

THE IMPORTANCE OF DRINKING CULTURES: THE CASE OF PRICE POLICY MEASURES

A Southern European Identity in Alcohol Use?

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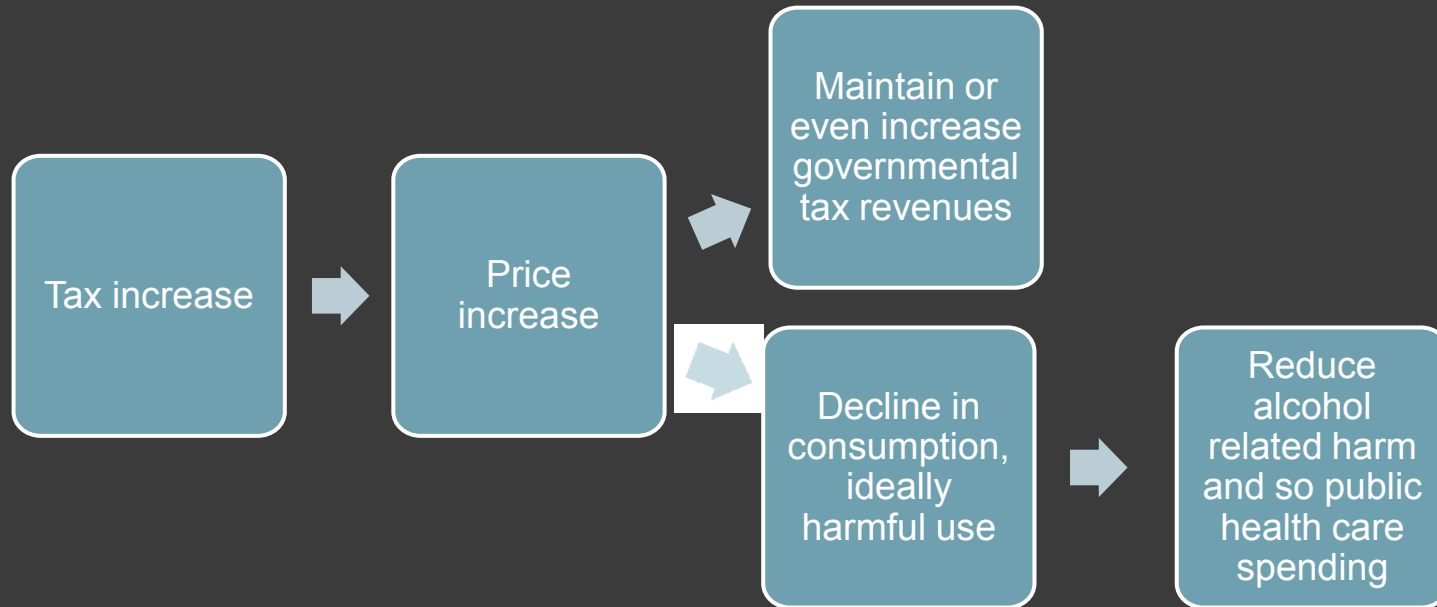
Outline

- ① Basic background theory, features and a simple model of price policy measures
- ② A more sophisticated and realistic model of price policy measures, which takes recent peer-reviewed evidence as well as statistical information into account
- ③ The importance of drinking cultures will emerge while elaborating the more realistic model
- ④ Concluding remarks

Theory, Features & Model of Price Policy Measures

- ① When the price of a good increases, ceteris paribus, the quantity demanded decreases, according to the law of demand for ordinary goods, as described in standard economic text books.
- ① Price policy measures are interventions into the market economy and are introduced for basically two reasons
 - Internalise/cover negative externalities
 - Increase governmental tax revenues
- ① Moreover, an important feature of price policy interventions is that they are regressive: they impose a greater burden on poor than on rich people

Theory, Features & Model of Price Policy Measures (II)

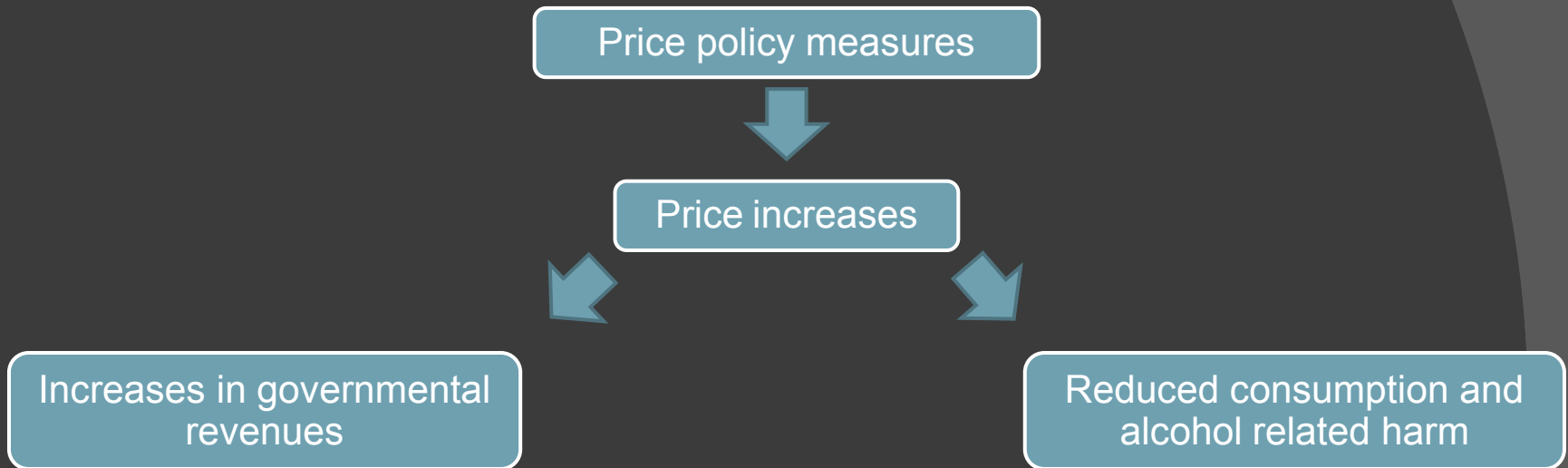


- This model is assumed to be universally applicable, no matter whether you are in the UK, Latvia, Greece or Portugal



This ideal model looks nice and the outcome would be great, but this simplistic model does not adequately capture the real, more complex reality

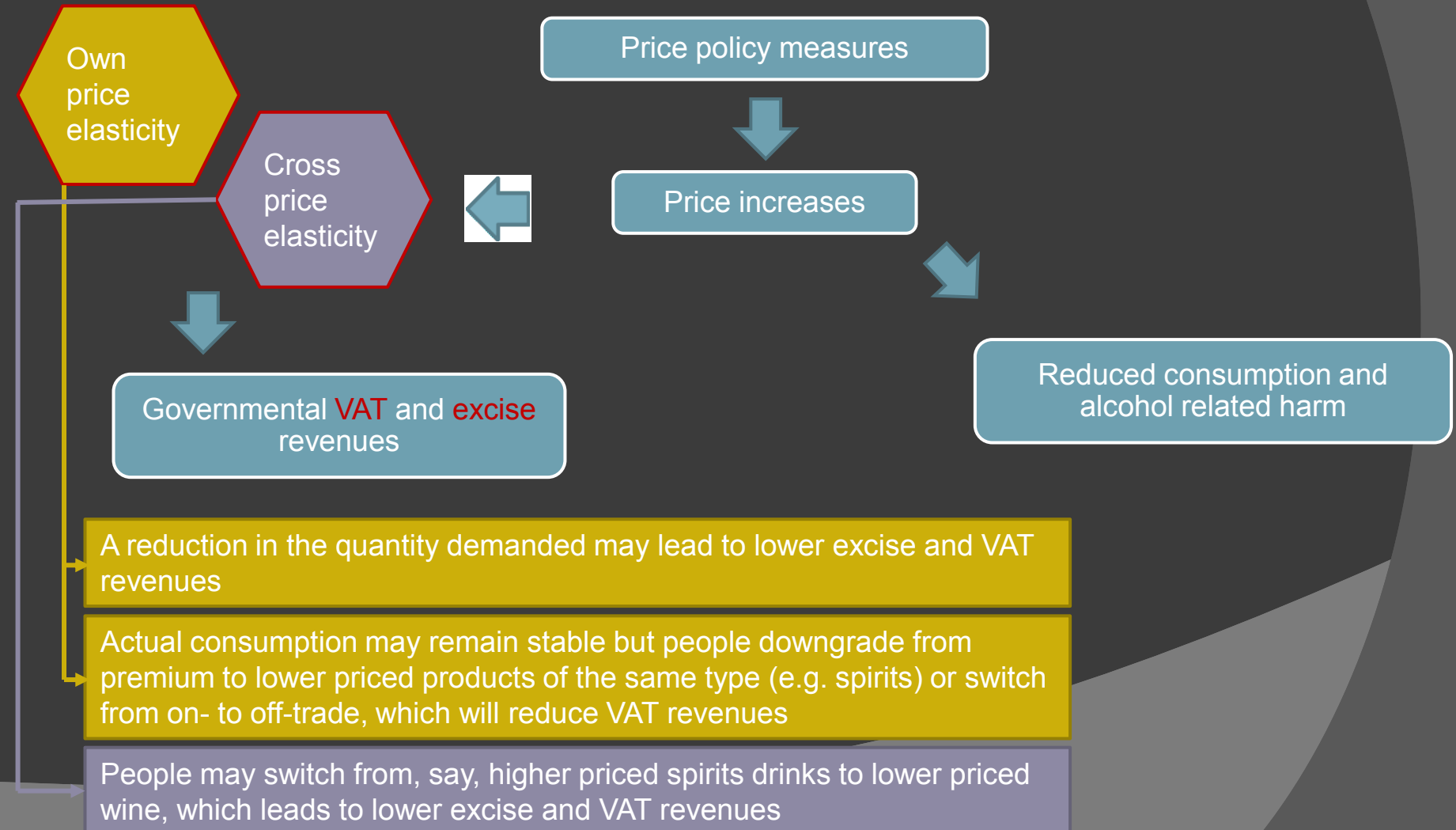
The simplistic model restated



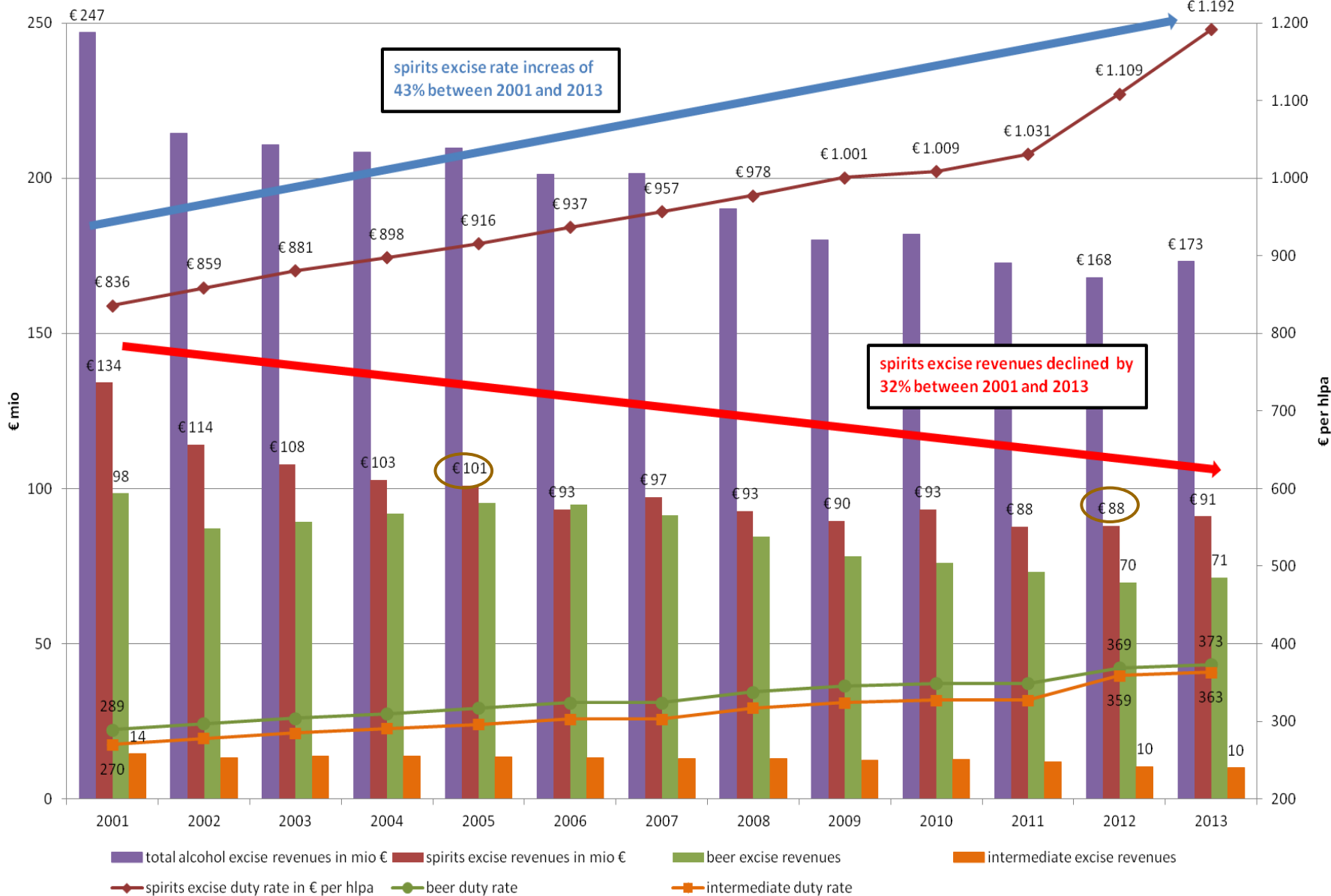
What are the missing & important elements in this too simplistic model?

A more sophisticated model

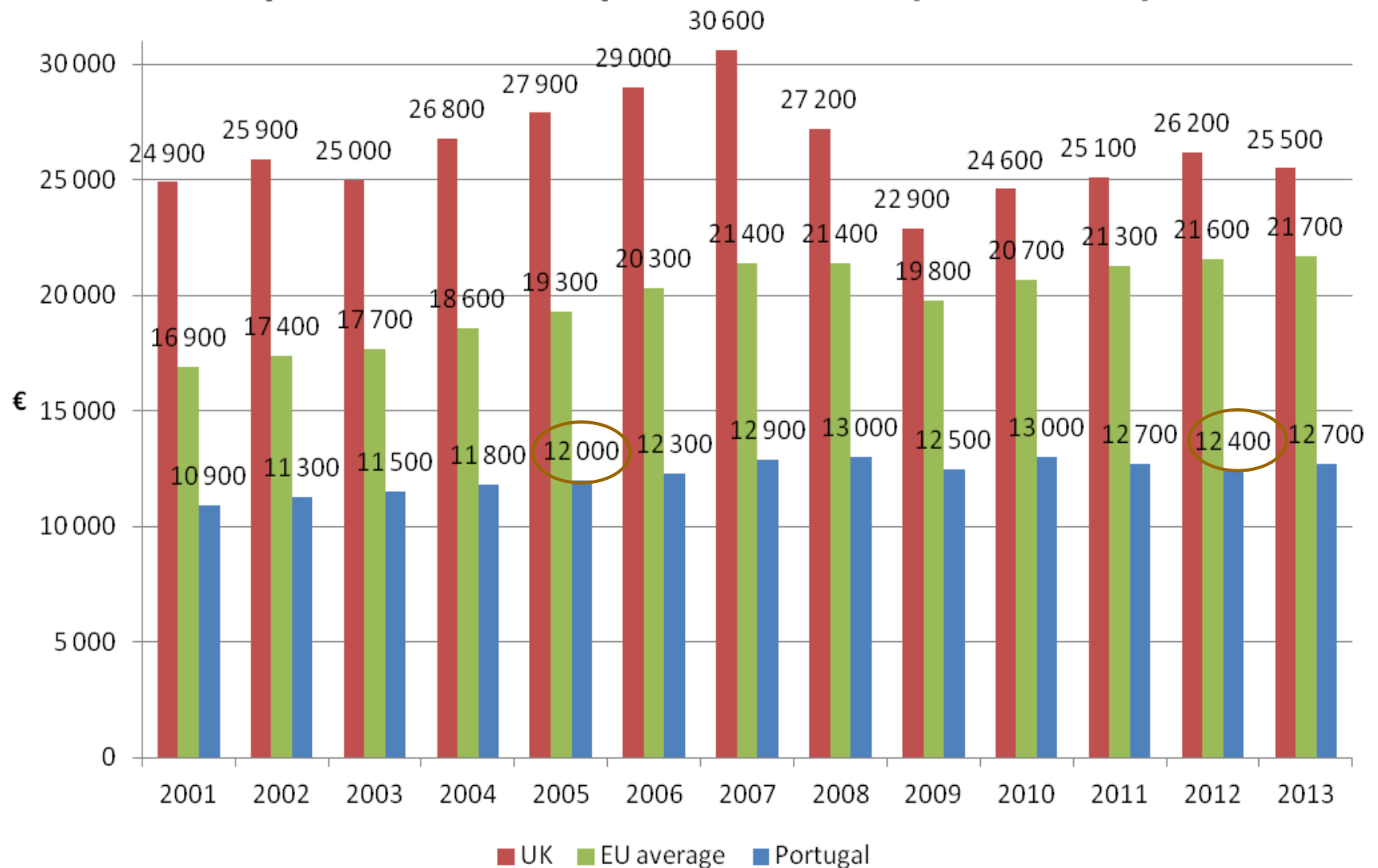
1. The own & cross-price elasticity of the demand for alcoholic beverages



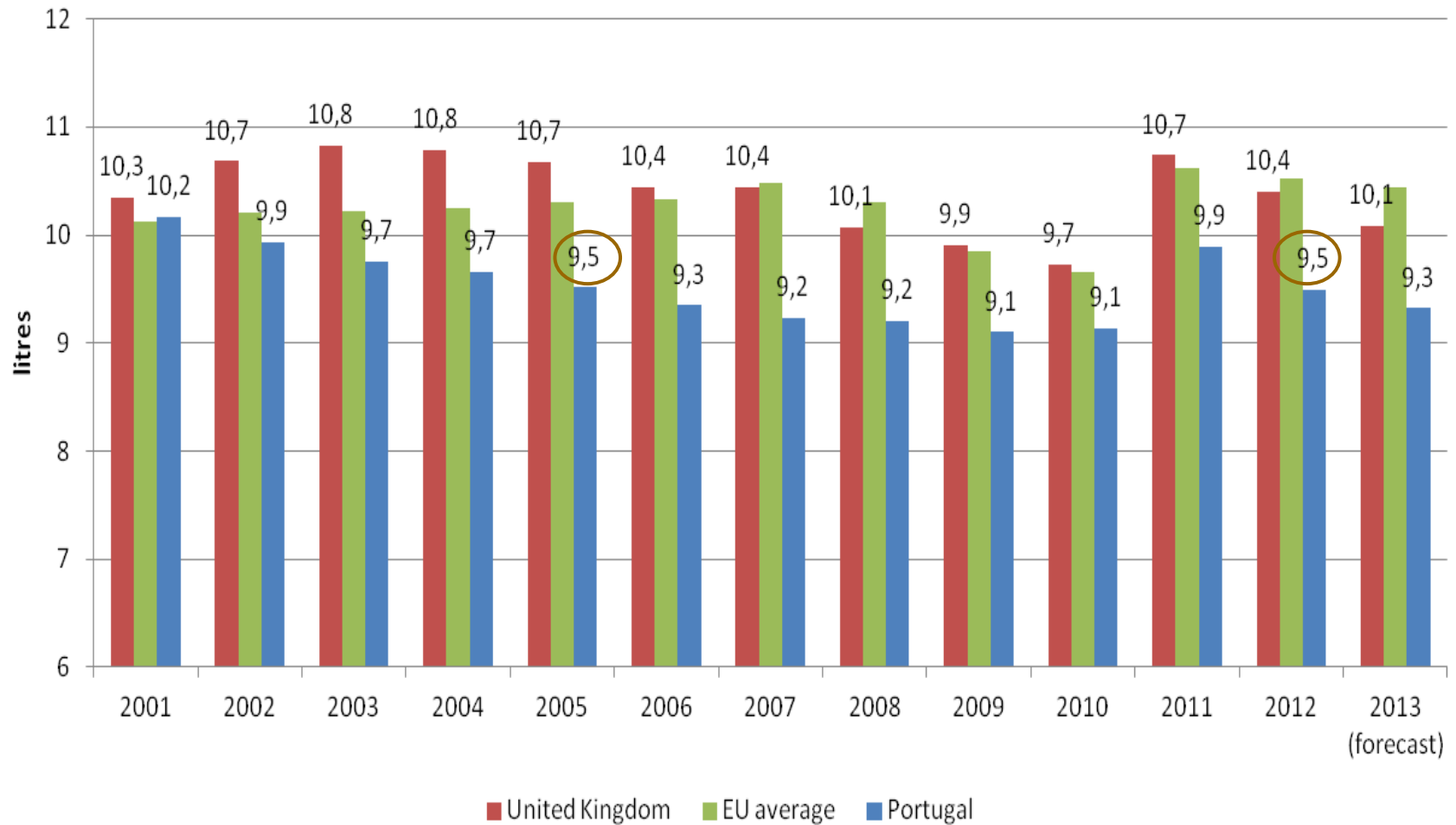
Excise duty rates and excise revenues for alcoholic beverages in Portugal



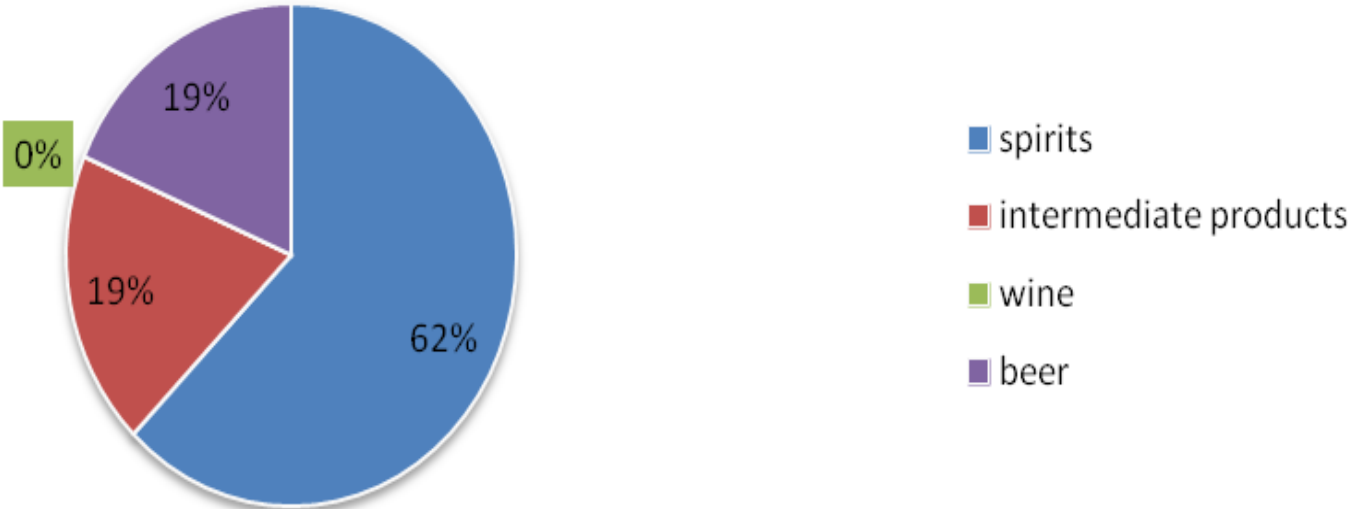
Disposable income per inhabitant (EUROSTAT)



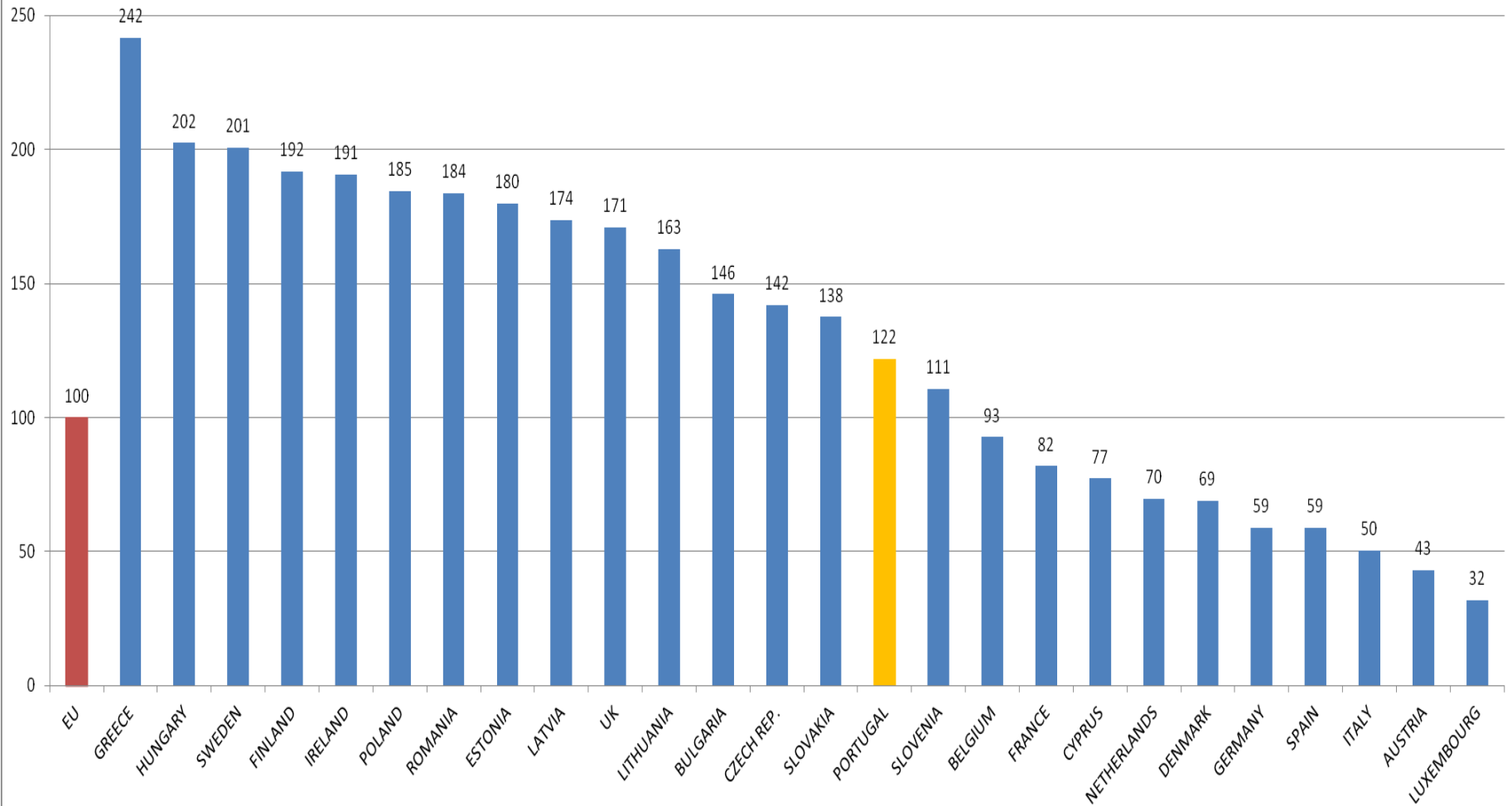
Per capita consumption of pure alcohol (source: IWSR)



Excise duty rates for various products in relation to total excise duty rate in 2014 (Portugal)



Excise duty rates for spirits to disposable income in EU Member States in 2013 (or nearest year available):
EU indexed to 100



A more sophisticated model II

2. The price responsiveness of different consumer groups

Price policy measures



Price increases



Moderate vs. heavy/addicted drinkers:

❖ Heavy drinkers are less price responsive compared to moderate consumers



Governmental VAT and excise revenues



Reduced consumption and alcohol related harm

- ◉ Nelson concludes: *'A large body of evidence now indicates that binge drinkers are not highly-responsive to increased prices or taxes, and may not respond at all. Non-responsiveness holds generally for younger and older drinkers and for male and female binge drinkers alike. Increased alcohol prices or taxes are unlikely to be effective as a means to reduce binge drinking, regardless of gender or age group'* (p. 1).
 - Nelson, Jon P., Binge Drinking, Alcohol Prices, and Alcohol Taxes: A Systematic Review of Results for Youth, Young Adults, and Adults from Economic Studies, Natural Experiments, and Field Studies (March 10, 2014). Available at SSRN: <http://ssrn.com/abstract=2407019>
- ◉ Nelson concludes his peer-reviewed paper as follows: *'a review of two sets of related studies casts doubt on public policies that rely extensively on price controls or higher alcohol taxes as a means to reduce abusive drinking by adults, adverse health outcomes, and related social costs. The price/tax elasticity for heavy drinkers appears to approach zero in most instances. This result is robust across countries, time periods, drinking measures, and model specifications'* (p. 280).
 - Nelson, Jon. 2013. Does Heavy Drinking by Adults Respond to Higher Alcohol Prices and Taxes? A Survey and Assessment. *Economic Analysis & Policy*, 43(3): 265-291.
- ◉ Ayyagari et al analyse the price responsiveness of different drinking groups and they find that one group *'is significantly responsive to price but the other is unresponsive'*. They conclude that *'the unresponsive group drinks more heavily, suggesting that a higher price could fail to curb drinking by those most likely to cause negative externalities. In contrast, those least likely to impose costs on others are more responsive, thus suffering greater deadweight loss yet with less prevention of negative externalities'* (2).
 - Ayyagari et al 2013. Understanding Heterogeneity in Price Elasticities in the Demand for Alcohol for Older Individuals. *Health Economics*, 22(1):89-105.

A more sophisticated model II

2. The price responsiveness of different consumer groups

Price policy measures



Price increases



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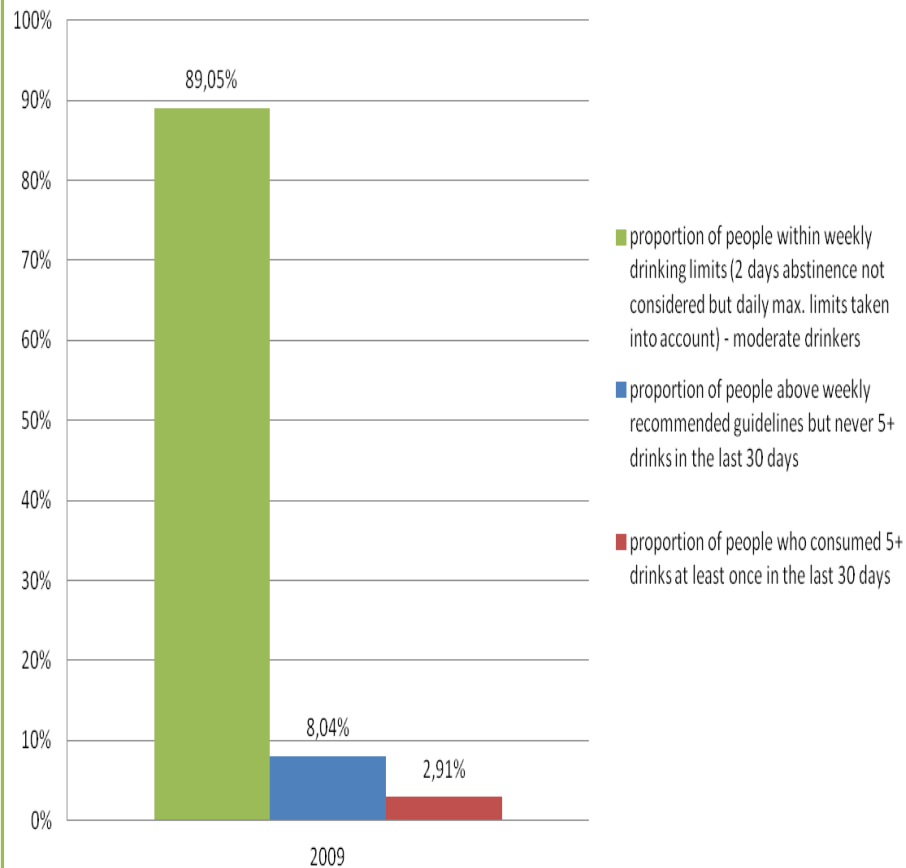


Governmental VAT and excise revenues

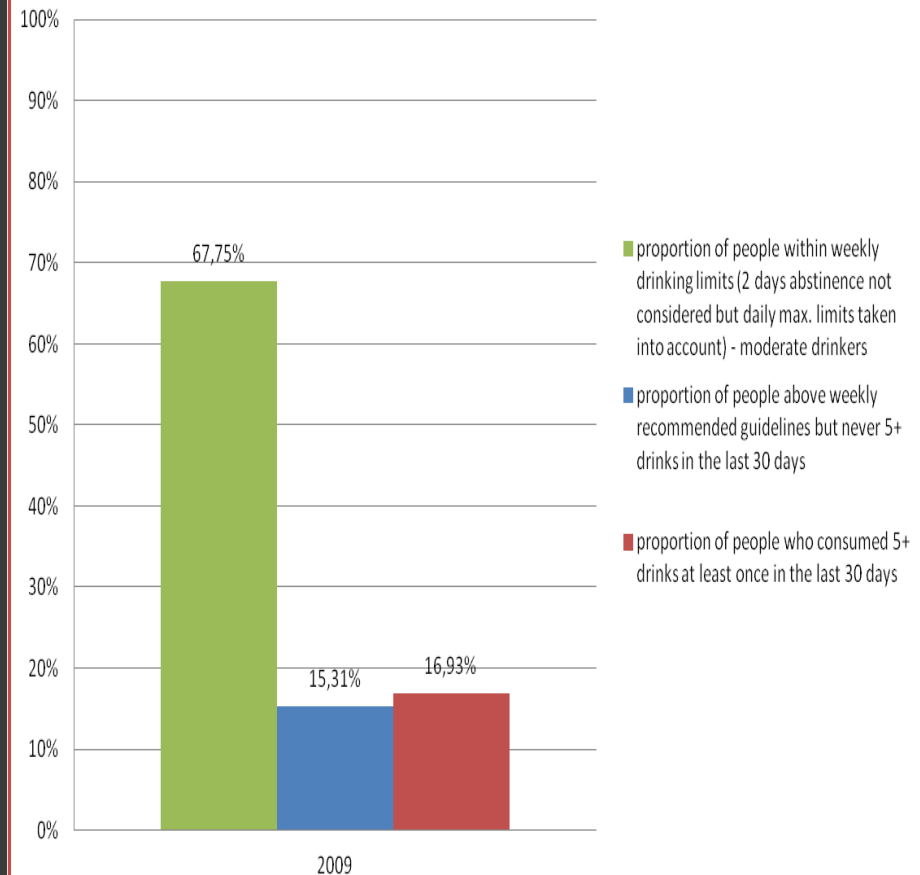


Reduced consumption and alcohol related harm

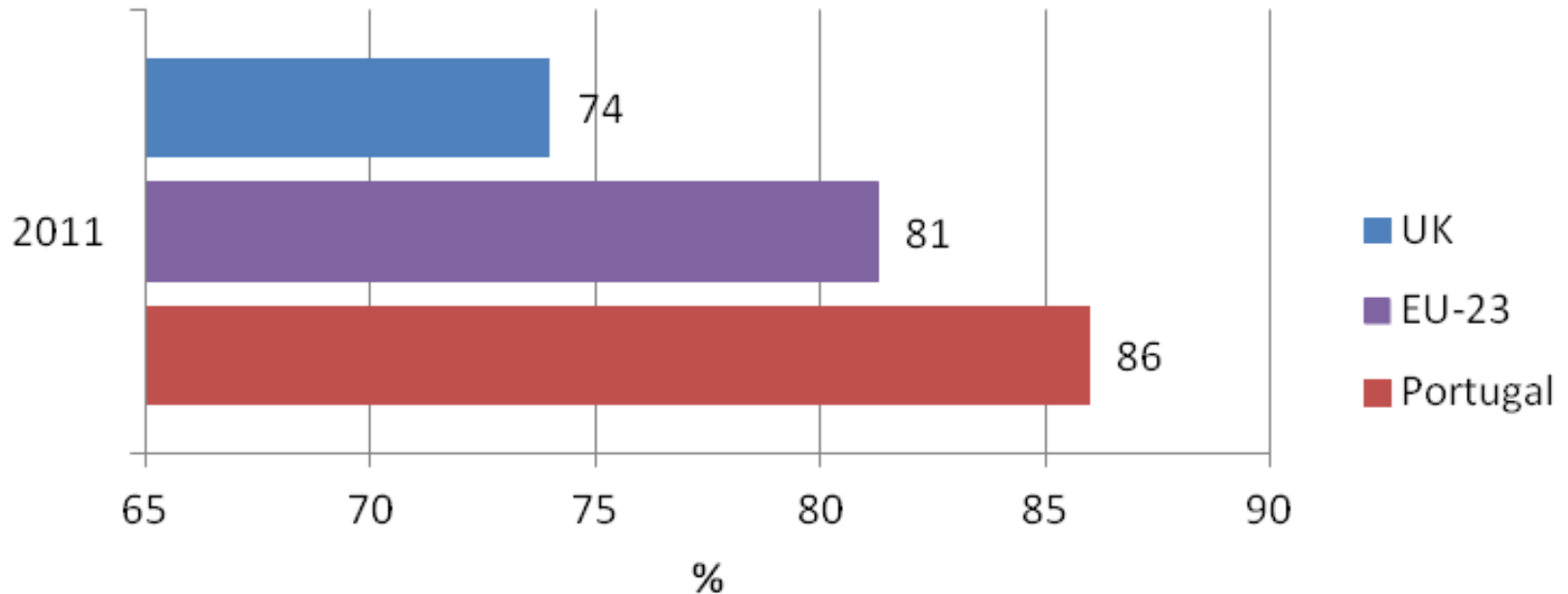
PORTUGAL: Classification of drinkers in respect to the entire population aged 15+ (EUROBAROMETER 2009)



UK: Classification of drinkers in respect to the entire population aged 15+ (EUROBAROMETER 2009)

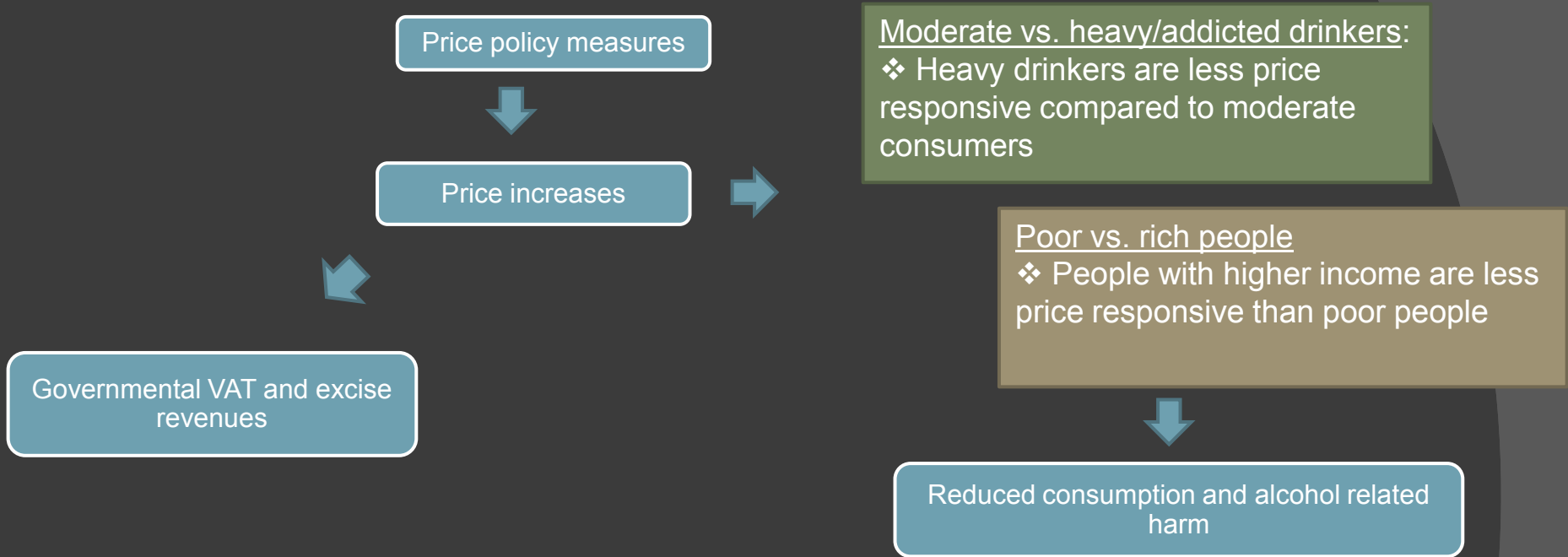


Percentage of 15/16 year olds who reported
"never been drunk in the last 30 days" in 2011
(ESPAD)



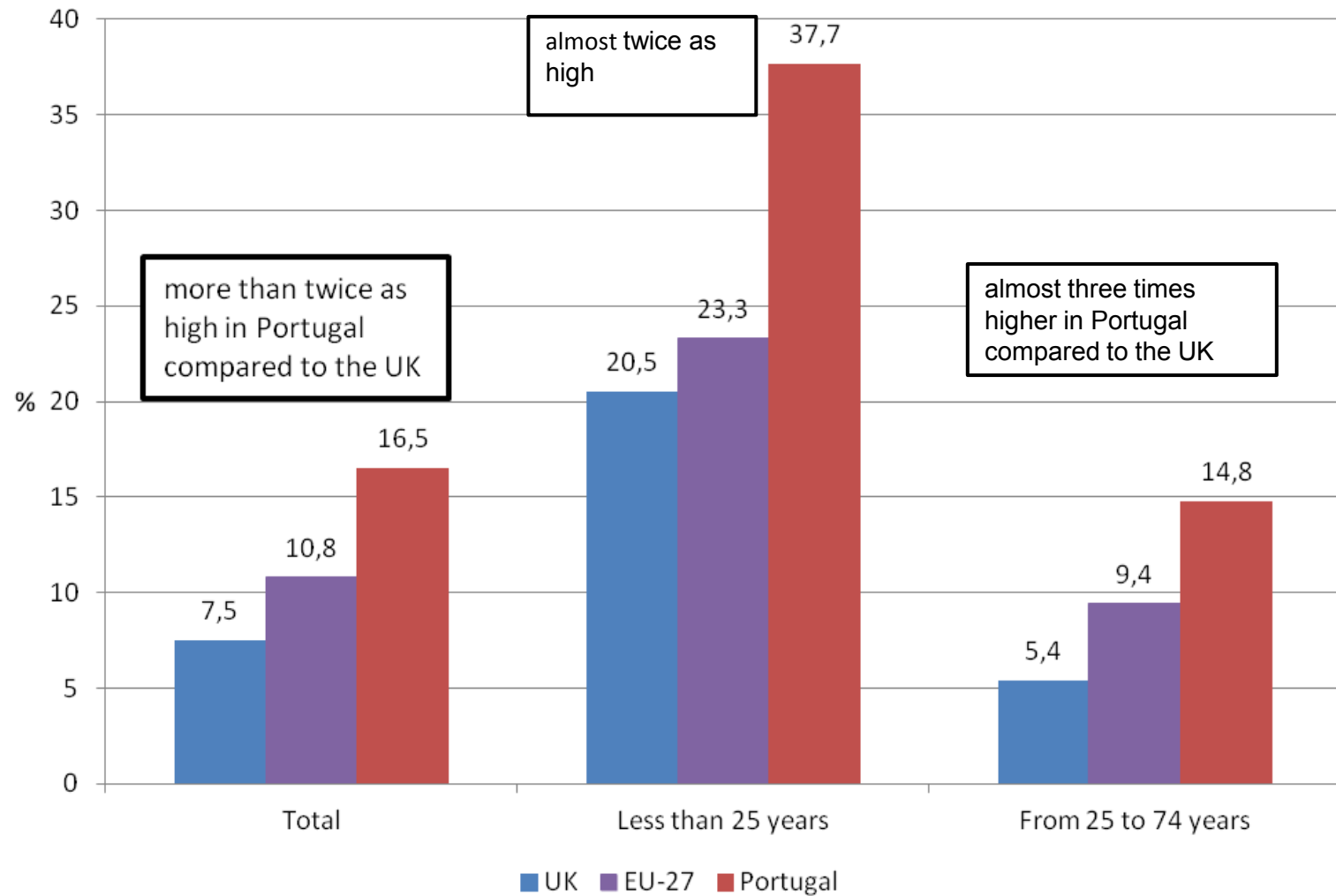
A more sophisticated model II

2. The price responsiveness of different consumer groups

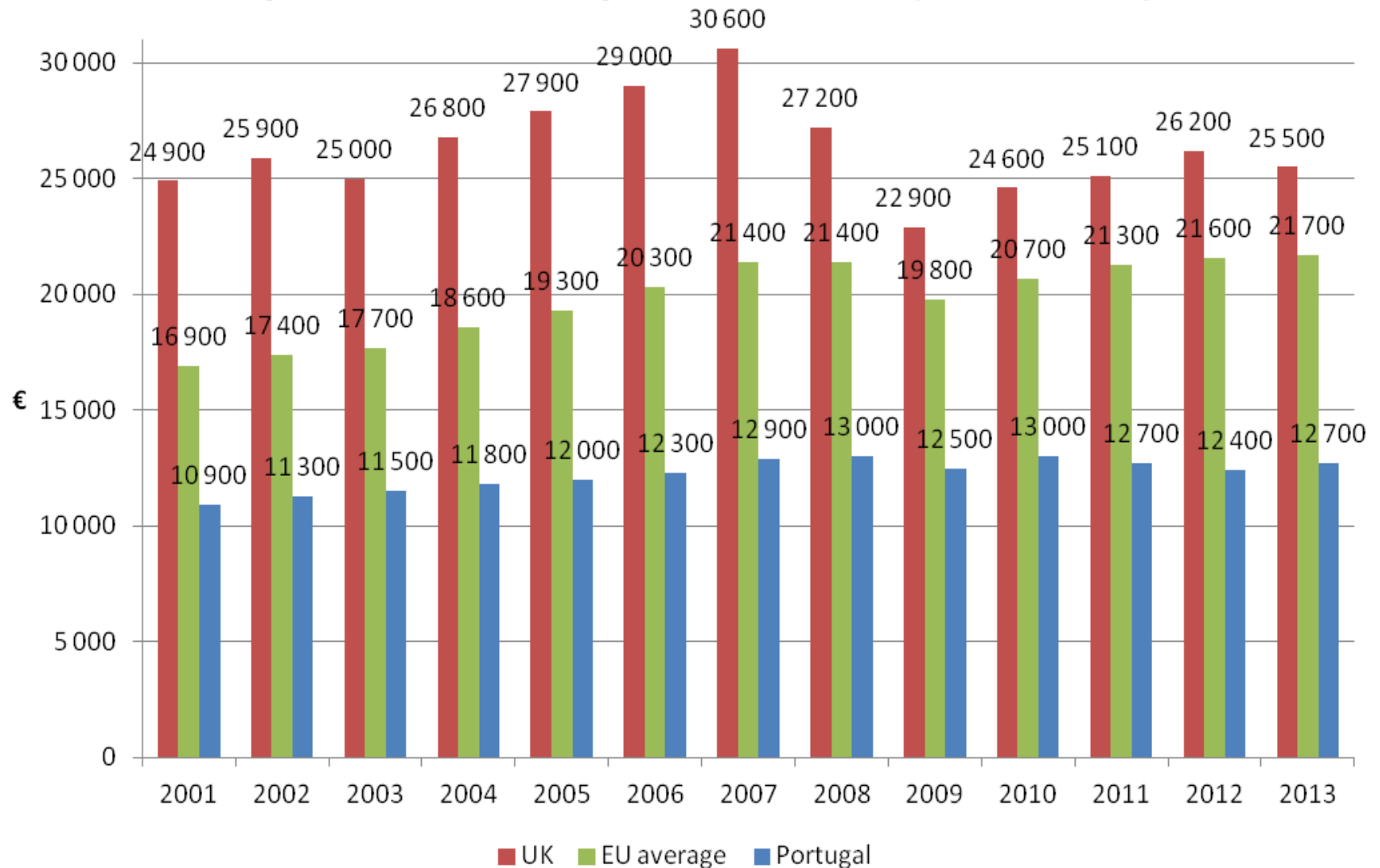


- There is no evidence that in particular people with low income are heavy drinkers, alcohol abusers or alcoholics, rather the opposite. The current available scientific evidence maintains that problem drinkers are spread across all income groups with a slight tendency that more alcohol is consumed by managers, white colour people or people with higher income. Indeed, according to the latest General Lifestyle Report, chapter 2 on “drinking” released on 7 March 2013 by the Office for National Statistics in the UK, **heavy alcohol use is more common for people with higher income in comparison to lower income groups in the UK.** The report states: *‘The proportion drinking heavily (exceeding 8/6 units) was also greater in households where the HRP [Household Reference Person] was in the ‘managerial and professional’ group (18%) than in the ‘routine and manual’ group (13%)’* (ONS, 2013, page 9). http://www.ons.gov.uk/ons/dcp171776_302636.pdf

Unemployment rate in 2013 for total population and two age groups in the UK, Portugal and EU-27 (EUROSTAT)

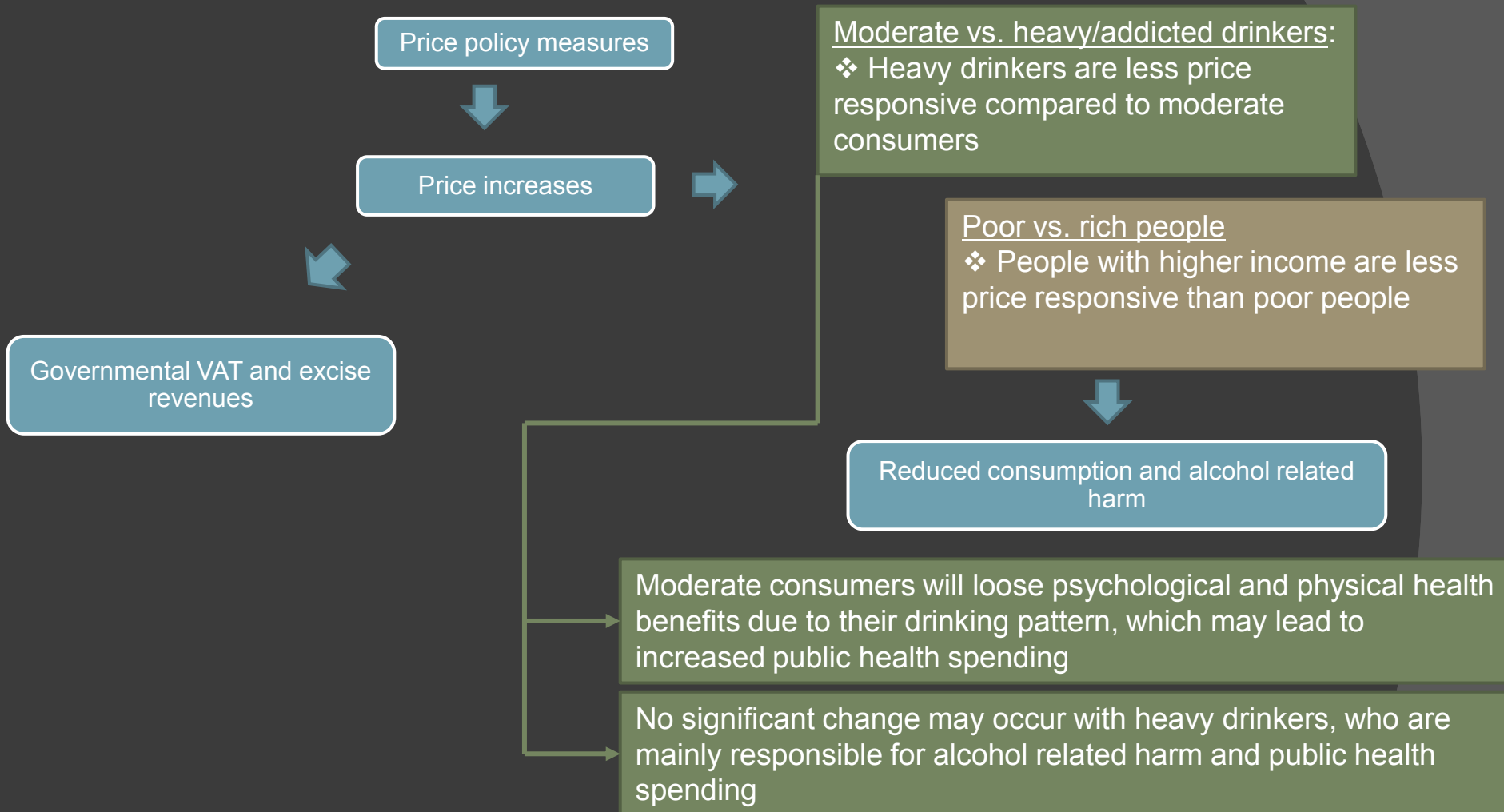


Disposable income per inhabitant (EUROSTAT)



A more sophisticated model II

2. The price responsiveness of different consumer groups



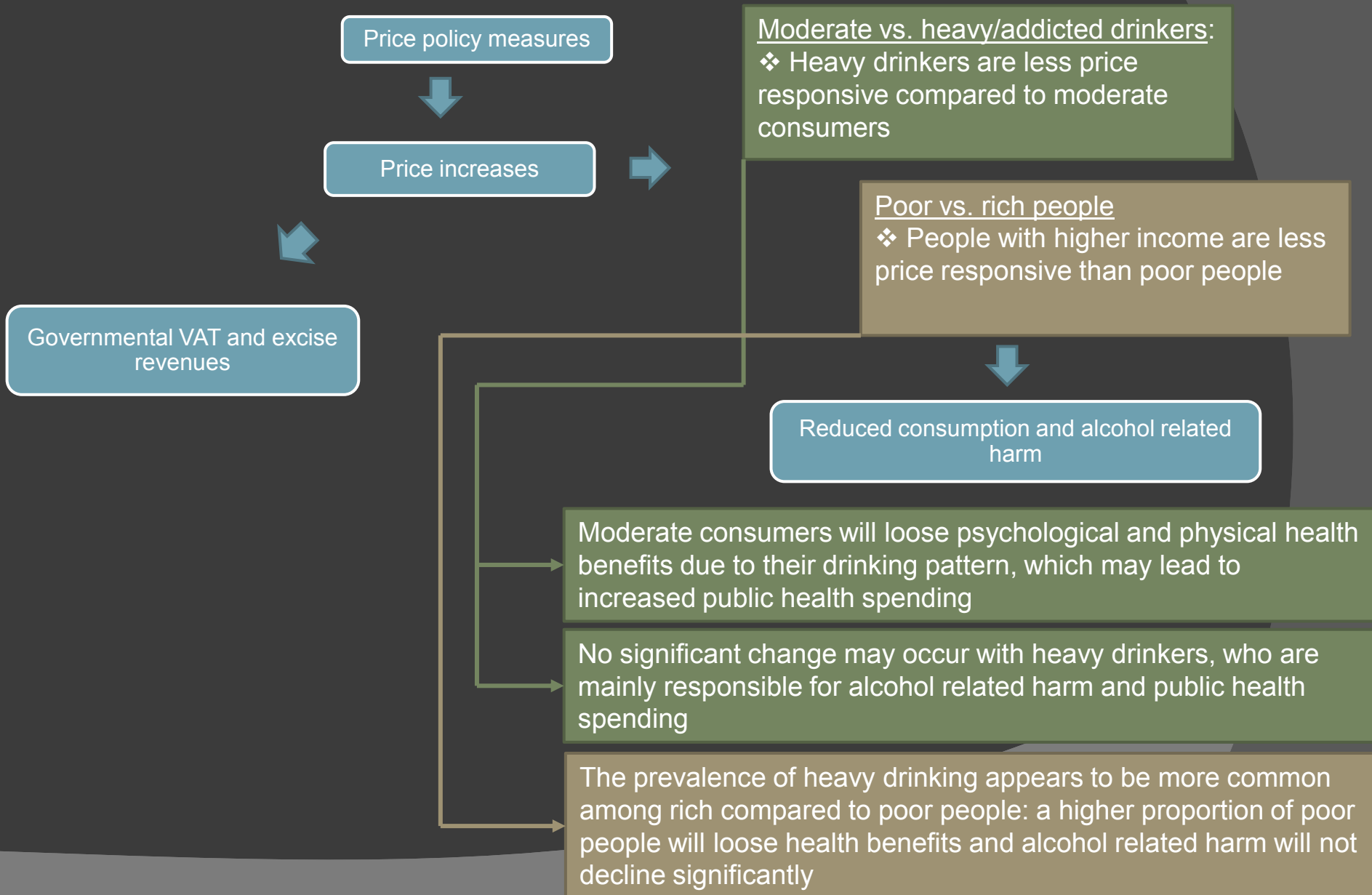
Health benefits for moderate alcohol users

- According to the vast majority of all-cause mortality risk studies, drinkers, and in particular moderate drinkers, face a significantly lower all-cause mortality risk compared to abstainers, also in studies that distinguish between former drinkers and abstainers (see Fuchs et al 1995, Doll et al 2005, Sun et al 2011),
- The latest meta-analysis by Di Castelnuovo et al 2006 concludes that: 'the benefit of light to moderate drinking remained in a range of undoubted public health value (15%-18%)' (2442). According to the most recent European study (consisting of 10 EU countries and people aged 25-70 years) by Bergmann et al (2013), *'the all causes of death among men'* (supplementary data p. 2) risk was lower for those consuming up to 45g/day compared to abstainers. The highest all-cause mortality risk reduction for women was achieved at a daily intake of 15g, according to Bergmann et al (2013).

Study	Drinking quantity	Risk reduction
Bagnardi et al 2004	Up to 6 drinks/day	Protective effect
Gunzerath et al 2004	Up to 2 drinks/day	Highest protective effect
Gaziano et al 2005	1 drink/day	Highest protective effect
Di Castelnuovo et al. 2006	Up to 2 drinks/day (women) and 4 drinks/day (men)	18% for women, 17% for men
Djousse et al, 2009	Up to 1,5 drinks/day	35%
Lee et al, 2009	1 drink/day	Highest effect: 28%
Streppel et al, 2009	2 drinks/day	25%
Costanzo et al. 2010	Up to 2,5 drinks/day	Highest effect
Ronksley et al, 2011	All drinkers together	13%

A more sophisticated model II

2. The price responsiveness of different consumer groups

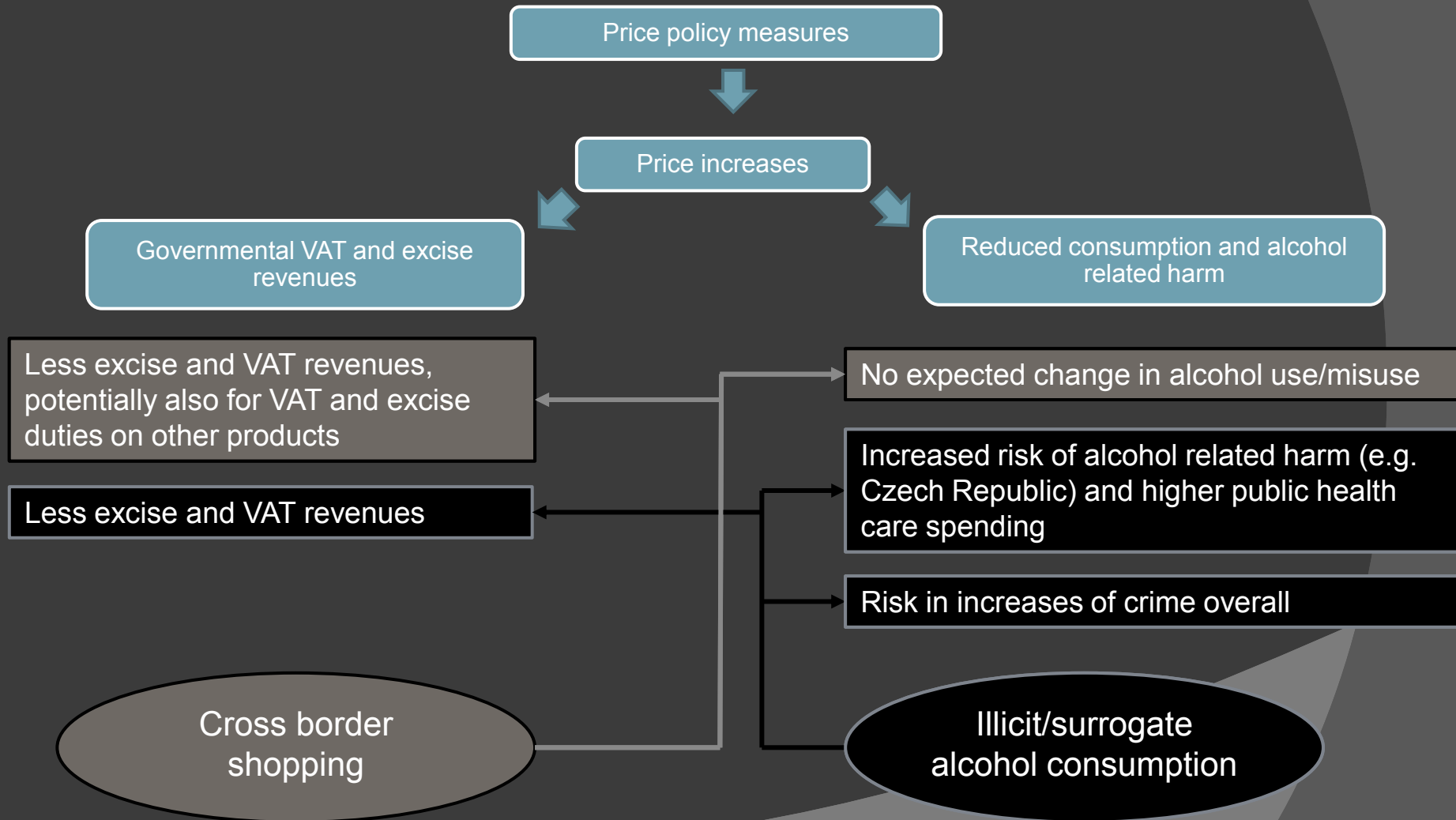


Comments to the regressive nature of price interventions

- The vast majority of people on low incomes, who are mostly hit by price policy measures, are moderate drinkers (more than 90% in Portugal). Moderate drinkers within this group will either switch to lower priced beverages or reduce their moderate alcohol intake, as they cannot afford to stick to their previous drinking habits.
- The minority of heavy/addicted drinkers among the poorest population group (less than 3% in Portugal) may respond to tax/price increases as follows:
 - A very small proportion of poor heavy drinkers will reduce their alcohol intake slightly at best, as heavy drinkers are least responsive to price changes.
 - The vast majority of heavy/addicted alcohol drinkers among the poorest population group will try to maintain their level of alcohol intake and therefore need to save money somewhere else, e.g. on their general nutrition, which may lead to malnutrition and increased adverse health effects for the drinker and his/her family.
 - Finally, this group may seek out alcoholic drinks on the black market and switch to illicit and more dangerous alcoholic drinks.

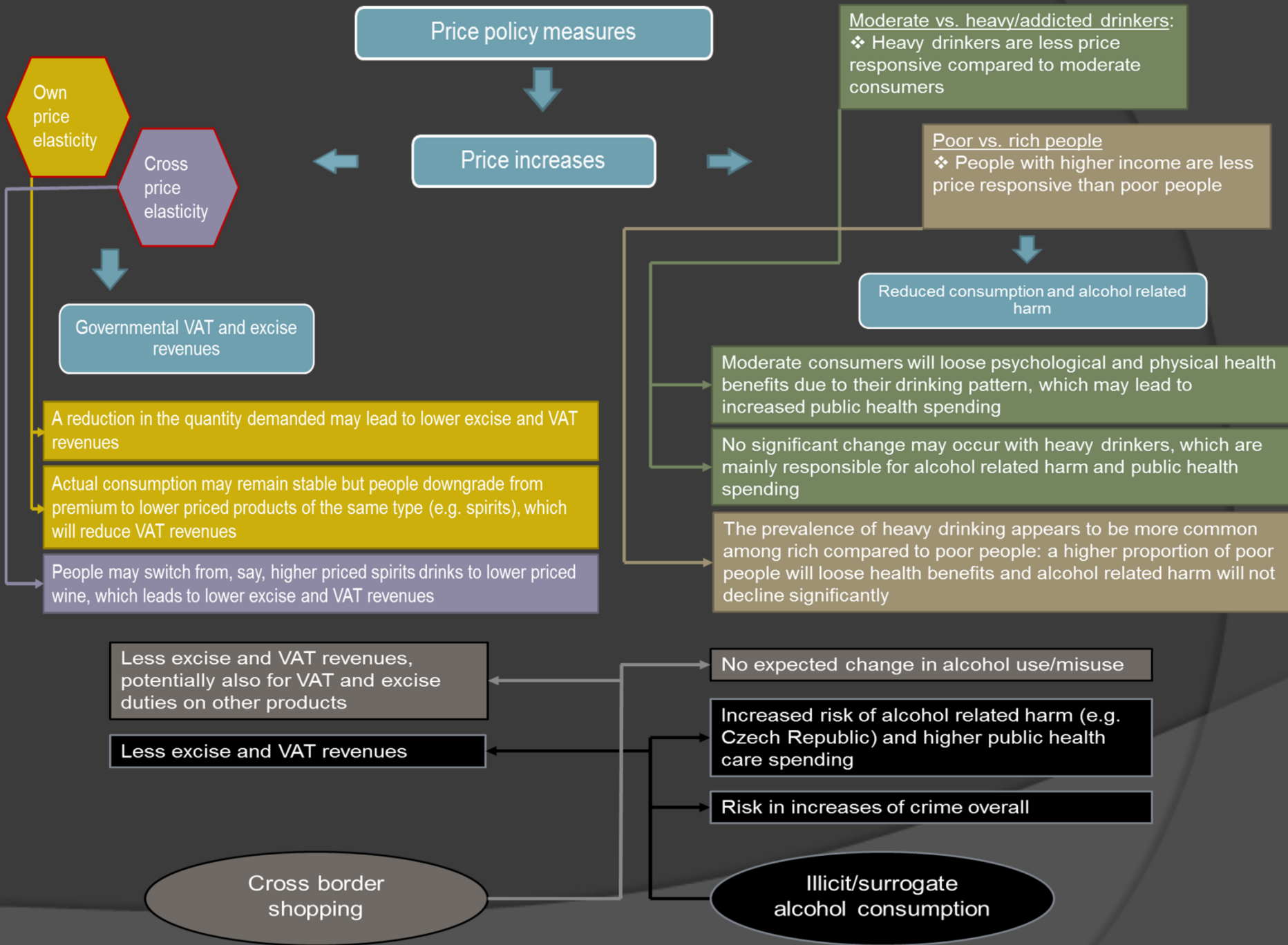
A more sophisticated model III

3. Unintended consequences of price increases



Concluding remarks

- ◉ When considering price policy measures or any alcohol policy intervention, it is important to use a model that fits best to reality, otherwise the negative consequences of the intervention can become severe
- ◉ Price policy measure models are universally applicable, but have very differing effects in various countries: the specific context is of crucial importance, such as country drinking patterns, economic situation (income and income distribution, unemployment) etc., which feed into price elasticities and price responsiveness of drinking groups
- ◉ The geographical location of a country is of relevance, e.g. as regards cross-border shopping.
- ◉ Portugal's drinking pattern is very different compared to the UK, or more generally, the Southern European style of drinking (compared to Northern Europe) plus economic conditions need to be considered when designing alcohol policy measures, especially price policy measures



THANK YOU FOR YOUR ATTENTION.
I AM HAPPY TO TAKE ANY QUESTIONS