

***BASICS OF TOBACCO TAXATION
POLICY IN THE EUROPEAN UNION (2)***

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**Capacity Building Workshop on Taxation and Illicit Trade in tobacco
products
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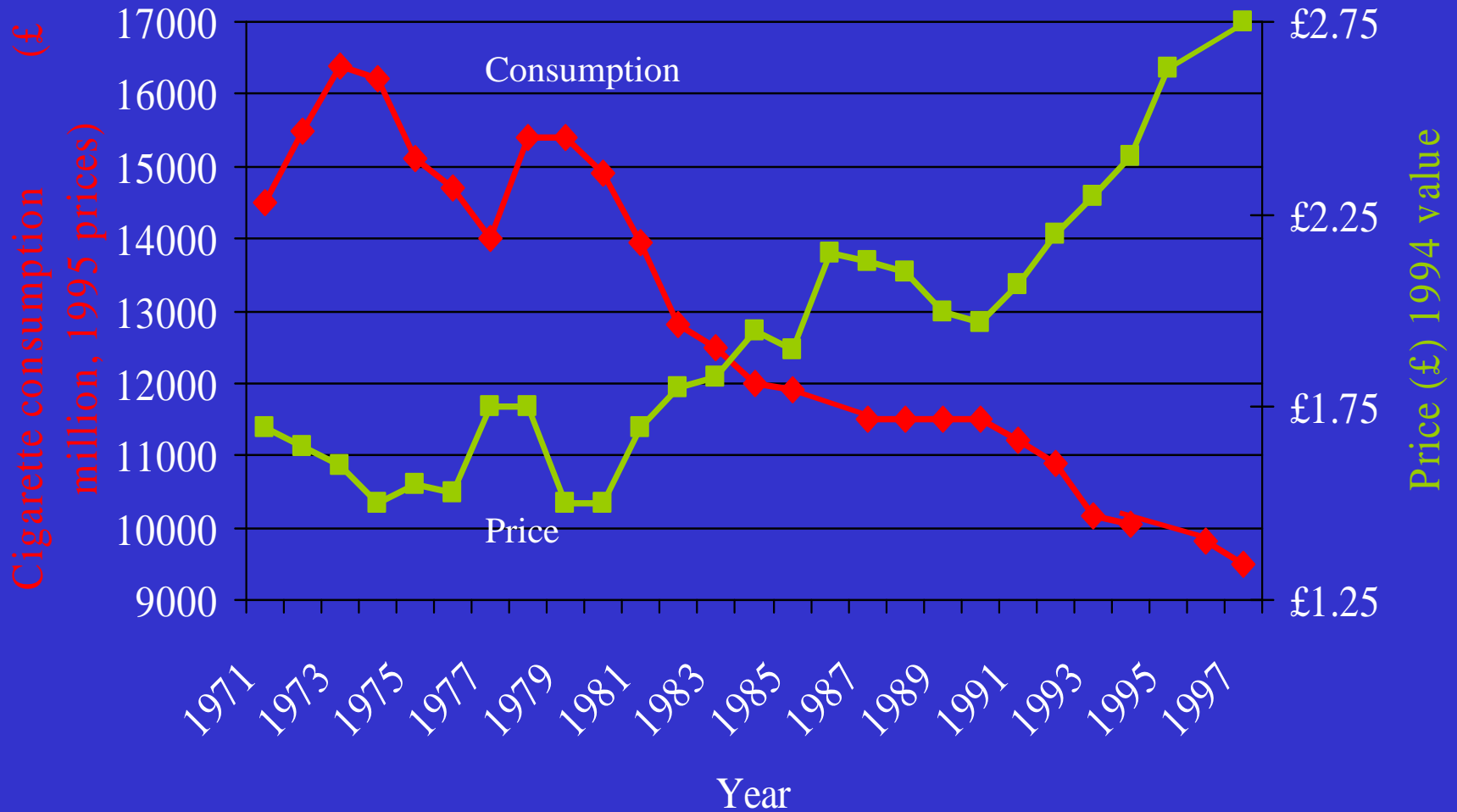
MYTH

SMOKERS WILL SMOKE THE SAME
AMOUNT WHATEVER THE PRICE

PURPOSES OF TAXATION

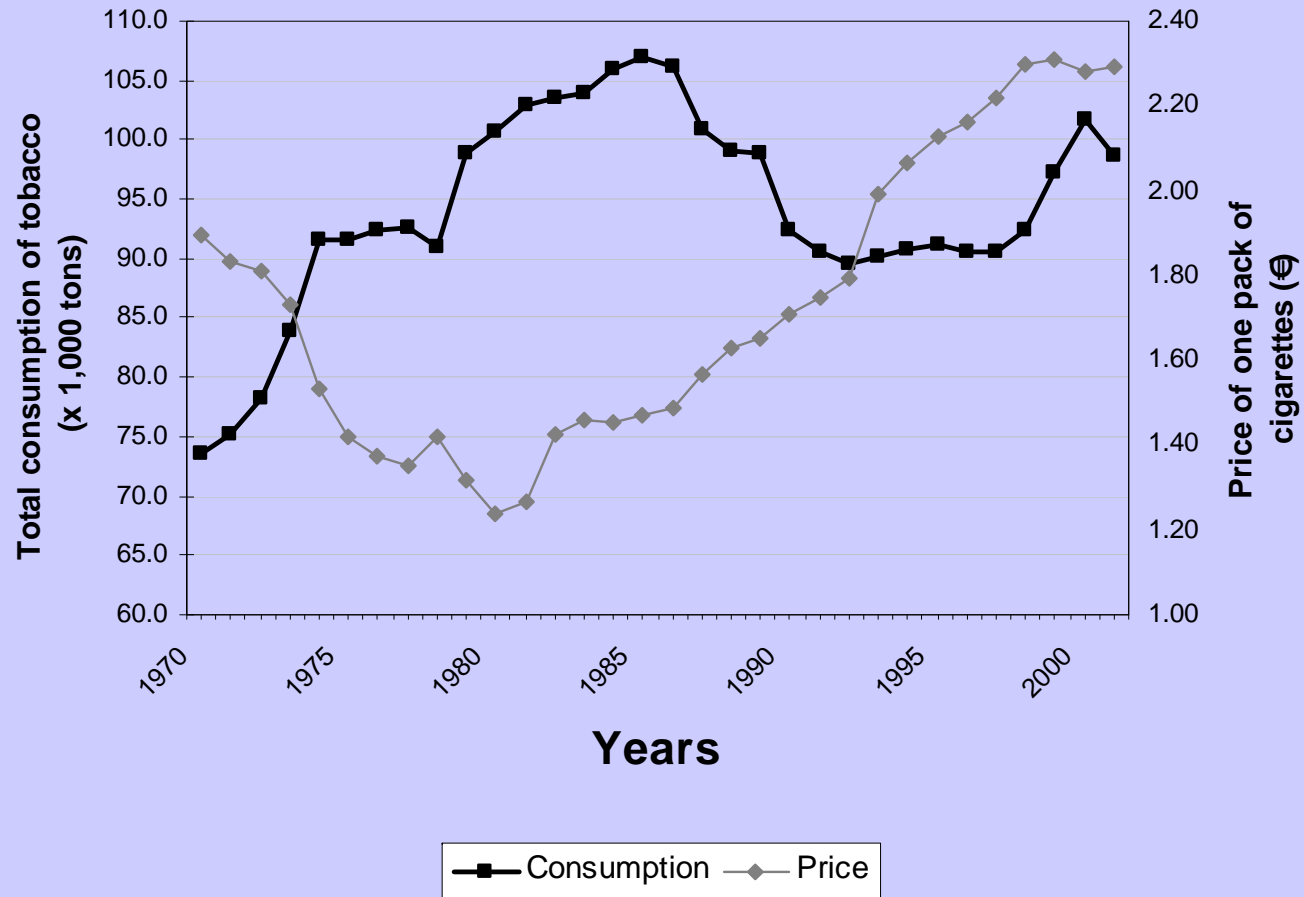
- **Raise revenue**
- **Sumptuary tax – to deter consumption**
- **To correct for externalities**

Cigarette price & consumption (UK)



Italy

Tobacco consumption and real price of one pack of cigarettes (data from official legal sales). Italy, 1970-2001.



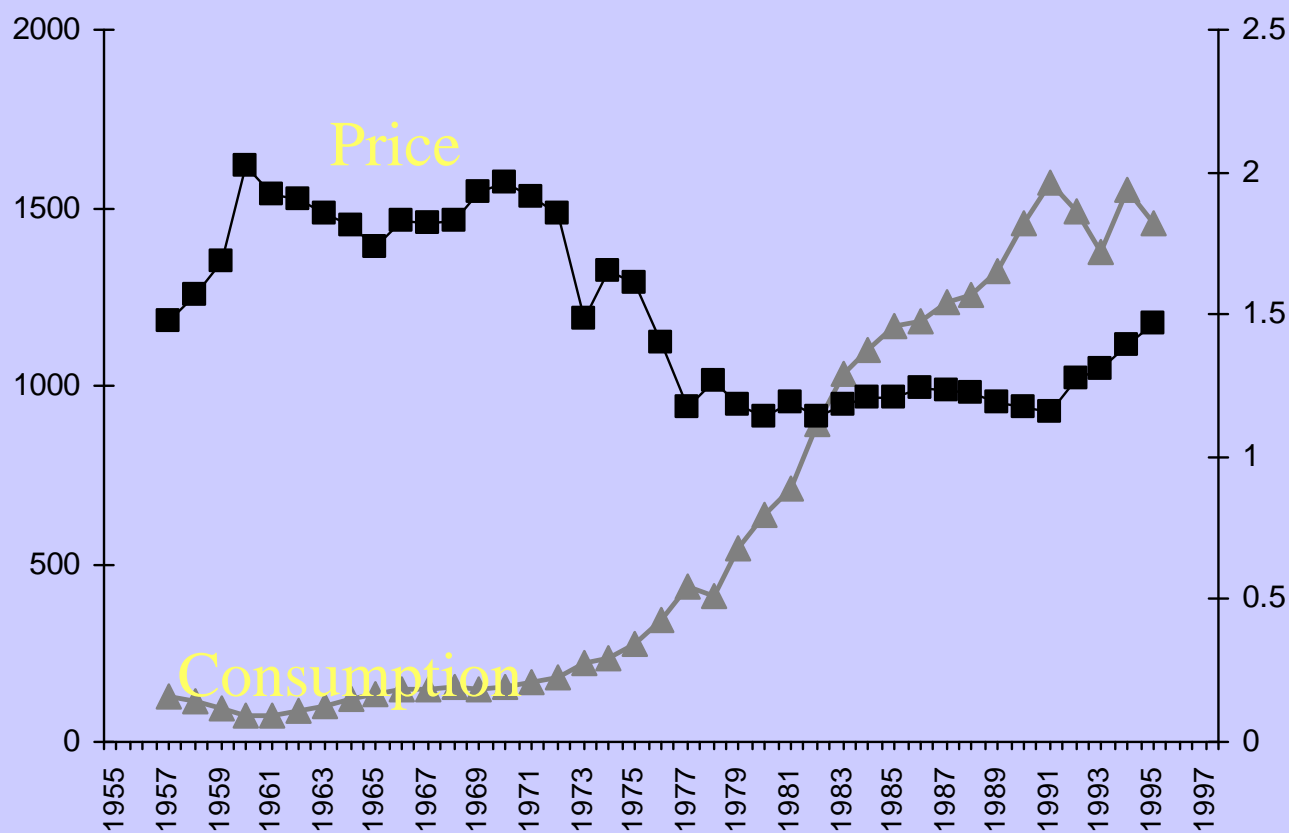
Price and consumption of tobacco in Italy over the last three decades

Gallus, S.; Fernandez, E.; Townsend, J.; Schiaffino, A.; la Vecchia, C.

European Journal of Cancer Prevention, 2003; 12(4):333-337

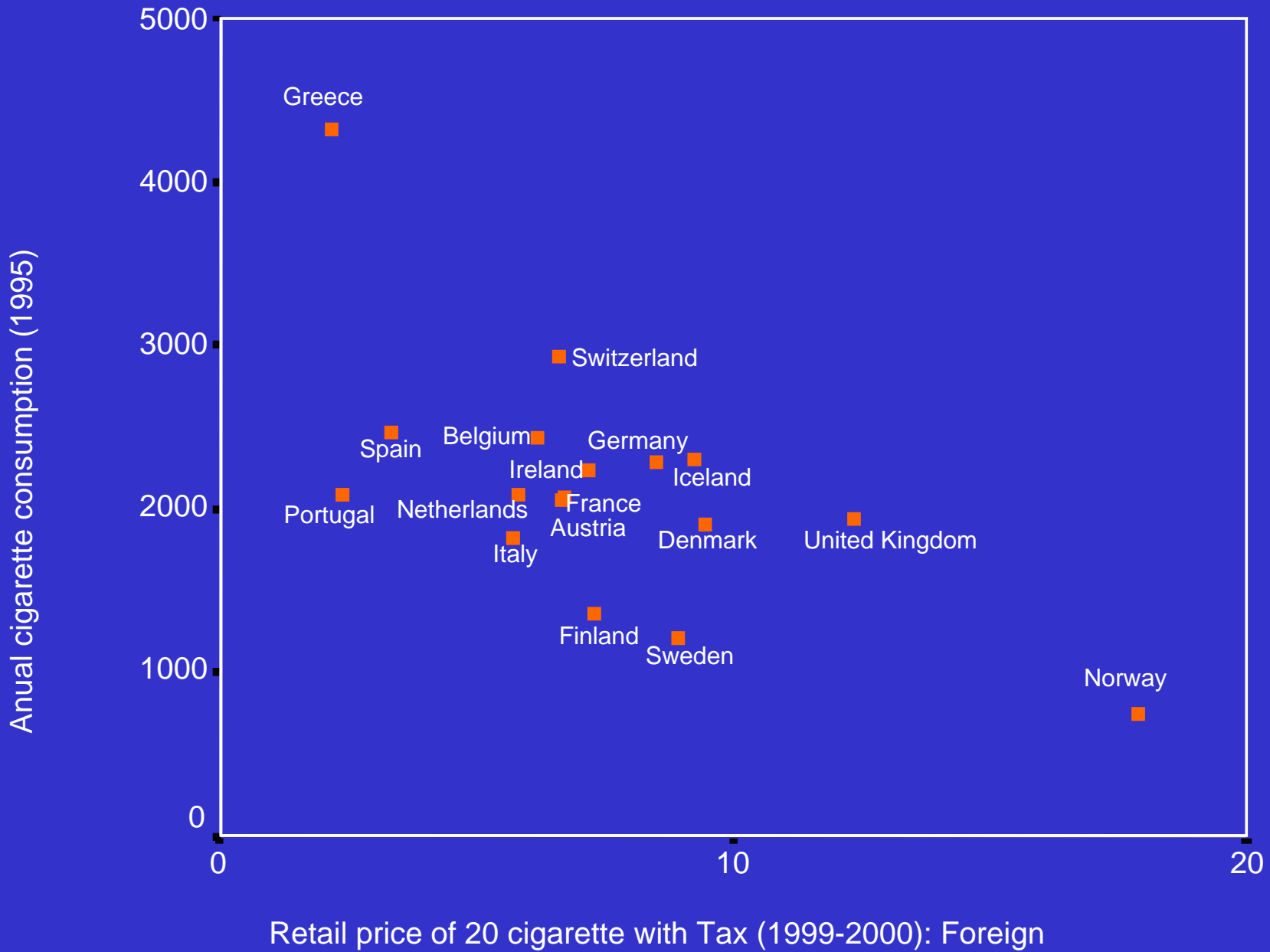
Spain

Blond tobacco consumption and real price of one pack of blond cigarettes. Spain, 1965-1995.

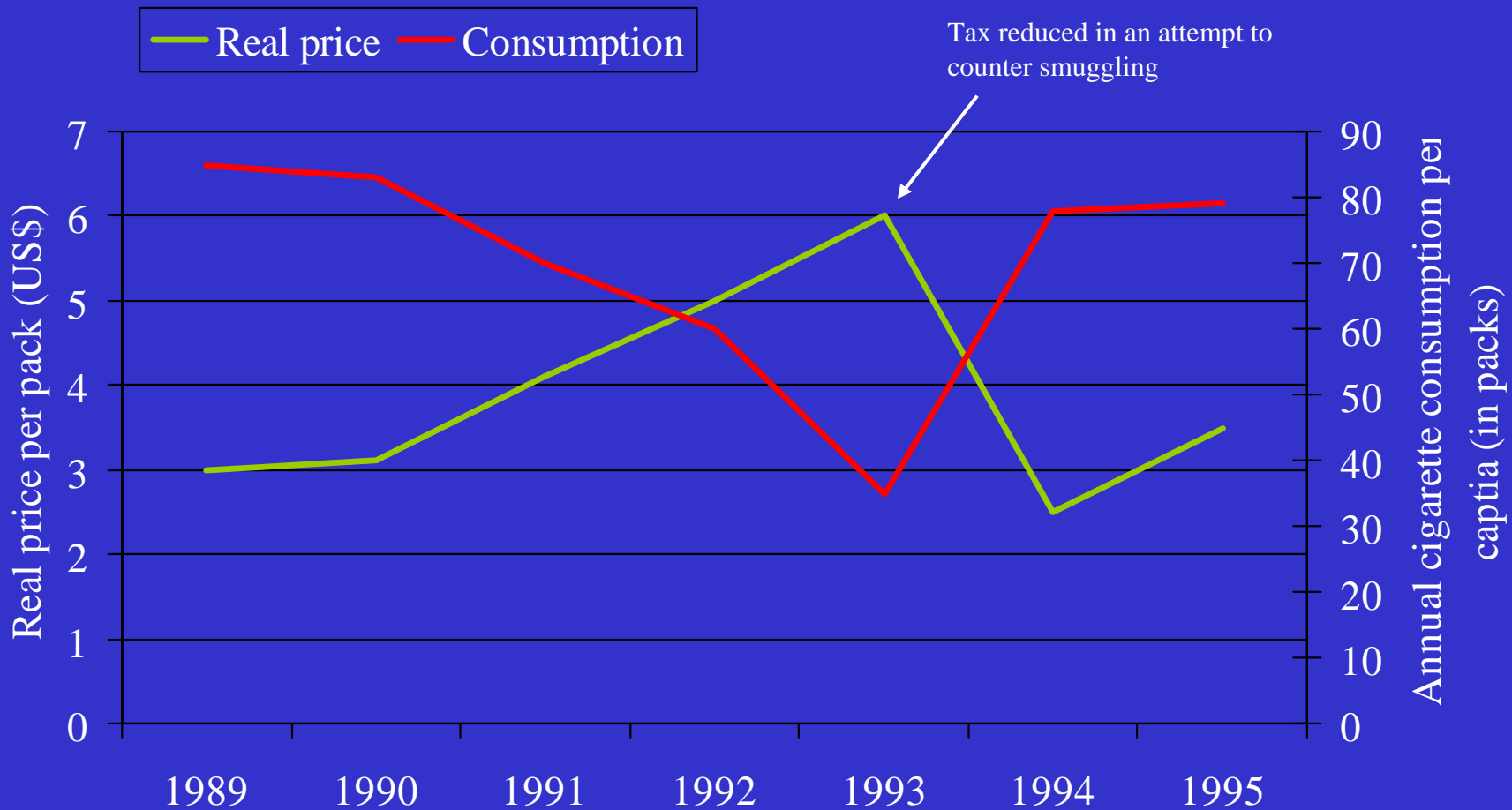


Price and consumption of tobacco in Spain over the period 1965-2000

Fernandez, E.; Gallus, S.; Schiaffino, A.; Lopez-Nicolas, A.; Vecchia, C. L.; Barros, H.; Townsend, J.
European Journal of Cancer Prevention, 2004; 13(3):207-11



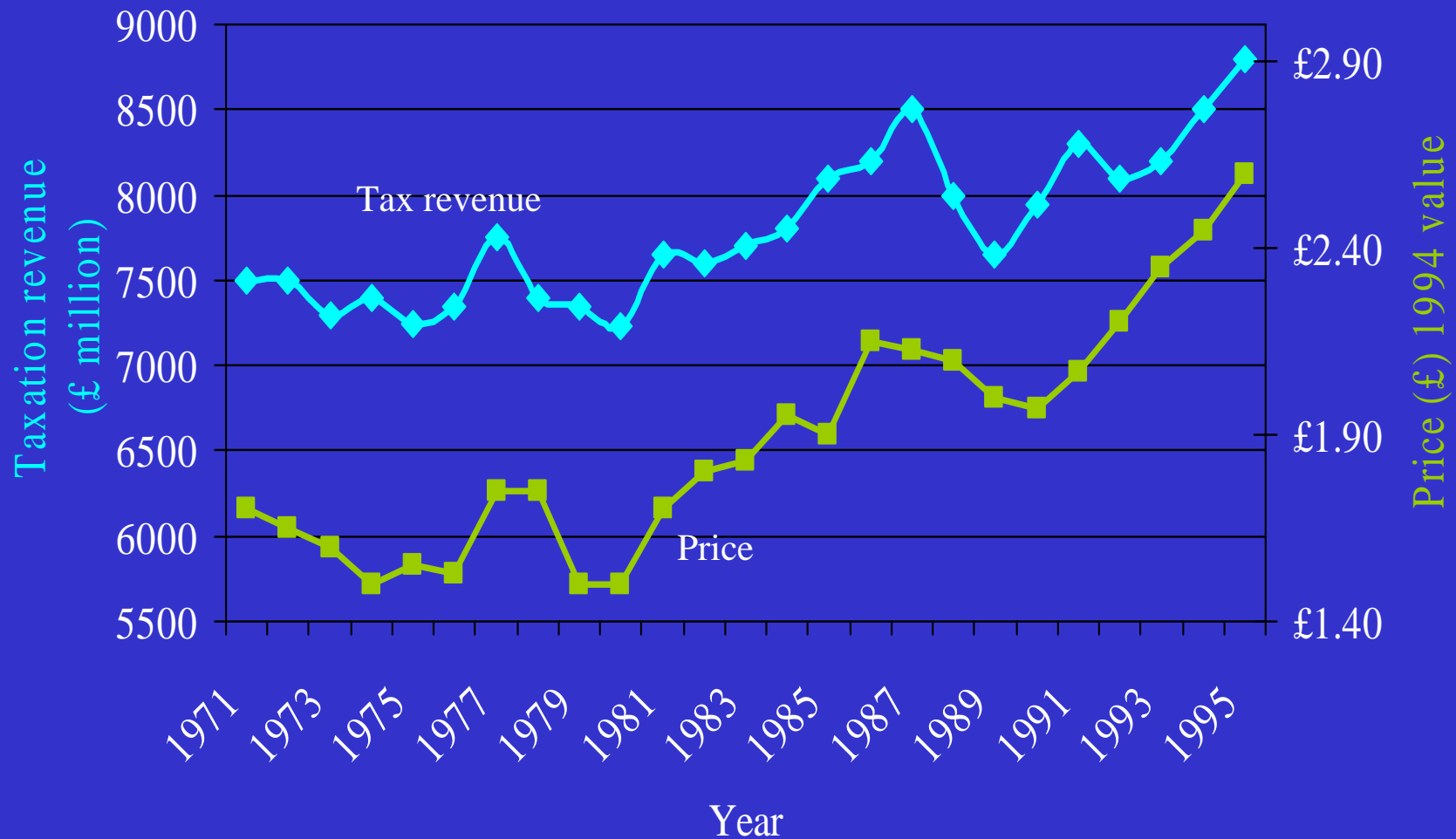
Real price of cigarettes and annual cigarette consumption per capita, Canada, 1989-1995



MYTH

GOVERNMENT TAX REVENUE
WILL FALL IF IT INCREASES
THE TOBACCO TAX RATE

Cigarette price & tax revenue (UK)



**real price is the
current (nominal) price
price of all goods and services**

**** Very important that tax and price rises are not eroded by general price inflation. Tax levels must be raised at least by as much as inflation ****

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Price elasticity of demand

% change in demand for a 1% price change

About -0.4 in developed countries

10% rise in real prices decreases smoking by about 4%.

(-0.8 in developing countries)

Highest for poor and young people

Use of price elasticity

- **To estimate effects of tax rises on tobacco consumption and on tax revenue**

AFFORDABILITY

- **Relative ability to purchase tobacco will depend on the Affordability**
- **that is price relative to income**

Changes in smoking as a result of tax rise

When price rises from P1 to P2

smoking falls from Q1 to Q2

$$Q2/Q1 = (P2/P1)^e$$

where e is price elasticity of demand for cigarettes

If price rises 10% and e is -0.4 then

$Q2/Q1$ is $1.1^{-0.4} = 0.96$ so smoking falls by 4%

- **But if price rises 20%, $Q2/Q1$ is $1.2^{-0.4} = 0.93$ smoking falls by 7%**

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Tax revenue elasticity

- $= - (1.0 + T/P) \times e$
- So tax revenue will increase with a tax increase (tax revenue elasticity > 0) as long as the price elasticity is negative
- If tax on cigarettes rises 10%, $e = -0.4$ and $T/P = 0.7$
- Tax revenue should rise by about 6.7%
-

Estimates of price elasticities

- Gallus et al for EU, Tob Con 2006 -0.46 local cigs
-0.74 imported cigs
- Philip Morris for US (1982) -0.42
- Jha and Chaloupka 1999
developed countries av -0.4
poor countries av -0.8
- Townsend et al for UK, BMJ 1994 -0.5 men
-0.6 women

Price elasticities and health publicity by socio economic group UK 1972-1990

	<u>Socio-econ Group</u>	<u>Price elasticity</u>	<u>Health publicity</u>
MEN	I (richest)	(0.003)	-0.09***
	IIIM (middle)	-0.49	-0.04**
	V (poorest)	-1.02	-0.01
WOMEN	I (richest)	(0.5)	-0.06
	IIIM (middle)	-0.71*	-0.01
	V (poorest)	-0.88*	0.02

- *Townsend, Roderick, Cooper, BMJ,1994,309,923-927*

- **SPECIFIC TAX**

- **Fixed amount**

- **AD VALOREM TAX**

- **Percentage of final price**

- **Value added tax**

- **Percentage of price before VAT**

Cigarette Tax in four EU countries
prices and taxes per pack of 20 cigarettes MPPC

	<u>Price</u>	<u>specific</u>	<u>ad val</u>	vat	Total	<u>%price</u>
UK	€ 7.8	€ 3.12	22%	€ 1.1	€ 6.0	77%
Ireland	€ 7.5	€ 3.22	17%	€ 1.3	€ 5.8	78%
Poland	€ 1.3	€ 0.48	38%	€ 0.2	€ 1.2	93%
Bulgaria	€ 1.3	€ 0.38	35%	€ 0.2	€ 1.1	82%

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Price and prevalence of male smoking

	<u>Males</u> (2000/5)	<u>price(mppc,2008)</u>
UK	23 %	€ 7.8
Ireland	24 %	€ 7.5
Poland	38 %	€ 1.2
Bulgaria	44 %	€ 1.3

EU TAX ON HAND ROLLED AND FINE CUT TOBACCO (HRT)

- Minimum rates
- **36% of retail price or € 32 per kilogram**
- **Proposed gradual increase to 2/3rds tax rate of cigarettes**
- **below cigarette tax equivalent and cause of serious cross border smuggling**

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CIGARETTE TAX AND POVERTY

- **INEQUALITIES IN HEALTH?** **poor suffer most smoking illness and mortality**
- **RESPONSE TO TAX RISE?** **poor have highest price elasticities so raising tax reduces their smoking most**
- **Complements health education?** **poor tend to have lower response to health education**
- **REGRESSIVITY?** **poor smoke more and so pay more tax if they continue smoking**
- **Tobacco tax revenue can be targeted to help cessation in poorer groups**

COST EFFECTIVENESS OF TAXATION

- **All studies show that cigarette tax is effective in reducing smoking**
- **It's effective immediately**
- **It's most effective :young and poor**
- **No cost to government**
- **Increases government revenue**
- **Revenue can boost health promotion and smoking cessation**

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SMOKERS' TAX AVOIDANCE

- **Legal tax paid: cross border shopping for personal use (with threshold quantities)**
- **Legal (non tax paid): duty free from non EU (threshold quantities)**
- **Illegal tax paid: Bootlegging not for personal use/
over threshold limit**
- **Illegal non tax paid: illegal smuggling**
- **Internet sales**

Deterring Tax avoidance

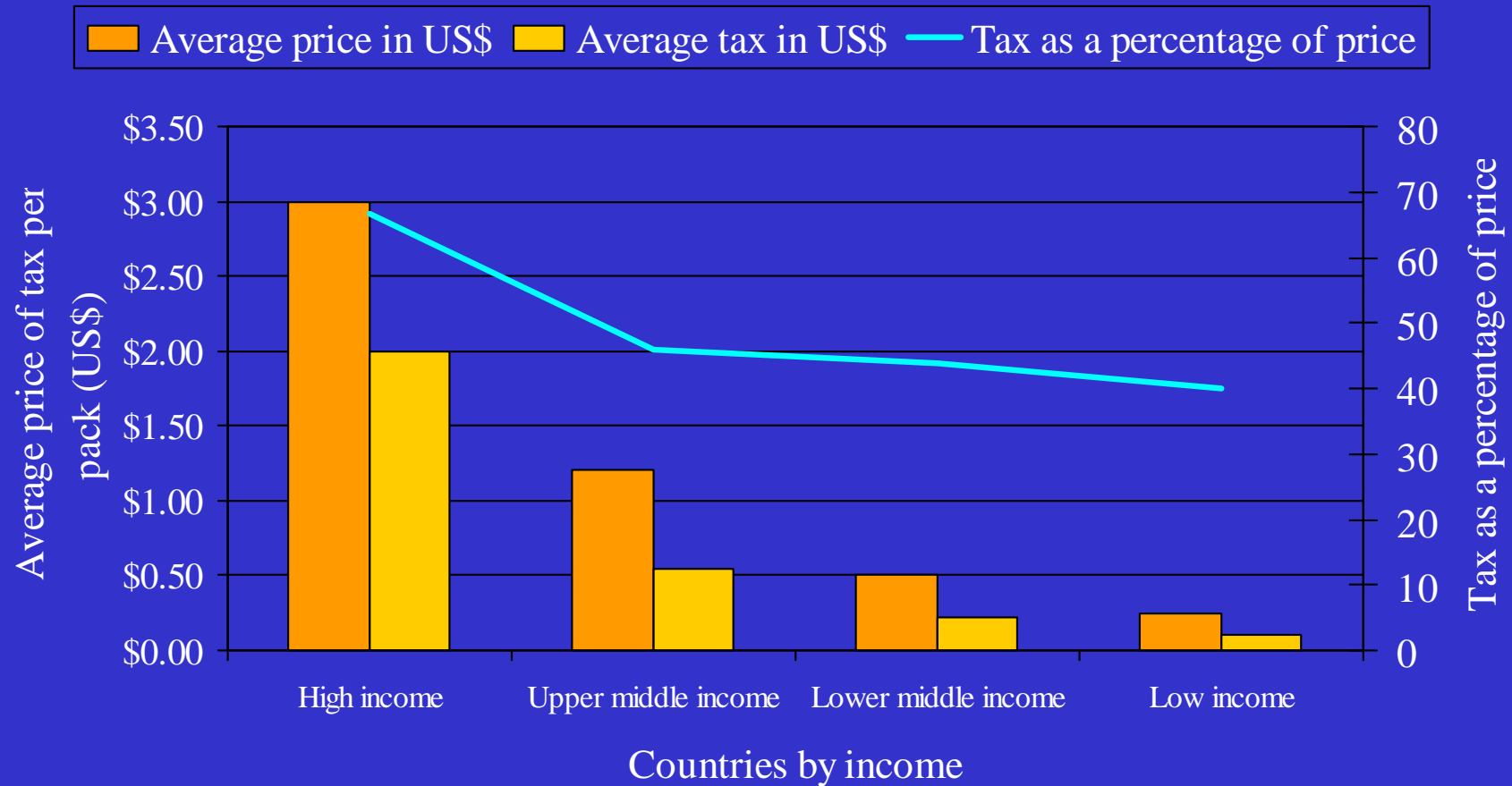
- **Level up price levels**
- **Level up tax levels and keeping up with inflation**
- **Reduce demand by all tobacco control measures**
- **Control smuggling**

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Industry's response to tax structure

- **ad valorem tax: industry lowers base price**
- **specific: Industry may increase cigarette size**
- **(by weight: may reduce size of cigarette)**
- **Lobby governments to lower tax or not to increase**
- **Complicit in smuggling**

Average cigarette price, and percentage of tax share per pack, by World Bank income groups, 1996



RECOMMENDATIONS FOR INFLUENCING TAXATION POLICY

- **Analyse and understand** the structure –specific tax, ad valorem tax, value added tax, overall tax in euros. In real terms, and in affordability terms. How could these be improved?
Monitor and analyse smoking levels, and tobacco disease levels
- **Compare with levels in other countries**
Estimate the effects on mortality/health of raising tax to average EU level; to highest EU level
- Estimate benefits of raising specific tax to 75% price
- **Benefits of taxing all tobacco products similarly?**
- Is there a need to tackle smuggling by effective legislation and monitoring and taxation
- **Is some tobacco tax revenue used for health promotion and smoking cessation?**

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