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Alcohol pricing in the WHO European Region

UPDATE REPORT ON THE
EVIDENCE AND RECOMMENDED
POLICY ACTIONS



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ABSTRACT

This report summarizes the current evidence base for alcohol pricing policies and considers how this compares to current policies in place across the World Health Organization (WHO) European Region. Intended as a resource for governments and implementers, the report highlights challenges to effective pricing policies and provides recommendations for policy actions on alcohol pricing in the WHO European Region.

KEYWORDS

ALCOHOL DRINKING – prevention and control

ALCOHOL – adverse effects

ALCOHOL POLICY IMPACT

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ABBREVIATIONS

ABV	alcohol by volume
EU	European Union
I\$	international dollar
MUP	minimum unit pricing
PPP	purchasing power parity
VAT	value-added tax
WHO	World Health Organization

EXECUTIVE SUMMARY

Increasing the prices that consumers pay for alcohol is one of the most effective tools available to policy-makers looking to reduce alcohol consumption and associated harm. However, not all pricing policies are equal in either their effectiveness or their impact on socioeconomic inequalities in health, in which alcohol plays an important role.

Alcohol taxation is the primary mechanism through which governments influence alcohol prices. This can be levied on the basis of the alcohol content of a product (specific taxation), the overall product volume (unitary taxation) or the price of the product (ad valorem taxation). From the perspective of improving public health, there is little justification for any approach other than specific taxation, through which the tax payable on a product is directly proportional to its alcoholic content. Tax rates should generally be similar for different types of alcohol (e.g. beer, wine and spirits) as a lower rate on some products is likely to encourage heavier drinkers to consume larger volumes of these products. It may, however, be desirable to levy higher taxes on stronger products which are associated with greater levels of intoxication and heavy episodic drinking. Higher taxes on products, such as some spirits, that have low production costs relative to other types of alcohol can also help to prevent these products being available to consumers at lower prices. Finally, alcohol taxes should be directly linked (indexed) to inflation to prevent the affordability of alcohol increasing over time.

Minimum unit pricing (MUP) of alcohol, which sets a floor price for alcoholic products, is an alternative, or complement, to taxation that has generated considerable interest in recent years. There is a robust evidence base supporting its effectiveness at reducing alcohol consumption and harm, particularly in the heaviest drinkers. Emerging evidence from both Scotland and eastern Europe has shown that MUP can be effective in practice across hugely diverse settings. A further advantage of MUP over taxation is that it is likely to be a more effective mechanism for reducing health inequalities as it effectively targets the cheap, high-strength products that drive these inequalities.

Other policy approaches, such as banning retailers from selling alcohol at a loss or restricting price discounting, may contribute to reducing alcohol-related harm as part of a broader alcohol strategy, but are unlikely to have a significant impact in isolation.

In spite of the clear evidence in favour of a specific tax system that is indexed to inflation, current systems of alcohol taxation across the WHO European Region are hugely varied and poorly aligned with this evidence. Almost all countries operate systems with specific, unitary and ad valorem components, and no country has implemented a fully specific alcohol tax system. Most countries also have wide variation in the rates at which they tax different products. In particular, duty rates are generally highest on spirits, which is in line with public health evidence, and lowest on wine, which is not in line with that evidence. The use of automatic indexing of taxes to inflation is also restricted to less than a third of European countries. MUP is also not widely used across the Region, with only eight countries having some form of MUP in place.

This report demonstrates that alcohol pricing policies offer a uniquely powerful opportunity to reduce the burden of alcohol harm across Europe. That these policies are not currently being used to their fullest effect suggests that a more effective approach to pricing policies, which reflects the existing evidence, is required to reduce alcohol-attributable harm across the Region.

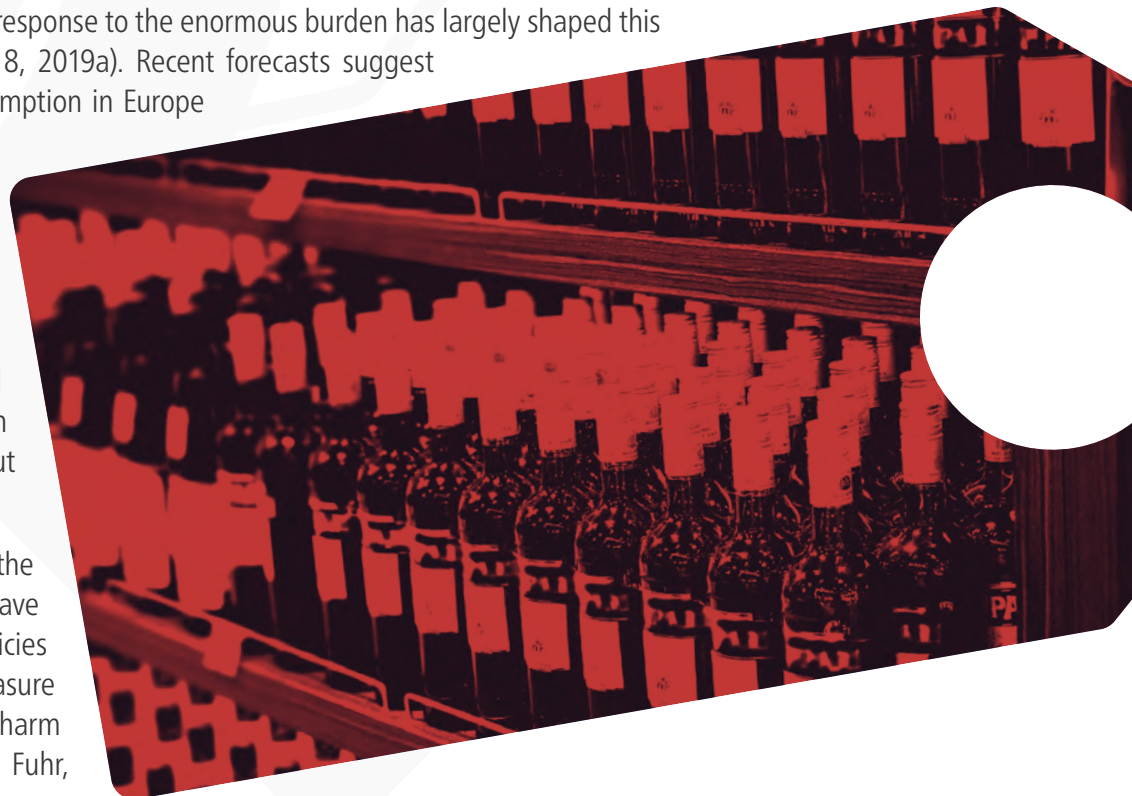


1. BACKGROUND

The consumption of alcohol has been established as a causal risk factor for a broad range of health conditions, including liver disease, cardiovascular conditions and cancer; it also increases the risk of injuries and road traffic accidents (Rehm et al., 2017). Europe has the highest levels of alcohol consumption per capita, the highest prevalence of heavy episodic drinking, and the lowest rates of abstinence from alcohol in the world (WHO, 2018). It is perhaps unsurprising, therefore, that a greater proportion of all deaths in Europe are attributable to alcohol consumption than in any other region in the world. It is estimated that more than one in every 10 deaths in Europe is caused by alcohol consumption (WHO, 2018). This burden falls disproportionately on people of working age, with alcohol ranked as the leading risk factor in the European Region for people aged 15–49 years; this places a substantial burden on economic productivity, as well as a heavy financial cost on health-care and welfare systems (GBD 2016 Alcohol Collaborators, 2018). In addition, alcohol is both a cause and a consequence of socioeconomic inequalities in health; alcohol-attributable death rates are significantly higher in poorer, more deprived and lower-educated populations, in spite of the fact that these groups typically have higher rates of abstinence and lower levels of average alcohol consumption (Mackenbach et al., 2008, 2015; Sassi, 2015).

There have been some significant changes in alcohol consumption patterns within the European Region in recent years. Most strikingly, there has been a widespread reduction in drinking among adolescents (Inchley et al., 2018), although there remain substantial differences between countries in levels of alcohol consumption per capita in this group (Looze et al., 2015). Levels of overall consumption in the adult population have fallen in many Mediterranean countries since 1990; these trends are not universal and alcohol consumption in south-eastern and central-eastern Europe has increased over the same period. However, the latest evidence highlights that the overall reduction in alcohol consumption is driven by considerable declines in drinking in the eastern part of the European Region and that implementation of alcohol control policies in response to the enormous burden has largely shaped this positive trend (WHO, 2018, 2019a). Recent forecasts suggest that overall alcohol consumption in Europe is expected to remain close to current levels over the next decade (WHO, 2018; Manthey et al., 2019). It is therefore unlikely that the burden of harm caused by alcohol will fall substantially in the near future without significant policy action.

Numerous reviews of the scientific evidence have concluded that pricing policies are a highly effective measure to reduce alcohol-related harm (Anderson, Chisholm & Fuhr,



2009; Babor et al., 2010; Burton et al., 2017), and they were included as a “best buy” policy in WHO’s Global Action Plan for the Prevention and Control of NCDs, 2013–2020 (WHO, 2013). A huge body of economic literature has established that the overall price elasticity of alcohol demand is negative, with an average value of approximately -0.5 , meaning that a 1% increase in alcohol prices is associated with a 0.5% reduction in consumption (Gallet, 2007; Wagenaar, Salois & Komro, 2009; Fogarty, 2010). As a result, policy approaches that increase the price of alcohol are likely to reduce alcohol consumption, and therefore harm. The costs of implementing pricing policies are typically extremely low – a recent study estimated the cost of increasing taxation to be less than US\$ 0.10 per capita (Chisholm et al., 2018); as a result, such policies should be considered to be cost-effective, particularly once cost savings to health care and other public services are taken into account.

Across the European Region, alcohol is generally widely available and highly affordable. Typically, lower prices are associated with heavier drinking – something that is particularly true in lower socioeconomic groups (Kerr & Greenfield, 2007; Ludbrook et al., 2012; Holmes et al., 2014; Vandenberg & Sharma, 2016). This association suggests that cheap alcohol in particular may be contributing to socioeconomic inequalities in health and strongly indicates that pricing policies that increase the price of cheap alcohol are likely to contribute to reducing these inequalities.

Box 1. Key messages

- Policy measures that increase the cost of alcohol are effective and cost-effective at reducing alcohol consumption and the harms caused by drinking.
- Not all pricing policies are equally effective – minimum unit pricing (MUP) and levying alcohol duty on the basis of a product’s alcohol content are likely to be more effective than other approaches. These approaches are also the most likely to reduce health inequalities.
- Alcohol tax structures that apply very unequal levels of duty to different products are less likely to be effective at reducing consumption than those that have similar rates across all products.
- Failure to link pricing policies to inflation is likely to lead to an erosion in their effectiveness over time as the real-terms value of the duty rates or MUP threshold falls.

2. EVIDENCE FOR THE EFFECTIVENESS OF ALCOHOL PRICING POLICIES

2.1 Retail monopolies

The most comprehensive approach to controlling alcohol pricing is a state-run alcohol sales monopoly. Such monopolies allow, at least in theory, governments to control what types of alcohol are available, when and where they can be bought, and at what price. While several examples of full or partial monopolies exist across the European Region, these are comparatively rare. Several recent studies have found that retaining monopoly systems, where they exist, is likely to be substantially less harmful to public health than a policy of privatization (Stockwell et al., 2018, 2019).

2.2 Taxation

There is a substantial body of studies which have evaluated the impact of increases in alcohol taxation (often referred to as duty) on alcohol consumption (Burton et al., 2017; Sornpaisarn et al., 2017) and alcohol-related harm (Elder et al., 2010; Wagenaar, Tobler & Komro, 2010). The overwhelming conclusion from these studies is that taxation policies are a highly effective strategy for harm reduction. There have also been numerous modelling studies which have reached similar conclusions (Cobiac et al., 2009; Angus & Ally, 2015; Sassi, 2015; Chisholm et al., 2018). As well as reducing alcohol consumption and harm, there is also limited evidence that increases in alcohol taxation may delay the age at which adolescents and young adults first start drinking (Sornpaisarn et al., 2015).

While the evidence for alcohol taxation in general is extremely compelling, the specific implications of this evidence for individual countries are more complex. This is partly because there are enormous variations between countries in the levels at which alcohol taxation is set, but also because there are important differences in the bases on which that taxation is levied. Box 2 outlines the three main approaches to alcohol taxation.

Box 2. Three main approaches to alcohol taxation

- (1) **Specific taxation** (sometimes referred to as volumetric taxation) under which alcohol duty is levied on the basis of the alcohol content of a product.
- (2) **Unitary taxation** under which alcohol duty is levied on the basis of the volume of a product.
- (3) **Ad valorem taxation** under which alcohol duty is levied on the basis of the sales value of a product.

Hybrid systems which combine more than one of these approaches are also possible. For example, a specific taxation might be applied to a product, then an additional ad valorem tax, such as value-added tax (VAT), applied on top of that.

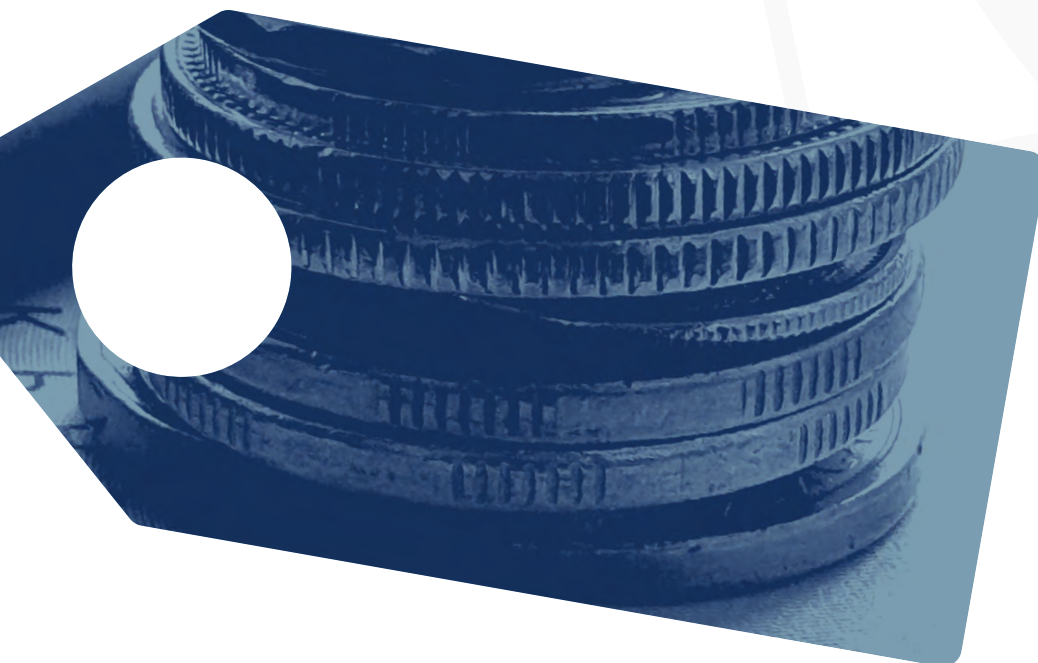
In terms of the relative effectiveness of these approaches at reducing alcohol consumption, the evidence is strongest for a specific taxation approach. Multiple studies in Australia (Doran et al., 2013; Sharma, Vandenberg & Hollingsworth, 2014) and the United Kingdom (Meier et al., 2016; Griffith, O'Connell & Smith, 2017) have appraised the impact of moving to a fully specific taxation system and found it to be both more effective and cost-saving in comparison to the existing, hybrid, systems. Indeed, there is some suggestion that a tax system based on either unitary or ad valorem taxation may encourage the manufacture of stronger products, potentially increasing alcohol consumption as a result (Sornpaisarn et al., 2017). These differences arise because a system of specific taxation means that the tax levied on each gram of ethanol is the same and therefore a bottle of wine at 15% alcohol by volume (ABV) will attract a greater level of duty than a bottle at 12% ABV. By contrast, under a unitary system, both bottles would attract the same duty, meaning that the duty levied per gram of ethanol falls as product strength increases. Under an ad valorem system, there is no direct link between alcohol content and duty, meaning that high-strength products with low production costs can be sold to consumers at cheaper prices than lower-strength products that cost more to produce, as they attract less tax.

In spite of this evidence, many countries in the WHO European Region are prevented from implementing a fully specific system of alcohol taxation by European Union (EU) directives which require wine and other products, including cider, to be taxed on a unitary basis (European Commission, 1992). These restrictions mean that EU countries are unable to implement tax systems that are optimal from the perspective of public health (Angus, Holmes & Meier, 2019).

2.3 MUP

MUP represents an approach whereby a floor price is introduced below which a fixed volume of alcohol, e.g. a “unit” or “standard drink”, cannot be sold to the public. Unlike increasing taxation, which affects the price of all products, MUP increases the price of only the cheapest alcohol. Since heavier drinkers typically favour cheaper drinks (Black, Gill & Chick, 2011; Callinan et al., 2015; Holmes et al., 2014), MUP policies effectively target price increases at heavier drinkers without significantly affecting the prices of alcohol bought by moderate drinkers, who tend not to seek out the cheapest products.

The evidence to support the effectiveness of MUP is robust (Boniface, Scannell & Marlow, 2017; Burton et al., 2017) and comes from two major sources. The first of these is a series of evaluation studies in several Canadian provinces where a form of MUP has been in place, at varying levels, for many years. These studies found that increases in the MUP level were associated with reductions in alcohol consumption (Stockwell et al., 2012a, 2012b), falls in alcohol-related hospital admissions (Stockwell et al., 2013) and deaths (Zhao et al., 2013), and fewer alcohol-related traffic offences (Stockwell et al., 2015). The second source of evidence is a number of modelling studies which have evaluated the potential impact of MUP across a range of countries, including the United Kingdom, Ireland, Canada, Australia, Czechia and Germany (Angus et al., 2014; Holmes et al., 2014; Sassi, 2015; Sharma, Etilé & Sinha, 2016). These studies have consistently found that MUP is likely to be a highly effective measure for reducing alcohol consumption, alcohol-related hospital admissions, deaths, criminal offences and workplace absence. These findings are further supported by emerging evidence from the Russian Federation which suggests that a form of MUP has contributed, alongside other policies, to falls in alcohol consumption, alcohol use disorders and mortality (Nemtsov, Neufeld & Rehm, 2019; WHO, 2019a). Initial evidence from Scotland, which implemented MUP in May 2018, is also promising, suggesting that alcohol consumption has fallen since MUP was introduced (Giles, Robinson & Beeston, 2019; O’Donnell et al., 2019).



2.4 Other pricing policies

Although direct government intervention in alcohol prices through taxation or MUP is the most common approach to alcohol pricing policy, several other approaches have been used alongside such measures. The first of these is a restriction on the sale of alcohol at below the cost the retailer paid for it. This prevents shops from selling very cheap alcohol as a “loss leader” to entice customers into the store. Legislation banning this practice is in place in several European countries, including France, Spain, Italy and Greece, although it applies to a broad range of products, not just alcohol (Hunt, Rabinovich & Baumberg, 2010). In some senses, this could be viewed as a form of minimum pricing, as it sets a product-specific floor price below which retailers are not permitted to sell alcohol. However, there are important differences between the two approaches – most significantly, the fact that a ban on selling below cost does not prevent alcoholic products with low production costs, or low profit margins, being sold at very low prices.

Although the use of this approach to restrict the availability of the very cheapest alcohol is a promising idea in principle, there is little evidence to support its effectiveness as a public health strategy. While the introduction of restrictions on below-cost sales is unlikely to be harmful, there is likely to be a significant administrative burden in establishing the correct “cost” that should apply to each product. For example, it might be necessary to examine invoices between wholesalers or producers and retailers to establish what the retailers paid for each alcoholic product. Indeed, concerns about abuse of the system used to establish costs were part of the reason why a ban on below-cost sales was lifted in Ireland in 2006 (DBEI, 2005). A further issue with this approach is that it enables producers to effectively dictate minimum sales prices to retailers for all products, not just those that are likely to be used as loss leaders. As a result, introducing a ban on below-cost sales may increase the price of a wide range of products, not just those at the cheaper end of the market (Allain & Chambolle, 2007).

A related policy which does not suffer from these limitations is to ban the sale of alcoholic products for less than the cost of the tax payable on the product. This measure was implemented by the United Kingdom government in 2014; however, a study at the time found that less than 1% of all alcohol sold would be affected by the ban and that it would lead to a negligible reduction in population alcohol consumption (0.04%) (Brennan et al., 2014).

A final approach to pricing policy is the restriction of discounting by alcohol retailers. Again, restricting the availability of cheap alcohol is likely to be a positive step, but evidence for the effectiveness of such policies is limited. Three studies evaluated a ban introduced in Scotland in 2011 on multibuy discounts – promotions, such as “buy one get one free” offers, in which price reductions are offered to customers purchasing larger quantities of a product. These studies found some support for a reduction in alcohol consumption, although this was not conclusive (Nakamura et al., 2014; Robinson et al., 2014), and there was no evidence of a reduction in alcohol-related deaths or hospital admissions (Robinson et al., 2018). By contrast, one prospective modelling study in Ireland suggested that a stronger approach, banning all product discounts and price promotions, might be more effective, leading to an estimated 2.3% reduction in alcohol consumption, a 2.3% fall in alcohol-related hospital admissions, and a 3.5% fall in alcohol-related deaths (Angus et al., 2014). These differential findings may be explained by the fact that a ban on multibuy discounts can be circumvented to some extent by simply discounting all products, irrespective of purchase volumes – something that was observed in the Scottish case (Nakamura et al., 2014). While a total ban on discounting can prevent this approach, no restriction on discounting can fully restrict the availability of cheap alcohol, as retailers can continue to sell undiscounted products at low prices.

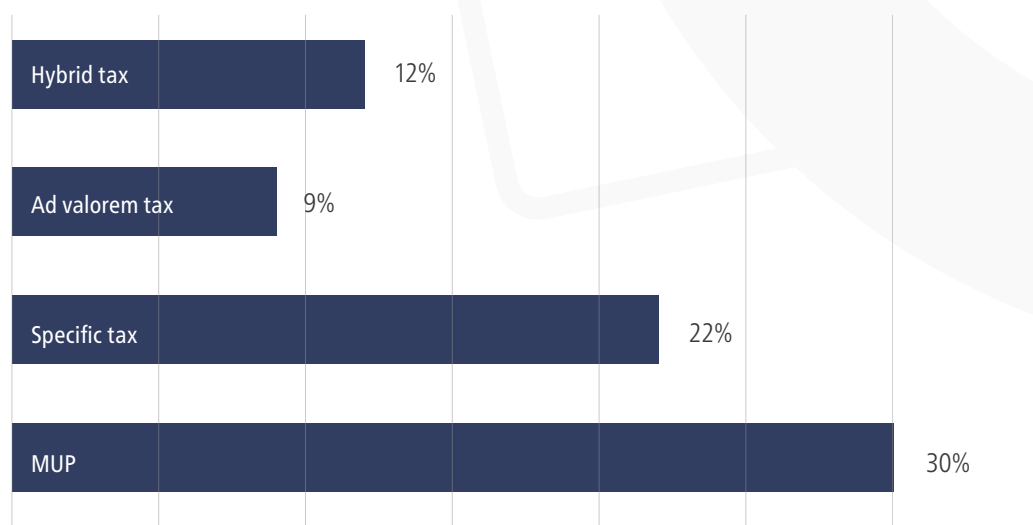
3. EVIDENCE FOR THE IMPACT OF PRICING POLICIES ON HEALTH INEQUALITIES

The burden of alcohol harm is particularly concentrated in heavier drinkers from lower socioeconomic groups. The potential for pricing policies to address the significant inequalities in health that are caused by alcohol is therefore substantial. Indeed, pricing policies have been highlighted as “the most promising policy intervention to reduce social inequalities in alcohol-related harm” (Loring, 2014). In spite of this, a recent review identified relatively few studies which actually evaluated the impact of pricing policies on inequalities (Wood & Bellis, 2017). A series of Finnish studies that looked at the impact of a substantial reduction in alcohol taxation on inequalities found greater increases in alcohol consumption (Helakorpi, Mäkelä & Uutela, 2010), hospitalizations (Herttua, Mäkelä & Martikainen, 2015) and alcohol-related deaths (Herttua, Mäkelä & Martikainen, 2008) in lower socioeconomic groups. Another study, from Canada, showed that increases in minimum prices were associated with greater reductions in hospital admissions in lower-income populations (Zhao & Stockwell, 2017).

A key question remains: which pricing policies are the most effective at reducing health inequalities? One study compared the potential impact of four different pricing policies, set at levels that would achieve the same population-level impact on mortality, on socioeconomic inequalities in England (Meier et al., 2016). This found that a fully ad valorem tax system was less effective at reducing inequalities in alcohol-attributable deaths than increasing rates in the current hybrid system of taxation. By contrast, a fully specific tax system was estimated to be almost twice as effective as the current one, while MUP was found to be the most effective option at reducing health inequalities. These impacts are illustrated in Fig. 1.

One further study from Australia, which compared the impact on alcohol consumption of specific taxation and MUP, reached a similar conclusion – that both policies would have a greater impact on lower-income drinkers, but that the impact of MUP on inequalities in consumption was marginally greater (Vandenberg & Sharma, 2016).

Fig. 1. Effectiveness of various alcohol pricing policies in reducing inequalities in alcohol-attributable deaths in England (from Meier et al., 2016)



Reduction in the gap in alcohol-attributable mortality rates between high and low socioeconomic groups following policy implementation

4. CHALLENGES TO EFFECTIVE PRICING POLICY

4.1 Price sensitivity

A common argument levelled against pricing policies is that heavier drinkers are less price-sensitive, or even insensitive to changes in price, so increasing prices will not lead to reductions in consumption. While it is true that some studies have found heavier drinkers to have lower price elasticities of demand than more moderate drinkers (Griffith, O’Connell & Smith, 2017; Pryce, Hollingsworth & Walker, 2019), other studies have found the reverse to be true (Meng et al., 2014; Jiang et al., 2016). It is likely that these differences arise from the different methodological approaches and data used in these studies, although they may represent genuine differences in price responsiveness between the study populations. To explore the validity of this argument against pricing policies, let us assume that heavier drinkers are indeed less price-responsive.

The first important point to note is that the studies which find heavier drinkers to be less price-sensitive do not find that heavier drinkers are completely insensitive to price, but rather that their price elasticity is lower than moderate drinkers. This is important as the elasticity represents a percentage reduction in consumption associated with a percentage increase in price, and heavier drinkers consume more alcohol by definition. It is therefore possible that, when faced with the same increase in price, a heavier drinker may reduce their consumption by a *smaller proportion*; however, this will equate to a much larger *absolute reduction* in the volume of alcohol consumed. **Table 1** shows an illustrative example of this effect, highlighting that a lower price elasticity can still lead to much larger reductions in total volumes of consumption.

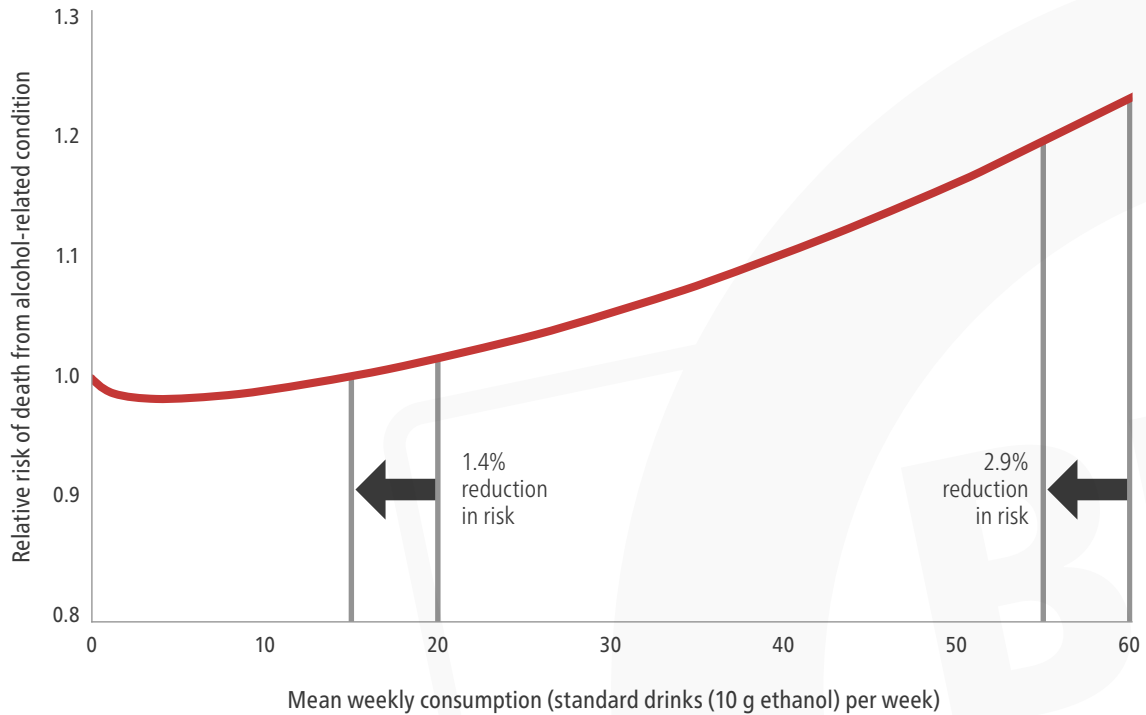
Table 1. Illustrative impact of price increases (based on Pryce, Hollingsworth & Walker, 2019)

Consumption group	Baseline consumption (litres of ethanol/year)	Elasticity	Increase in prices (%)	Relative reduction in consumption (%)	Absolute change in consumption (litres of ethanol/year)
Moderate drinkers	3	-0.709	10	-7.10	-0.21
Heavy drinkers	10.5	-0.232	10	-2.30	-0.58

This difference in consumption reductions is of particular importance in light of the shape of the relationship between levels of alcohol consumption and risks of harm. Several major studies have established that the risks associated with drinking increase more rapidly at higher levels of consumption (Rehm et al., 2017; GBD 2016 Alcohol Collaborators, 2018). This means that a small reduction in consumption for a heavier drinker can lead to a larger reduction in risk of harm than a large reduction in consumption for a moderate drinker. **Fig. 2** provides an illustrative example of this, suggesting that a drinker consuming 60 standard drinks (10 g ethanol each) per week would reduce their risk of harm by 2.9% if they cut their consumption by five standard drinks per week, whereas a drinker starting with a consumption of 20 standard drinks would reduce their risk by 1.4% when cutting their consumption by the same amount.

The second important point is that heavier drinkers consume cheaper alcohol, on average, than moderate drinkers – something that has been observed across all income groups. Although this generally means that they purchase products that are subject to lower rates of tax, it also means that tax makes up a larger

Fig. 2. Risk reduction at different levels of alcohol consumption (based on Holmes et al., 2016)



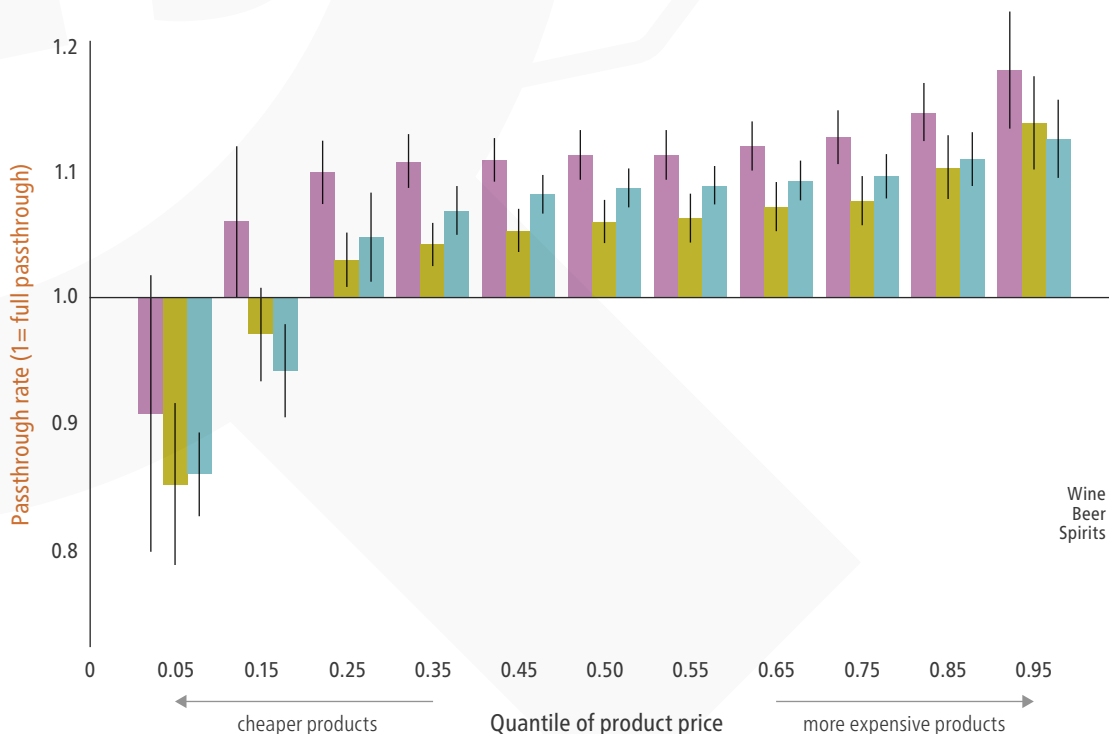
proportion of the cost of those products. The effect of this is that an increase in taxation, or an MUP, will lead to a relatively larger increase in price for cheaper products than for more expensive ones. Thus, when prices rise, heavier drinkers will face a larger increase in price and see greater falls in consumption, leading to even greater reductions in harm. This effect is seen even if they are considerably less price-sensitive in the narrow economic sense in which such terms are usually defined. The effect is even more acute under an MUP, as cheaper products, which are further below the MUP threshold, will see much larger increases in price.

A third point, of particular relevance to MUP, is that there is clear evidence that heavier drinkers are more prepared to switch to other, cheaper, products when the price of the products they are currently drinking increase (Gruenewald et al., 2006; Griffith, O’Connell & Smith, 2017; Pryce, Hollingsworth & Walker, 2019). This mitigates the effect of some pricing policies, as heavier drinkers can continue to consume the same amount by switching to a cheaper product to offset the increase in cost. Under an MUP, however, this “trading down” is no longer possible, as there is no alcohol available for less than the floor price. All existing estimates of price elasticity implicitly account, to some extent, for this switching behaviour, and this may be responsible for at least some of the difference in the observed elasticity between heavy and moderate drinkers. The implication of this is that, under an MUP policy, you would expect to see larger reductions in consumption than existing price elasticities might suggest.

4.2 Tax passthrough

A small number of studies have explored the extent to which increases in alcohol taxation are actually passed through to consumers. In response to a rise in taxes, retailers may pass it on in full to the prices of products on the shelf; they may “undershift” products by absorbing some of the increase themselves; or they may “overshift”, increasing prices by more than you would expect from the tax rise alone. One study, which examined these so-called “passthrough” rates for both beer and spirits in Ireland, Finland, Latvia and Slovenia, found a combination of under- and overshifting, depending on the country and the beverage type (Rabinovich et al., 2012). A recent study in Belgium found that there was significant heterogeneity in tax passthrough, depending on the location of the alcohol retailer, with lower levels of passthrough in areas with high levels of competition (Hindriks & Serse, 2019). A United Kingdom study examined the extent to which passthrough rates varied by price, finding clear evidence that cheap products tended to be undershifted, while more expensive products were overshifted (Ally et al., 2014). This can be seen clearly in Fig. 3, which shows the findings of this study visually: bars below the line represent products that are undershifted, while those above the line are overshifted. The implications of these findings for tax policies are profound, illustrating that increases in taxation may lead to larger or smaller increases in the prices experienced by consumers than was intended by the policy-maker. The prices of cheaper alcohol, preferred by heavier drinkers, may increase by less than the prices of more expensive alcohol, preferred by moderate drinkers. This means that moderate drinkers may be effectively being used by retailers to subsidize lower prices (or smaller price increases) for heavier drinkers. Such issues are unlikely to be present under MUP, although there is a lack of evidence to date on exactly how markets respond to the introduction of MUP. Further research is also needed to understand how changes in taxation interact with minimum prices in countries where some form of MUP is already in place.

Fig. 3. Tax passthrough rates (with 95% confidence intervals) across the price distribution (lower values = lower prices) (from Ally et al., 2014)





Values below the horizontal line, which represents “full passthrough”, mean that prices have increased by less than would be expected when taxes have increased – i.e. the tax increase has not been fully “passed through” to the cost that consumers pay. Equivalently, values above the line represent prices being increased by more than would be expected – i.e. retailers have increased their profit margin on these products when taxes have increased.

4.3 Changing affordability

A further consideration in relation to taxation policies is the fact that, as a result of inflation, a policy of keeping duty rates constant will cause the effective level of duty to fall over time. As such, holding duty rates at the same level will gradually increase the affordability of alcohol over time, as the taxes payable on alcoholic products remain at the same level while incomes and the cost of other goods rise with inflation. This is particularly true in contexts where inflation rates are significantly above zero. This increasing affordability can be prevented by indexing alcohol duty rates to inflation to ensure that they maintain their effective level and are not eroded over time.

It should also be noted that this issue does not apply only to taxation. There is also a danger, in countries with some form of MUP, that inflation may erode the effective level at which the MUP is set. Policy-makers may therefore wish to consider indexing MUP to inflation or putting an alternative mechanism in place to periodically review the level at which MUP is set and uprate it where necessary. In some of the eastern European countries, including the Russian Federation and Kyrgyzstan, annual increases in the MUP level are established several years in advance by governmental decrees.

4.4 Revenue from pricing policies

Although alcohol pricing policies can be used as an effective tool for the improvement of public health, they are also a potential source of revenue for governments. One key difference between taxation policies and MUP is that, with taxation, the increase in prices of products on the shelves is returned to the government as duty, while the majority of the price increases under MUP go to retailers and producers. Modelling work in Scotland estimated that a £0.50 MUP would increase revenue to retailers from alcohol sales by £34 million (+2.5%) per year, while exchequer revenue from alcohol duty would fall by £15 million (–1.3%) (Angus et al., 2016). In comparison, a 28% increase in taxation, which would lead to a comparable fall in alcohol-attributable mortality, is estimated to reduce revenue to retailers from alcohol by £63 million (–4.6%) each year while raising duty revenue to the exchequer by £209 million (+18.4%). These differences are not insignificant and should be taken into consideration when designing alcohol policy, although they should be considered alongside the potential savings of pricing policies to other aspects of government, such as health care, criminal justice and economic productivity. Modelled estimates for England suggest that a £0.60 MUP would reduce tax revenue by £81 million per year, but at the same time health-care costs associated with alcohol would fall by £390 million, criminal justice costs by £1.43 billion, and workplace productivity losses by £136 million (Angus & Ally, 2015). It may also be possible for governments to introduce other policies alongside MUP which seek to recover some of the additional revenue to retailers, although the specific design of these policies will depend on existing legal frameworks within each country.

4.5 Unrecorded alcohol

Unrecorded alcohol is an umbrella term for alcohol that is not accounted for in official statistics on taxation and sales in the country where it is consumed because it is usually produced and sold outside

the formal channels under government control (WHO, 2018). This includes cross-border purchases, smuggled alcohol, informally produced alcohol (both legal and illegal) including home-production, and also so-called surrogate alcohol, i.e. alcoholic products that are not produced as beverage alcohol but are consumed as such (Lachenmeier, Gmel & Rehm, 2013; WHO, 2018). Overall, unrecorded alcohol is often the cheapest form of alcohol available in a country and is thus popular among heavier drinkers and those of lower socioeconomic position (Rehm et al., 2014), with the exception of cross-border purchasing that is more prevalent among drinkers of higher socioeconomic position (Svensson, 2009).

Such products are an important consideration for alcohol policy-makers, especially in regions such as eastern Europe and central Asia, where unrecorded consumption is estimated to be particularly high, accounting for around 15–30% of all alcohol drunk (Shield, Rylett & Rehm, 2016; Probst et al., 2018).

Pricing policies may be less effective if reductions in recorded alcohol consumption are offset by increases in unrecorded alcohol. For instance, cheap alcohol from unrecorded sources could potentially undermine an MUP on recorded alcohol, if no additional measures are taken, maintaining the supply of cheap alcohol for heavy drinkers from lower socioeconomic strata, who are at greater risk of experiencing alcohol-related harm (Neufeld & Rehm, 2018). This link is particularly relevant for middle- and lower-middle-income countries where unrecorded alcohol makes up a relatively larger share of overall consumption (Rehm et al., 2016).

While unrecorded alcohol poses specific challenges to alcohol control, it is vital to keep this type of alcoholic products in perspective and to understand that the alcohol industry consistently overstates these concerns in order to lobby against effective policy actions on price (Lachenmeier & Rehm, 2009). The evidence suggests that there is never full substitution between recorded and unrecorded consumption (Babor et al., 2010).

The issue of unrecorded alcohol supports the argument for a holistic approach to alcohol policy that encompasses enforcement, customs policies and coordinated action in neighbouring countries. Such an approach may be informed by the one taken in relation to illicit tobacco set out in Article 15 of the WHO Framework Convention on Tobacco Control (WHO, 2003).

4.6 Alcohol industry opposition

Some alcohol producers and retailers perceive a significant threat from policies that reduce alcohol consumption. In particular, the alcohol industry as a whole relies on heavy drinkers for a substantial proportion of their revenue – a recent United Kingdom study estimated that 68% of total alcohol sales revenue came from the 25% of the adult population exceeding current drinking guidelines (Bhattacharya et al., 2018). It is therefore unsurprising that many commercial actors and industry-funded corporate social responsibility organizations strongly oppose effective policies such as action on pricing (Gornall, 2014; McCambridge, Mialon & Hawkins, 2018; Williams et al., 2018). A clear recent example of this opposition was the ultimately unsuccessful legal challenge brought against the Scottish government's MUP legislation by the Scotch Whisky Association (Meier et al., 2017).

One common argument used by the alcohol industry against effective alcohol policy is that the alcohol industry is a major contributor to the economy and that any policy that reduces alcohol consumption may harm the economy as a result and lead to job losses. This argument ignores both the fact that consumers spending less money on alcohol will spend that money elsewhere in the economy and the fact that



alcohol consumption itself has negative effects on economic productivity. These negative effects include increased absenteeism, reduced levels of productivity (so-called “presenteeism”), and increased levels of illness which reduce people’s capacity to work. Ultimately, alcohol is one of the leading factors for years lost due to ill health, disability or early death in the WHO European Region, with every fourth death in those aged 25–29 being attributable to alcohol, which results in large losses in productivity and economic development (WHO, 2018). As a result, reducing alcohol consumption benefits the economy in the long term, and existing economic analyses highlight the total productivity benefits and return on investment gained from implementing alcohol control policies (WHO, 2019b). A 2014 study from the United States of America supports this argument, showing that increased alcohol consumption was associated with reduced economic growth (Cesur & Kelly, 2014).

5. UPDATE ON CURRENT PRICING POLICY APPROACHES IN EUROPE

Detailed information about current levels and structures of alcohol taxation is published regularly by the European Commission for the 27 EU Member States (European Commission, 2018). No equivalent resource exists across the WHO European Region. The data in this section have therefore been drawn from a wide range of additional sources, including the 2016 WHO Global Survey on Alcohol and Health, government websites, commercial and market research data from Euromonitor and PricewaterhouseCoopers, and data from industry trade bodies such as SpiritsEUROPE. All tax rates are based on the most recently available data collected in November 2018 and have been converted into international dollars (\$) using purchasing power parities (PPPs) from the World Bank (World Bank, 2018). Data on MUP levels were collected in February 2020 and converted similarly.

5.1 Alcohol tax structures

All 53 countries in the European Region levy taxes of some form on alcoholic drinks (with exemptions for some very low-strength products). Every country (except for Andorra, which levies only a single ad valorem tax) operates a hybrid tax system with duties levied on a specific, unitary or ad valorem basis (see Box 2) and then a further ad valorem tax (i.e. VAT) added to the combined cost of the product and the duty payable on it. Fig. 4 shows the VAT rates applied to alcohol in each country. This shows that there is substantial variation between the lowest rates (4.5% in Andorra) and the highest (27% in Hungary), but that the vast majority of countries have a VAT rate on alcohol of between 17% and 25%.

The basis on which alcohol duty is levied on wine, beer and spirits within each country is illustrated in Fig. 5. This shows that 23 of the 53 countries of the WHO European Region do not levy any alcohol duty on wine, whereas every country, except Andorra, levies some form of duty on beer and spirits. Where duty is levied on wine, this is predominantly unitary (i.e. based on the volume of product), except in Armenia and Turkmenistan, where it is ad valorem (i.e. based on the value of the product), Iceland, where it is a form of specific tax (i.e. based on the volume of alcohol in the product), and Norway, where a combined specific/unitary approach is taken depending on the ABV of the product. Thirty-one of the 53 countries (58%) levy beer duty on a specific basis, with a further five using a combined specific/unitary system depending on the product’s ABV. Forty-six of the 53 countries (87%) tax spirits on a specific basis.

Fig. 4. VAT rates payable on alcohol in the WHO European Region

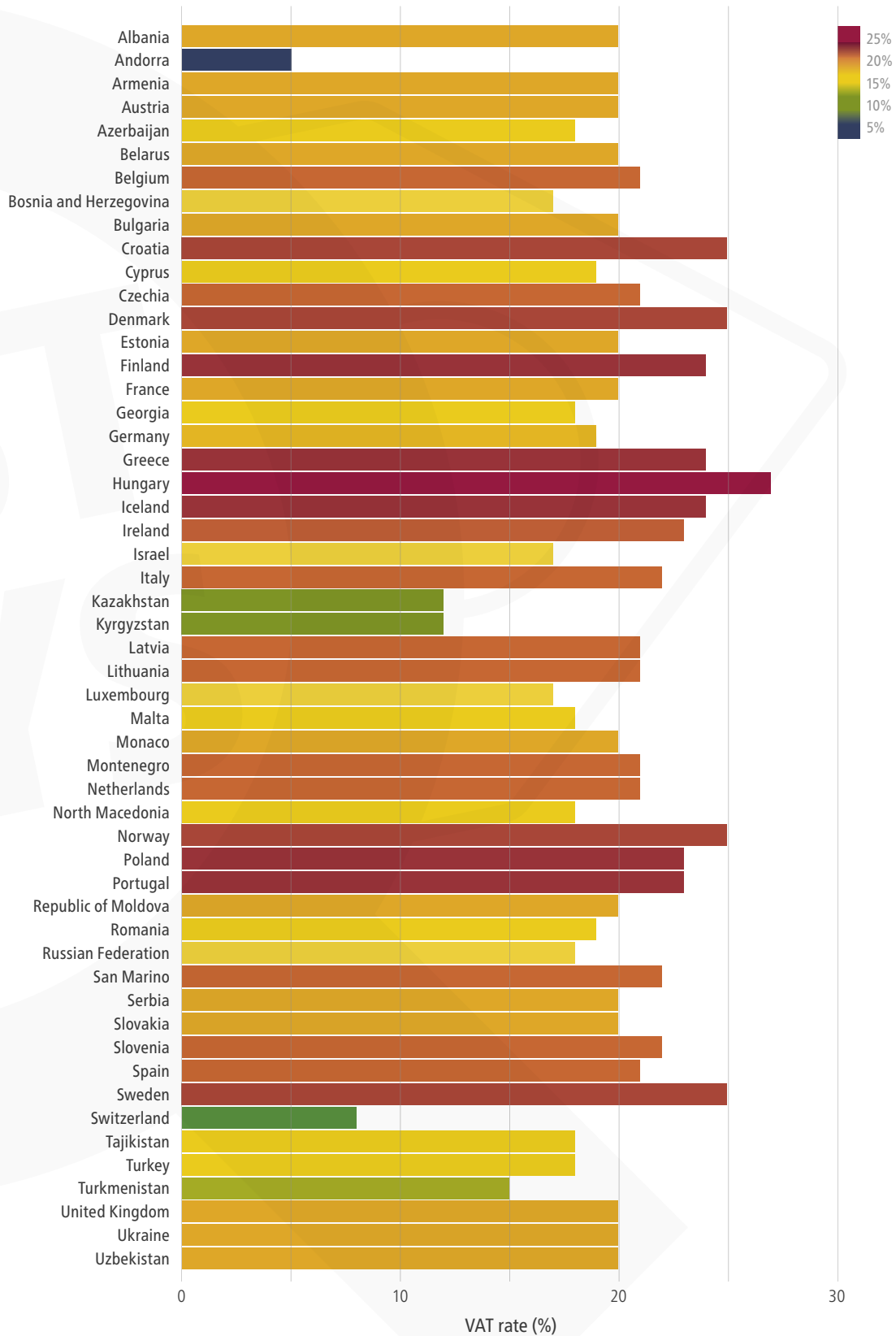


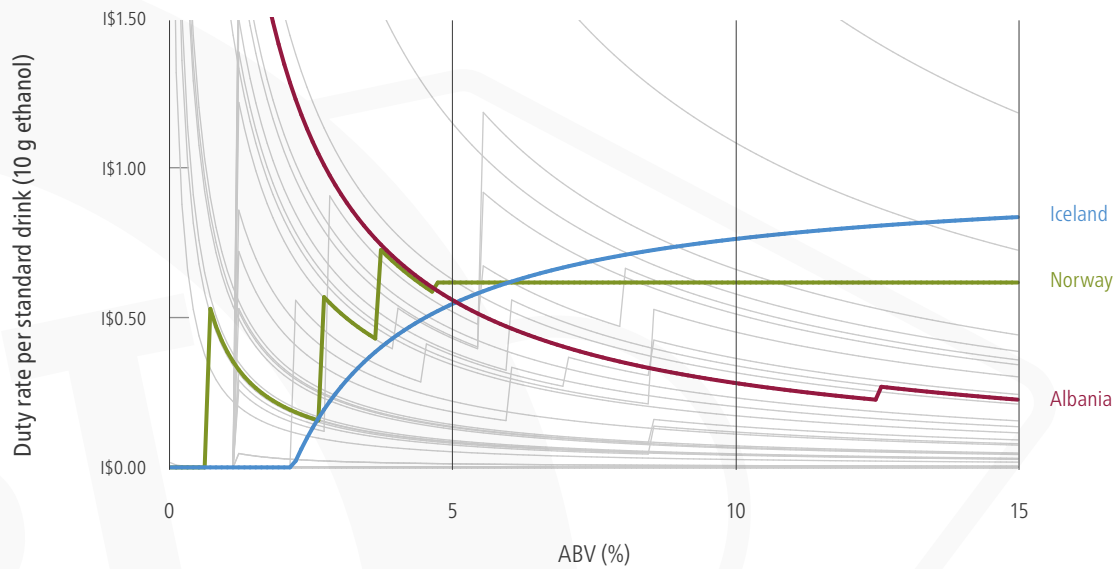
Fig. 5. Basis of taxation (excluding VAT) for beer, wine and spirits in the WHO European Region

Country	Wine	Beer	Spirits	Country	Wine	Beer	Spirits
Albania	Unitary	Specific	Specific	Lithuania	Unitary	Specific	Specific
Andorra	No duty	No duty	No duty	Luxembourg	No duty	Specific	Specific
Armenia	Ad valorem	Ad valorem	Ad valorem	Malta	Unitary	Specific	Specific
Austria	No duty	Specific	Specific	Monaco	Unitary	Specific	Specific
Azerbaijan	Unitary	Unitary	Unitary	Montenegro	No duty	Specific	Specific
Belarus	Unitary	Unitary	Specific	Netherlands	Unitary	&	Specific
Belgium	Unitary	Specific	Specific	North Macedonia	No duty	Specific	Specific
Bosnia and Herzegovina	Unitary	Unitary	Specific	Norway	&	&	Specific
Bulgaria	No duty	Specific	Specific	Poland	Unitary	Specific	Specific
Croatia	No duty	Specific	Specific	Portugal	No duty	&	Specific
Cyprus	No duty	Specific	Specific	Republic of Moldova	No duty	Unitary	Specific
Czechia	No duty	Specific	Specific	Romania	No duty	Specific	Specific
Denmark	Unitary	Specific	Specific	Russian Federation	Unitary	Unitary	Specific
Estonia	Unitary	Specific	Specific	San Marino	No duty	Specific	Specific
Finland	Unitary	Specific	Specific	Serbia	No duty	Unitary	Unitary
France	Unitary	Specific	Specific	Slovakia	No duty	Specific	Specific
Georgia	No duty	Specific	Specific	Slovenia	No duty	Specific	Specific
Germany	No duty	Specific	Specific	Spain	No duty	&	Specific
Greece	Unitary	Specific	Specific	Sweden	Unitary	Specific	Specific
Hungary	No duty	Specific	Specific	Switzerland	No duty	Unitary	Specific
Iceland	Specific	Specific	Specific	Tajikistan	Unitary	Unitary	Specific
Ireland	Unitary	Unitary	Specific	Turkey	Unitary	Ad valorem	Specific
Israel	No duty	Unitary	Unitary	Turkmenistan	Ad valorem	Ad valorem	Ad valorem
Italy	No duty	Specific	Specific	United Kingdom	Unitary	Specific	Specific
Kazakhstan	Unitary	Unitary	Unitary	Ukraine	Unitary	Unitary	Specific
Kyrgyzstan	Unitary	Unitary	Unitary	Uzbekistan	Unitary	Unitary	Unitary
Latvia	Unitary	&	Specific				

Key Specific & Unitary Ad valorem No duty

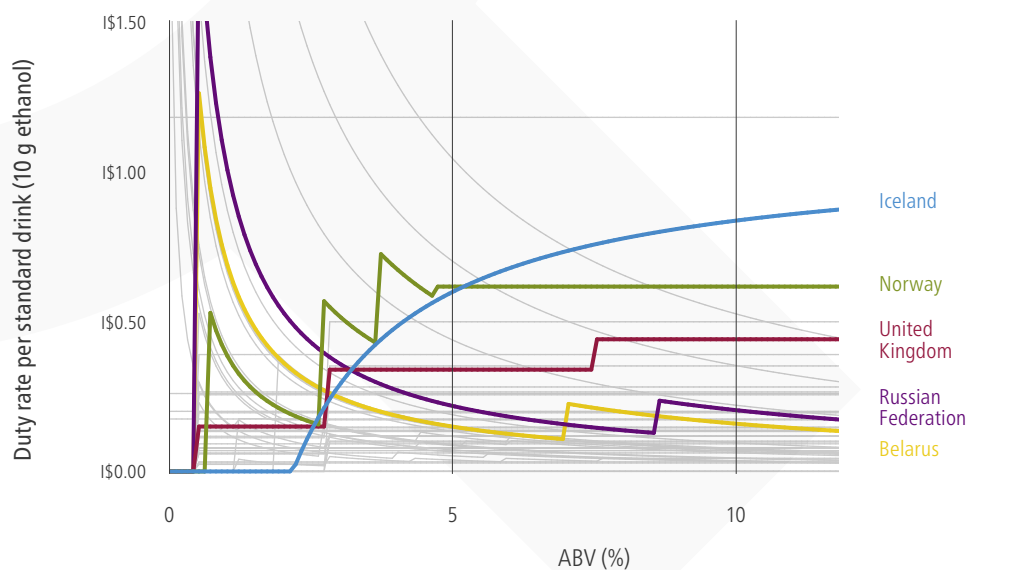
There is considerable additional variation in the ways in which countries structure their alcohol duty regimes, even within countries using the same basis for their taxation (i.e. ad valorem, unitary or specific). Fig. 6–8 show this variation visually for wine, beer and spirits, with selected countries highlighted. As the basis for wine duty, where it is levied, is predominantly unitary, wine duty rates generally fall as product strength increases. Some countries have banded rates of wine duty, although Albania is the only country where these bands occur at the typical strengths at which wine is usually sold. There are two other notable exceptions to the general pattern: Norway, where duty on wines over 4.8% ABV is levied on a specific basis; and Iceland, where a unique form of specific duty is levied which leads to the duty rate increasing as strength increases.

Fig. 6. Wine duty rates by product strength for selected countries



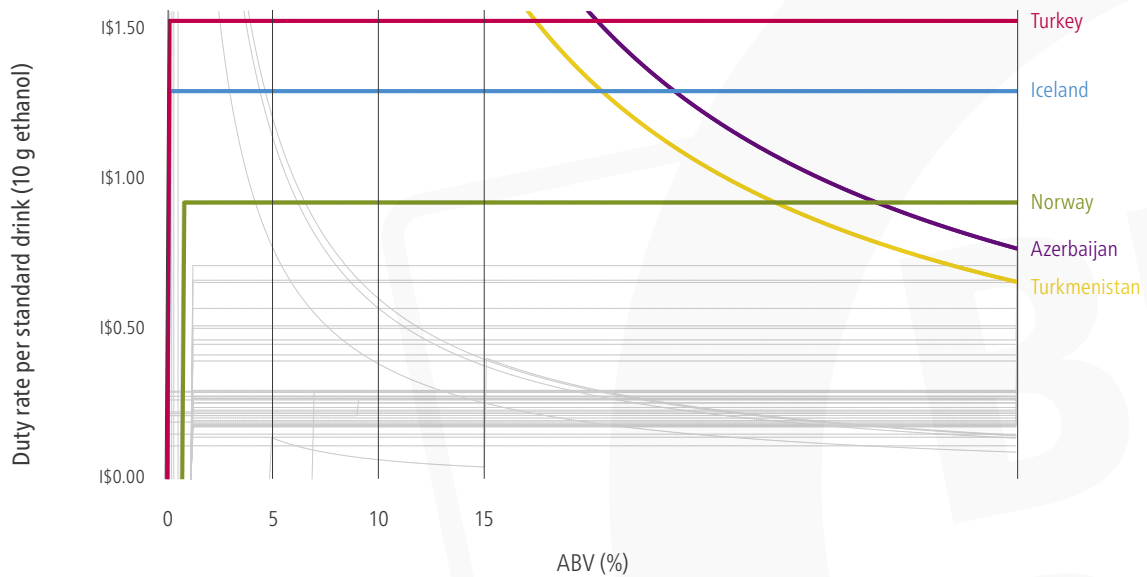
The majority of countries levy beer duty on a specific basis, although there are a few notable departures from this trend. Iceland levies beer duty on the same basis as wine duty, with the effective duty rate increasing with ABV. Norway also has the same taxes for beer as for wine, although the strength bands below 4.8% ABV are more relevant for beer. Belarus, the United Kingdom and the Russian Federation are unusual in that these countries have a higher rate of duty for strong beer over 7%, 7.5% and 8.7% respectively.

Fig. 7. Beer duty rates by product strength for selected countries



There is less variation in the structure of spirits duties, with most countries having a single, fixed rate of duty per standard drink, irrespective of product strength. Turkey, Iceland and Norway have the highest rates of specific spirits duty, although the unitary rates applied in Azerbaijan and Turkmenistan are higher at lower product strengths.

Fig. 8. Spirits duty rates by product strength for selected countries



5.2 Levels of alcohol duty

Duty rates payable per standard drink (10 g ethanol) for three common products – 5% ABV beer, 12.5% ABV wine and 40% ABV spirits – are illustrated in Fig. 9. This highlights a few clear geographical patterns, with alcohol duty rates generally higher in Scandinavia, the United Kingdom, Ireland, Turkey, Azerbaijan and Turkmenistan, and lower in central and eastern Europe. It also suggests that duty on spirits is generally higher than on beer or wine.

Fig. 10 uses a ternary colour scheme to show the relative levels of tax on beer, wine and spirits within each country (Schöley, 2018), with a point in the centre of the legend representing a country where duty levels are equal across all three beverage types. This clearly shows the tendency for spirits duties to be higher in the predominance of blue (countries where tax is markedly higher on spirits than beer or wine) and green (countries where beer and spirits are taxed more heavily than wine). This also highlights a relatively small group of countries, including the United Kingdom, Norway, Finland, Albania and Azerbaijan, that have broadly similar rates of duty across all three products.

Fig. 9. Alcohol duty payable on selected products across the WHO European Region

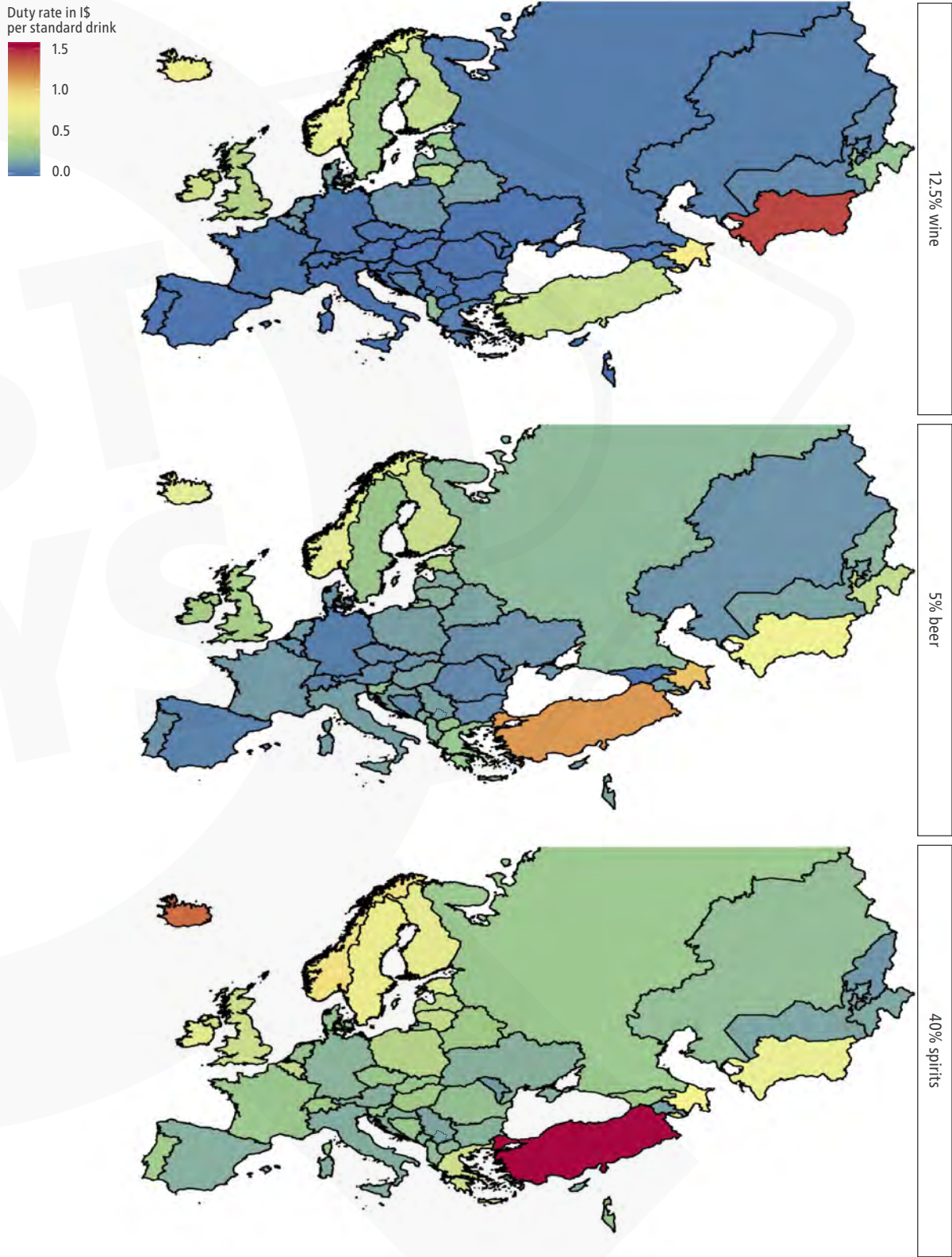
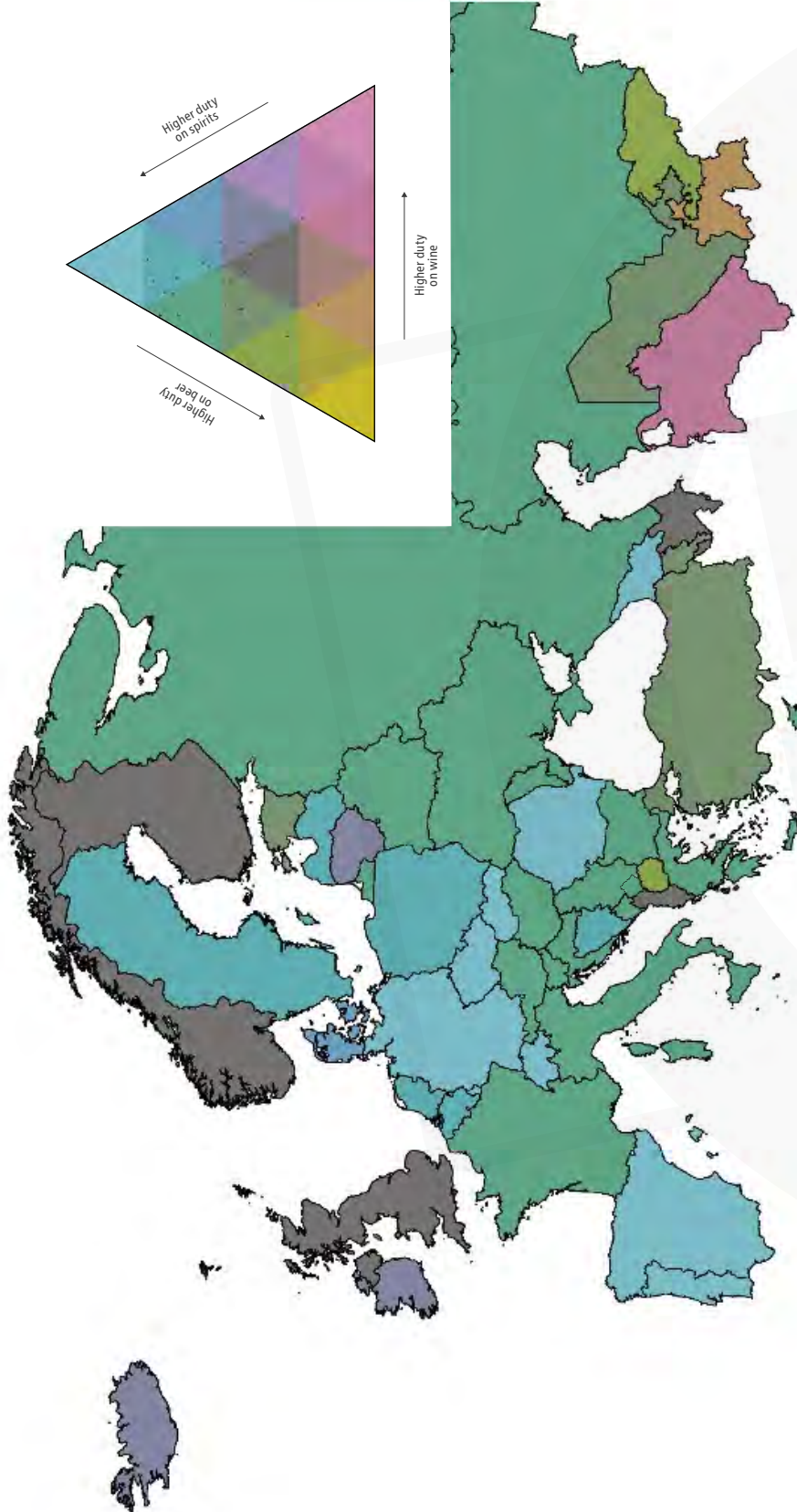




Fig. 10. Relative levels of duty rates within each country for beer (5%), wine (12.5%) and spirits (40%)

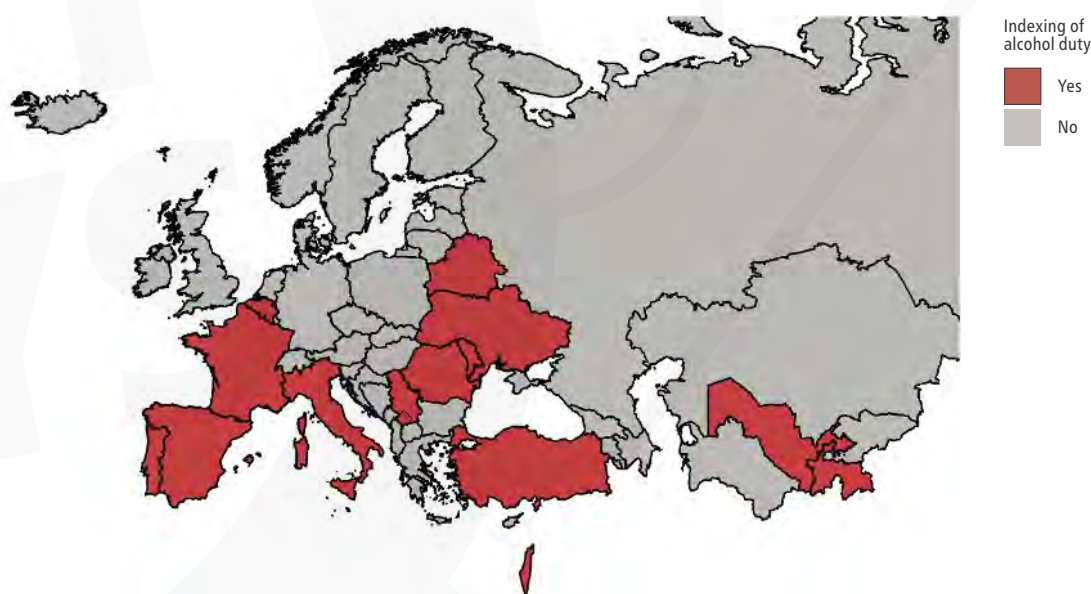


Countries are coloured according to the relative duty rates levied on beer (yellow), wine (pink) and spirits (blue). Countries that levy higher taxes on spirits than other products appear more blue, countries with higher taxes on beer appear more yellow, and those with higher taxes on wine appear more pink. Countries with similar rates of duty on all three products appear grey.

5.3 Inflation indexing of duty rates

Only 16 of 53 (30%) of countries, predominantly in the south-western and eastern parts of the WHO European Region, report that they have alcohol duties (beer, wine or spirits) linked to inflation (Fig. 11). The extent to which the lack of inflation indexing in the other 37 countries will reduce the effective duty levels and thus increase the affordability of alcohol depends on both inflation rates within each country and the frequency with which duty rates are revised. For example, although the default position in the United Kingdom is for alcohol duties to rise in line with inflation each year, the government has frequently departed from that position in recent years, cancelling inflation-linked increases or even cutting duty rates for some products. This is in contrast to the period 2008–2014, when a “duty escalator” was in place, which not only indexed duty rates to inflation but increased them by 2% above inflation each year (Box 3). While regular revisions to duty rates can achieve the same effect as indexing duty rates to inflation, it may be advantageous to do so automatically, as this ensures that the default position is for alcohol duty to increase in line with inflation.

Fig. 11. Countries in the WHO European Region that report indexing alcohol duty rates to inflation



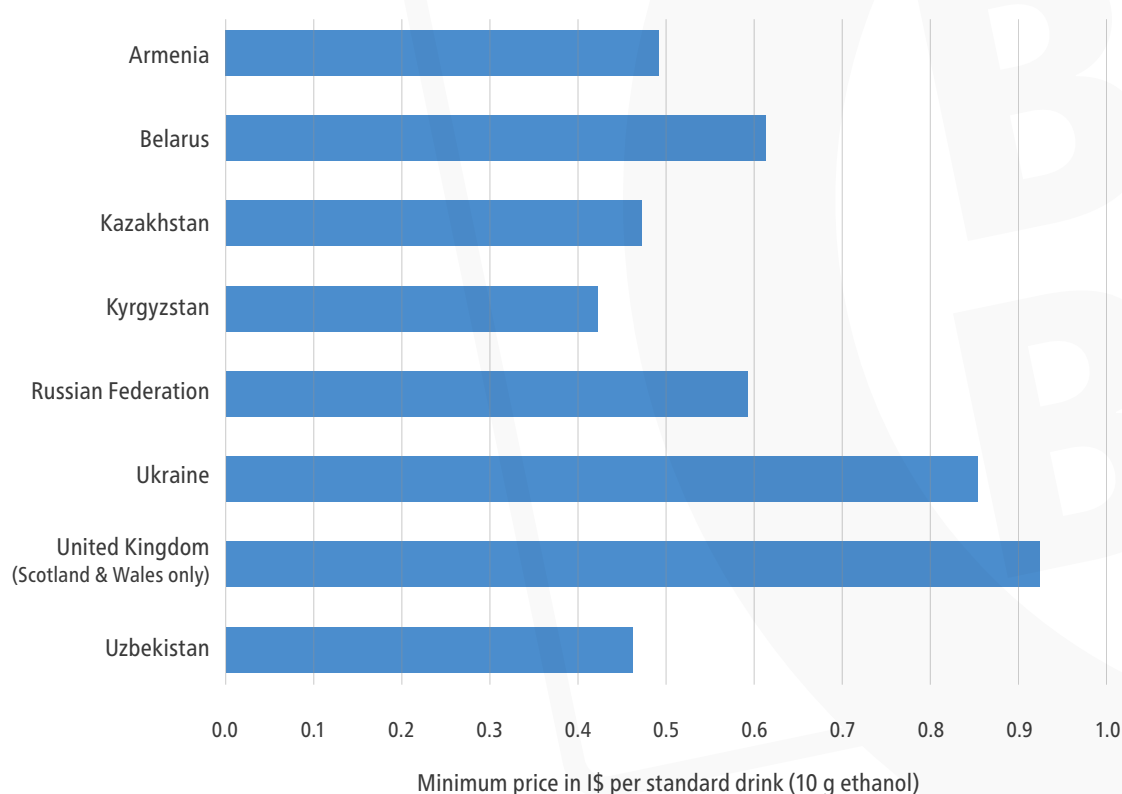
Box 3. The United Kingdom alcohol duty escalator

From 2008 to 2014 the United Kingdom increased alcohol duty on all products by 2% above inflation each year. This approach saw the affordability of alcohol fall for the first time since the early 1980s and led to duty rates rising over the period by 54% for wine, 37% for beer and 44% for spirits. In spite of the scale of these rises, they did not attract significant public attention, perhaps as the incremental rise over several years was less visible than a single, large, increase. Another contributory factor may have been the fact that, because the rises were announced in advance, they became the default position and did not have to be announced each year as a new duty increase. Over the same period, alcohol-specific death rates fell by 10%, against a longer-term rising trend. Since the abolition of the duty escalator in 2014, duty rates on beer and spirits have been frozen or cut almost every year, increasing the affordability of alcohol, and alcohol-specific death rates have risen by 7%. Whilst other economic factors have been in play over the period since 2008, including the global financial crash, it seems likely that the duty escalator played a role in reducing alcohol-related harm while it was in place.

5.4 Implementation of MUP

Some form of MUP legislation is currently in operation in eight European countries: Armenia, Belarus, Kazakhstan, Kyrgyzstan, the Russian Federation, Ukraine, United Kingdom (Scotland and Wales only) and Uzbekistan (such legislation has been passed, but not yet brought into force, in the Republic of Ireland). In many of these countries, MUP applies only to spirits, particularly vodka. The relative level of these MUPs is shown in Fig. 12, illustrating that the United Kingdom (Scotland and Wales) has the highest MUP for vodka, followed closely by Ukraine. Several eastern European countries have higher MUP thresholds for more “premium” spirits such as cognac. In the Russian Federation an MUP is also in place for sparkling wine, while Ukraine and Uzbekistan have MUPs in place for all wine. In Armenia the MUP applies to all bottled products, while Scotland and Wales are the only countries with an MUP that applies across all products, although the proposed policy in the Republic of Ireland is likewise due to apply across all products.

Fig. 12. MUPs for vodka in countries of the WHO European Region



5.5 Other price policies

The use of other alcohol pricing policies is relatively rare across the European Region. Only three countries – the United Kingdom (England and Wales), Uzbekistan and Switzerland – have in place a specific ban on sales of alcohol at below cost price, although the Swiss ban relates to spirits only. Several other countries have broader rules preventing the sale of many common products, including alcohol, at below cost. The lack of more widespread implementation of this approach perhaps reflects the fact that it may be difficult to establish what the “correct” cost price is.

Restrictions or bans on volume discounts are also not widely used across the Region. Under these policies, it is illegal to offer multiple products at cost below the total cost of the individual components (for example, a four-pack of beer cannot be sold for less than four times the cost of one can). Only Finland, Sweden, Switzerland (where it only applies to spirits) and Scotland have such restrictions in place. It is worth noting, however, that other countries with state-owned retail monopolies may have policies in place limiting or preventing volume discounts even if there is no legislation in place.

6. NEXT STEPS AND POLICY RECOMMENDATIONS

This report has highlighted the extent to which alcohol pricing policies vary hugely between countries and even within countries across different types of alcohol.

Looking at the existing alcohol taxation levels and structures, there is no clear argument from a health perspective to tax different products on different bases. As alcohol itself is the vector of harm, the most effective approach to taxation with a view to improving public health and reducing this harm is to tax the volume of alcohol directly through a fully specific system of taxation. Such a system may be most effective at improving health if it has higher rates of taxation for stronger products for two reasons: first, drinkers can consume a greater volume of alcohol more quickly through stronger products, and such products may therefore be more closely associated with heavy episodic drinking and intoxication (Mäkelä, Mustonen & Österberg, 2007; Korotayev et al., 2018; Rehm & Hasan, 2020); and second, production and distribution costs may be lower, at least in some cases, for stronger products, meaning that the same volume of alcohol can be sold more cheaply in higher ABV products even at the same rate of specific duty. Many countries in the WHO European Region have some aspects of specific taxation or tax that increases with strength, but this is not consistent across beverage types. A further argument for moving to a tax system based on the volume of alcohol in a product is that this is likely to have the biggest effect on the reduction of health inequalities.

One important factor restricting the feasibility of this approach throughout the European Region is the restrictions placed on EU Member States by the EU directives governing alcohol duties. By preventing alcohol taxation from being levied in proportion to alcohol content on wine and cider, and by restricting the use of banded duty rates, most notably on wine between 8.5% and 15% ABV, the EU substantially compromises the ability of Member States to implement alcohol taxation systems which can most effectively reduce harm. Seeking revision of these directives to allow fully specific taxation should be considered an important priority for public health. It should be noted, however, that even within these restrictions, many EU Member States currently have alcohol duty structures that are much less effective, from a health perspective, than they could be, with rates that vary widely between beverages and across the ABV spectrum (Angus, Holmes & Meier, 2019).

As far as the Eurasian Economic Union is concerned, it remains to be seen how taxation structures and excise rates will be harmonized across its five Member States (Armenia, Belarus, Kazakhstan, Kyrgyzstan and the Russian Federation) before 2024, the year when the Eurasian Economic Commission's agreement for joint excise tax rates is due to come into force. At present, levels of alcohol duty vary greatly across these five countries and are adjusted differently and with different frequency for inflation. Therefore, in the absence of harmonization, it is very likely that, over time, alcohol prices across these countries will



drift further apart, leading to issues of unrecorded cross-border alcohol sales. The current legislation makes provisions for reviewing and harmonizing excise rates on alcoholic beverages and tobacco products among all Member States every five years, starting from 2024 (Board of the Eurasian Economic Commission, 2018).

An important issue identified in the production of this report is the lack of transparency on current levels and rates of alcohol duties across the WHO European Region. We would strongly recommend that all Member States make this information readily available to the public. Ideally, this would be in a form which clearly states what alcoholic products are taxed, how those products are defined (including any exemptions), what the basis for taxation on each product is, and what the duty rate is (including the units the rate is given in). Where multiple rates of duty apply to the same product – for example, banded duty rates based on ABV – these should be given alongside the definitions that are used to determine which rate is applicable to any given product.

The evidence to support raising alcohol duties as an effective measure to reduce harm is overwhelming. In spite of this, while all countries in the WHO European Region levy some form of alcohol taxation, a significant proportion of countries do not levy any form of duty on wine. While there may be economic arguments for this approach, it is problematic from the perspective of health. Heavier drinkers across many countries have been observed to drink greater quantities of cheaper alcohol than moderate drinkers. Any tax system which has low or no duty on some products will find it hard to reduce consumption among heavy drinkers without increasing duty on those specific products.



The WHO European Action Plan to Reduce the Harmful Use of Alcohol 2012–20 suggested tax increases targeted at beverages preferred by young drinkers. While there are many specific problems associated with young peoples' drinking, drinking in adolescents and young adults has been in decline across many European countries for much of the past decade (Inchley et al., 2018). At the same time, drinking in older age groups has stayed constant, or even risen, in many countries, and the absolute scale of the health burden of alcohol is greater in older, rather than younger, age groups (GBD 2016 Alcohol Collaborators, 2018). Policy-makers should consider which age groups are likely to be most heavily affected by any alcohol policy and whether these are the groups that they are specifically seeking to target.

The evidence to support the introduction of MUP is very strong. The appeal of such a policy is that, by targeting the cheapest alcohol which is drunk disproportionately by heavier drinkers, it effectively targets price increases at those who are suffering the greatest levels of harm from their drinking, while having relatively limited impact on the prices faced by more moderate drinkers. MUP is likely to be most effective where it is eliminating the cheapest alcohol from the market, so partial MUP approaches that do not cover all alcohol sold are likely to be less effective, particularly where they exclude products that are widely available or taxed at low rates. MUP should also not be viewed only as a policy in isolation –

combining MUP with increases in duty rates may be more effective than either individually and ensures that a greater proportion of the increase in sales is returned to the exchequer (Angus & Ally, 2015). Both MUP and duty increases may also be more effective when combined with other, complementary, policies such as increased levels of activity to counter illicit alcohol or greater funding for specialist alcohol treatment services.

An additional policy concern is the failure to link either alcohol duty rates or MUP levels to inflation, thus eroding the effective value of pricing policies and reducing their effectiveness over time. By contrast, a duty escalator approach, which reduces the affordability of alcohol over time by increasing taxes incrementally above inflation year on year, is likely to be effective and may be more politically acceptable than larger one-off tax increases.

The presence of high levels of unrecorded consumption in a country is an important issue when considering the introduction of alcohol pricing policies. While this may reduce the effectiveness of some pricing policies, there is little evidence in practice of substantial increases in unrecorded consumption when alcohol duties increase (Sornpaisarn et al., 2017), and these concerns should not therefore be overstated. However, the effectiveness of pricing policies in countries with significant unrecorded consumption may be improved through the introduction of complementary policies that seek to restrict unrecorded consumption itself, such as increased levels of registration and licensing of alcohol producers and retailers, or stronger enforcement of existing policies in these areas, such as penalties for illegal production or smuggling. One example of a successful intervention against unrecorded alcohol is the Russian EGALS system, which uses QR (Quick Response) codes on alcohol containers to monitor both production and excise duty, allowing both consumers and enforcement agencies to quickly and simply trace the origin of any product (Neufeld & Rehm, 2018; WHO, 2019a).

The setting of alcohol taxes and other pricing policies is a complex process which must balance many, often competing, factors. The protection of health should be a key consideration in this process, particularly when one also considers the burden which alcohol-related ill health places on health-care services and the economy more broadly. The evidence to support the effectiveness of pricing policies as a measure to reduce alcohol-related harm is extremely robust, and they should be considered a key tool for any policy-maker who wishes to reduce this burden.

Box 4. Key policy recommendations

- Alcohol taxation should be levied on a specific basis and indexed to inflation to ensure prices do not fall in real terms over time.
- Alcohol duty rates should be broadly similar across all products, with the exception of high-strength alcohol and products with low production costs.
- MUP is an effective approach to reducing alcohol-related harm which should be considered alongside taxation policies.
- The implementation of policies to address unrecorded consumption alongside pricing policies may increase their effectiveness or, in some cases, be pivotal to their success.



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