

# Tobacco Tax and Economics

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<http://www.tobaccoevidence.net>

# Tobacco Tax and Economics

- **Public health** – will higher taxes improve health of the nation?
- **Budget** – will higher taxes increase or decrease budget income?
- **Economy/development** – is there any negative effect? Employment? Smuggling?
- **Poverty** – will higher taxes burden low income groups?
- Reaction of the **tobacco industry** to new taxes

# Public Health:

## Higher Taxes

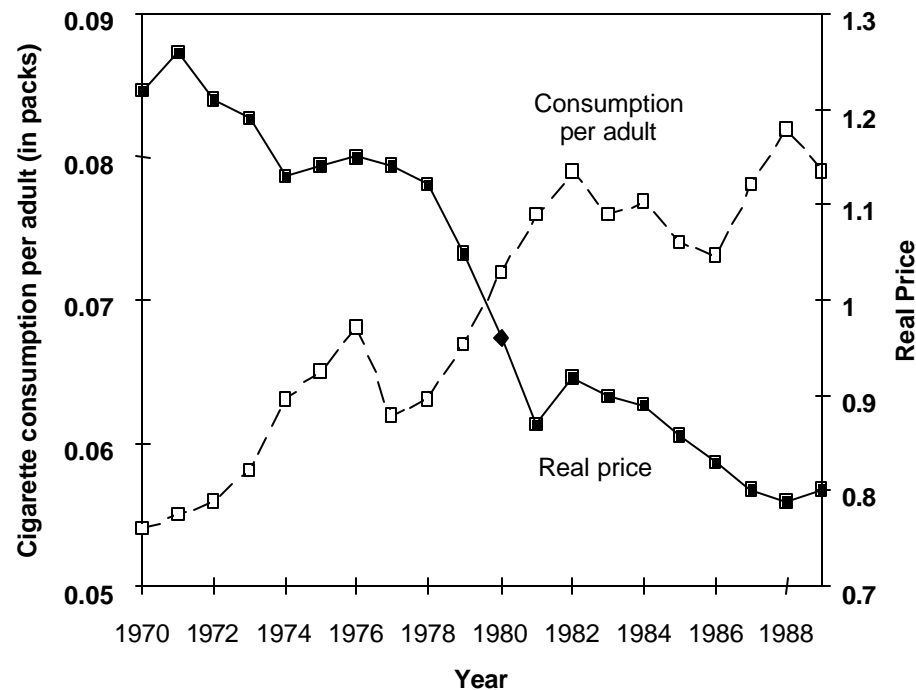
- Prevent uptake of smoking among young
- Reduce adult and youth smoking prevalence
- Reduce cigarette consumption among continuing smokers

# Research Evidence (continues)

- **Low income smokers reduce overall expenditures on cigarettes (GB)**
- **Price effect is doubled in long-run**
- **PM documents: “A high cigarette price, more than any other cigarette attribute, has the most dramatic impact on the share of the quitting population”**

# Cigarette price and consumption show opposite trends (1)

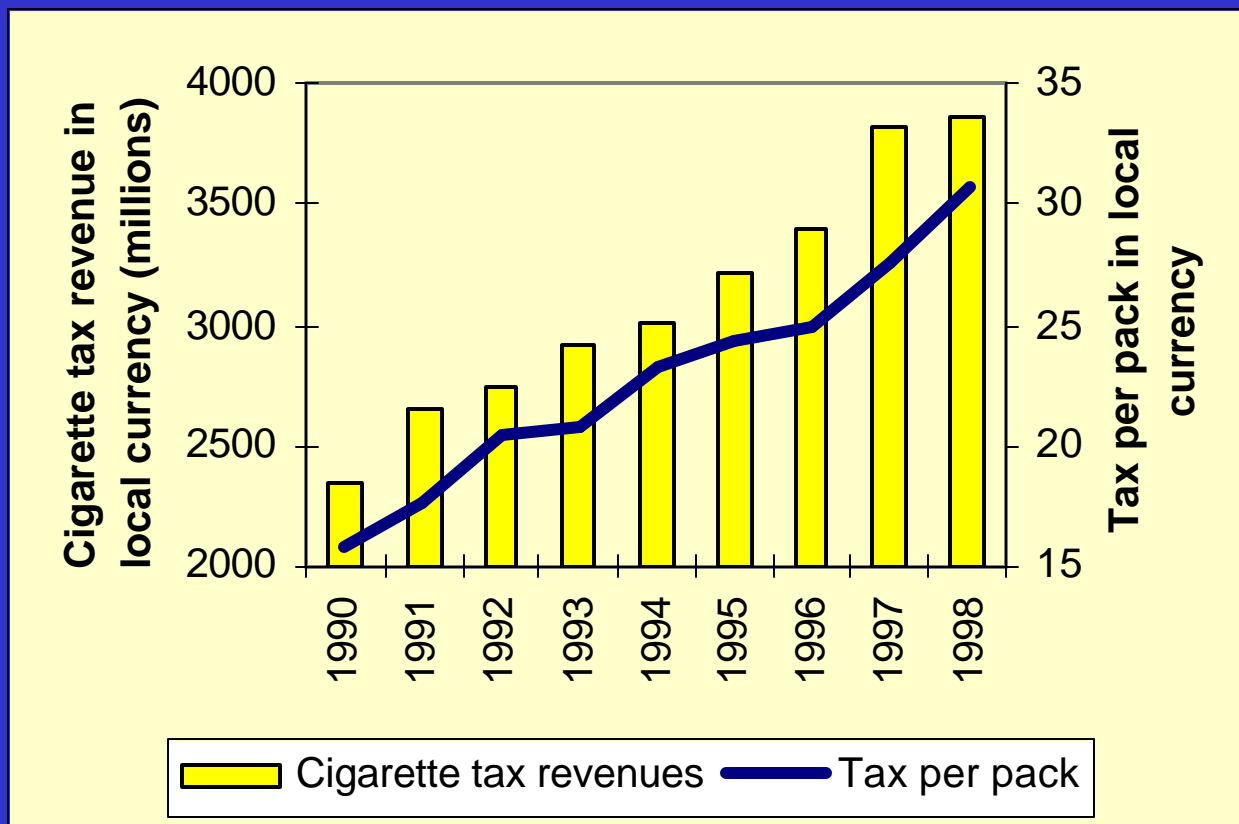
Real price of cigarettes and annual per adult cigarette consumption in South Africa 1970-1989



Source: Saloojee 1995

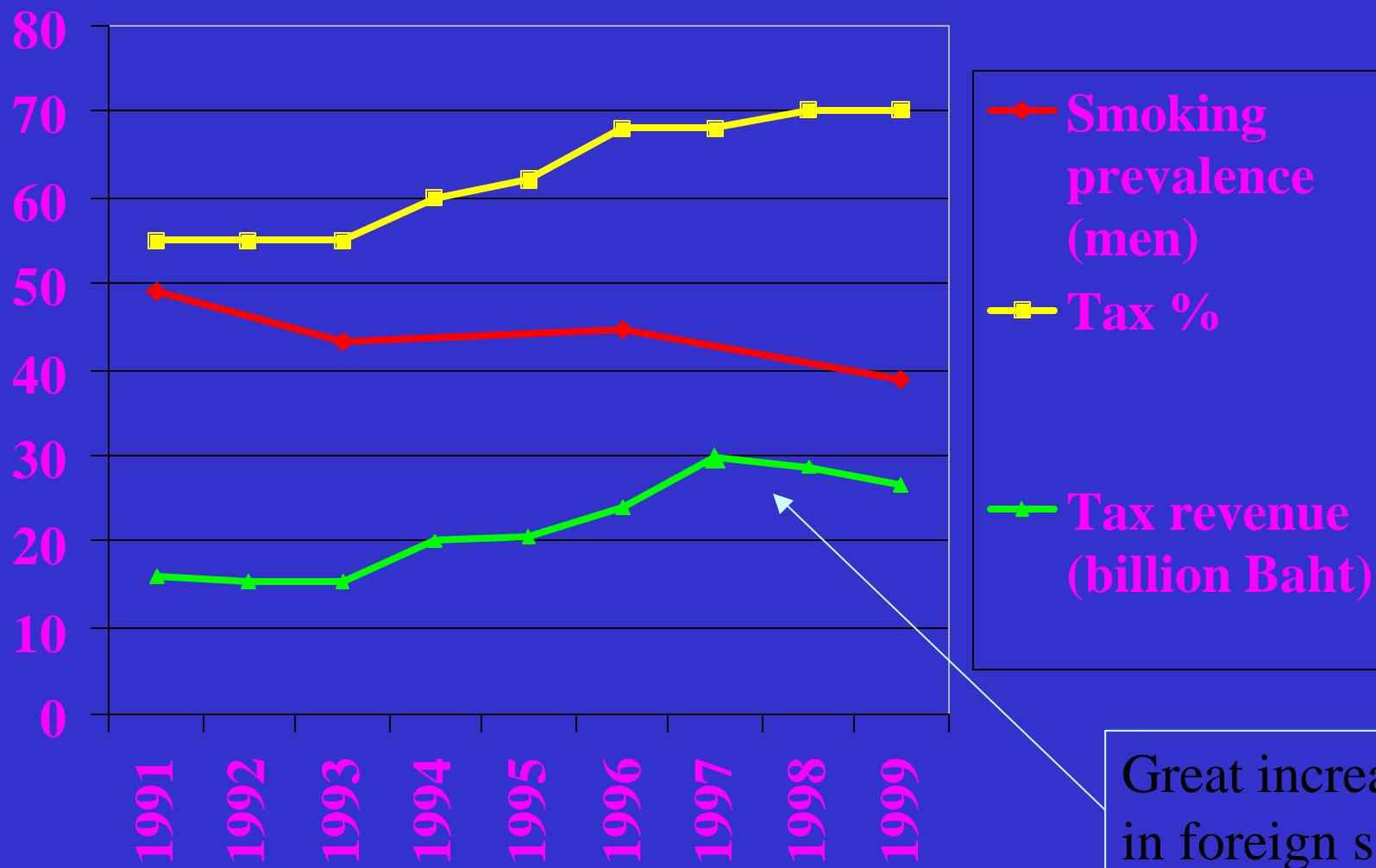
# As cigarette tax rises, revenues increase

## Example from Norway



Source: World bank 1999

# Thailand: Tobacco revenues increased with tax increases while prevalence declined



# Hypothetical tax increase

## Indonesian Example

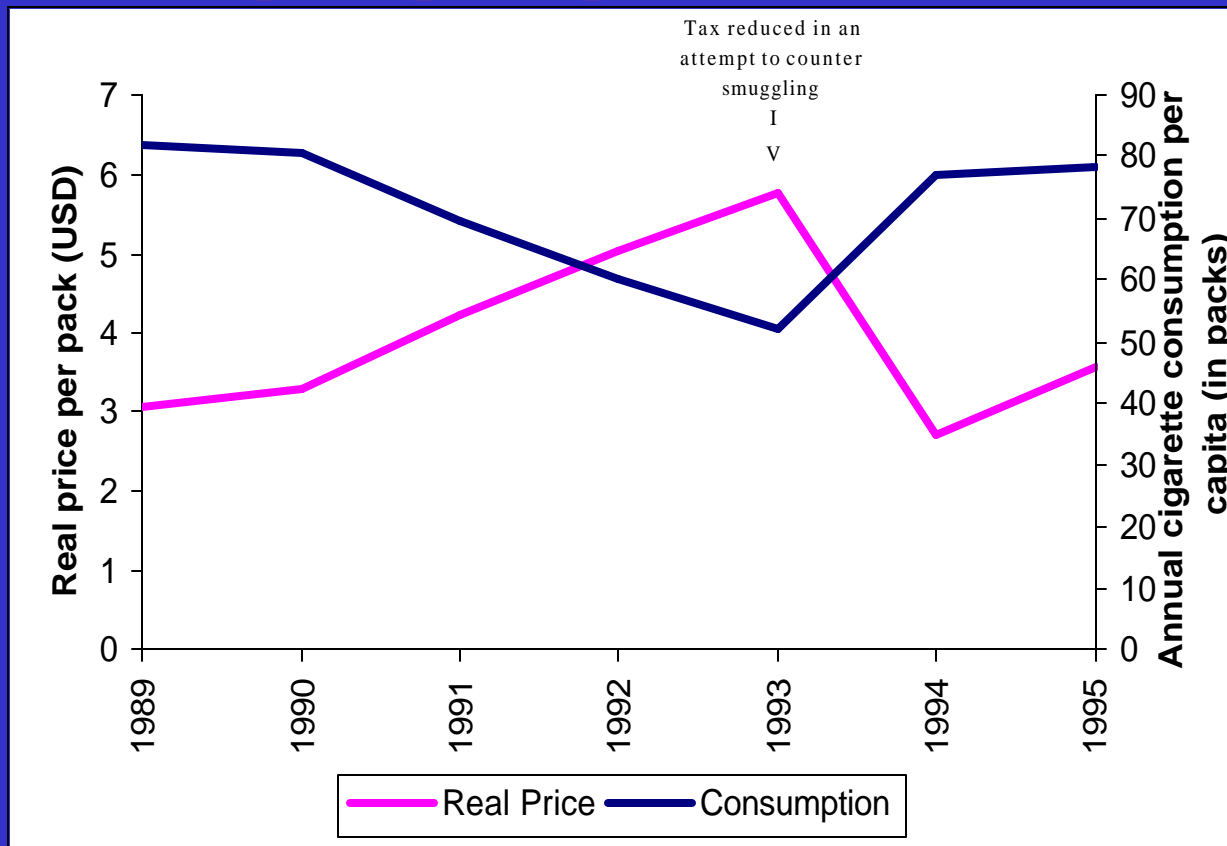
<b>Tax increase</b>	<b>% price change</b>	<b>% demand change</b>	<b>% tob. tax revenue change</b>	<b>Revenue change as % of GDP</b>
<b>10% -</b>	<b>3% -</b>	<b>2% -</b>	<b>8% -</b>	<b>0.26</b>
<b>50% -</b>	<b>18% -</b>	<b>9% -</b>	<b>36% -</b>	<b>0.33</b>
<b>100% -</b>	<b>36% -</b>	<b>19% -</b>	<b>63% -</b>	<b>0.40</b>

# Smuggling of cigarettes

- **Industry** has economic incentive to smuggle
  - Increase market share and decrease tax rates
- **Best estimate: 6 to 8.5% of total consumption**
- **Non-price variables important**
  - Perceived level of **corruption** more important than cigarette prices
- **Tax increase will lead to revenue increase, even in the event of increased smuggling**

# Lower tax rates in Canada in response to smuggling

Real price of cigarettes and annual cigarette consumption per capita, Canada, 1989-1995



Source: Jha and Chaloupka, 1999

# What is the “right” level of tax?

- **Complex question**

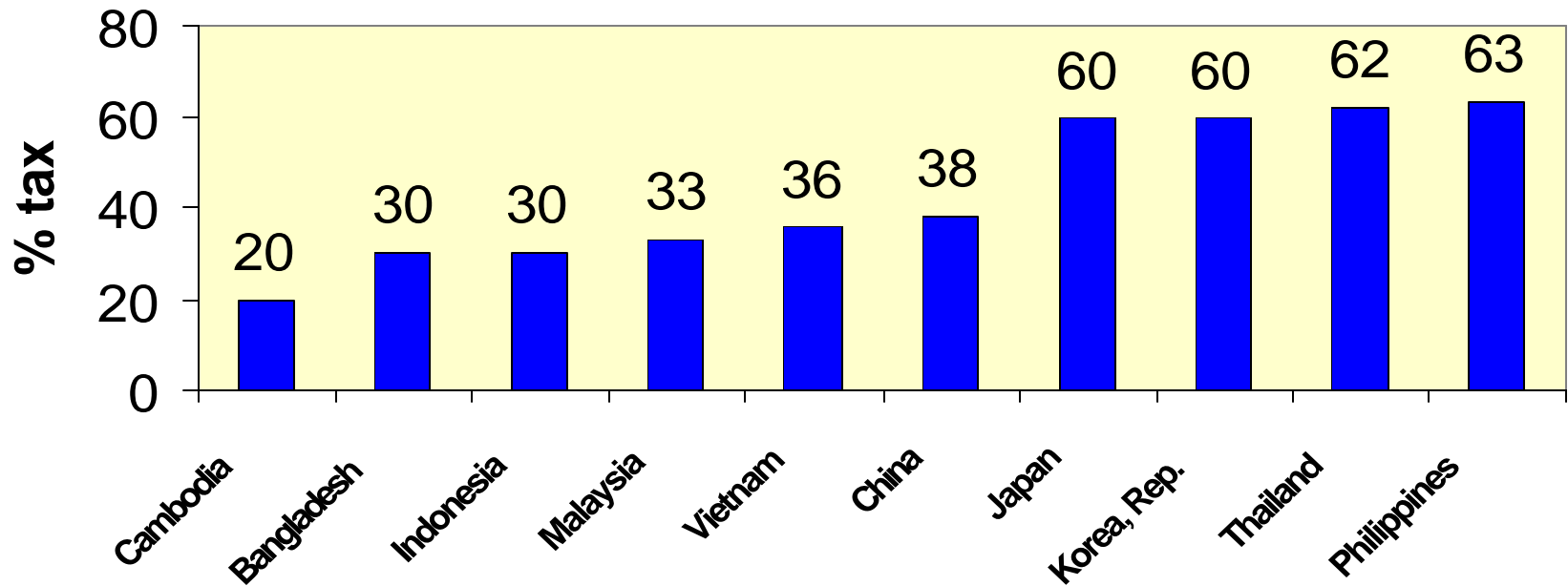
Depends on various factors, such as degree to which society wishes to **protect children**, **revenue** considerations, **health care costs**, state of public health & **development**, etc.

- **Useful yardstick:** where comprehensive programs used, tax is at least  $2/3$  to  $4/5$  of retail price.

Source: Chaloupka *et al.*, 2000

# Tax share in average retail price of cigarettes varies among countries

**Tobacco tax share in average retail price of pack of cigarettes in South East and East Asia Countries (1998)**



Source: World Bank data

# Summary

- **Revenue loss?** likely to have revenue gains
  - a 10% tax increase would raise revenue by 7%
- **Job loss?** temporary, minimal, and gradual
- **Possible smuggling?** crack down on criminal activity, not lower taxes
- **Costs to individuals, especially the poor?** partially offset by lower consumption

# Research Support

- **Dr. Teh Wei Hu & Dr. Hana Ross** can advise on technical issues
- **Rockefeller Foundation** is funding research on issues of poverty, tax analysis
- **SEA Alliance Hanoi workshop** – focus on taxation
- **Future workshops??**

# Hanoi Workshop

- **Goals**

- **assess tax policy in the region  
(commonalities, differences)**

- **determine what research is needed and  
can be done**

- **get policy makers and researchers to  
work together more efficiently**

# Hanoi Workshop

- **Participants**

**Researchers - know how to work with data**

- can get access to the data
- have time to work with data and produce research reports

**Public policy makers – need/want to understand the research results**

- are able to apply the results

**Good knowledge of English**