

Tobacco, Economics and Development in the 21st Century

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DEVELOPMENT IN PRACTICE

Curbing the Epidemic

Governments and the Economies of Tobacco Control



A WORLD BANK PUBLICATION



Consumption per adult

Real price


Tobacco control in developing countries

editors | Prabhat Jha | Frank Chaloupka

The International Tobacco Control Policy Evaluation Project

Tobacco Price and Taxation

ITC Cross-Country Comparison Report



MARCH 2012

UNIVERSITY OF WATERLOO

itc International Tobacco Control Policy Evaluation Project

The International Tobacco Control Policy Evaluation Project
ITC PROJECT WORKING PAPER SERIES

Taxation of Tobacco Products in Bangladesh

Findings from the 2009 ITC Bangladesh Survey

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itc International Tobacco Control Policy Evaluation Project

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WHO Technical Manual on Tobacco Tax Administration

World Health Organization

International Agency for Research on Cancer
World Health Organization

IARC HANDBOOKS OF CANCER PREVENTION
Tobacco Control

Volume 14

Effectiveness of Tax and Price Policies for Tobacco Control

2011

Economics & Tobacco Control

- ◆ Tobacco control efforts: public health + economic
 - Cost effectiveness of tobacco control interventions
- ◆ 21st Century: economic issues are key:
 - health care costs, lost productivity, lost income
 - tobacco farming
 - limited public health budgets in LMICs
 - increasing consolidation of the global tobacco industry

Economics & Tobacco Control

- ◆ But also...**effective tobacco control makes good economic sense:**
 - Taxes can increase revenues AND decrease demand
 - Restaurants and bars that become smoke-free will maintain or increase their revenue AND protect health
 - Farmers can be successfully transitioned away from tobacco growing
 - Health and economic benefits

Economic Costs of Tobacco Use

Considerable evidence from high-income countries:

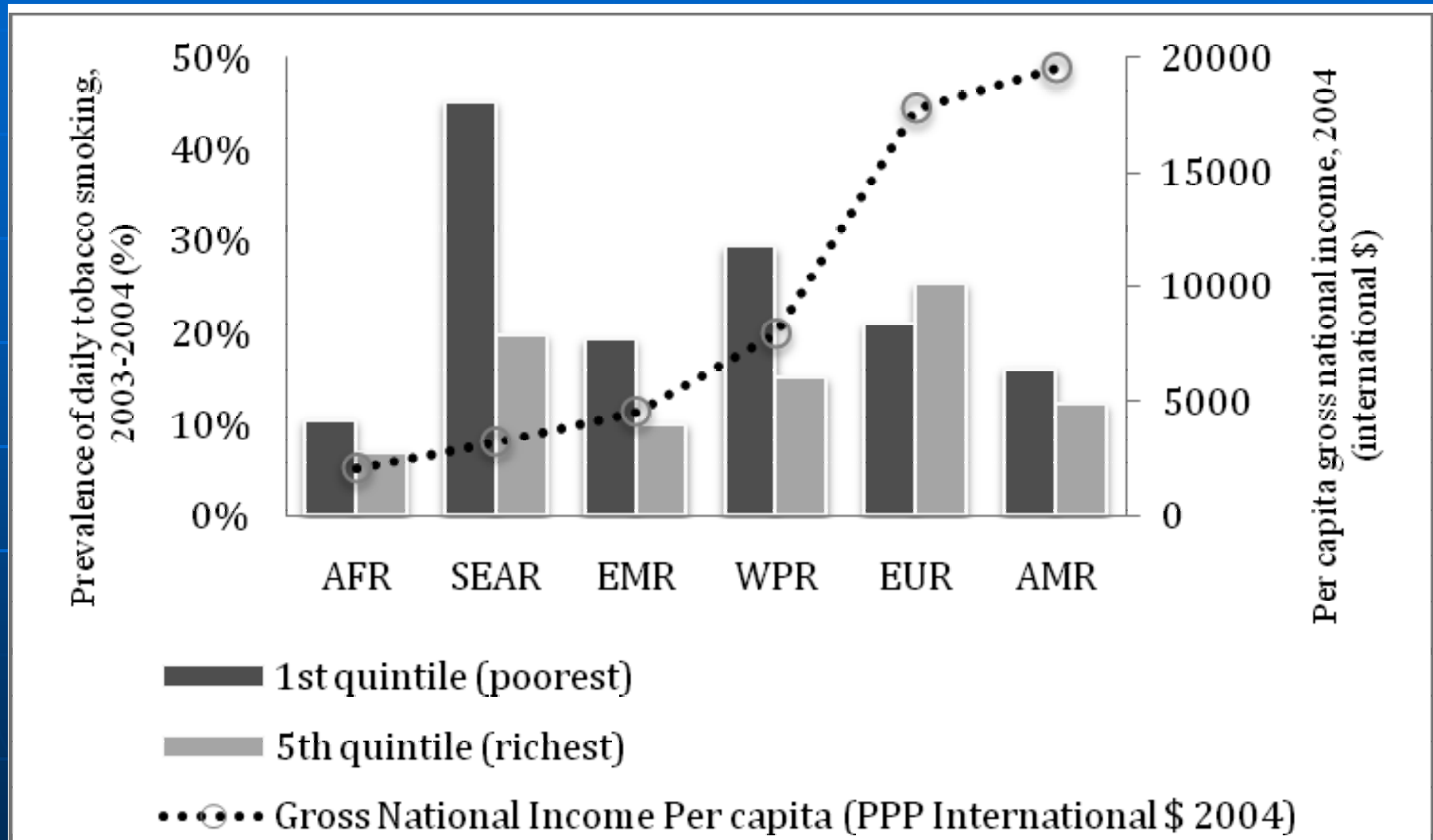
- US: smoking-attributable health care expenditures of \$96 billion in early 2000s
 - Lifetime health care costs for smokers are significantly higher than those of nonsmokers
- US: additional \$97 billion in lost productivity from premature death
 - Additional lost/reduced productivity from smoking on the job, smoking-attributable morbidity, exposure to TSP

Economic Costs of Tobacco Use

Limited, but emerging evidence from low and middle-income countries:

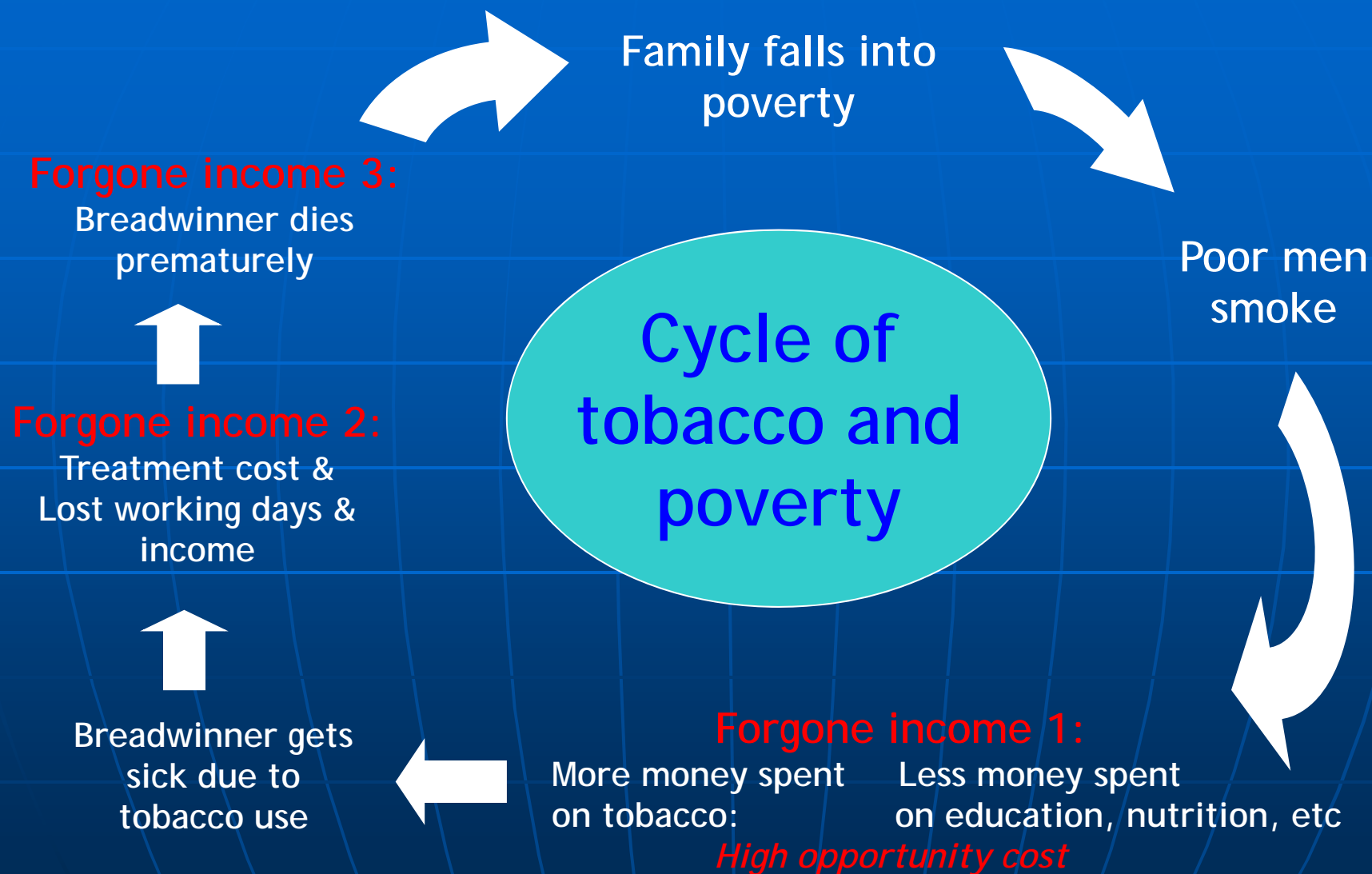
- **China:**
 - 3.1% of health care costs; 1.9% of GDP
- **India:**
 - 4.7% of health care costs; 0.25% of GDP
- **Bangladesh:**
 - >3% of GDP
- Economic costs in LMICs will almost certainly rise over time

Poverty and Tobacco Use



Sources: WHO 2007

Tobacco and Poverty



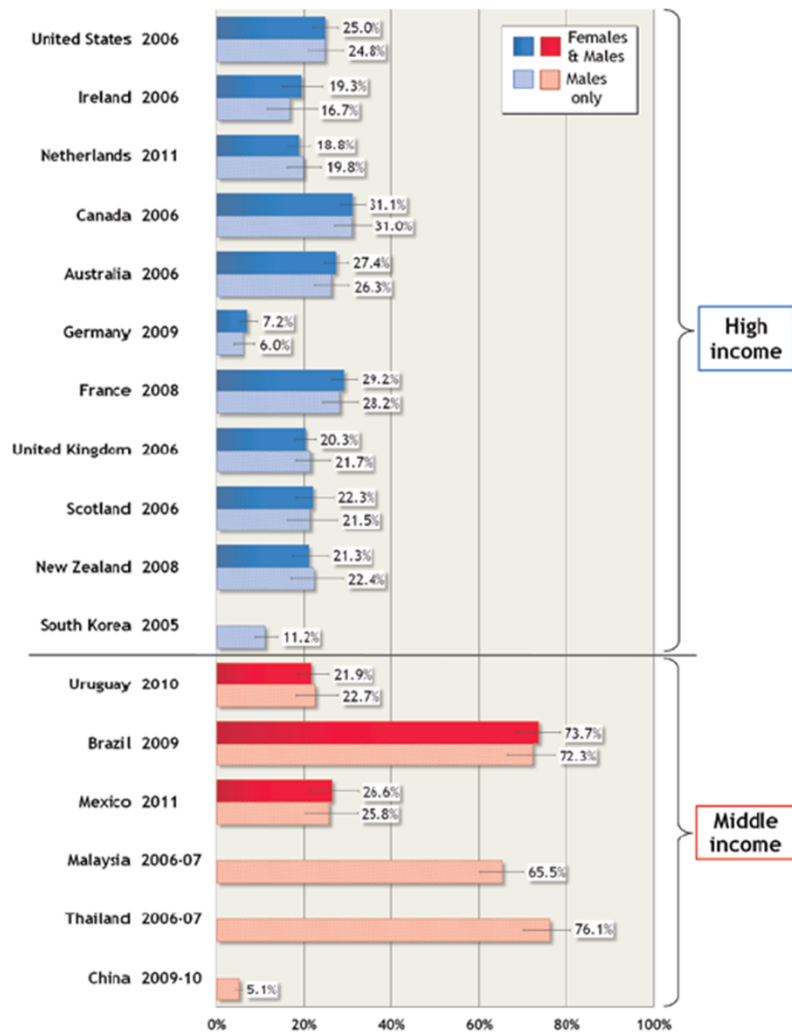
Poverty and Tobacco Use

Burdens of poverty are compounded by tobacco use

- Responsible for impoverishment of over 50 million in China and over 15 million in India
- Crowding out of other spending:
 - Bangladesh: tobacco money spent equivalent to:
 - Males = 1402 calories of rice per day
 - Females = 770 calories of rice per day

Spent Money on Cigarettes Instead of Essentials

Figure 2. Percentage of smokers who spent money on cigarettes instead of household essentials, such as food, in the last 6 months, by country



Crowding Out 17 ITC Countries

Tobacco crowds out spending on essentials.
– Greater crowding out in LMICs



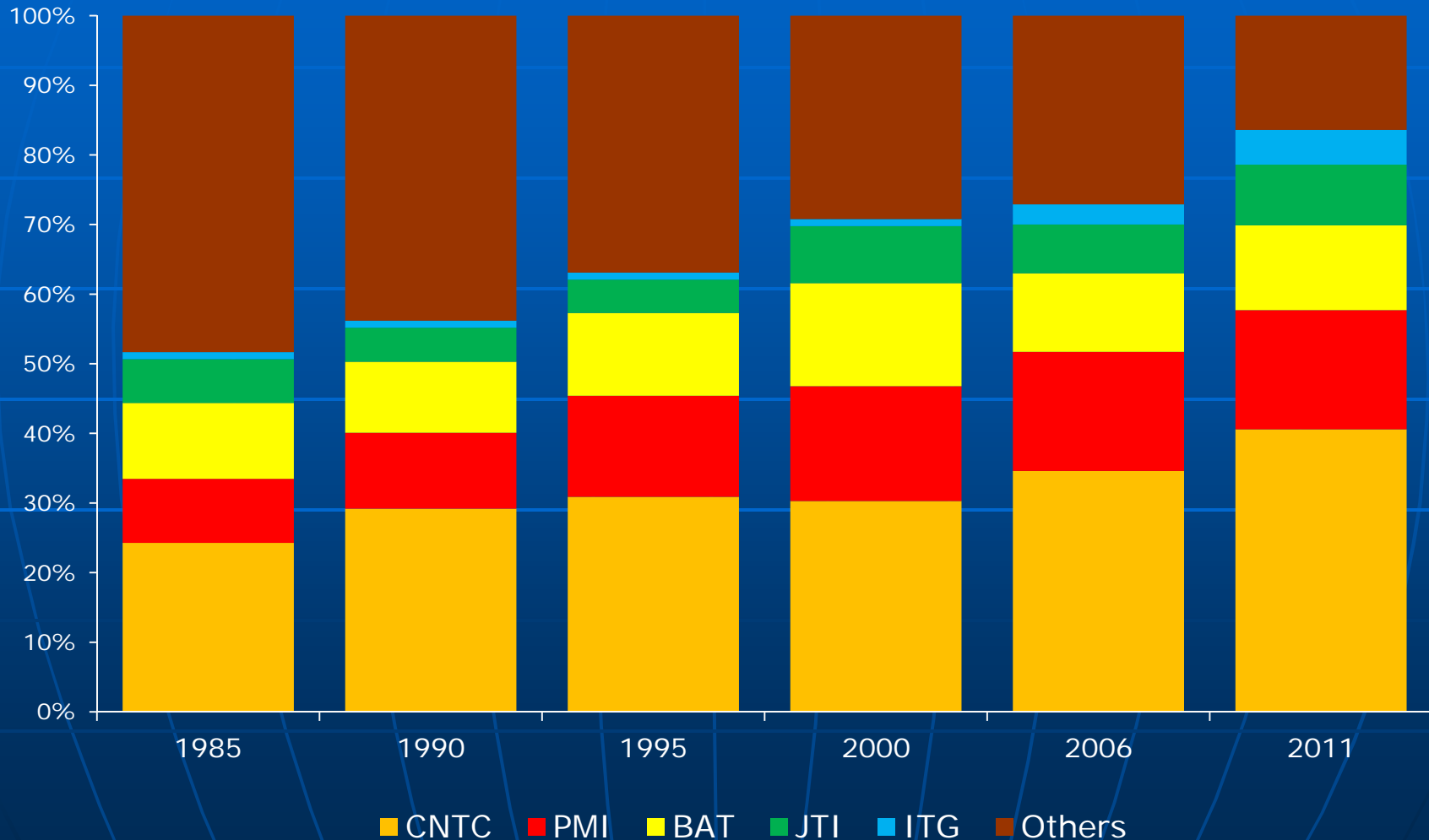
Source: ITC Project, 2012

Tobacco-Related Employment

- Very small share of employment *dependent* on tobacco growing and manufacturing in most countries
 - Net gains in total employment with reductions in tobacco use as expenditures are redistributed and specific sectors (e.g., hospitality) improve.
 - Employment losses in tobacco-related areas are small and gradual over time.
 - Can use revenues from tobacco taxes to help those in tobacco growing/manufacturing shift to other sustainable livelihoods

Globalization of Tobacco Industry

Cigarette Company Market Shares, 1985-2011, Selected Years



Sources: *Maxwell Tobacco Fact Book*, various years; Euromonitor, 2013; note: PMI includes Philip Morris International and Altria Group Inc.

Globalization of Tobacco Control

- Prioritize public health
- Emphasize need for international action and cooperation
- Evidence-based
- Mindful of social & economic impact of tobacco control
- Concerned about role of industry



Economic Impact of Tobacco Control

Effective tobacco control makes good economic sense:

- Not just long-term public health, but near-term health and economic benefits
- Tobacco control will not harm economies
- Substantial impact in reducing health care costs, improving productivity, and fostering economic development.

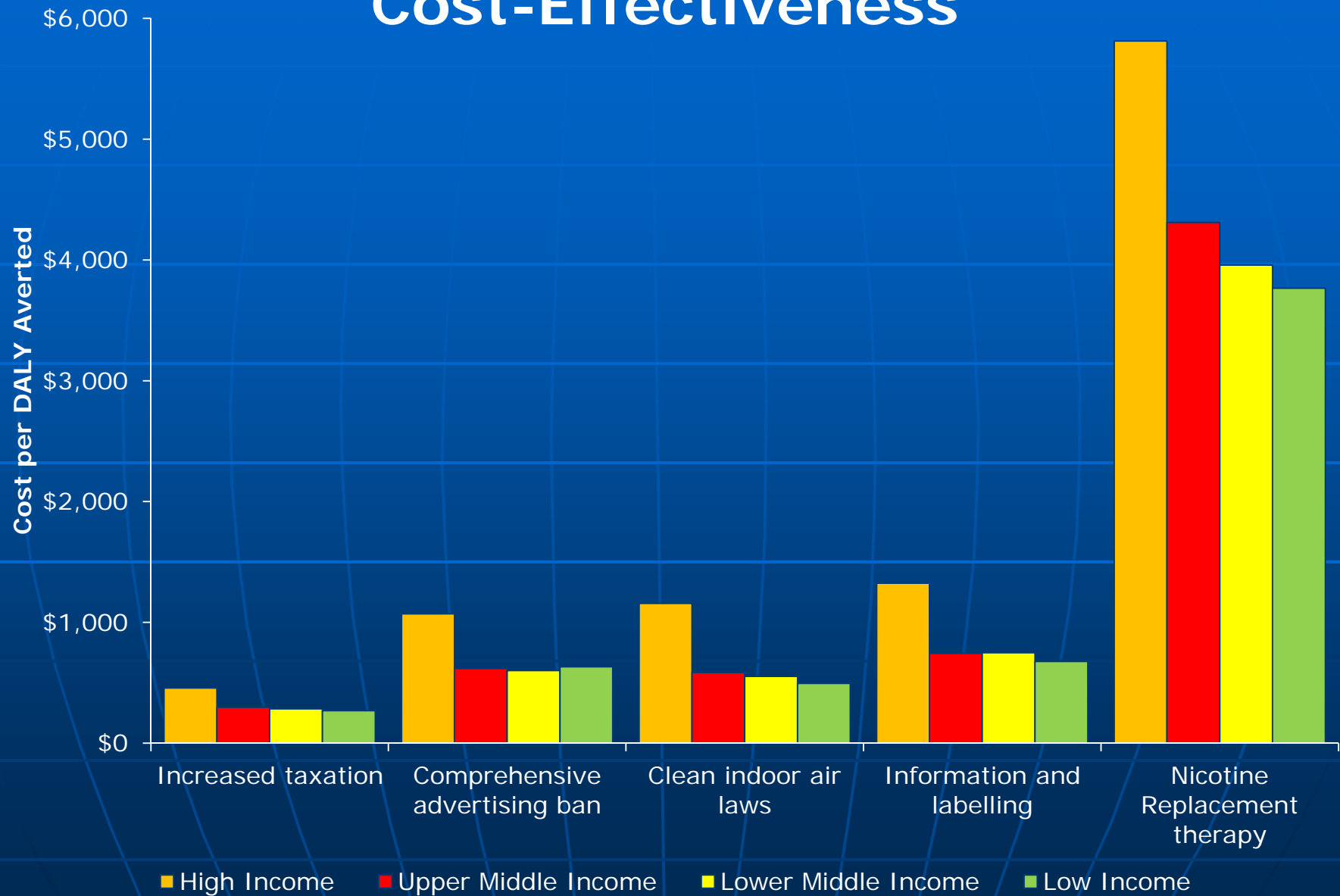
Tobacco Control & Development

Tobacco control can help achieve Millennium Development Goals

- Eradicate extreme poverty & hunger
- Achieve universal primary education
- Promote gender equality
- Reduce child mortality
- Improve maternal health
- Combat HIV/AIDS, malaria & other diseases
- Ensure environmental sustainability
- Develop global partnership for development

Key Tobacco Control Policies

Cost-Effectiveness



Source: WHO, unpublished data

Tobacco Taxation

*"... 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.**"*

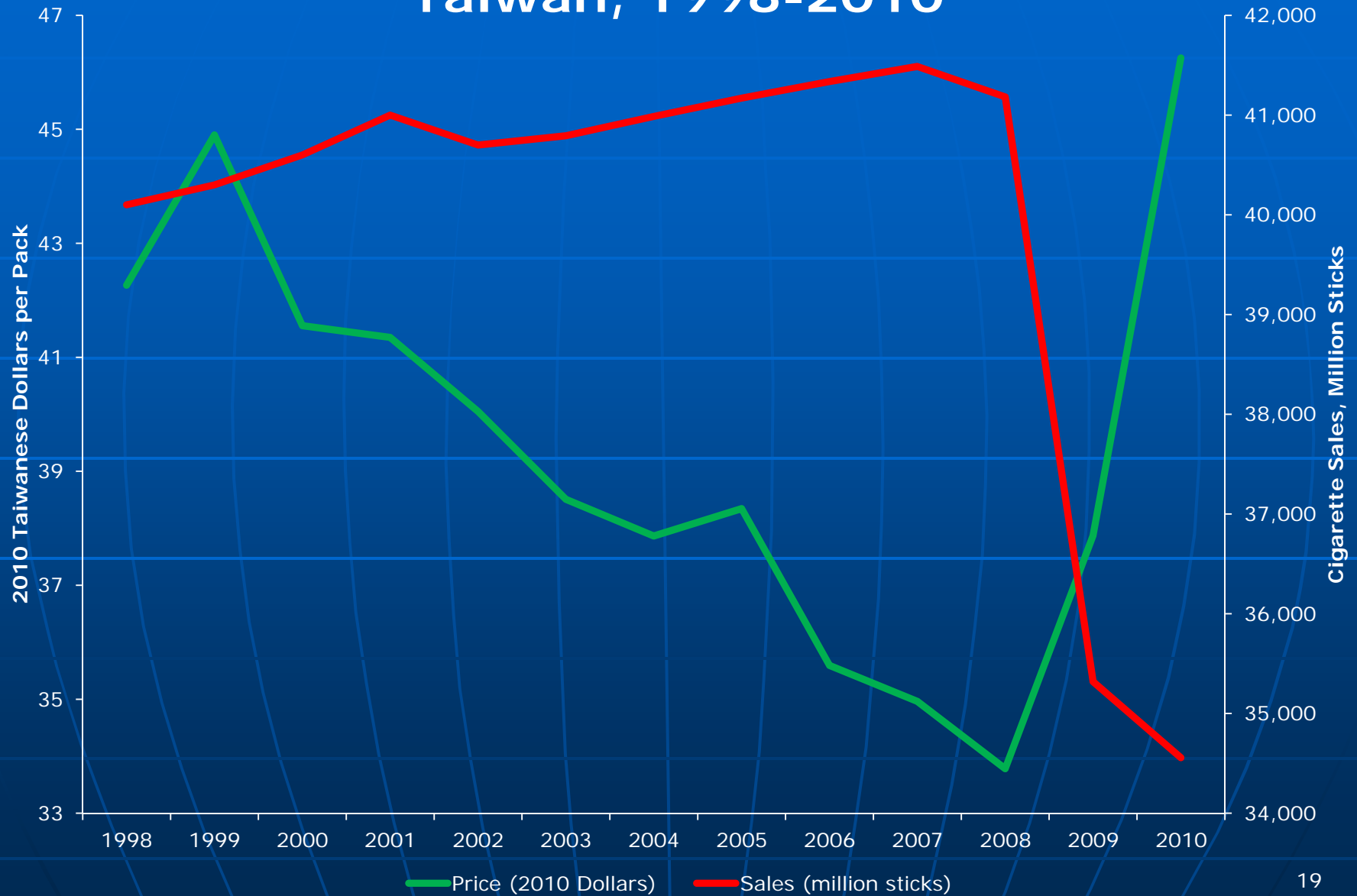
Director General Dr. Margaret Chan, WHO

Tobacco Taxes and Tobacco Use

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

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

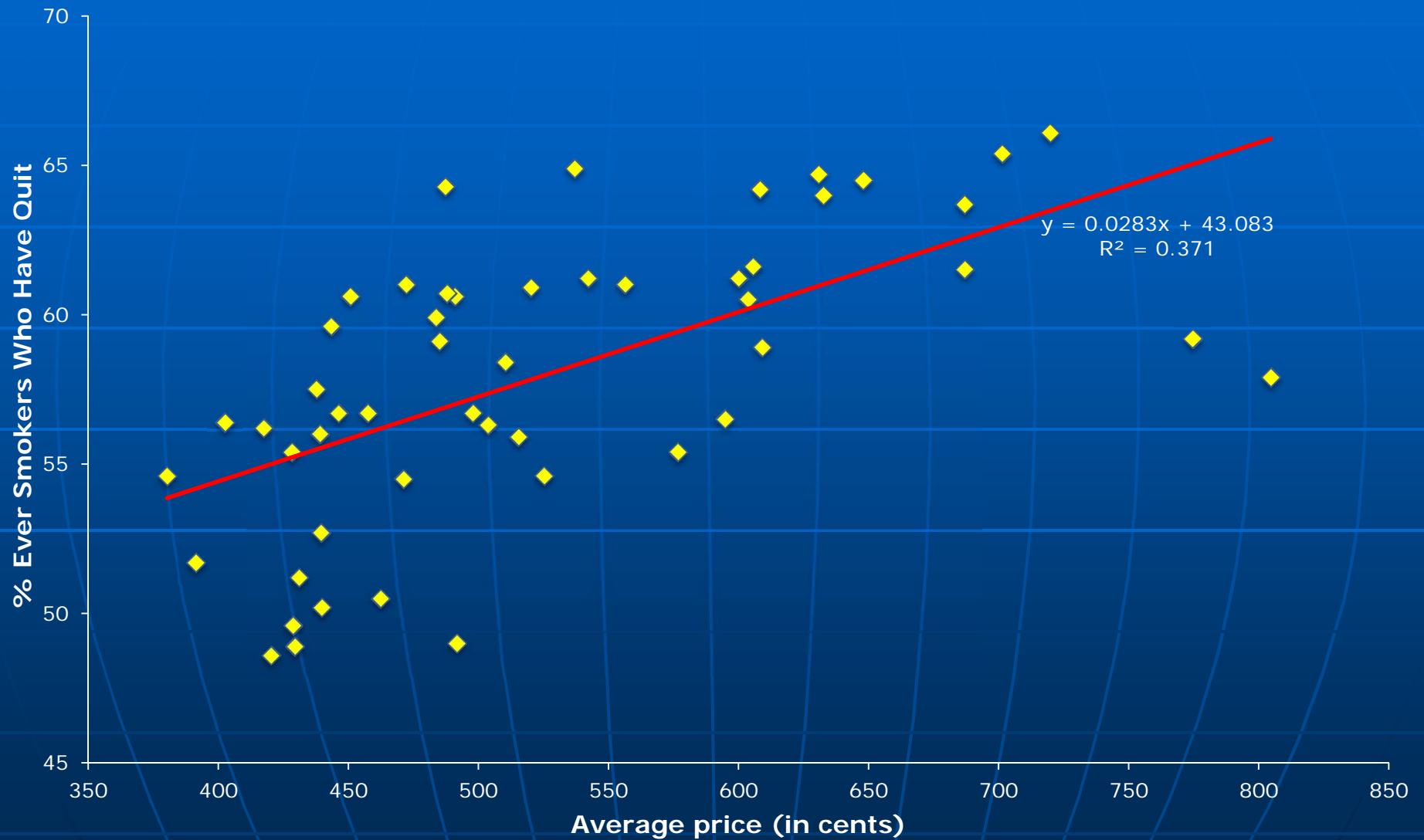


Source: *Tax Burden on Tobacco*, 2011, National Health Interview Survey, and author's calculations

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

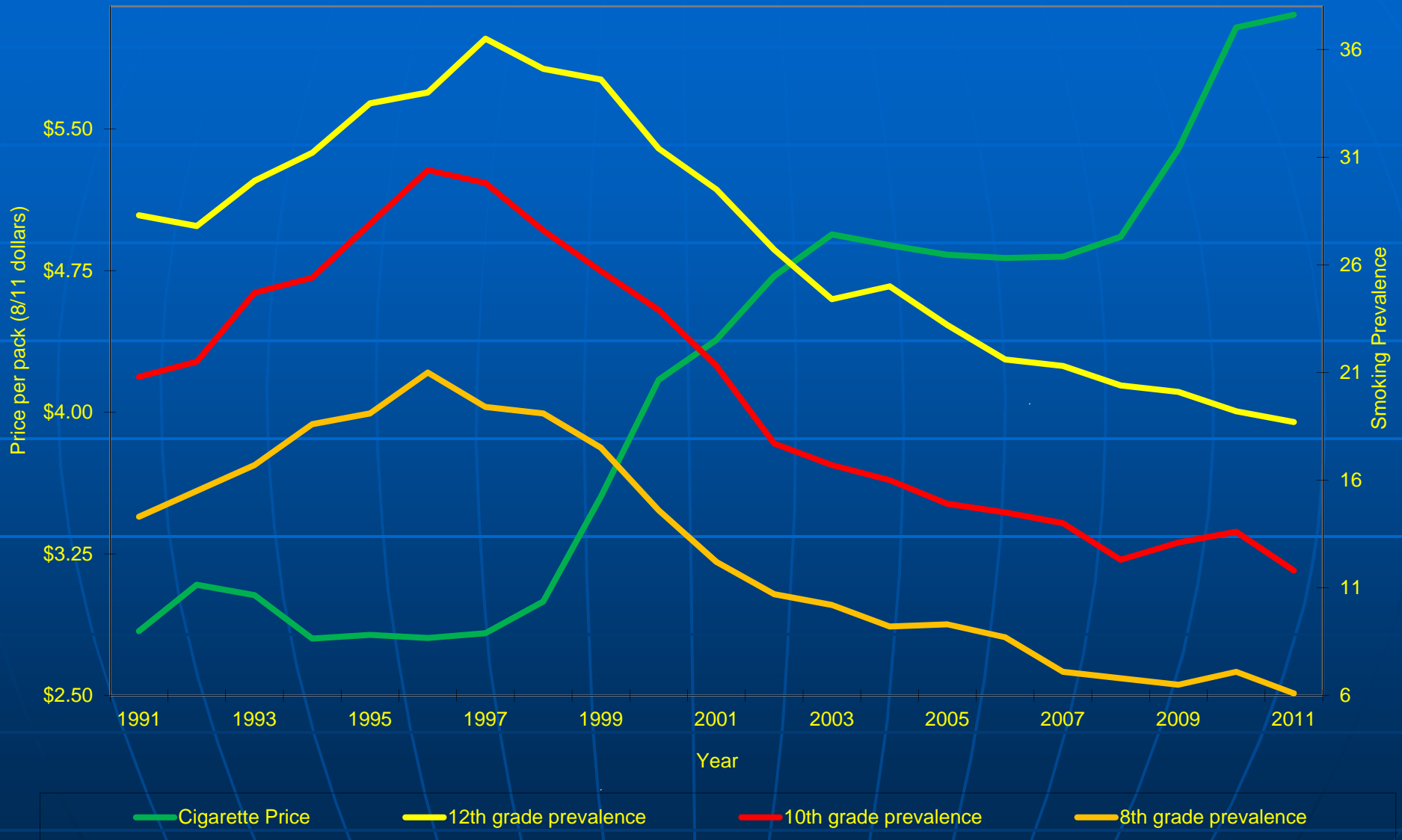
Tobacco Taxes and Youth Tobacco Use

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



Source: MTF, *Tax Burden on Tobacco*, 2011, and author's calculations

Tobacco Taxes and LMICs

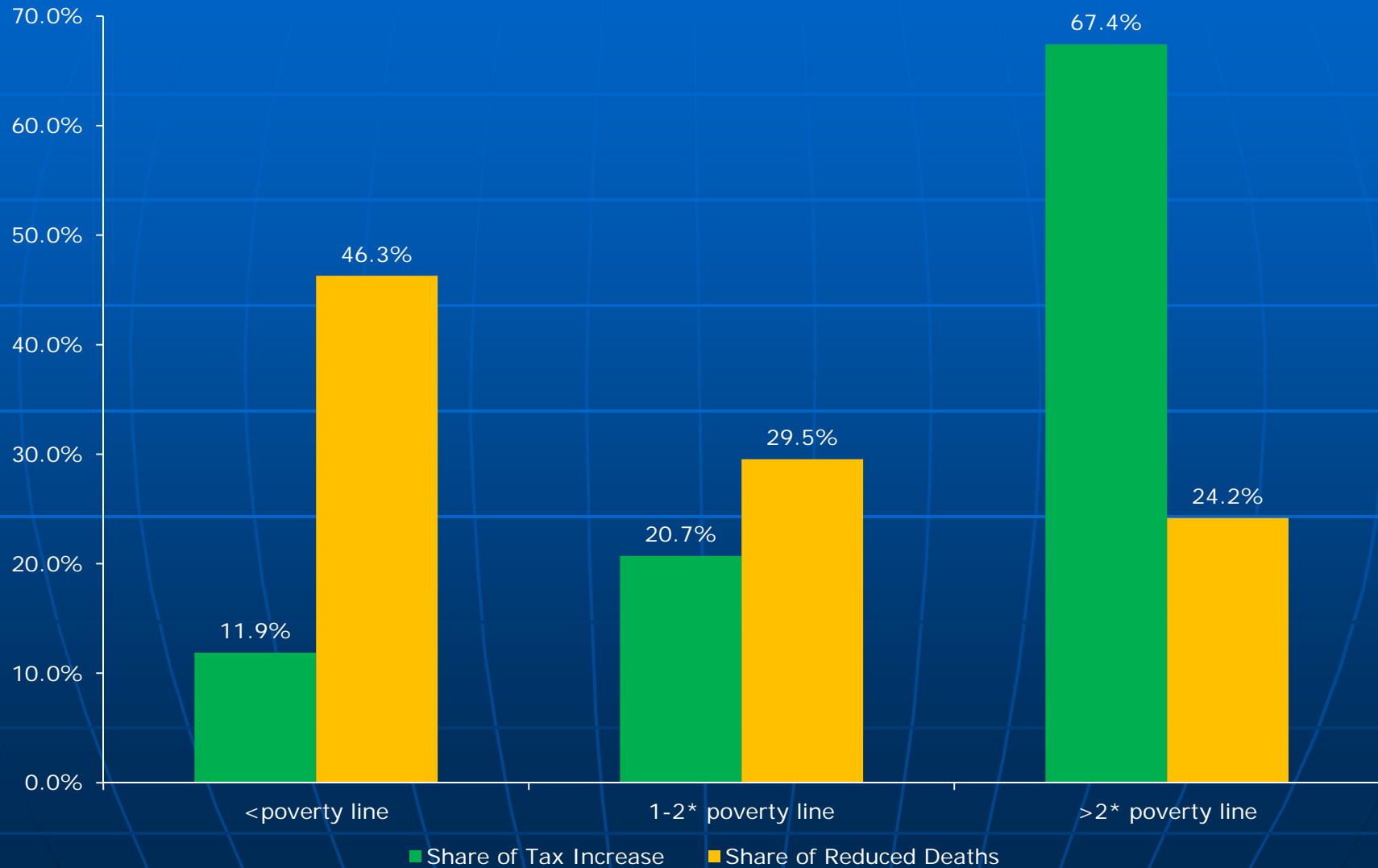
The demand for tobacco products in low-income countries is at least as responsive to price as is the demand for tobacco products in high-income countries.

Tobacco Taxes and Low-Income Populations

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

Who Pays & Who Benefits

Impact of Federal Tax Increase, U.S., 2009

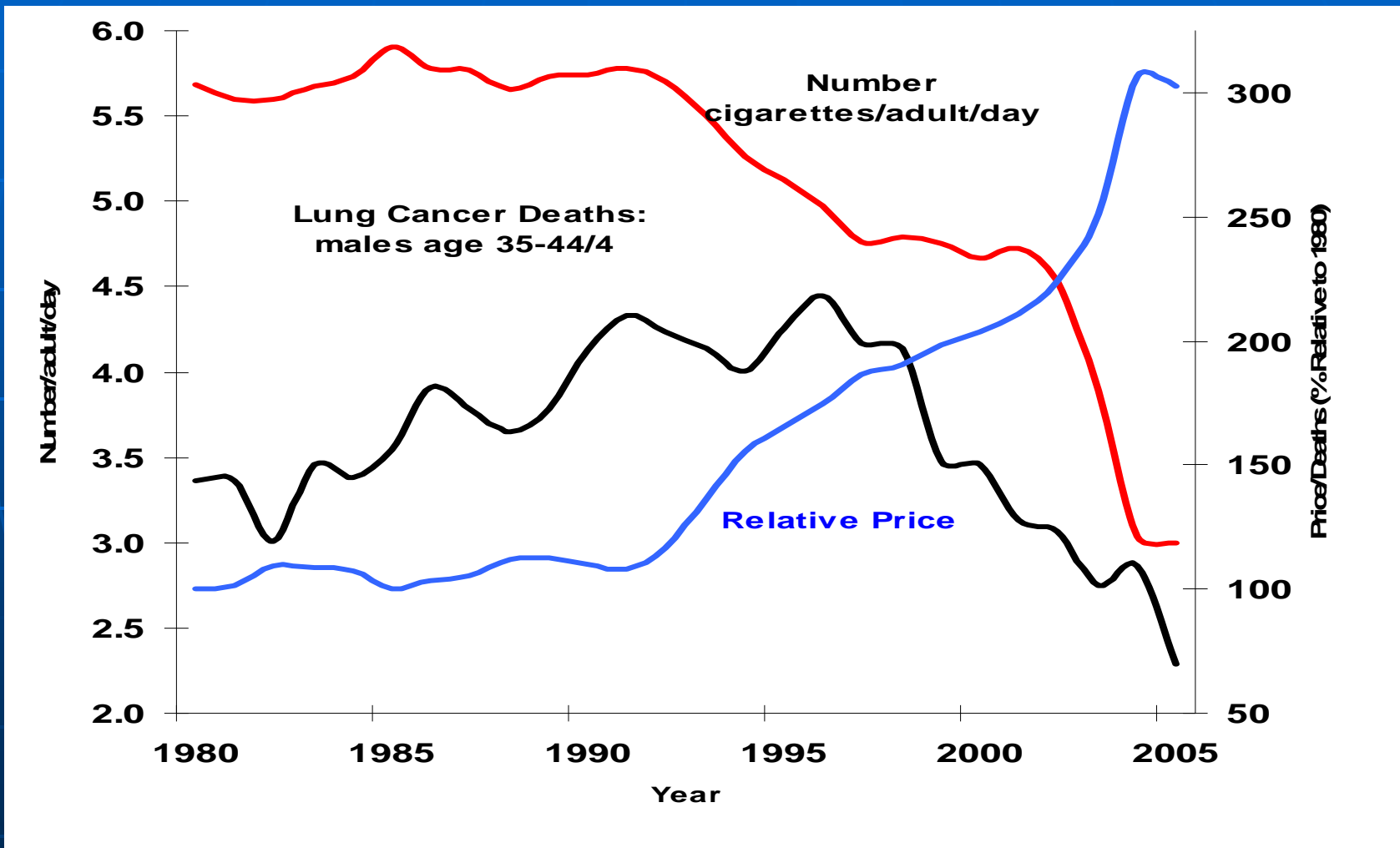


Source: Chaloupka et al., in progress; assumes higher income smokers smoke more expensive brands

Tobacco Taxes and Population Health

Tobacco tax increases that
increase prices improve population
health

Tax, Price, Smoking, and Male Lung Cancer, France, 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.

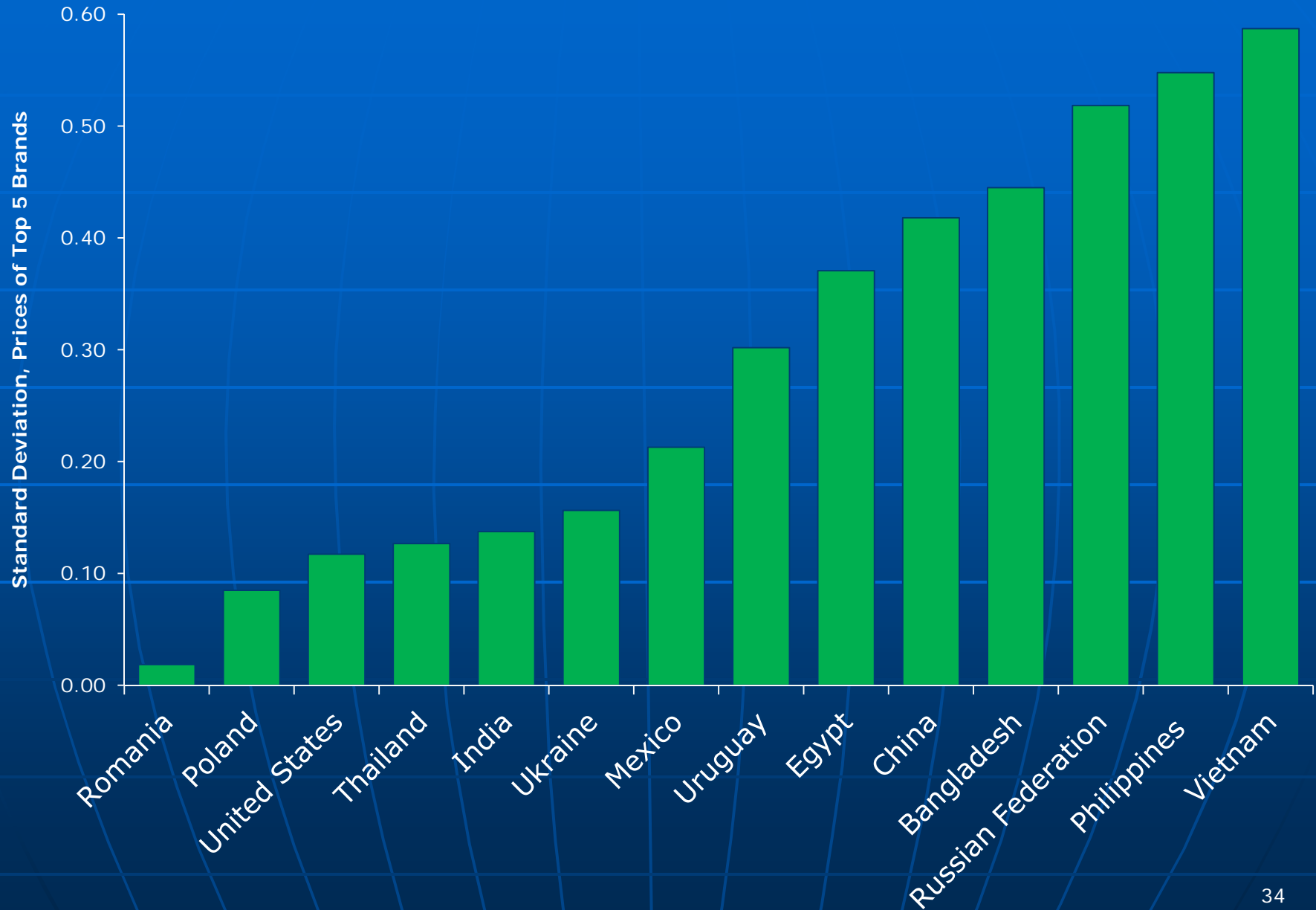
Cigarette Taxation Globally

Income Group	Excise System on Cigarettes			No Excise	Total countries *
	Only specific	Only ad valorem	Both specific and ad valorem		
High	11	2	25	7	45
Upper Middle	16	11	9	6	42
Lower 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

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* Countries for which data are available; Source: WHO calculations using WHO GTCR 2009 data

Cigarette Prices & Tax Structure



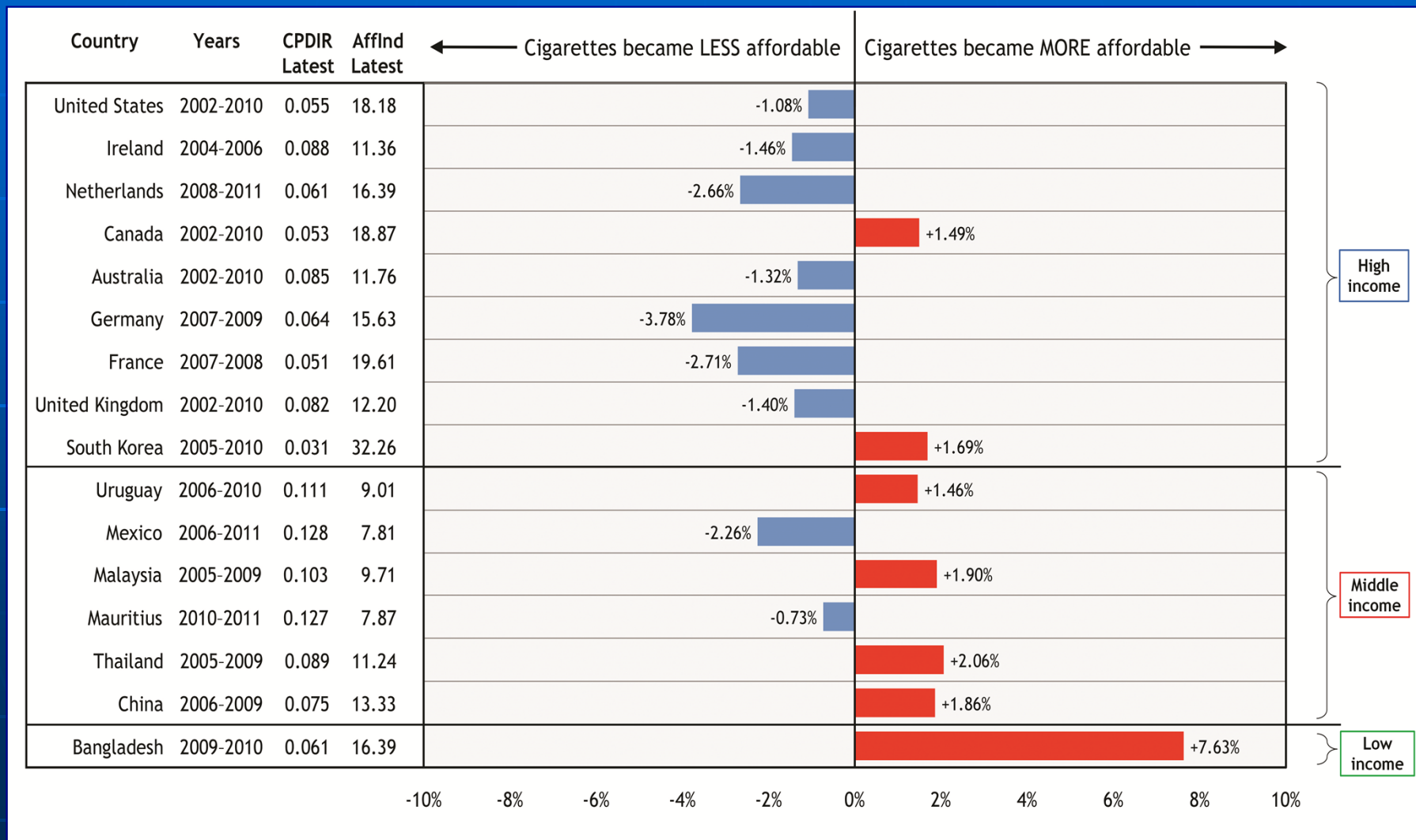
Source: Chaloupka, et al., in progress

Tobacco Taxes and Affordability

To achieve public health goals, tobacco tax and price increases need to reduce the affordability of tobacco products.

Cigarette Affordability

16 ITC Countries over Time

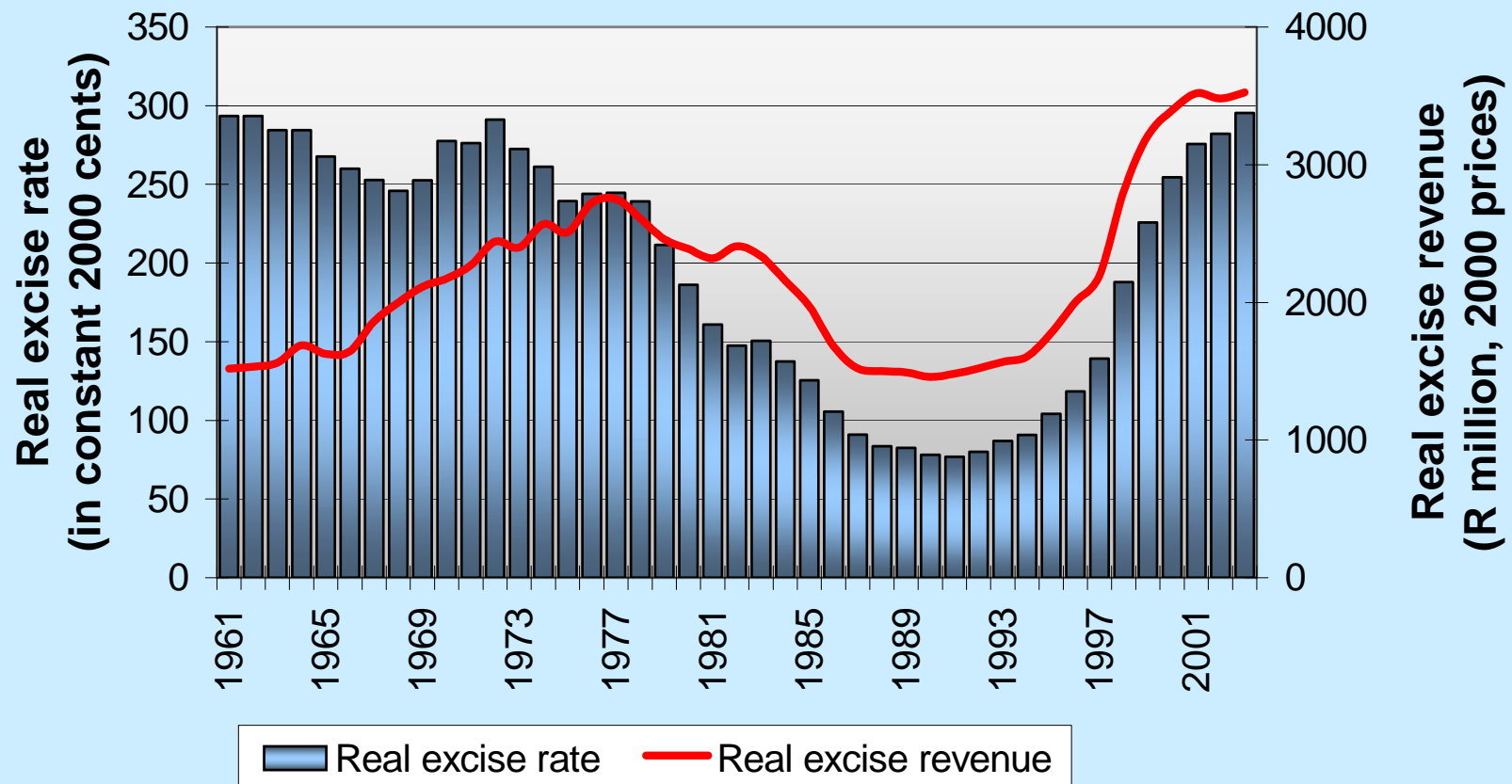


Tobacco Taxes and Tobacco Tax Revenues

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

Tobacco Taxes, Sales & Revenues

WHO TaXSiM model forecasts of tax changes announced in 2012	% change in average excise per pack	% change in average price per pack	% change in annual sales volume	% change in annual excise revenue
Philippines (median est.)	201%	70%	-48%	58%
Senegal	57%	50%	-22%	23%
India (bidi cigarettes)	25%	1%	-1%	5%
Thailand	21%	14%	-6%	12%
India (white cigarettes)	20%	18%	-9%	9%
Fiji	10%	4%	-3%	7%
Papua New Guinea	10%	3%	-3%	7%
Bangladesh	8%	5%	-2%	6%
Indonesia	5%	3%	-1%	4%

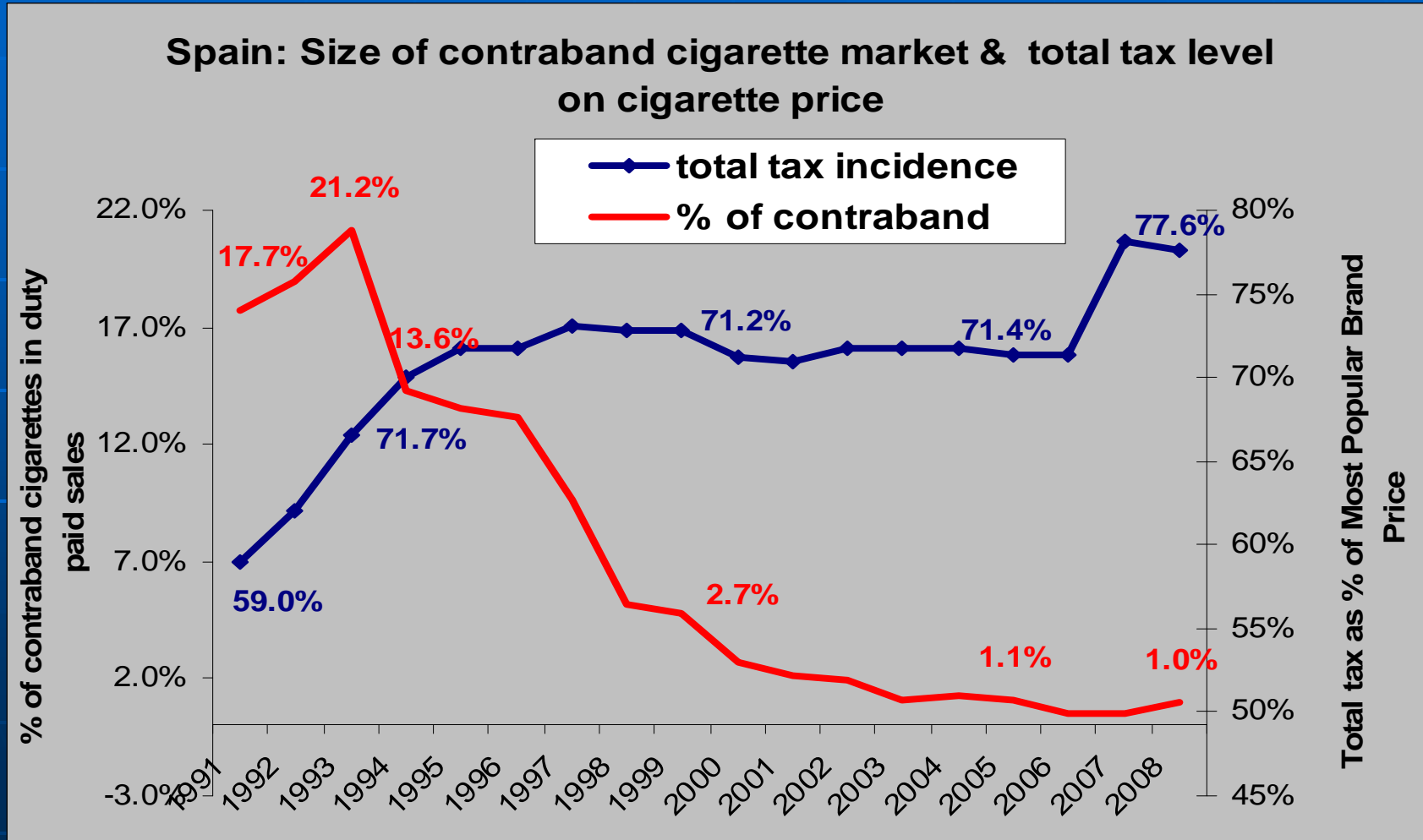
Tax Avoidance & Tax Evasion

Tax avoidance and tax evasion reduce, but do not eliminate, the public health and revenue impact of tobacco tax increases.

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 Taxes and Illegal Cigarettes, Spain 1991-2008



Source: WHO, unpublished data

Conclusions

Health and economic development are interlinked

By promoting health, tobacco control is good for development

Encouraging tobacco growing and manufacturing leads to poor health and negatively impacts development

Significant tobacco tax increases reduce tobacco use, improve health, and will be good for development

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www.itcproject.org

www.tobacconomics.org

(coming soon)