Cigarette Tax Policy as a Public Health Measure

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Why Are Tobacco Taxes Good for Public Health: Impact of a Tax Increase

- Decrease in number of cigarettes consumed by current smokers
- Increase in number of people who stop smoking
- Decrease in number of people who start smoking
- Decrease in smoking prevalence
- Decrease in cigarette consumption
Why Are Tobacco Taxes Good for the Economy

- Cigarette consumption reduction
- Tax revenue increase
- Quitting smoking
- Consumption reduction among smokers
- Lives saved
- Work days gained
- Medical cost savings
- Productivity gain
Cigarette Prices and Cessation

Changes in prevalence after a price increase largely due to cessation among current users: 10% price increase in the U.S. increases number of smokers trying to quit by more than 10%, with about 2% successful in the long-term.

**Cigarette Prices and Percentage of Ever Smokers Who Have Quit Smoking, U.S. States, 2005**

Relation Between the Size of Cigarette Price Increase and Tobacco Use

Estimates suggest that about half of the impact of price on overall tobacco use result from changes in prevalence.

10% price increase reduces prevalence by:

- 1 - 2.5% in high-income countries
- 2.5 - 5% in low/middle-income countries
Tobacco Taxes and Public Health

Given evidence on impact of tobacco taxes and prices on tobacco use, increases in taxes would significantly reduce premature deaths caused by tobacco use.

• Short-run reductions in deaths result from increased cessation
  – Significant health benefits of cessation (reduction in smoking-related disease incidence)

• Long-run reductions result from preventing initiation
  – Significant improvement in the quality of life, reduced disability, better indoor air.
Tobacco Deaths and Tobacco Control

Baseline

Nicotine replacement therapy with five percent effectiveness

Non price interventions with 10 percent reduction

33 percent price increase

70 percent price increase

Source: Jha, et al., 2006
New York City Example

In 2002, NY city increased excise tax from 8 cents to $1.50 and NY state raised its excise tax from $1.11 to $1.50. Total increase in tax $1.81.

The tax increases raised the average price of a pack from $5.20 to $6.85 (by $1.65).

2003 – launch in intense TC campaign: smoke-free laws + anti-smoking campaign.

The tobacco industry’s spending = 20+ times more than the city for marketing and promotion.

At least 240,000 (up to 1 mil) New Yorkers quit (smoking prevalence declined from 21.6% to 17.5%) and smoking-related deaths fell more than 11% from 8,722 to 7,744 between 2002-2006.

No impact on bars/restaurants revenue.

High school students smoking rate fell by 50% between 2001 and 2007 (from 18% to less than 10%).

Cigarette tax revenue: increased 9-times in 2002 ($250 million) compared to 2001. Revenue in 2005 ($123 million) and 2006 ($120 million) lower compared to 2001, but still 4-time more compared to revenue before the tax increase.
Impact of Tobacco Taxes on Tobacco Use Depends on Impact of Tax on Prices of Tobacco Products

Impact on prices will vary based on several factors, including:

- Structure of tobacco product market
- Cost of tobacco product production
- Industry price-related marketing efforts
- Potential for individual tax avoidance and larger scale, more organized tobacco product smuggling

Most evidence indicates that tobacco tax increases result in comparable tobacco product price increases

- That is, tax increases fully passed on to tobacco users
Price Sensitivity and Income/Education

A growing number of studies find that tobacco use among less-educated and/or lower-income persons is more responsive to price.

Economic theory implies lower income persons generally more responsive to changes in price for goods/services they consume than higher income persons.

U.K.: lowest socioeconomic group very responsive to price, while highest socioeconomic group virtually unresponsive to price.

U.S.: smoking in households below median income level about 4 times more sensitive to price than smoking in households above median.

Similar evidence emerging from low- and middle-income countries.
Win-Win Situation: Tobacco Tax Increase in Europe

20% excise tax increase → 13.5% price increase (if excise tax rate is 57% and VAT is 19%).

About 215 mil smokers in Europe [1].

Assuming prevalence price elasticity of -0.1%, the number of smokers in Europe reduced by 2.9 mil (1.35%) and about 726 thousand smoking-related deaths prevented (25% of those who quit/not initiate).

Cost of active smoking in Europe were €98 -130 billion in 2000.

Assuming 0% inflation 2000 -2008, 20% tax increase will save €1.3–1.8 billion per year.

Revenue increase = 16.8%. It would mean at least €10.3 billion just for the EU member states (based on 2004 tax collection of €61.6 billion)
Recommendations

Raise tobacco tax, given its public health benefits and the economic consequences of tobacco use (taxes collected on cigarettes represent 0.68% of EU GDP, but smoking costs EU 1.04% - 1.49% of GDP)

Preferable approach is a uniform specific excise tax

- maintain consistency of rate between cigarettes and roll-your-own tobacco
- automatic indexation for inflation; exclude cig. prices from CPI

Evaluate industry responses to tax increases and changes in purchasing behaviour

Earmark tobacco tax and use the resource to mediate the impact of higher tax on the poor, to provide resources for sustainable and self financed TC activities and research
THANK YOU!

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