Action for health taxes from policy development to implementation

Making the case for alcohol taxes

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Introduction

1.1. Background

Introduction

1.1. Background

Alcohol use is a leading cause of preventable death and disability worldwide. It is one of the world's largest risk factors for death and disability,[1] and the leading risk in middle income countries.[2] In 2019, alcohol resulted in 2.6 million deaths (4.7% of all deaths) worldwide.[3] In per capita terms, the amount of alcohol consumed globally increased from 2000 to 2010 and then slightly declined from 2010 to 2019.[3] However, in absolute terms, the total amount of alcohol consumed increased partly due to population growth.[4]

In addition to the massive impact of alcohol on unintended injuries, with the resulting health and social harms, the prevention of many other non-communicable diseases (NCDs), particularly strokes, liver disease, and cancers, can be significantly enhanced by lowering or preventing alcohol consumption and abuse. As with taxes on other unhealthy products, alcohol taxes create a price differential compared with substitute products not containing alcohol, meaning that products with alcohol become less affordable and are thus consumed less, leading to improved health outcomes.

Alcohol taxes, like all health taxes, are considered to be a 'triple-win' for governments in that they can lead to 1) improved population health, 2) increased government revenues, and 3) reduce health inequality. [5,6] Reducing alcohol consumption through the use of alcohol taxation is identified by the World Health Organization as a "best-buy" in preventing and controlling the burden of NCDs.[7] Furthermore, of all the health taxes now in common use, alcohol probably has the most untapped potential: despite being used as a fiscal tool for centuries and being implemented in over 86% of countries worldwide, alcohol taxes have yet to be utilized to achieve their fullest impact for population health, revenue generation and economic growth.[8]

This document supports policymakers and other stakeholders to implement alcohol taxes more effectively, with a focus on the political economy of alcohol taxation and on how policy processes are shaped at a national level. It is the third in a series of resources that provide a practical overview of approaches to support national stakeholders to develop, strengthen, and implement fiscal policies for health.

It provides a step-by-step approach to demonstrate how the Health Tax Action Framework can be applied to alcohol taxes.

This document focuses on excise taxes levied on alcohol. Governments may apply a variety of taxes on alcohol, including customs duties, value-added or general sales taxes, and excise taxes. Of these, excise taxes are the most important for promoting health because they can be applied in a targeted manner to raise the cost of alcohol products relative to other goods. Increasing excise taxes and prices on alcohol products is one of the key recommendations of the *WHO Global Action Plan for the Prevention and Control of Noncommunicable Diseases*.

2

The case for alcohol taxes

The case for alcohol taxes

2.1. The current situation

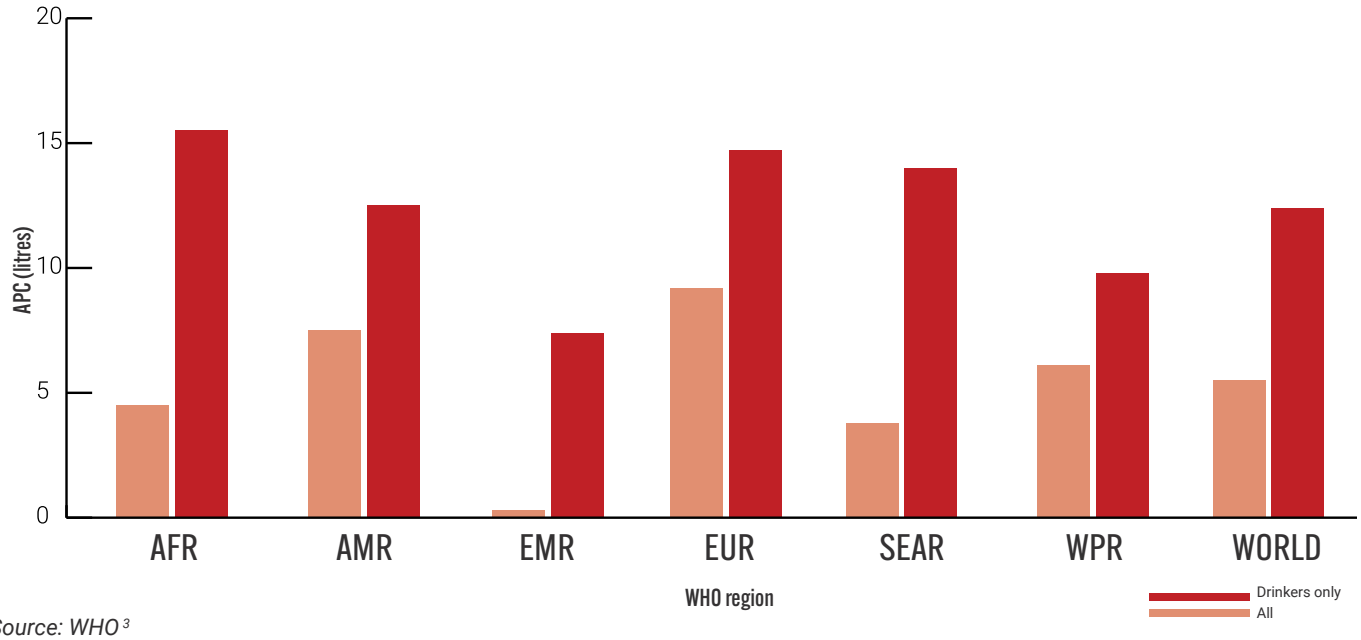
2.1.1. Patterns of alcohol consumption

In 2019 an estimated 2.3 billion people globally were current drinkers (i.e. individuals having consumed a drink containing alcohol in the last 12 months).[3] However, alcohol consumption patterns vary worldwide (Figure 1). Alcohol is mostly consumed in the form of spirits (44.8%), followed by beer (34.3%) and wine (11.7%).[2] To account for differences in the alcohol content of these beverages, alcohol use is measured and reported in liters of pure alcohol per year. In general, the highest alcohol per capita consumption (APC) among all adults is observed in the WHO European region. The highest APC among those who report drinking was in Africa and Eastern Mediterranean regions.[2]

Within countries, there are often groups with comparatively high levels of alcohol consumption. For instance, in the United States National Epidemiologic Survey on Alcohol and Related Conditions and the National Survey on Drug Use and Health between 2001 and 2005, there was a higher prevalence of alcohol consumption amongst white respondents, but greater levels of risky alcohol use and dependence in Black and Indigenous respondents.[9] This translates to a greater burden of alcohol related harm in Black and Indigenous populations than the general population.[9,10] Young people (aged 18–25 years) were also found to demonstrate risky patterns of alcohol use and unintentional injury caused by drinking.[10] Moreover, consumption is rising in developing countries, which are least able to cope with the public health and social problems that alcohol consumption causes.[11]

Targeting alcohol consumption through taxation may be especially important in regions with high overall consumption (such as Eastern Europe),[12] settings with high sub-group alcohol consumption, and in contexts with high tobacco consumption.[13–15] Reducing alcohol consumption through taxation should be feasible in most LMICs, where there are currently low tax burdens on alcoholic beverages.[16] Furthermore, considering that the harms from alcohol consumption are generally higher among more disadvantaged socioeconomic groups, reducing alcohol consumption should be a priority to attenuate health inequalities.

Figure 1. **Alcohol per capita consumption (APC – Liters of pure alcohol in a year) by WHO region and the World (2019)**



Source: WHO[3]

2.1.2. Burden of disease

Alcohol is associated with over 200 health conditions, including NCDs, infectious diseases, injuries, and maternal and child health. It is the world's seventh largest risk factor for death and disability,[1] and the leading cause in middle income countries.[2] In 2019, alcohol resulted in 2.6 million deaths (4.7% of all deaths) worldwide.[3] Alcohol consumption was predicted to lead to an additional 37 million cases of injuries, 24 million cases of cardiovascular disease, 10 million cases of cancer, and 5 million cases of cirrhosis based on simulations for the period 2020–2050 in 52 countries.[17]

Alcohol consumption is also associated with substantial costs that are not reflected in the market price of the products (negative externalities) including crime, violence, health system burden and loss of economic productivity.[18] There are both immediate and long-term impacts of alcohol consumption; consuming high levels of alcohol leads to acute alcohol intoxication, which may contribute to interpersonal violence, accidents, injuries, and other forms of antisocial behavior. Longer-term, continued alcohol consumption and intoxication leads to alcohol dependence, or alcoholism, the inability for an individual to control the amount or frequency of alcohol consumption, which like any physical dependency, may contribute to the same set of outcomes mentioned before: crime, violence, accidents, and injuries.[19,20] These two factors combine with the physiological impact of continued alcohol consumption and often become interrelated and reinforcing, leading to a cluster of health and social harms.

2.2. Understanding alcohol

To more effectively design and implement alcohol taxes, a useful starting point is to understand alcohol as a product. Alcohol is not an 'ordinary commodity'.[20] It is a socially and economically embedded product that has substantial cultural and societal value attributed to it, despite the known harms associated with its consumption. On the one hand, it is recognized that alcohol use is a leading cause of preventable death and disability, that it contributes to health and social inequality, and that harmful use can be a drain on the economy through factors such as days missed at work or lower productivity due to alcohol consumption.[21] On the other hand, alcohol is often seen as central to the agricultural, hospitality and entertainment sectors, and creates and supports an array of jobs and local economies. Alcoholic beverages accounted for global revenues of more than US$ 1.5 trillion in 2019.[22] Moreover, the alcohol industry has an increasingly consolidated global presence, investing in mature and comprehensive marketing and advocacy strategies. [23]

Heterogeneity in the composition and categorization of alcoholic beverages (Table 1) makes it challenging to develop a standardized category for tax purposes (see Tax Design below). Moreover, national and subnational alcohol consumption behaviors can vary substantially (see Patterns of Alcohol Consumption, above), and so gathering local information on the types of alcoholic beverages consumed and their characteristics is important. For those interested in designing and implementing effective alcohol tax policy it is important to understand the landscape of alcohol production, sales, and consumption at the national level.

Table 1. **Common alcoholic beverage types and typical alcohol by volume (ABV) ranges**

Form	Category of alcoholic drink	Typical ABV range	Common types
Fermented	Beer	2-8%	Lager, ale, malt liquors
	Wine	5-25%	Unfortified (White, Red, Sparkling),
	Hard Cider	4.5-12%	Apple cider, Perry (Pear) cider
	Mead	8-18%	Honey wine
	Sake	15-17%	Japanese rice wine
	No/low alcohol	0-1.2%	No/low alcohol beers and spritzers

Form	Category of alcoholic drink	Typical ABV range	Common types
Distilled	Liquors and Spirits	35-90%	Gin, Brandy, Whiskey, Rum, Tequila, Vodka, Absinthe, Schnaps, Everclear
	Liqueurs	20-45%	Pastis, Sambuca, Campari, Amaretto, Jägermeister
Other	Alcopops	4-7%	Malt beverages plus fruit juice/flavorings, Wine plus fruit juice/flavorings, Spirits + fruit juice/flavorings
	"Moonshine"	40-60%	Locally produced distilled alcohol beverages (unregulated)

ABV refers to the percentage of a drink that is pure alcohol
Source: Alcohol change UK (ND), Nutrients Review (ND)

2.2.2. Unrecorded alcohol

Unrecorded alcohol refers to alcohol that is not accounted for in official statistics and that is usually produced, distributed, and sold outside the formal sector under government control.[24] Unrecorded alcohol can therefore be legal or illegal and can take several forms, such as illicit trade, home and small-scale artisanal production, consumption of surrogate alcohol, or cross-border alcohol shopping. In 2019, WHO estimated that 21% of all alcohol consumed worldwide was in the form of unrecorded alcohol, with a higher prevalence in the South-East Asian and Eastern Mediterranean regions.[25]

A principal concern is that increasing alcohol taxes will lead to increased consumption and production of unrecorded alcohol. Alcohol consumption has been found to decrease as a result of higher alcohol taxes.[26] In addition, tax revenue losses from illicit alcohol trade can be significant. For example, in the United Kingdom an estimated 8% of alcohol tax revenue (equivalent to £1.2 billion) was estimated to have been lost each year.[27]

While it is important to address unrecorded alcohol consumption, as part of multisectoral alcohol policies including taxation,[28] evidence seems to show little impact on unrecorded alcohol production and consumption from increases in alcohol taxes.[29] The alcohol industry consistently overstates these concerns in order to lobby against effective policy actions, particularly on alcohol tax and price policies.[30] Nevertheless, simplifying alcohol excise tax structures and increasing the share of alcoholic beverages that are subject to taxes can counter incentives to increase unrecorded alcohol production, particularly as

a result of tax avoidance.[31,32] Tax stamps, track-and-trace systems, license systems and increased enforcement can also be used to reduce unrecorded consumption, but these may require new management and monitoring systems to be implemented and to function effectively.[33,34]

2.3. Why tax alcohol?

Alcohol taxation has the potential to **1)** generate large health gains, **2)** raise public revenue, and **3)** reduce inequalities, while also being the most cost-effective way to reduce alcohol consumption.[35] Alcoholic beverages are an attractive target for taxation because of the health risks associated with their consumption, and their lack of essential nutritional value.

The health and economic burden

Alcohol consumption represents a large health and economic burden for society. Alcohol consumption yields a net negative impact on the economy through its negative impacts on human health. The health repercussions of alcohol consumption, including alcohol dependence, contribute to productivity losses, unemployment, reductions in the size of the labor market, and premature death and disability. Economic losses in high-income settings were found to represent as much as 1.5% to 2.6% of national yearly GDP.[36] In OECD countries, employment and productivity losses equal 32.7 million full-time workers per year and US$ PPP 595 billion per year.[17]

Taxation reduces consumption

Alcohol taxes reduce alcohol consumption resulting in improved health. Studies have shown that alcohol taxes have been effective at reducing alcohol consumption, through their increase in price.[37,38]

As the price of alcohol increases, its consumption decreases. It is generally thought that at least a proportional decrease in consumption is to be expected for any increase in price among all consumers and across all product types (See Box 1).

Increasing the price of alcohol through taxation can help halt progression to heavy drinking, reduce underage drinking, and shape consumer perceptions and preferences.[39] Studies have shown that alcohol taxes reduce alcohol consumption, drinking and driving, lower the frequency of diseases, injuries and deaths related to alcohol use and abuse, and contribute to reducing suicides, sexually transmitted diseases, and violence related to alcohol consumption.[37,40,41] Further studies found reductions in the prevalence of lifetime drinking and delayed alcohol use initiation,[42,43] and reductions in social inequalities due to alcohol-related harms.[20, 44–49]

Box 1.
Alcohol price elasticity of demand

Most studies indicate negative price elasticities of demand for alcohol (the proportional decrease in consumption in response to an increase in price). Elder et al.[37] estimated median elasticities to be -0.79 for spirits, -0.5 for beer and -0.64 for wine. Differences in price elasticities may differ according to income. For instance, Chaloupka et al.[50] report values between -0.51 and -0.77 in high-income countries, and -0.64 in low- and middle-income countries. Moreover, responses to price differ according to drinking status, with heavier drinkers being less price responsive than moderate or light drinkers.[41,51] Moreover, while heavier drinkers appear less responsive in terms of consumption, they are more likely to switch to cheaper alcohol products as prices increase. This highlights the importance of alcohol content-based specific excise taxes and tax floors (See Tax Design below).

Cost-effectiveness

Alcohol taxation is a highly cost-effective way to decrease alcohol consumption, meaning it has a relatively large effect on consumption for the resources required to implement it,[31] and as such is considered a “best buy” for the prevention and control of NCDs.[7] It has been estimated that implementing legislation to introduce or increase alcohol taxes has a low cost (<I$ 0.10 per capita) and a large impact on alcohol consumption and improved health outcomes.[52] The WHO SAFER initiative highlights alcohol taxes and pricing policies as one of the five high-impact strategies for reducing alcohol-related harms.[53]

Supply-side effects

Changes in alcohol tax design can lead to changes in the behavior of producers, distributors and retailers of alcoholic beverages. These changes are known as 'supply-side effects'. Supply-side effects include reformulating drinks to contain less alcohol, changing the sizes of containers (usually to smaller units) but also shifting production towards particular or new products whose consumption would be thought to be less affected by the changes in the alcohol tax.

Raising government revenue

Alcoholic beverages represent an enormous potential source of tax revenue.[22] A global study estimated that a one-time tax increase resulting in a 20% price change in alcohol products globally would generate over US$ 9.4 trillion over 50 years, while a one-time tax increase resulting in a 50% price change would generate US$ 17.8 trillion over 50 years.[54] Country-specific analyses find similar results. In South Africa, an increase in excise taxes on beer by 40% could lead to increased annual revenues of more than ZAR 14 billion (approximately US$ 1 billion, or 0.3% of South Africa's GDP).[55] A modeling study that focused on raising taxes on beer and rum in order to reach target health impacts (reducing national alcohol consumption) found that, for 15 Caribbean Community (CARICOM) countries, an increase in taxes to obtain a 5% reduction in alcohol consumption would yield per-capita tax revenues of US$ 4.91, larger than the cost delivering a package of essential noncommunicable disease interventions.[56]

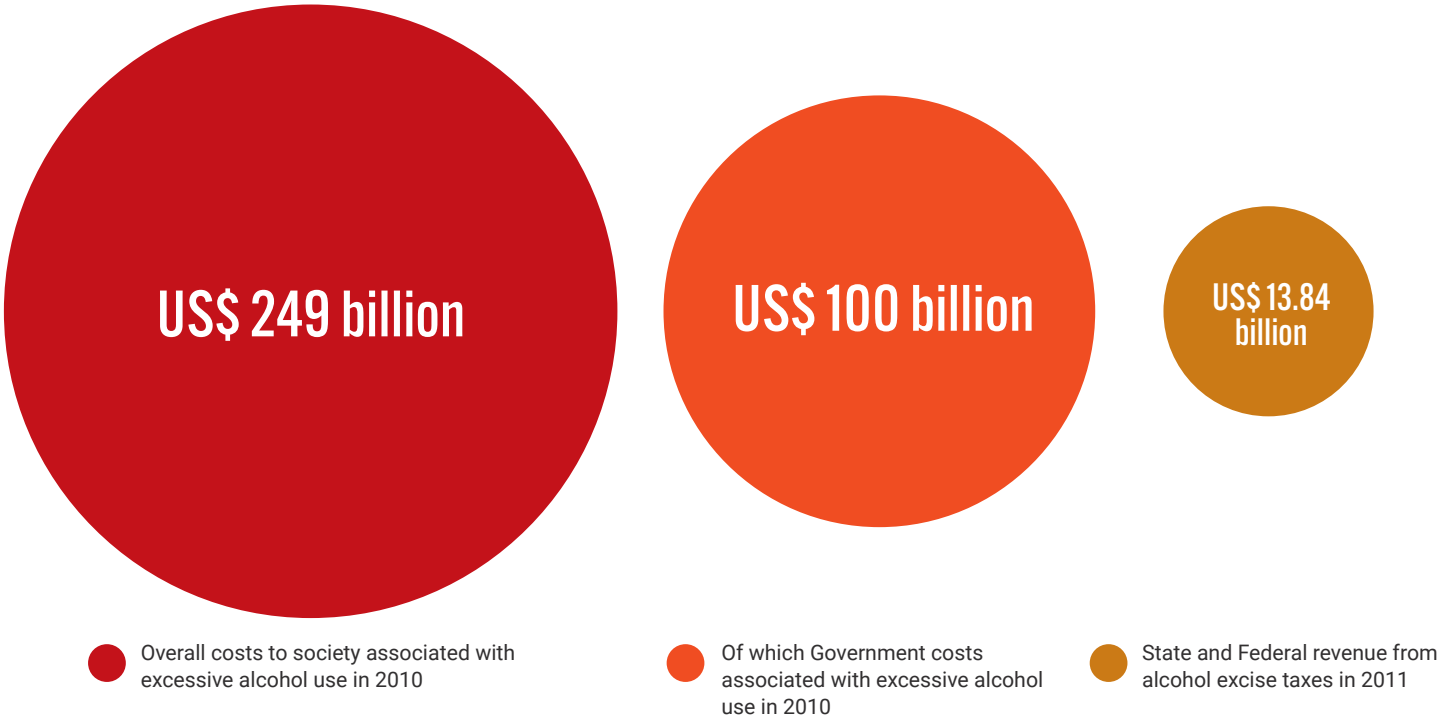
Reducing healthcare spending

Improvements in health from higher alcohol taxes would reduce future healthcare spending for both governments and households. It costs over I$ 138 billion per year to treat alcohol-associated diseases; in OECD countries this equates to I$ 61 per capita annually – around 2.4% of total health expenditure in those countries.[17] This burden is increasing in developing countries, which are those least able to cope with the public health and social problems that alcohol consumption causes.[11] Given the expected rise in the global NCD-related burden of disease, opportunities to reduce future healthcare spending will become increasingly important.

Correct negative externalities and internalities

Alcohol consumption has both a social cost (e.g. healthcare spending) and an individual cost (e.g. ill health) to the individual, their family and community as well as to the government, which are not is reflected in the price a consumer pays for an alcoholic beverage (Figure 2). Other negative externalities, including crime and violence, have often been used to justify governmental intervention.[57] By increasing the price of alcohol, alcohol taxes can be used to offset not only these social costs (externalities) but also unforeseen individual costs (called 'internalities'). Even when consumers are aware of potential negative health effects associated with alcohol consumption, they may overly discount such costs, and they are often exposed to aggressive product marketing highlighting the supposed benefits of alcohol consumption while failing to provide information about harms.[38]

Figure 2. The economic potential of alcohol taxes: tax revenue and costs to society. Empirical evidence from the USA



Source: 58, 59

Improved equity

The burden of alcohol consumption and harms is not shared equally within and between countries. An important concept to understand is the so-called alcohol-harm paradox, where individuals in deprived groups experience higher rates of harm related to alcohol consumption

compared with those in advantaged groups despite drinking similar or lower levels of alcohol, due to the clustering of other risk factors in such groups.[45,48,60] Alcohol expenditure can also exacerbate poverty in low-income households by taking up a significant proportion of income earned.[61] There are also notable differences by gender. Men are more often current and heavier drinkers than women and as such have a higher prevalence of NCDs,[62] although among heavy drinkers women develop more medical problems. Alcohol consumption is also associated with domestic abuse and sexual assault,[63] with a disproportionate impact on women. Certain regions, notably Eastern Europe, have significantly higher shares of the population who consume alcohol or who are heavy drinkers and have notably higher burdens of NCDs than other regions of comparable income or demographics.[64] Alcohol taxation is likely to reduce these inequalities.

"Alcohol taxation and pricing policies have several public health, economic and social benefits as they have the capacity to:
1) generate tax revenue,
2) reduce alcohol consumption and associated harms (covering both externalities and internalities) among various groups, including young people and heavy drinkers,
3) prevent the initiation of drinking, which is an important preventive strategy in low-and middle-income countries that have a high prevalence of lifetime abstainers."

WHO Resource Tool on Alcohol Taxation and Pricing Policies

Source: 66

3

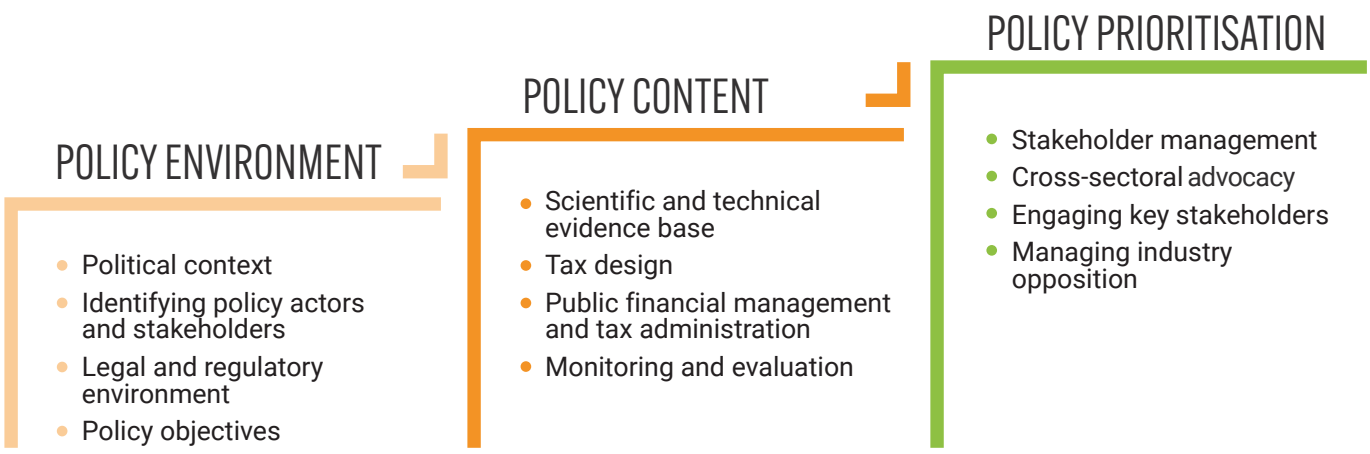
Alcohol taxes and the health taxes action framework

Alcohol taxes and the health taxes action framework

In "Action for Health Taxes: From Policy Development to Implementation", the Health Tax Action Framework was introduced to guide users of the document through the policy process and expand on the factors that support the success of health taxes (Figure 3).

These steps can be grouped into three main areas: understanding the broader policy environment, developing robust policy content, and advocating to ensure the policy is prioritized. In the following sections, the Health Taxes Action Framework will be applied to alcohol taxation.

Figure 3. Health Tax Action Framework



Source: Authors

4

The policy environment

The policy environment

4.1. Policy context

Developing a clear understanding of the policy context is a key part of efforts to introduce or amend alcohol taxation. In Toolbox 1 in Action for Health Taxes: From Policy Development to Implementation, the Multiple Streams Approach (MSA) was introduced to help explain why certain policies come to be seen as an idea "whose time has come". This approach has been championed by alcohol tax researchers and advocates, as it demonstrates how policy change is influenced by the confluence of politics, policy, and prioritization streams. A number of case studies have brought together a rich set of information on the policy processes around the introduction (or the failed introduction) of alcohol taxes and provide models for understanding the political economy around alcohol taxation.[65,66]

4.1.1. Trade and regional issues

Under the global move towards trade liberalization prevailing over the past decades, tariffs and other 'price-distorting' measures have been substantially reduced overall on alcohol as well as on other types of products.[11,67] However, there is support under international law for governments to regulate to protect public health, including through the introduction of taxes for the protection of the health of their populations.

4.2. Policy actors and stakeholders

The introduction or modification of alcohol taxation requires leadership from the Ministry of Finance or an equivalent level of government, as well as input from other sectors including those related to commerce and trade, education, agriculture, and labor. Civil society organizations and academic research groups can also provide key support. Stakeholder analyses, as introduced in Toolbox 2 in Action for Health Taxes: From Policy Development to Implementation, can identify the relevant governmental and non-governmental actors and illustrate their relative influence and power.

In most settings, the Ministry of Health is likely to be a strong advocate of alcohol taxation. However, it is Ministries of Finance that often determine the success of alcohol taxation. When Ministries of Finance perceive alcohol taxes as aligned with their goals (such as addressing budget deficits), they can be a powerful advocate for policy implementation. However, if industry arguments about job losses and

economic productivity risks gain traction, support may waiver. Alcohol tax advocates should be prepared to address these threats and communicate with Ministry of Finance officials to pre-empt such fears.

Ministries of Agriculture may also be important stakeholders, with support likely to vary based on local agricultural production and Ministry priorities. For example, in settings in which sugar or potatoes are a key crop, an alcohol tax may be viewed as a threat to small farmers – an argument which is often amplified by industry stakeholders.[68] Other ministries may also play important roles and should be taken into account in comprehensive stakeholder analyses.

Outside of government, civil society organizations and academic centers can be essential in mobilizing public support for alcohol taxation, and the formation of strong pro-tax coalitions strengthen policy arguments.[69] CSOs with a focus on NCD prevention (rather than treatment only) are likely to be strategic advocates.

Finally, the alcohol industry itself is a very powerful group (including manufacturers, distributors, and members of the hospitality sector), but has private interests that conflict with the public interest.

Experiences in a number of countries have highlighted that the alcohol industry will adopt tactics similar to those used by the tobacco industry in an effort to defeat or dilute proposed alcohol tax policies.[70] Some of these strategies include presenting misleading arguments and attempting to sway the opinions of the public and policymakers, blocking attempts to promote campaigns.[23,71,72] These are outlined further below.

4.3. Legal and regulatory analysis

4.3.1. Domestic legal framework

A useful starting point in alcohol tax policy is first to review the domestic legal environment and identify existing taxes and other price policies applicable to alcohol. It is important to understand how alcohol tax rates have previously been set in the country (e.g. through enactment of legislation, amendment of excise tax schedules, or by executive order). Lessons may be drawn from previous domestic experiences in implementing alcohol taxes or other taxes with a public health objective (e.g. tobacco taxes), including identification of which approaches might be most effective or which to avoid.

The legal infrastructure for the regulation of alcohol should also be reviewed, including the regulation of the marketing, sale or consumption of alcohol and alcohol-product labeling and related monitoring

mechanisms, which are necessary to support the monitoring and enforcement of alcohol taxation and may need to be strengthened; for example, alcohol-content-based taxes may require additional monitoring. Developing policy or policy amendments informed by an assessment of the legal environment will increase the likelihood of successfully producing policy change, as well as decreasing the threat of successful legal action by industry.[73]

The National Constitution generally provides the government with broad taxation powers and the right and duty to protect public health. It may also guarantee the right to health as a fundamental right of individuals, supporting the right of governments to implement an alcohol tax with a public health objective. However, it is important to be aware of any limitations on government powers of taxation and of how the national courts have balanced the right to health and government's duty to protect public health with other fundamental rights, for example the right to engage in trade or to run a business.

It is also important to assess the government's specific authority (legislative mandate) to levy an alcohol excise tax. In most jurisdictions excise taxes are applied under the authority of a specific law. As above, any existing excise tax laws should be reviewed, and the scope, mechanisms and processes for amending such laws must be clarified.

4.3.2. Regional and international legal framework

It is also important to understand a government's obligations under international law applicable to alcohol taxes, particularly international trade agreements, regional trade agreements or customs unions to which the state may be party and International investment agreements, whether standalone or in investment chapters of free trade agreements.

Under a global move towards trade liberalization over the last decades, tariffs and other "price-distorting" measures have been substantially reduced overall (e.g. both on alcohol and on other types of products).[11] This is because governments are generally obliged to set upper limits, or to eliminate tariffs on imported goods including on alcoholic beverages.[74] There may also be limitations, or harmonization requirements, on taxes and pricing measures under regional customs unions. Opponents of alcohol taxation will often point to the risk of international legal challenges to taxes on imported alcoholic beverages[75] or threaten such challenges to deter governments from implementing alcohol taxes.

The most relevant obligation is an obligation to ensure that taxes do not discriminate, such as by favoring domestic over imported products. Discrimination can arise through the form or effect of a tax, and taxes should be applied equally to imported and domestic products.

There are a number of cases in which alcohol taxes with differentiated tax rates for different product categories have been found discriminatory under Article III of the General Agreement on Tariffs and Trade (GATT). None of those taxes, however, was designed to pursue an explicit health objective. If such a tax were inadvertently discriminatory in its effect, trade and investment agreements generally include exceptions allowing governments to protect public health (e.g. Article XX(b) of the GATT), applied equally to imported and locally manufactured products of a similar nature) and distinctions in tax treatment between product categories should be justifiable by reference to the government's health objective. Taxes should be not more trade restrictive than necessary to achieve a legitimate public health objective, and the government is in a stronger position if they are applied as part of a comprehensive framework of measures to reduce harmful use of alcohol and supported by evidence of effectiveness. It is also important to ensure that any procedural requirements such as notification of new or amended taxes and public comment periods under trade or customs agreements are complied with.

4.3.3. Possible grounds for legal challenge

While there are limits on the extent to which it is possible to generalize about the legal issues associated with alcohol tax in different jurisdictions, it is also possible to anticipate the types of legal challenges alcohol taxes may face. See Table 8 in *Action for Health Taxes: From Policy Development to Implementation* setting out some possible grounds for threatened or actual legal challenges under international and domestic law with their suggested evidence-based responses.

4.4. Policy objectives and framing the tax

The extent to which alcohol taxation has been framed for health reasons varies widely. Clear regulatory objectives identifying a domestic public health issue(s) based on evidence (local and international) and supporting a tax on alcohol products as an effective and cost effective measure in response to the identified issue(s) should strengthen the government position against potential legal challenges. However, in some settings, taxes have been successfully introduced as a way to finance important social programs.[76] Despite these differences in framing, behind the scenes, the need for revenue - either to make up for a budget shortfall or to fund new programs - has consistently been part of the context for the creation of a policy window around alcohol taxation.

Another important factor has been election cycles, with newly elected politicians more likely to enact taxes and politicians facing imminent elections less likely to do so.[77]

Alcohol taxes will almost certainly face strong industry opposition, and successful implementation depends on countering industry efforts. Industry opposition and lobbying strategies in the policy environment will be outlined in more detail in Managing Industry Opposition below.

5

Policy content

Policy content

5.1. Evidence base

5.1.1. Alcohol consumption patterns

Understanding baseline alcohol consumption patterns will help tax design and subsequent advocacy efforts. Given the variation in consumption between and within countries, it is important to identify country-specific analyses to provide the strongest evidence for policymaking.

Targeting alcohol consumption through taxation will be especially important in settings with high overall consumption of alcohol, such as Eastern Europe, settings in which sub-group consumption is high, and settings in which alcohol consumption is rising, such as South-East Asia and the Western Pacific.[4]

5.1.2. Mechanisms of impact

Alcohol taxes will lead to changes in health outcomes in several ways:

- **Increasing the price of alcoholic beverages and dampening demand.** Alcohol taxes have been consistently shown to increase the price of alcoholic beverages and these price increases have been associated with decreases in sales of alcoholic beverages.[37] Different tax designs, baseline consumption patterns, and market dynamics can impact the extent to which taxes are passed on to consumers (the 'pass-through rate', see Box 2 below) and thus impact product price.

  On average, an increase in alcohol taxes has been associated with a decrease in alcohol purchases, but in some countries, alcohol consumption, particularly for certain subgroups, may be less price-responsive.[26, 41]

  Any tax-induced price changes also should be interpreted in the context of changing affordability. As income increases, alcoholic beverages become relatively more affordable, particularly if prices remain stable. Affordability measures use an estimate of national income (e.g. gross national income per capita, gross domestic product per capita) to estimate the proportion of income needed to purchase a standardized amount of alcohol throughout the year (e.g. 10 liters of beer).

- **Changing public perceptions of alcoholic beverages.**
  Alcohol taxes can signal to consumers that there are clear health risks with the consumption of alcohol. Signaling effects may be strongest in settings in which 1) there is a substantial health-related public debate around an alcohol tax, 2) citizens vote on changes to alcohol taxation, and 3) changes to alcohol taxes are presented with an explicit health framing. In addition to conveying information to consumers, alcohol taxes may contribute to shifting social norms around alcohol consumption.

- **Incentivising a range of industry reactions.**
  The ways in which industry responds to the introduction of a tax (aside from price changes) may influence overall alcohol consumption. Some tax designs (for example, tiered taxes and taxes based on alcohol content in particular) create an incentive for alcoholic beverage manufacturers to reduce the amount of tax-liable alcohol in their products, or to change product sizes.

  Regardless of tax design, alcoholic beverage manufacturers and their allies (such as the hospitality sector) may also respond to an alcohol tax by changing or tailoring marketing efforts to counter any messages about the risk associated with these products.[71,73] They may also introduce new products, for example at a lower price point, to counteract the price impact of changes to alcohol taxes. Finally, multinational alcoholic beverage companies may respond to changes in alcohol taxes by focusing on targeting other countries and creating additional demand in other settings.[78]

  Understanding and anticipating some of these responses may enable policymakers to design changes to alcohol taxes in ways which maximize their effectiveness, and also to consider additional policy options (such as marketing restrictions, package warnings), which may work synergistically alongside alcohol taxes.

Box 2.
Tax pass-through

Tax pass-through is thought of as the impact on retail prices increase when taxes are increased. There are many determinants of the prices consumers face, and an increase in alcohol taxes may not necessarily result in an equivalent increase in the price faced by consumers. For instance, if a new tax of 50% is introduced on beer, breweries and distributors may choose to decrease their share of profit margin, resulting in a smaller percent increase in the final price, in order to prevent consumers from substituting to other goods.

Evidence from OECD countries and South Africa show that price increases in alcoholic beverages are relatively higher or equal than tax increases.[79,80] However, tax pass-through rates can differ depending on the type of alcoholic beverage[81] and the beverages' price band, with industry 'over-shifting' for more expensive beverages, and the opposite, smaller price increases relative to tax increases, or 'under-shifting,' for less expensive beverages.[82] This can have implications for the kind, or intensity, of tax reforms to pursue, for instance pursuing tax measures that increase lower priced alcoholic beverages more than higher priced ones, to compensate for under-shifting.[8] The level of competition in the alcohol market has also been found to impact levels of pass-through, with lower levels found in areas with higher levels of competition.[83]

5.1.3. Anticipated impact

From a health perspective, the main considerations for tax design would be the expected reduction in alcohol consumption and associated health problems, and prevention of drinking initiation, particularly in countries with a high prevalence of lifetime abstinence.[84] From a financial standpoint, considerations include the expected magnitude of revenue to be collected, and the support mechanisms and investments needed to identify the tax base and collect tax revenues.[84]

5.1.4. Existing policies

Understanding existing alcohol tax policy enables the identification of ways to strengthen existing taxes as well as opportunities for introducing new taxes. If alcohol taxes are not currently implemented, policymakers can look for information about other health taxes (such as tobacco taxes). In most countries, there is some sort of alcohol taxation in place.

However, in many cases the tax design could be improved to strengthen their health impact by amending their structure, tax rate, or the policy coherence around which products are taxed.

There are a variety of tax types (e.g. excise taxes, value-added taxes, import taxes, etc.) and designs, some of which perform better from a health perspective than others. Tax structures can vary substantially between countries.

It is helpful to explicitly identify the type of alcohol taxes that currently exist, including whether they are applied differentially across different types of alcohol products (distilled vs non-distilled beverages), whether they are comprehensively applied on all alcoholic products (e.g. on artisanal production, whether a uniform or tiered rate is used). Furthermore, it is useful to map what the current tax base and rate(s) are, and if possible, identify the amount of the annual revenue being raised.

5.2. Tax design

The technical aspects of alcohol tax policy and administration have been covered in depth in the recently published WHO technical manual on alcohol tax policy and administration[131] and the WHO Resource Tool on Alcohol Taxation and Price Policies;[84] this should be referenced by national policymakers where possible. Understanding the technical nuances in tax design along with advantages and disadvantages may facilitate more effective engagement with finance authorities during the decision-making process of alcohol tax design. Of note, alcohol pricing policies are not a substitute for effective alcohol taxes and should rather be viewed as a complement to tax policy.

Tax policies can be designed to incentivize changes in the consumption trends of alcoholic beverages. These policies can differ significantly from setting to setting, including the type of tax system in place and at what level rates are set. Deciding how to tax alcoholic beverage products must involve consideration of the interplay of administrative capacity and the stated objective of the tax. For health purposes, alcohol taxes should be a form of excise tax so as to ensure the creation of a price differential of the taxed product with respect to healthier options. There are several key dimensions to consider in the design of alcohol excise taxes: the type of excise tax (e.g. ad-valorem, specific, or mixed), the tax structure (e.g. uniform vs. tiered), the tax base and the tax rate. The structure of taxes used should be tailored to the country context – different tax structures are more appropriate for certain levels of per-capita income, alcohol demand, market competition and structure, tax administrative capacity – and policy objectives.[84]

5.2.1. Tax type and structure

Taxes typically collected on alcoholic beverages include sales taxes or value-added taxes (VAT), customs taxes and excise taxes.[84] Except for excise taxes, other tax types may fail to increase the relative price of alcoholic beverages (value-added taxes typically do not target alcoholic beverages specifically); may incentivize domestic production (import or customs taxes may increase local alcohol manufacture); may be vulnerable to international trade litigation (import or customs taxes may be seen as discriminatory); or may be less visible or salient to the consumer (sales taxes are sometimes not included in the shelf price of products, reducing their impact on consumers' choices). In contrast, excise taxes allow policymakers to target and raise the price of selected products, making them relatively less affordable and disincentivizing their consumption.

An overview of the advantages and disadvantages of different tax types are outlined in greater depth in Table 3 of Action for Health Taxes: From Policy Development to Implementation.

Excise taxes on alcoholic beverages can be either uniform or tiered/varying rates. Uniform excise taxes have been shown to reduce alcohol consumption and related harms, and incentivize a switch to cheaper products.[84]

Specific excise taxes

Specific excise taxes are often calculated based on the beverage volume, the amount of ethanol a beverage contains, but can also be calculated on other tax bases such as concentration of extract in beer. Specific excise taxation based on alcohol content is likely to lead to larger reductions in health inequalities across income groups and larger reductions in harmful drinking, with minimal effects on those drinking in moderation.[85] When the rate of an alcohol-content-based specific excise tax increases, the alcoholic beverage price per unit of ethanol will increase, which encourages reductions in consumption, because consumers observe an increase in the price of the drink without a change in its perceived value. Taxes based on alcohol content also create an incentive for industry to reduce the alcohol content of beverages. Alcohol-content-based specific excise taxes with automatic adjustments for inflation are a preferred tax design.

The unitary excise tax (volume-based-specific tax or volumetric-specific tax), is calculated based on beverage volume. Under unitary tax regimes, producers are encouraged to increase the range of high-quality

beverages, because there is no tax penalty associated with it. Unitary taxes also do not differentiate between high- and low-alcohol products (unless they are tiered, see below), nor do they create an incentive for industry to reduce alcohol levels.

Ad valorem excise taxes

Ad valorem excise taxes are calculated based on both quantity and price of alcoholic beverage (retail price, cost, insurance and freight (CIF), producer price) and are more difficult to administer than specific tax. Since the ad valorem rate is based on value, they generally do not have to be adjusted for inflation. When ad valorem rates increase, and the amount of ethanol in a drink and the value of the perceived qualities do not change, the price of the beverage per unit of alcohol will increase, which should decrease consumption in the short term. However, ad valorem taxes can encourage producers to produce higher ethanol content beverages, or lower priced alcoholic beverages, to reduce prices in response to taxes. This may be particularly relevant to heavier drinkers as they may be more likely to circumvent price increases by switching to cheaper beverages.[86] In addition, revenues from ad valorem taxes may be less stable since pricing (and reported prices) are subject to variability. With ad valorem excise taxes, the point in the value chain at which the product's value is assessed needs to be clearly defined (e.g. either the producer price, the final retail price). Applying an ad valorem tax to the producer price may substantially reduce the effective tax rate, since the tax is applied to a smaller proportion of the final value of the product. See Box 3 for an illustrated example.

Mixed systems

Many countries apply a mix of the excise taxes mentioned above, in so-called 'mixed systems'. The most common approaches are a combination of specific and ad valorem excise taxation. Some countries also apply minimum specific excise tax as a floor, and then an ad-valorem tax for higher price alcoholic beverages.[84] This tax structure, often referred to as "ad valorem with a specific floor" has been found to reduce total alcohol consumption among heavy drinkers, as well as prevent drinking initiation among young people (who prefer low alcohol content beverages upon initiation).[84,88] Specific tax floor can also be used with a specific tax. For example, Latvia imposes an alcohol-content-based specific tax of €8.2 per hectolitre per degree alcohol on beers with a minimum volume-based tax floor of €15.2 per hectolitre.[131] This tax structure is thought to have this effect because the tax due is never less than the specific tax rate, meaning low alcohol content beverages are more heavily taxed.[84]

In sum, when deciding upon excise tax approaches, governments should evaluate their impact on alcohol consumption and the prevention of drinking initiation, as well as expected tax revenues and issues related to ease and feasibility of collection.[47] A comparison of commonly used excise taxes and their advantages and disadvantages can be found in Table 4 of *Action for Health Taxes: From Policy Development to Implementation.*

5.2.2. Tax base

The impact of alcohol taxes depends on the total amount of goods to which taxes are applied. The tax base varies according to method: a specific excise tax is based on alcohol content or a volume of the product and an ad valorem tax is based on the value of the product.

It is important that an alcohol tax includes all alcoholic beverages to avoid incentivizing substitution towards untaxed alcoholic beverages. There are several countries where some alcoholic beverages are untaxed, representing a large opportunity for alcohol tax reform.[8] There are a few additional considerations to be made with ad valorem taxes and their tax base, as this depends on where in the value chain the tax is charged (see Box 3 below). For example, tax applied early in the value chain (e.g. CIF value, or on the producer price) will have a smaller impact on retail prices than tax that is applied on the final retail price. Tax applied early in the value chain is also vulnerable to transfer pricing and other tax avoidance tactics, particularly in highly vertically integrated industries.[88, 89]

Furthermore, to maximize the signaling effect of a tax (i.e. information that prompts behavior change for consumers independently of the price pathway), the introduction or increase of alcohol taxes should be complemented with awareness raising and messaging around the health risks associated with alcohol consumption.

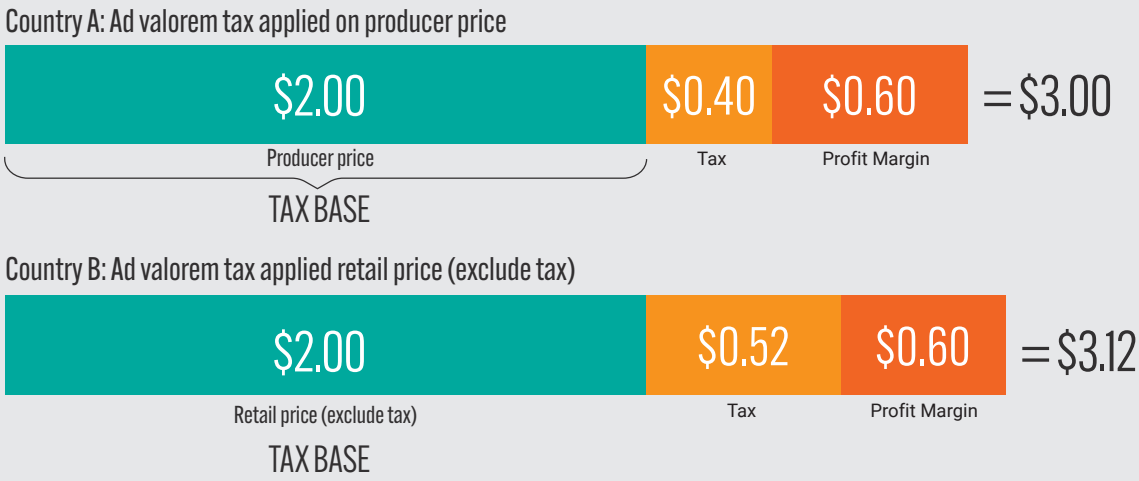
Box 3.
Implications of different tax bases for ad valorem tax structures

If an ad valorem structure is used, the choice of where in the value chain to assess the product's value is crucial. Some ad valorem taxes are applied to the producer price, and this introduces the risk that companies may underreport the value of the product. Even if no underreporting occurs, this structure diminishes the total value of the tax, because it does not capture the mark-ups that are applied after production. The way the choice of tax base may change the total impact on final prices is demonstrated in Table 2 and Figure 5 below.

Table 2. Impact of different tax structures on price following a 20% ad valorem tax on beer

	Country	
Components and summary measures of price	A	B
[1] Producer price (same in both countries)	2.00	2.00
[2] Country A: Ad valorem tax on producer price (20%)=20% X [1]	0.40	-
[3] Retailer's and wholesaler's profit margin (same in both countries)	0.60	0.60
[4] Country B: Ad valorem tax on retail price (20%) =20% X ([1]+[3])	-	0.52
[5] Final price	3.00	3.12
[6] Pass-through rate	100%	100%

Figure 5. Impact of different tax base on price following a 20% ad valorem tax

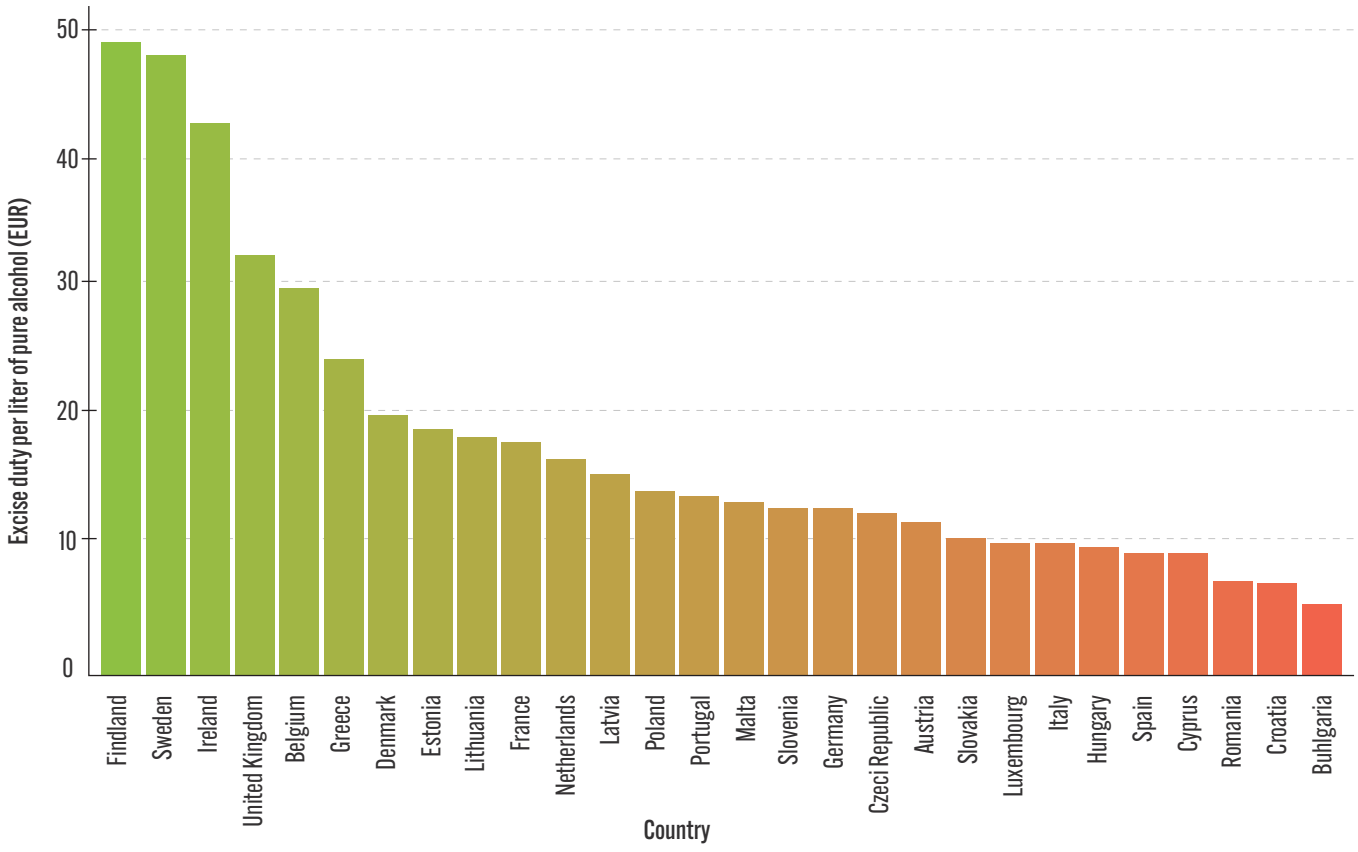


5.2.3. Tax rate

While WHO recommends that excise tax should represent at least 70% of the final retail price of cigarettes,[90] no similar recommendation currently exists for alcoholic beverages. From an economic perspective, an optimal level of taxation exists, where this tax adjusts the price of alcoholic beverages to include the negative internalities and externalities associated with their consumption.[91,92] From a public health perspective, high levels of taxation are desirable as a deterrent to alcoholic consumption and to prevent a change of behavior among those who abstain from alcohol.

Unlike tobacco, there is a great deal of price and quality heterogeneity across and within different types of product classes (spirits, wines, beers). As a result, most countries use differential tax rates for different types of alcoholic beverages. For example, there is a 10-fold difference in the duty rate per unit of alcohol across EU member countries for each alcoholic beverage type.[93] Figure 6 illustrates the situation for tax duty on distilled alcohol (spirits and liquor) in the European Union in 2020.

Figure 6. Excise duties for distilled alcohol in EU Member States (January 2020)



Source: European Commission (98)

Differences in domestic tax rates may be the result of the existence of alcohol industries in specific countries, such that would result in lower tax rates on wine in wine-producing countries.[93] However, it may also be a deliberate policy choice, whereby alcohol taxes are calibrated to target a particular type of beverage, most often spirits.[84] Nevertheless, such tax policy may have both demand and supply side effects, pushing consumers and producers/retailers towards other types of alcoholic beverages with lower tax rates.

Nevertheless, consensus exists around a few recommendations. First, the principal mechanism that excise taxes work through is the result of higher prices faced by consumers. As such, alcohol excise tax rates should be high enough to reduce the affordability of alcoholic beverages. Furthermore, to counter the general trend of increasing household incomes in LMICs, in such contexts specific excise taxes should be raised periodically, as their real value and their effectiveness in reducing consumption tend to diminish over time if they are not adjusted to account for inflation and income growth.[84,95]

5.2.4. Minimum unit price (MUP) and other pricing policies

Governments often apply a minimum pricing policy. In practice, in many countries this means a minimum price below which a fixed volume of alcohol cannot be sold to the public. For instance, in Scotland (where MUP was introduced in 2018) the minimum price for a 700 ml bottle of whisky with an ABV of 40% is £14.00. Such policies target heavier drinking in those who favor cheaper drinks, without significantly affecting the price of other more expensive alcoholic beverages.[8] There is robust evidence that minimum pricing is highly effective and cost-effective in reducing alcohol consumption, alcohol-related hospital admissions, deaths, criminal offenses, and workplace absence.[96,97] MUP is complementary to tax policies because it prevents producers and retailers from absorbing excise tax increases.[98] However, while additional revenue from alcohol taxes goes to the government, the additional revenue created with the MUP implementation will be accrued by the alcohol industry. Therefore, MUP should be seen only as a policy complementary to tax policies.

Other pricing policies include, but are not limited to, restrictions on below-cost sales. There is little evidence supporting the effectiveness of restrictions on below-cost sales and it may represent a significant administrative burden to establish the correct cost that should apply to

each alcoholic beverage type.[8] Restrictions on discounting by alcohol retailers may reduce alcohol consumption but there is no evidence of a reduction in alcohol-related morbidity and mortality.[99] Evidence from Scotland suggests that restricting discounts for purchasing larger quantities is not sufficient; restricting all types of discounts, irrespective of purchased volumes, may be more effective.[100]

5.3. Public financial management and tax administration

5.3.1. Earmarking alcohol tax revenues

An additional consideration around alcohol tax design is whether to earmark the resulting tax revenues. Earmarking means using some or all of the revenue deriving from a tax for a specific budgetary expense.[101] Earmarking is part of the global discussion on domestic resource mobilization for health, particularly in low- and middle-income countries. In 2017, at least 80 countries earmarked revenue or expenditure sources for health.[101] While earmarking protects revenues to be spent for a specific purpose and links taxation to benefits that can soften public resistance to taxation, earmarked revenues are prone to the influence of lobbies and can create rigidities in the budget that lead to the inefficient allocation of resources. Ministries of Finance may withdraw their support for alcohol taxation if other actors push too hard for earmarking.

Revenues from taxes on alcohol are typically not earmarked and applied to the general government accounts instead.[54,84] In 2017, at least nine countries were identified as earmarking all or a portion of revenues from alcohol taxes for health.[102] An example of the effective use of earmarked alcohol taxes for health is outlined in Box 4.

Decisions around whether and how to earmark alcohol tax revenue depend on country context, including the political economy context, budgeting laws and practices, and the degree of priority attributed by governments to specific policies.

Box 4.
Using alcohol tax revenues for health

Sustainable financing for health in the Philippines

One of the most salient examples of the efficient use of alcohol tax revenues for health is The Philippines's "Sin Tax" reform in 2012. This reform significantly increased excise taxes on tobacco and alcohol and simplified the excise tax regimes from a multi-tiered ad valorem structure to a two-tiered structure which converged to one unitary rate by 2017. The minimum tax on the cheapest cigarettes was raised from P2.72 prior to 2012 to P12 in 2013, and later rose to P31.2 by 2018. Alcohol tax increases were lower but saw an increase in excise tax for the cheapest beer rise from P11 pre-2012 to P24.4 by 2018. Spirits are now subject to a specific tax of P20 per-proof liter (adjusted for annual inflation) and a 20% ad valorem tax.

Revenues generated from the "Sin Tax" law were earmarked to ensure a source of sustainable financing for the country's Universal Health Coverage Program. Fifteen percent of earmarked revenue goes towards tobacco farmer livelihoods. Of the remaining 85%, 80% finances health insurance coverage of the poor and elderly, and the remainder supports health facility improvements. In 2019 the base of earmarks was changed from incremental revenues to total revenues. In 2020 100% of alcohol revenues were earmarked for health.

Overall, the earmarks have expanded health coverage for over 15.2 million families, representing with their dependents about half of the Philippines' population.

Source: 103

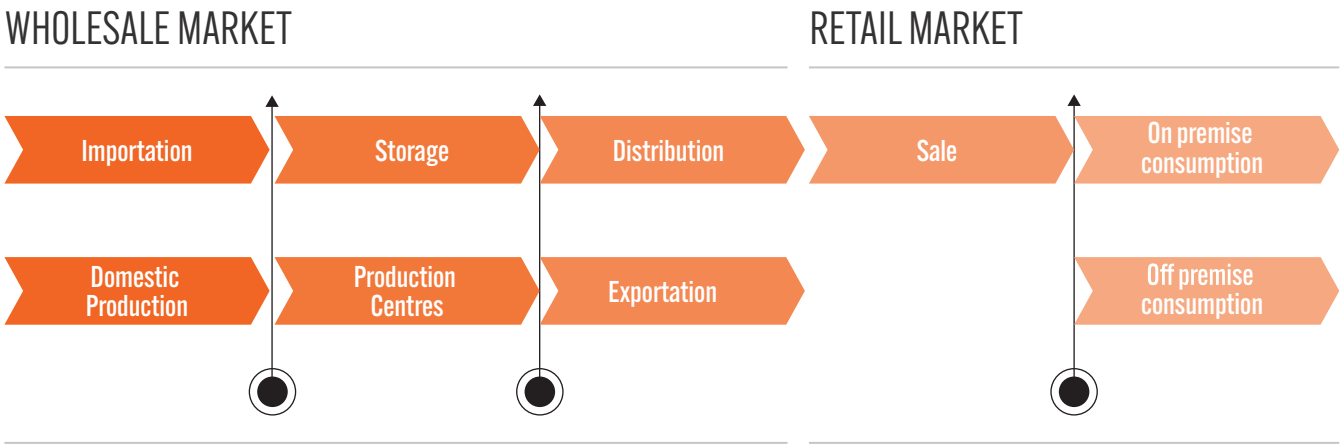
5.3.2. Tax collection and administration

In addition to the general design of alcohol tax policies, it is important to consider the actual collection of taxes, and the administration or management of these additional fiscal resources. This requires technical capacity, knowledge of the alcohol market in the relevant jurisdiction, and effective enforcement. Further guidance on public financial management and tax administration can be found in *Action for Health Taxes: From Policy Development to Implementation*.

Taxes may be collected at different points in the alcohol production process (Figure 7). This includes when beverages are imported,

domestically produced, released for distribution, or sold to consumers. Conventionally this is done when the product enters the wholesale or retail market. In order to effectively regulate and collect tax from importers, producers, distributors or retailers, tax administrators should ensure there is a good understanding of the quantity and variety of alcoholic beverages on the market. This information should be updated regularly to capture new products and markets.

Figure 7. Key points (indicated by stars and arrows) in the alcohol production, distribution and sales process where alcohol taxes can be collected



Source: Authors (based on 84)

As usual, there are incentives to avoid taxation. Details related to the collection, administration and enforcement of alcohol taxes are often an integral part of the policies or regulations that implement an alcohol tax. The WHO recommends that the following procedures are followed in order to enhance compliance with a tax regime:

- Request producers, importers and exporters register for tax purposes and obtain a license for production, distribution and retail sales.
- Monitor domestic production and trade activities by conducting physical controls and requiring tax stamps on alcohol products.
- Require taxpayers, including manufacturers and importers, to file tax returns and pay tax liabilities within a specific period of time after the alcohol products move from the factories or enter the country.

If successfully implemented, the above measures can make complete tax avoidance very difficult, actively monitor products on which alcohol tax should be collected and help keep track of the amount of alcoholic beverages produced and the taxes that should be charged. Registration and licensing is not only a prerequisite for tax compliance but also may help for health and safety purposes.[28]

Compliance with alcohol excise taxes is based on cooperation between the taxpayer and national administrative body but must be enforced to ensure optimal revenue collection. Compliance is most often enforced through verification in the form of tax audits. Measures to combat tax evasion include conducting physical controls and using tax stamps. Physical controls involve in-person checks at the point of production or manufacturing. Tax stamps can also be used as part of a system of tracking, tracing and monitoring across the production and retail chain, and help authorities to distinguish licit from illicit products.[84] However, tax stamps can exist without full-blown track and tracing systems, as the latter can require significant investment and effort as a unique identifier on each item is an essential part of such systems.

An administrative structure for the collection and enforcement of taxes is a prerequisite for the implementation of alcohol tax. Administrative agencies connect tax policy with enforcement and the rule of law and thus are a critical element in ensuring effective alcohol tax implementation.[90] In countries with little administrative capacity, physical controls may be used to promote compliance with tax policies. Investing in capacity-building for tax administration systems will help ensure a strong system that can run efficiently, effectively collect revenue, and enforce compliance where necessary.

5.4. Monitoring and evaluation

The evidence base around the impact of alcohol taxes is robust. Monitoring and evaluation of the impact of alcohol taxes is an important step, both in generating local evidence of a tax's effectiveness, as well as to assess unanswered questions.[84] Monitoring and evaluation processes need to be planned alongside the implementation or reform of alcohol taxes. In settings in which soft or hard earmarking is used, a proportion of the revenue from alcohol taxation can be dedicated to these efforts.[102]

In order to prevent lobbying to repeal alcohol taxes, evaluations can help policymakers by providing a strong evidence base on effectiveness. These evaluations should be high-quality and impartial to ensure that they are free from industry influence.

Beyond monitoring the impact of alcohol taxes, it is also important to contribute to global or regional monitoring to assess if tax levels are too low. To date, the information collected on taxes applied on alcoholic beverages is not sufficient to build summary indicators at global level.[104] Nevertheless, four recent studies have developed tax share estimates

for groups of countries; one for six countries using tax and price data from the International Alcohol Control Study,[105] one for 26 OECD countries using OECD tax data and price data from The Economist's Intelligence Unit,[17] and the WHO Global Report on the Use of Alcohol Taxes.[132] However, at the global level, alcohol taxes are monitored through qualitative data. Indicator 6C of the WHO Noncommunicable Disease Progress Monitor is considered achieved if excise taxes are applied on the three main types of alcoholic beverages (beer, wine, and spirits), no tax incentives or rebates for production of alcoholic beverages are applied, and an adjustment for inflation of the level of taxation is implemented.[106] Tax data are collected through the WHO Global survey on progress on SDG health target 3.5, which is also used to track information on per-capita alcohol consumption.[107] The data collected allow for describing the type of tax structure applied to alcoholic beverages and provides limited tax policy information. The information is reported for every WHO Member State in the WHO Global status report on alcohol and health and the WHO Global Information System on Alcohol and Health database.

Some regional mechanisms exist to monitor alcohol taxes. For example, in the European Union, all countries apply volume-based specific excise taxes on intermediate products (e.g. port, sherry) and content-based specific excise taxes on beer and spirits, regulated through Directives 92/83/EEC and 92/84/EEC, which define the tax structure, products taxed, and minimum rates applied. This harmonization of tax approaches allows monitoring and comparisons of excise tax levels across countries.[94] However, in most regional settings, where uniform tariff and trade policies do not exist, statutory tax rates cannot be used to compare taxes between countries because alcohol taxes vary substantially in terms of structure, base, rate, and products on which they are applied to.[84,108] It is not straightforward to compare, for example, Argentina's 14% ad valorem excise tax on beer with Jamaica's JMD 1,230 specific tax per liter of pure alcohol, nor to tease apart tax effects across beverage types of varied alcohol content and volume sizes.

More recently, the Global report on the use of alcohol taxes assessed taxed applied to alcohol beverages at the global level and compared alcohol taxes and prices for the first time at the global level.[132] In sum, while there is no clear consensus on how to optimally monitor and compare the alcohol tax policies of countries, the studies mentioned above have contributed to the evidence base that tax burdens on alcoholic beverages are generally low and suggest that there is ample room for increasing alcohol excise taxes.

6

Political advocacy

Political advocacy

6.1. Cross-sectoral alignment

As discussed earlier, several government ministries are key in reforming alcohol taxation. Coordination between ministries does not always happen in practice, but without Ministry of Finance commitment, alcohol tax reform is unlikely to move ahead; without Ministry of Health support, key tax design decisions may not align with public health priorities. Ministries of Health and other allies have to be able to communicate using the concepts, terms and priorities that will resonate with Ministries of Finance.

For a Ministry of Finance, fiscal and economic motivations are most important. The stable and predictable revenue potential of additional or higher alcohol taxes should be clearly outlined. Arguments around the larger economy tend to be convincing, as is reducing absenteeism and presenteeism and boosting labor productivity and labor supply. Finally, an argument that may help relates to the social cost of alcohol consumption, and how taxes on the price of alcohol can move such products towards their real prices, taking into account their relevant internalities and externalities.[109]

Even when several ministries are aligned behind higher alcohol taxes, where the introduction of a tax is subject to a legislative process (rather than being introduced, for example, by the executive branch of government) the political negotiations required for passage may lead to compromises in tax design (e.g. lowering tax rates or excluding particular alcoholic beverages),[103] which tend to weaken the impact and effectiveness of the tax.

In many places, key actors that would help support alcohol tax reform, such as national and sub-national governments and civil society organizations and interest groups, are not well-coordinated and effective multisectoral action is challenging.[110] Strong leadership by Ministries of Finance and Health, and active engagement with these other actors can serve to counter opposition to alcohol taxation.[111]

Key arguments for alcohol taxes can be thought of as either emphasizing a unified, whole-of-government approach, or as audience-specific messaging emphasizing particular benefits relative to others. Some of this messaging for cross-sectoral advocacy are summarized in more detail in Table 3 below.

Table 3. Key messages to advocate for alcohol taxes

Message	Key points
Alcohol consumption is a leading cause of preventable death and disability	• Seventh largest risk factor for death and disability globally • Causes over 2.6 million deaths • Reduces life expectancy • Drives dependence, injuries, heart disease, cancer, mental illness and other noncommunicable diseases. There are over 200 health conditions associated with alcohol consumption
Alcohol consumption harms more than physical health	• Associated with over 200 health conditions • Mental illness, dependence and addiction are the result of sustained alcohol use • Violence and injuries • Social impacts of alcohol • Economic impact of harmful use is substantial
Harmful alcohol consumption drains the economy	• Increased health expenditures • Decreased labor force participation • Reduce productivity • Lower than potential GDP
Alcohol is associated with health and social inequality	• **Gender inequality:** men are more likely to drink alcohol, and drink heavily compared to women • **Socioeconomic inequality:** morbidity and mortality higher in poorer drinkers despite similar or lower levels of consumption (alcohol-harm paradox)
Increasing alcohol price reduces alcohol consumption	• Reduces prevalence of lifetime drinking • Delays initiation of alcohol use • Prevents underage drinking • Halts progression to heavy drinking
Alcohol taxes contributes to improve health	• Reduces overall alcohol consumption • Prevents drink driving • Lowers frequency of diseases, injuries and deaths related to alcohol use and abuse, • Contributes to reducing suicides, sexually transmitted diseases, and alcohol-related violence and other crimes.
Alcohol taxes generate government revenue	• Enormous revenue generation potential
Alcohol taxes are effective and cost efficient	• It is a “best buy” for the prevention and control of NCDs • Low cost (< I$ 0.10 per capita) and a favorable cost effectiveness ratio (< I$ 100 cost per healthy life year gained) • Tax increases are the cheapest alcohol control policy to implement.
Alcohol taxes make economic sense	• Alcohol taxes boost the economy by improving labour force participation and productivity (preventing absenteeism, presenteeism, premature deaths and disability) • Revenue from alcohol taxes can be reinvested in job creation opportunities
Alcohol industry tactics must be actively managed	• **Unrecorded alcohol:** Increasing excise taxes does not necessarily increase unrecorded alcohol use and can be effective in decreasing overall alcohol consumption • **Cross-border shopping:** the impact of cross-border shopping on overall per capita consumption is limited • **Distributional impact:** Alcohol taxes may positively benefit the poor • **Macroeconomic impact:** Although they may impact the alcohol industry, overall alcohol taxes are a major boost for economies. • **Employment:** Alcohol-related job losses would be offset by job gains in other industries and sectors.

References: 1,20,30,37,60,84,112–117

6.2. Managing industry opposition

The production, sale and consumption of alcohol are promoted by a global industry with sophisticated marketing, promotional and lobbying strategies. This is particularly the case for multinational corporations, who have used corporate political advocacy to influence national policy and regulations.[118] When developing alcohol tax policies to prevent alcohol-related harms, industry representatives employ a myriad of arguments, often shifting the focus onto individual responsibility (See Table 4, below).[119] The actors, interests, and power dynamics to be affected by changes to alcohol taxes should be made explicit to forge national consensus and/or mitigate the impact of industry strategies.

The opposition to alcohol taxes can extend beyond manufacturers and distributors of alcoholic beverages to include agriculture in countries that produce the products that serve as inputs to alcohol production, such as sugarcane; it can likewise include the hospitality sectors, where restaurants, bars and nightclubs generate revenue from the sale of alcoholic beverages, and it may also include chambers of commerce if alcoholic beverages are exported.[20] Approaches to alcohol taxation must take into consideration the ways in which alcohol is an economically embedded product, for example by mapping local industries that are supported directly or indirectly by the alcohol industry so that sectors that are impacted by alcohol taxes can be actively managed. It may also be possible to reduce the opposition of some of these sectors, particularly if the additional alcohol tax revenues can be used to address distributional effects of the tax.[120]

The alcohol industry is closely aligned with the agricultural sector, which benefits from the demand for a wide array of primary ingredients – including fruits, grains, plant matter and dairy – to supply alcohol production. However, it is possible to engage with the agricultural sector and minimize its opposition to increasing alcohol taxes. First, just as the overall economy would benefit from higher alcohol taxes, so the agricultural sector would benefit from more productive laborers as a result of the health impacts of health taxes (which would predominantly benefit agricultural and farm workers). Second, particularly if public authorities agree to earmark some funds, agricultural sectors could be incentivized to alter the sale of their products towards alternative markets, such as bio-ethanol, or alter the selection of crops on their land, or the use of the land altogether, towards products that are not used as inputs to alcoholic beverage production.

The hospitality industry also relies on alcohol production and consumption. National hospitality industries are diverse and span tourism and travel, food and beverage, accommodation, recreation and other sectors. Each of these sectors depend to an extent on the sale and consumption of alcohol. The industry is characterized by a number of small and medium-sized businesses which may benefit directly from alcohol companies (i.e. through product placement or sponsorship) or indirectly (i.e. through patterns of behavior related to alcohol consumption). As with the agricultural sector, there are benefits to alcohol taxes, including those related to labor productivity and supply. Furthermore, experiences have found that diversifying tourism and leisure activities from a focus on binge drinking and alcohol consumption has led to increasing tourism and hospitality from other demographic groups. Furthermore, for workers in the hospitality sector, it would be useful to convey the overall net increase in jobs expected from higher alcohol taxes and how hospitality workers have highly transferable skills to other sectors.[121]

Anticipating the arguments that industry actors use can enable advocates to pre-empt them and prepare effective and evidence-based responses.[30] Common industry arguments and potential evidence-based responses are summarized in Table 4, also detailed in chapter 7 of the alcohol tax manual:[131]

Table 4. Common industry arguments and evidence-based responses

Industry argument	Example	Evidence-based response
Effectiveness	"The tax on alcoholic beverages is not the end of NCDs, road traffic injuries or even alcoholism"	Modeling studies have found that alcohol taxes are associated with reductions in overall mortality, obesity, diabetes, cardiovascular disease, and some cancers[1] Industry actors often misrepresent the evidence or fund biased research to cast doubt on these impacts[30]
Cross-border shopping	Local jurisdictions will lose out if people go elsewhere to purchase alcoholic beverages because of a tax	The impact of cross-border shopping on overall average per capita consumption is limited.[122] Efforts for alcohol reform can also be done in conjunction with neighboring jurisdictions, to be implemented in tandem, or can take cross-border shopping, such as reducing allowances of alcohol that can be brought across borders and other similar policies.[84,123] The fear of the impact of cross-border shopping on tax revenues may push some countries to lower their excise taxes on alcohol. However, alcohol tax reductions will result in increased alcohol consumption and alcohol-related deaths, as was seen in Finland following the introduction of a single market for alcohol in the EU in 2003.[124]

Industry argument	Example	Evidence-based response
Regressivity	Alcohol taxes hurt the poorest families and widen inequality	Furthermore, additional public spending based on tax revenue can benefit more lower socioeconomic groups.[103] Taxes on health harming products like alcohol are not regressive. In fact, health taxes on products such as alcohol positively benefit the poor.[109] First, due to the alcohol-harm paradox, the harms from excessive alcohol use impact poorer drinkers' households more than richer drinkers across 25-33 countries in the studies.[45, 48] Second, empirical research has found that the distribution of the tax burden of alcohol taxes in generally progressive, preferentially targeting higher income earners or heavy drinkers who spend relatively more on alcohol products.[125–128] Third, evidence from tobacco cessation demonstrates that poorer households are more sensitive to changes in commodity prices, thus benefiting relatively more from taxes in terms of reduced health care expenditures and increased productivity and lifetime income.[129] Fourth, additional public spending, as a result of alcohol tax revenue, preferentially benefits poor or marginalized communities, thus increasing their progressive nature.[21,130]
Job losses / macroeconomic growth	"[the tax] is the end of neighborhood stores that provide income for the thousands of families who tend them."	Although they may impact the alcohol industry, overall alcohol taxes are a major boost for economies. Additional fiscal revenues will in-part contribute to increased government reserves, which contributes to macroeconomic stability and economic growth. Furthermore, the positive impacts on labor supply and labor productivity from decreases in alcohol consumption are significant.[2,8] Finally, alcohol taxes have been associated with net job increases in high-quality evaluation studies,[121] as additional jobs should be expected to be created in other sectors,[84] particularly in the public sector, as a result of government spending as a result of the additional alcohol tax revenues.[32]
International trade disputes	Taxes violate international trade law and may lead to expensive legal battles	Governments have a legally recognized right to protect the health of their populations. To avoid such claims, it is important that alcohol taxes are designed to be non-discriminatory (e.g. apply equally to imported and locally manufactured drinks).[84]

Reference list

1. IHME. Alcohol use. Available from: https://www.healthdata.org/research-analysis/health-risks-issues/alcohol-use (accessed 11 July 2024).
2. World Health Organization. Global Status Report on Alcohol and Health. World Health Organization; 2011. 286 p.
3. Global status report on alcohol and health and treatment of substance use disorders. Geneva: World Health Organization; 2024. Available from: https://iris.who.int/bitstream/handle/10665/377960/9789240096745-eng.pdf?sequence=1
4. Manthey J, Shield KD, Rylett M, Hasan OSM, Probst C, Rehm J. Global alcohol exposure between 1990 and 2017 and forecasts until 2030: a modelling study. Lancet. 2019 Jun 22;393(10190):2493–502
5. Neufeld M, Rovira P, Ferreira-Borges C, Kilian C, Sassi F, Veryga A, et al. Impact of introducing a minimum alcohol tax share in retail prices on alcohol-attributable mortality in the WHO European Region: A modelling study. Lancet Reg Health Eur. 2022 Apr;15:100325.
6. Lietuvos nevyriausybinės organizacijos kreipėsi į LRV ir Seimą dėl alkoholio kontrolės politikos tęstinumo – NTAKK [Internet]. [cited 2023 May 14]. Available from: https://www.ntakk.lt/lietuvos-nevyriausybines-organizacijos-kreipesi-i-lrv-ir-seima-del-alkoholio-kontroles-politikos-testinumo/
7. Tackling NCDs: best buys and other recommended interventions for the prevention and control of noncommunicable diseases, second edition. Geneva, World Health Organization; 2024 [cited 2023 May 14]. Report No.: WHO/NMH/NVI/17.9. Available from: https://iris.who.int/bitstream/handle/10665/376624/9789240091078-eng.pdf?sequence=1.
8. World Health Organization. Regional Office for Europe. Alcohol pricing in the WHO European Region: update report on the evidence and recommended policy actions [Internet]. World Health Organization. Regional Office for Europe; 2020 [cited 2023 May 14]. Report No.: WHO/EURO:2020-1239-40989-55614. Available from: https://apps.who.int/iris/handle/10665/336159
9. Delker E, Brown Q, Hasin DS. Alcohol Consumption in Demographic Subpopulations: An Epidemiologic Overview. Alcohol Res. 2016;38(1):7–15.
10. Szlemko WJ, Wood JW, Thurman PJ. Native Americans and alcohol: past, present, and future. J Gen Psychol. 2006 Oct;133(4):435–51.
11. Gould E, Schacter N. Trade Liberalization and Its Impacts on Alcohol Policy. SAIS Rev. 2002;22(1):119–39.
12. Rehm J, Štelemėkas M, Kim KV, Zafar A, Lange S. Alcohol and health in Central and Eastern European Union countries - status quo and alcohol policy options. J Health Inequal. 2021 Dec 31;7(2):91–5.
13. Onagan FCC, Ho BLC, Chua KKT. Development of a sweetened beverage tax, Philippines. Bull World Health Organ. 2019 Feb 1;97(2):154–9.
14. Sartika RAD, Atmarita A, Zulkarnain Duki MI, Bardosono S, Wibowo L, Lukito W. Consumption of Sugar-Sweetened Beverages and Its Potential Health Implications in Indonesia. Kesmas: Jurnal Kesehatan Masyarakat Nasional (National Public Health Journal) [Internet]. 2022 Feb 1 [cited 2023 May 15];17(1). Available from: https://scholarhub.ui.ac.id/kesmas/vol17/iss1/1/
15. Sreeramareddy CT, Pradhan PMS, Mir IA, Sin S. Smoking and smokeless tobacco use in nine South and Southeast Asian countries: prevalence estimates and social determinants from Demographic and Health Surveys. Popul Health Metr. 2014 Aug 28;12:22.
16. Ngo AP, Wang X, Slater S, Chriqui JF, Chaloupka FJ, Yang L, et al. Alcohol excise taxes as a percentage of retail alcohol prices in 26 OECD countries. Drug Alcohol Depend. 2021 Feb 1;219:108415.
17. Organisation for Economic Cooperation and Development. Preventing Harmful Alcohol Use [Internet]. OECD. [cited 2023 May 15]. Available from: https://www.oecd.org/health/preventing-harmful-alcohol-use-6e4b4ffb-en.htm
18. Bhattacharya A. The government's own numbers show that alcohol is under-taxed [Internet]. British Politics and Policy at LSE. 2016 [cited 2023 May 15]. Available

from: https://blogs.lse.ac.uk/politicsandpolicy/the-governments-own-numbers-show-that-alcohol-is-under-taxed/

19. Sassi F, Hurst J. The prevention of lifestyle-related chronic diseases: an economic framework. 2008; Available from: https://www.oecd-ilibrary.org/content/paper/243180781313
20. Babor TF, Casswell S, Graham K, Huckle T, Livingston M, Österberg E, Rehm J, Room R, Rossow I, Sornpaisarn B. Alcohol: no ordinary commodity. Oxford, UK: Oxford University Press; 2023.
21. Rehm J, Mathers C, Popova S, Thavorncharoensap M, Teerawattananon Y, Patra J. Global burden of disease and injury and economic cost attributable to alcohol use and alcohol-use disorders. Lancet. 2009 Jun 27;373(9682):2223–33.
22. Vital Strategies. The sobering truth: Incentivizing alcohol death and disability [Internet]. Vital Strategies. 2021 [cited 2023 May 21]. Available from: https://www.vitalstrategies.org/resources/the-sobering-truth-incentivizing-alcohol-death-and-disability/
23. McCambridge J, Coleman R, McEachern J. Public Health Surveillance Studies of Alcohol Industry Market and Political Strategies: A Systematic Review. J Stud Alcohol Drugs. 2019 Mar;80(2):149–57.
24. Rehm J, Kailasapillai S, Larsen E, Rehm MX; Samokhvalov, AV; Shield, KD; Roerecke, M, Lachenmeier, DW. A systematic review of the epidemiology of unrecorded alcohol consumption and the chemical composition of unrecorded alcohol. Addiction. 2014 Jun;109(6):880-93
25. WHO. Global Information System on Alcohol and Health. Geneva. Available from: https://www.who.int/data/gho/data/themes/global-information-system-on-alcohol-and-health/GHO/
26. Sornpaisarn B, Shield K, Cohen J, Schwartz R, Rehm J. Elasticity of alcohol consumption, alcohol-related harms, and drinking initiation in low- and middle-income countries: A systematic review and meta-analysis. Int J Alcohol Drug Res. 2013 Mar 8;2(1):45–58.
27. HM Revenue and Customs. HMRC alcohol strategy [Internet]. GOV.UK. 2016 [cited 2023 May 21]. Available from: https://www.gov.uk/government/publications/hmrc-alcohol-strategy
28. World Health Organization. Global strategy to reduce the harmful use of alcohol [Internet]. World Health Organization; 2010 [cited 2023 May 21]. Available from: https://www.who.int/publications/i/item/9789241599931
29. Chaiyasong S, Limwattananon S, Limwattananon C, Thamarangsi T, Tangchareonsathien V, Schommer J. Impacts of excise tax raise on illegal and total alcohol consumption: A Thai experience. Drugs: Education, Prevention and Policy. 2011 Apr 1;18(2):90–9.
30. McCambridge J, Mialon M, Hawkins B. Alcohol industry involvement in policymaking: a systematic review. Addiction. 2018 Mar 15;113(9):1571–84.
31. Anderson P, Chisholm D, Fuhr DC. Effectiveness and cost-effectiveness of policies and programmes to reduce the harm caused by alcohol. Lancet. 2009 Jun 27;373(9682):2234–46.
32. World Health Organization. Health taxes: a primer. In: Health taxes: a primer. WHO. 2019.
33. Lachenmeier DW, Neufeld M, Rehm J. The impact of unrecorded alcohol use on health: What do we know in 2020? J Stud Alcohol Drugs. 2021 Jan;82(1):28–41.
34. Rehm J, Neufeld M, Room R, Sornpaisarn B, Štelemėkas M, Swahn MH, et al. The impact of alcohol taxation changes on unrecorded alcohol consumption: A review and recommendations. Int J Drug Policy. 2022 Jan;99:103420.
35. OECD. Tackling Harmful Alcohol Use Economics and Public Health Policy: Economics and Public Health Policy. OECD Publishing; 2015. 236 p.
36. Manthey J, Hassan SA, Carr S, Kilian C, Kuitunen-Paul S, Rehm J. What are the Economic Costs to Society Attributable to Alcohol Use? A Systematic Review and Modelling Study. Pharmacoeconomics. 2021 Jul 1;39(7):809–22.
37. Elder RW, Lawrence B, Ferguson A, Naimi TS, Brewer RD, Chattopadhyay SK, et al. The effectiveness of tax policy interventions for reducing excessive alcohol consumption and related harms. Am J Prev Med. 2010 Feb;38(2):217–29.
38. Chaloupka FJ, Powell LM. Using fiscal policy to promote health: taxing tobacco, alcohol, and sugary beverages. Background Paper, The Task Force on Fiscal Policy for Health Tobacconomics at the University of Illinois, Chicago [Internet]. 2019; Available from: https://impuestotabaco.org/wp-content/uploads/2022/03/021.pdf

39. World Health Organization. 10 areas governments could work with to reduce the harmful use of alcohol [Internet]. [cited 2023 May 30]. Available from: https://www.who.int/news-room/feature-stories/detail/10-areas-for-national-action-on-alcohol

40. Chaloupka FJ, Grossman M, Saffer H. The effects of price on alcohol consumption and alcohol-related problems. Alcohol Res Health. 2002;26(1):22–34.

41. Wagenaar AC, Salois MJ, Komro KA. Effects of beverage alcohol price and tax levels on drinking: a meta-analysis of 1003 estimates from 112 studies. Addiction. 2009 Feb;104(2):179–90.

42. Sornpaisarn B, Shield KD, Cohen JE, Schwartz R, Rehm J. Can pricing deter adolescents and young adults from starting to drink: An analysis of the effect of alcohol taxation on drinking initiation among Thai adolescents and young adults. J Epidemiol Glob Health. 2015 Dec 1;5(4, Supplement 1):S45–57.

43. Paraje GR, Guindon GE, Chaloupka FJ. Prices, alcohol use initiation and heavy episodic drinking among Chilean youth. Addiction. 2021 Mar;116(3):485–94.

44. Ayyagari P, Deb P, Fletcher J, Gallo W, Sindelar JL. Understanding heterogeneity in price elasticities in the demand for alcohol for older individuals. Health Econ. 2013 Jan;22(1):89–105.

45. Grittner U, Kuntsche S, Graham K, Bloomfield K. Social inequalities and gender differences in the experience of alcohol-related problems. Alcohol Alcohol. 2012 Apr 27;47(5):597–605.

46. Nelson JP. Gender differences in alcohol demand: a systematic review of the role of prices and taxes. Health Econ. 2014 Oct;23(10):1260–80.

47. Pan American Health Organization. Policy brief: Alcohol taxation and pricing policies in the region of the Americas. 2019 Oct 9 [cited 2023 May 30]; Available from: https://iris.paho.org/handle/10665.2/51530

48. Schmidt LA, Room R. Alcohol and inequity in the process of development: Contributions from ethnographic research. Int J Alcohol Drug Res. 2012;1(1):41–55.

49. World Health Organization-Regional Office for Europe [Internet]. Alcohol and inequalities. Guidance for addressing inequalities in alcohol-related harm. [cited 2023 May 30]. Available from: https://www.drugsandalcohol.ie/21801/1/Alcohol-and-Inequity.pdf

50. Chaloupka FJ, Powell LM, Warner KE. The Use of Excise Taxes to Reduce Tobacco, Alcohol, and Sugary Beverage Consumption. Annu Rev Public Health. 2019 Apr 1;40:187–201.

51. Pryce R, Hollingsworth B, Walker I. Alcohol quantity and quality price elasticities: quantile regression estimates. Eur J Health Econ. 2019 Apr;20(3):439–54.

52. WHO. Technical Annex (version dated 26 December 2022). Updated Appendix 3 of the WHO Global NCD Action Plan 2013-2030. Available from: https://cdn.who.int/media/docs/default-source/ncds/mnd/2022-app3-technical-annex-v26jan2023.pdf?sfvrsn=62581aa3_5.

53. World Health Organization. SAFER - alcohol control initiative [Internet]. [cited 2023 May 30]. Available from: https://www.who.int/initiatives/SAFER

54. Summan A, Stacey N, Birckmayer J, Blecher E, Chaloupka FJ, Laxminarayan R. The potential global gains in health and revenue from increased taxation of tobacco, alcohol and sugar-sweetened beverages: a modelling analysis. BMJ Glob Health. 2020 Mar 29;5(3):e002143.

55. Stacey N, Summan A, Tugendhaft A, Laxminarayan R, Hofman K. Simulating the impact of excise taxation for disease prevention in low-income and middle-income countries: an application to South Africa. BMJ Glob Health. 2018 Jan 5;3(1):e000568.

56. Foucade AL, Metivier C, Gabriel S, Scott E, Theodore K, Laptiste C. The potential for using alcohol and tobacco taxes to fund prevention and control of noncommunicable diseases in Caribbean Community countries. Rev Panam Salud Publica. 2018 Dec 17;42:e192.

57. Sassi F, Belloni A, Capobianco C. The role of fiscal policies in health promotion. 2013; Available from: https://www.oecd-ilibrary.org/social-issues-migration-health/the-role-of-fiscal-policies-in-health-promotion_5k3twr94kvzx-en

58. Sacks JJ, Gonzales KR, Bouchery EE, Tomedi LE, Brewer RD. 2010 National and State Costs of Excessive Alcohol Consumption. Am J Prev Med. 2015 Nov;49(5):e73–9.

59. Change Lab Solutions. Alcohol tax revenues, social and health costs, & government expenditures [Internet]. [cited 2023 Jun 2]. Available from: http://alco-

hol-psr.changelabsolutions.org/alcohol-psr-faqs/alcohol-taxes-faq/alcohol-tax-revenues-social-and-health-costs-government-expenditures/

60. Bloomfield K. Understanding the alcohol-harm paradox: what next? Lancet Public Health. 2020 Jun;5(6):e300–1.
61. Nyakutsikwa B, Britton J, Langley T. The effect of tobacco and alcohol consumption on poverty in the United Kingdom. Addiction. 2021 Jan;116(1):150–8.
62. Erol A, Karpyak VM. Sex and gender-related differences in alcohol use and its consequences: Contemporary knowledge and future research considerations. Drug Alcohol Depend. 2015 Nov 1;156:1–13.
63. Institute for Alcohol Studies. Alcohol, Domestic Abuse, and Sexual Assault. [internet] IAS. Available from: https://www.ias.org.uk/uploads/IAS%20report%20Alcohol%20domestic%20abuse%20and%20sexual%20assault.pdf. Accessed 27/02/2022
64. Popova S, Rehm J, Patra J, Zatonski W. Comparing alcohol consumption in central and eastern Europe to other European countries. Alcohol Alcohol. 2007 Feb 6;42(5):465–73.
65. Lima JM, Brummer J, Schölin L, Täht T, Beekmann L, Ferreira-Borges C. Improving monitoring of implementation of alcohol policy: a case study from Estonia [Internet]. [cited 2023 Jun 2]. Available from: https://apps.who.int/iris/bitstream/handle/10665/324932/php-4-3-378-383-eng.pdf
66. Karlsson T, Mäkelä P, Tigerstedt C, Keskimäki I. The Road to the Alcohol Act 2018 in Finland: A conflict between public health objectives and neoliberal goals. Health Policy. 2020 Jan;124(1):1–6.
67. Zeigler DW. The alcohol industry and trade agreements: a preliminary assessment. Addiction. 2009 Feb;104 Suppl 1:13–26.
68. Morojele NK, Dumbili EW, Obot IS, Parry CDH. Alcohol consumption, harms and policy developments in sub-Saharan Africa: The case for stronger national and regional responses. Drug Alcohol Rev. 2021 Mar;40(3):402–19.
69. Rekve D, Banatvala N, Karpati A, Tarlton D, Westerman L, Sperkova K, et al. Prioritising action on alcohol for health and development. BMJ. 2019 Dec 6;367:l6162.
70. Petticrew M, Maani N, Pettigrew L, Rutter H, VAN Schalkwyk MC. Dark Nudges and Sludge in Big Alcohol: Behavioral Economics, Cognitive Biases, and Alcohol Industry Corporate Social Responsibility. Milbank Q. 2020 Dec;98(4):1290–328.
71. Hawkins B, McCambridge J. Public-private partnerships and the politics of alcohol policy in England: the Coalition Government's Public Health "Responsibility Deal." BMC Public Health. 2019 Nov 8;19(1):1477.
72. Petticrew M, Maani Hessari N, Knai C, Weiderpass E. How alcohol industry organisations mislead the public about alcohol and cancer. Drug Alcohol Rev. 2018 Mar;37(3):293–303.
73. Abdool Karim S, Erzse A, Thow AM, Amukugo HJ, Ruhara C, Ahaibwe G, et al. The legal feasibility of adopting a sugar-sweetened beverage tax in seven sub-Saharan African countries. Glob Health Action. 2021 Jan 1;14(1):1884358.
74. Anderson P, Baumberg B. Alcohol in Europe: Health, social and economic impact. Eurohealth. 2006;12(2):17.
75. Zeigler DW. International trade agreements challenge tobacco and alcohol control policies. Drug Alcohol Rev. 2006 Nov;25(6):567–79.
76. Wright A, Smith KE, Hellowell M. Policy lessons from health taxes: a systematic review of empirical studies. BMC Public Health. 2017 Jun 19;17(1):583.
77. Nelson MA. Electoral Cycles and the Politics of State Tax Policy. Public Finance Review. 2000 Nov 1;28(6):540–60.
78. Jernigan DH, Babor TF. The concentration of the global alcohol industry and its penetration in the African region. Addiction. 2015 Apr;110(4):551–60.
79. Russell C, van Walbeek C. How does a change in the excise tax on beer impact beer retail prices in South Africa? S Afr J Econ. 2016 Dec;84(4):555–73.
80. Shang C, Ngo A, Chaloupka FJ. The pass-through of alcohol excise taxes to prices in OECD countries. Eur J Health Econ. 2020 Aug;21(6):855–67.
81. Nelson JP, Moran JR. Effects of Alcohol Taxation on Prices: A Systematic Review and Meta-Analysis of Pass-Through Rates. B E J Econom Anal Policy [Internet]. 2020 Jan 1 [cited 2023 Jun 3];20(1). Available from: https://www.degruyter.com/document/doi/10.1515/bejeap-2019-0134/html
82. Ally AK, Meng Y, Chakraborty R, Dobson PW, Seaton JS, Holmes J, et al. Alcohol tax pass-through

across the product and price range: do retailers treat cheap alcohol differently? Addiction. 2014 Dec;109(12):1994–2002.

83. Hindriks J, Serse V. Heterogeneity in the tax pass-through to spirit retail prices: Evidence from Belgium. J Public Econ. 2019 Aug 1;176:142–60.

84. World Health Organization. Resource tool on alcohol taxation and pricing policies [Internet]. [cited 2023 Jun 2]. Available from: https://www.who.int/publications-detail-redirect/9789241512701

85. Meier PS, Holmes J, Angus C, Ally AK, Meng Y, Brennan A. Estimated Effects of Different Alcohol Taxation and Price Policies on Health Inequalities: A Mathematical Modelling Study. PLoS Med. 2016 Feb;13(2):e1001963.

86. Hobday M, Gordon E, Lensvelt E, Meuleners L, Liang W, Chikritzhs T. The effect of price increases on predicted alcohol purchasing decisions and choice to substitute. Addict Res Theory. 2016 Nov 1;24(6):441–9.

87. Sornpaisarn B, Shield KD, Rehm J. Two-chosen-one taxation: examining its potential effectiveness to reduce drinking initiation and heavy alcohol consumption in low- to middle-income countries. Addiction. 2012 Aug;107(8):1389–90.

88. Keen M. The balance between specific and ad valorem taxation. Fisc Stud. 1998 Feb;19(1):1–37.

89. Global Health Advocacy Incubator. Sugar-Sweetened Beverage Taxation in the Region of the Americas. Pan American Health Organization (PAHO); 2021. 64 p.

90. World Health Organization. WHO technical manual on tobacco tax policy and administration [Internet]. World Health Organization; 2021 [cited 2023 Jun 5]. Available from: https://www.who.int/publications/i/item/9789240019188

91. Allcott H, Lockwood BB, Taubinsky D. Should We Tax Sugar-Sweetened Beverages? An Overview of Theory and Evidence. J Econ Perspect. 2019 Aug;33(3):202–27.

92. Griffith R, O'Connell M, Smith K. Tax design in the alcohol market. J Public Econ. 2019 Apr 1;172:20–35.

93. Angus C, Holmes J, Meier PS. Comparing alcohol taxation throughout the European Union. Addiction. 2019 Aug;114(8):1489–94.

94. European Commission. Excise duty tables. Part I: Alcoholic beverages. Brussels: European Commission. 2020. Available at: https://taxation-customs.ec.europa.eu/system/files/2021-09/excise_duties-part_i_alcohol_en.pdf

95. Naimi TS, Blanchette JG, Xuan Z, Chaloupka FJ. Erosion of State Alcohol Excise Taxes in the United States. J Stud Alcohol Drugs. 2018 Jan;79(1):43–8.

96. Boniface S, Scannell JW, Marlow S. Evidence for the effectiveness of minimum pricing of alcohol: a systematic review and assessment using the Bradford Hill criteria for causality. BMJ Open. 2017 Jun 6;7(5):e013497.

97. Burton R, Henn C, Lavoie D, O'Connor R, Perkins C, Sweeney K, et al. A rapid evidence review of the effectiveness and cost-effectiveness of alcohol control policies: an English perspective. Lancet. 2017 Apr 15;389(10078):1558–80.

98. Anderson P, O'Donnell A, Kaner E, Llopis EJ, Manthey J, Rehm J. Impact of minimum unit pricing on alcohol purchases in Scotland and Wales: controlled interrupted time series analyses. Lancet Public Health. 2021 Aug;6(8):e557–65.

99. Robinson M, Geue C, Lewsey J, Mackay D, McCartney G, Curnock E, et al. Evaluating the impact of the alcohol act on off-trade alcohol sales: a natural experiment in Scotland. Addiction. 2014 Dec;109(12):2035–43.

100. Angus C, Meng M, Ally A, Holmes J, Brennan A. Model-based appraisal of minimum unit pricing for alcohol in the Republic of Ireland [Internet]. 2014. Available from: https://www.drugsandalcohol.ie/23904/1/MUP-FINAL-Report-2014.pdf

101. Ozer C, Bloom D, Martinez Valle A, Banzon E, Mandeville K, Paul J, et al. Health Earmarks and Health Taxes. 2020; Available from: https://openknowledge.worldbank.org/handle/10986/34947

102. Cashin C, Sparkes S, Bloom D. Earmarking for health: from theory to practice [Internet]. World Health Organization; 2017 [cited 2022 Dec 4]. Report No.: WHO/HIS/HGF/HFWorkingPaper/17.5. Available from: https://apps.who.int/iris/handle/10665/255004

103. Kaiser K, Bredenkamp C, Iglesias R. Sin Tax Reform in the Philippines: Transforming Public Finance, Health, and Governance for More Inclusive Development. World Bank Publications; 2016. 146 p.

104. Sandoval RC, Malik S,

Roche M, Belausteguigoitia I, Morales-Zamora G. Lessons learned from fostering tobacco taxes in the Americas and implications for other health taxes. Rev Panam Salud Publica. 2022 Oct 31;46:e188.

105. Wall M, Casswell S, Callinan S, Chaiyasong S, Viet Cuong P, Gray-Phillip G, et al. Alcohol taxes' contribution to prices in high and middle-income countries: Data from the International Alcohol Control Study. Drug Alcohol Rev. 2018 Aug;37 Suppl 2:S27–35.

106. World Health Organization. Noncommunicable Diseases Progress Monitor 2020 [Internet]. World Health Organization; 2020 [cited 2023 Jun 5]. Available from: https://www.who.int/publications-detail/ncd-progress-monitor-2020

107. World Health Organization. Regional Office for Europe. Alcohol consumption and sustainable development: fact sheet on Sustainable Development Goals (SDGs): health targets [Internet]. World Health Organization. Regional Office for Europe; 2020 [cited 2023 Jun 5]. Report No.: WHO/EURO:2020-2370-42125-58041. Available from: https://apps.who.int/iris/handle/10665/340806

108. OECD. Consumption Tax Trends 2020: VAT/GST and excise rates, trends and policy issues. [cited 2023 Jun 5]; Available from: https://www.oecd-ilibrary.org/taxation/consumption-tax-trends-2020_152def2d-en

109. World Health Organization. Noncommunicable diseases: what ministries of finance, tax and revenue need to know [Internet]. [cited 2023 Jun 5]. Available from: https://www.who.int/fr/publications-detail/WHO-NMH-NMA-16.94

110. Gil A, Polikina O, Koroleva N, Leon DA, McKee M. Alcohol policy in a Russian region: a stakeholder analysis. Eur J Public Health. 2010 Oct;20(5):588–94.

111. Friel S, Hattersley L, Townsend R. Trade Policy and Public Health. Annu Rev Public Health. 2015 Mar 18;36(1):325–44.

112. Thavorncharoensap M, Teerawattananon Y, Yothasamut J, Lertpitakpong C, Chaikledkaew U. The economic impact of alcohol consumption: a systematic review. Subst Abuse Treat Prev Policy. 2009 Nov 25;4:20.

113. Probst C, Roerecke M, Behrendt S, Rehm J. Gender differences in socioeconomic inequality of alcohol-attributable mortality: A systematic review and meta-analysis. Drug Alcohol Rev. 2015 May;34(3):267–77.

114. Štelemėkas M, Manthey J, Badaras R, Casswell S, Ferreira-Borges C, Kalėdienė R, et al. Alcohol control policy measures and all-cause mortality in Lithuania: an interrupted time-series analysis. Addiction. 2021 Oct;116(10):2673–84.

115. Wagenaar AC, Tobler AL, Komro KA. Effects of alcohol tax and price policies on morbidity and mortality: a systematic review. Am J Public Health. 2010 Nov;100(11):2270–8.

116. World Health Organization. Saving lives, spending less: the case for investing in noncommunicable diseases. World Health Organization; 2021. 28 p.

117. The Institute for Alcohol Studies. The Alcohol Industry: Social and Political Activities. 2020. Available from: https://www.ias.org.uk/wp-content/uploads/2020/12/The-alcohol-industry-%E2%80%93-Social-and-political-activities.pdf

118. Martino FP, Miller PG, Coomber K, Hancock L, Kypri K. Correction: Analysis of Alcohol Industry Submissions against Marketing Regulation. PLoS One. 2017 Apr 6;12(4):e0175661.

119. Maani Hessari N, Petticrew M. What does the alcohol industry mean by "Responsible drinking"? A comparative analysis. J Public Health . 2018 Mar 1;40(1):90–7.

120. Jain V, Crosby L, Baker P, Chalkidou K. Distributional equity as a consideration in economic and modelling evaluations of health taxes: A systematic review. Health Policy. 2020 Sep;124(9):919–31.

121. Wada R, Chaloupka FJ, Powell LM, Jernigan DH. Employment impacts of alcohol taxes. Prev Med. 2017 Dec;105S:S50–5.

122. Bygvrå S. Distance and Cross-Border Shopping for Alcohol. Nordisk Alkohol Nark. 2009 Apr;26(2):141–63.

123. Grittner U, Bloomfield K. Changes in private alcohol importation after alcohol tax reductions and import allowance increases in Denmark. Nordisk Alkohol Nark. 2009;26(2):177–91.

124. Koski A, Sirén R, Vuori E, Poikolainen K. Alcohol tax cuts and increase in alcohol-positive sudden deaths: a time-series intervention analysis. Addiction. 2007 Mar;102(3):362–8.

125. Daley JI, Stahre MA, Chaloupka FJ, Naimi TS. The impact of a 25-cent-per-drink alcohol tax increase. Am J Prev Med. 2012

Apr;42(4):382–9.

126. Naimi TS, Daley JI, Xuan Z, Blanchette JG, Chaloupka FJ, Jernigan DH. Who Would Pay for State Alcohol Tax Increases in the United States? Prev Chronic Dis. 2016 May 19;13:E67.

127. Sassi F, Belloni A, Mirelman AJ, Suhrcke M, Thomas A, Salti N, et al. Equity impacts of price policies to promote healthy behaviours. Lancet. 2018 May 19;391(10134):2059–70.

128. Vandenberg B, Sharma A. Are Alcohol Taxation and Pricing Policies Regressive? Product-Level Effects of a Specific Tax and a Minimum Unit Price for Alcohol. Alcohol Alcohol. 2016 Jul;51(4):493–502.

129. Fuchs A, Gonzalez Icaza MF, Paz DP. Distributional Effects of Tobacco Taxation: A Comparative Analysis [Internet]. 2019 [cited 2023 Jun 5]. Available from: https://papers.ssrn.com/abstract=3368579

130. World Health Organization. Regional Office for Europe. Alcohol and inequities: Guidance for addressing inequities in alcohol-related harm. World Health Organization. Regional Office for Europe; 2014. 36 p.

131. WHO technical manual on alcohol tax policy and administration. Geneva: World Health Organization; 2023. https://www.who.int/publications/i/item/9789240082793

132. Global report on the use of alcohol taxes, 2023. Geneva: World Health Organization; 2023.https://www.who.int/publications/i/item/9789240086104

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