

Economics of Tobacco Control

—

An Introduction

Frank J. Chaloupka

Chair, WHO Collaborating Centre on the Economics of Tobacco &
Tobacco Control

Distinguished Professor, University of Illinois at Chicago

Symposium on the Economics of Tobacco Control
Hacettepe University, Ankara, Turkey

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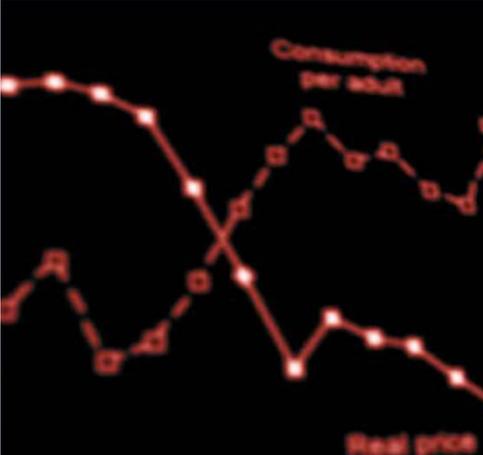
DEVELOPMENT IN PRACTICE

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

Nigar Nargis and Ummal Hasanath Ruthbah
University of Dhaka, Bangladesh

Geoffrey T. Fong
University of Waterloo and Ontario Institute for Cancer Research, Canada

APRIL 15, 2010

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itc International Tobacco Control Policy Evaluation Project

Suggested Citation: Nargis, N., Ruthbah, U. H., and Fong, G. T. (April 2010). Taxation of Tobacco Products in Bangladesh: Findings from the 2009 ITC Bangladesh Survey. ITC Project Working Paper Series, University of Waterloo, Waterloo, Ontario, Canada.



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

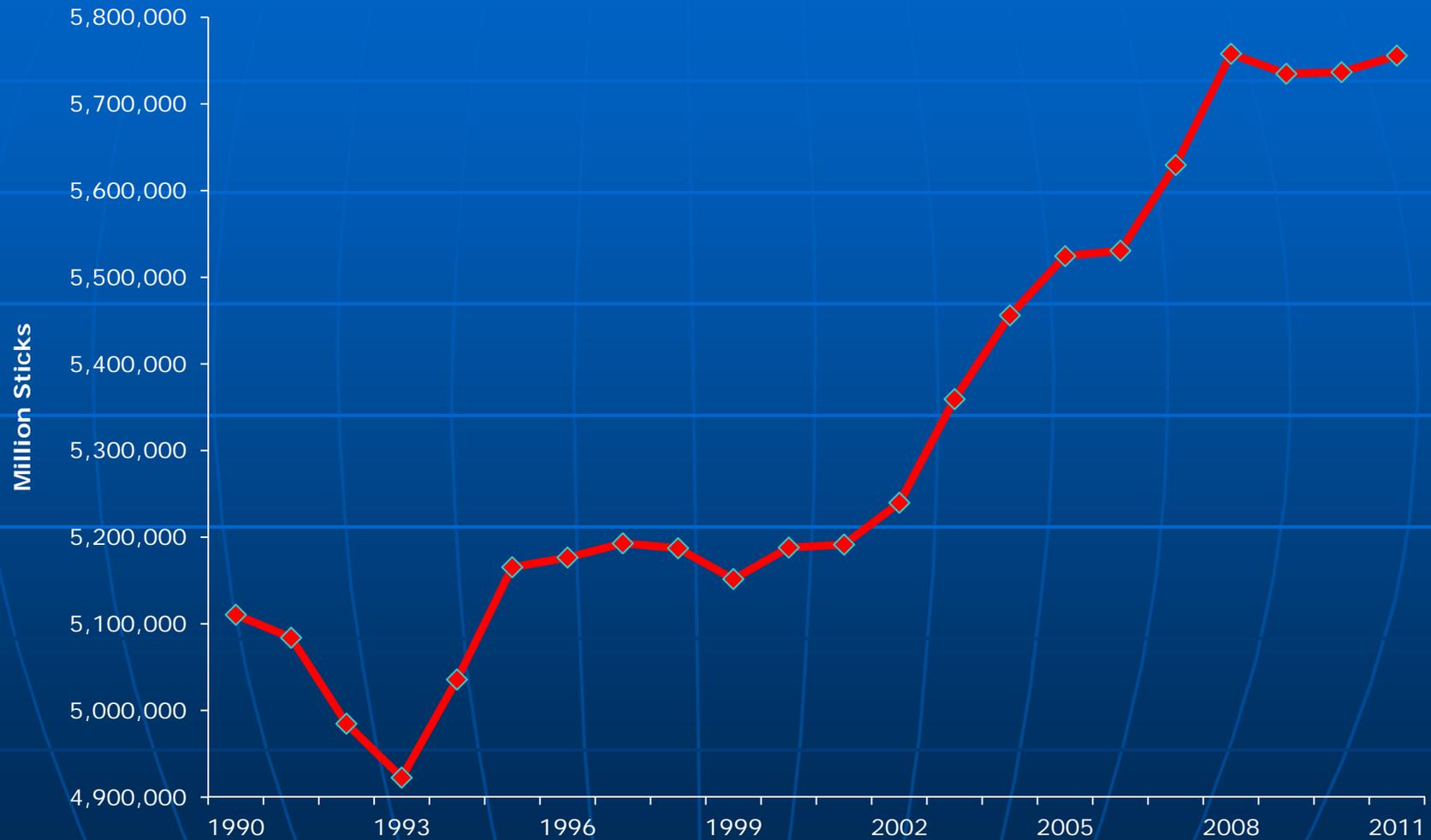
Effectiveness of Tax and Price Policies for Tobacco Control

2011

Economics & Tobacco Control

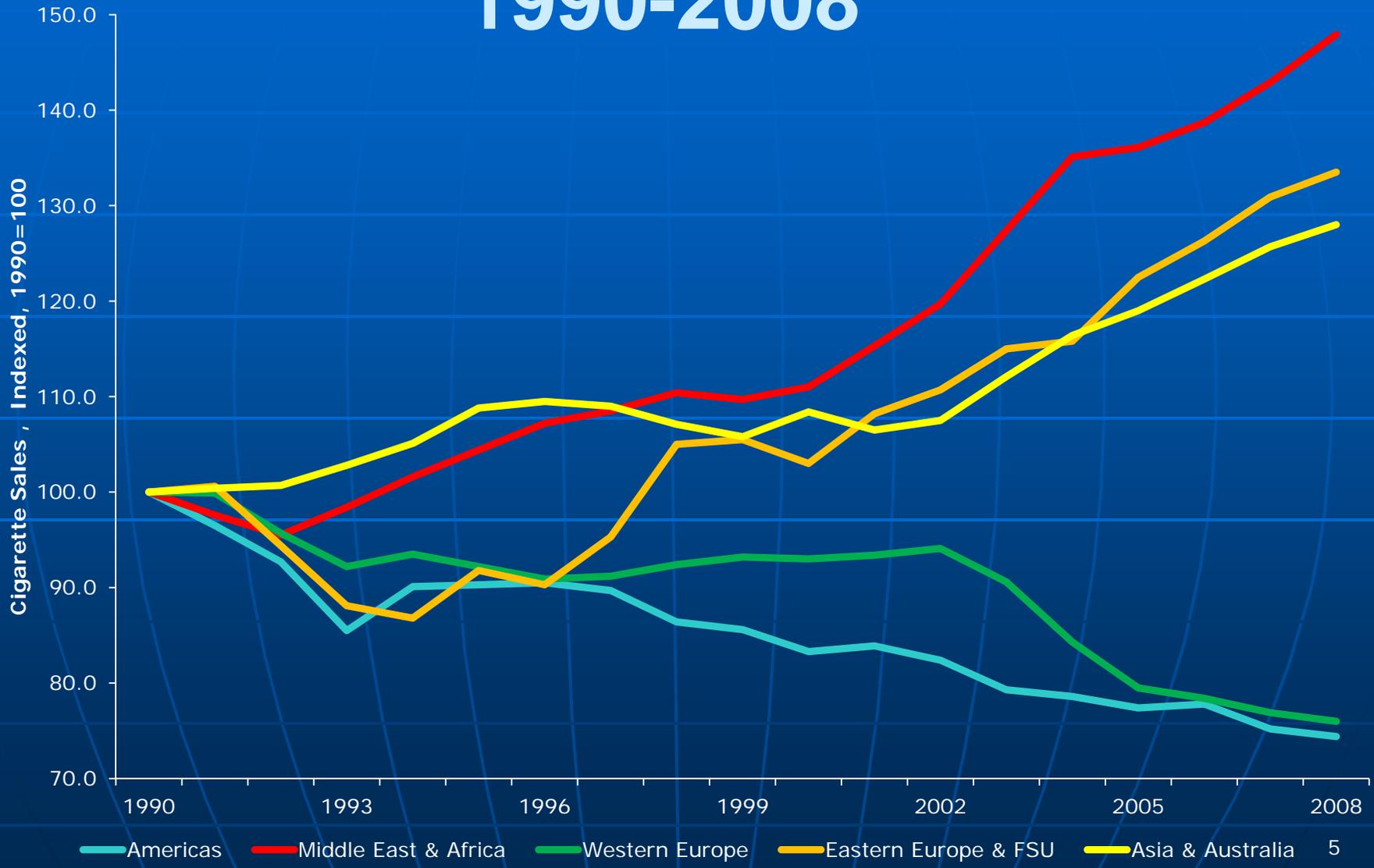
- ◆ Tobacco control efforts: public health + economic
 - Cost effectiveness of tobacco control interventions
- ◆ 21st Century: economic issues are key:
 - health care costs, lost productivity, lost income
 - tobacco farming
 - limited public health budgets in LMICs
 - increasing consolidation of the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

Global Cigarette Sales 1990-2011



Source: ERC, 2012; Euromonitor, 2013

Cigarette Sales by Region 1990-2008



Source: TMA, 2010

WORLD: Annual Tobacco Deaths (in millions)

	1990	2030
Developed	2	~3
Developing	~1	~7
<i>World Total</i>	3	~10



Past smokers, mainly adults



Current smokers, mainly teenagers and young adults

Economic Costs of Tobacco Use

Considerable evidence from high-income countries:

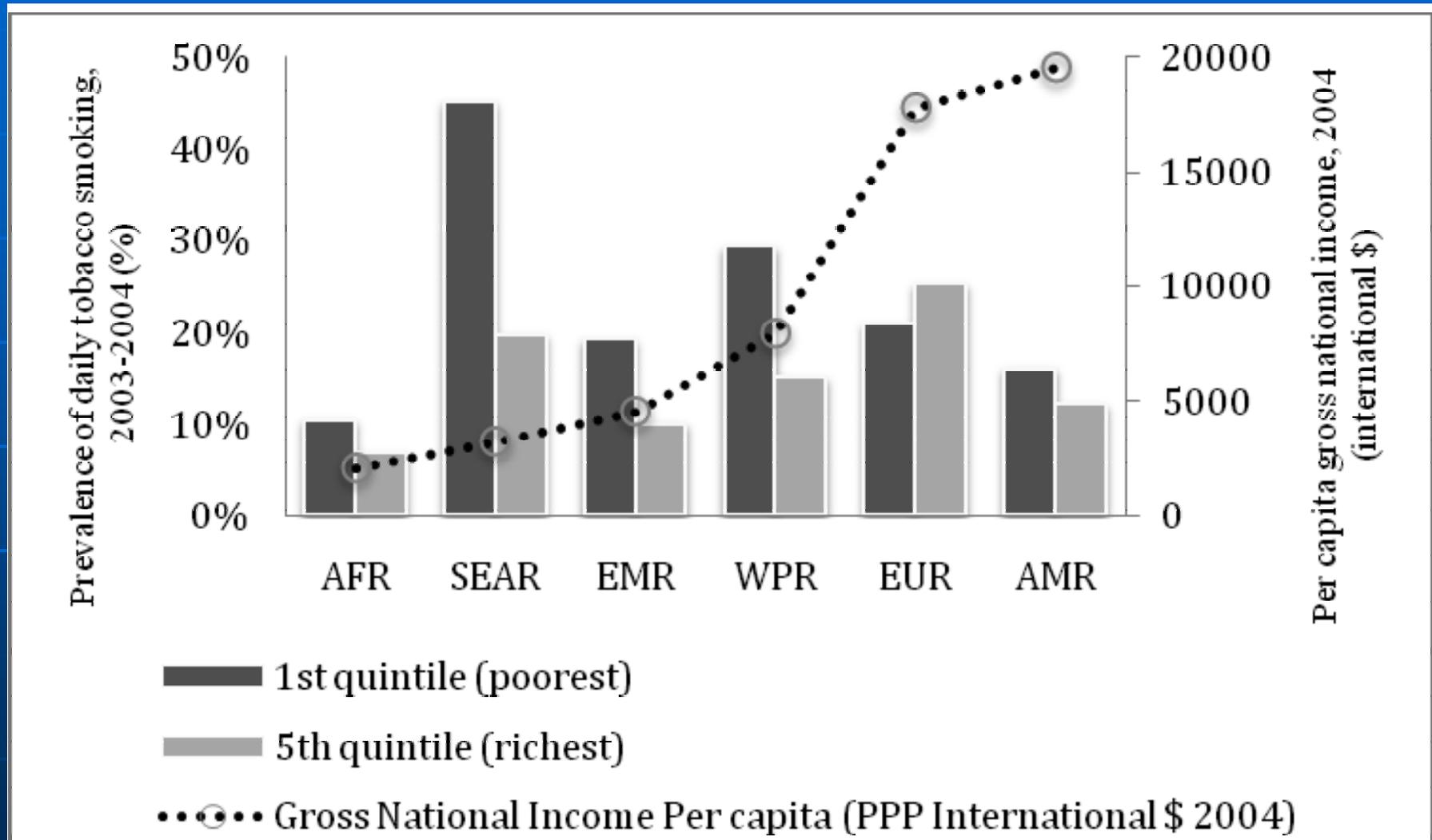
- US: smoking-attributable health care expenditures of \$96 billion in early 2000s
 - Lifetime health care costs for smokers are significantly higher than those of nonsmokers
- US: additional \$97 billion in lost productivity from premature death
 - Additional lost/reduced productivity from smoking on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

Economic Costs of Tobacco Use

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

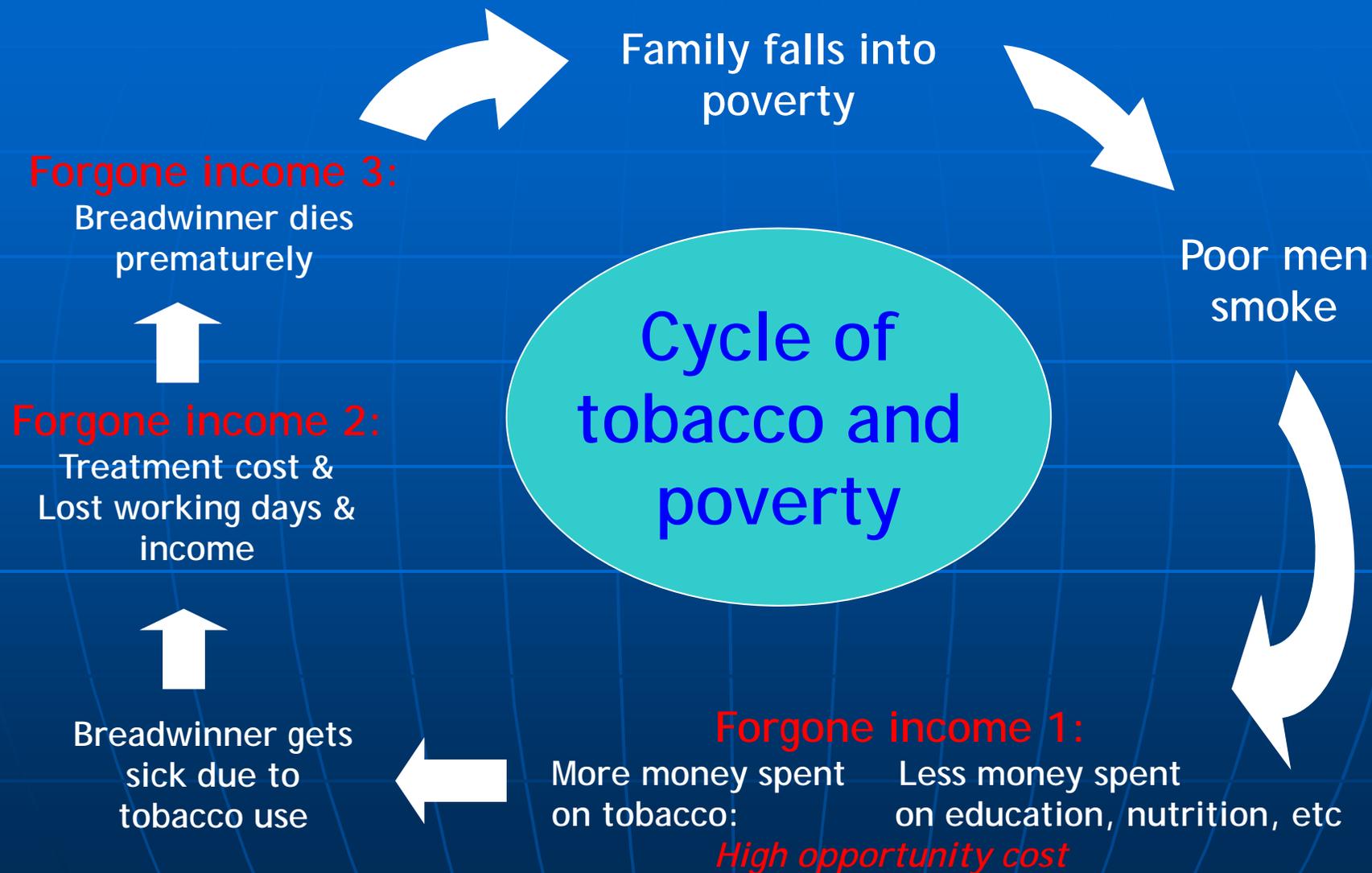
- **China:**
 - 3.1% of health care costs; 1.9% of GDP
- **India:**
 - 4.7% of health care costs; 0.25% of GDP
- **Bangladesh:**
 - >3% of GDP
- Economic costs in LMICs will almost certainly rise over time

Poverty and Tobacco Use



Sources: WHO 2007

Tobacco and Poverty



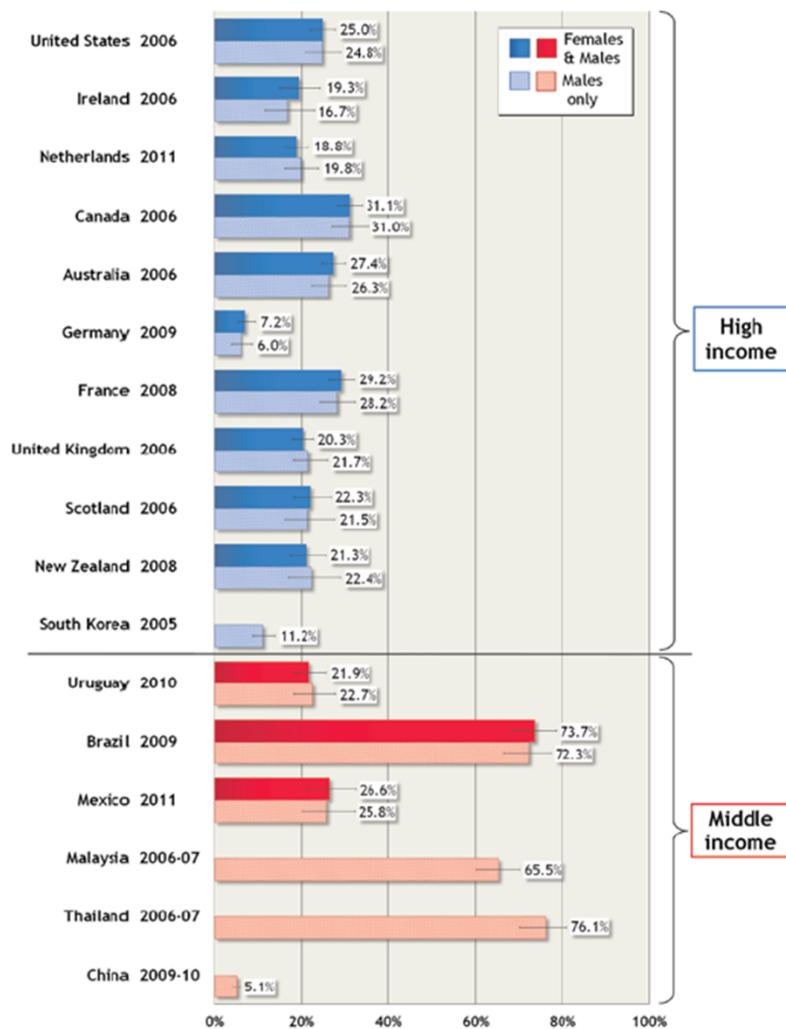
Poverty and Tobacco Use

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

Why should governments intervene? Economic rationale or “market failures”

- **Smokers do not know their risks**
- **Addiction and youth onset of smoking**
 - Lack of information and unwillingness to act on information
 - Regret habit later, but many addicted
- **Costs imposed on others**
 - Costs of environmental tobacco smoke and health costs

Source: Jha *et al.*, 2000

Government roles in intervening

- To deter children from smoking
- To protect non-smokers from others' smoke
- To provide adults with necessary information to make an informed choice
- ◆ *First-best instrument, such as youth restrictions, are less effective.*
- ◆ *Tax increases are highly effective, but are blunt instruments.*

Source: Jha *et al.*, 2000

Which interventions are effective?

Measures to reduce demand

- **Higher cigarette taxes**
- **Non-price measures**
 - comprehensive smoke-free policies, bans on tobacco product marketing, information interventions (warning labels and mass media campaigns)
- **Increased access to cessation therapies and services**

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.**”*

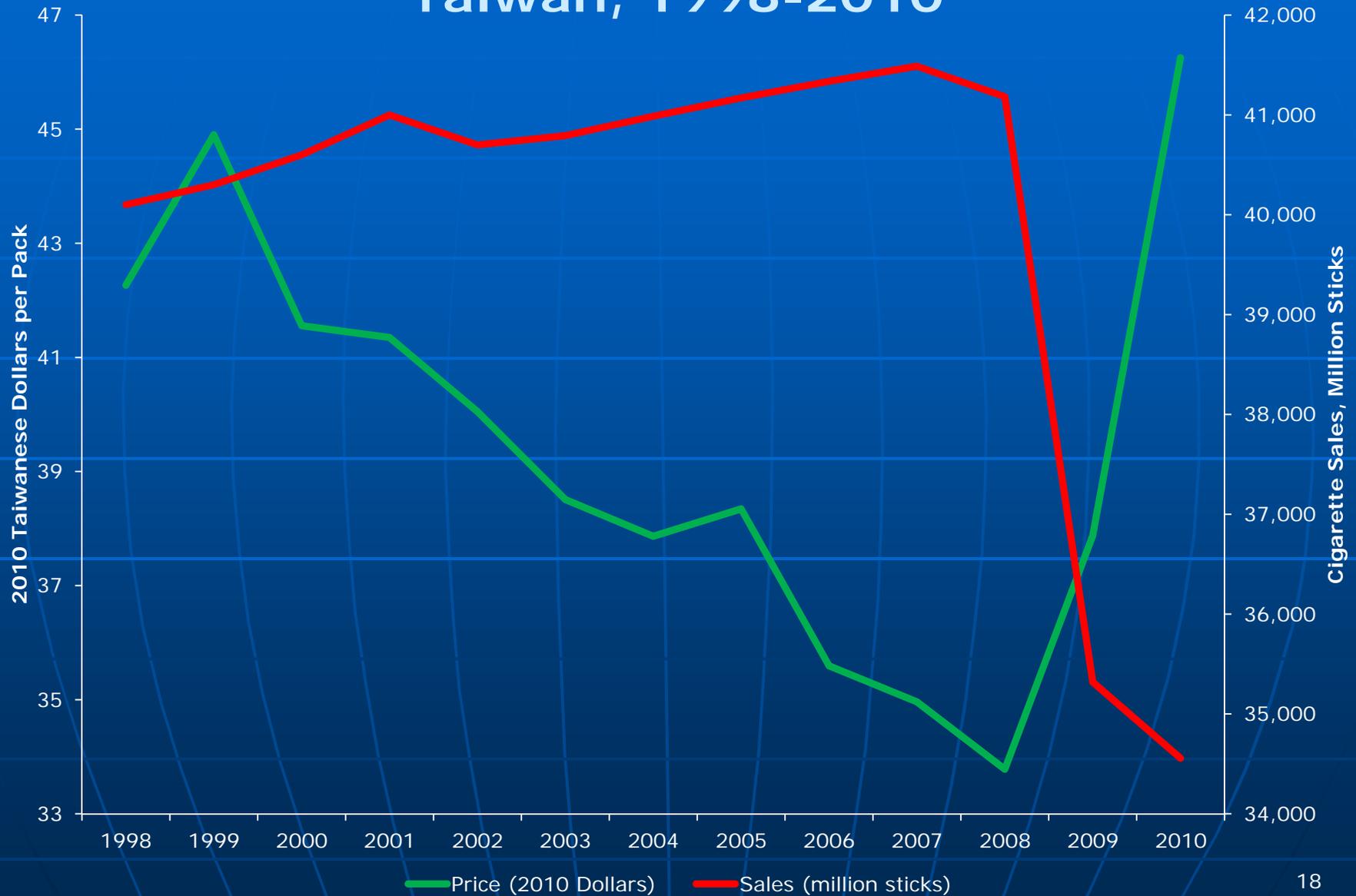
WHO Director General Dr. Margaret Chan

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

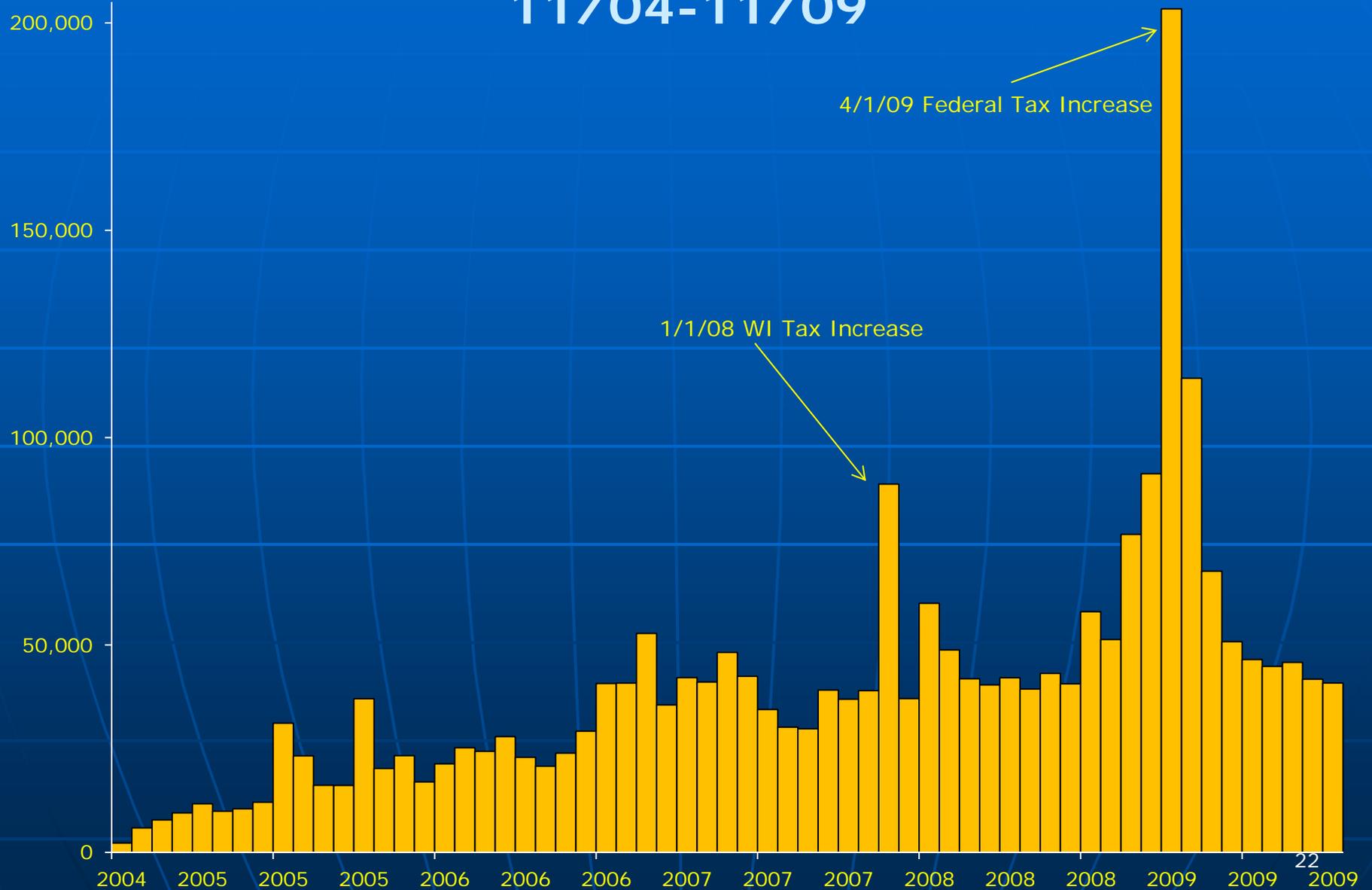


Source: *Tax Burden on Tobacco*, 2011, National Health Interview Survey, and author's calculations

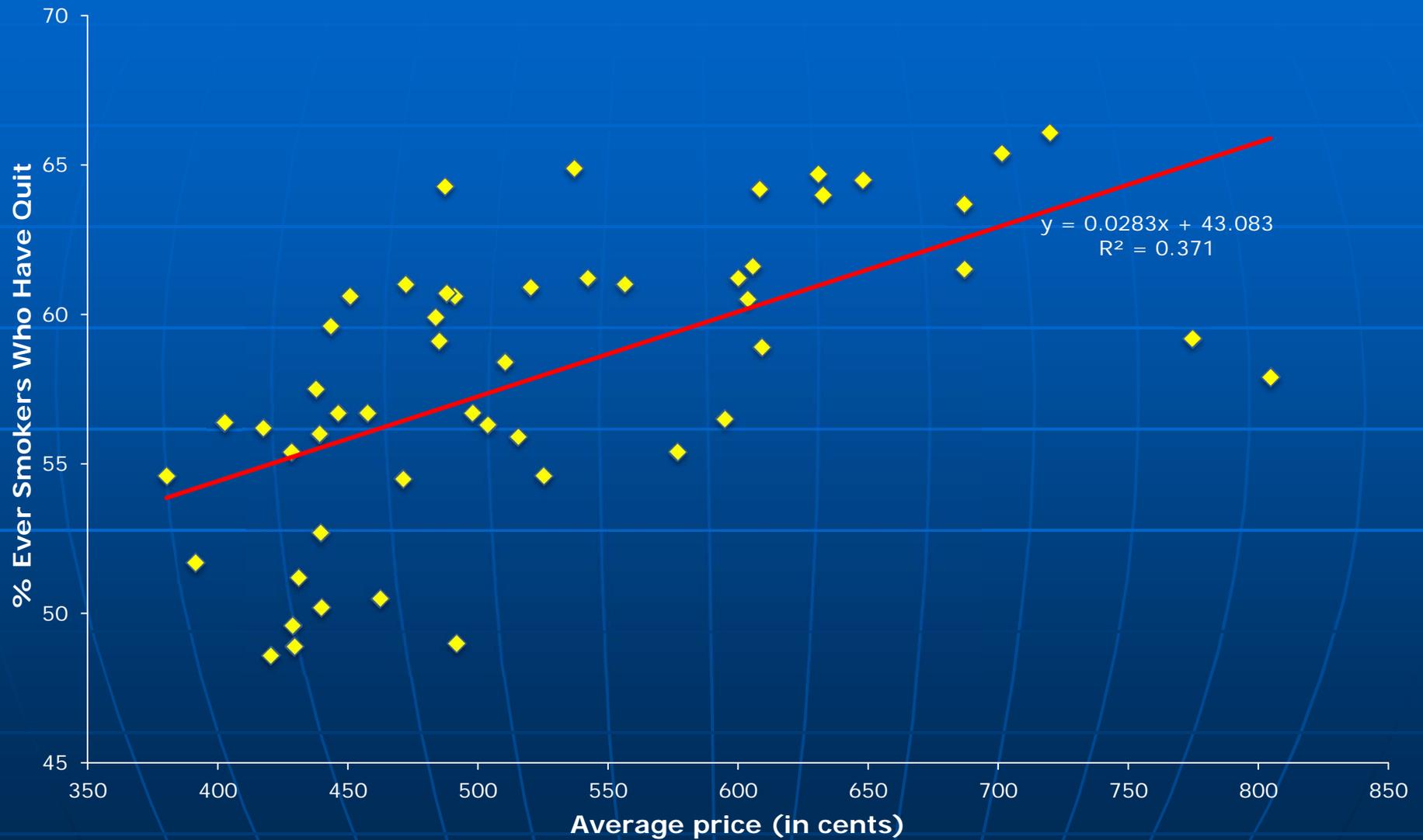
Tobacco Taxes and Cessation

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

Monthly Quit Line Calls, United States 11/04-11/09



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

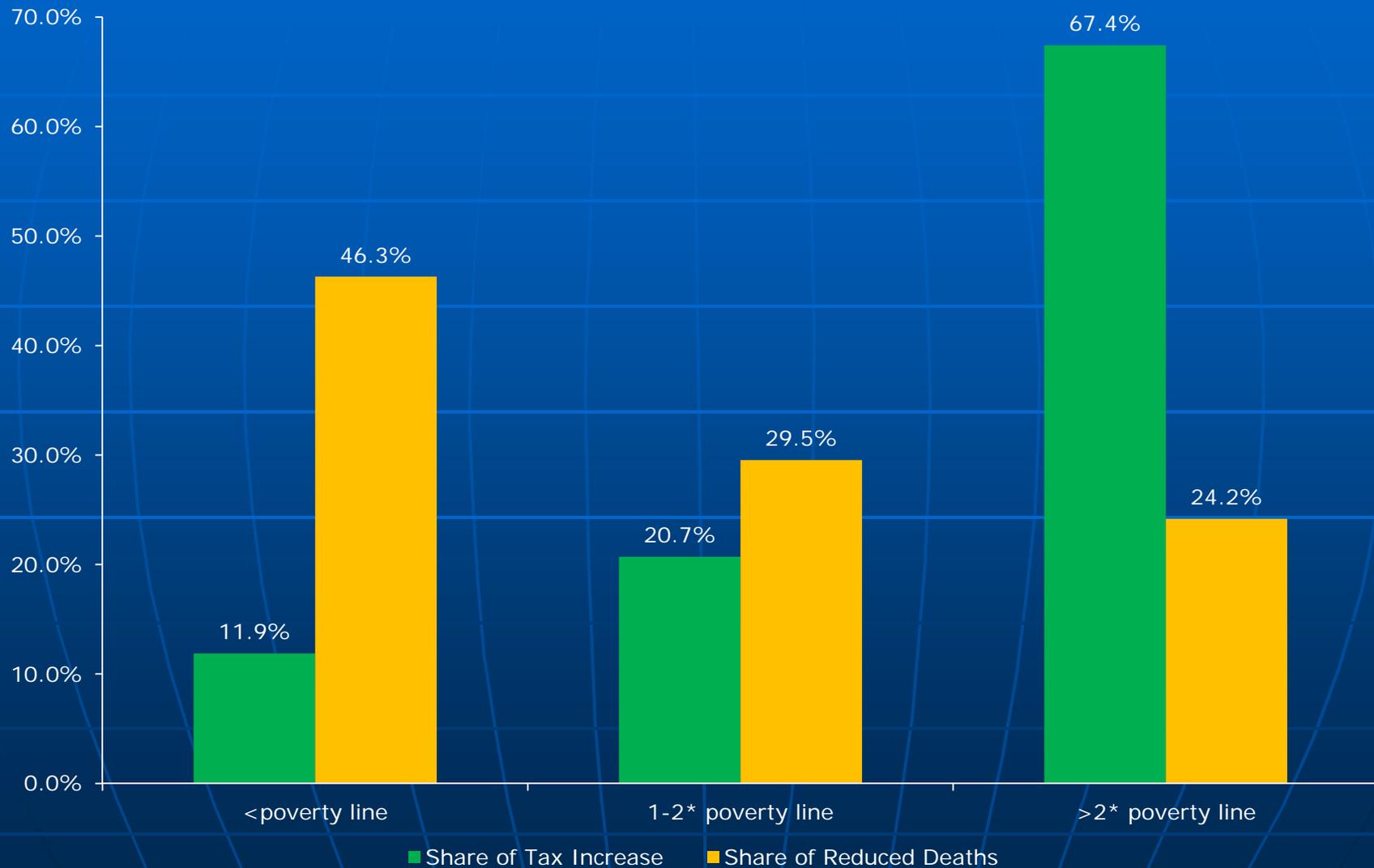
The demand for tobacco products in low-income countries is at least as responsive to price as is the demand for tobacco products in high-income countries.

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

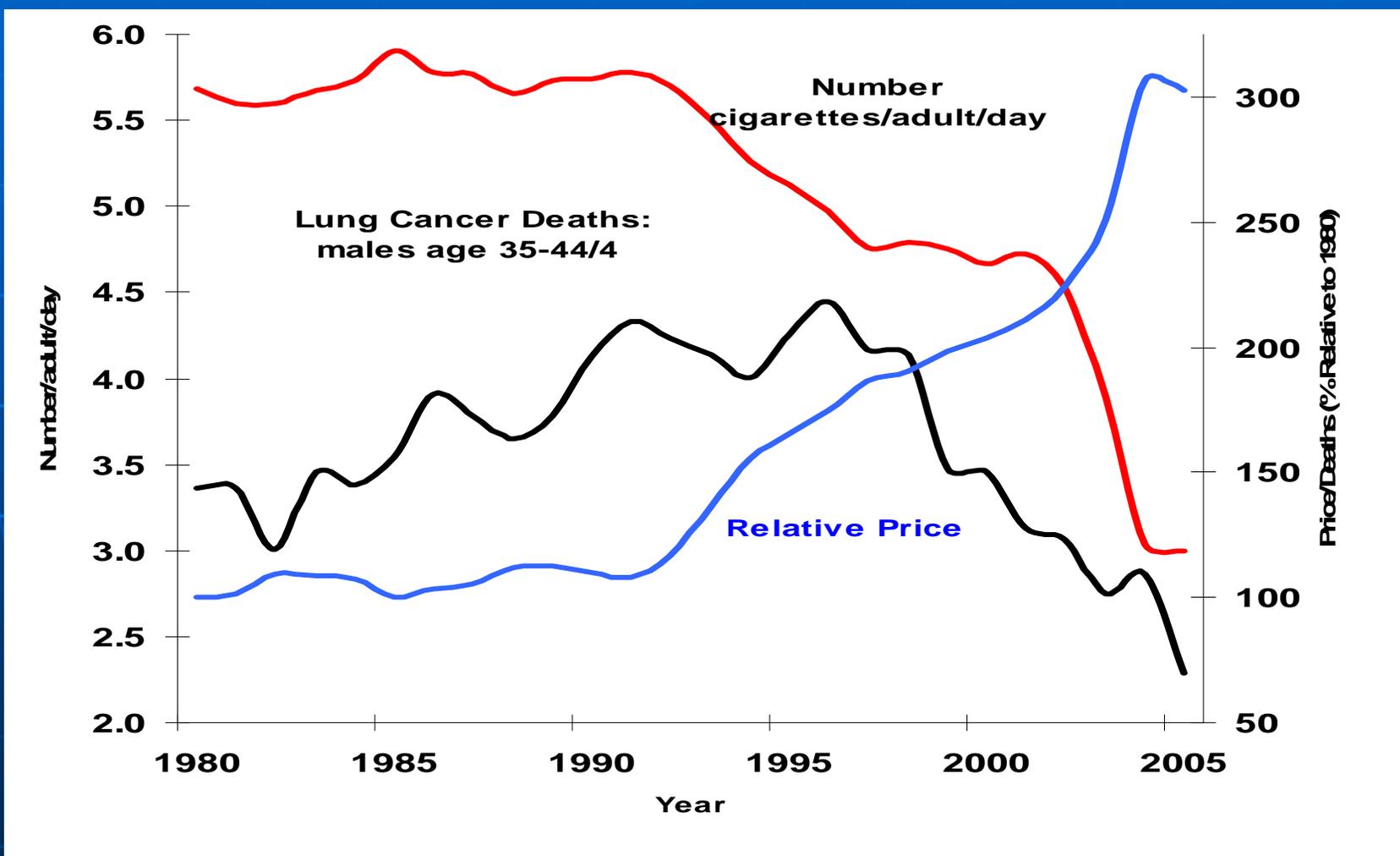


Source: Chaloupka et al., in progress; assumes higher income smokers smoke more expensive brands

Tobacco Taxes and Population Health

Tobacco tax increases that
increase prices improve population
health

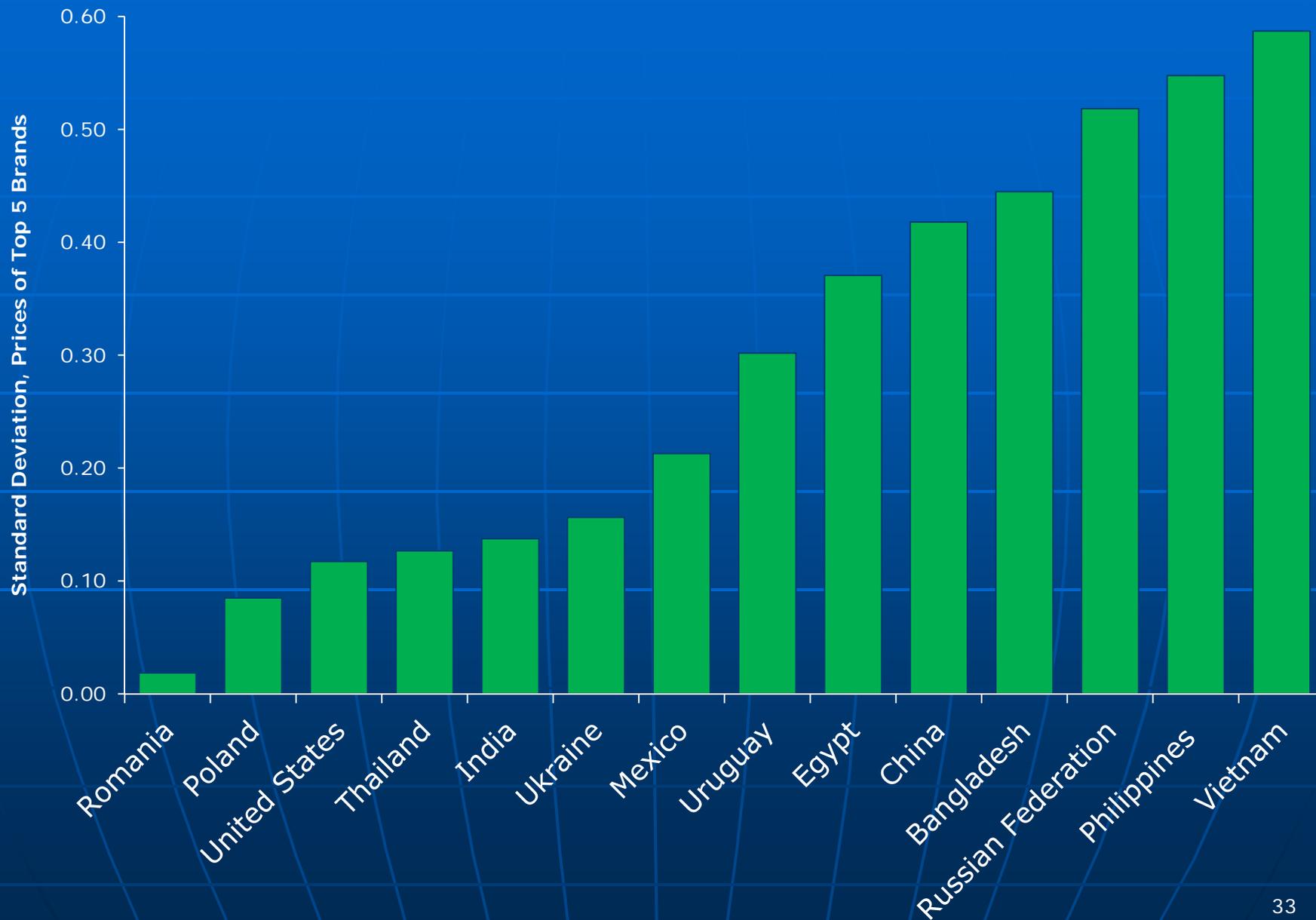
Tax, Price, Smoking, and Male Lung Cancer, France, 1980-2005



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 Prices & Tax Structure



Source: Chaloupka, et al., in progress

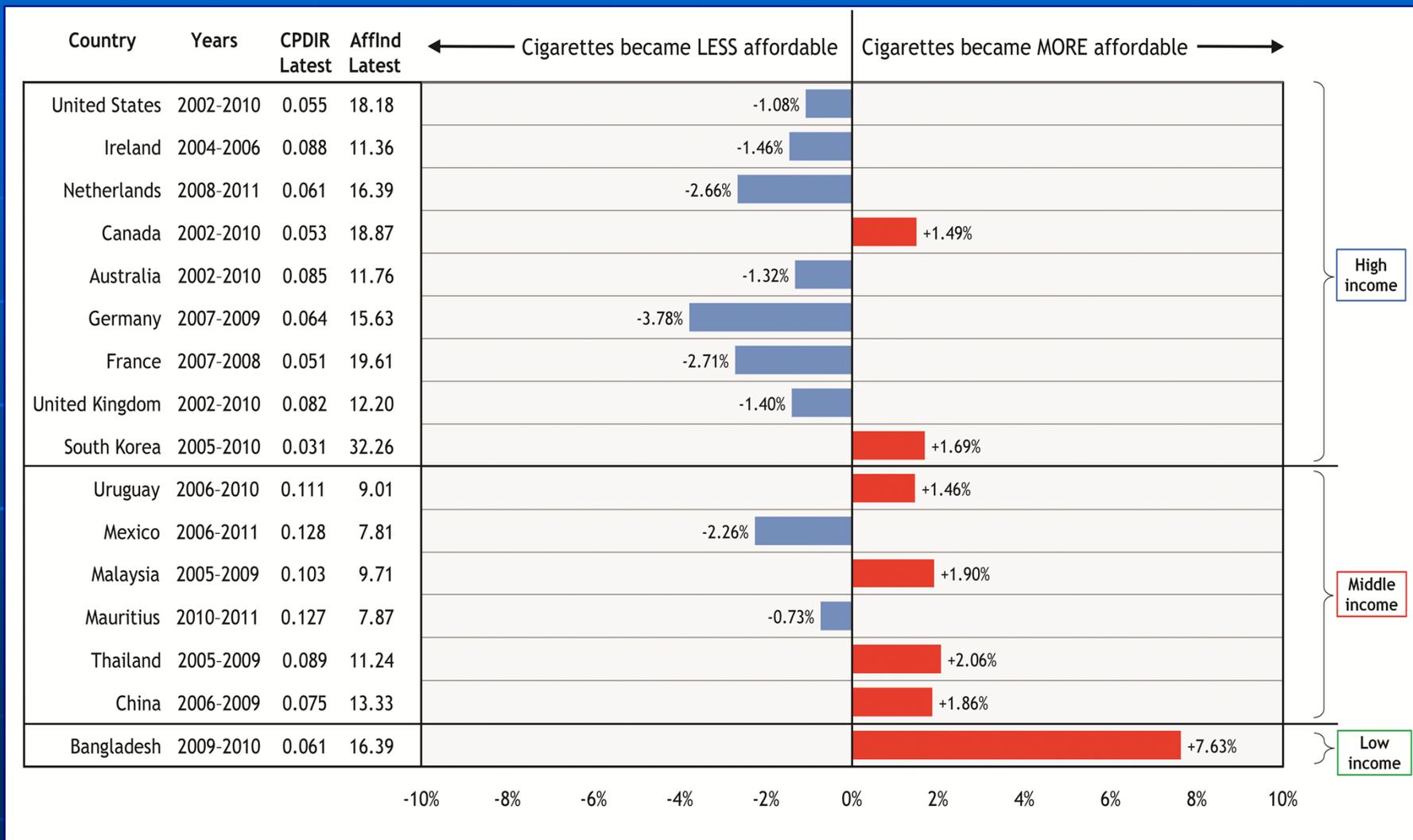
Tobacco Taxes and Affordability

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



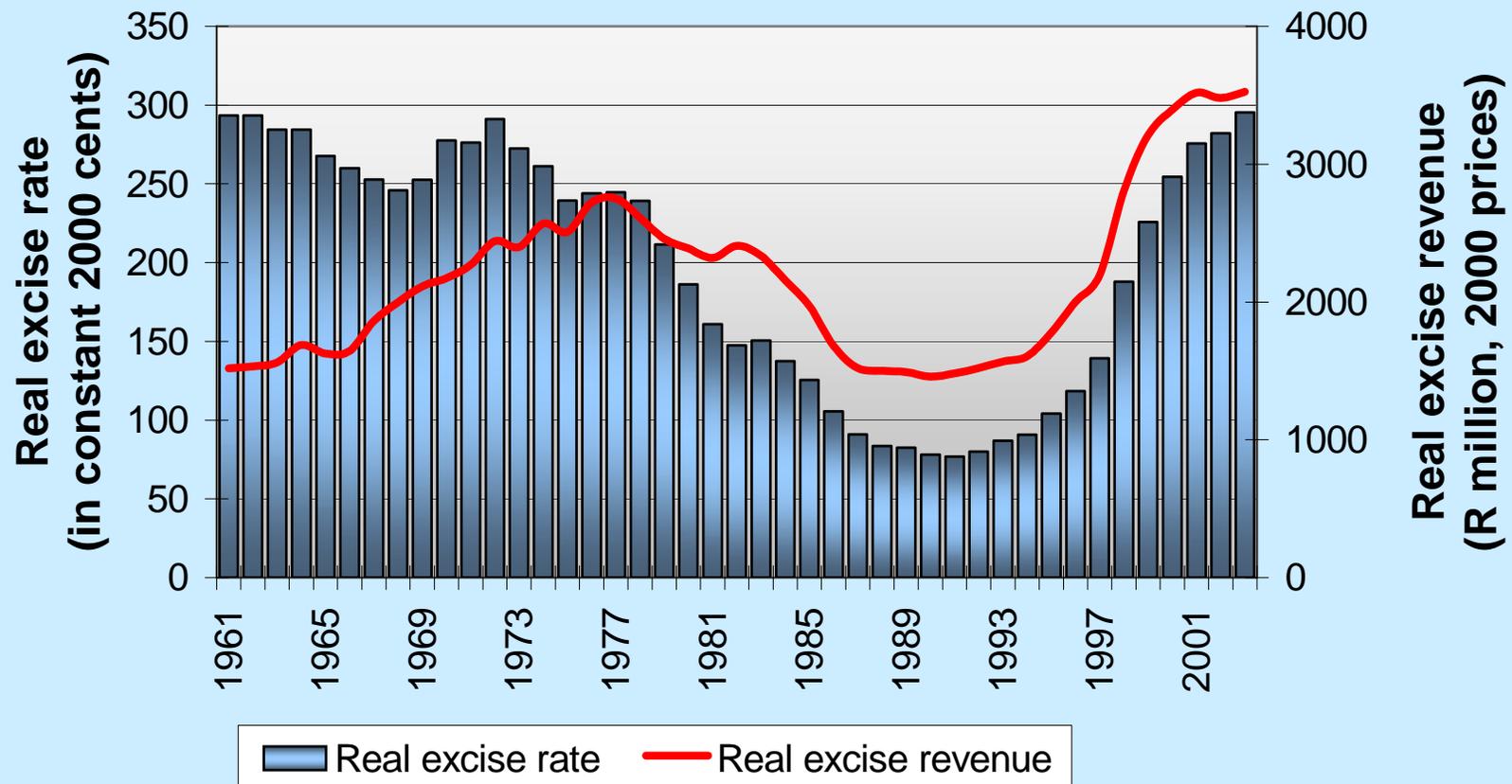
Source: ITC Project, 2012

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



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%

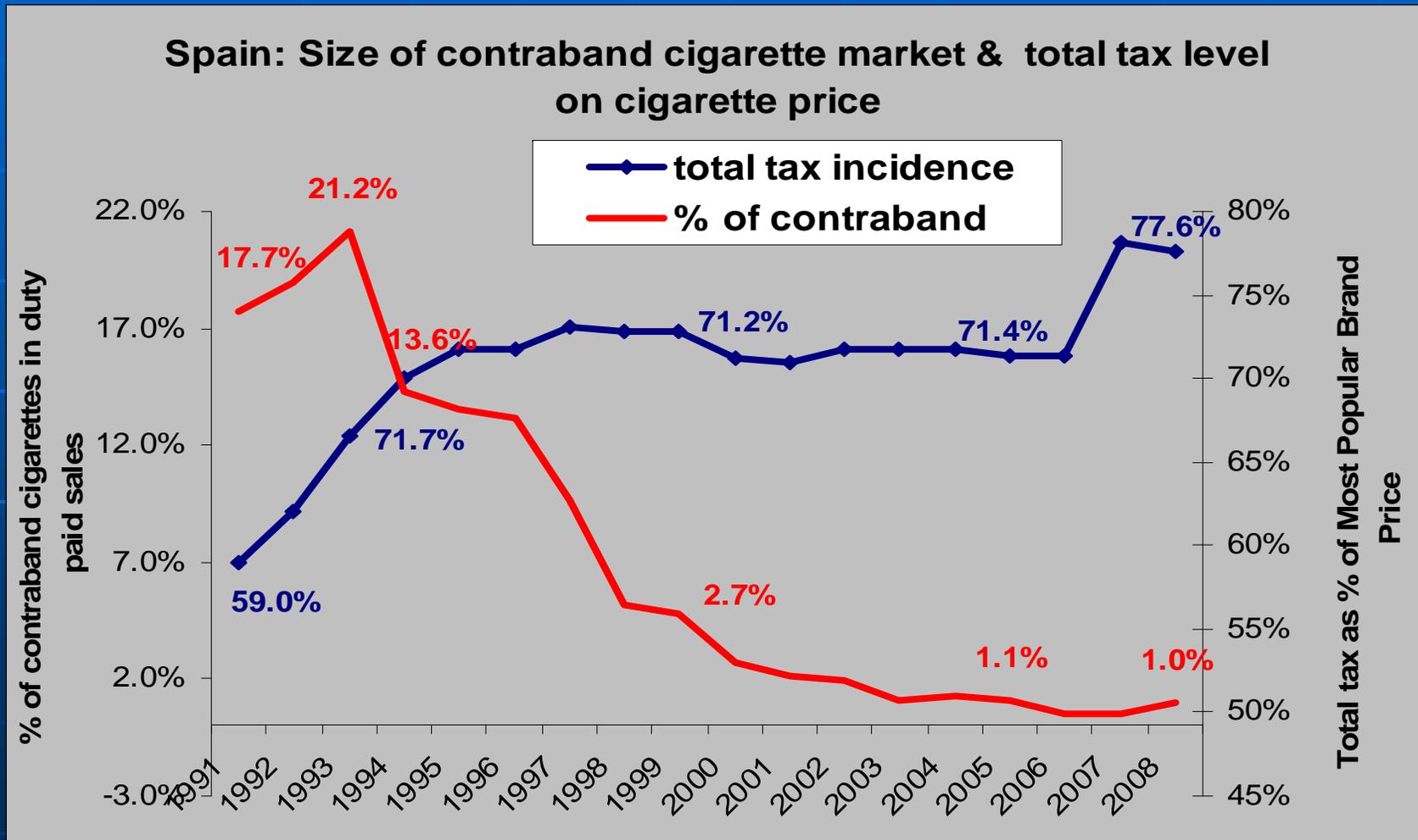
Tax Avoidance & Tax Evasion

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

Which interventions are ineffective at reducing consumption?

Most measures to reduce supply

- Prohibition
- Youth access restrictions
- Crop substitution
- Trade restrictions
- *Control of smuggling is key supply-side measure*
- *Product regulation promising*

Economics & Tobacco Control

- ◆ **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 business AND protect health of workers & patrons
 - Farmers can be successfully transitioned away from tobacco growing
 - Health gains lead to increased productivity and faster economic development

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

Tobacco Control & Development

Tobacco control can help achieve Millennium Development Goals

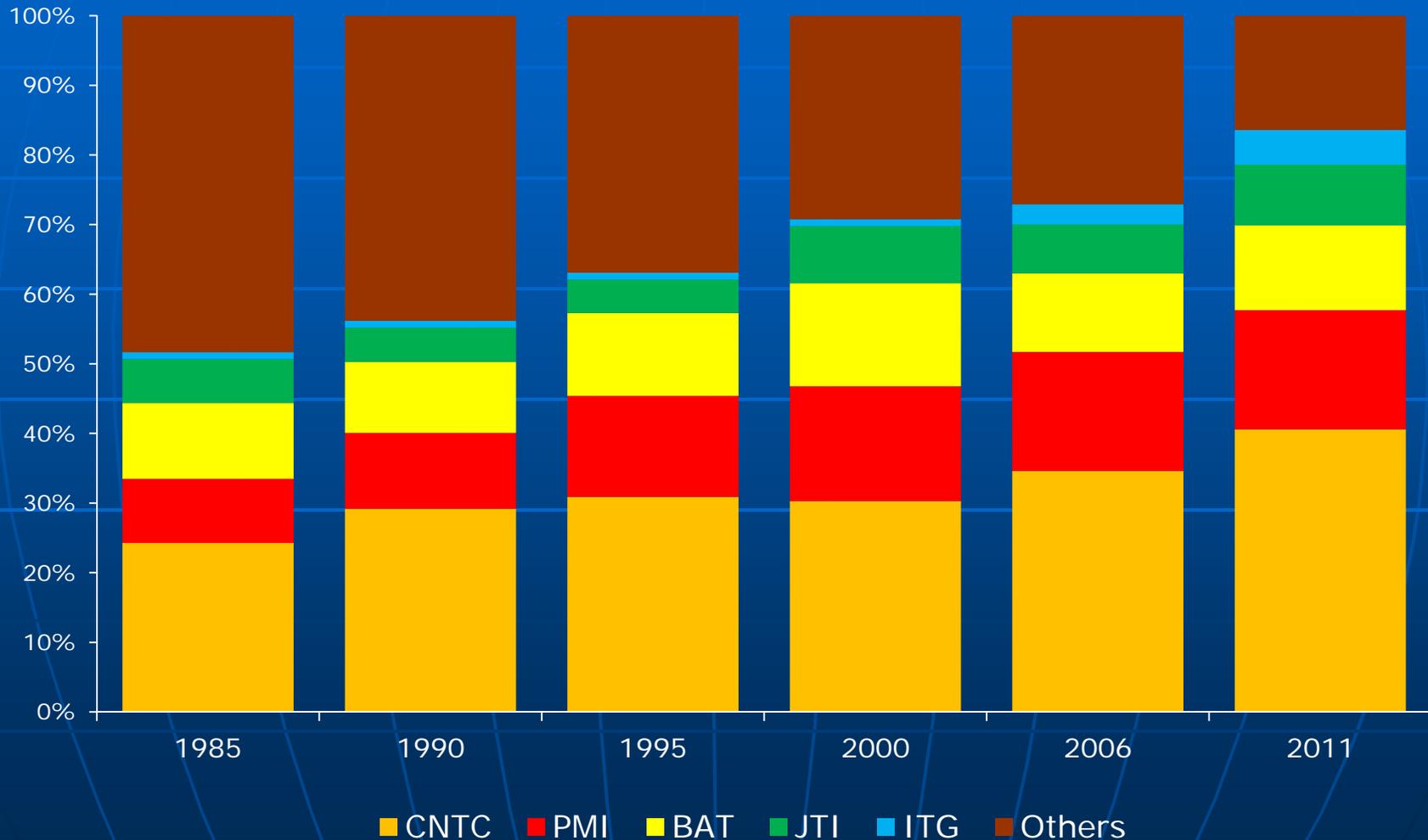
- Eradicate extreme poverty & hunger
- Achieve universal primary education
- Promote gender equality
- Reduce child mortality
- Improve maternal health
- Combat HIV/AIDS, malaria & other diseases
- Ensure environmental sustainability
- Develop global partnership for development

Globalization of Tobacco Industry

- Opening of markets through bilateral, regional, and global trade agreements
- Loosening of restrictions on foreign direct investment
- Privatization of government run tobacco companies
 - A few significant exceptions
- Consolidation among multinational tobacco companies

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 and Challenges to National Tobacco Control Policies

- Trade disputes
 - Section 301 cases between US and Japan, South Korea, Taiwan and Thailand
 - PM-Norway challenge to Norway's retail display ban
 - Indonesia WTO challenge to US ban on flavored cigarettes (except menthol)
 - Ukraine, Dominican Republic and Honduras challenge to Australia's plain packaging policy
- Investment disputes
 - PMI challenge to Uruguay's policy allowing only one brand variation to be sold
 - PM-Asia challenge to Australia's plain packaging policy
- Decisions to date support public health interests over trade/investment interests

Globalization and Tobacco Control

- Governments should not impose unilateral trade restrictions in efforts to reduce demand for tobacco products
 - Can negotiate exclusion of tobacco and tobacco products from trade agreements as part of international, multilateral, and bilateral trade agreements (e.g. ongoing negotiations for the Trans-Pacific Partnership agreement)
- Instead, adopt comprehensive tobacco control policies and programs that apply evenly to all tobacco products, regardless of origin

Evolution of Tobacco Products



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Globalization of Tobacco Control

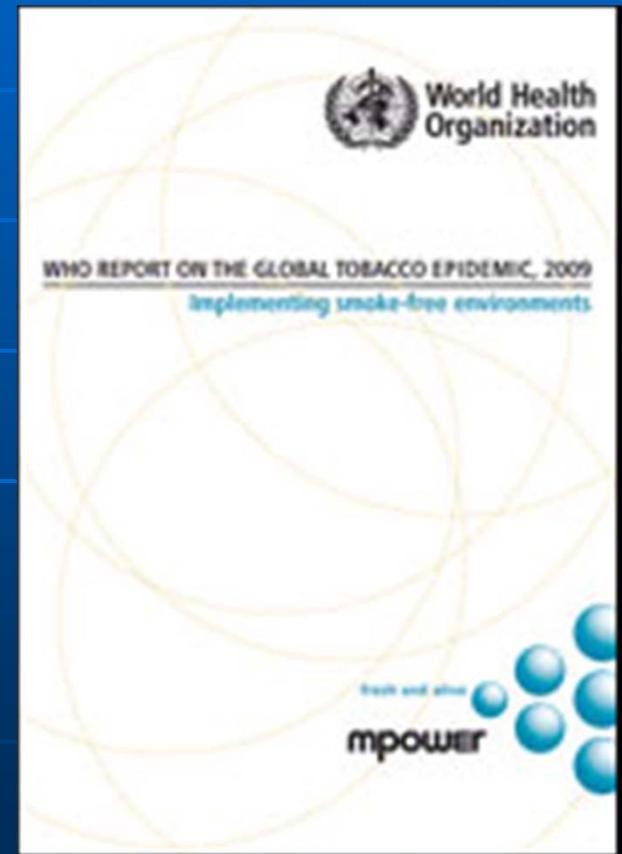
WHO FCTC

- Gives priority to public health
- Recognizes need for international action and cooperation
- Evidence-based
- Mindful of potential social and economic impact of tobacco control efforts
- Concerned about role of industry



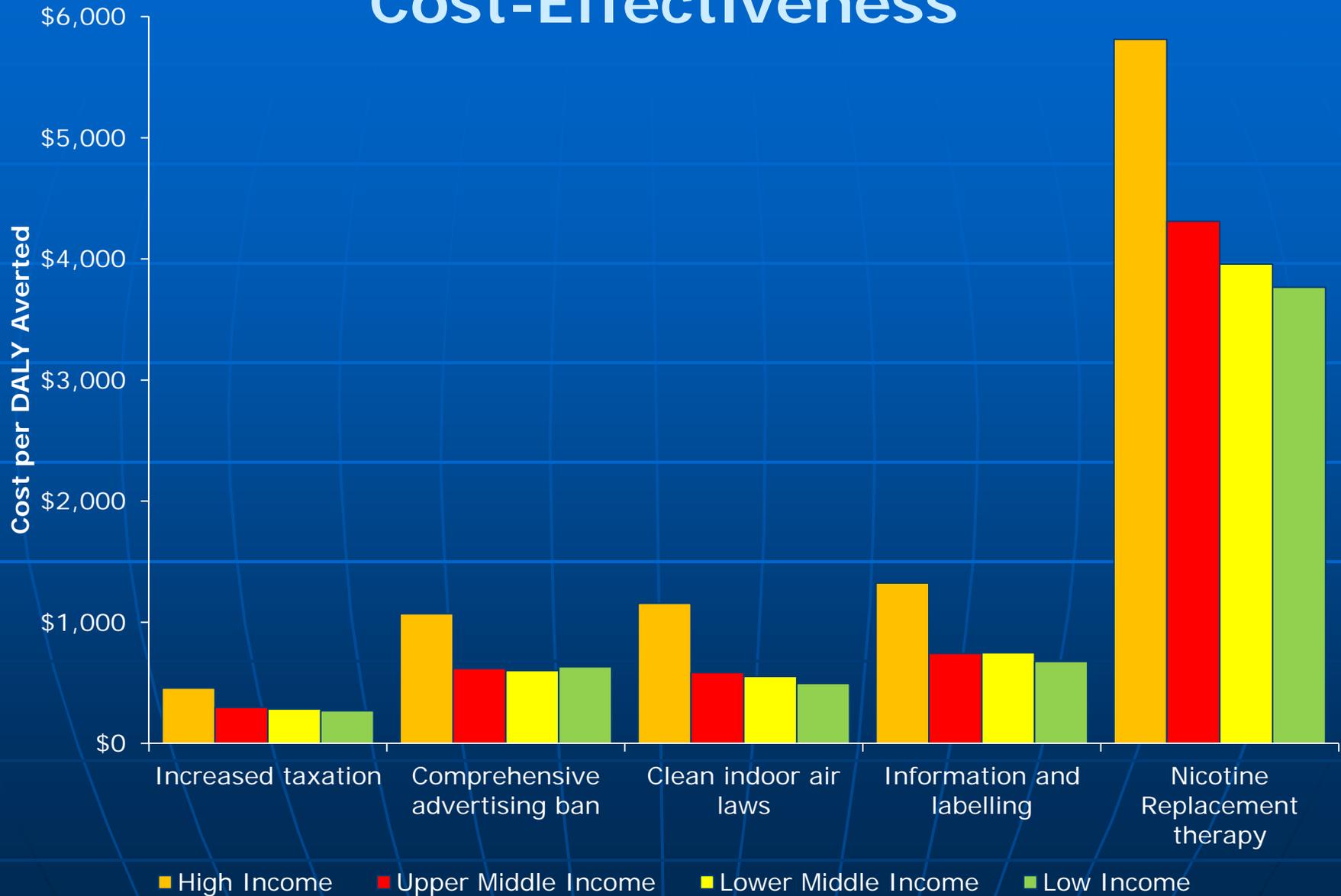
MPOWER Framework

- MPOWER Framework
 - “Monitor” the tobacco epidemic
 - “Protect” non-smokers
 - “Offer” help to quit
 - “Warn” about the harms
 - “Enforce” marketing bans
 - “Raise” taxes
- Most cost-effective components of WHO FCTC



Key Tobacco Control Policies

Cost-Effectiveness



Source: WHO, unpublished data

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.

For more information:

fjc@uic.edu

www.tobacconomics.org

(coming soon)