

Calculating Standardized Tax Share and Other Price and Tax Policy Indicators for Alcoholic Beverages in the Region of the Americas

Methodological Note

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Abbreviations and Acronyms

ABV	alcohol by volume
CIF	cost, insurance, and freight value
IMF	International Monetary Fund
L	liter
mL	milliliter
NCD	noncommunicable disease
NMH	Department of Noncommunicable Diseases and Mental Health
OECD	Organization for Economic Cooperation and Development
PAHO	Pan American Health Organization
PPP	purchasing power parity
SSB	sugar-sweetened beverages
UN	United Nations
VAT	value added tax
WHO	World Health Organization

1. Background and objective

The World Health Organization (WHO) *Global Action Plan for the Prevention and Control of Noncommunicable Diseases 2013-2030* (WHO Global Action Plan) recognizes the critical importance of reducing the level of exposure of individuals and populations to common risk factors of noncommunicable diseases (NCDs), including tobacco, alcohol, unhealthy diet, and physical inactivity (1). Alcohol is an addictive psychoactive substance that is carcinogenic, immunosuppressant, teratogenic, and toxic to cells and tissues. Consumption of alcoholic beverages increases the risk of hundreds of health conditions and injuries, acute and chronic, thus being a leading risk factor to the burden of disease globally and in the Americas (2).

Alcoholic beverages are all types of beverages containing ethanol at various concentrations and include, among others, beer, wine, cider, spirits (gin, rum, vodka, whisky, etc.), mixed drinks, and ready-to-drink mixed drinks (3).

Evidence indicates that as prices increase for tobacco, alcoholic beverages, and sugar-sweetened beverages (SSBs), the affordability, purchase, and consumption of these products decrease. Thus, taxation is an indirect tool to influence prices of these products and thereby reduce their affordability and discourage their purchase and consumption (4). Raising prices on alcohol through excise taxes and pricing policies is recommended by the WHO *Global Alcohol Action Plan 2022-2030* (endorsed by the seventy-fifth World Health Assembly to effectively implement the global strategy to reduce the harmful use of alcohol as a public health priority) and *The SAFER Technical Package* to support a reduction in the harmful use of alcohol (5, 6). Moreover, increasing excise taxes on alcoholic beverages is among the most cost-effective and feasible for implementation of the regulatory policies to address NCDs outlined in the updated Appendix 3 of the WHO Global Action Plan (7). Such taxes represent a triple win for governments because they 1) improve population health, 2) generate revenue, and 3) have the potential to reduce long-term associated health care costs and productivity losses (4).

Since 2008, WHO has calculated and published a standardized indicator to compare tobacco tax share levels (proportion of total indirect taxes in the final retail price) across all Member States and time (8). While a similar indicator has also been used in the literature to monitor alcohol tax levels in Organization for Economic Cooperation and Development (OECD) countries and South Africa, St Kitts and Nevis, Thailand, and Vietnam (9, 10), comparable global or regional information on taxation of alcoholic beverages and SSBs over time and across countries is not currently available. Nonetheless, developing such indicators is necessary for monitoring tax policies recommended in the WHO Global Action Plan, as well as for analyzing trends, enabling standardized comparisons across countries, establishing best practices, and providing a powerful tool for advocacy (11).

In 2016, the Department of Noncommunicable Diseases and Mental Health (NMH) of the Pan American Health Organization (PAHO) started on developing standardized and comparable indicators of the share of indirect taxes in the price of alcoholic beverages and SSBs across time and countries in Latin America and the Caribbean. In 2017, PAHO/NMH piloted the calculation of two tax share indicators for

10 countries¹ in Latin America and the Caribbean, the first for one liter (1 L) of the locally produced most sold brand of beer and the second for 1 L of the locally produced most sold brand of carbonated sugar-sweetened drink. PAHO/NMH convened researchers and ministries of finance for a two-day meeting in July 2018 to present its pilot results and receive feedback on its proposed methodology, discuss the progress and challenges in monitoring and evaluating taxation policies, and establish a road map to periodically collect tax legislation and prices and calculate tax share indicators for alcoholic beverages and SSBs in Latin America and the Caribbean. The participants provided valuable inputs on how to strengthen the proposed tax share indicators to adequately capture the intricacies, unique characteristics, and regional consumption patterns of these products (12).

In August 2019, PAHO/NMH launched a pilot survey on taxes and prices of alcoholic beverages in four countries in Latin America and the Caribbean² to test its Excel-based survey tool. Building on this experience, from November 2020 to October 2021, PAHO/NMH conducted a survey on prices and taxes applied on alcoholic beverages in all PAHO Member States (hereafter referred to as PAHO alcohol tax survey). This survey collected data and information on prices, product characteristics, and taxes in order to develop a tax share indicator and other tax policy and price indicators on selected alcoholic beverages.

This note describes the methodology that PAHO developed for estimating a tax share indicator and other tax policy and price indicators for selected alcoholic beverages, based on the methodology used by WHO to monitor prices and taxes applied on tobacco products since 2008 and adapted from the methodology developed by PAHO for estimating a tax share indicator and other tax policy and price indicators for selected SSBs (13, 14). It outlines the definition of the scope and beverages for which the tax share is calculated, a description of the data collection and analysis process, and an explanation of key components of the tax share calculation. It also defines additional indicators on prices, affordability, and tax policies. Through this exercise, PAHO aims to support Member States with accurate, relevant, and internationally comparable information that they can use to guide the development of taxes on alcoholic beverages and evaluate their impact.

¹ Three Caribbean countries: Barbados, Jamaica, and Suriname; and seven Latin American countries: Brazil, Chile, Colombia, Ecuador, Mexico, Peru, and Uruguay.

² El Salvador, Guyana, Jamaica, and Paraguay.

2. Definition of the scope of the tax share indicator

The first step in developing the methodology is to establish what types of taxes are to be considered in the calculation of the tax share indicator, along with the beverages for which the tax share is to be calculated. This section describes the rationale behind these decisions.

2.1 Types of taxes considered

From a public health perspective, the objective of taxation policies on NCD risk factor commodities (tobacco, alcoholic beverages, and SSBs) is to reduce their consumption; for this reason, the proposed tax share methodology is limited to indirect taxes. Indirect taxes usually have the most significant impact on the relative price of a product. All information collected about taxes was based on legislation in effect as of 30 November 2020.

Several types of taxes are categorized as indirect taxes, including: unitary excise taxes, specific excise taxes, ad valorem excise taxes, import duties, value-added taxes or sales taxes (VAT), and other indirect taxes. From a public health perspective, within indirect taxes, excise taxes have the greatest potential. They allow policymakers to target and tax selected products (e.g., alcoholic beverages) in order to raise their relative price and make them less affordable than other goods and services, such as water. Therefore, excise taxes can discourage the consumption of unhealthy products by decreasing their affordability, which is the ultimate objective of the use of taxation as a public health tool.

Table 1, extracted from Technical Note III of the *WHO Report on the Global Tobacco Epidemic 2021* and adapted to alcoholic beverages,³ provides a summary of the different types of indirect taxes considered. The estimated total share of indirect taxes in the final retail price of a beverage (i.e., the total tax share) is calculated by aggregating the proportion of the final retail price that corresponds to each type of indirect taxes, such that:⁴

$$\text{Total Tax Share} = \frac{\text{VAT amount} + \text{Excise taxes amount} + \text{Import duties} + \text{Other taxes amount}}{\text{Final retail price}} \quad (1)$$

Certain other taxes, in particular direct taxes such as corporate taxes, can potentially impact beverage prices to the extent that producers pass them on to consumers. However, because of the practical difficulty of obtaining information on these taxes and the complexity in estimating their potential impact on prices, they are not considered.

³ Some changes were made in the examples used to explain the different types of indirect taxes in order to target alcoholic beverages.

⁴ Unitary excise taxes, specific excise taxes, and ad valorem excise taxes can be summed to represent the total amount of excise taxes.

Table 1: Types of indirect taxes considered

Type of indirect taxes	Description
Unitary excise taxes	A unitary excise tax is a tax on a selected good produced for sale within a country or imported and sold in that country. In general, the tax is collected from the manufacturer or wholesaler 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 based on the volume of the beverage (e.g., \$1 per liter).
Specific excise taxes	A specific excise tax is a tax on a selected good produced for sale within a country or imported and sold in that country. In general, the tax is collected from the manufacturer or wholesaler 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 proportionate to the alcohol concentration of the beverage (e.g., \$10 per liter of pure alcohol).
Ad valorem excise taxes	An ad valorem excise tax is a tax on a selected good produced for sale within a country or imported and sold in that country. In general, the tax is collected from the manufacturer or wholesaler 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 of the production/distribution chain; e.g., 10% of the producer's price.
Import duties	An import duty is a tax on a selected good imported into a country to be consumed in that country (i.e., the good is 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 unitary or ad valorem. Unitary import duties are applied in the same way as unitary excise taxes. Ad valorem import duties are generally applied to the CIF (cost, insurance, freight) value; e.g., 50% import duty levied on the CIF value. ⁵
Value added taxes or sales taxes (VAT)	<p>A value added tax (VAT) is a "multi-stage" tax on all goods and services applied proportionally to the price the consumer pays for a product/service. Manufacturers and wholesalers participate in the administration and payment of the tax on the value they add in each stage of the manufacturing/distribution chain. They are all reimbursed through a tax credit system, except the final consumer who pays the tax in the end. Most countries that impose a VAT do so on a base that includes any excise taxes and customs duties; e.g., VAT is 10% of the value at each stage of commercialization.</p> <p>Some countries impose sales taxes instead of a VAT. Unlike VAT, sales taxes are levied at the point of retail on the total final value of goods or services purchased. For the purposes of the tax share calculations, care was taken to ensure the VAT or sales tax share was computed in accordance with country-specific rules.</p>
Other taxes	Information was also collected on any other indirect tax that is not an excise tax, import duty, VAT or sales tax, but that applies to either the quantity of a product (in volume, weight, or number of units) or to the value of a transaction of a product, with as much detail as possible regarding what is taxed and how the base is defined; e.g., environment levy.

⁵ Cost, insurance, and freight value (CIF): the value of the unloaded consignment that includes the cost of the product itself, insurance, and transport and unloading. The CIF value is used in most countries as the base for import duties and ad valorem excise taxes on imported products.

Source: Adapted from World Health Organization. Report on the Global Tobacco Epidemic, 2021. Technical Note III: Tobacco taxes in WHO Member States. Geneva: WHO; 2021 (13).

Table 1 defines ad valorem, unitary, and specific excise taxes. Some countries might apply one or a mix of two of them. Some, like Peru on wine and spirits, apply what results in the highest amount between an ad valorem excise tax and a unitary excise tax. However, countries do not apply both unitary and specific excise taxes on the same beverage type.

In addition, countries can have a uniform or a tiered excise tax system. A uniform excise tax system consists of a unique excise tax rate for all taxed beverages compared to a tiered system where variable rates apply based on selected criteria of beverages (type, volume, or alcohol concentration).

2.2 Types of alcoholic beverages considered

It is impractical to collect data on all desired beverage types given the high diversity of alcoholic beverages consumed, particularly if such endeavor is to be performed periodically and scaled regionally or globally. Selection of beverages for this analysis was conducted by the Economics of NCDs and Alcohol teams at PAHO/NMH and through collaboration with researchers and ministries of finance personnel from PAHO Member States.

The criteria for selection of types of beverages considered for the tax share indicator were regional patterns of consumption, representativeness, and price dispersion. The three main types of alcoholic beverages defined by WHO were selected: beers, wines, and spirits (2).

No single brand is the most sold in the majority of countries in the Americas for each beverage type (15), therefore the decision was made to ask for each country to pick their most sold brand for each beverage type, determining popularity based on national market share information. If this information was not available, survey respondents were asked to consult with the vendors from which the prices were collected.

Prices were also collected for the cheapest brand of beer, wine, and spirits to allow for a price dispersion analysis. In addition, prices were also collected for an internationally comparable premium brand⁶ of beer. The same brand was collected in all countries. This brand was selected as it is sold in most countries in the Americas⁷ and it represents a premium brand in the majority of them (15). No data were selected for premium brands of wine and spirits, as their selection by survey respondents would be too subjective in the absence of solid market data.

Table 2 below provides a definition for each of the beverages for which information was collected. These definitions were provided to the survey respondents.

⁶ Data were collected on Heineken®.

⁷ No data available for the Caribbean.

Table 2: Definition of selected alcoholic beverages

Beverage	Description
Beer	A beer is an alcoholic drink made from yeast-fermented malt flavored with hops. For this survey, we ask for beers with an alcohol by volume (ABV) between 4% and 6%.
Wine	A wine is an alcoholic drink made from fermented grape juice. For this survey, we ask for wines with an ABV between 11% and 14%.
Spirits	Spirits, also known as liquor, is an alcoholic beverage produced by distillation of grains, fruit, or other plants that have already gone through alcoholic fermentation. For this survey, we ask for spirits with an ABV between 35% and 45%.

Regarding beverage volume sizes, for beers two different sizes were selected: 330 milliliters (mL) can or bottle and 750 mL or a six-pack of individual size bottles (330 mL each), as they appeared to be the most common presentations found in the Americas.⁸ For wine and spirits the bottle size selected was 750 mL, also based on the most common presentations found in the Region⁹ (15). Section 3.3 describes how pricing information for these beverages was collected.

⁸ No data available for the Caribbean.

⁹ No data available for the Caribbean.

3. Data collection and analysis

The two main informational inputs for estimating the tax share indicator are: 1) tax rates, bases, and structures; and 2) beverage nominal final retail prices and product information. This section describes the respective processes to collect and analyze tax legislation, nominal final retail prices, and product information for calculating the tax share indicator, and validate the estimates.

3.1 Survey process and validation

The PAHO alcohol tax survey was conducted using an Excel-based tool between November 2020 and October 2021 and was completed by officially nominated ministry of finance practitioners from 30 PAHO Member States (all except Barbados, Cuba, Dominica, Haiti, and the United States of America).

Survey respondents were asked to provide information on tax structures, bases, and rates, and supporting legislation,¹⁰ as well as nominal price data and product information (volume size, alcohol concentration, and country of origin). The cut-off date for tax information was 30 November 2020.

After analysis, final estimates and indicators were sent to the respective governments for review and signoff. To facilitate review by governments, a summary sheet was generated for each country and was sent for review prior to publication. In cases where national authorities requested data changes, the requests were assessed according to both the legislation and the clarification shared by national authorities, and data were updated or left unchanged. In cases where national authorities explicitly did not approve publication of the data, this will be specifically noted in the published results.

3.2 Analysis of tax legislation

In addition to the tax legislation collected via the PAHO alcohol tax survey, legislation already collected through the following PAHO/WHO monitoring tools was reviewed: the WHO Global Information System on Alcohol and Health; the WHO Report on the Global Tobacco Epidemic; the WHO Global Nutrition Policy Review; and the PAHO NCD Country Capacity Survey. Searches were also conducted on websites of parliaments and ministries of finance, and legal databases. All information about taxes is based on legislation in effect up to 30 November 2020.

The legislation was analyzed to cross-validate the information provided by survey respondents and to describe all taxes levied on alcoholic beverages, including VAT, unitary excise taxes, specific excise taxes, ad valorem excise taxes, import duties, and other indirect taxes, according to the definitions in Table 1.

This information was then systematized into table format, such as in Box 1.

¹⁰ In this report, the term legislation refers to any tool used by national governments to impose obligations to their citizens and corporations, such as laws, decrees, regulations, norms, guidelines, and other tools for administrative regulations, among others, that national authorities impose as mandatory.

Box 1: Summary of systematized information collected on taxes for each country

1. Value added taxes or sales taxes (VAT)
 - a. VAT rate
 - b. VAT base
2. Ad valorem excise taxes
 - a. Ad valorem rate
 - b. Ad valorem base
 - c. Ad valorem base value, if available
3. Unitary excise taxes
 - a. Unitary rate
 - b. Unitary base
4. Specific excise taxes
 - a. Specific rate
 - b. Specific base
5. Import duties
 - a. Imported beverage or not?
 - b. If yes, country of origin
 - c. If yes, import duty rate
 - d. If yes, import duty base
 - e. If yes, import duty base value, if available
6. Other taxes
 - a. Other taxes name
 - b. Other taxes rate
 - c. Other taxes base

3.3 Collection of nominal final retail prices

The first step was to define the beverage types for which nominal final retail prices would be collected. Section 2.2 describes the rationale behind the selection. Box 2 lists these beverages along with the volume requested to survey respondents.

Box 2: Summary of alcoholic beverages for which nominal final retail prices were requested

- One 330 mL can/bottle of beer, most sold brand
- One 330 mL can/bottle of beer, cheapest brand
- One 330 mL can/bottle of beer, internationally comparable premium brand¹¹
- One 750 mL bottle or six-pack of bottles (330 mL each) of beer, most sold brand
- One 750 mL bottle or six-pack of bottles (330 mL each) of beer, cheapest brand
- One 750 mL bottle or six-pack of bottles (330 mL each) of beer, internationally comparable premium brand¹²
- One 750 mL bottle of wine, most sold brand
- One 750 mL bottle of wine, cheapest brand

¹¹ Data were collected on Heineken®.

¹² Data were collected on Heineken®.

- One 750 mL bottle of spirits, most sold brand (specify the type of spirits)
- One 750 mL bottle of spirits, cheapest brand (specify the type of spirits)

The volume sizes requested for collection of prices might not be available in all countries. In those cases, the final retail price of the closest volume size was collected and their price adjusted to a standardized volume for each beverage type. These standardized volumes are the same as the volumes requested for price collection for all beverages.

Volumes were standardized assuming a linear transformation of the price. The standardization of volumes might alter the calculation of the tax share or other indicators by overestimating or underestimating final retail prices. Indeed, usually, as the volume of a beverage presentation increases, the price per milliliter tends to decrease. However, volume standardization allows for cross-country comparison of these indicators that would not be possible otherwise.

All final retail prices, described above in Box 2, were collected first from a nationally representative supermarket or hypermarket, defined as a retail outlet (chain or independent store) with a selling space of over 2500 square meters and with a primary focus on selling food/beverages, and secondly from the most popular other store type, which may include convenience stores, small independent food stores, gas stations, etc. Survey respondents were asked to select the most popular other store type based on national market share information. Final retail prices from supermarkets or hypermarkets were used to calculate the tax share and other indicators. The collection of final retail prices from the most popular other store resulted in a lot of missing data. Final retail prices from this store type were only used to validate the data or for countries where alcoholic beverages (e.g., spirits) were not sold in supermarkets or hypermarkets.

In order to determine the popularity of the brands for the different types of beverages, survey respondents were asked to base their decision on national market share information. If this information was not available, survey respondents were asked to consult with the vendors from which the final retail prices were collected.

The instructions to survey respondents for collecting final retail prices are detailed in Box 3.

Box 3: Instructions for collecting nominal final retail prices in supermarkets/hypermarkets and in the most popular other store type

- Survey respondents are asked to provide nominal final retail prices:
 - obtained from a nationally representative supermarket/hypermarket and the most popular other store type;
 - non-promotional and **inclusive of all taxes and in local currency**;
 - indicate if the beverage is **locally produced or imported**, and indicate for the latter the country of origin;
 - indicate the volume size and alcohol concentration of the beverage.
- If a beverage is not available in the required volume size, survey respondents are asked to provide information on the volume size with the closest volume above the requested volume, specifying the size of the beverage.
- If national market share information is not available, survey respondents are asked to consult with the vendors from which the final retail prices were collected in order to determine popularity of the brands.
- If the cheapest brand cannot be identified using national market share information, survey respondents are asked to consult with the vendors from which the prices were collected in order to determine the cheapest brand.
- The brand selected for the cheapest single 330 mL can/bottle of beer can be different than the one selected for the cheapest large single 750 mL bottle or six-pack of bottles (330 mL each). However, both cannot be more expensive than the brand selected for most sold for the same volume size. If the most sold brand is indeed the cheapest brand for one or both requested volume sizes, please leave the information blank for the cheapest brand and mention it in the comments section.

For comparability between countries, all prices are converted into international dollars at purchasing power parity (PPP) using the International Monetary Fund (IMF) implied PPP conversion rates for 2020 (16). For countries for which excise taxes, import duties, or other indirect taxes amount-specific rates are defined in United States dollars rather than the local currency, the IMF's International Financial Statistics database exchange rates for November 2020 are used (17).

4. Estimation of the proportion of indirect taxes in the final retail price

As mentioned above, the tax share indicator estimates the percentage of the final retail price that corresponds to indirect taxes, such that:

$$Total\ Tax\ Share = S_{VAT} + S_u + S_s + S_{av} + S_{id} + S_o \quad (2)$$

S_{VAT} represents the share of value added taxes (VAT) or sales taxes in the final retail price.

S_u represents the share of unitary excise taxes in the final retail price.

S_s represents the share of specific excise taxes in the final retail price.

S_{av} represents the share of ad valorem excise taxes in the final retail price.

S_{id} represents the share of import duties in the final retail price.

S_o represents the share of other taxes in the final retail price.

Equation 2 is simply turning Equation 1 into a sum of fractions, each of them representing the share of one type of taxes in the final retail price. Consequently, the first step is to calculate the share of each type of taxes in the final retail price, as follows.

Unitary excise taxes and specific excise taxes are rarely applied simultaneously on the same beverage. Therefore, their shares in the final retail price are summed and reported as the share of amount-specific excise taxes in the results of our analysis.

4.1 Calculating the share of VAT or sales taxes in the final retail price

The first calculation that is made is the share of VAT or sales taxes in the final retail price because either of these taxes are usually applied in the last stage of sale (and consequently the final retail price, the denominator here, can include other indirect taxes). In most countries, VAT or sales taxes are calculated applying their statutory tax rate ($VAT\%$) to the final retail price excluding the *VAT amount*, therefore:

$$S_{VAT} = \frac{VAT\ amount}{Final\ retail\ price} \quad (3)$$

$$VAT\ amount = (Final\ retail\ price - VAT\ amount) * VAT\% \quad (4)$$

Solving Equation 4 for *VAT amount* leads to:

$$VAT\ amount = \frac{Final\ retail\ price * VAT\%}{1 + VAT\%} \quad (5)$$

Replacing Equation 5 in Equation 3 leads to the following formula for the share of VAT or sales taxes in the final retail price:

$$S_{VAT} = \frac{VAT\%}{1 + VAT\%} \quad (6)$$

In some countries, however, survey respondents informed that the VAT was not effectively collected at all levels of the supply chain. For example, in Suriname for imported beverages, the VAT or sales tax rate is applied on the CIF value including excise taxes and import and custom duties. In this case, the definition of the tax base provided by survey respondents and the legislation was followed.

4.2 Calculating the share of unitary excise taxes in the final retail price

The next step is to calculate the unitary excise tax share. As described in Table 1, unitary excise taxes are a fixed amount based on the volume of the beverage. The volume of the beverage, expressed in milliliters, is used to calculate the unitary excise tax T_u :

$$T_u = \frac{\text{Volume of beverage} * \text{Tax amount per taxable volume unit}}{\text{Taxable unit volume}} \quad (7)$$

Then the share of unitary excise taxes in the final retail price is recovered:

$$S_u = \frac{T_u}{\text{Final retail price}} \quad (8)$$

4.3 Calculating the share of specific excise taxes in the final retail price

On the other hand, specific excise taxes are a fixed amount based on the alcohol concentration of the beverage. The reported alcohol by volume (ABV), expressed as a percentage, is used to calculate the specific excise tax T_s . There are two cases:

- Specific excise tax applied per amount of liter of pure alcohol (L.p.a.)

$$\text{Liter of Pure Alcohol (L.p.a.)} = \frac{\text{ABV}\% * \text{Volume of beverage}}{1000} \quad (9)$$

$$T_s = \text{L.p.a.} * \text{Tax amount per L.p.a.} \quad (10)$$

- Specific excise tax applied per unit of ABV per taxable unit volume

$$T_s = \frac{\text{ABV}\% * 100 * \text{Volume of beverage} * \text{Tax amount per ABV unit}}{\text{Taxable unit volume}} \quad (11)$$

The taxable unit volume here is usually 1000 mL.

Some countries, like for example Canada for spirits, define specific excise taxes per proof gallon, which is one liquid gallon of spirits that is 50% alcohol at 60 degrees Fahrenheit. For tax purposes, to obtain volumes in proof gallons, liters are first converted into gallons, then multiplied by the ABV of the beverage, and finally multiplied by two.

As for unitary excise taxes, the share of specific excise taxes in the final retail price is easy to recover following Equation 8.

4.4 Calculating the share of ad valorem excise taxes in the final retail price

For ad valorem excise taxes, the rate $T_{av}\%$ is applied on the base provided by survey respondents and cross-checked with provided legislation. Ad valorem excise taxes typically apply on a base M , such that the share of ad valorem excise taxes in the final retail price is given by the following equation:

$$S_{av} = \frac{T_{av}\% * M}{Final\ retail\ price} \quad (12)$$

Calculating the share of ad valorem excise taxes is straightforward when, by law, the base M is fixed later in the value chain, such as the final retail price, the final retail price excluding VAT, or the final retail price excluding VAT and excise.

In other cases, when the tax base is fixed earlier in the value chain, such as the producer's price, the calculation of this share of the price is not as straightforward and differs for locally produced beverages (section 4.4.1 below) and imported beverages (section 4.4.2).

4.4.1 Locally produced beverages

In the case of locally produced beverages, when the base is not the final retail price, the final retail price excluding VAT, the final retail price excluding VAT and excise, or a fixed tax base amount,¹³ this base is the producer's price. In this case, ad valorem excise taxes are applied on a base that does not include unitary or specific excise taxes, ad valorem excise taxes, VAT, or the retailer's and wholesaler's profit margins π . When this base value M is not provided by survey respondents, it has to be estimated using the following methodology:

$$M = Final\ retail\ price - VAT\ amount - T_u - T_s - T_{av}\% * M - \pi \quad (13)$$

¹³ In Colombia (for wine and spirits) and in Uruguay (for beer and spirits), the ad valorem excise tax component is applied on fixed tax base amounts per volume varying per beverage type, effectively operating as a unitary excise tax. Therefore, these ad valorem components were categorized as unitary components in this analysis, and the method described for unitary excise taxes in section 4.2 was followed to calculate the excise tax share.

Using Equation 5 that defines the *VAT amount* and solving for M leads to:

$$M = \frac{\frac{\text{Final retail price}}{1 + \text{VAT}\%} - T_u - T_s - \pi}{(1 + T_{av}\%)} \quad (14)$$

Therefore, only one unknown variable remains, the retailer's and wholesaler's profits π . This information is rarely publicly disclosed and will vary from country to country. While it could be assumed that supermarkets' retail margins are small, assuming distribution margins (retailer's and wholesaler's margins) to be zero would overestimate the base for ad valorem excise taxes M and in turn the amount of ad valorem excise taxes and the total share of taxes in the final 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. While the market for beer is quite concentrated in the Region, this is less the case for wine and spirits (15).

Consequently, the distribution margins were assumed to be 20%. Applying this assumption to all countries using the producer's price as tax base allows for comparisons of excise tax share estimates among them. In addition, it allows for fairer comparisons with countries using tax bases fixed later in the value chain (closer to the retail price), such as the retail price excluding VAT and excise, by estimating a lower relative base M for countries using the producer's price.

4.4.2 Imported beverages

In the case of imported beverages, when the base is not the final retail price, ad valorem excise taxes typically apply on a base M' , such that the share of ad valorem excise taxes in the final retail price is given by the following equation, equivalent to Equation 12:

$$S_{av} = \frac{T_{av}\% * M'}{\text{Final retail price}} \quad (15)$$

In most cases, this base M' consists of the CIF value and the import duties. However, import duties typically apply on the CIF value, therefore import duties are expressed as a function of the CIF value and the import duty rate provided by the respondents and cross-validated with provided legislation. Therefore, M' can be expressed as follows:

$$M' = CIF + ID = CIF * (1 + T_{id}\%) \quad (16)$$

where CIF represents the CIF value, ID the import duties, and $T_{id}\%$ the import duty rate.

When the value of base M' is not provided by survey respondent, it has to be estimated. In order to estimate M' , the only unknown variable that needs to be estimated is the CIF value. The CIF value is the base for import duties. It does not include import duties, the retailer's and wholesaler's profit margins π , unitary or specific excises taxes, ad valorem excise taxes, VAT, or the importer's profit margin π' . If the

CIF value is not provided by survey respondents, it can theoretically be estimated using the following equation:

$$CIF = \text{Final retail price} - \text{VAT amount} - T_u - T_s - T_{av}\% * M' - \pi - ID - \pi' \quad (17)$$

Using Equation 5 that defines the *VAT amount*, Equation 16 that defines M' , and solving for *CIF* leads to:

$$CIF = \frac{\frac{\text{Final retail price}}{1 + VAT\%} - T_u - T_s - \pi - \pi'}{(1 + T_{av}\%) * (1 + T_{ID}\%)} \quad (18)$$

As in the case of locally produced beverages, distribution margins are assumed to be 20%.

The CIF value cannot be estimated as Equation 18 cannot be solved. Indeed, the importer's profit margin π' is unknown. It is rarely publicly disclosed and will vary from country to country. In practice, however, the importer's profit margin can be relatively significant and setting it to zero would substantially overestimate the CIF value, thus M' , and thereby substantially overestimate the share of ad valorem excise taxes in the final retail price. For this reason, the CIF value has to be estimated differently.

As WHO does for the estimation of the tobacco tax share indicator and PAHO for the SSB tax share indicator (13, 14), the United Nations (UN) Comtrade database is used as secondary source to obtain the CIF value when this value is not provided by survey respondents (18). This global trade database provides import and export statistics by country and tariff code. A tariff code or Harmonized System (HS) code is an internationally standardized nomenclature using four to six digits to classify traded products (19). The UN Comtrade database provides yearly total value and volume traded by HS code by country and trading partner. For the four beverages for which the tax share indicator is estimated, import data are extracted for the following HS codes:

- Beer: 220300
- Wine: 220421
- Spirits: 2208 (more disaggregated codes are used depending on the category of spirits reported).

World average import data for the importing country of interest for the latest year available are used. A linear transformation of the total value traded is assumed, using the selected standardized volume size of each beverage, to obtain their CIF value.

Using the UN Comtrade database has a significant limitation. The brand of interest might not be the only one traded between two given countries under a given HS code for a given year; therefore, the total value and volume traded could contain trade information for other brands. However, as the brand collected for each beverage type for which the tax share indicator is calculated is the most sold brand, the CIF value obtained through the UN Comtrade database should be representative for the most sold brand.

4.5 Calculating the share of import duties in the final retail price

An import duty is a tax on a selected commodity imported in a country and destined for domestic consumption (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. Import duties can be ad valorem or unitary. In cases of preferential trade agreements with the country of origin, if import duties information is not provided by survey respondents, the lowest possible import duties is assumed.

4.5.1 Unitary import duties

The volume of the beverage, the amount of import duties per taxable unit volume (e.g., \$10 per 100 L), and the taxable unit volume (e.g., 100 L) are used in order to calculate the unitary import duties T_{id} . In this case:

$$T_{id} = \frac{\text{Volume of beverage} * \text{Import duties per taxable unit volume}}{\text{Taxable unit volume}} \quad (19)$$

Therefore, the share of import duties in the final retail price is easy to recover:

$$S_{id} = \frac{T_{id}}{\text{Final retail price}} \quad (20)$$

4.5.2 Ad valorem import duties

In most countries, when applicable, ad valorem import duties are applied. The import duty rate $T_{id}\%$ is usually applied on the CIF value, which is rarely readily available. The share of ad valorem import duties in the final retail price is given by the following equation:

$$S_{id} = \frac{T_{id}\% * CIF}{\text{Final retail price}} \quad (21)$$

If the CIF value is not provided by survey respondents, secondary data are used, as explained in section 4.4.2.

4.6 Calculating the share of other taxes in the final retail price

Other indirect taxes are applied either to a quantity (volume of the beverage or the quantity of a certain type of container, therefore amount specific) or to the value of a beverage (therefore ad valorem). Examples of other taxes are environment levy, revenue recovery charge, or custom service charge.

Environment levies are counted in the estimation of the share of other taxes, even when in some countries they work as a deposit that is refunded when the container is returned. Indeed, since such levies can have an impact on the final retail price that consumers face, it is important to account for them. When environment levies are based on container type, and this information is not provided by survey respondents, it is assumed that containers are all made of glass.

4.6.1 Amount-specific other taxes

When amount-specific other taxes are applied, they are generally calculated by volume or the quantity of a certain type of container. For amount-specific other taxes calculated by volume, the volume of the beverage, the amount of other taxes per taxable unit volume (e.g., \$1 per 100 L), and the taxable unit volume (e.g., 100 L) are used in order to calculate the amount-specific other taxes T_o . In this case:

$$T_o = \frac{\text{Volume of beverage} * \text{Tax per taxable unit volume}}{\text{Taxable unit volume}} \quad (22)$$

As the tax share indicator is calculated for a single unit of selected beverages, for amount-specific other taxes calculated by the quantity of a certain type of container, the amount-specific other taxes T_o is equal to the tax amount per taxable unit (e.g., \$0.05 per bottle or can).

$$T_o = \text{Tax amount per taxable unit} \quad (23)$$

Therefore, in both cases, the share of other taxes in the final retail price is easy to recover:

$$S_o = \frac{T_o}{\text{Final retail price}} \quad (24)$$

4.6.2 Ad valorem other taxes

In the case of ad valorem other taxes, the other taxes rate $T_o\%$ is applied to a tax base M'' , which is generally equal to the final retail price or the final retail price excluding some or all taxes for locally produced beverages, and in most cases to the CIF value for imported beverages. The share of ad valorem other taxes in the final retail price is given by the following equation:

$$S_o = \frac{T_o \% * M''}{Final\ retail\ price} \quad (25)$$

If the CIF value is not provided by survey respondents, secondary data are used, as explained in section 4.4.2.

Several other taxes can apply to one beverage. In this case, the share of other taxes is the sum of the share of each other tax.

5. Additional price and tax policy indicators

Additional indicators can be defined for prices and taxes, but also for tax policies in order to capture the full scope of the tax environment surrounding alcoholic beverages. Their definition is also based on the methodology used by WHO to monitor prices and taxes applied on tobacco products since 2008 and adapted from the methodology developed by PAHO for estimating a tax share indicator and other tax policy and price indicators for selected SSBs (13, 14).

5.1 Excise tax share

This indicator is the total share of excise taxes—ad valorem, unitary, and specific—in the final retail price. It is calculated as follows:

$$Excise\ tax\ share = S_{av} + S_u + S_s \quad (26)$$

The higher the excise tax share, the greater the reliance on excise taxes.

5.2 Price per liter of pure alcohol

This indicator allows comparison of the final retail price of 1 L.p.a. between the different alcoholic beverage types selected. It is calculated using the following formula:

$$Price\ per\ L.\ p.\ a. = \frac{Final\ retail\ price}{L.\ p.\ a.} \quad (27)$$

where the volume of ethanol contained in the beverage or *L. p. a.* is calculated as described in Equation 9. This indicator is expressed in international dollars at PPP.

5.3 Excise tax per liter of pure alcohol

This indicator allows comparison of the amount of excise taxes—ad valorem, unitary, and specific—applied to the different alcoholic beverage types selected. It is calculated using the following formula:

$$\text{Excise tax per L.p.a.} = \text{Excise tax share} * \text{Price per L.p.a.} \quad (28)$$

This indicator is expressed in international dollars at PPP.

5.4 Total tax per liter of pure alcohol

This indicator allows comparison of the amount of total taxes applied to the different alcoholic beverage types selected. It is calculated using the following formula:

$$\text{Total tax per L.p.a.} = \text{Total tax share} * \text{Price per L.p.a.} \quad (29)$$

This indicator is expressed in international dollars at PPP.

5.5 Price and tax indicators per standard drink

The indicators for price per L.p.a., excise tax per L.p.a., and total tax per L.p.a., defined respectively in section 5.2, 5.3, and 5.4, can also be estimated as amounts per standard drink. The definition of a standard drink varies across countries. In countries providing a definition of a standard drink in grams of ethanol, the most common size is found to be 10 g (2). Such definition also allows comparison with previous estimations developed by WHO Regional Office for Europe (20). An ethanol density of 0.789 g/mL is used to convert L.p.a. indicators into grams of ethanol (21). This indicator is expressed in international dollars at PPP.

5.6 Weighted average price and tax share indicators

The indicators for price per L.p.a., excise tax share, and total tax share can also be estimated as a weighted average (weighted by proportion of use) across alcoholic beverage type using data from the WHO *Global Status Report on Alcohol and Health* for annual adult per capita consumption in liters of pure alcohol per alcoholic beverage type (2). Price and tax data corresponds to the most sold brand of beer (330 ml) and wine (750ml), and of the most sold brand of the most sold category of spirits (750 ml).

5.7 Affordability indicator per liter of pure alcohol

In the case of tobacco, WHO defines the affordability indicator as the proportion of GDP per capita required to buy 100 packs of 20 cigarettes of the most sold brand (13). If this same definition were to be applied to 100 bottles for each of the selected beverages, this would not allow comparisons of affordability between countries, as even if the volume of each beverage type selected is standardized, their alcohol by volume is not. Also, it would not be possible to use the indicator to compare affordability between beverage types within a given country, as the standardized volume differs between beverage types, in addition to the alcohol by volume.

Also, this indicator cannot be defined as, for example, the proportion of GDP per capita required to buy 100 L of a given beverage, as done in the literature for SSBs (14, 22). Indeed, assuming that drinkers calibrate their consumption based on ethanol content, this definition would not solve the problem of comparability between beverage types inside a given country.

Therefore, the affordability indicator is defined for 1 L.p.a. of a given beverage. The indicator is calculated using the following formula:

$$\text{Affordability per L.p.a.} = \frac{\text{Price per L.p.a.}}{\text{GDP per capita}} \quad (31)$$

where *Price per L.p.a.* is calculated as described in Equation 27.

The final retail price and the GDP per capita are in local currency unit. GDP per capita data at current prices are derived from the IMF's World Economic Outlook (WEO) database (16).

The affordability of a beverage is inversely proportionate to the affordability indicator defined above. This indicates that if GDP per capita increases while the final retail price of a beverage remains constant or decreases, or if the final retail price decreases while GDP per capita remains constant or increases, the above indicator decreases and affordability increases.

Although this affordability indicator allows cross-country and cross-beverage-type comparisons of affordability, it contains one strong limitation, which relates to the assumption of linear transformation of prices. Indeed, prices for smaller volume containers tend to be higher per milliliter than prices for larger volume containers. The selected standardized volumes are all below or equal to 750 mL, and multiplying the final retail price reported for this standardized volume to obtain the price of 1 L.p.a. for a given beverage is overestimating the latter. Since the goal of this exercise is to measure how high is the share of GDP per capita required to buy 1 L.p.a. of a given beverage, this assumption does not penalize countries, as it overestimates the affordability indicator. In addition, an overestimation of the affordability indicator is acceptable given the comparable treatment across countries.

The affordability indicator will be most valuable if the collection of data is repeated regularly and changes over time are analyzed, as done by WHO for cigarette affordability trends since 2017 (13).

5.8 Price dispersion indicators

The first price dispersion indicator is defined as the share of the final retail price of the cheapest brand in the final retail price of the most sold brand:

$$Price\ dispersion_1 = \frac{Final\ retail\ price\ cheapest\ brand}{Final\ retail\ price\ most\ sold\ brand} \quad (32)$$

The second price dispersion indicator is defined as the share of the final retail price of the cheapest brand in the final retail price of the premium brand (therefore, estimated only for beers in this analysis):

$$Price\ dispersion_2 = \frac{Final\ retail\ price\ cheapest\ brand}{Final\ retail\ price\ premium\ brand} \quad (33)$$

The third price dispersion indicator is defined as the share of the final retail price of the most sold brand in the final retail price of the premium brand (therefore, estimated only for beers in this analysis):

$$Price\ dispersion_3 = \frac{Final\ retail\ price\ most\ sold\ brand}{Final\ retail\ price\ premium\ brand} \quad (34)$$

The indicator is expressed in percentages and is calculated after linearly transforming both prices to a standard drink unit. As in section 5.6, while the definition of a standard drink varies across countries, it was set in this analysis to 10 g of ethanol and using an ethanol density of 0.789 g/mL (21).

The smaller the gap between the prices, the higher the value of the indicator.

5.9 Tax policy indicators

Several other tax policy indicators are defined in order to better understand the tax administration and tax design applied on alcoholic beverages in the Region of the Americas. Their definition is also based on the methodology used by WHO to monitor tobacco taxes and adapted from the methodology developed by PAHO for estimating a tax share indicator and other tax policy and price indicators for selected SSBs (13, 14).

Type of excise taxes applied on each beverage type

This indicator simply states if excise taxes are unitary, specific, ad valorem, or a mix of two, or if no excise taxes are applied on a particular beverage type. Ad valorem excise taxes applied on a fixed tax base amount by unit volume—for example, set by decree—work effectively like unitary excise taxes and were categorized as such in this analysis.

Uniform versus tiered excise tax system

In countries applying excise taxes on alcoholic beverages, this indicator informs whether a uniform excise tax system is in place, consisting of a unique excise tax rate or amount for all taxed beverages, or a tiered excise tax system where variable rates or amounts apply based on selected criteria of beverages (by beverage type, HS code, volume, alcohol concentration, etc.). This indicator is defined across beverage types.

Retail price (or retail price exclusive of VAT or retail price exclusive of VAT and excise) used as base for ad valorem excise taxes on locally produced beverages

In countries applying ad valorem or mixed excise tax systems, ad valorem excise taxes applied to the retail price, the retail price excluding VAT, or the retail price excluding VAT and excise are applied on a larger tax base than the producer's price. The retail price is easier to determine than the producer's price, and therefore there is less risk of undervaluation of the tax base. This indicator informs whether or not ad valorem excise taxes are applied on the retail price (or the retail price excluding VAT or the retail price excluding VAT and excise). It is not applicable to countries where only unitary or specific excise taxes are applied or where no excise tax is applied.

Automatic adjustment for inflation (or another economic indicator) of unitary or specific excise taxes on a periodic basis

In countries applying unitary, specific, or mixed excise tax systems, if the unitary or specific component is not adjusted for inflation (or another economic indicator such as average income), its real value will diminish over time. This indicator captures whether or not the legislation mandates that unitary or specific excise taxes be periodically automatically adjusted. This indicator is not applicable to countries where only ad valorem excise taxes are applied or where no excise tax is applied.

Minimum unitary or specific excise tax

In countries applying ad valorem or mixed excise tax systems, this indicator informs whether there is a minimum unitary or specific excise tax applied. A minimum excise tax provides protection against unhealthy products being underpriced. Indeed, it forces prices up since the price will not be lower than the excise tax paid. This indicator is not applicable to countries where only unitary or specific excise taxes are applied or where no excise tax is applied.

Minimum price policy

A minimum price policy is a policy that mandates the lowest price at which specific beverages can be sold (e.g., minimum unit pricing). This indicator captures whether there is a minimum price policy applied.

Other price policy than minimum excise tax or minimum price

This indicator captures if any other policy than minimum excise tax or minimum price is applied to force prices up or to mandate the lowest price at which specific beverages can be sold.

Mandatory duty-paid, excise, fiscal mark, banderole, or any other type of marking or tax stamps or labels is applied

This indicator informs if any policy mandating the use of mandatory duty-paid, excise, fiscal mark, banderole, or any other type of marking or tax stamps or labels is applied. These types of policies help identifying tax-paid beverages, strengthening tax administration, and combating illicit trade.

5.10 Excise tax revenue and earmarking

Excise tax revenues

In countries applying excise taxes on alcoholic beverages, this indicator reports the annual amount of excise tax revenue by type of alcoholic beverage, as reported by survey respondents for the latest fiscal year available in local currency units.

Earmarking of excise tax revenues

In countries applying excise taxes, this indicator informs whether excise tax revenue (a portion or all) is dedicated to any specific health purpose (e.g., health programs). Excise taxes can generate substantial revenues. Revenues can be used to fund health care, which is often underfunded and put under strain as a result of NCDs and mental health conditions.

6. Methodological limitations and other considerations

The methodology to calculate the tax share and other price indicators has limitations, largely due to the data availability constraints, the complexity of alcohol tax designs, the variety of beverage types and their respective alcohol concentration, and the necessity to have standardized and comparable indicators across countries and beverage types.

National representativeness of prices and brands. In countries where national market share data are not available, survey respondents are instructed to consult vendors to select the most sold brand. This could potentially lead to the selection of most sold brands (or beverage category for spirits) that may not be nationally representative. In addition, the final retail price data used were often collected from one representative supermarket/hypermarket, usually in the capital city of the country, where survey respondents are mostly based. Thus, prices collected may not be nationally representative. Finally, prices from the most popular other type of store (independent small grocery stores, specialist liquor stores, etc.) and on-trade channels (restaurants, bars, etc.) are not taken into account in the estimations (except in countries where alcoholic beverages were not available for sale in supermarkets/hypermarkets). In some countries, such other store types and distribution channels may represent significant market shares.

Comparability of spirits selected across countries. The category of spirits was not specified in the survey and survey respondents were asked, as for the selection of the most sold brand, to select the most sold spirits category. 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 across countries.

Standardization of volumes. The volume sizes requested for collection of prices may not be available in all countries. In those cases, the final retail price of the closest volume size was collected and then adjusted to a selected standardized volume assuming a linear transformation of the price. The respective mode of the distribution of the volume sizes collected was found to be equal to the standardized volume for each beverage type, except large or six-pack beer by construction. However, as the container size of a beverage increases, its price per milliliter tends to decrease. Therefore, the tax share and other price indicator estimations may be altered.

CIF value. As explained in section 4.4.2, when the CIF value is not provided by survey respondents, it is estimated using secondary data. The brand of interest may not be the only one imported under a given HS code for a given year. Therefore, the total value and volume traded could contain trade information for other brands. However, as the brand for which the tax share indicator for each beverage type is calculated is the most sold brand, the CIF value obtained through this method should be representative of the selected brand.

Distribution margins markup assumption. Making an arbitrary non-zero assumption for the total distribution margins for countries using the producer's price as base for ad valorem excise taxes may lead to overestimation or underestimation of tax share estimates. However, applying the same assumption to all countries using the producer's price as tax base allows for comparisons of excise tax share estimates among them. It also allows for fairer comparisons with countries using tax bases fixed later in the value chain (closer to the retail price), by estimating a lower relative tax base for countries using the producer's price. While there are limited publicly available data on distribution margins in the rest of the Region, markups for alcoholic beverages have previously been assumed between 15% and 17% in the literature in the United States of America (23). Also, recent data from the United States Census Bureau present distribution margins of approximately 29% for all alcoholic beverages combined (24). Outside of the Region, a study from the French National Institute of Statistics and Economic Studies (INSEE) found that the overall gross margin on alcoholic beverages in supermarkets is homogeneous and between 10% and 15% (25).

Use of GDP per capita to measure affordability. Using GDP per capita tends to underestimate affordability, as per capita income grows faster than per capita GDP in most countries (26). However, it should be mentioned that per capita GDP is equally underestimated for all countries. Therefore, the variations in the affordability indicator between countries are assumed not to be altered by such a discrepancy. In addition, using median income instead of GDP per capita, as done in the literature in high income settings (27), is challenging in the Region of the Americas due to a lack of comparable per capita income estimates across countries.

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The World Health Organization (WHO) *Global Action Plan for the Prevention and Control of Noncommunicable Diseases 2013–2030* (WHO Global Action Plan) recognizes the critical importance of reducing the level of exposure of individuals and populations to common risk factors of noncommunicable diseases (NCDs), including harmful use of alcohol. It particularly recommends taxing alcoholic beverages as one of the most cost-effective regulatory policies to prevent NCDs, as does the *WHO Global Alcohol Action Plan 2022-2030*. Indeed, harmful use of alcohol is associated with hundreds of health conditions and injuries, acute and chronic. Taxes on alcoholic beverages represent a triple win for governments, because they 1) improve population health, 2) generate revenue, and 3) have the potential to reduce long-term associated healthcare costs and productivity losses. While since 2008, WHO has monitored tobacco taxes and prices with standardized quantitative indicators, including the comparison of tobacco tax share levels across all Member States and time, comparable information on taxation of alcoholic beverages over time and across countries is not currently available. Such monitoring is important for analyzing trends, enabling standardized comparisons across countries, establishing best practices, and providing a powerful tool for advocacy. The Pan American Health Organization (PAHO) is committed to providing Member States with accurate, relevant, and internationally comparable information that they can use to guide the development of policy and to evaluate the impact of measures to prevent the harmful use of alcohol. This note describes the methodology that PAHO developed for estimating a tax share indicator and other tax policy and price indicators for alcoholic beverages, based on the methodology used by WHO to monitor prices and taxes applied on tobacco products. It outlines the definition of the scope and beverages for which the tax share is calculated; a description of the data collection and analysis process; and an explanation of key components of the tax share calculation. It also defines additional indicators on prices, affordability, and tax policies.