## Tax, Price and Tobacco Use

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## Why Tax Tobacco?

"Sugar, rum, and tobacco, are commodities which are no where necessaries of life, which are become objects of almost universal consumption, and which are therefore extremely proper subjects of taxation.

Adam Smith, An Inquiry into the Nature and Causes of The Wealth of Nations, 1776

## Why Tax Tobacco?

- Promote public health "... We [] have a package of six policy measures, known as MPOWER, that can help countries implement the provisions in the Convention. All six measures have a proven ability to reduce tobacco use in any resource setting. But tobacco taxes are by far the most effective."

Director General Dr. Margaret Chan, WHO, 2008


## Taxes and Tobacco Use

Increases in tobacco excise taxes that increase prices result in a decline in overall tobacco use.


Source: Euromonitor, 2011

## Tobacco Taxes and Prevalence of Tobacco Use

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

## Tobacco Taxes and Cessation

Increases in tobacco excise taxes that increase prices induce current tobacco users to quit.

## Cigarette Prices and Cessation US States \& DC, 2009



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

## Tobacco Taxes and Intensity of Tobacco Use

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

## Cigarette Price and Less than Daily Smoking Prevalence, Adults, US States \&DC, 2009



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

## Tobacco Taxes and Youth Tobacco Use

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 Taxes and Youth Tobacco 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, 1991-2011



## Differential Impact of Tobacco Taxes

The demand for tobacco products in low-income countries is at least as responsive to price as is the demand for tobacco products in high-income countries.

## Elasticity Estimates Aggregate Demand Studies

High-I ncome, Non-US Low/Middle-Income



## Differential Impact of Tobacco Taxes

In many countries, tobacco use among lower-income populations is more responsive to tax and price increases than is tobacco use among higherincome populations.

## 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

## Differential Tobacco Taxes And Tobacco Use

Changes in the relative prices of tobacco products lead to some substitution to the products for which the relative prices have fallen.

## Tobacco Industry Strategies

Tobacco industry price discounting strategies, price-reducing marketing activities, and lobbying efforts mitigate
the impact of tobacco excise tax increases.

## Cigarette Company Marketing

 Expenditures, by Type, 1975-2008

## Tobacco Taxes and Population Health

Tobacco tax increases that increase prices improve population health

## France: smoking, tax and male lung cancer, 1980-2005



## Tobacco Tax Structure

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 Taxes and Prices Globally



Source: WHO 2010

## Cigarette Taxation Globally

|  | Excise System on Cigarettes |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Income Group | Only specific | Only ad valorem | Both specific and ad valorem | No Excise | Total countries |
| High | 11 | 2 | 25 | 7 | 45 |
| Upper <br> Middle | 16 | 11 | 9 | 6 | 42 |
| Lower <br> Middle | 18 | 19 | 12 | 3 | 52 |
| Low | 10 | 28 | 2 | 3 | 43 |
| By Region |  |  |  |  |  |
| AFRO | 14 | 29 | 1 | 2 | 46 |
| AMRO | 13 | 16 | 2 | 3 | 34 |
| EMRO | 1 | 7 | 5 | 7 | 20 |
| EURO | 10 | 3 | 36 | 0 | 49 |
| SEARO | 3 | 2 | 2 | 1 | 8 |
| WPRO | 14 | 3 | 2 | 6 | 25 |
| All Countries | 55 | 60 | 48 | 19 | 182 |
| * Countries for which data are available <br> Source: WHO calculations using WHO GTCR 2009 data |  |  |  |  | 21 |

## Tobacco Taxes and Tobacco Tax Revenues

Tobacco tax increases increase tobacco tax revenues.

## Tobacco Taxes and Revenues

 Inflation Adjusted Cigarette Taxes and Cigarette Tax Revenues, South Africa, 1961-2003

Source: Van Walbeek, 2003

## Impact of Tax Avoidance And Tax Evasion

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 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



## Curbing Tax Evasion

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

## Cigarette tax and illegal cigarette market, Spain 1991-2008

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


## For more information:

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