
Tobacco Taxes and the Poor
Concerns about “fairness” of tobacco taxes

- Clearly regressive in high income countries
  - Given greater prevalence of smoking in lower income populations

- Likely regressive in most low/middle income countries
  - Depends on distribution of tobacco use by income level and tax structure
  - Less regressive in countries where differences in prevalence by income level are smaller;
  - even less where prevalence/consumption rises with income
  - Less regressive in countries with *ad valorem* taxes and/or tiered taxes where tax as share of price increases with price
Tobacco and Poverty

Family falls into poverty

- **Foregone income 3:** Breadwinner dies prematurely

- **Foregone income 2:** Treatment cost & Lost working days & income

- **Foregone income 1:**
  - More money spent on tobacco:
  - Less money spent on Education, nutrition etc
  - High opportunity cost

Breadwinner gets sick due to tobacco use

Source: Yurekli, 2007
Tobacco Taxes & Equity

- Tobacco tax increases can be “progressive” even in countries where tax is regressive
  - Based on greater reductions in tobacco use among the poor in response to higher taxes and prices
  - Distribution of health benefits from tax also progressive
    - Given “regressive” burden of tobacco-caused disease
      - Greater use of tobacco among lower income
      - Less access to health care to treat diseases caused by tobacco use
    - Tobacco use accounts for much of the health gap between the rich and the poor
Who Pays & Who Benefits

Impact of Federal Tax Increase, U.S., 2009

Source: Chaloupka et al., in progress; assumes higher income smokers smoke more expensive brands
WHO “Best Practices” for Tobacco Excise Taxes

- Do not view low taxes and prices for some tobacco products as a “pro-poor” policy

  - High tobacco taxes on all tobacco products will result in greater reductions in tobacco use among the poor and to a progressive distribution of the health and economic benefits that result – a truly “pro-poor” policy
WHO “Best Practices” for Tobacco Excise Taxes

- *Do not allow concerns about the regressivity of higher tobacco taxes to prevent tobacco tax increases*

  - Regressive impact often overstated; concerns about impact on the poor can be offset by using new revenues to support efforts to help poor tobacco users quit, health promotion efforts targeting poor and/or other poverty alleviation programs
Summary

- Countries impose a variety of taxes on tobacco products
- Higher tobacco taxes will lead to higher tobacco product prices
- Large increases in tobacco taxes are single most effective policy for reducing tobacco use
  - Increase cessation among current users
  - Prevent relapse among former users
  - Preventing initiation of regular tobacco use
  - Reduce consumption among those who continue to use
- Arguments about negative economic impact of tobacco tax increases either false or overstated
- Considerable gaps in evidence for most low/middle income countries
Research Priorities

- Country specific research on impact of tax/price on tobacco use in LMICs
- Research on the economic costs and benefits of tobacco and tobacco control
- Research on the interrelationships between tobacco use, poverty, and tobacco control
- In small number of highly tobacco-dependent countries, research on economically viable alternatives to tobacco growing and manufacturing
- In HICs, research to assess changes in price elasticity of tobacco products over time and at different tax/price levels