

Global report
on the use of
alcohol taxes

2025



World Health
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Abbreviations

ABV	Alcohol by volume
CIF	Cost, insurance and freight
GISAH	WHO Global Information System on Alcohol and Health
HS	Harmonized Systems tariff codes
IMF	International Monetary Fund
NCD	Noncommunicable diseases
PAHO	Pan American Health Organization
UN	United Nations
VAT	Value added tax
WHO	World Health Organization

Executive summary

This report provides a global assessment of taxes applied to alcoholic beverages in 2024. It is an update to the first assessment undertaken in 2022 (1). It qualitatively compares their design and provides estimates of standardized metrics to measure tax levels across countries. This assessment builds on and complements the World Health Organization (WHO) technical manual on alcohol tax policy and administration (2). It aims to inform policy decisions on alcohol excise taxation and support further research.

Alcohol consumption is one of the leading risk factors for noncommunicable diseases worldwide. It is also a risk factor for poor mental health, injury and poisoning (2). While historically it has predominantly been used to raise revenue, excise taxes are an effective tool to decrease the affordability of alcoholic beverages and reduce alcohol consumption and related harms. Taxation is even more effective when paired with other high-impact, population-wide interventions that limit alcohol availability and marketing.

Section 1 provides background on alcohol consumption and its related harms, WHO's policy recommendation on alcoholic beverage excise taxation, and the importance of assessing the use of such taxes as a policy tool drawing from lessons learned in the monitoring of tobacco taxation carried out by WHO since 2008.

Section 2 presents the global implementation of excise tax policy. Key takeaway from this section:

- As of July 2024, at least 167 countries applied excise taxes to alcoholic beverages at the national level, two did not apply any excise taxes, and another 12 countries banned the use of alcoholic beverages. Wine was exempted from excise taxes in at least 25 countries, particularly in the WHO European Region. These exemptions contradict WHO's recommendation that excise taxes apply to all alcoholic beverages where they are not banned.

Section 3 provides an overview of the design of alcoholic beverage excise taxes across countries. Key takeaways from this section:

- Volume-based specific excise represents the most-used type of excise tax system applied to beer and wine, while alcohol-content-based specific excise tax systems are the most used for spirits.
- Approximately half the countries that apply excise tax on alcoholic beverages base it on alcohol content for beer and for spirits, either through an alcohol-content based specific excise or tiered excise rates based on alcohol by volume (ABV).
- Among the countries that apply an alcohol-content-based specific excise, or an *ad valorem* excise tax component, only 8%, 5% and 4% also apply a minimum specific excise tax to beer, wine and spirits, respectively.

- Fewer than one in four countries implementing specific excise tax systems mandate a regular automatic adjustment of tax rates. This means that in most countries these taxes may lose real value over time, as they are likely to be eroded by inflation.

Section 4 briefly discusses the use of other indirect taxes and complementary pricing measures, and is illustrated by country examples.

Section 5 estimates the share of taxes in the retail price for 330 ml of the most-sold beer brand, and 750 ml of the most-sold brand of the most-sold type of spirits. These indicators allow standardized comparisons among countries with varying tax designs. Key takeaways from this section:

- The global median excise tax share is low overall, at 14% for beer and 22.5% for spirits, with significant differences across regions. This is generally very similar to the median values identified in 2022, at 13.4% for beer and 24.8% for spirits.

Section 6 focuses on average tax and price levels. Key takeaways from this section:

- Excise tax levels remain low in many countries. On average worldwide, a 330 ml bottle of the most-sold brand of beer costs US\$ 2.47 at purchasing power parity (PPP), of which only PPP \$0.52 (21%) is excise tax. For a 750 ml bottle of the most-sold brand of the most-sold type of spirits, the average price is PPP US\$ 22.67, of which only PPP\$ 6.44 (28%) is excise tax.

Section 7 looks at changes in affordability of beer and spirits between 2022 and 2024. Key takeaways from this section:

- Between 2022 and 2024, beer became less affordable in only 31% of countries, and spirits became less affordable in 22% of countries. Regularly reviewing and adjusting tax policies is important to ensure alcohol becomes less affordable over time.

Section 8 looks at the implementation of revenue earmarking from excise taxes applied to alcoholic beverages. Key takeaways from this section:

- Of the 146 countries that apply excise taxes to alcoholic beverages and for which information on earmarking is available, 28 earmark such revenue for a variety of health programmes, including for universal health coverage, the prevention and control of noncommunicable diseases, alcohol control interventions and the promotion of physical activity.

Finally, **Section 9** summarizes the main takeaways and provides key considerations to guide policy-makers in improving existing excise taxes on alcoholic beverages in light of available evidence.

- While other perspectives and competing factors have to be accounted for when designing taxation policies, the protection of people's health should be a key consideration, particularly given the health, social and economic burden associated with alcohol consumption and its related harms.

Technical notes are provided in **Section 10**, at the end of the report for more information on the methods used in this analysis, as well as the rationale behind the choice of indicators. Detailed results for each country are available in WHO's Global Health Observatory Website.

Overall, excise taxes on alcoholic beverages remain underutilized and little progress has been made since 2022. Countries should improve tax design and increase taxes more systematically so that alcoholic beverage products become less affordable and as a consequence the burden of alcohol consumption and its related harms are effectively reduced.

1. Background

Alcohol and alcoholic beverages contain ethanol, which is a psychoactive and toxic substance with dependence-producing properties. The negative health impacts of alcohol consumption include those for maternal and child health, communicable diseases, noncommunicable diseases (NCD) and mental health damage, injuries, and poisonings (3-5). The harmful use of alcohol¹ (5) results in the deaths of approximately 2.6 million people annually (3). It also damages the well-being and health of people around drinkers, and carries significant social and economic costs (6).

In 2022, worldwide total per capita consumption was equal to 5.02 litres of pure alcohol per person among those aged 15 years or older, a 16% decrease from 2013 following a steady increase in the 2003–2012 period (5).

Empirical evidence indicates that as the prices of alcoholic beverages increase and become less affordable, purchases and consumption of these products decrease (2). Increases in excise taxes on alcoholic beverages which increase their price and reduce their affordability can prevent alcohol-related harm by reducing consumption, delaying and even preventing the initiation of drinking (7-9). Excise taxes on alcohol are even more effective when paired with other high-impact, population-wide interventions that limit alcohol availability and marketing. Although alcohol excise taxes generate revenue and reduce consumption, they are currently too low to offset more than a small fraction of the substantial health and economic burdens caused by alcohol-related harm. Consequently, WHO recommends taxing alcoholic beverages as one of the most cost-effective policy options (2) in line with the WHO Global Alcohol Action Plan (2022–2030) endorsed in World Health Assembly decision WHA75.11 (10) and the WHO Global Action Plan for the Prevention and Control of NCDs (2013–2030) with its updated Appendix 3 (resolutions WHA70.11 and WHA72(11) (10) as well as the WHO SAFER package² (11,12). Alcohol taxes represent a win-win-win strategy: a win for public health, including averted healthcare costs, a win for government revenue, and a win for health equity. Evidence shows that the harm of alcohol is disproportionately borne by households with lower economic status. At the same time, because alcohol affordability has a greater impact on households with lower economic status, price and tax increases typically lead to larger reductions in consumption in these groups, resulting in greater health gains from reduced alcohol-related disease and death (2,13).

WHO has developed a technical manual on alcohol taxation policy and administration (2). It provides a practical guide for policy-makers and others involved in alcohol taxation policy development and implementation. It features summaries of

¹ Harmful use of alcohol: “Drinking that causes detrimental health and social consequences for the drinker (harmful drinking), the people around the drinker and society at large, as well as patterns of drinking that are associated with increased risk of adverse health outcomes (hazardous drinking)”.

² SAFER stands for: Strengthen restrictions on alcohol availability; Advance and enforce drink driving counter measures; Facilitate access to screening, brief interventions and treatment; Enforce bans or comprehensive restrictions on alcohol advertising, sponsorship, and promotion; Raise prices on alcohol through excise taxes and pricing policies.

available global evidence and case studies of country experiences. WHO's Regional Office for Europe has also released an Alcohol Taxation and Pricing Policies Implementation Toolkit to support government officials in selecting, implementing, and evaluating alcohol taxation and pricing policies. It provides practical guidance to engage government sectors and navigate the complexities of policy development, empowering officials to initiate cross-government discussions and enhance policy effectiveness (14). As highlighted in the manual and in this report, alcohol taxes are currently applied using a variety of designs, which in turn have implications for their effectiveness in reducing consumption. Given such heterogeneity in tax-policy approaches, standardized indicators are required to enable meaningful comparisons of alcohol tax structures and levels across countries.

Since 2008, WHO has monitored tobacco tax designs and levels, as well as prices and affordability, with standardized indicators for all Member States. This monitoring has informed best practices, and institutional opportunities and barriers to applying tobacco taxes with a health rationale, enabled comparisons across countries and over time, and provided a powerful tool for advocacy and research (15). Work to develop comparable measures for taxes on alcoholic beverages started in the WHO Region of the Americas in 2016 (16), when the Pan American Health Organization (PAHO) adapted WHO's method to monitor tobacco taxes and developed alcohol tax policy and tax level indicators (17,18). WHO Europe's Signature Initiative on alcohol tax has also been working to identify an alcohol tax target for implementation by countries in the region (19,20). Other regional initiatives to improve alcohol tax monitoring were also developed in the European Union and among OECD countries (21,22).

In an effort to extend this work, WHO for the first time initiated the collection of price and tax of alcoholic beverages globally in 2022. The results of this data collection and its analysis were summarized in the Global report on the use of alcohol taxes, 2023 (1). The current report is an update to the 2023 report with data collected in 2024, once again presenting a panorama of current excise taxes applied to alcoholic beverages, and assessing their design. This report also disseminates standardized indicators of tax levels for beer and spirits, as they represent the highest share of alcohol per capita consumption globally (71% of average alcohol per capita consumption in 2022) (5). Additional information is provided on excise taxes applied to wine. The results are discussed within the context of the key findings of the WHO technical manual on alcohol tax policy and administration (2).

The data was collected through a survey instrument disseminated to all WHO Member States through WHO's regional and country offices³. Data collection and analysis covered the July 2024–June 2025 period, which included, when available, validating the data against the provided or acquired tax laws, as well as direct communication with many countries to confirm data validity. The cut-off date for the data and legislation collected and each estimated indicator was 31 July 2024.

The data reported in this analysis, once completed, was shared with country officials for review and feedback. They were given four-to-six weeks to respond with further clarifications or corrections before the data analysis was closed and completed. Of the 195 Member States and Associate Members contacted, 24 did not provide any response. Based on the responses received, it was possible to compile standardized indicators of tax and price levels for 156 countries for beer and 152 countries for spirits for 2024. From the responses collected either in 2024 or 2022 and through

³ Note that data collection for alcoholic beverages was done at the same time as data collection for tobacco and sugar-sweetened beverages.

searches on government websites, it was possible to compile information for the section on tax design applied to alcoholic beverages for 181 countries. Additional data on the price and tax levels of wine was collected for the WHO European Region only in 2022 and also in 2024. A summary report of the data collected in 2022 was published earlier in 2025 (20).

The method followed in compiling any recommendation in this report was based on the evidence collected in the WHO technical manual on alcohol tax policy and administration (2).

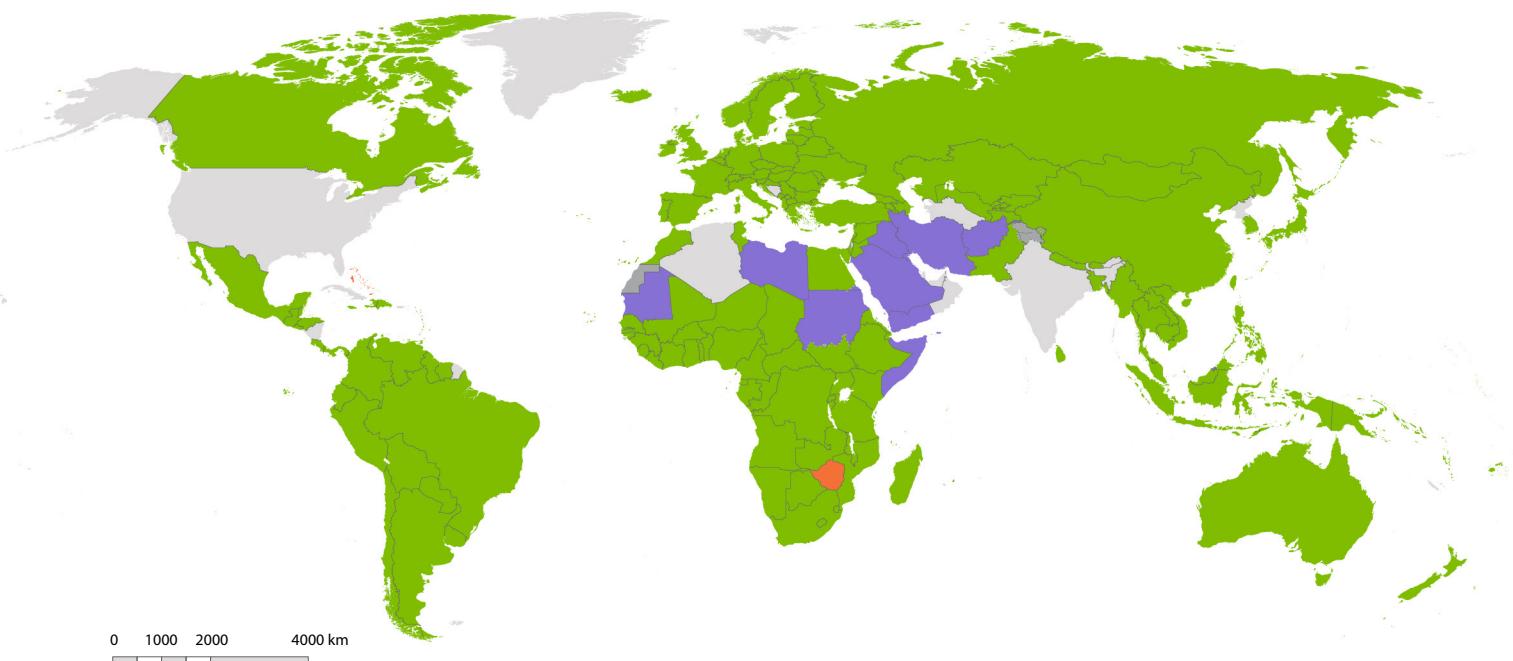
2. Excise taxes on alcoholic beverages

Amongst the various types of consumption taxes (including excise taxes, value added taxes, or VAT, sales taxes, and import duties), excise taxes are preferred from a public health perspective as they raise the relative price of alcoholic beverages compared to other products and services in the economy, so helping reduce affordability. Thus, this report focuses largely on analysing such taxes. Unless otherwise specifically indicated, alcohol taxes refer to excise taxes throughout the report.

For more information on the definition of alcoholic beverages, please refer to the Technical Notes (Section 10).

Globally, as of July 2024, at least 167 countries applied national-level excise taxes to at least one type of alcoholic beverage. Most of the countries that do not apply such taxes are located in the Eastern Mediterranean, where many countries ban the sale of alcohol. Selling alcohol is not legal in 12 countries of the 181 countries analysed. Two countries, where the sale of alcohol is not banned, did not apply any excise tax on alcoholic beverages.

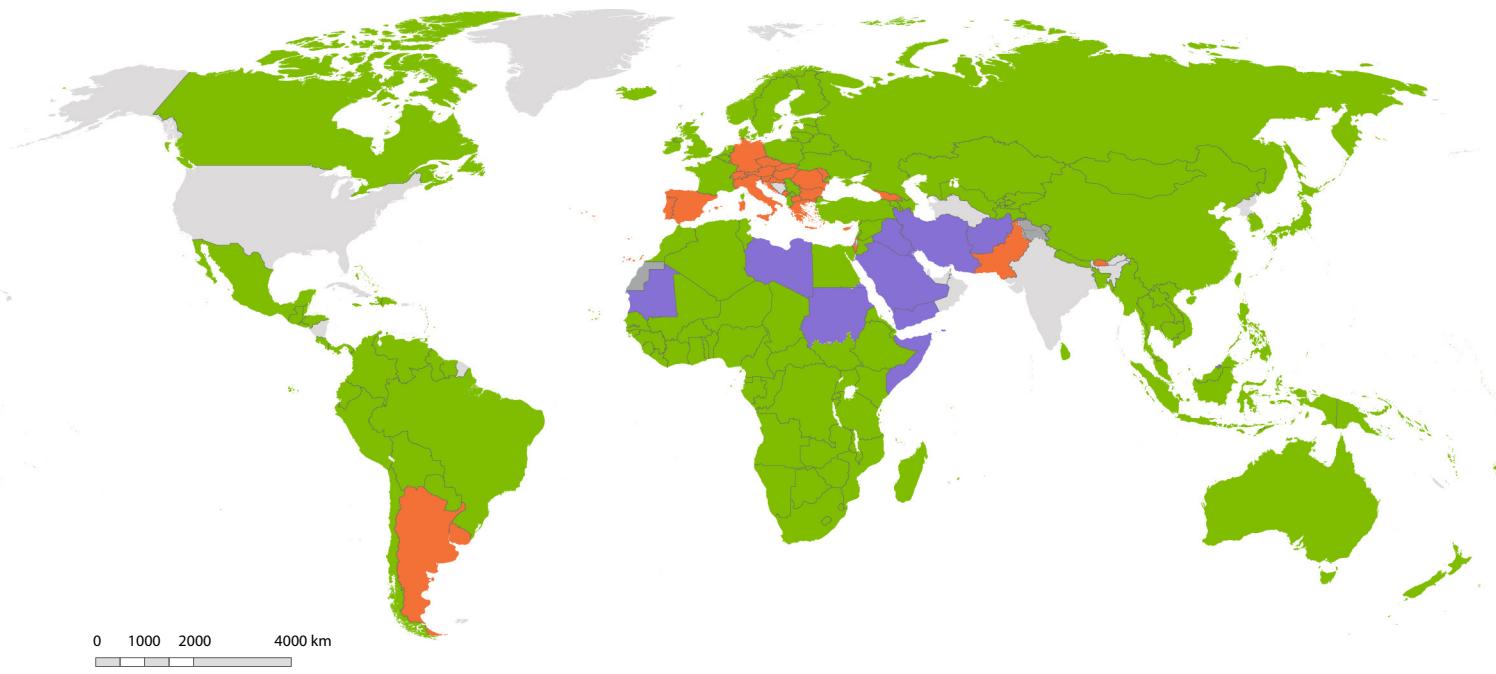
Map 1 National-level excise taxes applied to beer, as of July 2024



Excise taxes applied to beer

- Yes
- No
- Sale of alcoholic beverages is not legal
- Data not available
- Not applicable

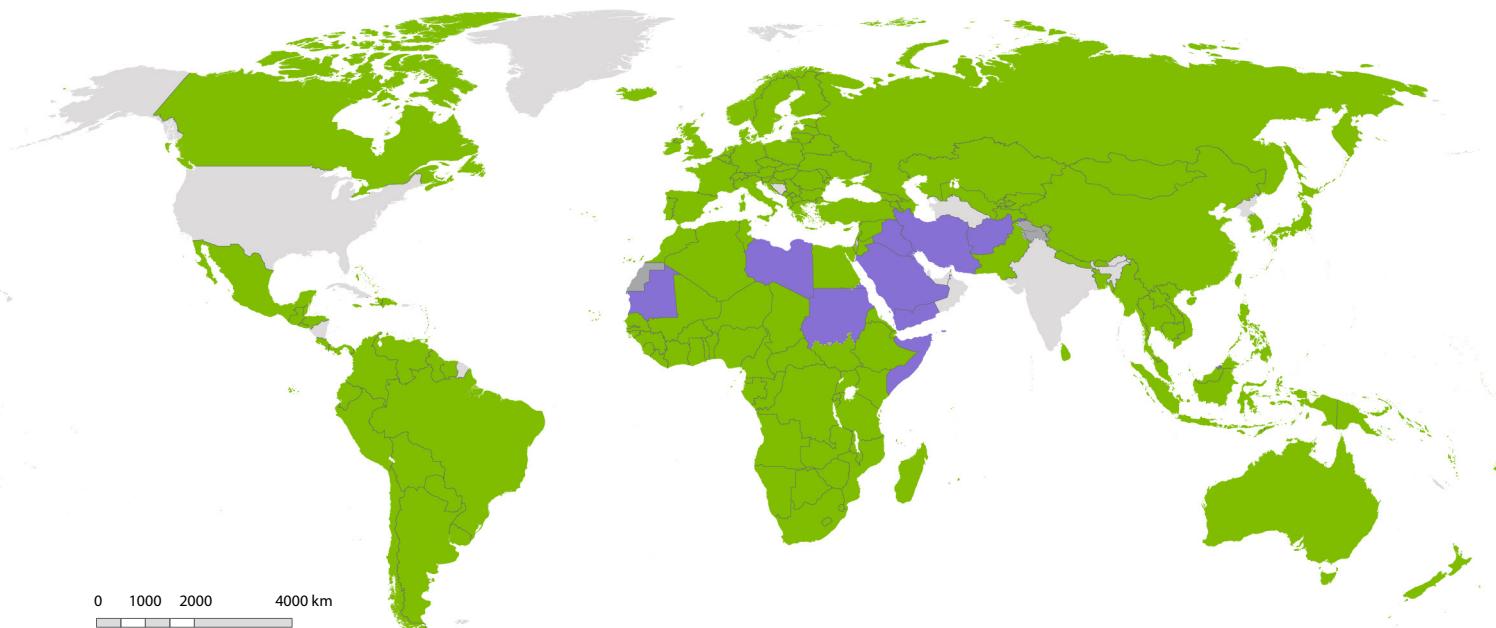
Notes: Iraq: Production, import and sale of alcoholic products banned in February 2023.

Map 2 National-level excise taxes applied to wine, as of July 2024

Excise taxes applied to wine

- Yes
- No
- Sale of alcoholic beverages is not legal
- Data not available
- Not applicable

Notes: This analysis focuses on still wine (not sparkling), typically found in harmonized tariff code 22.04.21. Australia: The Wine Equalization Tax (WET) applied on wine is not an excise tax *per se* but it is considered here an excise tax since it acts like one. Iraq: Production, import and sale of alcoholic products banned in February 2023. Pakistan: Data collected for the State of Punjab. Uruguay: An excise tax applies on wine with ABV above 16%, but most wines have an ABV below this threshold.

Map 3 National-level excise taxes applied to spirits, as of July 2024

Excise taxes applied to spirits

- Yes
- No
- Sale of alcoholic beverages is not legal
- Data not available
- Not applicable

Notes: Iraq: Production, import and sale of alcoholic products banned in February 2023.

Ideally, alcohol excise taxes should apply to all alcoholic beverages. Bahamas⁴ and Zimbabwe⁵ do not apply excise taxes on beer (Map 1). When it comes to wine, at least 25 countries exempt it from tax^{6,7}. Most of these are located in the WHO European Region (21 countries), where 42% of all European countries exempt wine (Map 2). Spirits are taxed by all countries that apply excise taxes to alcoholic beverages (Map 3).

⁴ Beer is not included in the excise tax schedule, but beer production is taxed under the "Spirits and Beer Manufacture Act".

⁵ Honey beer and opaque beer are not subject to excise.

⁶ This analysis focuses on still wine (not sparkling), typically found in harmonized tariff code 22.04.21. Some countries tax sparkling wine while still wine is exempted.

⁷ This list includes countries that do not apply excise taxes to wine or have a zero-rate on wine in their excise tax law, but apply excise taxes to at least one other type of alcoholic beverage. Those countries are Argentina, Austria, Bhutan, Bulgaria, Croatia, Cyprus, Czechia, Georgia, Germany, Greece, Hungary, Israel, Italy, Luxembourg, Montenegro, North Macedonia, Pakistan (State of Punjab), Portugal, Republic of Moldova, Romania, Slovakia, Slovenia, Spain, Switzerland, and Uruguay.

3. Excise tax policy design⁸

Excise taxes can either be applied as a percentage of the monetary value of a beverage (*ad valorem*) or as a fixed amount applied on the volume of a beverage (volume-based specific) or the alcohol content of a beverage (alcohol-content-based specific). Some countries may apply a mixed excise tax system using a combination of excise tax types simultaneously.

Ad valorem excise taxes have the perceived advantage of preserving the real value of the tax without the need for regular adjustment⁹ (but see also 23) as well as taxing more (in monetary terms) and receiving more revenue from higher-priced beverages. However, they do not effectively target cheap products as these have a smaller tax base, potentially widening the price dispersion within products and incentivising unintended substitutions to cheaper alcoholic beverages without reducing the quantity of alcohol consumed. *Ad valorem* excise taxes are also more prone to tax avoidance strategies like underreporting the value on which the tax is based.

On the other hand, specific taxes effectively target cheap brands, as the same rate applies to all products based on volume or alcohol content, regardless of their price, reducing the incentive to shift demand to cheaper beverages. They are also not as prone to industry price manipulation and provide relatively more stable revenue. Nevertheless, specific excise taxes need to be regularly adjusted for inflation or their real value risks erosion over time. Specific taxes are advised for all countries; however, the choice between volume-based specific and alcohol-content-based specific is dependent on the policy goals and tax administrative capacity of each country.

Alcohol-content-based specific excise taxes unify prices in relative terms across brands of the same alcoholic strength, and can be used to incentivize consumers to substitute for alternatives with lower or no alcohol content. They can reduce the health harms of drinking and can also incentivise industry to reformulate products towards low-alcohol content beverages or alcohol-free versions, which could drive alcohol consumption down beyond a tax-induced decrease in demand. On the other hand, volume-based specific taxes are easier to administer and most effective in raising the prices of cheap alcohol, thereby reducing alcohol affordability, curbing initiation and reducing the consumption of low-strength and low-priced beverages. Minimum specific volumetric taxes applied on products with an alcohol-content-based excise tax can combine the benefits of both the volumetric and alcohol-content-based taxes.

Finally, some countries apply mixed excise tax systems, most involving a specific tax component and an *ad valorem* tax component. Mixed excise tax systems can balance the advantages and disadvantages of each excise tax type and offer flexibility but is more complex to administer.

⁸ Please refer to the Technical Notes for more information on the definition of beverages and elements of alcoholic beverage tax design.

⁹ However, this is not always the case. In some countries *ad valorem* excise is applied to the wholesale or ex-factory price of alcoholic beverages. According to the IMF, if inflation affects only retail prices, then excise revenue would not automatically and entirely adjust to it.

Table 1 Number of countries applying different types of excise taxes to beer, by World Bank income groups¹⁰ and WHO regions, as of July 2024

	Ad valorem	Volume-based specific	Alcohol-content-based specific	Mixed – Volume-based specific & Ad valorem	Mixed – Alcohol-based specific & Ad valorem	Mixed – Alcohol & Volume-specific and Ad valorem	Specific mixed – Alcohol based & Volume-based specific	Total countries*
Income groups	High income	3	16	32	0	0	1	52
	Upper middle income	8	18	10	1	6	1	44
	Lower middle income	17	20	3	6	0	0	46
	Low income	13	4	1	3	0	0	21
WHO regions	Africa	20	9	5	9	0	1	44
	Americas	11	12	3	1	4	0	31
	Eastern Mediterranean	3	5	0	0	0	0	8
	European	1	16	32	0	1	0	50
	South-East Asia	2	3	1	0	1	0	7
	Western Pacific	4	13	5	0	0	1	23
Grand Total		41	58	46	10	6	1	163

Notes: *Countries for which data are available.

Volume-based specific excise taxes are the most-used type of tax for beer, with 58 out of 163 countries, followed by alcohol-content-based specific excise taxes (46/163). The latter tend to be favoured by high-income countries (32/52), while volume-based specific excise taxes were favoured by upper- and lower-middle-income countries (18/44 and 20/46, respectively). *Ad valorem* excise taxes are more common among low-income countries (13/21) (Table 1).

¹⁰ World Bank income classification of July 2024.

Table 2 Number of countries applying different types of excise taxes to wine, by World Bank income groups and WHO regions, as of July 2024

	Ad valorem	Volume-based specific	Alcohol-content-based specific	Mixed – Volume-based specific & Ad valorem	Mixed – Alcohol-based specific & Ad valorem	Specific mixed – Alcohol based & Volume-based specific	Total countries*
Income groups	High income	6	21	6	0	0	2 35
	Upper middle income	6	21	3	3	6	1 40
	Lower middle income	15	22	2	6	0	0 45
	Low income	13	3	1	4	0	0 21
WHO regions	Africa	20	14	1	10	1	0 46
	Americas	10	9	3	2	4	2 30
	Eastern Mediterranean	3	4	0	0	0	0 7
	European	0	25	3	1	0	0 29
	South-East Asia	0	4	1	0	1	0 6
	Western Pacific	7	11	4	0	0	1 23
Grand Total		40	67	12	13	6	3 141

Notes: *Countries for which data are available.

Volume-based specific excise taxes are the most-used type applied to wine, with 67 out of 141 countries, followed by *ad valorem* excise taxes (40/141). The latter tend to be mainly used in low-income countries (13/21) and by countries in the African Region and Region of the Americas (20/46 and 10/30, respectively). One low-income country (Mozambique) applies alcohol-content-based specific excise taxes to wine, while the number of countries using this excise tax type on wine in other World Bank income groups is low (6/35 for high-income, 3/40 for upper-middle-income, and 2/45 for lower-middle-income) (Table 2).

Table 3 Number of countries applying different types of excise taxes to spirits, by World Bank income groups and WHO regions, as of July 2024

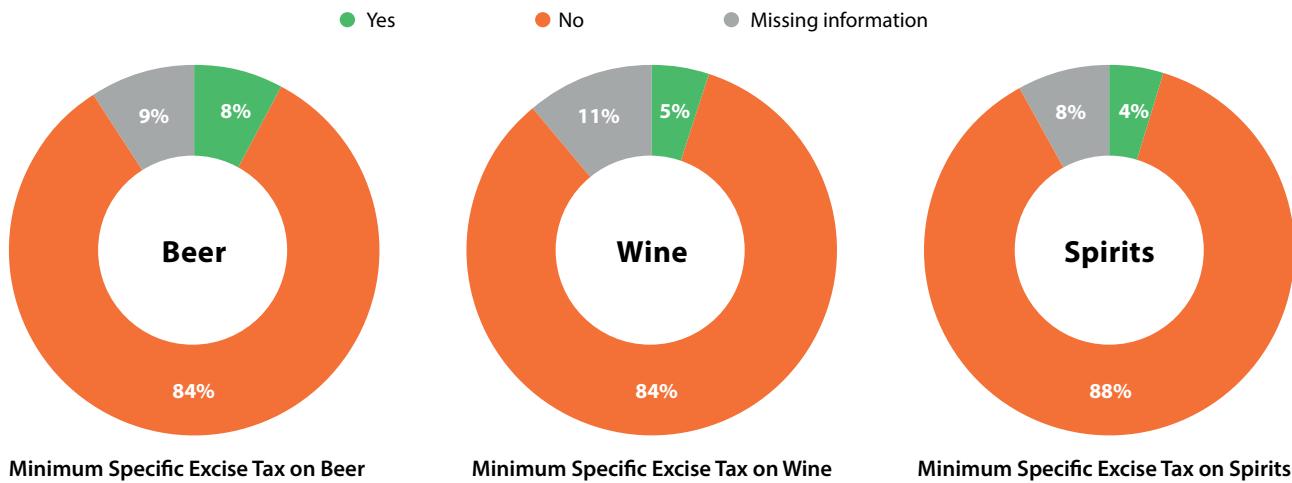
	Ad valorem	Volume-based specific	Alcohol-content-based specific	Mixed – Volume-based specific & Ad valorem	Mixed – Alcohol-based specific & Ad valorem	Specific mixed – Alcohol based & Volume-based specific	Total countries*	
Income groups	High income	4	6	41	0	0	2	53
	Upper middle income	6	9	18	3	7	2	45
	Lower middle income	17	16	6	7	1	0	47
	Low income	13	3	1	4	0	0	21
WHO regions	Africa	20	8	7	10	1	0	46
	Americas	10	9	4	3	4	2	32
	Eastern Mediterranean	4	3	1	0	0	0	8
	European	0	2	47	0	1	0	50
	South-East Asia	1	4	1	0	1	0	7
	Western Pacific	5	8	6	1	1	2	23
Grand Total		40	34	66	14	8	4	166

Notes: *Countries for which data are available.

Alcohol-content-based specific excise taxes are the most used type applied to spirits, with 66 out of 166 countries, followed by *ad valorem* excise taxes (40/166). The latter tend to be mainly used in lower-middle and low-income countries (17/47 and 13/21 respectively) and by countries in the African Region and Region of the Americas (20/46 and 10/32, respectively). Only one low-income country (Mozambique) applies alcohol-content-based specific excise taxes to spirits, while the number of countries using this excise tax type on spirits increases with income (6/47 for lower-middle-income, 18/45 for upper-middle-income, and 41/53 for high-income). Volume-based specific excise taxes are applied in 34/166 countries (Table 3).

The majority of mixed excise tax systems applied on beer, wine and spirits are in the form of volume-based specific combined with *ad valorem*, followed by alcohol-content-based specific combined with *ad valorem*. Cameroon applies a volume-based specific excise tax of 37.50 CFA francs per 330 ml and a 25% *ad valorem* excise tax to beer, while Dominican Republic applies an alcohol-content-based specific excise tax of 723 Dominican pesos, 13 Dominican pesos per litre of pure alcohol and a 10% *ad valorem* excise tax to beer and spirits. Equatorial Guinea applies another type of mixed system by combining an alcohol-content-based specific excise tax of 75 CFA francs per litre of pure alcohol, a volume-based specific excise tax of 200 CFA francs per litre and an *ad valorem* excise of 30%.

Fig. 1 Excise tax structure: Proportion of countries applying a minimum specific excise tax, as of July 2024

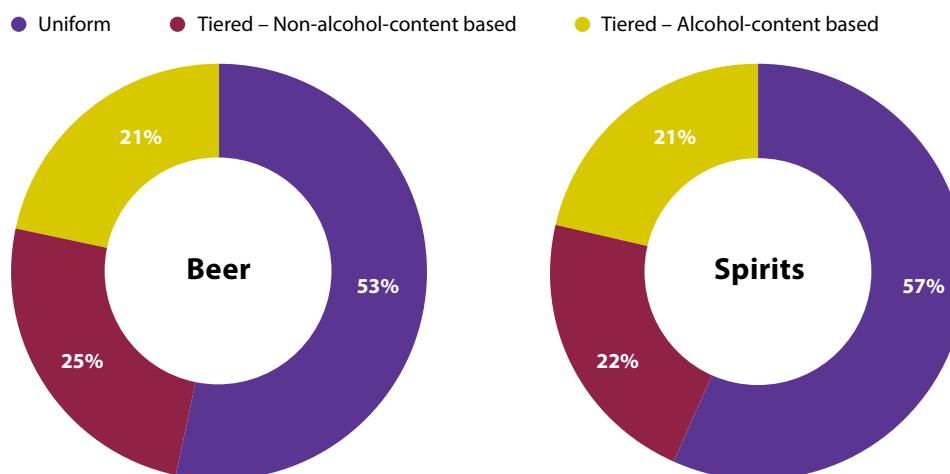


Note: This analysis uses in the denominator countries that apply alcohol-content-based specific excise, *ad valorem* excise or a mixed excise.

A minimum excise tax is usually used in countries to guarantee a set revenue generation amount. It provides protection against products being undervalued where an *ad valorem* tax is applied. It is also used when an alcohol-content based specific excise is applied and beverages with low ABV are prevalent. A minimum tax also forces prices up since the price will not be lower than the tax paid. It is a powerful fiscal tool to raise low-priced alcoholic beverages upwards and to help reduce alcohol consumption and its related harms, especially among heavy drinkers.

Among countries where an *ad valorem* excise component or an alcohol-content-based excise was applied to beer, wine or spirits types of beverages, very few implemented a minimum specific volumetric tax (8% of countries did so for beer, 5% for wine and 4% for spirits) (Fig. 1).

Fig. 2 Excise tax structure: Proportion of countries with uniform vs tiered excise tax system applied to beers and spirits, as of July 2024



Notes: This analysis only accounts for tiers within beer and within spirits and not between alcoholic beverage types.

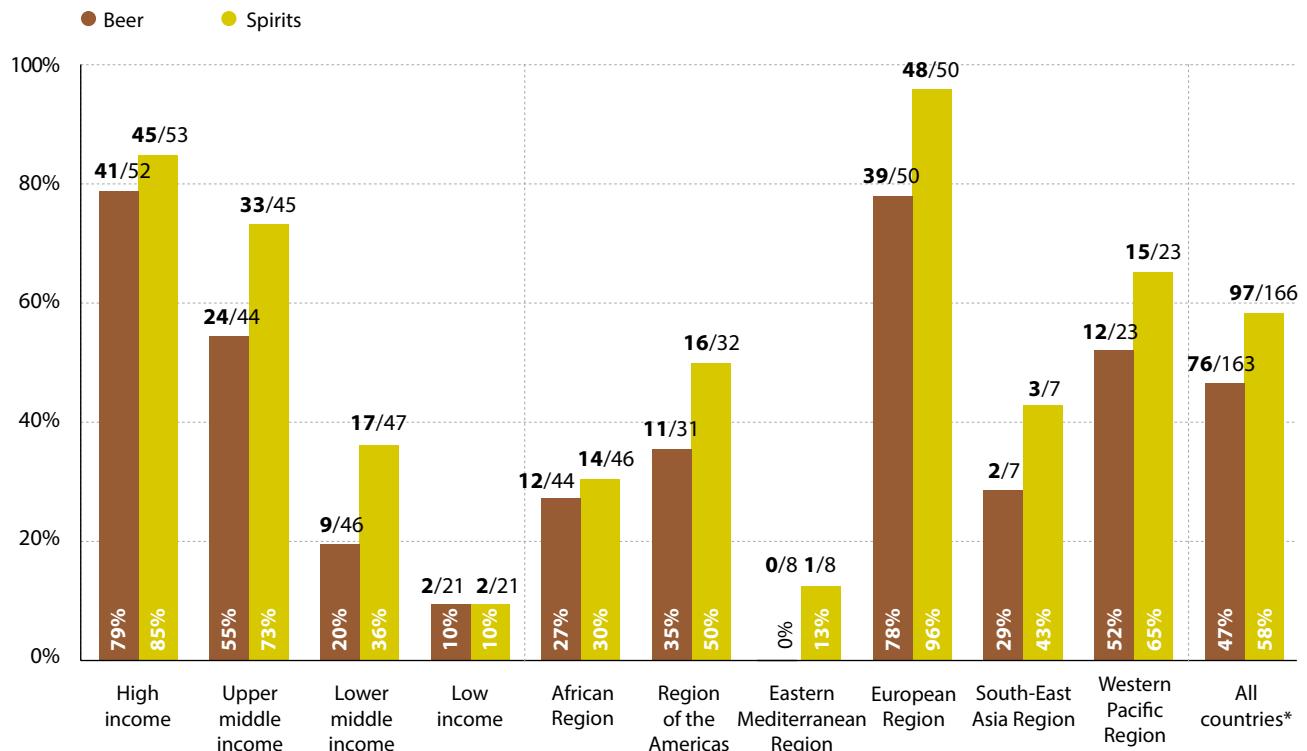
Excise taxes can either be applied using a uniform rate across all beverages of the same type, or can be tiered according to product characteristics such as alcohol content, origin (imported vs locally produced), or annual production volume. Tiered excise taxes based on beverage alcohol concentration may encourage consumers to substitute for alternatives with lower or no alcohol content (demand-side effect) as well as incentivize the industry to reformulate beverages to contain less alcohol (supply-side effect). Tiered taxation based on criteria other than alcohol content¹¹ is not advisable as it does not have any public health purpose and is an additional burden on tax administration. Uniform excise taxes tend to be simpler to administer and more effective at reducing alcohol-related harms than tiered taxes based on other characteristics than alcohol content (2).

Fig. 2 shows that 53% and 57% of countries apply uniform excise taxes to beer and spirits, respectively. Among countries applying a tiered excise tax system, less than half do so based on alcohol content. Seventeen countries differentiate their excise tax between locally produced beverages (or those produced with local raw materials) and imported beverages for at least one type of alcoholic beverage.¹² The highest number of countries applying tiered excise taxes based on alcohol content is found in the WHO European Region (15) for beer and the Western Pacific Region (10) and the Region of the Americas (7) for spirits. For example, Sao Tome e Principe applies three different volume-based specific tax rates based on beverage alcohol concentration (between 2% and 7%; above 7% but below 18%; and equal and above 18%), while Mongolia imposes three specific tax tiers for spirits based on alcohol content (<= 25%, between 25% and 40% and >= 40% ABV). Fig. 2 only captures tiered excise tax systems within beer and within spirits categories and not between alcohol beverage types.

¹¹ In the European Region, more than 80% of countries that apply tiered excise taxes on beer apply a reduced excise tax rate on small breweries.

¹² Those countries are: Bangladesh, Burundi, Cabo Verde, Cameroon, Czechia, Eswatini, Gabon, Ghana, Greece, Lebanon, Liberia, Madagascar, Rwanda, Sierra Leone, Tonga, Uganda, United Republic of Tanzania. This tax differentiation may incentivize unintended substitutions from imported to locally produced beverages, offsetting the effect of the tax on consumption. To limit the risk that excise taxes might be considered discriminatory, they should apply equally to imported and locally produced alcoholic beverages.

Fig. 3 Excise tax structure: Proportion of countries with alcohol-content-based excise taxes applied to beers and spirits, by World Bank income groups and WHO regions, as of July 2024



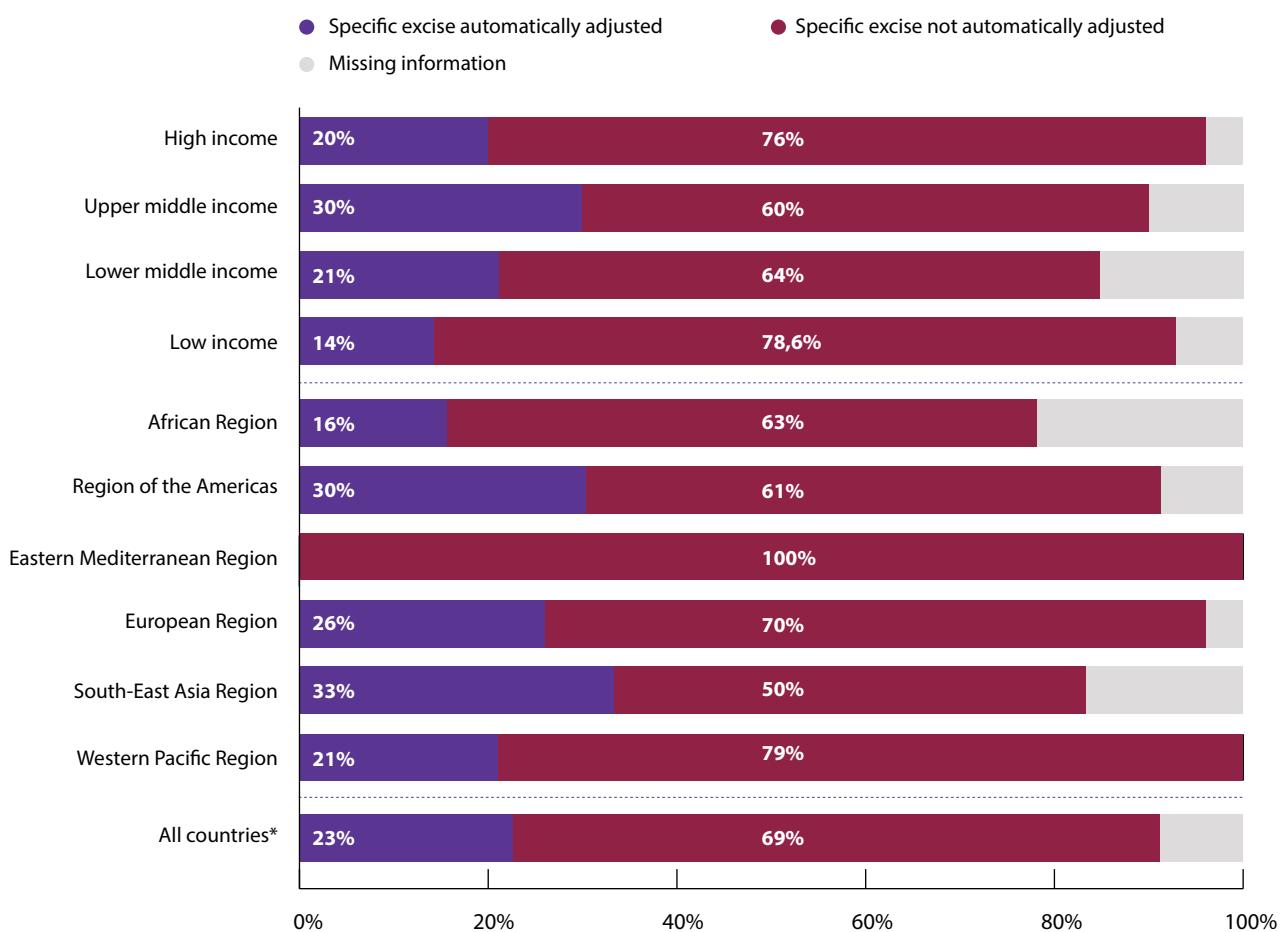
Notes: *Countries for which data are available.

As mentioned previously, accounting for alcohol content in the design of excise taxes is effective in reducing total alcohol consumption and its related harms (2). Tables 1–3 show that some countries use alcohol-content-based specific excise taxes and some others include an alcohol-content-based specific component in their mixed excise tax system. Nevertheless, as seen in Fig. 2, other countries apply *ad valorem* or volume-based specific excise taxes with varying rates (i.e., tiers) based on alcohol concentration thresholds.

Fig. 3 displays the proportion of countries applying excise taxes to beer and spirits based on alcohol content in each World Bank income group category and WHO region (either by applying an alcohol-content-based specific excise tax or using tiered rates based on alcohol content). This is the case for 47% and 58% of them, respectively, with 10% in low-income countries and more than 75% in high-income countries. The highest proportion of countries applying excise taxes based on alcohol content is found in the WHO European Region (78% and 96% for beer and spirits, respectively), while the least is found in the Eastern Mediterranean Region (0% and 13% for beer and spirits, respectively).¹³

¹³ Eight countries reported applying excise taxes on alcoholic beverages in the Eastern Mediterranean Region while nine ban the sale of alcohol.

Fig. 4 Excise tax structure: Proportion of countries with automatic adjustment of specific excise taxes, by World Bank income groups and WHO regions, as of July 2024



The real value of specific excise taxes risks eroding over time if it is not regularly adjusted to keep up with inflation. To address this, WHO recommends countries should implement the automatic adjustment of specific excise taxes to at least account for inflation and ideally income growth. Fig. 4 shows that this is implemented in 23% of countries (31 countries in total) with a specific excise tax globally. More than one out of four countries using a specific excise tax do so in the Regions of the Americas and South-East Asia while none do it in the Eastern Mediterranean Region.¹⁴

¹⁴ Only five countries in the Eastern Mediterranean Region (Jordan, Lebanon, Morocco, Pakistan and Tunisia) apply a specific excise tax component on at least one type of alcoholic beverage.

4. Other non-excise alcohol taxes and pricing policies

Some countries use other indirect taxes as instruments to target the affordability of alcoholic beverages. For example, Marshall Islands and Nauru use import duties. In these small island states where most alcoholic beverages are imported, import duties may be effective in reducing overall consumption. However, tariffs on imported products that are also produced domestically will raise the relative price of the imported products and may induce tax substitution (tax avoidance) in favour of domestically produced products. Import duties may also create risks for countries with trade agreements. For these reasons, import duties are not considered a best practice as an effective policy tool aimed at reducing alcohol consumption.

Another instrument some countries use is value-added taxes (VAT) or sales taxes. When applied uniformly on all goods, they raise all prices, when they are applied differently depending on groups of products, they can make those targeted product relatively more expensive (if the VAT rate is higher) or less expensive (if the VAT rate is lower), and this affects consumption (the relative price increase of a product would for example discourage consumption of that product). From a public health perspective, the VAT or sales tax rate applied to alcoholic beverages should not be discounted, and if various tiers exist, the highest rate should apply. Imposing an excise tax while concurrently applying a reduced VAT rate may undermine the tax's effectiveness in raising the relative price of alcoholic beverages, and consequently, also undermine its potential to improve public health.

While not covered in this analysis, minimum prices represent another pricing policy to reduce the affordability of alcoholic beverages. Minimum prices based on beverage volume set a floor price for a specific volume of a beverage, while minimum prices based on alcohol content (or minimum unit price) represent a floor price below which a fixed volume of alcohol, e.g., a "unit" or "standard drink", cannot be sold to the public. For example, Ireland sets a minimum unit price of 0.1 euro per gram of alcohol for all alcoholic beverages while Kazakhstan sets a minimum price of 2 100 tenge per litre of product. Minimum prices based on alcohol content are better targeted and correlated to alcohol strength and are preferred from a public health perspective. They only increase the price of the cheapest alcohol and thus are particularly effective in targeting heavier drinkers (24,25). It is recommended to automatically index minimum price values to inflation. Other pricing policies include banning below-cost sales, quantity-based discounts, and price promotions. It is important to stress that all those approaches should be complementary to excise taxes and should not be used as a substitute.

5. Tax share¹⁵

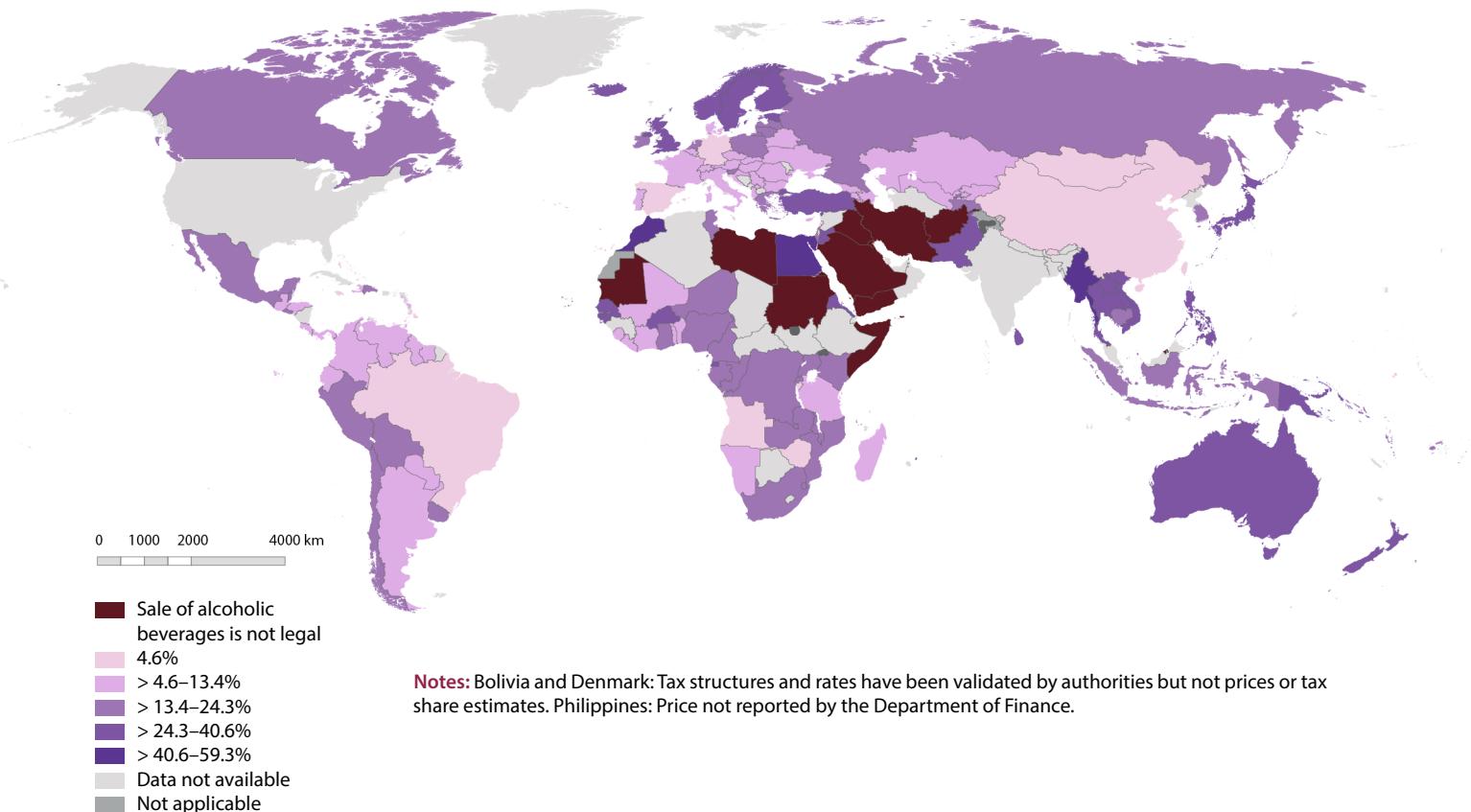
The tax share indicator represents the proportion of indirect taxes in the retail price. This indicator has been used biennially by WHO to monitor tobacco taxes since 2008. It was used the first time for alcoholic beverages (specifically for beer and spirits) in 2022 (1). It allows the monitoring of trends and country comparisons in a standardized way. In this analysis (similar to the 2023 report), the excise tax share measures the proportion that excise taxes alone (whether alcohol-content-based specific, volume-based specific, or *ad valorem*) represent in the retail price of 330 ml of the most-sold brand of beer and 750 ml of the most-sold brand of the most-sold type of spirits. Additionally, we define the total tax share as the sum of all indirect taxes (excise, value-added taxes or sales taxes, import duties, and other indirect taxes) as a proportion of the retail price.

Beer and spirits were selected as they represent the highest share of alcohol per capita consumption globally. No one brand of beer or type of spirit was found to be representative and the most-sold globally; instead, the most-sold brand of beer and the most-sold brand of the most-sold brand of the type of spirits were identified in each country (see Technical notes for more details). For beer, the standardized volume of 330 ml was used as a mid-point volume for bottles or cans with a container size ranging between 300 ml and 360 ml. This range of volume sizes, as well as 750 ml for spirits, are among the most prevalent globally (see Technical notes for more details).

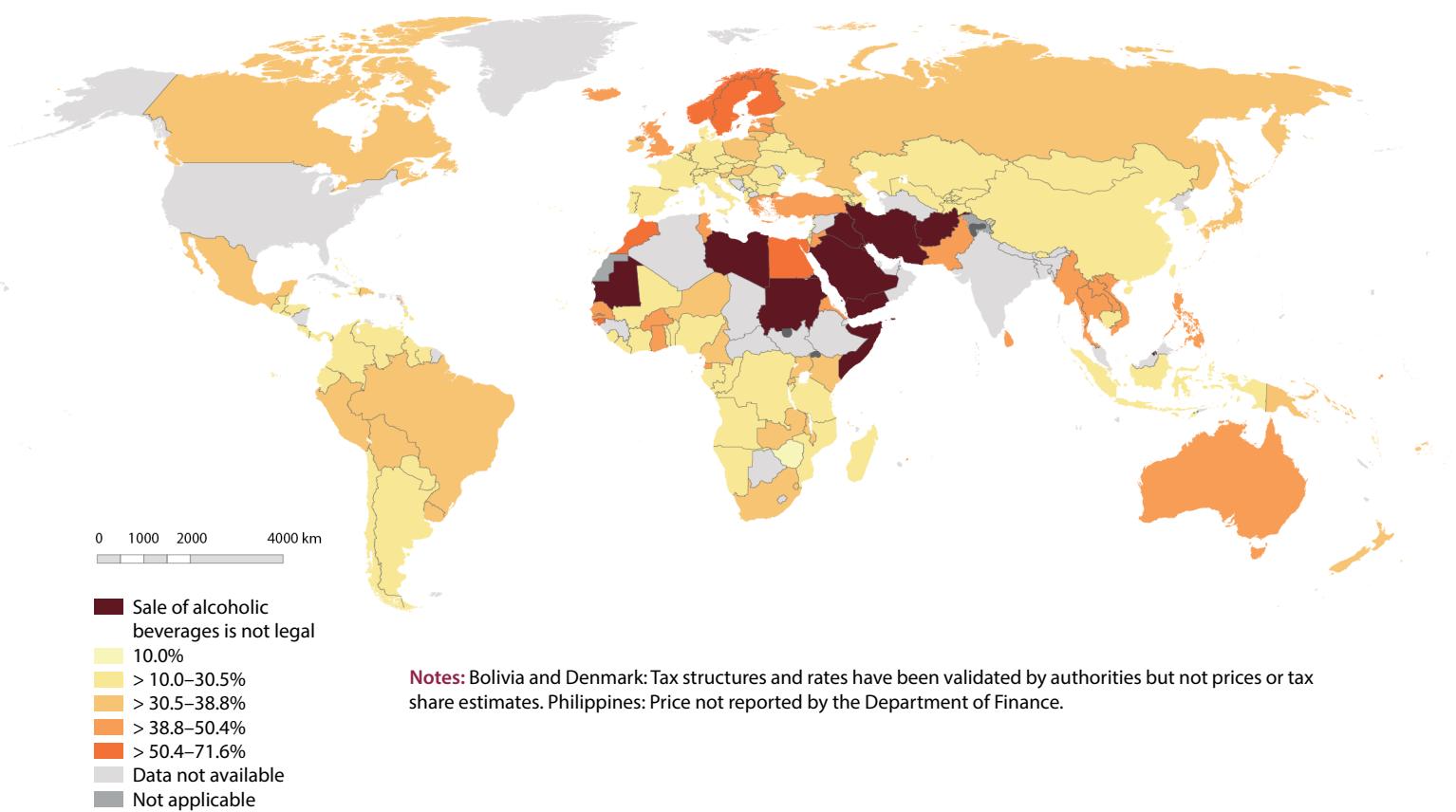
Research shows that demand for alcoholic beverages is price-inelastic, i.e., an increase in price leads to a less-than-proportional decrease in consumption (7-9). Tax levels need to be significantly high to trigger sufficiently high changes in price to alter the underlying affordability of the product relative to income. Conventional economic theory suggests that larger tax and price changes are likely to induce bigger changes in consumption. Increased monitoring and evaluation will help inform their definition.

¹⁵ Please refer to the Technical Notes for detailed information on the methods used to estimate the tax share.

Map 4 Excise tax share for the most-sold brand of beer, as of July 2024



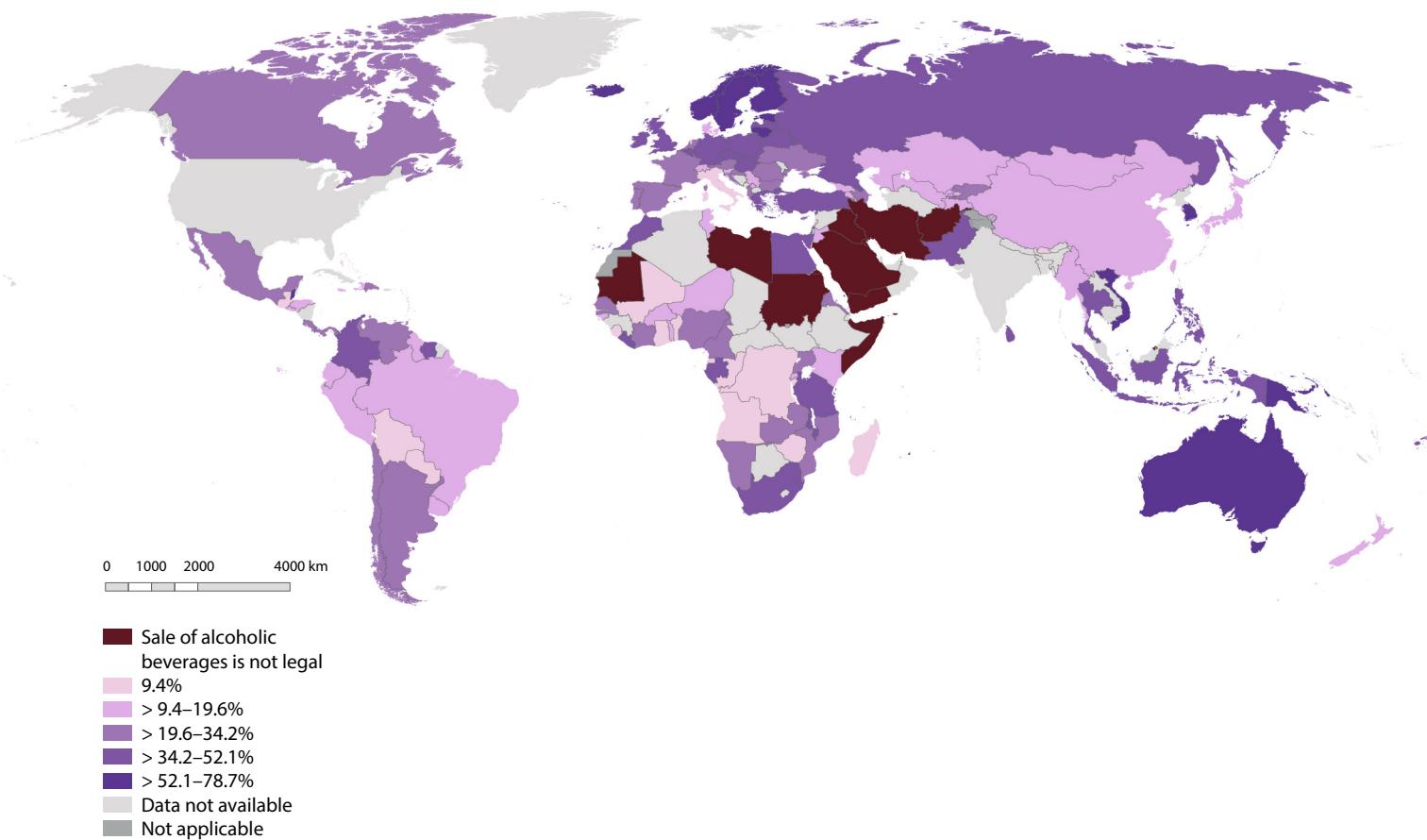
Map 5 Total tax share for the most-sold brand of beer, as of July 2024



Globally, the median excise tax share for 330 ml of the most-sold brand of beer is 14%. Excise taxes account for the highest share of the retail price of the most-sold brand of beer in Egypt (59.3%), a country from the WHO Eastern Mediterranean Region. The maximum excise tax share is found in Eritrea for the African Region (40.6%), Dominica for the Region of the Americas (22%), Finland for the European Region (39.8%), Myanmar for the South-East Asia Region (44.8%), and the Philippines for the Western Pacific Region (32.3%). The median excise tax share is higher in lower-middle income countries (20.1%) and lower income countries (15.4%) than in high-income countries (13.2%) and upper-middle income countries (11.9%). It also varies across WHO regions, from 9.7% in the European Region to 34.6% in the Eastern Mediterranean Region (Map 4).¹⁶

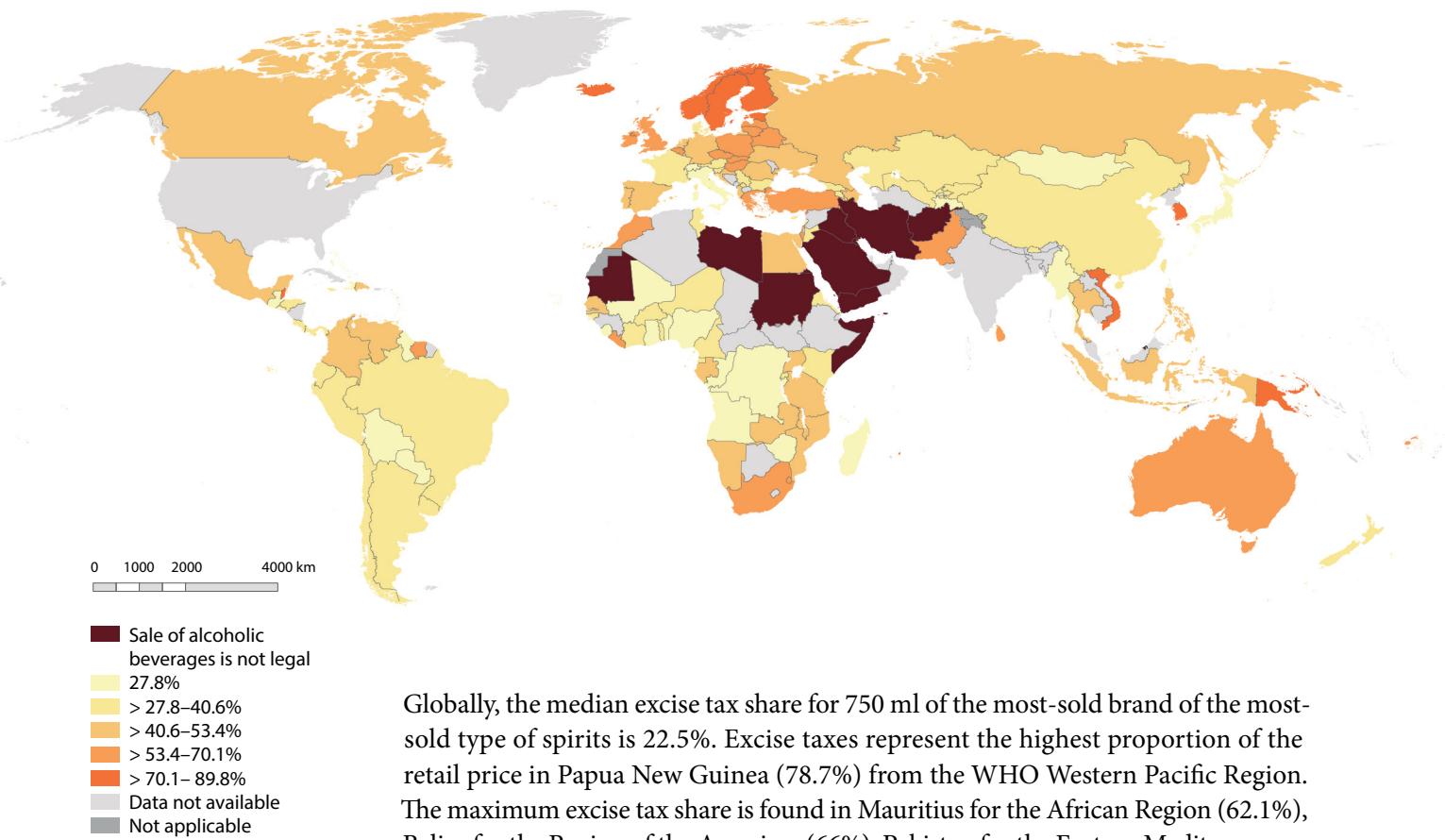
While excise taxes are the preferred fiscal instrument to reduce the relative affordability of alcoholic beverages, it is also interesting to measure the total tax burden applied to such beverages. Globally, the median total tax share for 330 ml of the most-sold brand of beer is 29.4%. Total taxes account for the biggest share of the retail price of the most-sold brand of beer in Egypt (71.6%). The median total tax share is lowest in the Region of the Americas (25.5%), followed by the European Region (27.4%), the African Region (31.6%), the Western Pacific Region (33.3%), and the South-East Asia Region (45.3%), while being the highest in the Eastern Mediterranean Region (49.2%) (Map 5).

Map 6 Excise tax share for the most-sold brand of the most-sold type of spirits, as of July 2024



¹⁶ Only six countries in the Eastern Mediterranean and four in the South-East Asia Regions are represented in tax share and tax level estimates, as others did not provide the required data or ban alcohol sales.

Map 7 Total tax share for the most-sold brand of the most-sold type of spirits, as of July 2024



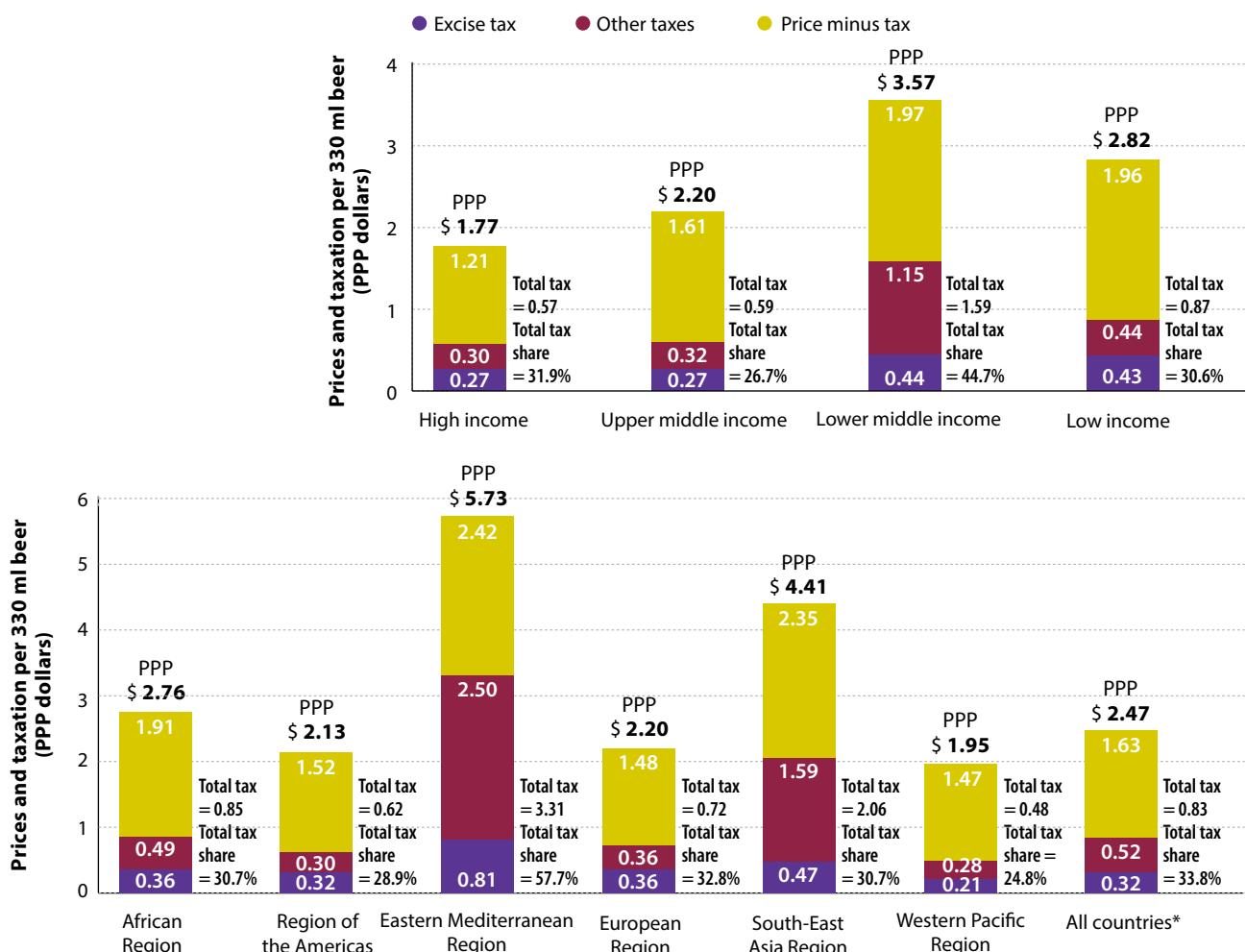
Globally, the median excise tax share for 750 ml of the most-sold brand of the most-sold type of spirits is 22.5%. Excise taxes represent the highest proportion of the retail price in Papua New Guinea (78.7%) from the WHO Western Pacific Region. The maximum excise tax share is found in Mauritius for the African Region (62.1%), Belize for the Region of the Americas (66%), Pakistan for the Eastern Mediterranean Region (39.9%), Iceland for the European Region (69.5%), and Sri Lanka for the South-East Asia Region (48.0%). The median excise tax share increases with income: 15.3% in low-income countries, 21.4% in lower-middle income countries, 22.5% in upper-middle income countries, and 29.2% in high-income countries. It also varies across WHO regions, from 16% in the Region of the Americas to 32.6% in the Western Pacific Region (Map 6).

Regarding total tax share, the median is 38.7% globally. Among WHO regions, it is the highest in the European Region (47.2%), and as with beer, it is the lowest in the Region of the Americas (31.5%). Median total tax share estimates increase with income; with 31.8% for low-income countries, 35.4% and 38.7% for lower-middle income and upper-middle income countries, respectively, and 45.2% for high-income countries (Map 7).

6. Tax level¹⁷

This section examines average price and tax levels for the most-sold brand of beer (per 330 ml) and the most-sold brand of the most-sold type of spirits (per 750 ml). Tax share estimates are multiplied by retail prices to obtain tax level indicators. Such indicators are expressed in international dollars at purchasing power parity (PPP). Averages by region and income groups are weighted by the adult population (15+) of each country for which estimates are available.

Fig. 5 Population weighted average retail price and taxation (excise and total) for the most-sold brand of beer, 330 ml, in Purchasing Power Parity (PPP) adjusted dollars or international dollars, by World Bank income groups and WHO regions, as of July 2024

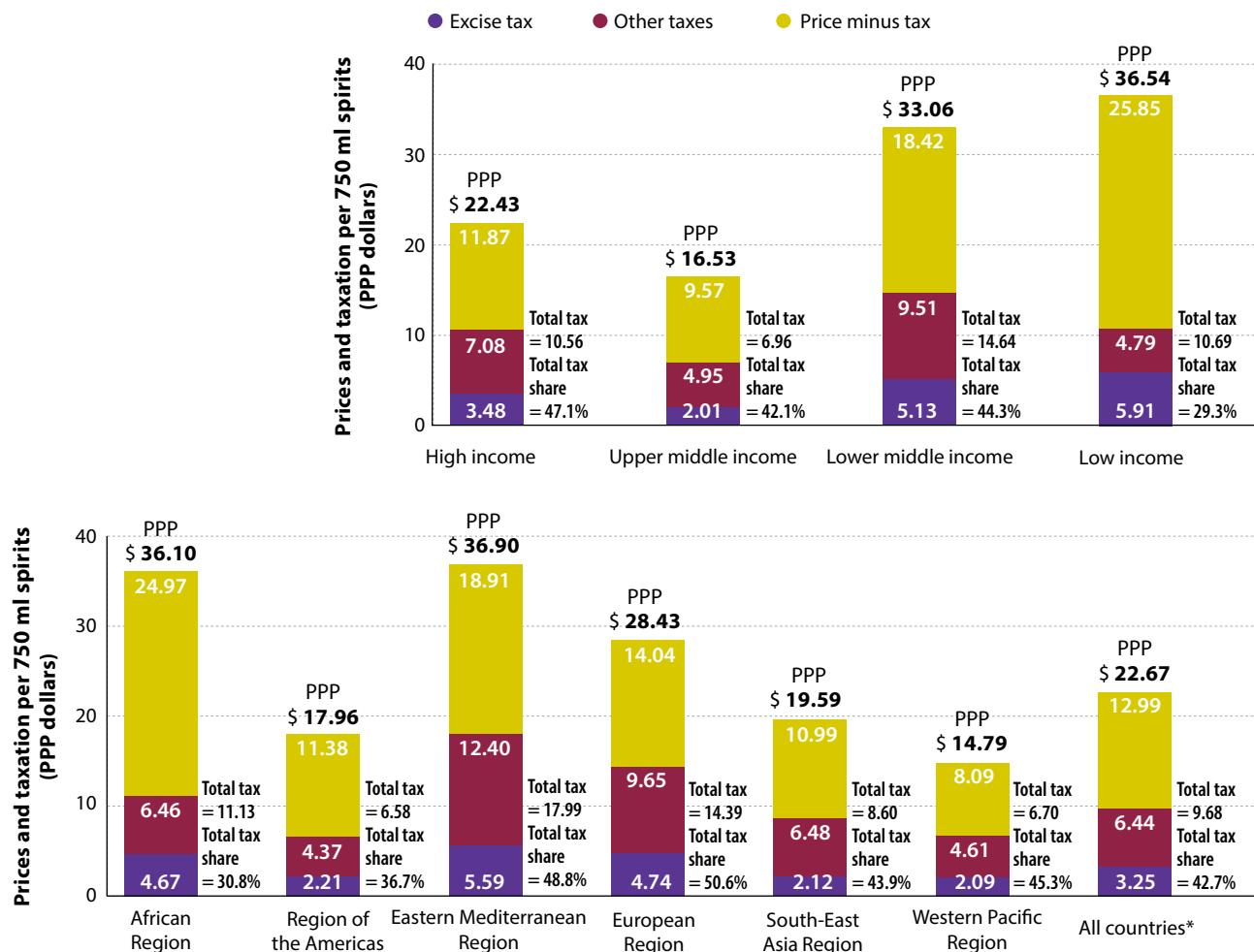


Notes: *Countries for which data are available. Totals may not add up due to rounding errors.

¹⁷ Please refer to the Technical Notes for detailed information on the methods used to estimate the tax share.

After adjusting for differences in purchasing power, population-weighted excise tax levels for beer are the highest in the Eastern Mediterranean Region (PPP US\$ 2.50, or 43.6% of retail price) and the lowest in the Western Pacific Region (PPP US\$ 0.28, or 14.3% of retail price). The Western Pacific Region is also the region with the cheapest price for 330 ml of the most-sold brand of beer (PPP US\$ 1.95), while it is found most expensive on average in the Eastern Mediterranean Region (PPP US\$ 5.73).¹⁸ While prices are the highest at purchasing power parity in lower-middle- and low-income countries (PPP US\$ 3.57 and PPP US\$ 2.82, respectively), excise tax shares are highest in lower-middle and high income countries (32.2% and 16.8%). Globally, the population-weighted average retail price is PPP US\$ 2.47, composed of PPP US\$ 0.52 of excise taxes (20.9%) and PPP US\$ 0.834 of total indirect taxes (including excise) (33.8%) (Fig. 5).

Fig. 6 Population weighted average retail price and taxation (excise and total) for the most-sold brand of the most-sold type of spirits, 750 ml, in Purchasing Power Parity (PPP) adjusted dollars or international dollars, by World Bank income groups and WHO regions, as of July 2024



Notes: *Countries for which data are available. Totals may not add up due to rounding errors.

¹⁸ Only five countries in both the Eastern Mediterranean and South-East Asia Regions are represented in tax share and tax level estimates, as others did not provide the required data or ban alcohol sale.

For spirits, excise tax levels are the highest in the Eastern Mediterranean Region (PPP US\$ 12.40, or 33.6% of retail price) and the lowest in the Western Pacific Region (PPP US\$ 4.61, or 31.2% of retail price). The Western Pacific Region is also the region with the cheapest price for 750 ml of the most-sold brand of the most-sold type of spirits (PPP US\$ 14.79), while it is found most expensive on average in the Eastern Mediterranean Region (PPP US\$ 36.90).¹⁹ Prices are highest at purchasing power parity in low and lower-middle-income countries (PPP US\$ 36.54 and PPP US\$ 33.06, respectively). Population-weighted average excise tax share increases with income with 13.1% for low-income countries, 28.8% and 30% for lower-middle income and upper-middle income countries, respectively, and 31.6% for high-income countries. When accounting for all indirect taxes, the total share of taxes in the price reaches from 30.8% in the African Region to 50.6% in the European Region. Globally, the population-weighted average retail price is PPP US\$ 22.67, composed of PPP US\$ 6.44 of excise taxes (28.4%) and PPP US\$ 9.68 (42.7%) of total indirect taxes (including excise) (Fig. 6).

¹⁹ Only five countries in the Eastern Mediterranean and four in the South-East Asia Regions are represented in tax share and tax level estimates, as others did not provide the required data or ban alcohol sale.

7. Affordability of alcoholic beverages

With economic growth but without action from government to increase prices, alcoholic beverages risk becoming ever-more affordable, including to young people with lower disposable incomes. Global evidence shows that affordability is linked to alcohol consumption, and that a decrease in affordability will result in lower consumption (2). Past global analyses show that the affordability of beer, measured as relative income price, has increased in the past decades, driven by rising incomes (26). Tax and pricing policies are an effective tool to reduce affordability.

The affordability of alcoholic beverages is measured in this report by the per capita GDP required to purchase 40 litres of the most-sold brand of beer and 5 litres of the most-sold brand of the most-sold type of spirits reported in a given year (see more detailed explanation in the Technical notes). Changes in affordability over time can guide policy-makers on the approaches needed to address alcohol consumption in an effective way.

Fig 7 Number and proportion of countries with change in the affordability of beer between 2022 and 2024

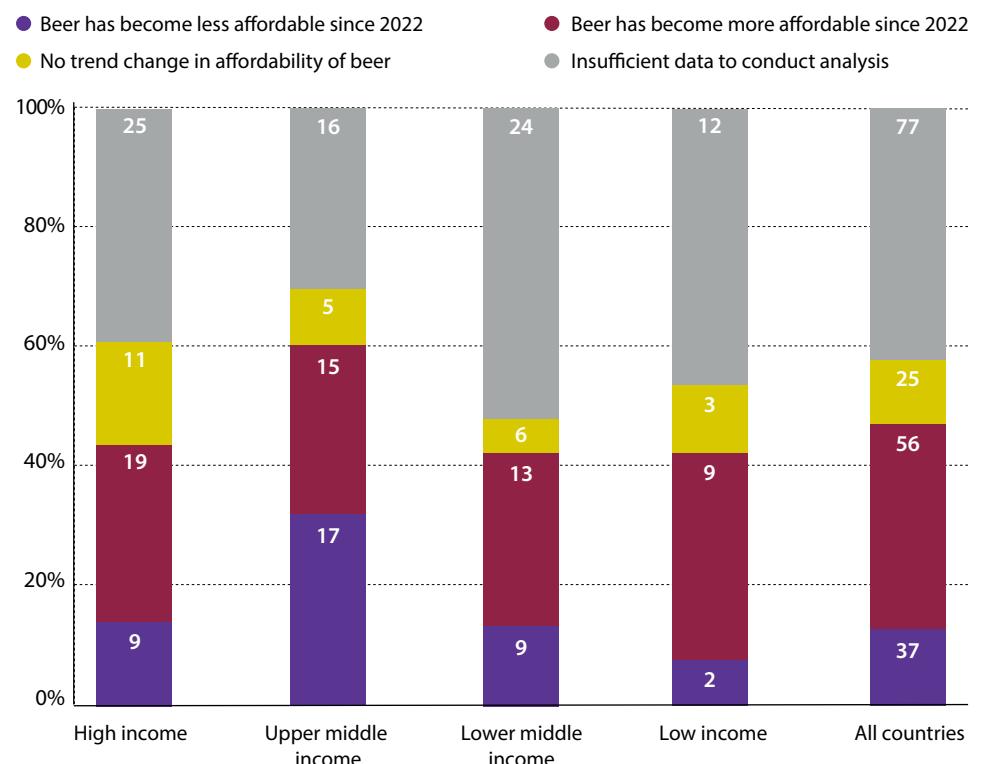
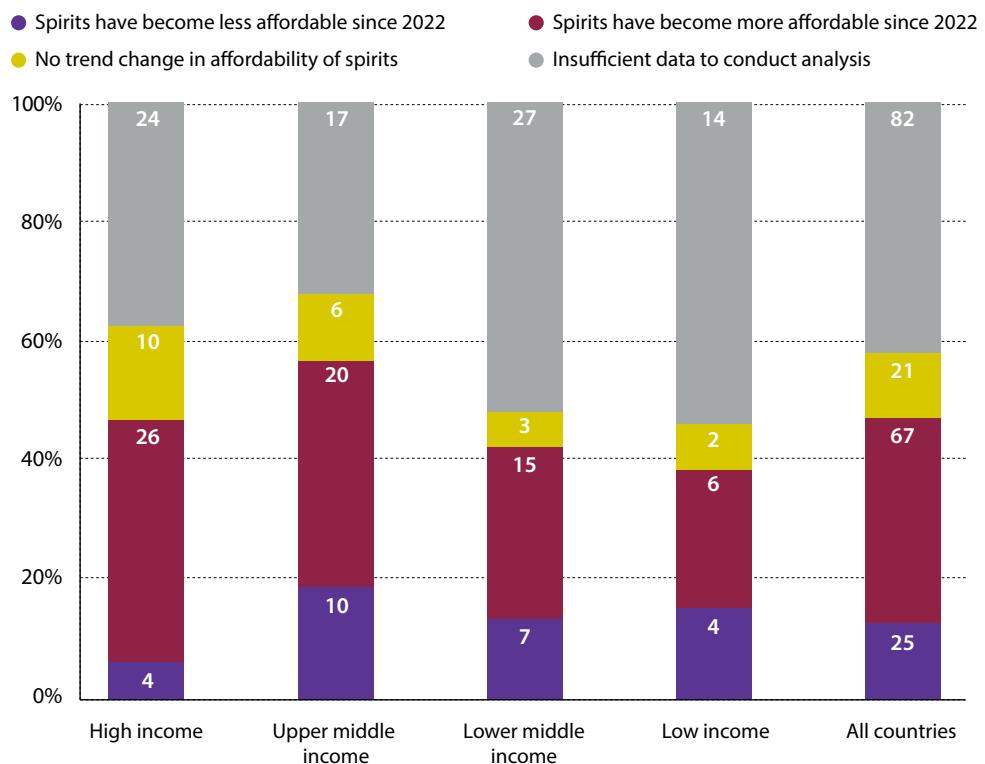


Fig 8 Number and proportion of countries with change in the affordability of spirits between 2022 and 2024



Beer has become less affordable since 2022 in only 37 countries (31% of countries with available estimates), with the largest number and proportion seen among upper-middle income countries (17 countries or 45%). Most countries have either experienced an increase in affordability (56 countries) or no change (25 countries) (Fig. 7).

Similarly, spirits have also become less affordable in only 25 countries (22% of countries with available estimates), with the largest number seen among upper-middle income countries (10 countries) and the largest proportion seen among low-income countries (33%). Most countries have registered an increase in affordability (67 countries) or no change (21 countries) (Fig. 8).

8. Earmarking of excise tax revenue

Taxing alcoholic beverages raises public revenue. Earmarking this revenue for a specific government programme or interventions can be a contentious topic in public financial management. Some experts argue that earmarking can introduce rigidities in the budget and lead to inefficient allocation of resources. Nonetheless from a political economy perspective, using soft earmarking of some portion of excise tax revenue for health promotion or other public goods may help to garner public support for alcohol taxation while supporting its intended public health impact (27,28). Soft earmarking means that tax revenues are designated for a particular service but do not determine the amount spent, such that there is no hard expenditure ceiling and transfers to and from general funds are possible. An earmark is “hard” if it is the only or main revenue for a particular service or programme and none of the earmarked revenue can be allocated to any other purposes (28).

Table 4 Earmarking of excise tax revenue by programme as of July 2024

Alcohol control	Health coverage expansion	NCD prevention and control programmes	Promotion of physical activity	Other, more general or unspecified health programmes
Bulgaria New Zealand Switzerland	Azerbaijan Chad Philippines United Republic of Tanzania	Iceland Lithuania Mongolia Palau Paraguay Thailand	Bolivia Cabo Verde Gabon Madagascar	Colombia Costa Rica (incl. alcohol dependance) El Salvador Estonia France Guatemala (incl. alcohol dependance) Lesotho Morocco Nauru Panama Venezuela

Note: New Zealand: Excise duty goes to general taxation but the Pae Ora (Healthy Futures) Alcohol Levy is dedicated to alcohol-related health activities.

Data shows that around 28 countries applying excise taxes to alcoholic beverages earmark the revenue for a specific purpose (Table 4). This represents 19% of all countries that are reported to apply an excise on alcoholic products and where information on earmarking was available (146 countries). Earmarking is more common in the Region of the Americas (eight countries or 29% of those with earmarks) and used the least in low-income countries (two countries or 7.1% of countries with earmarks). The most-reported destinations for earmarked funds are noncommunicable disease (NCD) prevention and treatment, health system financing, the promotion of physical activity, and alcohol-control programmes.

9. Takeaways

This report highlights significant heterogeneity in the use of taxes on alcoholic beverages, their design, and levels. Globally, at least 167 countries apply excise taxes to alcoholic beverages at the national level. Among these, at least 25 countries exempt wine. WHO recommends that alcohol taxes should apply to all alcoholic beverages to avoid incentivizing undesirable substitutions (2).

Volume-based specific is the most prevalent type of excise tax system applied to beer and wine. Alcohol-content-based specific excise tax systems are the most prevalent for spirits. However, more than two out of three countries using specific excise taxes do not mandate their automatic regular adjustment for inflation, or other economic indicators. Thus, their real value is at risk of erosion over time. Approximately half the surveyed countries differentiate excise tax rates for beers and for spirits based on alcohol content. Although it is effective in reducing total alcohol consumption, and may incentivise producers to reformulate beverages to contain lower alcohol content, it may require a stronger tax administration capacity (2). Excise tax levels are generally low while varying significantly across countries with no clear trends between income groups and regions. The global median excise tax shares are low for both beer (20.9% of retail price) and spirits (28.4% of retail price).

Lastly, between 2022 and 2024, fewer countries have seen beer (31%) and spirits (22%) become less affordable compared to countries where those beverages have become more affordable. Tax policy should be reviewed regularly to ensure alcoholic beverages become less affordable over time.

The evidence to support raising taxes on alcoholic beverages is strong (2). Countries have endorsed a series of mandates, action plans and strategies for reducing NCDs as well as alcohol consumption and its related harms that specifically call for the increase of taxes applied to alcoholic beverages. And just recently, WHO launched in July 2025 the “3 by 35” Initiative, a global effort to increase the real prices of any or all of three health-harming products – tobacco, alcohol, and sugary drinks by at least 50% by 2035 through tax increases, while taking into account each country’s unique context (29). Yet, most alcohol taxes remain low and are not optimally designed. There is significant room for better design and higher excise taxes on alcoholic beverages to decrease affordability and thereby reduce alcohol consumption and its related harms.

Countries should pursue improved tax design and increased taxes more systematically so that alcoholic beverage products become less affordable and as a consequence the burden of alcohol consumption and its related harms are effectively reduced.

10. Technical notes

These technical notes contain information on the methodology used by WHO to estimate the share of total and excise taxes in the price of a bottle or can of 330 ml of the most-sold brand of beer, and a bottle of 750 ml of the most-sold brand of the most-sold type of spirits using country-reported data. They also provide information on other data collected in relation to alcohol taxation and prices as well as tax policy information. They build on and are an update of the first report published in 2023 (1). Detailed country data values for both 2022 and 2024 are available for view and download in WHO's Global Health Observatory website: <https://www.who.int/gho/data/themes/topics/taxes-on-alcoholic-beverages>.

a. Data collection

All data for this report were collected between July 2024 and June 2025 by WHO regional data collectors. In total, some information on excise tax was collected for 181 Member States but price data and tax share estimates were calculated for 156 Member States. Below is the list of Member States and territories, organized by WHO region, which did not respond to the survey questionnaire or which provided incomplete responses which could not be clarified within the data collection and analysis time period:

- African Region: Algeria*, Botswana*, Central African Republic*, Chad*, Ethiopia*, Guinea*, Lesotho*, South Sudan* and Zimbabwe*.
- Region of the Americas: Cuba*, Nicaragua and the United States of America
- Eastern Mediterranean Region: Bahrain, Djibouti*, Oman, Qatar, Syrian Arab Republic*, United Arab Emirates and occupied Palestinian territory, including east Jerusalem.
- European Region: Andorra*, Bosnia and Herzegovina, Malta*, Monaco*, Montenegro*, Republic of Moldova*, San Marino, North Macedonia* and Turkmenistan.
- South-East Asia Region: Bangladesh*, Democratic People's Republic of Korea, India, Maldives*, Nepal* and Timor-Leste*.
- Western Pacific Region: Malaysia*, Micronesia (Federated States of), Niue, Singapore* and Tuvalu*.

*Data was either provided on tax design for those countries in 2024 or extrapolated from data collected in 2022 or from government websites, but no estimates of price and tax share was possible for beer and/or spirits.

The two main inputs in calculating the share of total and excise taxes were (a) retail prices and (b) tax rates and structure. Prices were collected for the most-sold brand

of beer and the most-sold brand of the most-sold type of spirits (1).²⁰ The cut-off date for the price data and tax legislation collected and each estimated indicator was 31 July 2024. Some exceptions were made when complete information was collected with some delay and covered tax rates and prices applied after the cutoff date to maximize country representation. This applied to Ontario, Canada (as of August 2025), Dominica (as of September 2024), Equatorial Guinea (as of November 2024) and South Africa (March 2025).

Data on tax design was collected mainly through contacts with countries' ministries of finance. The validity of this information was cross-checked against other sources. For many countries, this was done through the wealth of work and knowledge accumulated by WHO while working directly with ministries of finance on tobacco taxation since 2009, and on sugar-sweetened beverage and alcohol taxation since 2020. Other sources, including tax law documents, decrees and official schedules of tax rates and structures and trade information, when available, were either provided by data collectors or were retrieved from ministerial websites.

The tax data collected focus on indirect taxes levied on alcoholic beverages (e.g., excise taxes of various types, import duties, value-added taxes). Among indirect taxes, excise taxes are the most important because they are applied exclusively to alcoholic beverages and contribute the most to increasing the price of alcoholic beverages relative to other goods, and subsequently reducing consumption. Subnational-level excise taxes, which could matter a lot, particularly in some federal systems where taxation is significant at the subnational level, are omitted from the analysis, except where otherwise mentioned.

The rates, amounts, and points of application of excise taxes are central components of the data required and collected for the calculation of the tax share.

Direct taxes are not considered in this analysis because of the practical difficulty of obtaining information on these taxes, and the complexity of estimating their potential impact on price in a consistent manner across countries.

The table below describes the types of tax information collected.

Alcohol-content-based specific excise taxes	An alcohol-content-based specific excise tax is a tax on a selected alcoholic beverage produced for sale within a country or imported and sold in that country. In general, the tax is collected from the manufacturer or at the point of entry into the country by the importer, in addition to import duties. These taxes come in the form of an amount in currency applied proportionate to the alcohol concentration of a beverage, per litre of pure alcohol, per gram of ethanol, or per alcohol by volume. Example: US\$ 10 per litre of pure alcohol.
Volume-based specific excise taxes	A volume-based specific excise tax, is a tax on a selected alcoholic beverage produced for sale within a country or imported and sold in that country. In general, the tax is collected from the manufacturer or at the point of entry into the country by the importer, in addition to import duties. These taxes come in the form of an amount in currency applied to a certain volume of the beverage, per litre, per 100 ml, or per fluid ounce. Example: US\$ 1 per litre.

²⁰ The most-sold brand of beer, most-sold type of spirits and most-sold brand of most-sold type of spirits were pre-selected in countries where data was collected in 2022 and estimates of price and tax share were made possible.

<i>Ad valorem</i> excise taxes	An <i>ad valorem</i> excise tax is a tax on a selected alcoholic beverage produced for sale within a country or imported and sold in that country. In general, the tax is collected from the manufacturer or at the point of entry into the country by the importer, in addition to import duties. These taxes come in the form of a percentage of the value of a transaction between two independent entities at some point in the production/distribution chain. <i>Ad valorem</i> taxes are generally applied to the value of the transactions between the manufacturer and the retailer or wholesaler. Example: 10% of the producer/manufacturer's price.
Import duties	An import duty is a tax on a selected alcoholic beverage imported into a country to be consumed in that country (i.e., the goods are not in transit to another country). In general, import duties are collected from the importer at the point of entry into the country. These taxes can be either specific or <i>ad valorem</i> . Specific import duties are applied in the same way as specific excise taxes (e.g., an amount per litre). <i>Ad valorem</i> import duties are generally applied to the CIF (cost, insurance, freight) value, i.e., the value of the unloaded consignment that includes the cost of the product itself, insurance, and transport and unloading. Example: 50% import duty levied on CIF.
Value added taxes and sales taxes	Value-added tax (VAT) is a multi-stage tax on all consumer goods and services applied proportionally to the price the consumer pays for a product. Although manufacturers and wholesalers also participate in the administration and payment of the tax all along the manufacturing/distribution chain based on the value added to the product, they are all reimbursed through a tax credit system, so that the only entity who pays in the end is the final consumer. Most countries that impose a VAT do so on a base that includes any excise tax and customs duty. Example: VAT representing 10% of the retail price. Some countries, however, impose sales taxes instead. Unlike VAT, sales taxes are generally levied at the point of retail on the total value of goods and services purchased. For the purposes of the report, care was taken to ensure the VAT and/or sales tax shares were computed in accordance with country-specific rules.
Other taxes	Information was also collected on any other tax that is not called an excise tax, import duty, VAT or sales tax, but that applies to either the quantity/volume of beverages or to the transaction value of a beverage, with as much detail as possible regarding what is taxed and how the base is defined.

The three main alcoholic beverages consumed globally are beer, wine, and spirits (5). In this analysis, they were defined as follows (along with their harmonized tariff code or HS code):²¹

- Beer: Alcoholic beverage made from cereals or grains flavoured with hops, typically found in harmonized tariff code 22.03.
- Wine: Alcoholic beverage made from fermented grape juice. For this analysis, we focused on still wine (not sparkling), typically found in harmonized tariff code 22.04.21.
- Spirits: Alcoholic beverages produced by the distillation of grains, fruit, or other plants that have already gone through alcoholic fermentation, typically found in harmonized tariff code 22.08.

b. Data analysis

The price of the most-sold brand of beer and the most-sold brand of the most-sold type of spirits were considered in the calculation of the tax as a share of the retail price. In the case of countries where different levels of taxes are applied on alcoholic beverages based on the volume, quantity produced, beverage type, or alcohol content,

²¹ The harmonized tariff or Harmonized System (HS code) is a standardized nomenclature (six digit numbers) used internationally to classify traded products and administered by the World customs Organization (WCO).

only the relevant rates that applied to the most-sold brand of beer and the most-sold brand of the most-sold type of spirits were used in the calculation.

In the case of countries where excise tax or VAT (or sales tax) rates or tax structure varied at subnational level (e.g., state or province), price and tax data were collected for the most-populated state or province and the rates and tax structure corresponding to that state or province was applied. This was the case for Brazil²², Canada²³ and Pakistan²⁴, where data was collected for the State of São Paulo, the Province of Ontario and the State of Punjab, respectively.

The import duties were only used in the calculation of tax shares if the most-sold brand of beer and the most-sold brand of the most-sold type of spirits were imported into the country. Import duty was not applied in total tax calculation for countries reporting that the most-sold brand was produced locally. In cases where imported beverages originated from a country subject to a bilateral or multilateral trade agreement that waived the duty, care was taken to ensure that the import duty was not taken into account in calculating the taxes levied.

Comparing reported statutory *ad valorem* excise tax rates without taking into account the stage at which the tax is applied could lead to incorrect results. In the below example, Country Y apparently applies the same *ad valorem* excise tax rate (20%) as Country X, but in fact ends up with a higher tax share and a higher retail price because the tax is applied later in the value chain.

	Country X (US\$)	Country Y (US\$)
[A] Producer/manufacturer's price (same in both countries)	2.00	2.00
[B] Country X: <i>Ad valorem</i> excise tax on producer/manufacturer's price (20%) = 20% x [A]	0.40	–
[C] Retailer's and wholesaler's profit margin (same in both countries, US\$ 0.20)	0.20	0.20
[D] Country Y: <i>ad valorem</i> excise tax on retailer's price (20%) = 20% x [E]	–	0.55
[E] Final retail price = P P = [A] + [B] + [C] or [A] + [C] + [D]	2.60	2.75
<i>Ad valorem</i> excise tax share (as % of P)	0.40/2.60 = 15.4%	0.55/2.75 = 20%

The next step of the analysis was to convert all taxes as a percentage of the tax-inclusive retail price (hereafter referred to as P), i.e., estimating the tax share for each tax type. This standardized metric allows unbiased comparisons of tax incidence between countries.

c. Calculation

As an example of the calculations performed, denote S_{ts} as the total share of taxes in the retail price of a bottle or can of the most-sold brand of beer or a bottle of the most-sold brand of the most-sold type of spirits. Then,

²² All indirect taxes applied to alcoholic beverages in Brazil are applied at federal level except value-added tax, the rate of which varies by state.

²³ Both federal and provincial taxes applied in Ontario were accounted for.

²⁴ Excise rates included Still Head Duty and Vend Fee for the tax share calculation for Pakistan.

$$S_{ts} = S_{as} + S_{vs} + S_{av} + S_{VAT} + S_{id} + S_o \quad \text{Equation 1}$$

Where:

S_{ts} = Total share of taxes in the retail price of a bottle/can of the most-sold brand of beer or a bottle of the most-sold brand of the most-sold type of spirits, i.e., the total tax share indicator;

S_{as} = Share of alcohol-content-based specific excise taxes in the retail price of a bottle/can of the most-sold brand of beer or a bottle of the most-sold brand of the most-sold type of spirits;

S_{vs} = Share of volume-based specific excise taxes in the retail price of a bottle/can of the most-sold brand of beer or a bottle of the most-sold brand of the most-sold type of spirits;

S_{av} = Share of *ad valorem* excise taxes in the retail price of a bottle/can of the most-sold brand of beer or a bottle of the most-sold brand of the most-sold type of spirits;

S_{VAT} = Share of value-added tax or sales tax in the retail price of a bottle/can of the most-sold brand of beer or a bottle of the most-sold brand of the most-sold type of spirits;

S_{id} = Share of import duties in the retail price of a bottle/can of the most-sold brand of beer or a bottle of the most-sold brand of the most-sold type of spirits (if the brand is imported and import duty is applicable); and

S_o = Share of other indirect taxes in the retail price of a bottle/can of the most-sold brand of beer or a bottle of the most-sold brand of the most-sold type of spirits (if applicable).

Calculating S_{as} and S_{vs} is straightforward and involves dividing the specific tax amount defined by alcohol concentration or volume of the beverage by the retail price. On the other hand, the share of *ad valorem* excise taxes, S_{av} , depending on the base it is applied on, can be much more difficult to calculate and can involve making some assumptions described below. VAT rates reported for countries are usually applied on the VAT-exclusive retail price but are sometimes reported on VAT-inclusive retail prices. S_{VAT} is calculated to consistently reflect the share of the VAT in VAT-inclusive retail price.

The price of a bottle/can of the most-sold brand of beer or of a bottle of the most-sold brand of the most-sold type of spirits can be expressed as the following:

$$P = [(M + M \times ID\%) + (M + M \times ID\%) \times T_{av}\% + T_{as} + T_{vs} + \pi] \times (1 + VAT\%), \text{ or}$$

$$P = [M \times (1 + ID\%) \times (1 + T_{av}\%) + T_{as} + T_{vs} + \pi] \times (1 + VAT\%) \quad \text{Equation 2}$$

Where:

P = Retail price per bottle/can of a bottle/can of the most-sold brand of beer or a bottle of the most-sold brand of the most-sold type of spirits;

M = Producer/manufacturer's/distributor's price, or import price if the brand is imported;

$ID\%$ = Import duty rate (where applicable) on a bottle/can of the most-sold brand of beer or a bottle of the most-sold brand of the most-sold type of spirits;

$T_{av}\%$ = Statutory rate of *ad valorem* excise tax applied on the base M ;

T_{as} = Alcohol-content-based specific excise tax amount applicable on a bottle/can of the most-sold brand of beer or a bottle of the most-sold brand of the most-sold type of spirits;

T_{vs} = Volume-based specific excise tax amount applicable on a bottle/can of the most-sold brand of beer or a bottle of the most-sold brand of the most-sold type of spirits; π = Retailer's and wholesaler's profit per bottle/can of the most-sold brand of beer or bottle of the most-sold brand of the most-sold type of spirits (sometimes expressed as a mark-up); and

VAT% = Statutory rate of value-added tax on VAT-exclusive price.

Changes to this formula were made based on country-specific considerations such as the base for the *ad valorem* excise tax and the VAT, the existence — or not — of *ad valorem* and specific excise taxes, and whether the most-sold brand was locally produced or imported. In many cases (particularly in low- and middle-income countries), the base for *ad valorem* excise taxes was the producer/manufacturer's price (as in equation 2 above). However, this base varies significantly between countries and can include other bases, such as the retail price, the retail price net of some taxes (and/or some predefined margins), the retail price net of all taxes, the CIF value, etc.

Given knowledge of the retail price (P) and the specific excise tax (T_{as} or T_{vs}), the shares S_{as} and S_{vs} are easy to recover ($= T_{as}/P$ or T_{vs}/P). For alcohol-content-based specific excise taxes, T_{as} is calculated by multiplying the alcohol concentration of the beverage by the corresponding tax amount per defined alcohol content, as applicable (e.g., US\$ 10 per litre of pure alcohol). For volume-based specific excise taxes, T_{vs} is calculated by multiplying the volume of the beverage by the corresponding tax amount per taxable unit volume, as applicable (e.g., US\$ 1 per litre).

The case of *ad valorem* excise taxes (and, where applicable, S_{id}) is fairly straightforward when, by law, the base is the retail price. The calculation is more complicated when the base is the producer/manufacturer's price (M) and needs to be recovered to calculate the amount of *ad valorem* excise tax. In most cases, the value of M was not known (unless specifically reported by the country) and therefore had to be estimated.

Based on the price composition and tax base for *ad valorem* defined from Equation 2, it is possible to recover M :

$$M = \frac{P}{1 + VAT\%} - \pi - T_{vs} - T_{ss} \quad \text{Equation 3}$$

$$(1 + T_{av}\%) \times (1 + ID\%)$$

π , or the profit margins of wholesalers and retailers, are rarely publicly disclosed and will vary from country to country. While it could be assumed that retail margins are small, assuming distribution margins (retailer and wholesaler margins) to be zero would overestimate the base M and in turn the share of *ad valorem* excise taxes in the retail price.

On the other hand, there is a risk of underestimating the base M by assuming high distribution margins in countries where the distribution of alcoholic beverages is a very competitive market. Consequently, (following 16 and 19), for domestically produced beverages, we considered to be 20% of M ($\pi = 20\% \times M$), unless country-specific information was made available to WHO. In the rare case of countries for which, the base of the *ad valorem* tax, is set as the wholesaler price, π is assumed to be half the total distribution profit margin, i.e., 10%.

For countries where the most-sold brand is imported, the import duty is applied on the CIF value, and the consequent *ad valorem* excise taxes are typically applied on a base that includes the CIF value and the import duty, but not the importer's profit.

For domestically produced beverages, the producer/manufacturer price includes its own profit, so it is automatically included in π . However, the importer's profit can be relatively significant and setting it to zero would substantially overestimate M , and thereby substantially overestimate the share of ad valorem excise taxes in the retail price. For this reason, M had to be estimated differently for imported products: M^* (or the CIF value) was estimated either based on information reported by countries or using secondary sources such as the United Nations Comtrade database (30).

In most cases, M^* was calculated as the import price of beverages in a country and estimated as the total value of beer or the most-sold spirits type imported (harmonized tariff code 22.03 for beer and 22.08 for spirits, with further disaggregation depending on spirits type) divided by the total volume of imports for the importing country for a given year. However, in exceptional cases where no such data were available, the export price was considered instead (Comoros for beer, Democratic Republic of the Congo for spirits, Equatorial Guinea for beer and spirits and Guinea-Bissau for beer and spirits). The *ad valorem* excise tax and other taxes were then calculated in the same way as for local beverages, using M^* rather than M as the base, where applicable.

For VAT, in most cases, the base was excluding the VAT (or, similarly, the producer/manufacturer/distributor's price plus all excise taxes and margins).

In other words:

$$S_{VAT} = VAT\% \times (1 - S_{VAT}), \text{ equivalent to}$$

$$S_{VAT} = VAT\% \div (1 + VAT\%) \quad \text{Equation 4}$$

In some cases, however, WHO was informed that the VAT was not effectively collected at all levels of the supply chain but mainly levied at the importing or manufacturing gate. In such countries, the VAT was calculated on the basis of M (or M^*) and the various taxes collected at this stage, mainly import duties, other taxes, and excise taxes (Cabo Verde, Chile, Eritrea, Ghana, Kiribati, Suriname, and Uganda).

Import duties may vary depending on the country of origin in cases of preferential trade agreements. WHO tried to determine the origin of the bottle/can and the relevance of using such rates where possible.

In sum, tax shares are calculated using Equation 1 and the following formulas:

$$S_{as} = T_{as} \div P \text{ or } S_{vs} = T_{vs} \div P$$

$$S_{av} = (T_{av}\% \times M) \div P \text{ or}$$

$$(T_{av}\% \times M^* \times (1 + ID\%)) \div P \text{ if the most-sold brand was imported}$$

$$S_{VAT} = VAT\% \div (1 + VAT\%)$$

$$S_{id} = (ID\% \times M^*) \div P \text{ (if the import duty is value-based) or}$$

$$D \div P \text{ (if the import duty is amount-specific per bottle/can or for a determined weight/quantity)}$$

$$S_o = (T_o\% \times M^*) \text{ (if the other tax is value-based) or}$$

$$T_o \div P \text{ (if the other tax is amount-specific per bottle/can or for a determined weight/quantity)}$$

Tax-share estimates are multiplied by retail prices to obtain tax level indicators. Such indicators are expressed in international dollars at purchasing power parity (PPP) using the International Monetary Fund's (IMF's) World Economic Outlook implied PPP conversion rates for 2024 (31). Population data from the United Nations (UN) World Population Prospects for 2024 are used to estimate population-weighted average indicators (32). For Brazil, Canada and Pakistan, subnational-level population data are used for the State of São Paulo, the Province of Ontario and the State of Punjab, respectively.²⁵

For the first time, the Western Pacific Region estimates included Indonesia. This accorded with resolution WHA78.25 (2025), whereby Indonesia was reassigned to the WHO Western Pacific Region as of 27 May 2025. Data pertaining to Indonesia are therefore included in the Western Pacific regional aggregates.

d. Prices

Beer and spirits were selected as they represent the highest share of alcohol per capita consumption globally (1). No one brand of beer or one type of spirits was found to be representative and the most-sold globally (1). This is why the research focused on identifying the most-sold brand of beer in each country, and the most-sold type of spirits and the most-sold brand within the type of spirits identified in each country. Primary collection of price data in this report involved surveying two types of retail outlets, defined as follows:

- Drink specialist: retail outlets specializing in the sale of mainly alcoholic beverages (e.g., liquor stores). Or independent small grocery stores: retail outlets selling a wide range of predominantly grocery products. These outlets are usually not part of a chain and if they are will have fewer than 10 retail outlets (e.g., family-owned).
- Supermarkets/hypermarkets: chains or independent retail outlets with a selling space of over 2,500 square metres and a primary focus on selling foods/beverages and other groceries. Hypermarkets also sell a range of non-grocery merchandise.

In some instances, price was collected from online stores belonging to supermarket chains (only for six countries in WHO European Region, two countries in the African region, and one country in the Region of the Americas). Prices were collected, to the extent possible, for a bottle or can of beer with a container size between 300 ml and 360 ml with alcohol by volume (ABV) between 4% and 6% and a bottle of spirits with container size between 750 ml and 1000 ml with ABV between 35% and 45%. These container types and this range of volume sizes are among the most prevalent globally for such beverages (1). To allow for cross-country comparisons of tax shares and prices, the volume size was then linearly standardized to 330 ml for beer and 750 ml for spirits.

Information was also collected on the alcohol content of beverages with reported price, i.e., the ABV. This was used to determine the applicable excise tax rate where relevant.

²⁵ State of São Paulo, Brazil: IBGE, Population estimates published in DOU, 2024 (total population). Province of Ontario, Canada: Statistics Canada, demographic estimates by provinces and territories, 2024 (total population). Province of Punjab, Population Census 2023, Pakistan Bureau of Statistics (total population).

For alcoholic beverages, the use of the price reported from drink specialists/independent small grocers was prioritized. This was based on an internal background analysis undertaken in 2022 using data from Euromonitor International assessing that, globally, global sales tended to be more prevalent from those type of outlets. However, and especially in this second round of data collection and analysis (2024), a judgement had to be made in some cases in the selection of the price reported to ensure consistency in prices between the two years covered, or if the price reported from that specific type of retail outlet was missing in the survey response.

Whenever errors were found in the 2022 estimates, whether in relation to prices or taxes, retroactive changes were made to estimates are the revised numbers are published along with the new 2024 estimates.

e. Taxation of other alcoholic beverages

We also reported if excise taxes apply on wine, which represent a significant share of alcohol per capita consumption in certain WHO regions, including Europe, the Americas, and the Eastern Mediterranean (5). We only reported if excise taxes apply on wine or not, and the type of excise taxes applied. However, we did not report the tax share in the retail price for such beverage type, as we did not collect the necessary information to do so.

f. Supplementary tax information

Many aspects of alcohol taxation need to be taken into account to assess if a tax policy is well designed. A tax share indicator does not tell the whole story about the effectiveness of a tax policy. To explore other dimensions, additional information was collected and compiled into data that can further inform researchers and policy-makers on tax policy in different countries.

The information was compiled and classified in this report according to two main themes: tax structure and earmarking. Information was collected in relation to countries that earmark alcohol taxes to fund health programmes and/or promotion activities. The different sets of data/indicators reported under each of the themes were developed and justified based on the WHO technical manual on alcohol taxation policy and administration (2).

Tax structure

- Type of excise taxes applied to beer, wine, and spirits: if excise tax applied is ad valorem, alcohol-content-based specific, volume-based specific, a mix, or if no excise tax is applied.
- Uniform vs. tiered excise tax system applied to beer and spirits: a uniform excise tax system corresponds to a unique rate that is applied to all beer or all spirits; a tiered excise tax system corresponds to different rates applied to beer or spirits, which can be based on alcohol content, beverage characteristics, volume, etc. If the excise tax system applied to beer or spirits is tiered, we indicate whether the tiers are defined based on the alcohol concentration. Note that the countries where no tax was applied on alcoholic beverages below an ABV of 0.5% were considered to be applying a uniform excise tax system. This is because many countries actually define alcoholic beverages as those containing alcohol at 0.5% or above.

- Base for the *ad valorem* excise tax component on the most-sold brand of beer and the most-sold brand of the most-sold type of spirits, among countries with *ad valorem* or mixed excise tax systems with an *ad valorem* component: *ad valorem* excise taxes are applied on a base value which can be set at different stages of the value chain. They can be applied on the all-inclusive retail price, the retail price excluding VAT, the retail price excluding VAT and excise taxes, the wholesaler's price, the producer/manufacturer's price, the CIF value, the CIF value and import duties, or the CIF value and import duties and other taxes.
- If the specific excise tax component is automatically adjusted for inflation (or another economic indicator).
- If a minimum volumetric excise tax on beer, wine and spirits is implemented in addition to the existing excise tax applied on those beverages reported in the first bullet point.

Affordability

With the second wave of data collected in 2024, it is possible to look into changes in the affordability of alcoholic beverages between 2022 and 2024. Building on the commonly used indicator of affordability for cigarettes, which is calculated by dividing the price of 2000 cigarettes by GDP per capita, a similar approach was used to build the indicators for beer and spirits.

Beer: the average recorded alcohol per capita (of those aged 15-plus) consumption of beer for the latest year available (2022) in WHO's Global Information System on Alcohol and Health (GISAH) webpage (5) amounted to 1.94 litres of pure alcohol. Assuming an average ABV of 5%, the equivalent volume in litres is about 38.8 litres of beer, this was rounded up to 40 litres for ease of reference. The affordability indicator was calculated by dividing the price of 40 litres of the most-sold brand of beer divided by GDP per capita for 2022 and 2024. A positive change between 2022 and 2024 would indicate a reduction in affordability while a negative change would indicate an increase in affordability of beer.

Spirits: the average recorded alcohol per capita (of those aged 15-plus) consumption of spirits for the latest year available (2022) in WHO's GISAH webpage (5) amounted to 1.46 litres of pure alcohol. Assuming an average ABV of 40%, the equivalent volume in litres is about 3.65 litres of spirits, this was rounded up to 5 litres for ease of reference. The affordability indicator was calculated by dividing the price of 5 litres of the most-sold brand of the most-sold type of spirits divided by GDP per capita for 2022 and 2024. A positive change between 2022 and 2024 would indicate a reduction in affordability while a negative change would indicate an increase in affordability of spirits.

GDP data in local currency units were sourced from IMF's World Economic Outlook (WEO) (30) while population data (for the per capita calculations for age 15-plus) were sourced from the United Nations (UN) World Population Prospects for 2024 (31).

Change in affordability (positive change means reduction in affordability, negative change means increase in affordability) was assessed by comparing the relative change in the affordability indicator between 2022 and 2024 with a margin of 10% change to account for some significance in affordability change in the short period of 2022-2024 (10% identified as the most frequent range of relative change in the indicator between the two years among countries covered).

Earmarking (portion of excise taxes or revenues from excise taxes dedicated to specific government programmes, particularly health-related).

Excise taxes can generate substantial revenues. Earmarking all or a part of revenues from excise taxes on alcoholic beverages can be a useful tool for improving the political economy of such taxes (9,30). Setting aside portions of tax revenue to fund health programmes, healthcare, recovery programmes, dependency treatment, rehabilitation, mental health projects, or support victims of harms, among others, can help convince the public, politicians, and officials of the value of excise taxes on alcoholic beverages, the ultimate goal of which is to reduce the consumption of alcohol.

g. Data validation and sign-off

For each country, every data point was assessed against market information where available for prices and volumes, and against reported or acquired tax laws in relation to tax information held by WHO headquarters with the support of the regional and country offices. Data were also checked for completeness and logical consistency across variables.

Final validated data for each country were sent to the respective governments for review and sign-off. To facilitate the review, a summary sheet was generated for each country and was sent prior to the closure of the report database. In the case where retroactive changes were made for the price and tax share of beer and/or spirits in a specific country, the revised data was also included in the summary sheet. In cases where national authorities requested data changes, the requests were assessed by WHO expert staff according to both the legislation/materials or data previously collected and the clarification shared by the national authorities. Following further communication with authorities, data were updated or left unchanged. Further details about the data processing procedure are available from the WHO.

For the review of this report, all external experts submitted to WHO a declaration of interest disclosing potential conflicts of interest that might affect, or might reasonably be perceived to affect, their objectivity and independence in relation to the subject matter of this guidance. WHO reviewed each of the declarations and concluded that none could give rise to a potential or reasonably perceived conflict of interest related to the subjects discussed at the meeting or covered by the guidance.

h. Limitations

The present analysis is subject to the limitations presented below, which are largely due to data availability constraints and the necessity to standardize the indicators for comparability across countries:

- Coverage of subnational taxation: In countries where indirect taxes (excise and/or VAT/sales tax) varied and due to limited capacity and data availability to compile a nationally representative indicator, information was collected only from the most populous state/province. This is not representative of the country but it is not a common trend at global level either. It applied in this report to three countries only: Brazil (Sao Paolo), Canada (Ontario) and Pakistan (Punjab).
- Coverage of beer and spirits only for the collection of prices and calculation of tax shares: Given limited capacity and the difficulty to identify one brand that is consequential enough in terms of market representation, wine price

and tax information was not collected. This decision was also made keeping in mind that beer and spirits are generally more commonly used compared to wine at the global level.

- Tiered excise tax systems based on alcoholic beverage type: Given the main focus on beer and spirits, as they represent the highest share of recorded alcohol consumed (5), the analysis of uniform vs. tiered excise tax systems only captures tiered systems within beer or within spirits and not between alcoholic beverage types. This underestimates the number of tiered excise tax systems applied to alcoholic beverages and may overestimate the proportion of tiered excise tax systems that are based on alcohol content.
- National representativeness of prices: In most countries, national level brand-specific price statistics were not available; thus the retail price data were collected from one drink specialist or independent small grocery store usually in the capital city of the country (where survey respondents were mostly located), and were therefore potentially not nationally representative. The same limitation applies to prices collected from online stores. Retail prices from other store types were not considered in this analysis, even though such store types may represent a significant market share in some countries.
- Comparability of the most-sold type of spirits across countries: Some countries apply different excise tax rates or import duties to different categories of spirits based on HS codes or alcohol concentration. A clear range of ABV was requested, but the category of spirits collected varies across countries according to what is the most-sold, potentially reducing the degree of comparability of estimated tax shares and other price and tax indicators for spirits across countries.
- Standardization of volume sizes: Linearly transforming retail prices to 330 ml for beer and 750 ml for spirits for countries reporting data on other volume sizes may alter tax share estimations as larger size beverages tend to have a lower price per unit. However, since 330 ml and 750 ml represent the mode of the distribution of volume sizes collected for beer and spirits, respectively, the number of required linear transformations of retail prices is minimized. Additionally, as data has been collected so far for 2022 and 2024, the volume reported in both years for the price of beer and spirits was not always consistently reported, which may have impacted comparability of the price of beverage per ml but care was taken to minimize this to the extent possible.
- Distribution margins assumption: The estimation of the share of *ad valorem* excise taxes in the retail price for locally produced beverages requires an assumption on the total distribution margins for countries using the producer/manufacturer's price as tax base. Due to a lack of market data, 20% distribution margins are assumed (17,18). This may lead to overestimation or underestimation of tax share estimates. However, this assumption is applied to all countries using the producer/manufacturer's price as tax base, therefore allowing for comparisons of tax share estimates among them.
- CIF value: The brand of interest is not the only one traded between two given countries under harmonized tariff code 22.03 and 22.08 (and further disaggregation based on spirits type) for a given year. The total value and volume traded may contain trade information for other brands. However, as data was collected on the most-sold brand for each country, the CIF value obtained by dividing the total traded value by total traded volume should be representative.

- Tax legislation cut-off: Data and information presented in this analysis are based on legislation that was in effect as of 31 July 2024. Legislation that could have been replaced, amended, or repealed since this cut-off date is not analysed to maintain comparability of data at the same point in time in all countries. Some very few exceptions were made when complete information was collected with some delay to maximize country representation (for specific countries identified earlier in the Technical Notes).

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