Taxes as a tool for promoting public health: Lessons from tobacco taxation

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Overview

1. Review of the evidence on the impact of tobacco taxes on tobacco use and its consequences

2. Brief review of impact of earmarked tobacco taxes for comprehensive tobacco control programs

3. Support from RWJF, NCI, USDA, CDC and others
Key Collaborators

Jamie Chriqui, Lisa Powell, Sandy Slater, John Tauras, Melanie Wakefield, Lloyd Johnston, Patrick O’Malley, Dianne Barker, Jidong Huang, Sherry Emery

and many others…….
Tobacco Taxes and Prices
State Cigarette Excise Tax Rates
July 2010
(amounts in dollars)

Source: NCSL; * Hawaii, New Mexico, South Carolina and Utah’s excise tax increase goes into effect July 1, 2010.
State and Local Taxes & Cigarette Prices per Pack, Nov. 1, 2009

Source: Tax Burden on Tobacco, 2010, and author's calculations
Cigarette Taxes & Prices
Inflation adjusted, 1954-2009

Source: Tax Burden on Tobacco, 2010, and author’s calculations
Taxes and Tobacco Product Prices
Inflation Adjusted, South Africa, 1961-2003

Source: Van Walbeek, 2003
Global Cigarette Taxes & Prices
By income level, 2008

Source: World Health Organization, 2010
Cigarette Marketing Spending
By type, 1975-2006

Source: Federal Trade Commission, 2009, and author’s calculations
Industry Response to Taxes

On February 4th, 2009, the Federal Government enacted legislation to fund the expansion of the State Children's Health Insurance Program (SCHIP) that increases excise taxes on cigarettes by 158%.

As a result, you will see the price of all cigarettes, including ours, increase in retail stores.

We know times are tough, so we'd like to help. We invite you to register at Marlboro.com to become eligible for cigarette coupons and special offers using this code: MAR1558

Thank You,

Philip Morris USA

Source: Philip Morris USA, 2009
Tobacco Taxes, Prices, and Tobacco Use
Tobacco Taxes & Tobacco Use

Higher taxes and prices:

- Lead current users to quit
- Prevent former users from restarting
- Keep kids from taking up
- Reduce consumption among continuing users

Estimates from US and other high income countries are that 10% price rise reduces overall use by about 4%

- Larger impact on most LMICs

Source: Chaloupka 2010; IARC, in press
Cigarette Prices & Sales
United States, 1970-2009

Source: Tax Burden on Tobacco, 2010, and author’s calculations
Cigarette Prices & Sales
South Africa, 1960-2003

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

Cigarette consumption
(millions of packs)

Real price of cigarettes
Consumption of cigarettes

Source: Van Walbeek 2005

bridging the gap
Cigarette Prices & Sales
Morocco, 1965-2000

Source: Aloui 2003
### Cigarette Prices & Adult Prevalence
#### United States, 1970-2008

<table>
<thead>
<tr>
<th>Year</th>
<th>Prevalence</th>
<th>Price (2009 dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>23</td>
<td>$1.25</td>
</tr>
<tr>
<td>1973</td>
<td>23</td>
<td>$1.75</td>
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<td>1976</td>
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<td>$4.25</td>
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<tr>
<td>2006</td>
<td>19</td>
<td>$4.25</td>
</tr>
</tbody>
</table>

**Note:** Green data points for prevalence are interpolated assuming linear trend.

Cigarette Prices & Former Smoking
50 States & DC, 2007

\[ y = 1.6826x + 17.443 \]

\[ R^2 = 0.2317 \]

Source: BRFSS, *Tax Burden on Tobacco*, 2010, and author's calculations
Young People More Price Sensitive

- Lower disposable incomes
- Greater importance of peer influences
  - about 1/3 of overall impact of price via peers
- Shorter history of use, less addicted
- More concerned about current costs than long term consequences
- Other spillover effects
  - parental smoking, social sources, etc.

Source: Chaloupka 2010
Cigarette Prices & Youth Smoking
United States, 1991-2008

Price per pack (2/09 dollars)

Year

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

Source: MTF, *Tax Burden on Tobacco*, 2010, and author's calculations
Cigarette Prices & Health France, 1980-2005

Lung Cancer Deaths: males age 35-44/4
Relative Price
Number cigarettes/adult/day

Source: Jha 2009
Impact of 2009 US Federal Tax Increase

• Sales reduced by over 900 million packs
• Almost $9 billion in new tax revenues
• Over 1.15 million adult smokers quit
• Over 1.45 million youth deterred from taking up smoking
• Over 700,000 premature deaths averted
• Significant reductions in health care spending

Source: Chaloupka and Tauras, 2009
Earmarked Tobacco Taxes and Comprehensive Tobacco Control Programs
Cigarette Price & Tax Revenues
United Kingdom, inflation adjusted, 1971-1995

Price (£) 1994 value
£1.40
£1.90
£2.40
£2.90

Taxation revenue (£ million)
5500
6000
6500
7000
7500
8000
8500
9000

Year
1971
1973
1975
1977
1979
1981
1983
1985
1987
1989
1991
1993
1995

Source: Townsend 2010
Cigarette Tax/Price & Tax Revenues
Poland, 1996-2007

Source: Stoklosa & Ciecierski, 2010

Percentage share of excise tax in retail price of MPPC cigarettes
Tobacco excise tax revenue in Poland (in mln PLN)

www.bridgingthegapresearch.org
Comprehensive Tobacco Control Programs

Primary aims:

• Prevent youth initiation
• Promote young adult & adult cessation
• Eliminate exposure to secondhand smoke
• Identify and eliminate disparities in tobacco use and its consequences

Source: CDC, 2007
Comprehensive State Tobacco Control Programs, US

• State and community interventions
  • policy development/implementation, strengthen anti-tobacco norms, reduce disparities

• Health communications interventions
  • mass media countermarketing, replacement of industry sponsorship/promotion, targeted messaging and delivery

• Cessation interventions
  • policy, health systems change, and population based measures

• Surveillance, evaluation, administration, and management

Source: CDC, 2007
Tobacco Control Program Funding
Per capita, inflation adjusted, 1989-2007

Source: Giovino, et al., 2009
Program Funding vs. Tobacco Revenues
FY 2010

$25.1 Billion

$8.1 Billion
Estimated Tobacco Settlement Revenues

$17.0 Billion
Estimated Tobacco Tax Revenues

$3.7 Billion

Total State Tobacco Revenues

CDC Recommended Annual Funding For Tobacco Prevention

$629.5 Million

$62 Million
Federal Spending*

$567.5 Million
State Spending

Actual Tobacco Prevention Spending

Source: Tobacco Free Kids, et al., 2009
Program Funding vs. Tobacco Revenues 2007-2008, by income level

Note: Based on 55 countries that provided information on both tax revenues from tobacco products and expenditures for tobacco control for 2007 and 2008.

Source: WHO., 2009
Impact of Program Funding, US

Significant reductions in state cigarette sales

- Estimated up to 8.7% decline by 2000 if states funded at $6 per capita

Significant reductions in youth smoking

- 2% reduction in prevalence in 1990s from existing programs; could have been 13% if funded at levels recommended by CDC

Significant reductions in adult smoking

- Funding at CDC minimum could have reduced adult prevalence by 5.4%

Source: Farrelly, et al., 2003; Taurus et al., 2005; Farrelly et al., 2008
Summary

Tobacco tax increases have been highly effective in reducing tobacco use and the death, disease, and economic losses caused by tobacco use

• Further reductions when revenues from taxes are earmarked for comprehensive tobacco control programs

Similar potential for using taxes and resulting tax revenues to promote healthy eating and to curb obesity
For more information:

www.bridgingthegapresearch.org

www.impacteen.org

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