



Tobacco Smuggling

Issues and Evidence

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A strong anti-smuggling protocol is a key part of the FCTC

Why?

Smuggling

- defrauds governments and taxpayers
- increases level of crime and corruption
- puts cheaper cigarettes on the street
- undermines a powerful tobacco control policy – use of higher taxes to reduce smoking.

Source: World Bank, 1999, Joossens 2002

Smuggling is a serious problem.

But

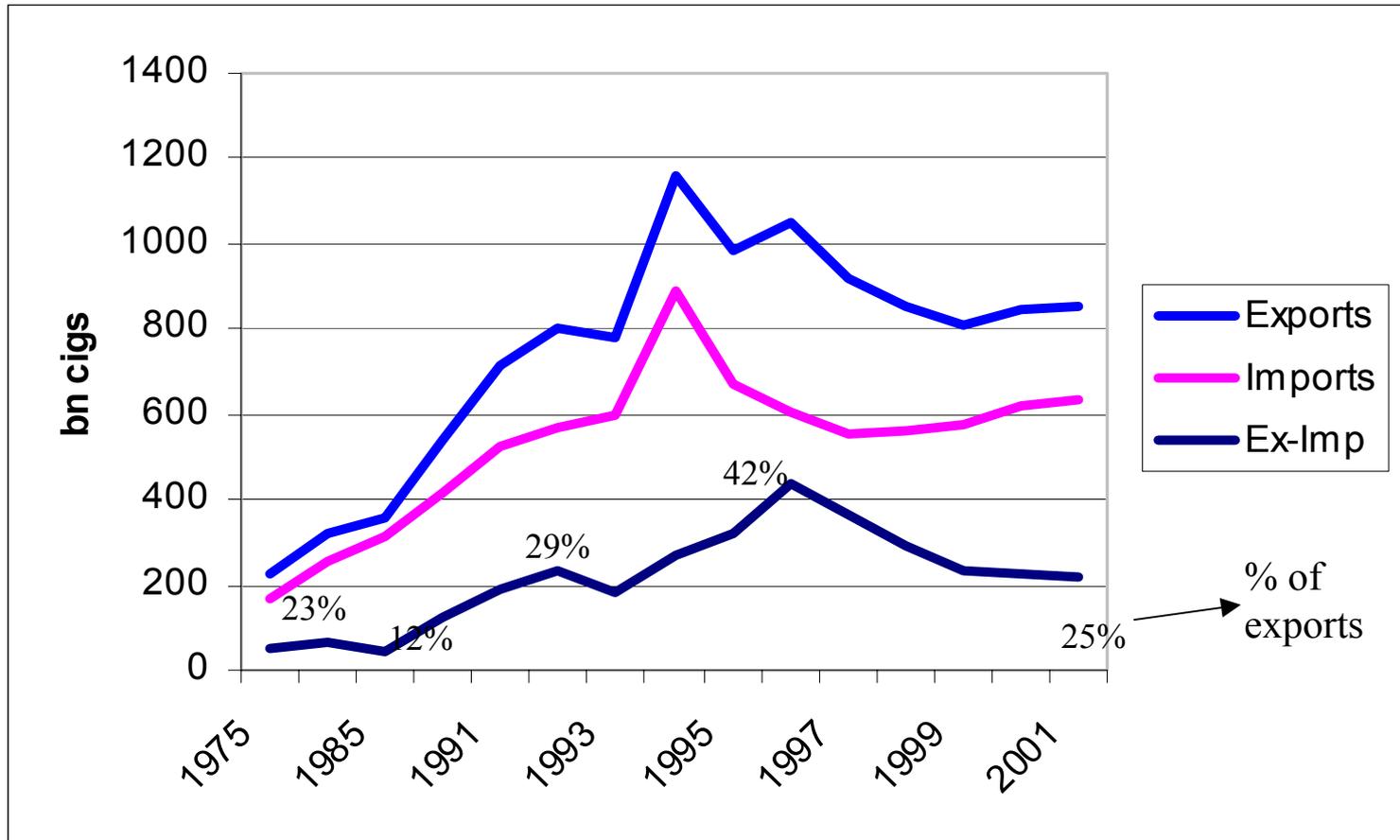
- exaggerations
- disinformation
- misconceptions and
- information gaps abound.

Lets look at facts and evidence.

Facts and Evidence

- High prices & taxes, low smuggling (<5%)
Sweden, Denmark, Norway, France, Finland
(UK in previous years), Ireland
- Low prices & taxes, high smuggling (>10%)
Spain, Italy, Pakistan, Nigeria, Yugoslavia,
Ukraine, Moldova, Colombia, Iran, Austria,
Cambodia

Facts and evidence: smuggling volume



Source: USDA, Joossens

Facts and Evidence: Types of Smuggling

	Bootlegging	Organized smuggling
Price/tax role	Exploits large price diffs between nearby countries	Evade taxes completely
Any duty paid?	Yes	No
Facilitated by:	Porous borders, illegal end sales	Poor controls on transit trade READY SUPPLY
Distances	Nearby countries	Long
Who?	Individuals and gangs	Organized criminal networks
Volumes	Smallish – eg 50kg/trip	Huge–10 million cigs/container
Outlay	£2,000	US\$200,000
Profit/consignment	£2,000	US\$ 1 million
Brands	?	Intn'l - Marlboro
Chain of trade	short	Long, many owners
Industry role	None?	Complicit
Total significance	Relatively small	Huge

Facts and Evidence – industry role?

- Many lawsuits and investigations
- Several convictions and guilty pleas since 1997
- Explicit admissions: “our brands will be available .. in the smuggled .. market”
(BAT Deputy Chairman)
- Industry’s own documents- internal memos about the “DNP” market, details, strategies etc.

Who benefits, who loses from smuggling?

Winners

- Industry
- Smugglers
- Vendors of contraband
- Smokers pay less/pack

Losers

- Governments
- Taxpayers
- Legal sellers
- Public health and health care system
- smokers lose (health, life as result of smoking/smoking more)

Facts and Evidence: What causes smuggling?

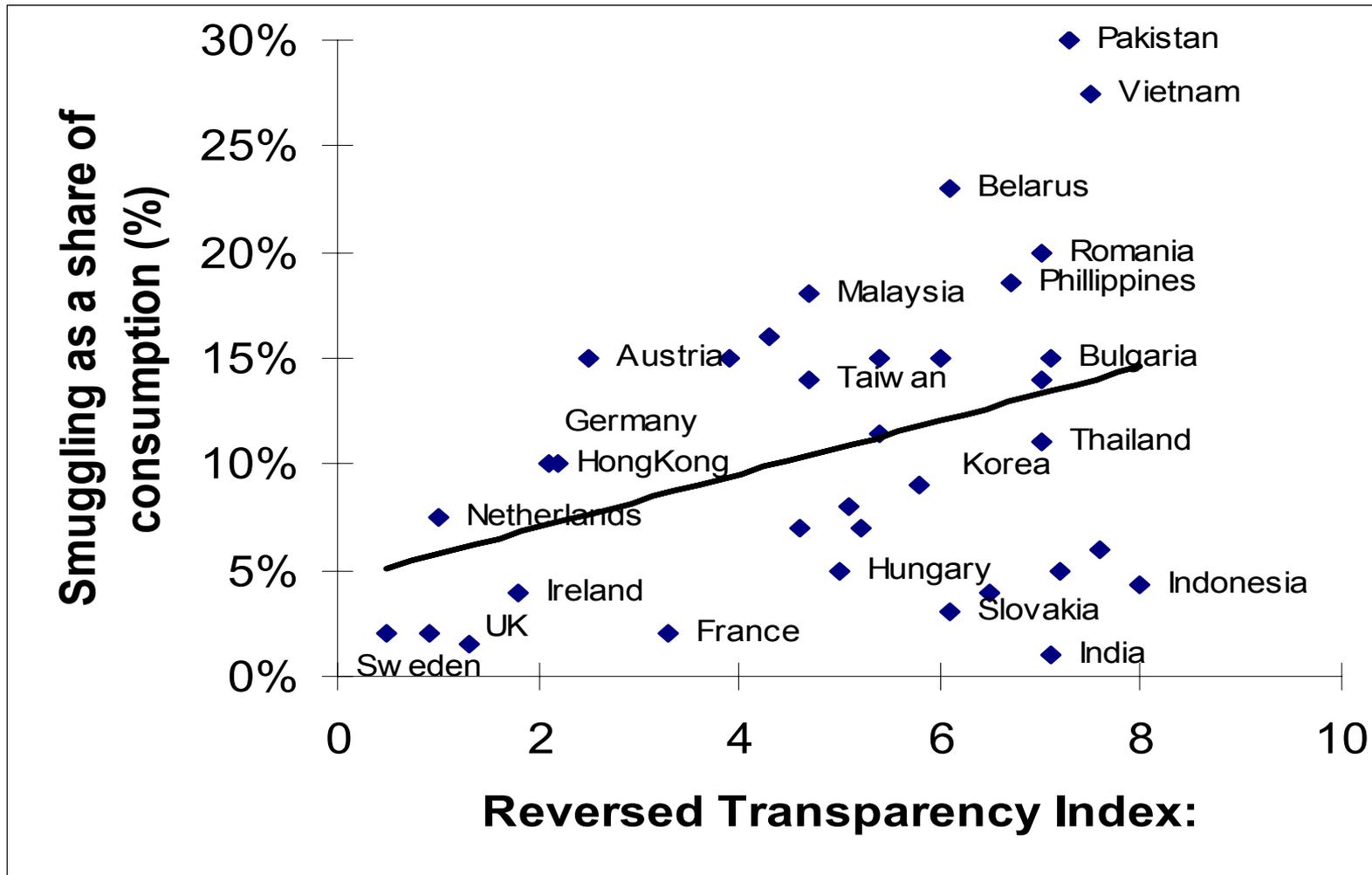
High taxes and price differentials provide an incentive to smuggle,

but

other causal factors are (more?)
important

e.g. corruption, ready supply,
irresponsible exporting

Tobacco smuggling rises with corruption



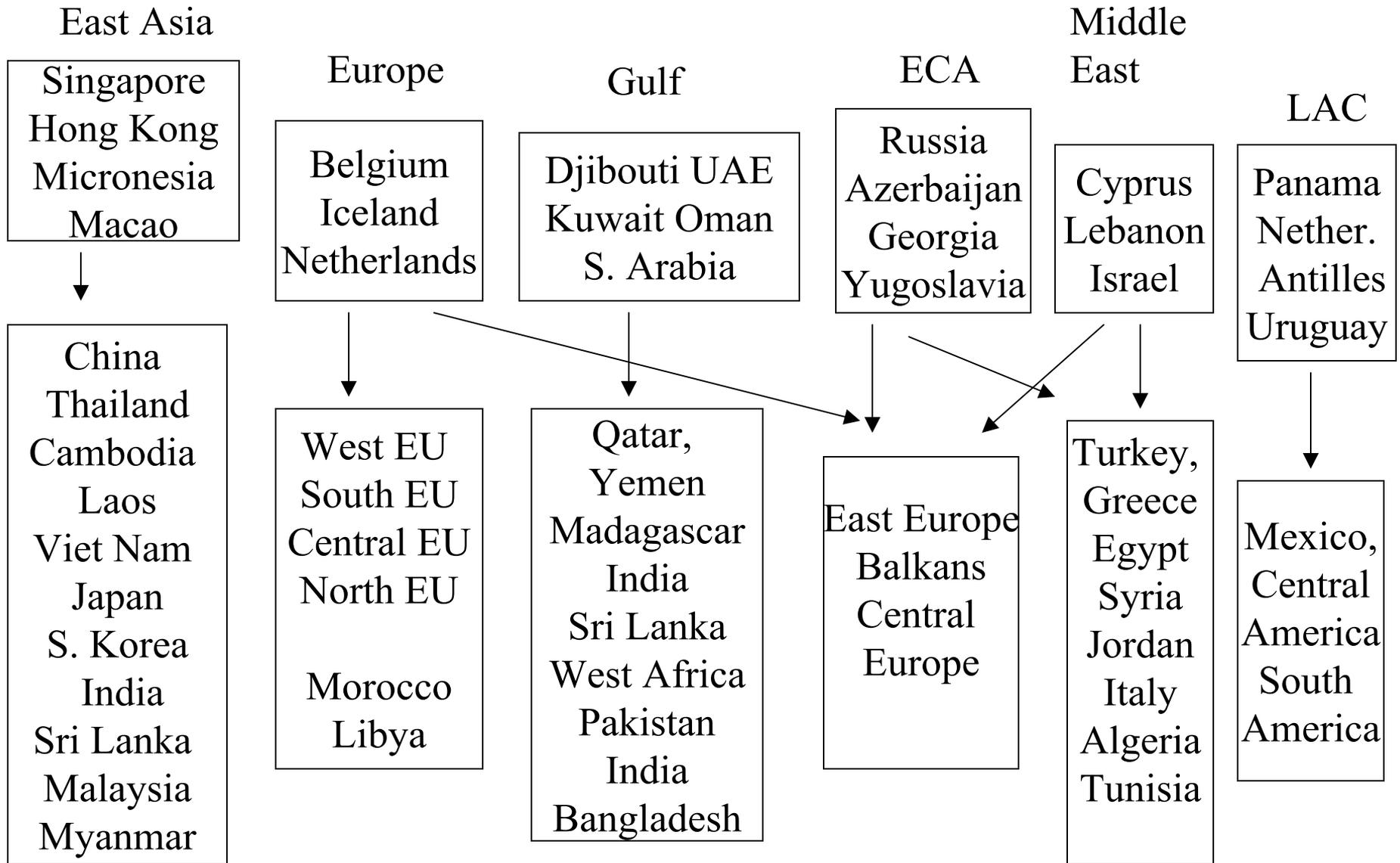
Source: WB calculation from Merriman, Yurekli, Chaloupka, 2000

Big Economic Incentive to Smuggle

	US Export Price	Average Imported
	pack US\$	Price/pack US\$
South Africa	0.64	1.28
Thailand	0.16	0.73
Malaysia	0.39	0.76
Azerbaijan	0.17	0.49
Poland	0.22	1.02
Germany	0.21	2.88
United Kingdom	0.33	6.25
Belgium	0.43	2.97
France	1.09	2.87
Argentina	0.15	1.35
Nicaragua	0.21	0.98
Jordan	0.43	0.76
Saudi Arabia	0.45	1.32

Source: US. Dept. of Agriculture, Foreign Agricultural Relations

Map for Possible Smuggling Routes



Hub country import/re-export volumes, prices

Tax reduction cannot compete with US Export Prices

	Population (000)	Import/capita (pieces)	Export Price of US /pack US\$
Cyprus	754	8176	0.21
Nether'dl Antilles	213	1870	0.22
Lebanon	4271	1343	0.31
Iceland	278	1146	0.23
Kuwait	1924	1011	0.46
Micronesia	116	923	0.27
Singapore	3952	830	0.36
Israel	6105	763	0.44
Japan	126650	569	0.47
UAE	2815	565	0.46
Saudi Arabia	20198	505	0.45
Hong Kong	6721	476	0.41
Azerbaijan	7983	224	0.17

Smuggling Model

- Smuggling routes - expert opinion, published articles and documents.
- US\$1 gap between US export price to hub and import sales price in smuggled countries, 2% of US&UK exports to hub countries are smuggled to each country supplied through that hub.
- Adjust for corruption/risk of being caught, using transparency index.

Worldwide Organized Smuggling Brands from UK and US

Econometric Model, 1999 data

$$\ln Q_t = b_0 + b_1 P_t + b_2 \ln Y_t + b_3 \text{OrgSmug}_t + \varepsilon_t$$

where:

- Q_t = Total Consumption in 1999
- P_t = Local price/pack US\$ in country t
- Y_t = GDP/capita (1995=100) US\$
- OrgSmug_t = Smuggling variable
- t = each of 109 countries

Organized Smuggling Variable

$$\text{OrganizedSmg} = a_k * b_i * \left(\frac{\text{sum}(p_i - p_k) \text{ExportQiusuk}}{\text{Population k}} \right)$$

Where

- a_k = probability of not being caught (used transparency index)
- b_i = For each US\$ difference between US, UK export price to country j and smuggled country k' retail price of imported brand price 1% or 2% of cigarettes smuggled to country k from cigarettes exported to country j from US, and UK (assumed 1%, 2%, etc)
- p_i = export price from US, UK to a country j
- p_k = Retail price for the legal imported cigarettes in country k
- Export Qiusuk = US, UK Cigarette Export to country 'i' .
- Population k = total population in smuggled country k

Key finding of new analysis

Even with smuggling,
tax increases that raise prices

- reduce total consumption
(legal ↓ smuggled ↑ total ↓)
- Increase total tax revenue

Preliminary Results

1999, 109 countries

Global Cigarette Price elasticity = -0.5

Price increase of 10% would

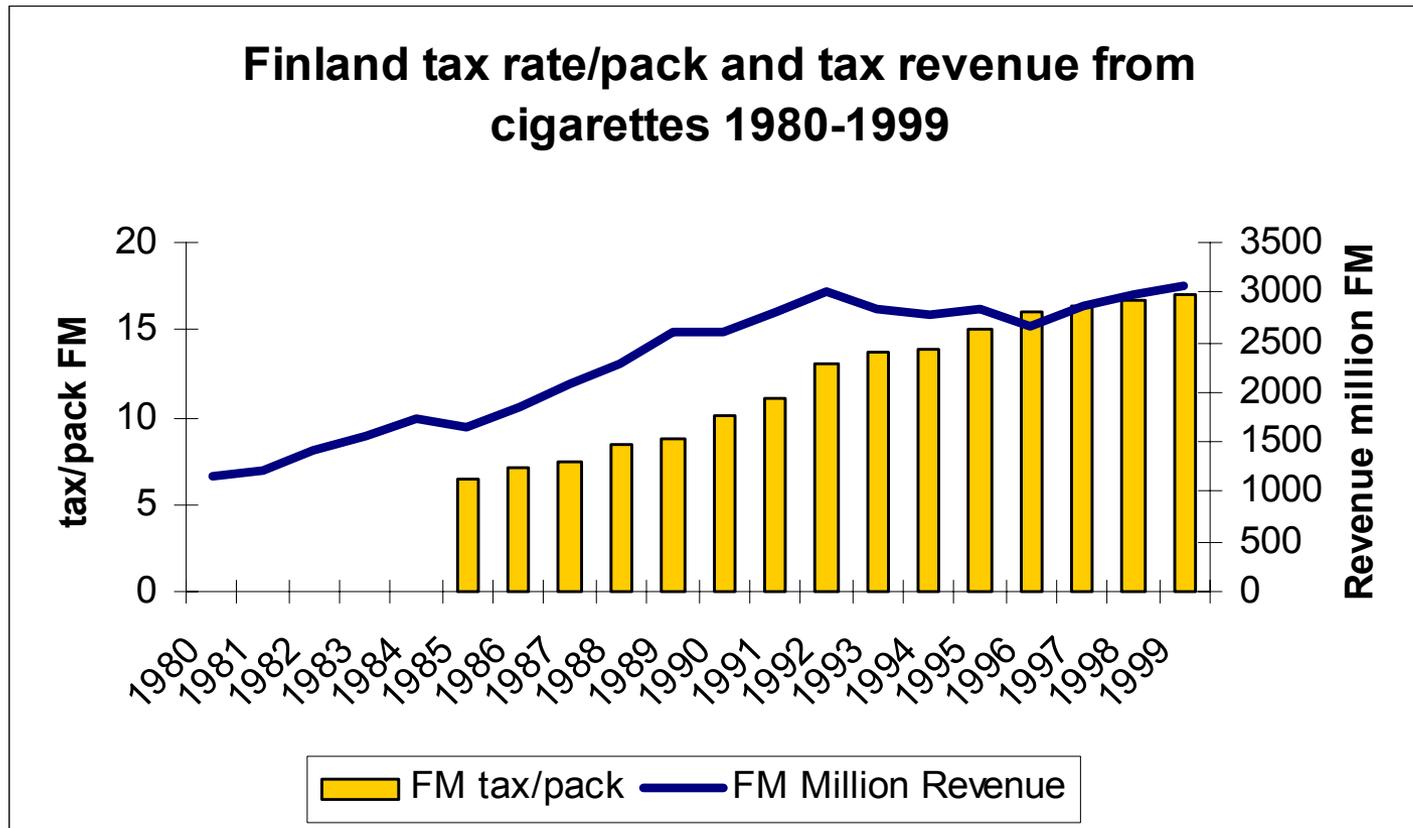
- reduce consumption by 3.5%
- increase smuggling marginally (1-2%)
- increase tax revenues by 10%, despite revenue loss of \$1.2 bn

Smuggled cigarettes from US/UK as % of Consumption in 1999

Smuggling as a share of consumption (%)

	High		Middle		Lower
Israel	44%	Cyprus	16%	Norway	4%
Slovenia	34%	Croatia	15%	UK	4%
Jordan	31%	Morocco	11%	Azerbaijan	3%
Armenia	31%	Hungary	9%	Senegal	2%
Latvia	27%	Cambodia	7%	Moldova	2%
Belgium	24%	Sri Lanka	6%	Finland	1.40%
Slovak	20%	Lebanon	5%	Egypt	1.30%

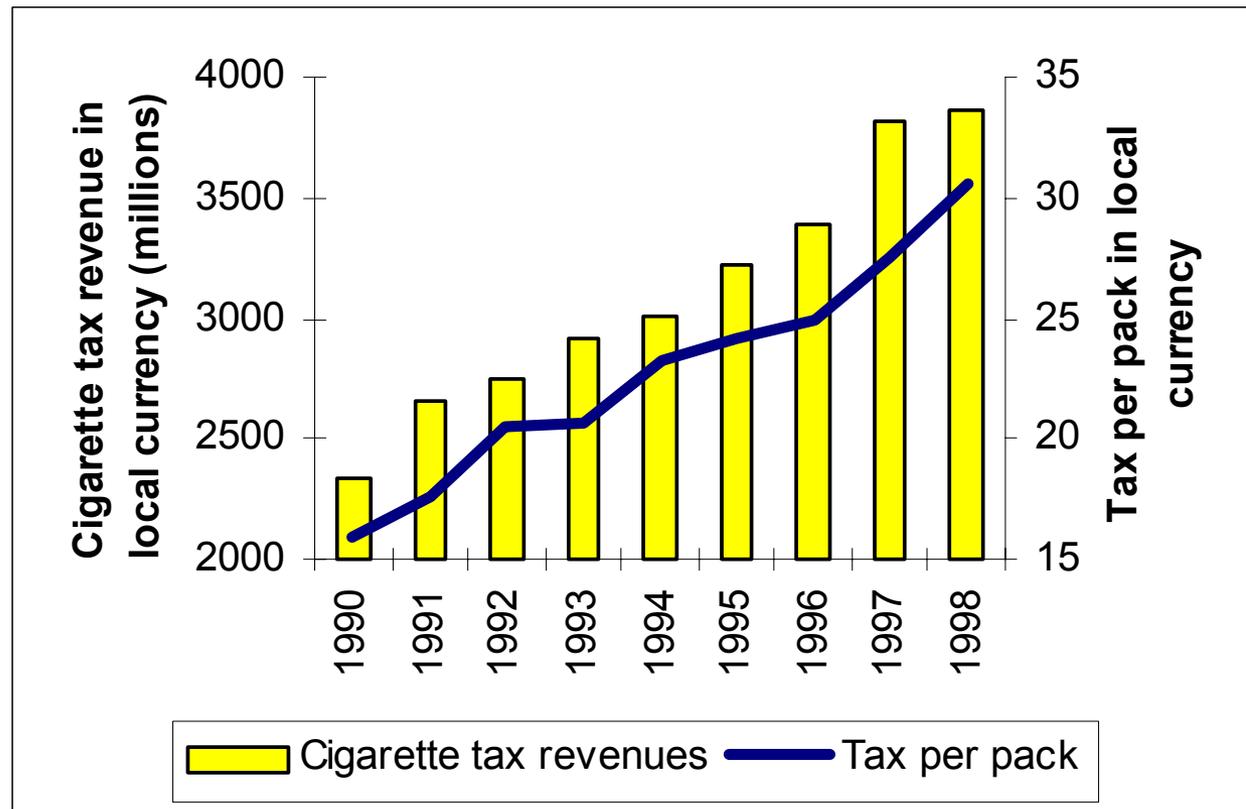
As Cigarette Tax Rises, Revenue Increases even with smuggling



Source: Statistics Finland

As Cigarette Tax Rises, Revenue Increases

Tax per pack, tax revenues, Norway, 1990-1998



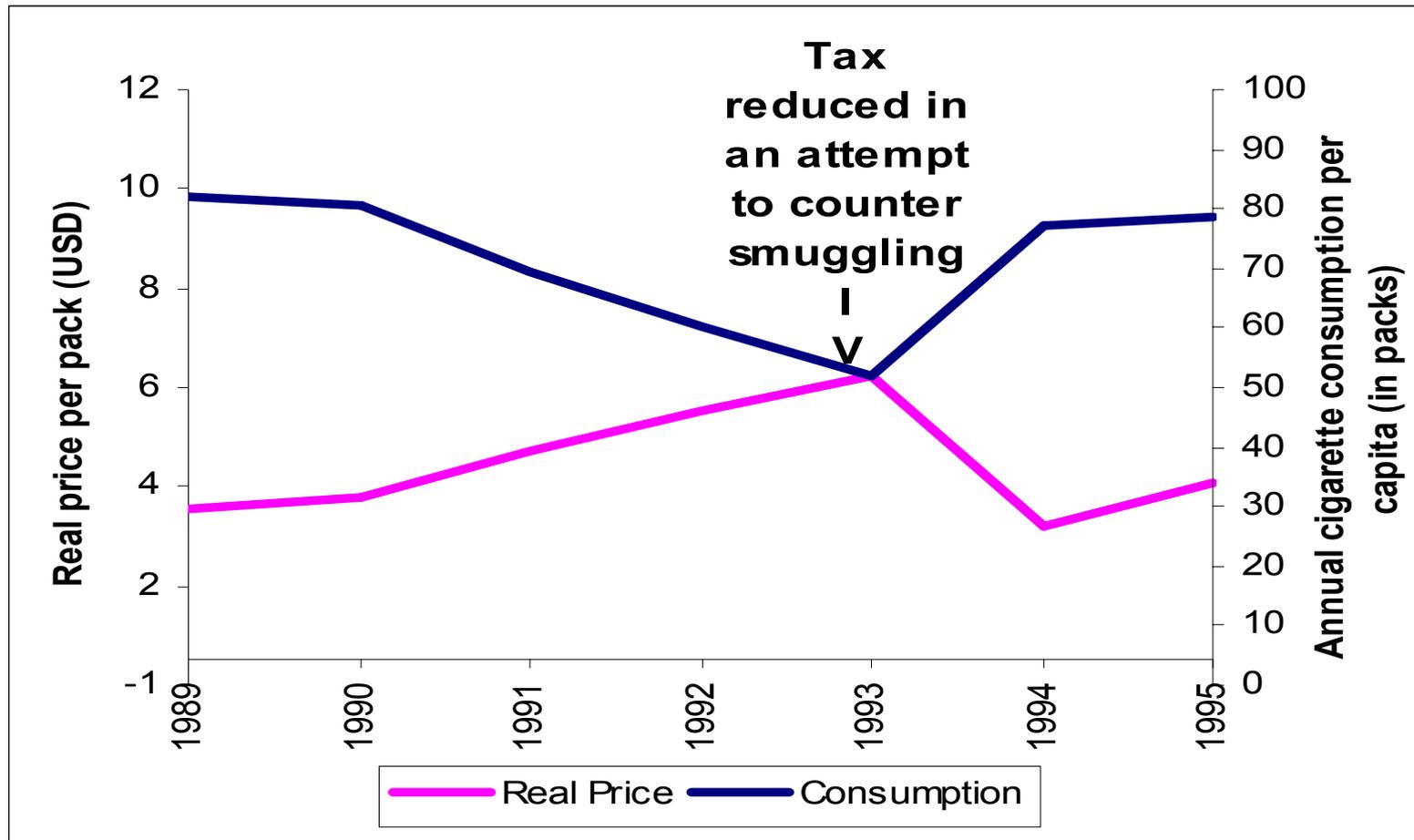
Source: World Bank 1999

What effect would lower taxes have?

Reducing prices and taxes is **not** the answer

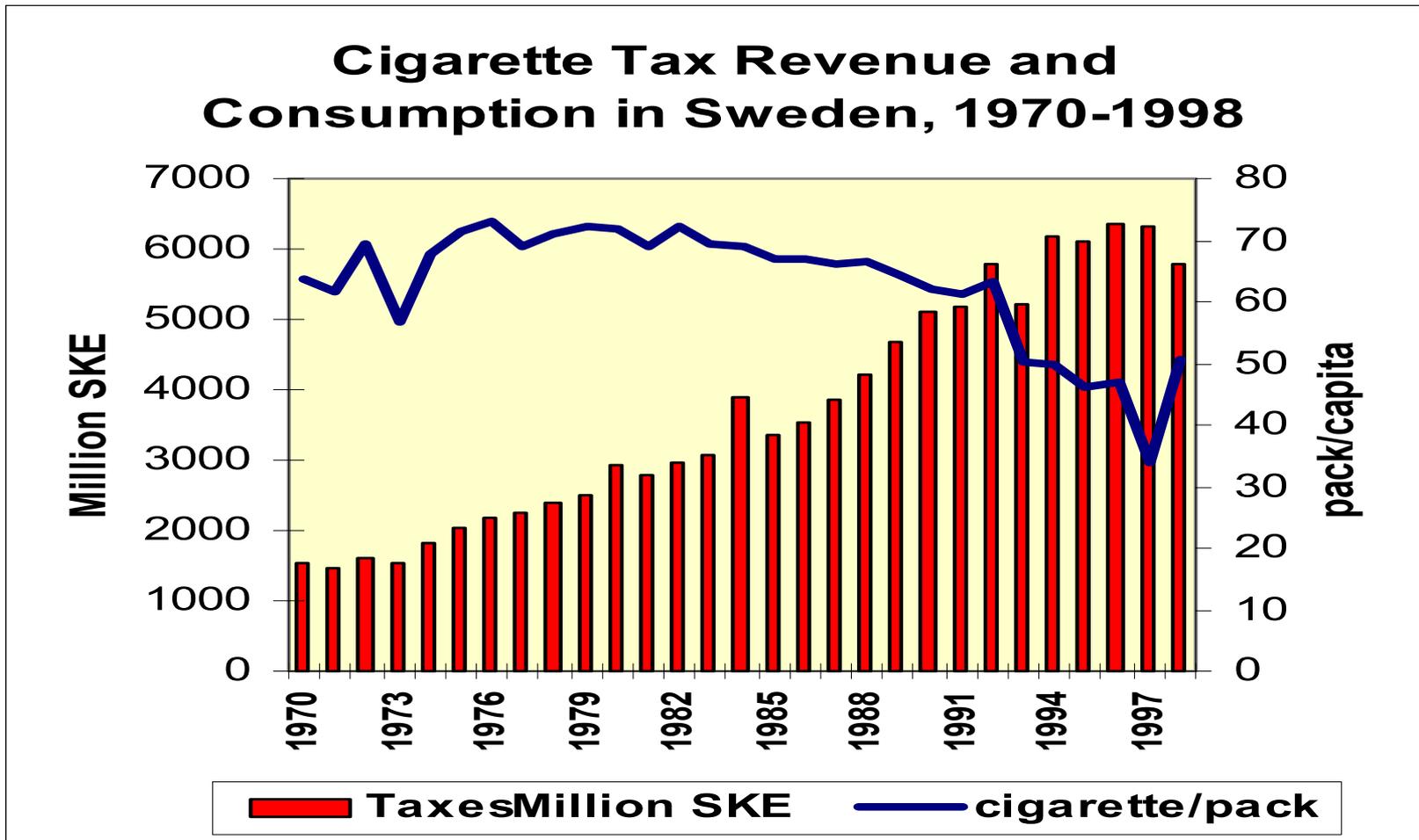
- will do little (nothing?) to reduce smuggling
- will reduce revenues
- will increase consumption (especially kids)

Reducing taxes loses revenue, raises consumption - Canada



Source: Sweanor and Marshall 1999, Canadian Cancer Scy 1999

Reducing taxes loses revenue, raises consumption - Sweden, 1998



If reducing taxes doesn't work
against smuggling, what does?

What can be done about smuggling?

- High **penalties**
- **Tax** paid markings/**stamps**, **end duty-free sales**
- **License** all cigarette exporters, manufacturers and distributors, require **detailed records**
- Require **unique identifying code** on all cigarette packs and chain of custody information, so smuggled cigarettes can be traced
- **Make cigarette exporters responsible** for final legal destination of cigarettes
- More **resources** for detecting and prosecuting
- **Collaboration/communication** among customs officials around the globe

Success story – Spain

Smuggled cig market share in 1995: 15%
1999: 5%

How?

choked off container supply, by intelligence,
customs activity and cooperation,
technology, anti-smuggling legislation,
close cooperation among 5 countries+OLAF

Not : reducing taxes, arresting street sellers

What will be done about cigarette
smuggling in future?

You decide.
Shape the FCTC

www.worldbank.org/tobacco

Please visit our website