Tax and Price Policies for Tobacco Control

Frank J. Chaloupka
Chair, WHO Collaborating Centre on the Economics of Tobacco & Tobacco Control
Distinguished Professor, UIC

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Overview
Effectiveness of Tax & Price Policies for Tobacco Control
Outline of Handbook volume 14

- **Chapter 1**: Introduction
- **Chapter 2**: Overview of Tobacco Taxation
- **Chapter 3**: Industry Pricing Strategies and Other Pricing Policies
- **Chapter 4**: Tax, Price and Aggregate Demand for Tobacco
- **Chapter 5**: Tax, Price and Adult Tobacco Use
- **Chapter 6**: Tax Price and Tobacco Use Among Young People
- **Chapter 7**: Tax, Price and Tobacco Use among the Poor
- **Chapter 8**: Tax Avoidance and Tax Evasion
- **Chapter 9**: Economic and Health Impact of Tobacco Taxation
- **Chapter 10**: Summary (Working Group of Experts)
- **Chapter 11**: Evaluation (Working Group of Experts)
- **Chapter 12**: Recommendations for Research (Working Group of Experts)
**Collaborators:**
- F. Chaloupka, Chair (USA), N. Nargis (Bangladesh), L. Joossens (Belgium), L. Nguyen (Finland), L. Clancy, L. Currie (Ireland), S. Gallus, C. La Vecchia (Italy), F. Godfrey (Luxembourg), C. Van Walbeek (South Africa), E. Fernandez (Spain), S. Delipalla, AM Perucic (Switzerland), Z. Onder (Turkey), A. Gilmore, (United Kingdom), E. Blecher, TW Hu, D. Levy, H. Ross, J. Taurus (USA); Frank van Driessche, (Belgium), R. Iglesias (Brazil), M. Pekurinen (Finland), A. Yurekli (Switzerland), K. Smith (United Kingdom)

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Evaluation Criteria

- **Sufficient evidence**: An association has been observed in studies in which chance, bias and confounding can be ruled out with reasonable confidence. The association is highly likely to be causal.

- **Strong evidence**: There is consistent evidence of an association but evidence of causality is limited by the fact that chance, bias or confounding have not been ruled out with reasonable confidence. However, explanations other than causality are unlikely.

- **Limited evidence**: There is some evidence of association between the intervention under consideration and a given effect, but alternative explanations are possible.
Evaluation Criteria

- **Inadequate/No Evidence:** There are no available methodologically sound studies showing an association; the available studies are of insufficient quality, consistency or statistical power to permit a conclusion regarding the presence or absence of a causal association between the intervention and a given effect. Alternatively, this category is used when no studies are available.

- **Evidence of No Effect:** Methodologically sound studies consistently demonstrate the lack of an association between the intervention under consideration and a given effect.
Evaluation Statements
Increases in tobacco excise taxes that increase prices result in a decline in overall tobacco use.
Taxes, Prices and Tobacco Use
Taiwan, 1998-2010

Source: Euromonitor, 2011
Sufficient Evidence that:

Increases in tobacco excise taxes that increase prices reduce the prevalence of adult tobacco use.
Cigarette Prices and Adult Smoking Prevalence, United States, 1970-2010

Source: *Tax Burden on Tobacco*, 2011, National Health Interview Survey, and author’s calculations
Sufficient Evidence that:

Increases in tobacco excise taxes that increase prices induce current tobacco users to quit.
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
Increases in tobacco excise taxes that increase prices lower the consumption of tobacco products among continuing users.

y = 0.0219x + 16.737
R² = 0.2306

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

Increases in tobacco excise taxes that increase prices reduce the initiation and uptake of tobacco use among young people, with a greater impact on the transition to regular use.
Tobacco use among young people responds more to changes in tobacco product taxes and prices than does tobacco use among adults.
Cigarette Price and Youth Smoking Prevalence, United States, 1991-2008

Year

1991 1993 1995 1997 1999 2001 2003 2005 2007

Price per pack (2/09 dollars)

$2.25 $3.00 $3.75 $4.50 $4.50

Smoking Prevalence

Cigarette Price 12th grade prevalence 10th grade prevalence 8th grade prevalence

Source: MTF, Tax Burden on Tobacco, 2009, and author’s calculations
Limited Evidence that:

The demand for tobacco products in low-income countries is more responsive to price than is the demand for tobacco products in high-income countries.
Elasticity Estimates
Aggregate Demand Studies
High-Income, Non-US   Low/Middle-Income

Source: IARC Handbook 14, forthcoming
In high-income countries, tobacco use among lower-income populations is more responsive to tax and price increases than is tobacco use among higher-income populations.
Limited Evidence that:

In low- and middle-income countries, tobacco use among lower-income populations is more responsive to tax and price increases than is tobacco use among higher-income populations.
Strong Evidence that:

Changes in the relative prices of tobacco products lead to some substitution to the products for which the relative prices have fallen.
Tobacco industry price discounting strategies, price-reducing marketing activities, and lobbying efforts mitigate the impact of tobacco excise tax increases.
Price-Reducing Marketing:
Cigarette Company Marketing Expenditures, by Type, 1975-2008

Source: author’s calculations from data reported in FTC (2011)
Sufficient Evidence that:

Tobacco tax increases that increase prices improve population health

Source: Jha, 2009
Sufficient Evidence that:

Higher and more uniform specific tobacco excise taxes result in higher tobacco product prices and increase the effectiveness of taxation policies in reducing tobacco use.
### Cigarette Taxation Globally

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<td>12</td>
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<tr>
<td>Low</td>
<td>10</td>
<td>28</td>
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**By Region**

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<td>2</td>
<td>1</td>
<td>8</td>
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<td>14</td>
<td>3</td>
<td>2</td>
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<td>25</td>
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<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*
Sufficient Evidence that:

Tobacco tax increases increase tobacco tax revenues.
Federal Cigarette Tax and Tax Revenues
Inflation Adjusted, 1955-2010

Source: Tax Burden on Tobacco, 2011, and author’s calculations
Sufficient Evidence that:

Tax avoidance and tax evasion reduce, but do not eliminate, the public health and revenue impact of tobacco tax increases.
Tax Avoidance & Evasion Do NOT Eliminate Health and Revenue Impact of Higher Taxes

Cigarette Prices and Adult Prevalence, New York, 1995-2007

Source: Tax Burden on Tobacco, 2008 and BRFSS
Tax Increases and Tax Avoidance

Cook County Cigarette Tax and Tax Revenues - FY01-FY06

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

- Tax per Pack:
  - 2001: $0.15
  - 2002: $0.35
  - 2003: $0.55
  - 2004: $0.75
  - 2005: $0.95
  - 2006: $1.15

- Tax Revenues:
  - 2001: $25,000,000
  - 2002: $45,000,000
  - 2003: $65,000,000
  - 2004: $85,000,000
  - 2005: $105,000,000
  - 2006: $125,000,000

Note: Chicago smoking ban, 1/16/06
Strong Evidence that:

A coordinated set of interventions that includes international collaborations, strengthened tax administration, increased enforcement, and swift, severe penalties reduces illicit trade in tobacco products.
Strong Evidence that:

Tobacco tax increases do not increase unemployment.
In order to improve public health by reducing tobacco use, governments should adopt relatively simple tobacco excise tax structures that emphasize specific taxes and that include regular tax increases that outpace growth in general price levels and incomes.
Governments should use tobacco tax revenues to fund comprehensive tobacco control programs and other health promotion activities, given that such programs lead to further reductions in tobacco use and improvements in population health.
A multi-national surveillance and monitoring system should be implemented that regularly collects data on tobacco use among adults and young people, tobacco product taxes and prices, price-reducing marketing and lobbying efforts of tobacco companies, tax avoidance and evasion, and tax administration and enforcement activities.
Effectiveness of Tax and Price Policies for Tobacco Control

IARC
2011

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www.iarc.fr/en/publications/pdfs-online/prev/handbook14
(coming soon)
Best Practices in Tobacco Taxation
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
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?
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
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 and its consequences
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
  - Increases public support for tax increases
Tobacco Taxes

Economic Impact - Myths & Facts
WHO “Best Practices” for Tobacco Excise Taxes

- **Do not allow concerns about employment impact to prevent tobacco tax increases**
  - Tobacco employment often declining even where tobacco product consumption rising
  - Reductions in tobacco-dependent employment are offset by increases in other sectors
  - Where concerns are significant, use tax revenues to support transition from tobacco farming/manufacturing to other activities
WHO “Best Practices” for Tobacco Excise Taxes

- Do not allow concerns about the inflationary impact of higher tobacco taxes to deter tax increases

  • If concerns about inflationary impact on pension and other payments tied to consumer price index, use a price index that excludes tobacco products
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 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 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
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
  - Results in 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
www.who.int/tobacco/publications/tax_administration
For more information:

fjc@uic.edu