

Economics of Tobacco Control

Building the Case for Armenia

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RTI International

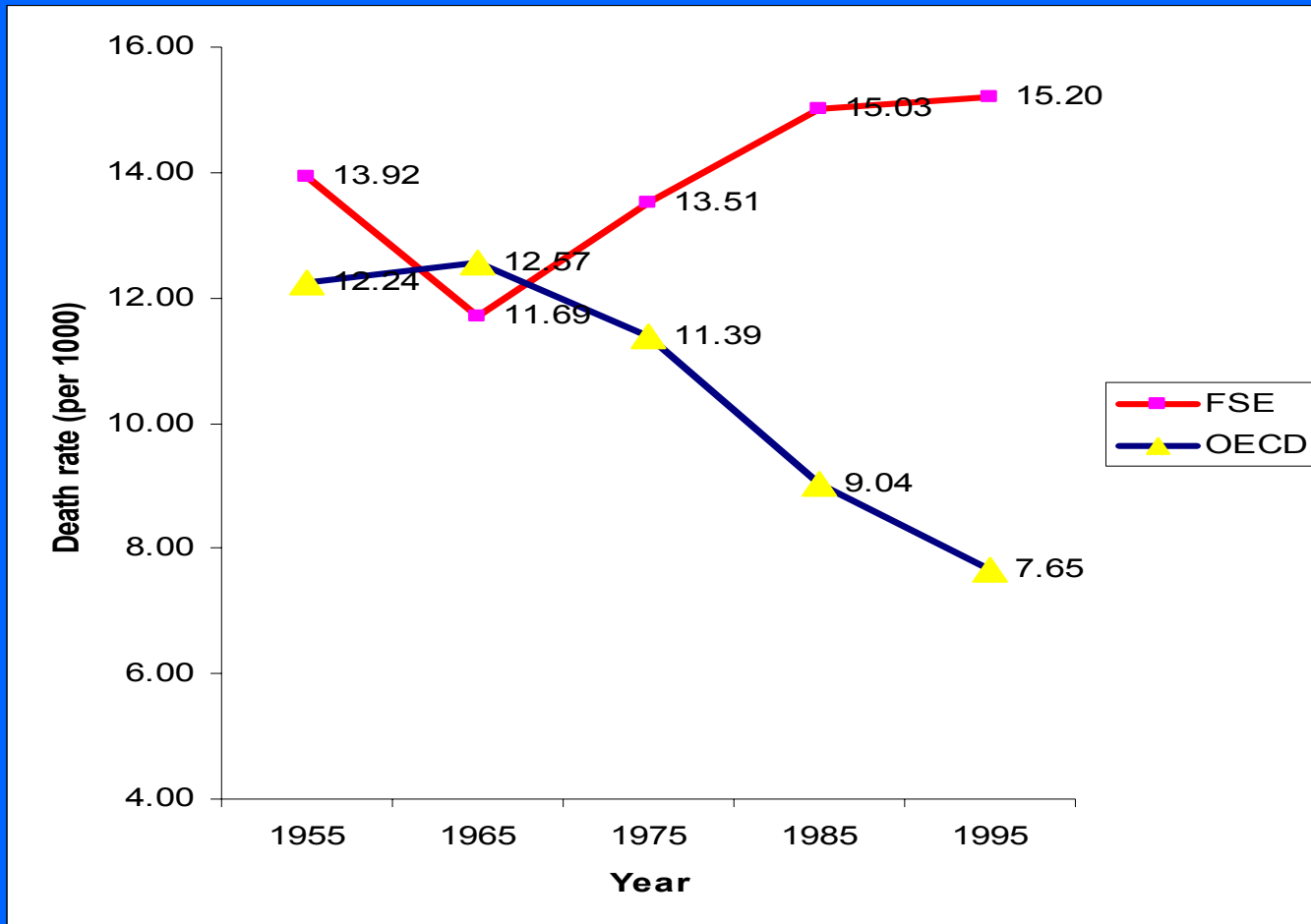


<http://www.tobaccoevidence.net>

It is important to base policies on research evidence

- Tobacco consumption **reduces human capital**: higher than average mortality in FSE was attributed to lifestyle habits including smoking
- Tobacco consumption **harms GDP** growth
- Tobacco consumption **hurts the poor** and increases the gap between rich and poor

Tobacco reduces human capital: death rates in middle aged (35-69) males



Source: Peto et al, 1994

Smoking prevalence in Armenia and UK (adults)

Armenia

UK

Male 67.5%

28%

Female 3.1%

26%

Tobacco reduces GDP growth

- From 1965 to 1990, **male survival** in the ages group 15-60 rose from 70% to 80% in 52 countries
- This **health improvement** raised income growth by 0.23% per year
- If adult male survival in FSE were the same as in OECD countries in the last 30 years, 1990 per capita income would have been **12% higher**, or \$3,000 as opposed to \$2,700

Tobacco hurts the poor:

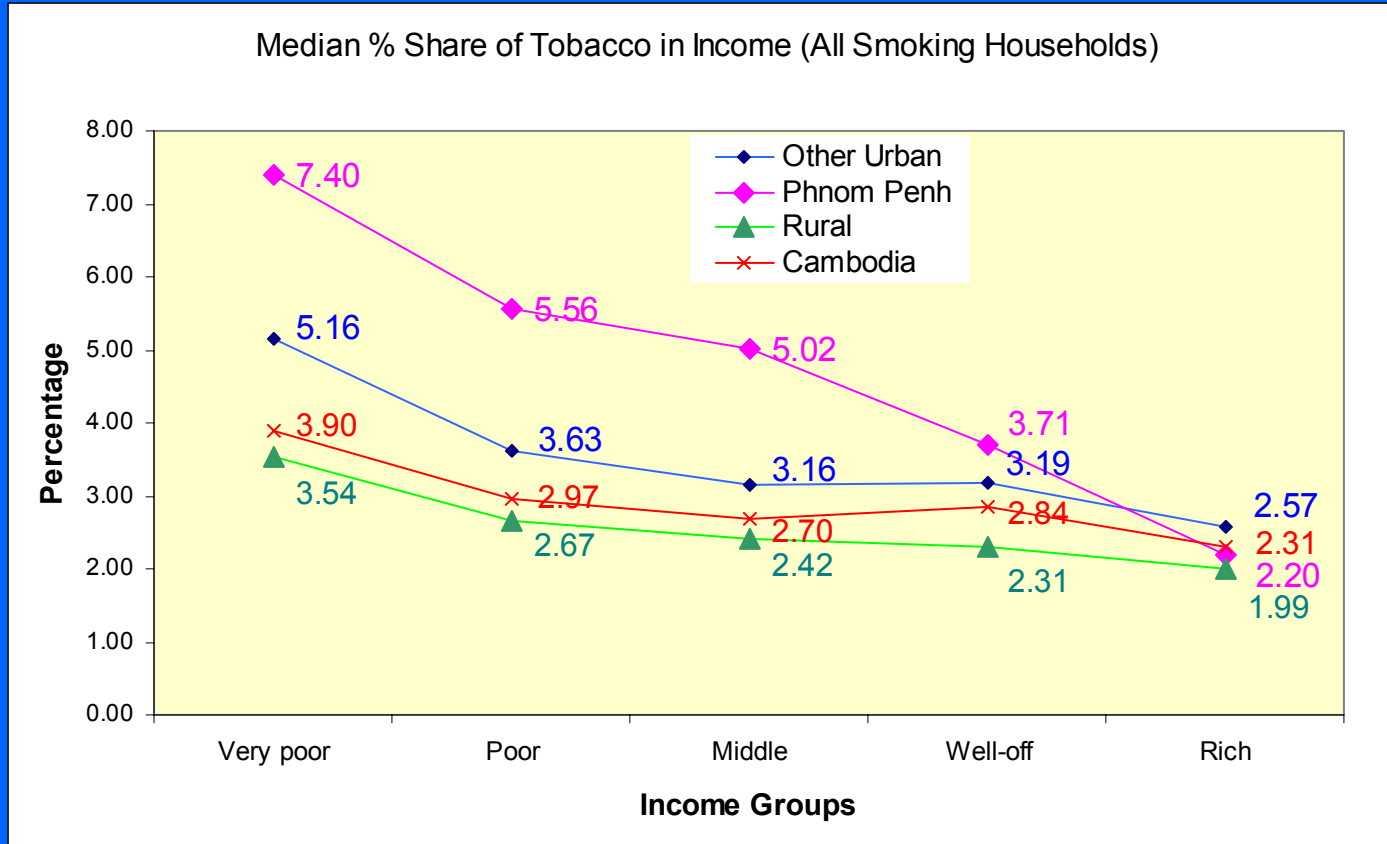
Risk of Premature Death Among Males at Age 35-69 by Income Group, Canada, 1991

	Attributed to Smoking	Attributed to Smoking, but would have died anyway	Other Causes	Total Risk
Richest	5	0	14	19
Richer	6	1	16	23
Average	7	1	17	25
Poorer	9	1	17	27
Poorest	13	2	20	35

Source: Jha, et al. BMJ

Tobacco hurts the poor:

Portion of income spent on tobacco increases as income decreases



Are there any economic benefits from tobacco?

- **Contribution to GDP?** Tax collection in EU is **0.68%** of GDP, but the costs of smoking in EU represent **1.04% - 1.49%** of GDP
- **Jobs?** Only **0.12%** of total labor force (ICHD estimates, 2001); money not spent on tobacco will be spent elsewhere creating jobs
- **Collected Taxes?** Goods purchased instead of tobacco are also taxed; excise taxes can be collected on other “sin” goods/activities

Taxation is most effective method to reduce tobacco consumption

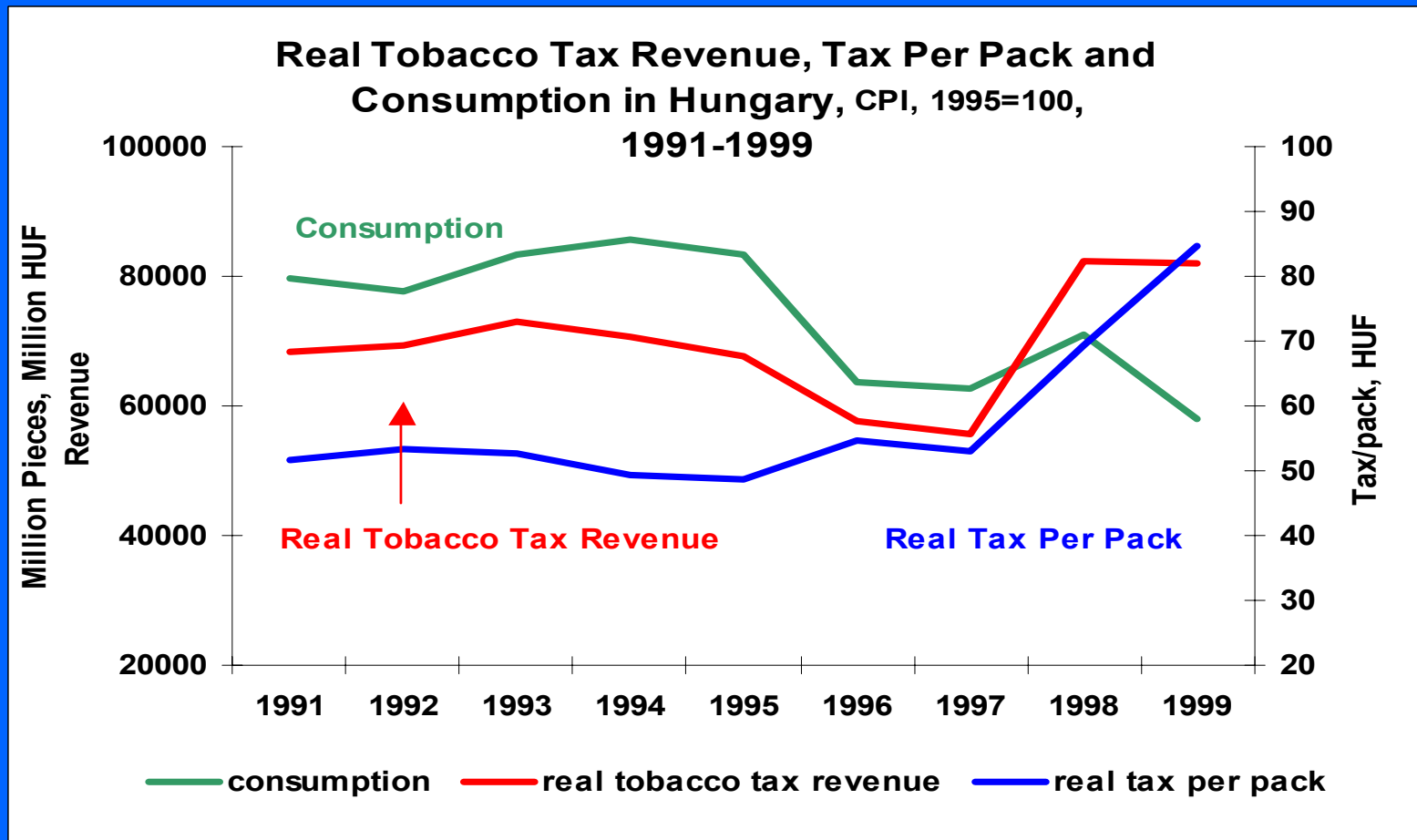
Short term impact

- Decline in smoking prevalence (quitting, lower uptake) and smoking intensity
- Change in purchasing behavior, brands
- Raise revenue
- Change business environment for tobacco companies

Long term impact

- Improve public health
- Reduce gap between the rich and the poor
- Improve economic growth

Higher taxes lead to higher budget revenue: Evidence from Hungary



Impact of tobacco control 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>
<i>Low / middle income</i>	<i>4 to 34</i>	<i>68 to 272</i>	<i>276 to 297</i>
<i>High Income</i>	<i>165 to 1,370</i>	<i>1,347 to 5,388</i>	<i>746 to 1,160</i>

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

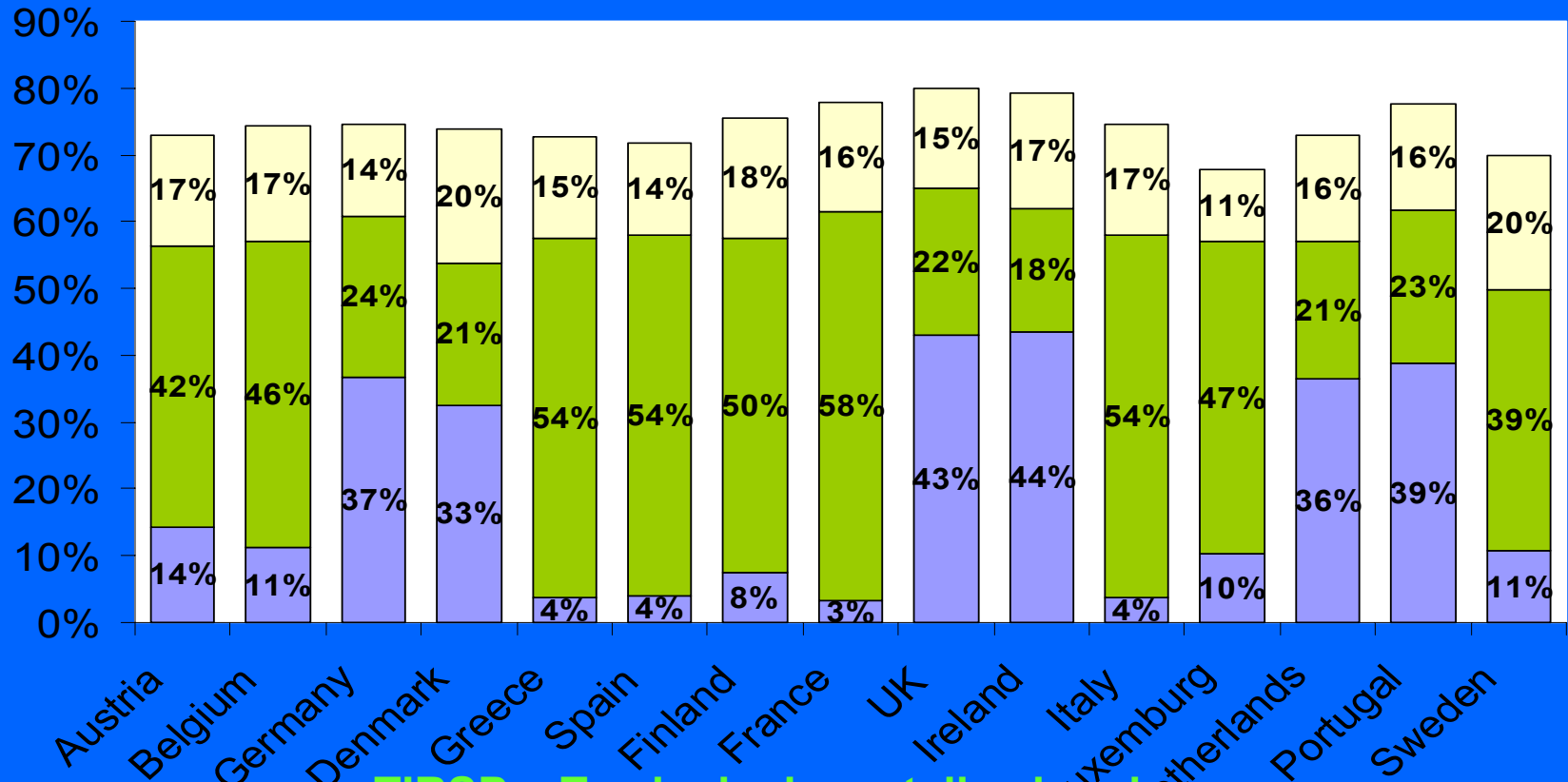
Source: *Ranson et al., 2000*

What is the “right” level of tax?

- Depends on societal values regarding:
 - Child protection
 - Revenue consideration
 - Health care costs
 - State of public health
 - Stage of development
- **World Bank and WHO recommendations: tax should be between 66% and 80% of price; tax in Armenia: about 35% (0.16 Euro excise tax/pack)**

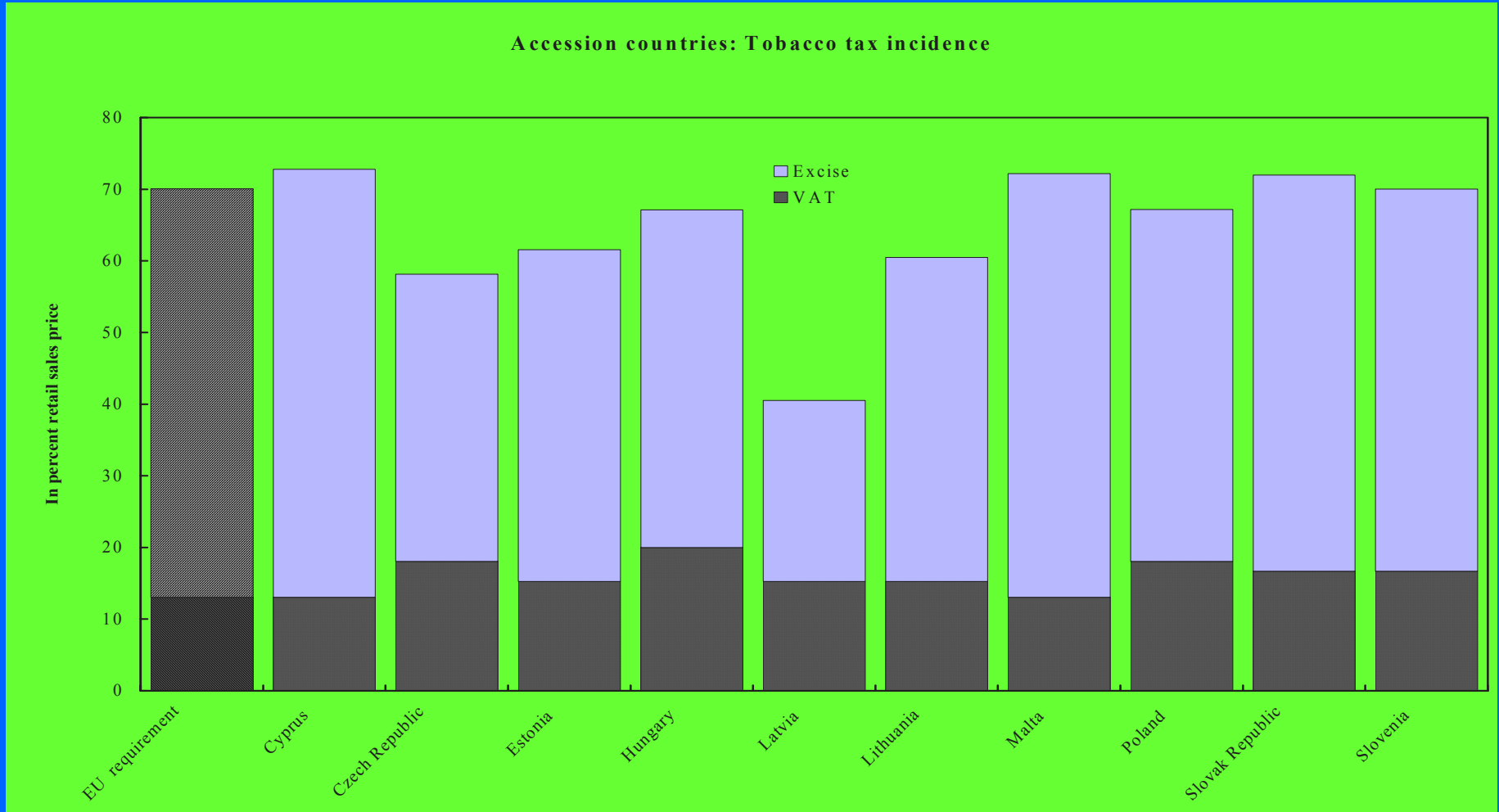
EU cigarette taxes 2003

■ Specific % of TIRSP
 ■ Ad valorem % of TIRSP
 ■ VAT % of TIRSP



TIRSP = Tax inclusive retail sale price

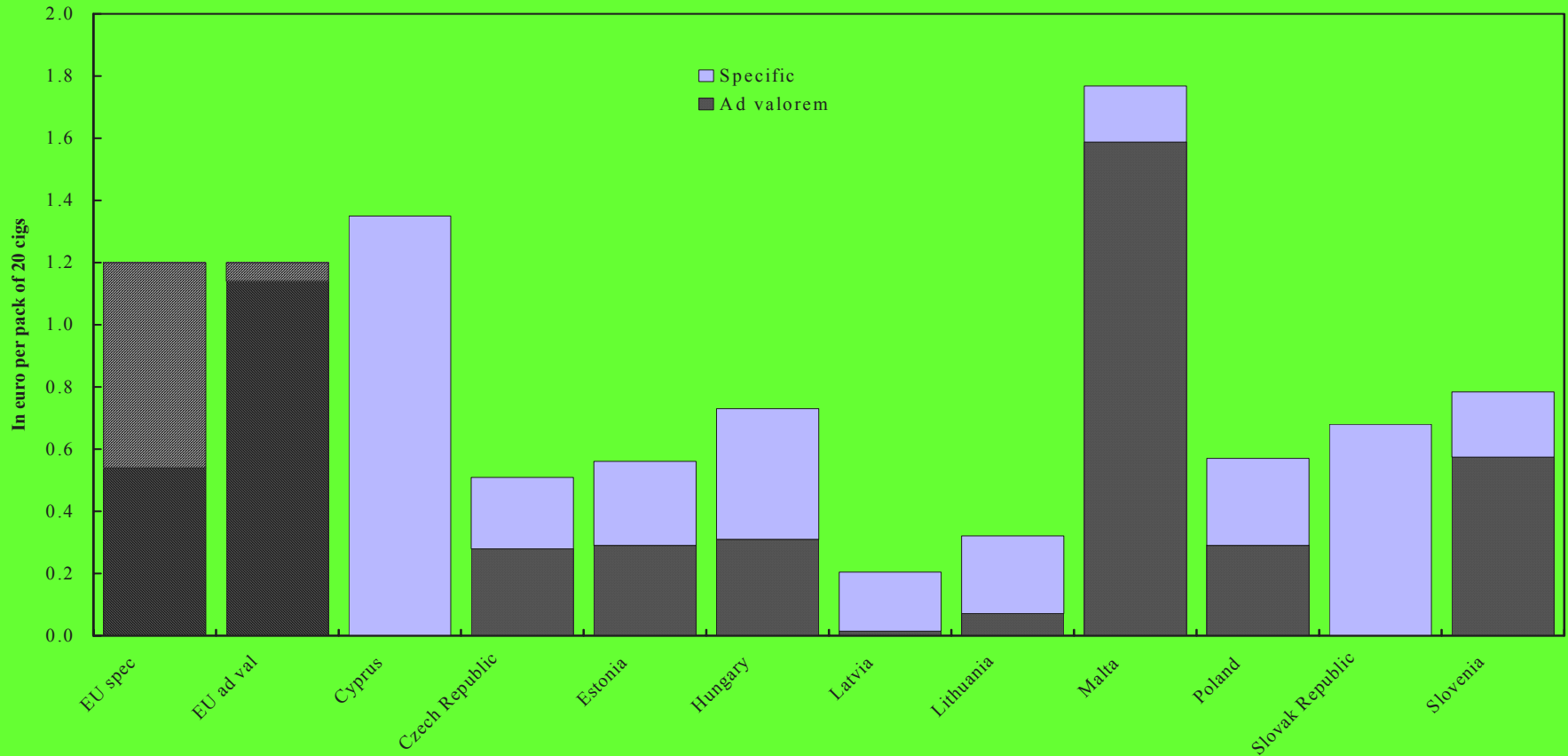
Accession countries tax level as % of price



Armenia tax level is 36% of price

Accession countries excise tax level in Euros

Accession countries: Excise Burden Per Pack of Cigarettes



Armenia tax level is 0.16 Euro excise tax/pack

Tobacco taxes can be earmarked (hypothecated)

- **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: Thailand, Estonia, Finland, France, Greece, Ireland, Latvia, UK, Portugal, etc.**