

Tobacco and the Economy

Hana Ross, PhD.

Research Triangle Institute, USA



<http://www.tobaccoevidence.net>

Tobacco Consumption in Kazakhstan

Smoking **prevalence** 2002:

Male 46,5 % Female 7,6%

Youth prevalence 2003 (GYTS):

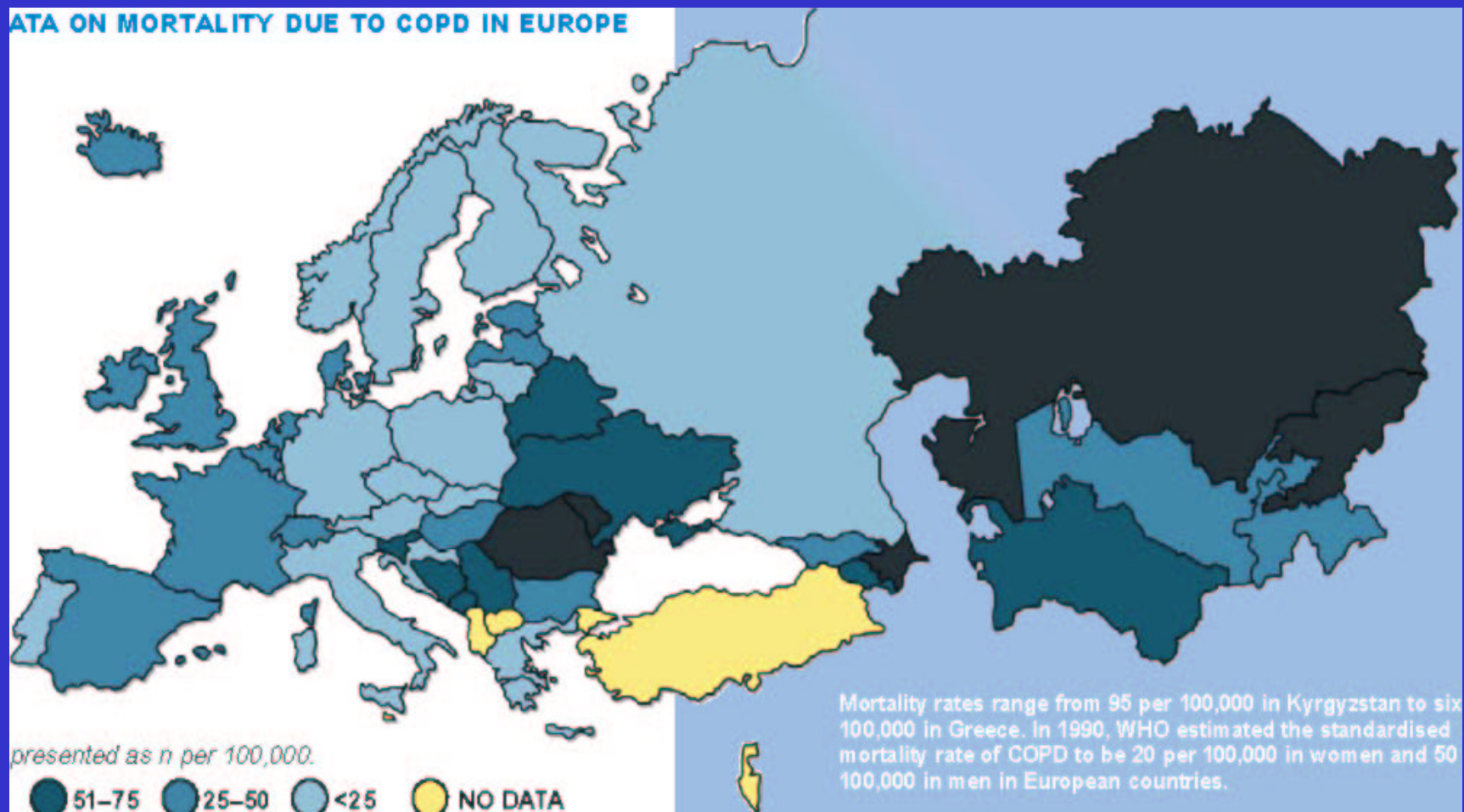
Boys 17%; Girls 9% (rapidly increasing)

Smoking attributable **deaths** are increasing:
from 14 900 (1985) to 18 600 (1995) and to 25 000
(2004)

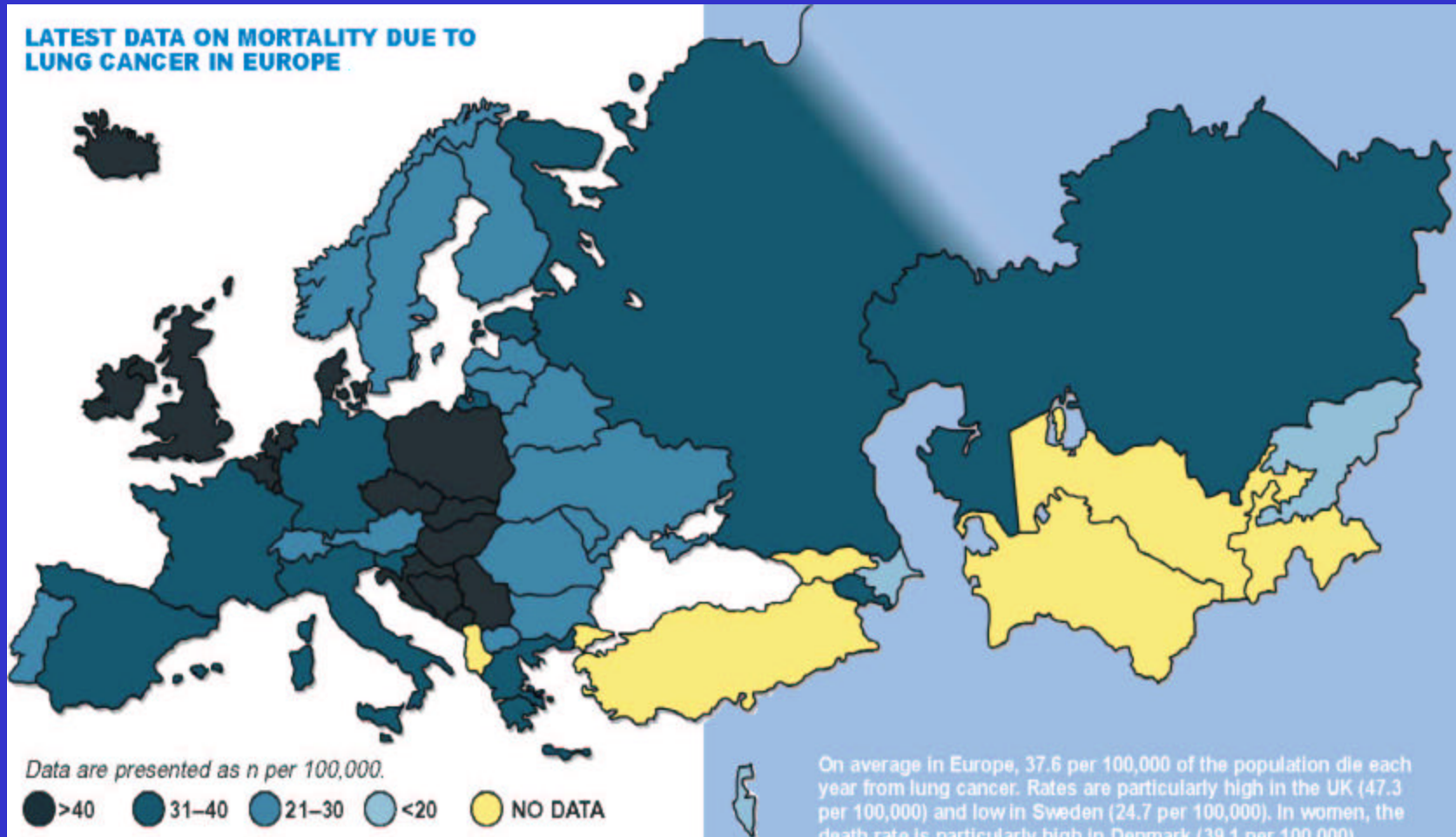
Share of income spent on tobacco is also
increasing:

2,4% in 1997 (348 T), but 4,7% in 2004 (1609 T)

Data on Mortality due to COPD in 1990's

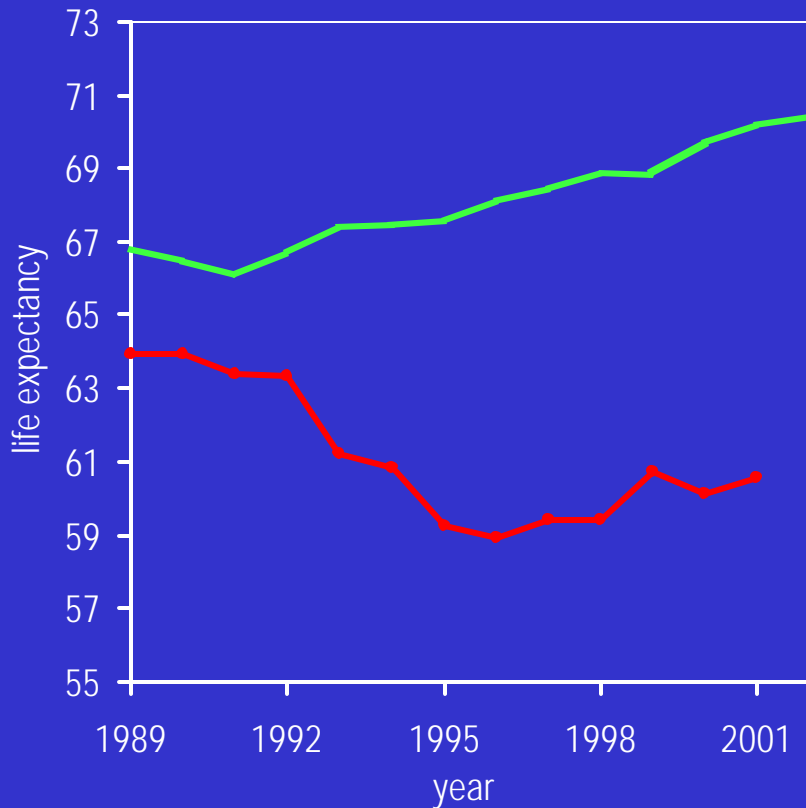


Data on Mortality due to Lung Cancer in 1990's

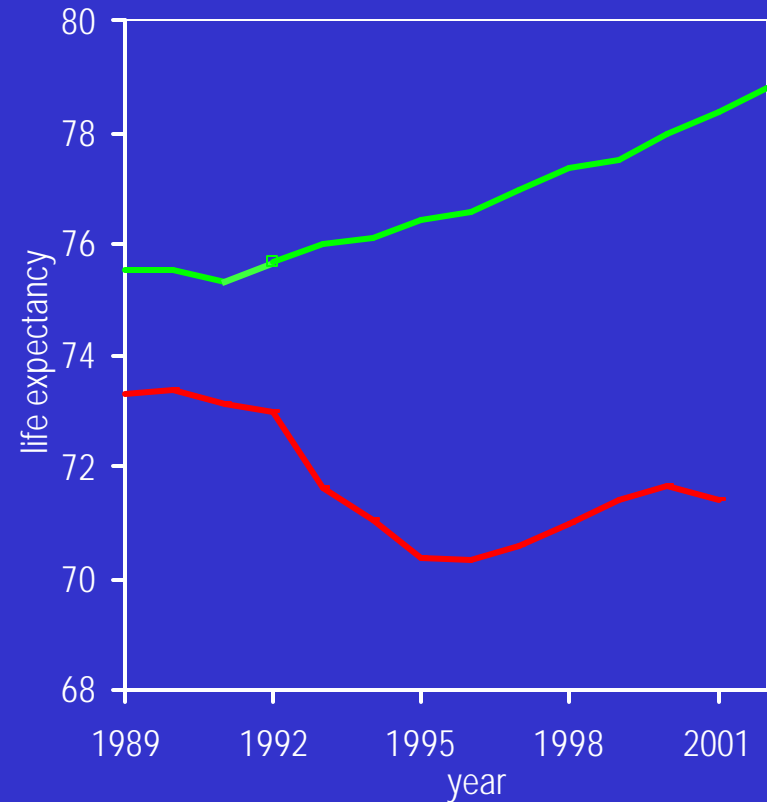


Average Life Expectancy in Poland and Kazakhstan 1989-2002

Males



Females



Healthcare Costs from Smoking

Annual (gross) healthcare costs:

- **1,0-1,4% of GDP** in Europe, in Hungary about 3% of GDP, in Australia 2 – 3,4% of GDP
- **proportionally similar in lower-income countries**

Tobacco Consumption Reduces GDP Growth

- From 1965 to 1990, **male survival rose** by 10% points in 52 OECD countries
- This health improvement **raised income** growth by 0,23% per year
- If adult male survival in FSR were that of OECD countries, annual growth rates over the last three decades **would have been about 1.4% vs. 1%**
- 1990 per capita income:

Actual	\$2 700
With better male survival	\$3 000
-12% higher	
- \$140 000 000 000 greater	

Employers Bear Cost of Employees Smoking

- More employee **absenteeism**
- Higher **insurance premium**
- Decreased **productivity on-the-job**
- Increased **early retirement** due to ill health
- Higher **cleaning costs**
- Higher risk of **fire** damage, explosions and other accidents related to smoking
- Cost estimates: **\$336 - \$601 per year** per smoking employee in the US

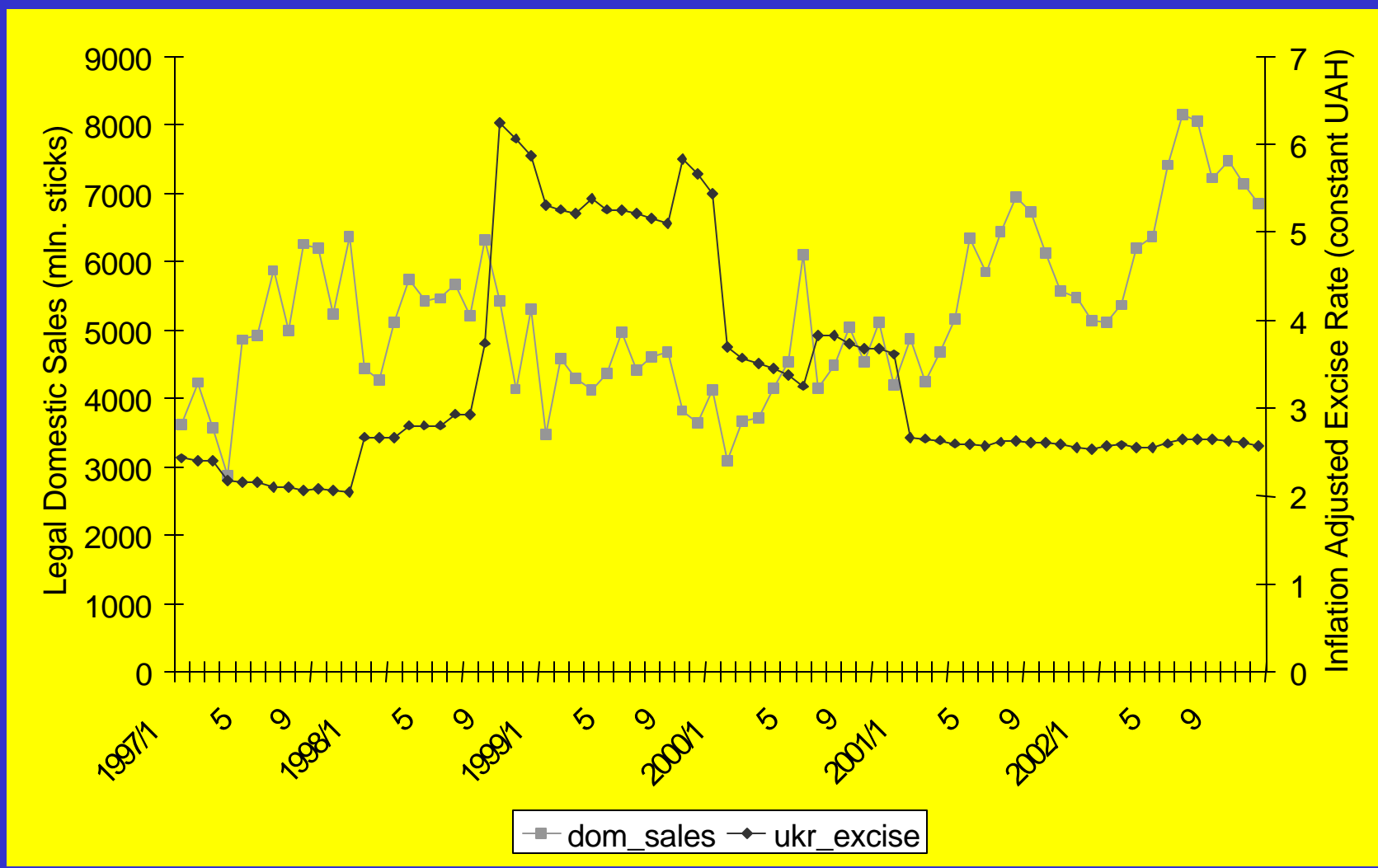
Higher Tobacco Taxes Can Improve Public Health

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

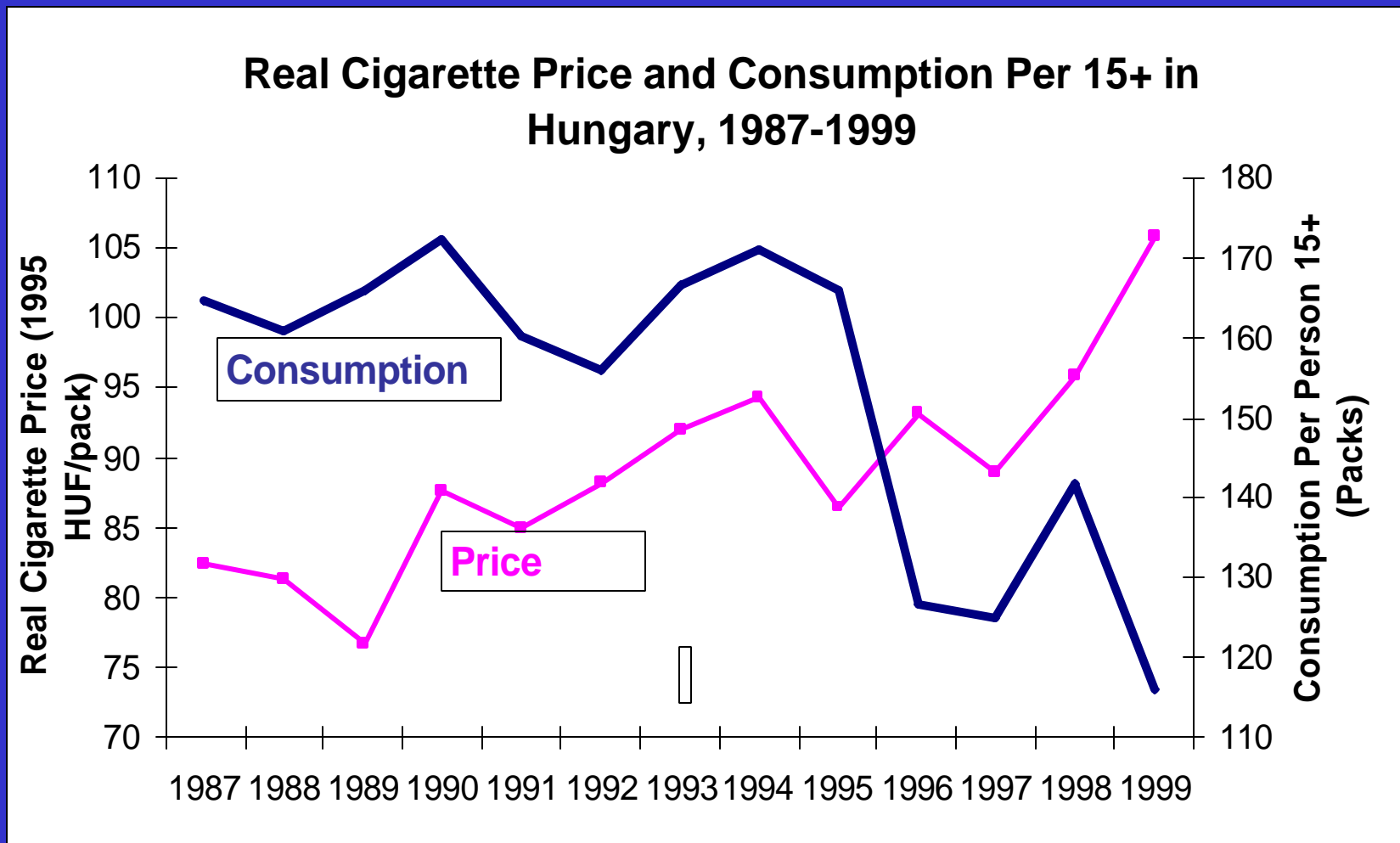
Research Evidence

- **10% increase** in the price of cigarettes reduces the number of smokers **by 4% in high income**, but **by 8% in low income** countries
- **Long-run** impact is up to **two-times larger** compared to a short run impact
- **Youth** are up to **6x more sensitive** to cigarette price changes than adults (USA)
- **10% increase** in the price of cigarettes will reduce smoking rates among **pregnant women** by **7% (USA)**
- **Lower income** smokers are **4x more likely to quit** than higher income smokers; **low income** smokers **reduce overall expenditures** on cigarettes (GB)

Cigarette Taxes and Cigarette Sales Show Opposite Trends in Ukraine

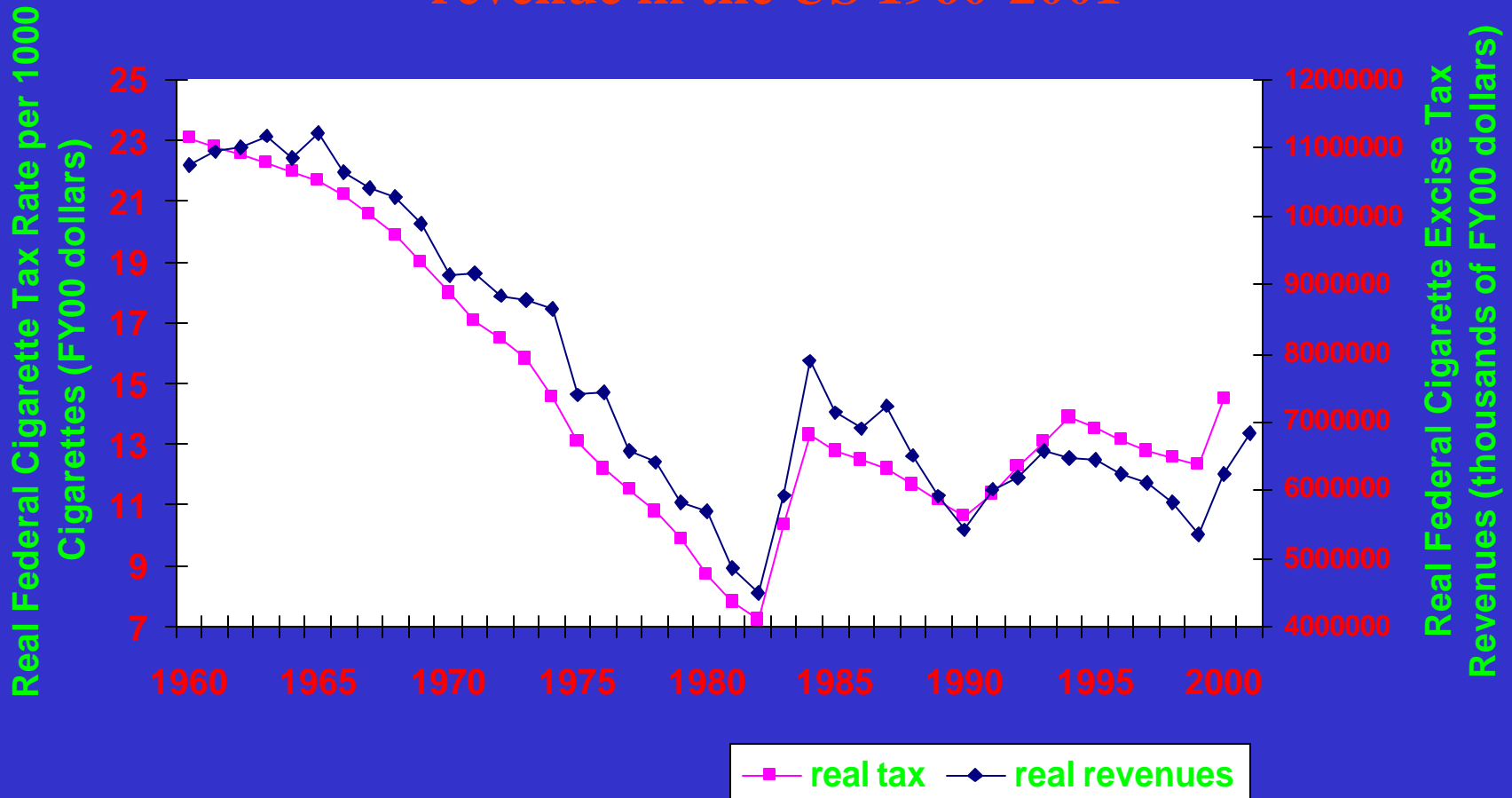


Cigarette Prices and Consumption Show Opposite Trends in Hungary



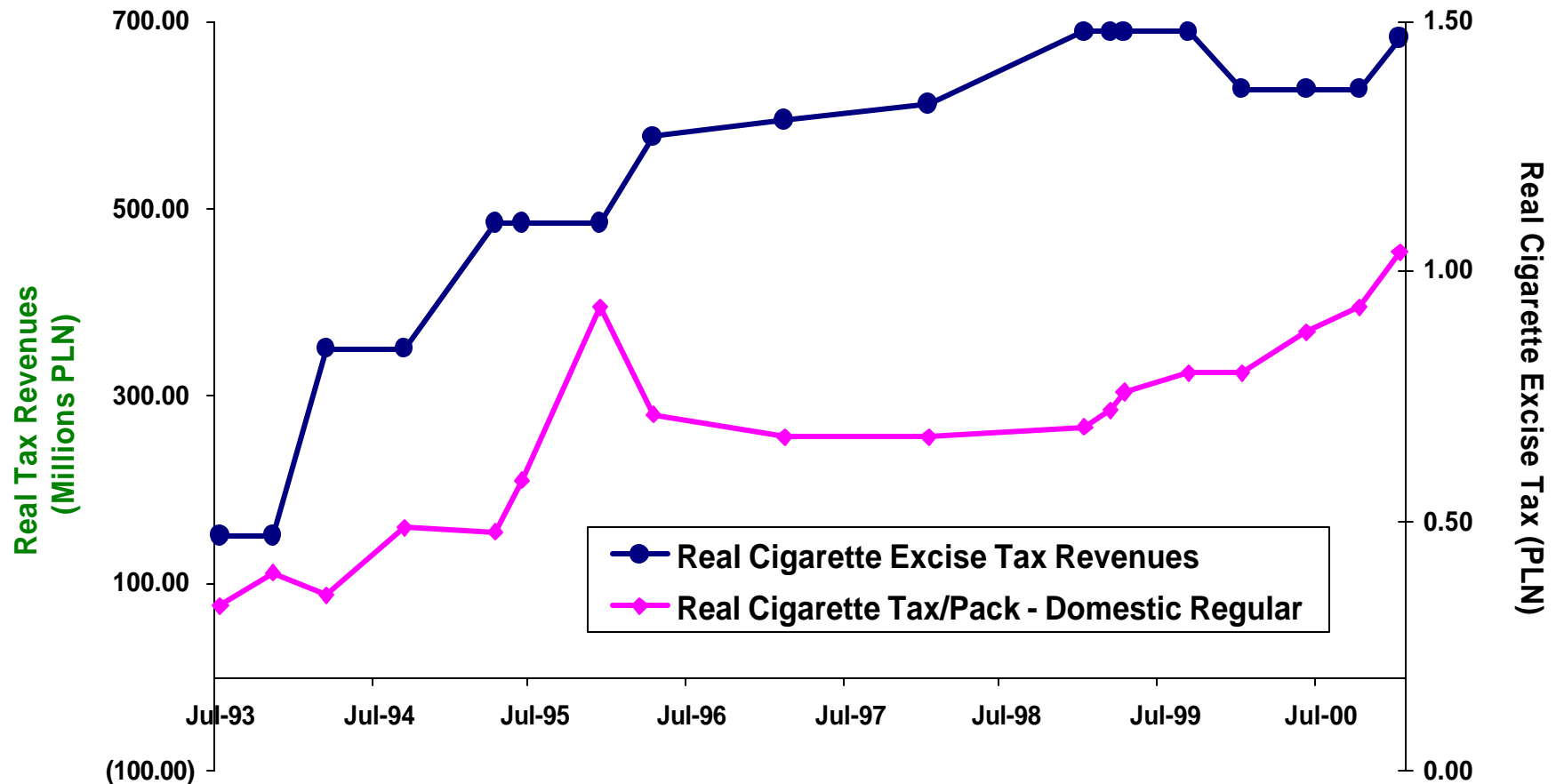
Cigarette Tax Increases Result in Higher Tax Revenues

Real Federal cigarette tax rate and real cigarette tax revenue in the US 1960-2001



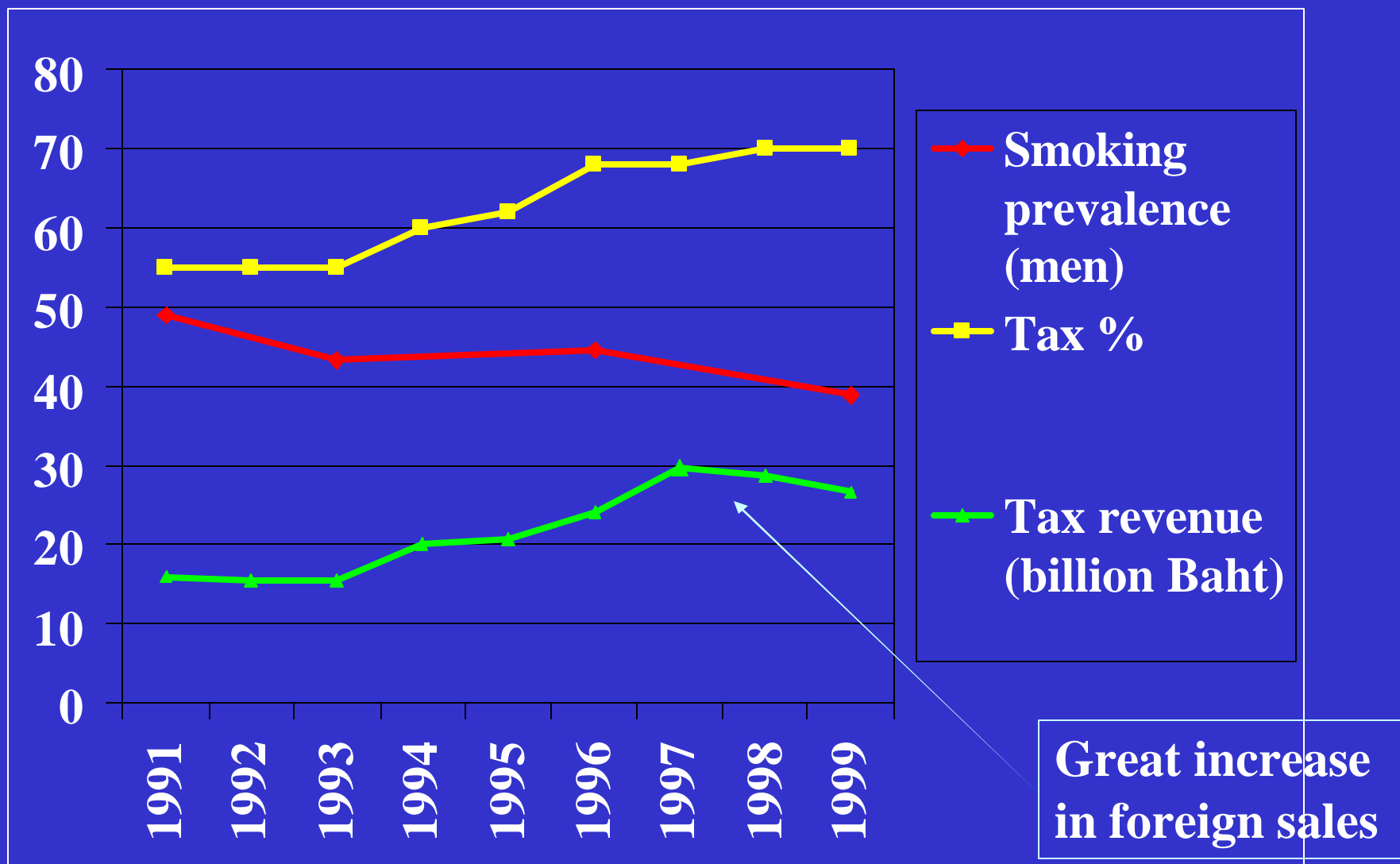
Source: ImpacTeen, 2002

Higher Taxes = Higher Budget Revenue: Evidence from Poland



Source: Ciecierski, 2003

Thailand: Tobacco revenues increased with tax increases while prevalence declined



Tobacco Tax Earmarking

- Setting aside all or part of tobacco tax revenue to **particular uses**, for example:
 - Health promotion foundations
 - Health care expenditure
- Political tool to gain **support of the public**
- Can reduce the impact on **the poor** (cessation services, health care)
- Countries with earmarked tobacco tax: **Estonia, Latvia, Finland, France, Greece, Ireland, UK, Portugal, Thailand, etc.**

What is the “Right” Level of Tobacco Tax?

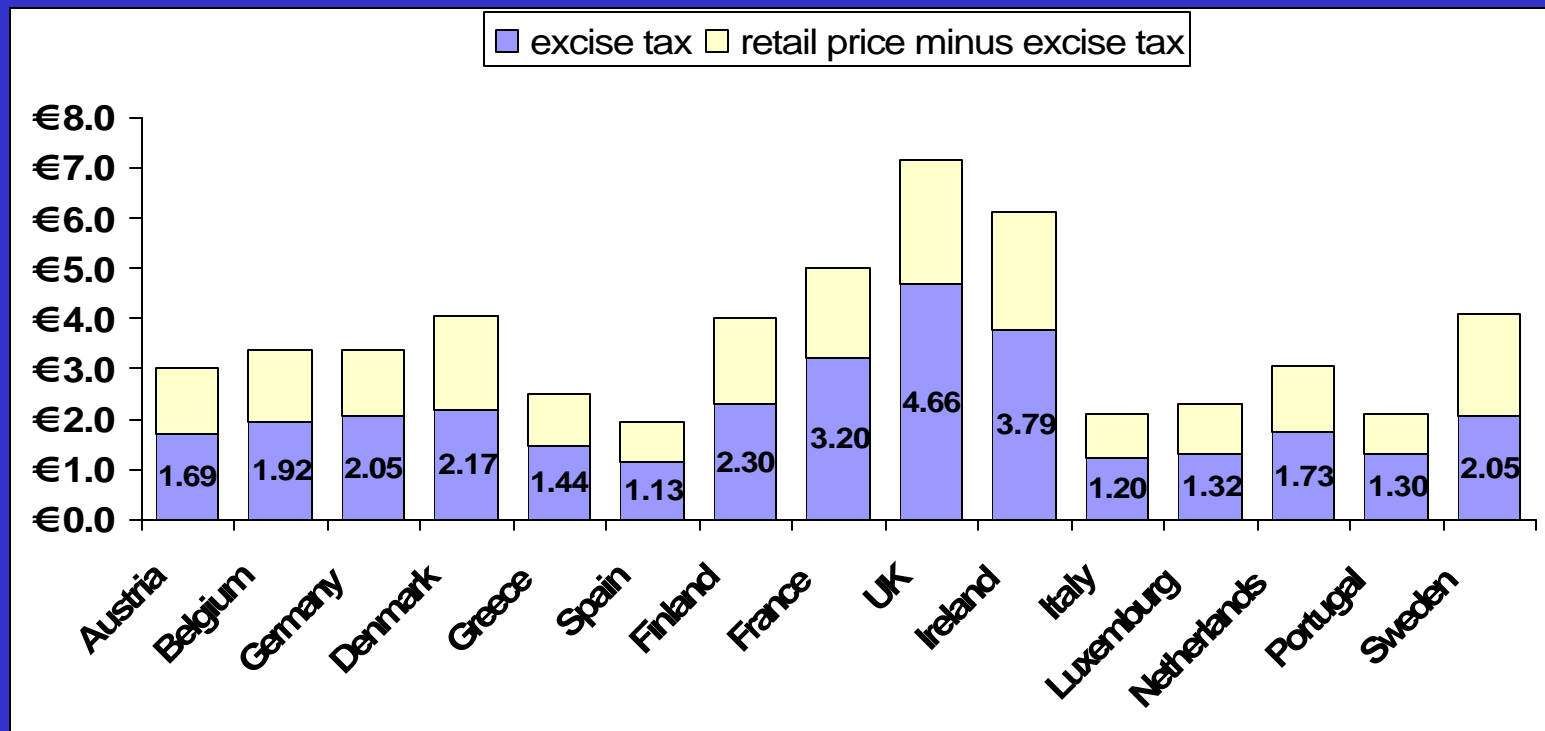
- **Complex** question

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.

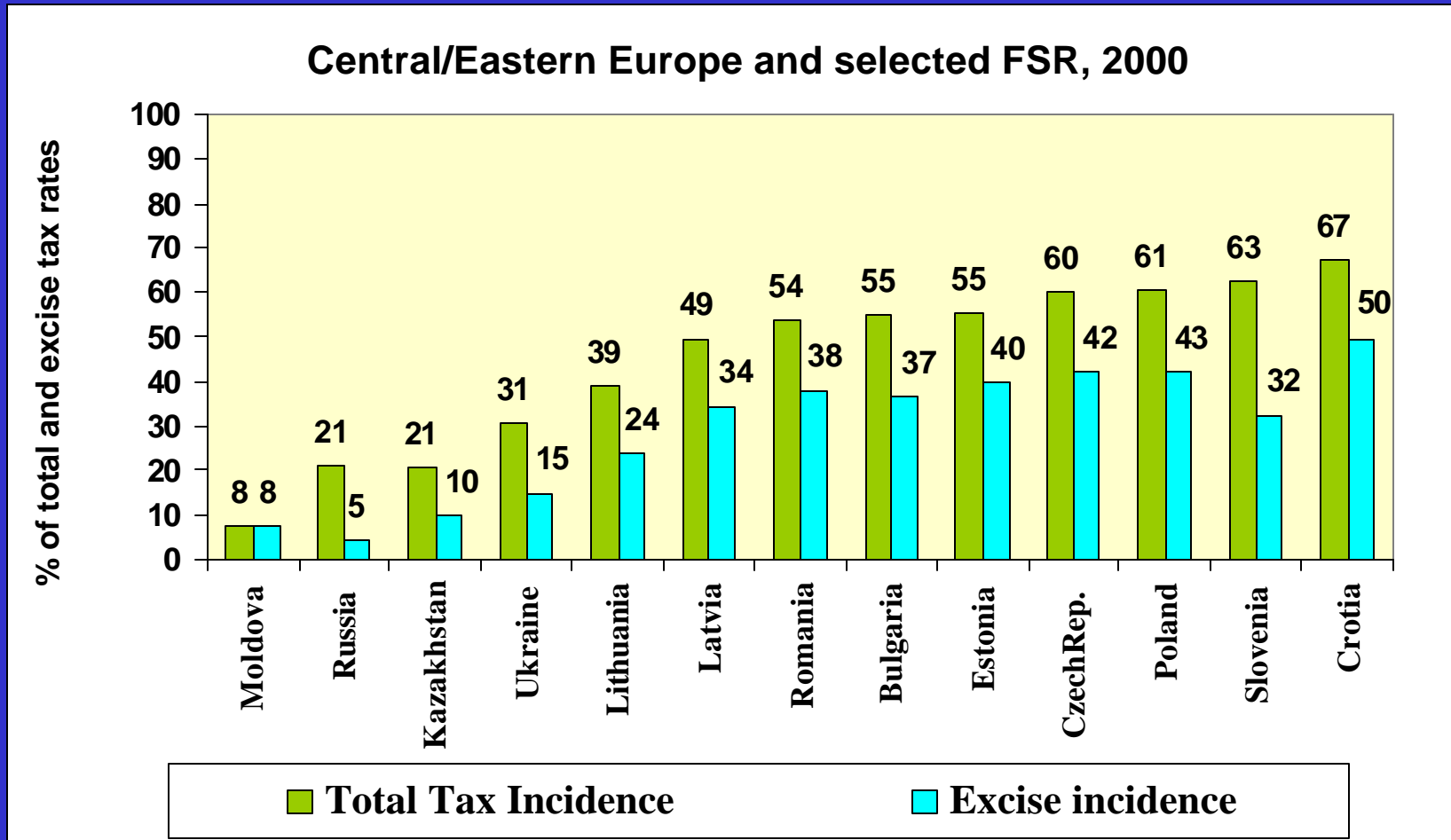
Source: Chaloupka *et al.*, 2000

EU Cigarette Prices 2003



Tax Level in Central/Eastern Europe and in some FSR

Total and Excise Tobacco Taxes as % of Retail Price



Tobacco Prices and Taxes in Kazakhstan are Low

Average price in 2004 was 41tenge (**\$0,32**), but possible to buy a pack as cheap as 15 tenge (**\$0,10**); Marlboro 100 tenge/pack (**\$0,77**)

Excise tax: 2 tenge (\$0,02)/pack without filter; 3,6 tenge (\$0,03)/pack with filter, 0,04 euro (6,4 tenge or \$0,05)/ pack of import

15% VAT

30% import duty

Average tax rate is about **20%** of retail price for domestic cigarettes

Tobacco Prices and Taxes in Other FSR

Georgia:

Jan 05: excise tax increased from \$0,15 to \$0,39 per pack (250% increase)

Average price per pack = \$4,5 - \$5,5

Ban of cigarette sale by street vendors

Latvia:

Jan 05: excise tax increased from \$0,07 + 6,1% gross price to \$0,074 + 10,5% gross price; plan to increase to \$0,19 + 32,2% gross price

Average price per pack = \$1,88

Russia:

Current tax is \$0,04 per pack; plan to increase to \$0,045 per pack

Ad valorem tax on tobacco will increase from 5% to 8%

Tobacco Business and its Importance to the Economy

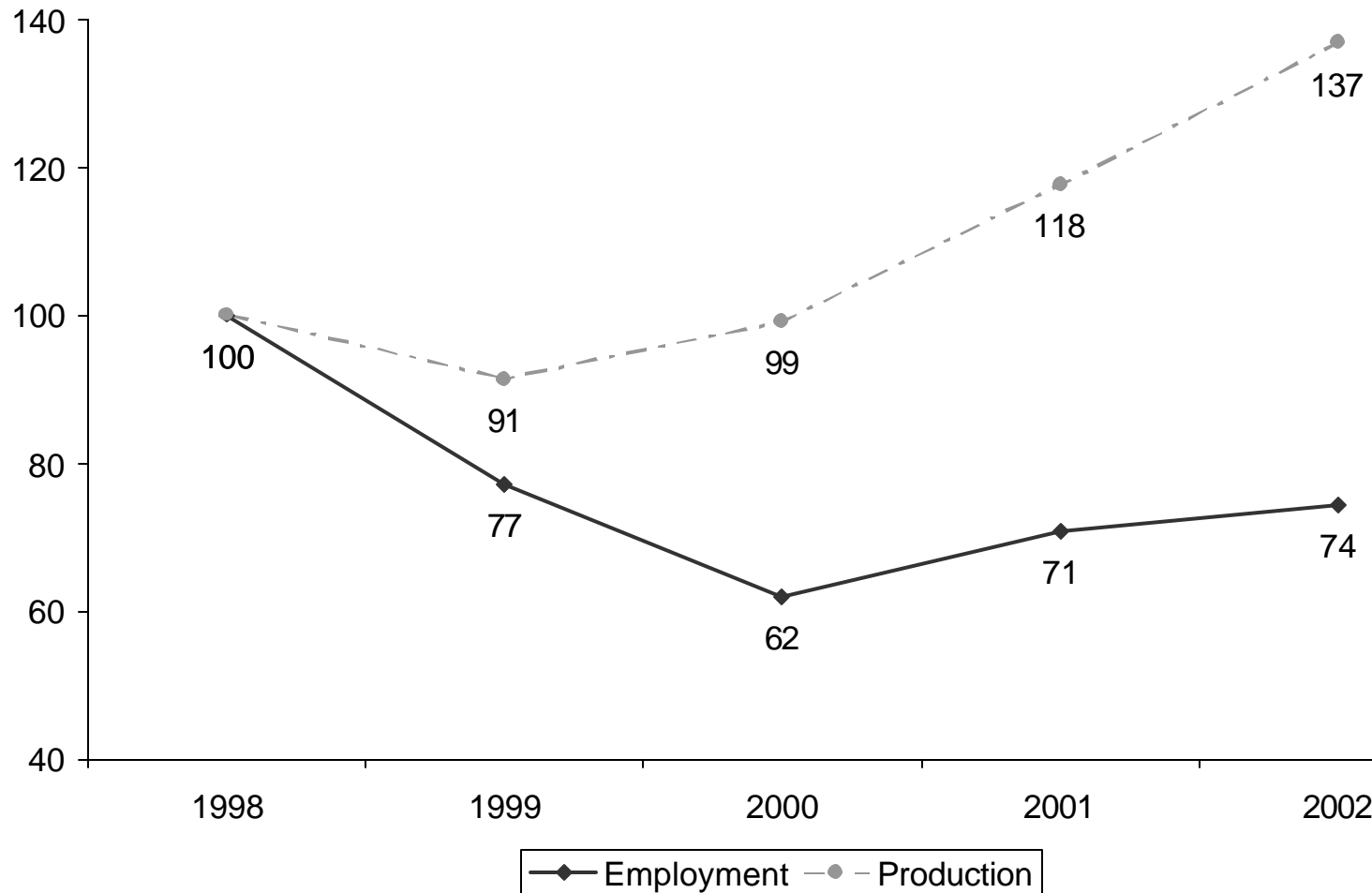
- A significant economic *presence* does **not** imply significant economic *dependence*.
- Spending on tobacco is rarely important to an economy.
 - *Money not spent on tobacco will be spent on other goods and services instead, thereby creating a comparable number of jobs.*

Real costs of tobacco control are the costs of **transition** to alternative products.

Employment

- Only **small % of labor force** is involved with tobacco farming and manufacturing
- **Gradual** adaptation of the economy – successful tobacco control policies will slow down the total demand, and in long-run may reduce demand; money saved from cigarettes **spent elsewhere**
- **Tobacco companies** themselves **reduce jobs** in tobacco industry:
1981 Almaty State Tobacco Combinat **2,400 employees**,
2004 the Philip Morris-owned ATC **1,300 employees**
with much larger production (information from workshop June 05 in Almaty)

Indices of Employment and Production in Ukraine



Effect of Tobacco Controls Depends on the Structure of Tobacco Economy

Kazakhstan is a **net importer of tobacco leaves**, and reduction in smoking will:

- improve **trade balance** if the imported leaves are for domestic consumption
- **increase employment** (when a part of the demand for foreign cigarettes will shift to domestic products – more labor intensive)
- due to inelasticity of cigarette demand, and relatively low taxes, government **revenue** from tobacco taxes **will increase**

Non-price Measures to Reduce Tobacco Demand

- Improve consumer **information**: dissemination of research findings, warning labels, counter-advertising
- Comprehensive **ban on advertising** and promotion
- **Restrictions on smoking** in public and work places
- Increase access to **cessation services** and to nicotine-replacement therapies (**NRT**)

Potential Impact of Demand Side Interventions

Region	Change in number of smokers (millions)		Change in number of deaths (millions)	
	10% Price increases	Set of Non-price measures	10% Price increases	Set of Non-price measures
Low/Middle Income	-38	-19	-9	-4
High Income	-4	-4	-1	-1
World	-42	-23	-10	-5

Source: Ranson *et al.*, 2000

How Cost-effective are Tobacco Control Measures?

US dollars per healthy year life gained

<i>Region</i>	<i>Price increases of 10%</i>	<i>Non-price measures with effectiveness of 5%</i>	<i>NRT (publicly provided) with 25% coverage</i>
Low / middle income	4 to 34	68 to 272	276 to 297
High Income	165 to 1,370	1,347 to 5,388	746 to 1,160

Note: 3% discount rate, costs for non-price measures and all benefits projected over 30 years

Source: *Ranson et al.*, 2000

Summary: Why to Raise Tobacco Tax

- Increasing tax on tobacco brings **positive macroeconomic effects**, both in **short-run** (more government revenue: a 10% tax increase would raise revenue by 7%) and in **long-run** (better public health and economic growth)
- **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