



The Role of Commodity Taxes in Health Promotion

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Taxes in Health Promotion

- Taxes on tobacco, alcohol, salt and other goods have existed in many countries for centuries
- Historically the primary objective has been revenue generation
- In recent years tax increases at least partially motivated by public health concerns



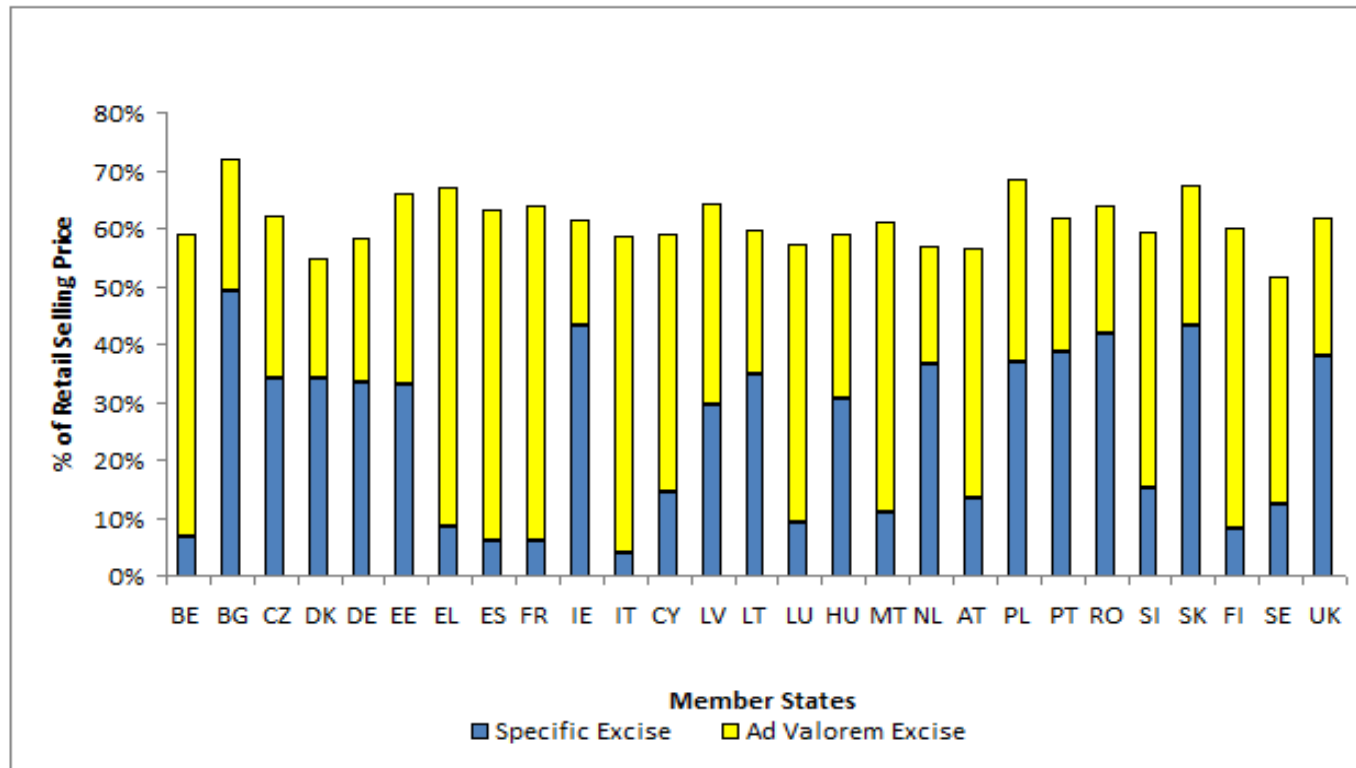
Alcohol Taxes in OECD Countries

- Excise duties on **wine** vary across OECD countries:
 - **Zero:** Austria, Greece, Israel, Italy, Luxemburg, Portugal, Slovenia, Spain and Switzerland
 - **More than \$2.5/litre:** Finland, Iceland, Ireland, Norway and the United Kingdom
- All OECD countries apply **VAT** on wine
 - VAT rates vary from **5%** to **25%**



Tobacco Taxes in OECD Countries

- Most OECD countries use a combination of **specific** and **ad valorem excises**



Source: European Commission, 2010

- All OECD countries apply **VAT** (rates vary from **5%** to **25%**)



Food Taxes in OECD Countries

- **Denmark, 2011:** 16 kroner (EUR 2.15) per kg of saturated fat (on food with more than 2.3% of saturated fat)
- **Finland, 2011:** EUR 0.75 per kg on confectionery products
- **France, 2012:** EUR 7.16 per hectoliter on drinks with added sugars and drinks with artificial sweeteners
- Most OECD countries apply a **reduced VAT rate** or **sales tax exemptions** on most foods and beverages



Tax Revenues

- Tobacco taxes (excise + VAT) account for 1% to 10% of tax revenues in countries at different levels of income
- Excise taxes on tobacco and alcohol products as share of total tax revenues are:
 - 1.85% in Germany
 - 2.55% in Finland
 - 2.6% in Japan
 - 3.4% in Hungary



Trends in Excise Tax Revenues

- Excise revenues as % of total tax revenues:

1965	1975	1985	1995	2005	2010
14.2	10.5	9.5	8.3	8.4	8.1

- Excises on alcohol and tobacco products as % of total tax revenues in the period 2000-2010:
 - were **stable** in Germany
 - **slightly decreased** in Japan (from 3.0% to 2.6%) and in Finland (from 2.9% to 2.5%)
 - **slightly increased** in Hungary (3.2% to 3.4%)



Effects of Taxes on Consumption

Effects depend on:

- a) Own price elasticity
- b) Cross price elasticity
- c) Pass-through



(a) Own Price Elasticity

- **Tobacco:** Most estimates between -0.25 and -0.5, clustered around -0.4 (Chaloupka et al., 2000)
- **Alcoholic beverages:**

Source	Distilled spirits	Wine	Beer	Total alcohol consumption
Fogarty 2006	-0.70	-0.77	-0.38	..
Gallet 2007	-0.68	-0.70	-0.36	-0.50
Wagenaar et al. 2008	-0.80	-0.69	-0.46	-0.51

- **Soft drinks:** Sugar-sweetened beverages: -1.21 [-0.71 to -3.87]; Soft drinks: -0.86 [-0.41 to -1.86](Powell 2013)
- **Food:**

Source	Eggs	Sugar & sweets	Cheese	Fats & oils	Meats
Andreyeva 2010	-0.27	-0.34	-0.44	-0.48	≈ -0.70
Bonnet 2007	--	--	--	-1.45	-1.69



(b) Cross Price Elasticity

- Complementarity between **regular** and **low-calorie soft drinks** (-0.46; -0.86)
- **Alcoholic beverages** are complements for **cigarettes**, but not the reverse (Koksal & Wohlgenan, 2011; Pierani & Tiezzi, 2005)
- Substitution effect between **whole milk** and **low or reduced-fat milk** is bigger than between **whole milk** and **skim milk** ([0.06-0.5] and [0.01-0.29])



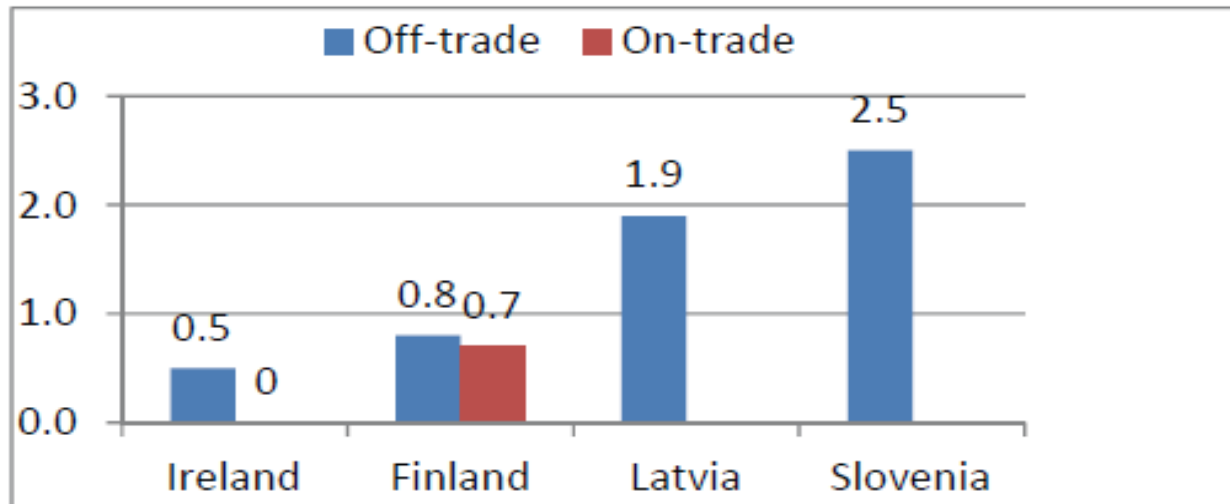
(c) Pass-through Effect

Summary of results of pass-through for Ireland, by beverage, 1994-2010

Beverage	Change in price for €1 change in excise duty:	
	Off-premise (€)	On-premise (€)
Beer	0.37–0.45	0.00*
Spirit	0.57–0.67	0.09–0.10
Wine	0.33	0.18

* The analysis finds statistically insignificant results (or pass-through not different from zero Euros).

Pass-through for beer in Ireland; Finland; Latvia and Slovenia



Source: RAND Europe 2012



Effects on Consumption

- Demand for unhealthy commodities is generally **inelastic**:
 - Modest change in consumption
- BUT**
- Reduced substitution effect
 - Likely high pass-through



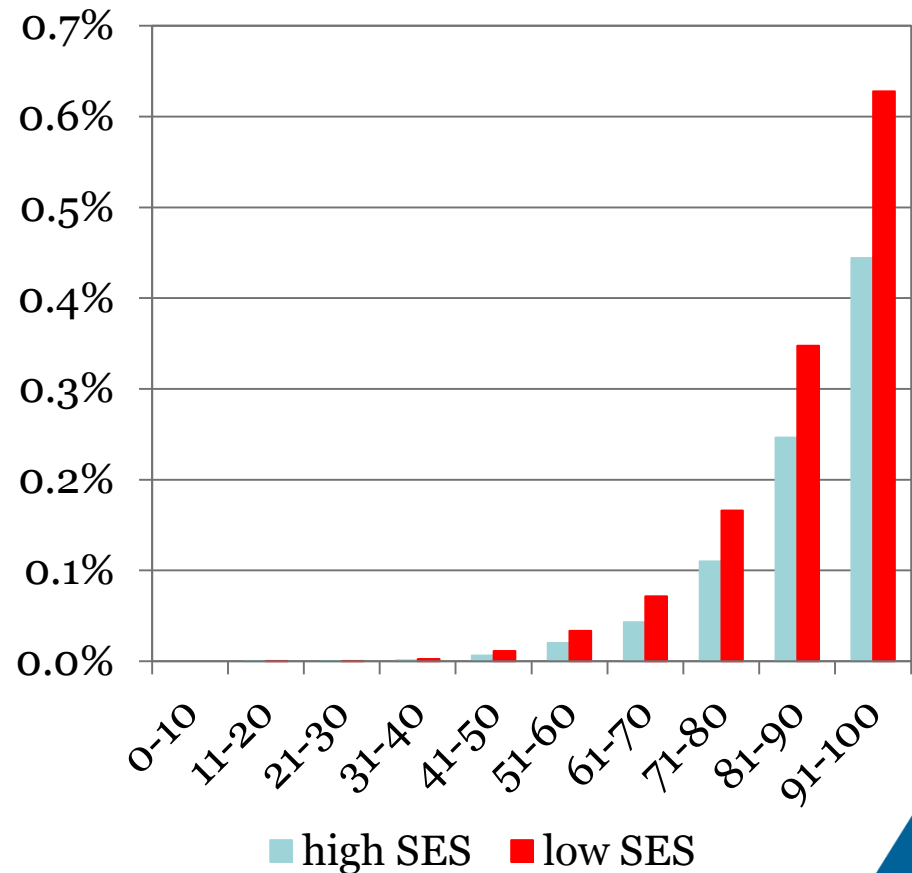
Additional Impacts of Taxation

- **Financial impact on consumers:**

- Population with income <£36 per week spend 0.7% of their total income on food, the richest pay less than 0.1% (Leicester, 2004)

- Disadvantaged socio-economic groups will benefit the most in health terms

DALY Improvement by Age Group

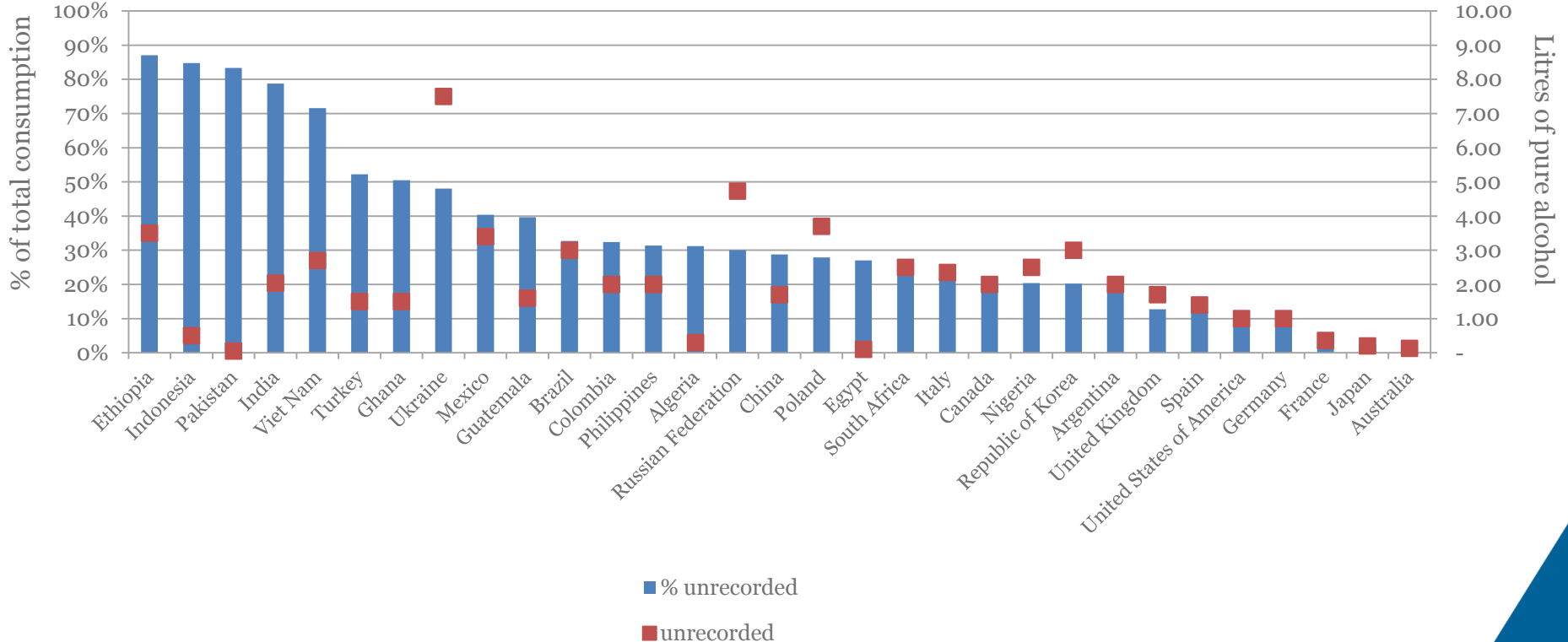




Additional Impacts of Taxation

- **Smuggling/illicit trade**

Unrecorded alcohol consumption





Additional Impacts of Taxation

- **Earmarking:** Countries may decide to use tax revenues to fund further health promotion efforts
 - Some **38 countries** earmark part or all their tobacco taxes for specific programs
 - Few governments earmark tobacco tax revenues for tobacco control efforts (Chaloupka 2012)



Conclusions

- Increased interest in taxes on health-related commodities
- Public health justification
- Reluctance to fund synergistic measures
- Concern about regressive impacts and effect on business/labour