

# Meeting to Develop a Standardized Tax Share Indicator for Alcoholic and Sugar-Sweetened Beverages

Washington, D.C., 24-25 July 2018

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## Acknowledgments

The development of this report as well as organization of the meeting and preparation of background documents and materials were conducted under the supervision of Rosa Sandoval, Advisor on Tobacco Control and Coordinator on Economics of Noncommunicable Diseases (NCDs) of the Risk Factors and Nutrition Unit of the Department of Noncommunicable Diseases and Mental Health (NMH/RF). Fabio da Silva Gomes, Regional Advisor on Nutrition and Physical Activity, and Maristela Monteiro, Senior Advisor on Alcohol and Substance Abuse, provided technical guidance on sugar-sweetened beverages (SSBs) and alcoholic beverages, respectively. Luis Galicia, Consultant of the REGULA (Strengthening Regulatory Capacity in the Region of the Americas for NCD Risk Factors) initiative, and Itziar Belausteguigoitia, Specialist on Economics of NCDs, led the collection of information on prices and taxes, and supported the development of the indicator, preparation of materials prior to the meeting, and elaboration of this report. Elisa Prieto, NMH Advisor, Caribbean Subregional Program Coordination, contributed to data collection for Caribbean countries and Brindis Ochoa, Health Information Consultant, supported the project in its early stages. Miriam Alvarado, Economics of NCDs Intern, and Maxime Roche, Economics of NCDs Consultant, supported the finalization of this report.

## Abbreviations

CIF	Cost, insurance, and freight
CPI	Consumer price index
GDP	Gross domestic product
GISAH	Global Information System on Alcohol and Health
GNPR	Global Nutrition Policy Review
GRADE	Group for the Analysis of Development
INSP	National Institute of Public Health of Mexico
NCD	Noncommunicable diseases
NMH	Noncommunicable Diseases and Mental Health
PAHO	Pan American Health Organization
REGULA	Strengthening Regulatory Capacity in the Region of the Americas for NCD Risk Factors
SCT	Special consumption tax
SSB	Sugar-sweetened beverage
VAT	Value-added tax
WHO	World Health Organization

## Executive summary

Noncommunicable diseases (NCDs) are a major driver of morbidity and mortality in the Region of the Americas. They represent a major public health challenge that undermines social and economic development.

The WHO Global Action Plan for Prevention and Control of Noncommunicable Diseases 2013-2020, endorsed by the 66th World Health Assembly, provides a road map and a menu of policy options. It recognizes implementing taxes on unhealthy products associated with NCDs—namely tobacco, alcoholic beverages, and sugar-sweetened beverages (SSBs)—as one of the most cost-effective regulatory policies to prevent NCDs.

Although, the World Health Organization (WHO) does calculate and publish biennially a standardized and comparable indicator on tobacco taxation for all Member States, it does not count with comparable measurements of taxation on alcoholic beverages and SSBs. Such measurements are necessary to monitor tax policies, analyze trends and establish best practices in using taxation for NCD prevention.

Since 2016, the Department of Noncommunicable Diseases and Mental Health (NMH) of the Pan American Health Organization/World Health Organization (PAHO/WHO) has worked towards addressing the gap measuring progress on alcoholic beverages and SSBs taxation in the Americas. NMH collected country-level information on prices as well as tax legislation and developed a methodology for calculating a tax share indicator. This indicator, estimating the share of total and excise taxes in the price of alcoholic beverages and SSBs, was calculated for ten countries. In order to receive feedbacks on its proposed methodology, discuss the progress and challenges in monitoring and evaluating taxation policies, and establish a roadmap to periodically collect tax legislation and prices and calculate the tax share for alcoholic beverages and SSBs in the Americas, NMH convened researchers and ministries of finance personnel for a two-day meeting in July 2018, in Washington D.C.

The participants provided inputs on how to strengthen the proposed tax share indicator to adequately capture the intricacies, unique characteristics, and regional consumption patterns of these products. These valuable inputs will help to improve the methodology and facilitate future efforts to develop a standardized and comparable tax share indicator for alcoholic beverages and SSBs.

## Introduction

The Department of Noncommunicable Diseases and Mental Health (NMH) of the Pan American Health Organization/World Health Organization (PAHO/WHO) is committed to helping strengthen PAHO Member States' capacity to generate and use economic evidence on noncommunicable diseases (NCDs) to effectively advocate for implementation of the WHO Global Action Plan for the Prevention and Control of Noncommunicable Diseases 2013-2020.

NCDs are responsible for 8 out of 10 deaths (80%) each year in the Americas, and 35% of those deaths occur in people 30-70 years of age (premature deaths). The four main NCDs (cardiovascular diseases, cancer, chronic respiratory diseases, and diabetes) are associated with four common risk factors: tobacco use, harmful use of alcohol, unhealthy diet, and insufficient physical activity.

Implementing taxes on unhealthy products associated with NCDs—namely tobacco, alcohol, and sugar-sweetened beverages (SSBs)—is one of the most cost-effective regulatory policies to prevent NCDs. Taxing these products has been recommended as a “best buy” for the prevention and control of NCDs in the updated Appendix 3 of the WHO Global Action Plan (1,2). However, raising taxes on tobacco, alcohol, and SSBs remains a largely underutilized measure both worldwide and in the Region of the Americas.

WHO has calculated and published a standardized indicator for tobacco taxation to compare tax share levels across countries and over time since 2008: the percentage of price attributable to taxes of the most sold brand of cigarettes (3). Comparable measures of alcoholic beverages and SSBs are not available, however. Developing these indicators is necessary to monitor tax policies recommended in the WHO Global Action Plan, as well as for analyzing trends and establishing best practices.

In 2016, PAHO/NMH started working toward the development of a standardized and comparable indicator for taxes on alcoholic beverages and SSBs across countries and over time. A team comprising members of the NMH REGULA (Strengthening Regulatory Capacity in the Region of the Americas for NCD Risk Factors) and Economics of NCDs initiatives developed an instrument to collect information on prices and taxes, and commissioned the development of a method to calculate this indicator.

In 2018, after almost two years of work, PAHO/NMH hosted a meeting to present the methods and results of this project, and to receive feedback from researchers and ministries of finance personnel. This report describes the proceedings and conclusions of the meeting.

The agenda of the two-day meeting was divided into three sessions (see Annex 2):

- The rationale for developing a tax share indicator for alcoholic beverages and SSBs;
- Overview of the work conducted by NMH on collecting tax and price data and developing a method to calculate the tax share for alcoholic beverages and SSBs; and
- Challenges in monitoring and evaluating tax policies on alcoholic beverages and SSBs.



Participants in the meeting included a variety of stakeholders, including researchers from within and beyond the Region; personnel from ministries of finance in selected PAHO Member States; PAHO advisors on alcohol, nutrition, and tobacco; and advisors of international finance institutions.

## **Day 1: Tuesday, 24 July 2018**

The meeting was opened by Dr. Adriana Blanco, Chief of the Risk Factors and Nutrition Unit, together with Ms. Rosa Sandoval, Regional Advisor on Tobacco Control and Coordinator on Economics of NCDs, NMH/RF; Dr. Maristela Monteiro, Senior Advisor on Alcohol and Substance Abuse, representing the Mental Health and Substance Abuse Unit; and Dr. Fabio da Silva Gomes, Regional Advisor on Nutrition and Physical Activity.

Dr. Blanco provided an overview of how the work to develop the standardized indicator for alcoholic beverages and SSBs began. First, legislation on NCD risk factors—including tax policies on alcoholic beverages and SSBs—was collected for 18 Latin American countries.<sup>1</sup> This was carried out under the framework of the REGULA initiative, which supports PAHO Member States in improving their capacity to regulate NCD risk factors and is implemented in close collaboration with the Office of the Legal Counsel at PAHO. Based on this information, and recognizing the absence of a standardized tax share indicator for alcoholic beverages and SSBs, the Economics of NCDs and REGULA teams, in collaboration with the Alcohol and Nutrition Advisors, began work to develop a standardized indicator for alcoholic beverage and SSB taxation.

Following Dr. Blanco's remarks, Dr. Monteiro and Dr. Gomes provided brief summaries on the relevant global and regional mandates related to alcoholic beverage and SSB taxation. Dr. Gomes highlighted the intra-unit work as a collaborative and successful effort, as REGULA and Economics of NCDs support Member States by providing guidance on the regulation of ultra-processed food and drink products.

Ms. Sandoval emphasized PAHO's commitment to strengthening Member States' ability to advocate for the implementation of NCD prevention and control policies, which are often beyond the sole remit of health authorities, as in the case of taxation policies. Ms. Sandoval also indicated that, unlike traditional meetings held by PAHO, where PAHO shares mandates and best practices, on this occasion researchers and ministries of finance personnel were convened to share their experiences and provide ideas on how to best collect the necessary information and calculate the indicator. She introduced the objectives and deliverables:

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<sup>1</sup> For this document we refer to legislation as any tool used by national government to impose obligations to their citizens and corporations, such as laws, decrees, regulations, norms, guidelines and other tools for administrative regulations, among others, that the national authority imposes as mandatory.

## Objectives

- Obtain feedback from academic experts and ministries of finance personnel on the proposed method to calculate a standardized and comparable indicator of the tax share for alcoholic beverages and SSBs.
- Discuss efforts, progress, and challenges in monitoring and evaluating taxation policies for alcoholic beverages and SSBs at the regional and national levels, including lessons learned from tobacco.
- Establish a roadmap to periodically collect the necessary information—using existing PAHO/WHO tools—and calculate the tax share for alcoholic beverages and SSBs for PAHO Member States.

## Expected deliverables

- Method for calculating the tax share for alcoholic beverages and SSBs validated by academic experts and selected ministries of finance personnel.
- Roadmap for collection of tax legislation and prices on alcoholic beverages and SSBs in a periodic way through PAHO/WHO tools, and calculation of the tax share for alcoholic beverages and SSBs for PAHO Member States.

Following these remarks, participants introduced themselves and noted their expectations, which were mainly focused on the relevance of the indicator, their interest in using taxation policies for achieving health objectives, and the necessity of exploring complementary indicators.<sup>2</sup>

## Session I: Motivation for developing a standardized indicator

### Keynote presentation: Taxes on tobacco, alcohol, and sugar-sweetened beverages as a public health tool

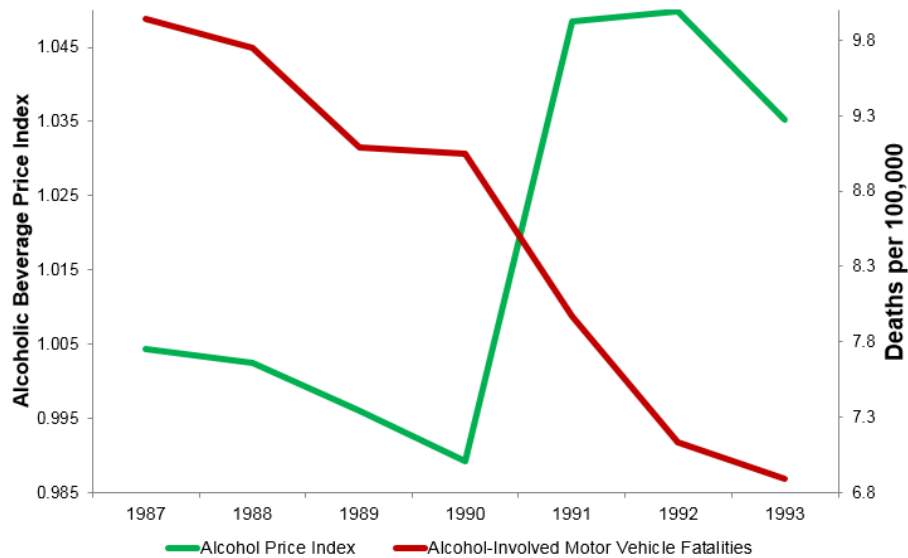
Dr. Lisa Powell, Professor and Division Director of Health Policy and Administration at the University of Illinois at Chicago's School of Public Health, provided an overview of the rationale for fiscal policies and related mechanisms through which the consumption of tobacco, alcohol, and SSBs have contributed to increased medical costs, loss of productivity, and other negative externalities. Taxation policies are a means to correct for these externalities, need to be considered a public health tool, and must be part of a comprehensive policy approach on tobacco, alcohol, and SSBs.

For alcohol, evidence shows that taxes that raise prices for alcoholic beverages significantly reduce drinking, with the largest impact among youth and young adults. Evidence also shows that taxes on alcoholic beverages reduce alcohol-related diseases and mortality. Figure 1 illustrates the inverse relationship between the alcohol price index in the United States and alcohol-related traffic fatalities.

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<sup>2</sup> Meeting participants are listed in Annex 3.

**Figure 2: Alcohol prices and alcohol-related traffic fatalities, United States, all ages, 1987-1993**



Source: Powell, L. Taxes on Tobacco, Alcohol and SSBs as a Public Health Tool. Presentation delivered at Meeting to develop a standardized tax share indicator for alcoholic and sugar-sweetened beverages. July 24, 2018: Washington D.C. Figure courtesy of Dr. Frank Chaloupka. Data Source: United States Department of Labor, Bureau of Labor Statistics, National Highway Traffic Safety Administration

For sugar-sweetened beverages, a systematic review of studies conducted in the United States suggests that a price increase of 10% would reduce consumption by 12% (4). The estimated impact of price changes on consumption varies quite widely by type of SSB, however, suggesting that it is important to carefully consider how a tax is structured and whether substitution incentives are in line with public health goals, Dr. Powell noted. For example, if products with low levels of sugar are untaxed, consumers may substitute to these while increasing intake, resulting in no change in total sugar consumption. Table 1 provides estimated price elasticities by category.

**Table 1: Mean estimates of price elasticity of demand for SSBs, United States studies from 2007-2012**

Beverage categories	Mean price elasticity estimate
Sugar-sweetened beverages overall*	-1.21
Sugar-sweetened beverages	-1.08
Regular carbonated soft drinks	-1.25
Sports drinks	-2.44
Fruit drinks	-1.41
Soft drinks (regular + diet)	-0.86

\*Overall weighted mean (based on SSB consumption shares) from the estimates from the aggregated SSB category and estimates from the disaggregated categories within the beverage demand system.

Source: Powell et al., *Obesity Reviews*, 2013.

Emerging evidence from Chile, Mexico and the United States (Berkeley, California) consistently shows that tax increases are passed on fully to prices and lead to reductions in consumption, which supports the findings from the systematic review (5-7). In terms of tax structure, Dr. Powell indicated that the tax base (i.e., products subject to the application of the tax) needs to be broad to minimize substitution. For example, in the case of SSBs, taxing items such as chocolate milk and fruit juices, which are large contributors to energy intake among young children, should be considered in addition to taxing sodas and sports drinks.

As is the case with tobacco and alcohol taxes, the main argument used by the industry against SSB taxes is that they are regressive (i.e., that they account for a larger percentage of income from low-income than high-income earners); however, it should be noted that the health impact is progressive (more health gains are accrued by low-income earners) (8). Another argument frequently used by the industry is that tax increases will result in job losses; however, the evidence in the United States shows that there is no net decline in jobs related to tobacco, alcohol, and SSB taxation, and recent evidence from Mexico shows no significant changes in employment for manufacturing industries related to SSB and non-essential energy-dense foods (9,10). To garner public support, Dr. Powell suggested considering earmarking at least a portion of the revenues for specific government programs.

The need to keep developing empirical evidence to support the implementation of alcoholic beverage and SSB taxation policies was emphasized. Taxes on tobacco, alcohol, and SSBs should be part of a comprehensive set of policies to reduce consumption of these health-harming products, Dr. Powell concluded.

### *Discussion*

The discussion focused on the evaluation of SSB tax policies and the incentives associated with different tax structures and their impact on sugar consumption. In addition to documenting the impact of SSB tax policies on purchases (consumption), the impact on health outcomes should also be considered; while it may not make sense to evaluate the impact on body mass index (BMI) in the short term, a more immediate impact could be measured through the prevalence of tooth decay. Regarding tax structures, it was noted that tiered taxation by level of sugar may not produce a reduction in sugar intake, since people may switch to drinking a higher volume of beverages that have a lower sugar content.

### *Presentation: Analysis of trends in affordability of alcoholic and sugar-sweetened beverages in the Region*

Dr. Guillermo Paraje, Professor of Economics from Adolfo Ibáñez University in Santiago, Chile, presented the results of an analysis of affordability of alcoholic beverages and SSBs in Latin American countries (11).<sup>3</sup> From a public health perspective, taxes can be used as a tool to reduce the consumption of health-harming

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<sup>3</sup> The period of analysis varies by country due to availability of data. For Brazil, the period of analysis was between 2002 and 2015. For Chile and Colombia, the period of analysis was between 2009 and 2016. For Ecuador, the period of analysis was between 2005 and 2016. For Mexico, the period of analysis was between 2007 and 2016. For Uruguay, the period of analysis was between 1997 and 2016.

products by reducing affordability. As such, it is important to consider trends in affordability to evaluate advances in the use of tax policies on alcoholic beverages and SSBs.

As a starting-point, Dr. Paraje explained that out of the 18 countries in Latin America that were analyzed, only two do not have excise taxes on SSB, while all of them have excise taxes on alcoholic beverages. For the purposes of the study, affordability was defined as the ratio between the official wage index and the SSB/alcohol component of the consumer price index (CPI). The primary sources of data were the official estimates of SSB and alcohol price changes usually provided by the national statistics offices of central banks.

Results of the analysis showed that the affordability of alcoholic beverages in the past decade has increased in four of 15 countries (Colombia, Ecuador, Guatemala, and Honduras); in eight, there were no changes (Argentina, Brazil, Chile, Costa Rica, El Salvador, Paraguay, Peru, and Uruguay); and in three there was a negative trend in affordability (Bolivia, Dominican Republic, and Mexico). Nevertheless, Dr. Paraje noted that in some countries the trend varied by type of alcoholic beverage—for example, in Brazil, the affordability of beer remained unchanged during the study period, while other alcoholic beverages became more affordable from 2002 to 2015.

For SSBs, trends for the region indicate that affordability has generally increased: in 7 of 12 countries there was a positive growth rate (Chile, Colombia, Costa Rica, Ecuador, Peru, Dominican Republic, and Uruguay); in three countries there was no change in affordability (El Salvador, Guatemala, and Honduras); and in two countries (Paraguay and Mexico) affordability decreased. Dr. Paraje highlighted the cases of Chile (see figure 2) and Mexico, for which the tax increases in 2014 were followed by decreases in affordability.

**Figure 2: Affordability of SSBs in Chile, 2009-2015 (base January 2009=100)**



Source: Paraje, G. Affordability of SSB and alcohol in Latin America and the Caribbean.

Presentation delivered at meeting to develop a standardized tax share indicator for alcoholic and sugar-sweetened beverages. July 24, 2018: Washington D.C.

*Note: Affordability is estimated as the ratio between the country-specific salary and price indicators, standardized so that the ratio in January 2009 is equal to 100 (for more details, see Paraje G., Pan American Journal of Public Health, 2018).*

Given the findings of increased or constant affordability of alcoholic beverages and SSBs in most countries, Dr. Paraje concluded that taxes on alcohol and SSBs have not been used to their fullest extent to reduce affordability. He noted that taxes are corrective mechanisms to reduce negative health externalities and should thus also address public health goals, not only fiscal goals, as has been the case in the Region. Mexico was noted as an exception, where the tax was framed as a public health measure and several additional measures were simultaneously introduced to reduce obesity.

## Discussion

Regarding the expected impact of taxation on affordability, one participant noted that economic growth, which increases purchasing power, also influences affordability and thus any indicator of affordability should account for changes in economic growth. The participant linked this principle to one of the lessons learned from implementing the SSB tax in Mexico, which is the need to adjust the tax rate by the rate of inflation in order to sustain its impact over time.

Participants reflected on the data used to construct the affordability indicator. For example, several participants noted that the official salary index does not capture the informal labor market or reflect inequities in income, both of which are significant in many countries in the region. As a means of accounting for informal labor, it was suggested that gross domestic product (GDP) per capita be used instead of the wage index to build the affordability indicator, in a manner similar to the indicator constructed by Blecher et al. (12). Dr. Paraje explained that GDP per capita was not used in the study because this number is less widely available and because the official salary index provides a good proxy of the informal labor market, as trends in this market track closely despite lower salaries in the informal market.

When establishing policies to decrease affordability over the long term, participants noted the need to consider projected increases in income. It was also suggested that the range of the analysis should be extended to include the 1990s (since the increase in consumption of SSBs in the Region was due to a decrease in their relative price during this period); however, it was pointed out that most countries do not have the time series data necessary for this analysis.

## Presentation: Monitoring of progress in tobacco, alcohol, and SSB tax policies—WHO tools and gaps

Ms. Sandoval opened with an overview of the pathways through which taxes can influence affordability. Affordability is determined by a variety of factors including income, tax policies, and industry pricing strategies—and taxes are the policy instrument used to achieve price increases. She provided an overview of the taxation-related WHO mandates that have been adopted by PAHO Member States, including the WHO “best buys”. She also provided an overview of the existing WHO tools to monitor tax policies for tobacco, alcohol, and SSBs, and noted that the information collected through these tools does not allow for monitoring of the status of alcohol and SSB taxation policies in a comparable manner (see Table 2).

**Table 2: WHO tobacco, alcohol, and SSB tax policy monitoring tools**

	Name and purpose of the tool		
	Tobacco	Alcohol	SSB
<b>Tool</b> → <b>Information collected</b> ↓	<b>WHO Report on the Global Tobacco Epidemic:</b> tracks implementation of MPOWER tobacco control measures	<b>WHO Global Information System on Alcohol and Health:</b> tracks consumption, health consequences, and policy responses	<b>WHO Global Nutrition Policy Review:</b> tracks implementation of nutrition policies and programs
<b>The tool asks whether taxes are applied to these products</b>	Yes	Yes	Yes
<b>The tool collects information establishing types of taxes applied</b>	Yes	Yes	No
<b>The tool collects information on tax rates and base</b>	Yes	No (only on rates)	No
<b>The tool collects information on tax legislation</b>	Yes	Yes	Yes (optional)
<b>The tool requires a technical team validating that tax information reported is supported by respective legislation</b>	Yes	Yes	No
<b>The tool collects information on nominal prices of tobacco, alcoholic beverages, and SSBs</b>	Yes	No	No
<b>The tool calculates a comparable and standardized tax share indicator (portion of the price accounted for by taxes)</b>	Yes	No	No

Source: Sandoval, R. Monitoring of progress in tobacco, alcohol and SSB tax policies: WHO monitoring instruments and gaps. Presentation delivered at Meeting to develop a standardized tax share indicator for alcoholic and sugar-sweetened beverages. July 24, 2018: Washington D.C.

Currently, only the tobacco monitoring tool collects all the information needed to calculate a standardized tax share indicator. The existing alcohol and nutrition policy monitoring tools collect some but not all the necessary information. The tool to monitor alcohol policy collects information on the type of tax and rates applied and updated tax legislation, but it does not collect information on prices. Similarly, the tool to monitor nutrition policy, including SSBs, only collects information on whether taxation is used to reduce the consumption of unhealthy foods and beverages, but does not explicitly collect information on tax types (ad valorem, specific, or mixed), tax base (i.e., producer price or retail price), or prices.



To monitor tax policies in a comparable manner, it is first necessary to develop tools to collect analogous information. As such, there is a need to expand the existing collection tools for alcoholic beverages and SSBs to include: 1) characteristics of the tax structure; 2) tax rates and base; and 3) nominal retail prices. Ms. Sandoval observed that it is important to monitor the type of tax utilized, and not simply whether a tax is applied or not, because different types of taxes have different effects on affordability. For example, excise taxes modify the relative price of targeted products compared with other products, which—when applied to health-harming products—makes them more desirable from a public health perspective.

Ms. Sandoval demonstrated how the information collected through the tobacco policy monitoring tool is processed and summarized to analyze trends in prices and a tax share indicator of tobacco products across time and countries. For example, prices of cigarettes in the Region increased in all countries between 2008 and 2016, while the tax share has remained fairly constant—with only five countries moving up from one achievement category to the next as defined in the WHO Report on the Global Tobacco Epidemic (13). The systematic collection of tax structure and price information for tobacco has facilitated the establishment of best practices, including a tax share threshold for tobacco tax administration.

Existing alcohol and SSB policy monitoring tools must be strengthened in order to improve the ability to track progress on tax policies in a comparable manner across NCD risk factors. Although the meeting focused on validating the method of calculating an indicator of the tax share for alcoholic beverages and SSBs, Ms. Sandoval concluded that, ideally, the tax share indicator should be complemented with indicators of affordability that take into account changes in income, among other factors.

### *Discussion*

Participants looked at how to adapt the experience from developing the tobacco tax indicators to ensure that comparable indicators for alcoholic beverages and SSBs would account for the intricacies and consumption patterns of these products.

In the case of alcohol, a participating researcher noted that a wide variety of products with different alcoholic content is available, and for this reason the unit of a “standard alcoholic drink” is most commonly used to standardize indicators across product types. As such, it was suggested that the indicator be calculated as the price and tax per standard alcoholic drink within each category (beer, wine, and spirits); however, Dr. Paraje noted that the tax share indicator proposed by PAHO includes separate calculations for beer, wine, and spirits. If the alcohol monitoring tool collects the necessary information to construct the proposed tax share information, only an additional data element of alcohol content per product would have to be collected to supplement the tax share indicator with the price and tax per standard alcoholic drink calculation.

Similarly, given the wide price and sugar content variation within products, participants discussed which products the SSB tax share indicator should be based on. Concern was expressed over having a single indicator, and it was suggested to have a set of indicators, including tax share and other measures of affordability. Key PAHO staff welcomed the suggestions for additional supplementary measures but acknowledged that there are also practical challenges to collecting detailed information (such as the

amount of sugar in each product) for 35 countries on a regular basis, proposing instead to focus on categories that can be used as a proxy for sugar or alcohol content.

### Presentation: Strengthening capacity in health taxes

Ms. Angeli Vigo, Consultant at WHO, presented an overview of the current work being carried out at WHO Headquarters to support the implementation of health taxes on a global level.

WHO is supporting regions and countries in the monitoring of tax laws and is developing a toolkit with information products addressed to various audiences, including a brief guidance document for WHO staff, a comprehensive guidance book, and an online course. Additionally, WHO will support public health focal points in developing economic expertise that may be helpful for increased dialogue with finance officers.

Ms. Vigo noted that there is no global WHO monitoring tool that collects health tax legislation but that this type of information is often collected at the regional level, though the information is not systematized and comparisons of data between regions is not possible at this point. WHO is exploring the possibility of building a global health tax repository.

### Key messages from session 1:

- The consumption of tobacco, alcohol, and SSBs leads to increased medical costs, loss of productivity, and other negative health-related and social externalities.
- Taxation is a tool that can correct these externalities because it increases prices, lowers affordability, and reduces the consumption of these products.
- Evidence shows that the affordability of alcoholic beverages and SSBs in the Americas has generally increased, indicating that taxes on alcohol and SSBs have not been used to their fullest extent and can be leveraged to reduce consumption and, ultimately, improve health.
- Currently, WHO does not use a comparable system to monitor the status of tobacco, alcohol, and SSB taxation policies. Only tobacco taxes are monitored using a standardized indicator that allows for comparisons between countries and across time.
- Developing a comparable indicator for tobacco, alcohol, and SSBs is necessary for monitoring tax policies recommended in the WHO Global Action Plan for the Prevention and Control of Noncommunicable Diseases 2013-2020, as well as for analyzing trends and establishing best practices.

## Session II: Overview of the work conducted by NMH

Proposal of method for calculating the tax share for alcoholic and sugar-sweetened beverages

Presentation: Collection of data for calculation of tax share indicator of alcoholic and sugar-sweetened beverages

Mr. Luis Galicia, Consultant at NMH, described the process that was used to select products and the proposed methodology that could be used to collect the necessary information to calculate the tax share indicator. The criteria used for selection of both alcoholic beverages and SSBs were: 1) patterns of consumption in the Americas, 2) representativeness, and 3) price dispersion.

Based on patterns of consumption, the following alcoholic beverages were selected: beer, as it is the most consumed alcoholic beverage in most countries in the Americas; spirits, as they are the most consumed alcoholic beverage in the Caribbean and many Central American countries; and wine, as it is the most consumed alcoholic beverage in Argentina, Chile, and Uruguay. For representativeness, the most sold brand for beer, spirits, and wine was selected.<sup>4</sup> To capture price dispersion, the cheapest brand for beer, spirits, and wine was selected.

For SSBs, the same criteria were used. Based on patterns of consumption and representativeness, Coca-Cola was selected, as it is found in all countries and the most sold brand in many of them. For price dispersion, the cheapest brand of carbonated beverage was selected.

Regarding product size, 750-milliliter (ml) bottles are the most common size for spirits and wine, and 350-ml and liter presentations are the most common sizes for beer and SSB. Since the specific taxes applies to these products in many countries are established using a liter as a base, for standardization purposes, a liter of each beverage was selected as the reference size for the collection and calculation of tax share. Table 3 provides an overview of the selected products.

**Table 3: Selected alcoholic and sugar-sweetened beverage products**

Alcoholic beverages	<ul style="list-style-type: none"><li>• One liter and one 350-ml can/bottle of the most sold brand of beer</li><li>• One liter and one 350-ml can/bottle of the cheapest brand of beer</li><li>• One liter of the most sold brand of spirits</li><li>• One liter of the cheapest brand of spirits</li><li>• One liter of the most sold brand of wine</li><li>• One liter of the cheapest brand of wine</li></ul>
Sugar-sweetened beverages	<ul style="list-style-type: none"><li>• One liter and one 350-ml can/bottle of Coca-Cola</li><li>• One liter and one 350-ml can/bottle of the cheapest brand of carbonated SSB</li></ul>

<sup>4</sup> No single brand of alcoholic beverage was identified as being widely consumed across all countries. On the other hand, for SSB, Coca-Cola was identified as being widely consumed across all countries.

To obtain the required tax-related information (e.g., tax structure, tax rates, and tax base), the team gathered information on the tax legislation, tax norms, and decrees on alcoholic beverages and SSBs through different existing PAHO/WHO tools including the WHO Global Information System on Alcohol and Health (GISAH) and legislation collected through the REGULA initiative. The team also conducted a systematic search in official sources of PAHO Member States, including national legislation databases. For the Caribbean, a collection tool was developed to systematize the information described above, and excise tax legislation collected through the alcohol and tobacco tools was reviewed to identify whether excises on SSBs were also applied.

To collect price information (since current WHO tools do not collect this for alcohol and SSB), ministries of finance and statistics institutes were consulted through PAHO country offices. When price information could not be obtained through official sources (as was the case in most countries), a systematic online search of major retailers in each country was conducted. As a last resort, PAHO country offices were consulted to identify the most sold and cheapest brands. Figure 3 shows the process that was followed to obtain price information.

In the future, price and tax structure information would need to be collected through existing PAHO/WHO monitoring tools such as GISAH and the Country Capacity Survey (14). After collecting the information, the indicator would need to be calculated and validated by national authorities.

**Figure 3: Process for the collection of nominal prices of selected products**



Source: Galicia, L. Collection of data for calculation of tax share indicator of alcoholic and sugar-sweetened beverages. Presentation delivered at meeting to develop a standardized tax share indicator for alcoholic and sugar-sweetened beverages. July 25, 2018: Washington D.C.

## *Discussion*

The discussion focused on the selection of products for which the tax share indicator would be calculated. For SSBs, the challenge is how to collect price information given that the price per volume has a very wide range—for example, a 2-liter bottle of Coca-Cola is considerably cheaper per ml than a 350-ml can. Participants noted that it is important to capture this wide range and especially the cheaper price per ml if the goal is to capture a measure of affordability. Another consideration is that product sizes and individual portions are not standardized across countries in the Region. In terms of product selection, one participant expressed concern with the focus on carbonated SSBs given that fruit juices, fruit drinks, and sweetened milk are often the main source of SSBs for children.

For price information on alcohol, there was a similar discussion regarding volume. One participant noted that it is usually much cheaper to buy a six-pack of beer than six individual cans or bottles of beer. A researcher suggested that in addition to capturing the price of the most sold and cheapest alcoholic products in each category (wine, beer, sprits), the price of the most expensive product in each category should also be collected to fully capture price dispersion. As in the previous discussion, a participant emphasized the importance of recording the strength of the different types of alcoholic beverages to enable calculation of the price or tax per standard unit of alcohol.

Overall, the discussion illustrated the difficulty in achieving a balance between comparability among countries, clarity in the indicator, and the precision of the indicator considering the wide price and product variance within sub-categories of alcoholic beverages and SSBs. It was agreed that the discussion would continue within the working groups.

In terms of the process for collecting price data, there was consensus that the best sources of information are the institutes of statistics and the ministries of finance. One participant recalled the use of scanned data in supermarkets, while another proposed developing an automated tool to capture price information available online.

### *Working group 1: Best practices and recommendations on collection of legislation on taxes, selection of products, and collection of prices of alcoholic beverages and SSBs*

Participants were divided into working groups according to their field of expertise and interests, as described in Annex 4. A list of guiding questions regarding the process for selecting products and collecting price and tax legislation was prepared by PAHO/NMH for consideration by the working groups.

#### *Alcohol working group*

The alcohol working group made a number of key points:

- It is important to identify simple characteristics that are helpful in terms of public health and that can be extracted from the legislation, e.g., whether the law requires a tax/price adjustment with

the cost of living or inflation across time and if the volume of product is large, and if there are specific provisions for changes in price or volume discounts.

- The tax share indicator ideally needs to be expressed by standard drink size.
- In addition to collecting the final consumer price information, other characteristics of the product should be collected, including:
  - alcohol strength;
  - container deposit included in the price;
  - cost, insurance, and freight (CIF) value (given that it serves as the base for calculating the appropriate excise and import taxes in many countries); and
  - cheapest, most common brand in the most commonly sold size.
- Institutes of statistics should be consulted for price information, as they already collect detailed price information to calculate the consumer price index.
- There needs to be close communication between health and finance ministries to validate the information and estimations.

#### *SSB working group*

The SSB working group made the following observations:

- Product selection should consider the most common presentation of the cheapest and most sold brands. If most sold information is not available, vendors may be contacted directly, or shelf space in supermarkets may be used as a rough proxy for market share.
- In addition to estimating a tax share indicator for carbonated beverages, tax share indicators should also be considered for energy drinks, sports drinks (i.e., isotonic drinks), chocolate milk, and processed fruit juices and nectars.
- Prices and tax information on substitutes, including plain milk and water, should be collected to measure affordability contrasts.
- The CIF value should be collected for all beverages given that this serves as the base for calculating the appropriate excise and import taxes in many countries.

## Day 2: Wednesday, 25 July 2018

### Presentation: Method for construction of the indicator of tax share for alcoholic and sugar-sweetened beverages and preliminary estimations

Dr. Paraje presented the proposed method to calculate a standardized tax share indicator for alcoholic beverages and SSBs. He acknowledged the discussions on the first day of the meeting regarding the complexity of alcohol and SSB taxation, given the variability in product sub-categories, product size, consumption patterns, and alcohol and sugar content. Referring to the presentations of the previous day, Dr. Paraje gave a brief overview of the selection of products for which the tax share was calculated, along with the analysis of tax legislation.

To develop and test this proposed method to calculate a standardized tax share indicator, two products were selected for which the total tax share was calculated: one liter of Coca-Cola and one liter of nationally produced beer. The total tax share was calculated as the percentage of the total consumer price that corresponds to consumption taxes—i.e., the value of all consumption taxes (excise taxes, import duties, and value-added tax [VAT]) divided by the price (see Annex 1 for further information about the calculations).

For calculating the tax share, several assumptions had to be made about the products. The assumptions made for the estimation of the tax share for beer were that: 1) beer was nationally produced, 2) the alcohol content was 5%, and 3) the volume was one liter. Similarly, assumptions made for the estimation of the tax share for Coca-Cola were that: 1) Coca-Cola was nationally produced and 2) the volume was one liter. Dr. Paraje noted that if the one liter presentation was not found in a particular country, prices were collected for a larger product, in which case the tax share was estimated proportionally for one liter, which, Dr. Paraje warned, underestimates the specific volume-based taxes of beverages.

Next, Dr. Paraje presented preliminary results of the tax structure analysis based on the collection of legislation and the tax share calculation for Barbados, Brazil, Chile, Colombia, Ecuador, Mexico, Jamaica, Peru, Suriname, and Uruguay.

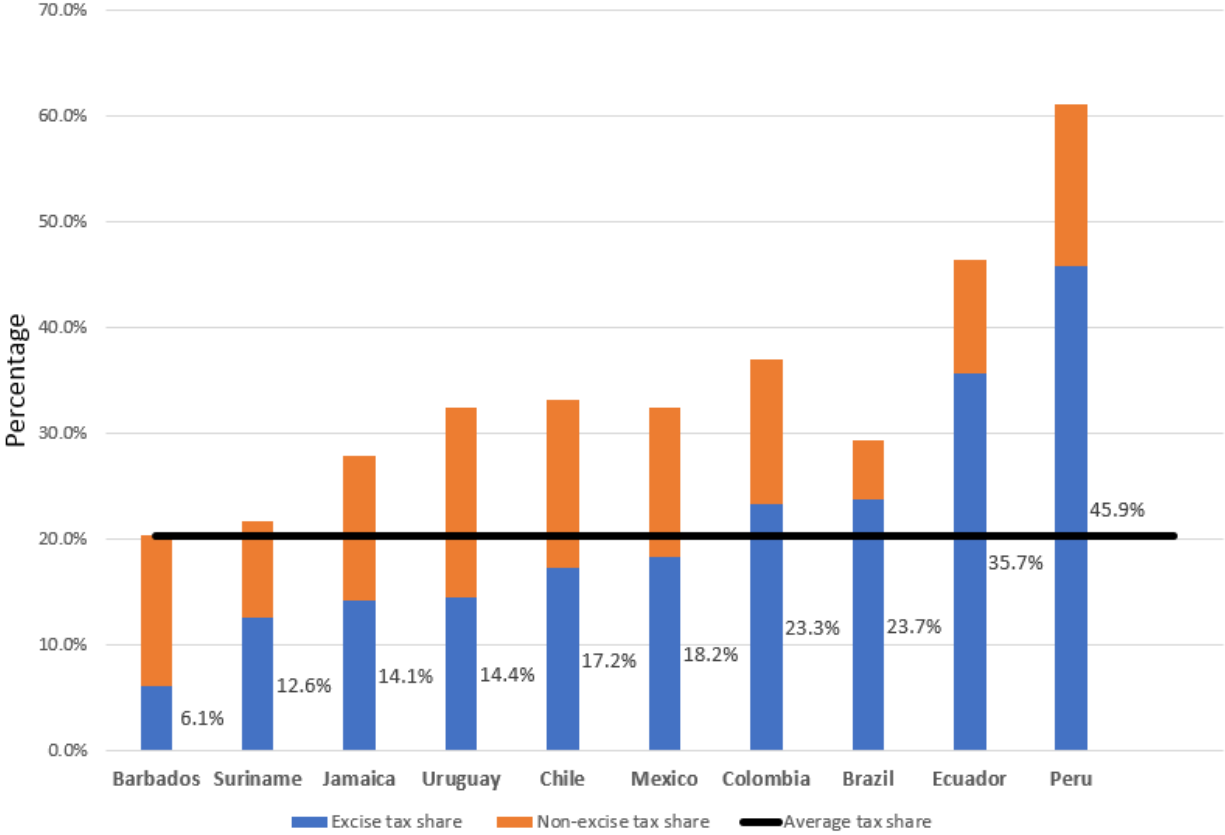
A summary of the tax share for beer in these countries is illustrated in figure 4. Overall, the average tax share for this group of countries is approximately 19% of retail price, and non-excise taxes (which are less likely to alter consumer behavior) are the largest component in 2 out of 10 countries (Barbados and Uruguay). Dr. Paraje highlighted the case of Ecuador, where the specific excise tax is based on alcohol content and the tax amount seems to be quite high relative to the final price. To put the tax share into perspective, he referenced the case of Chile, where it has been demonstrated that alcohol tax revenue collection only accounts for 12% of the social costs associated with alcohol consumption (15).

The calculated tax share for Coca-Cola in the same group of countries is outlined in figure 5. Dr. Paraje noted that the average excise tax share in these countries is approximately 8%. There is ample room to increase these taxes. Colombia is the only country that has no tax on locally produced SSBs, not even VAT

(taxes are only applied when they are consumed on-trade—i.e., served in restaurants, bars, etc.). Recent tax increases in Barbados, Chile, and Mexico have decreased consumption, as expected.

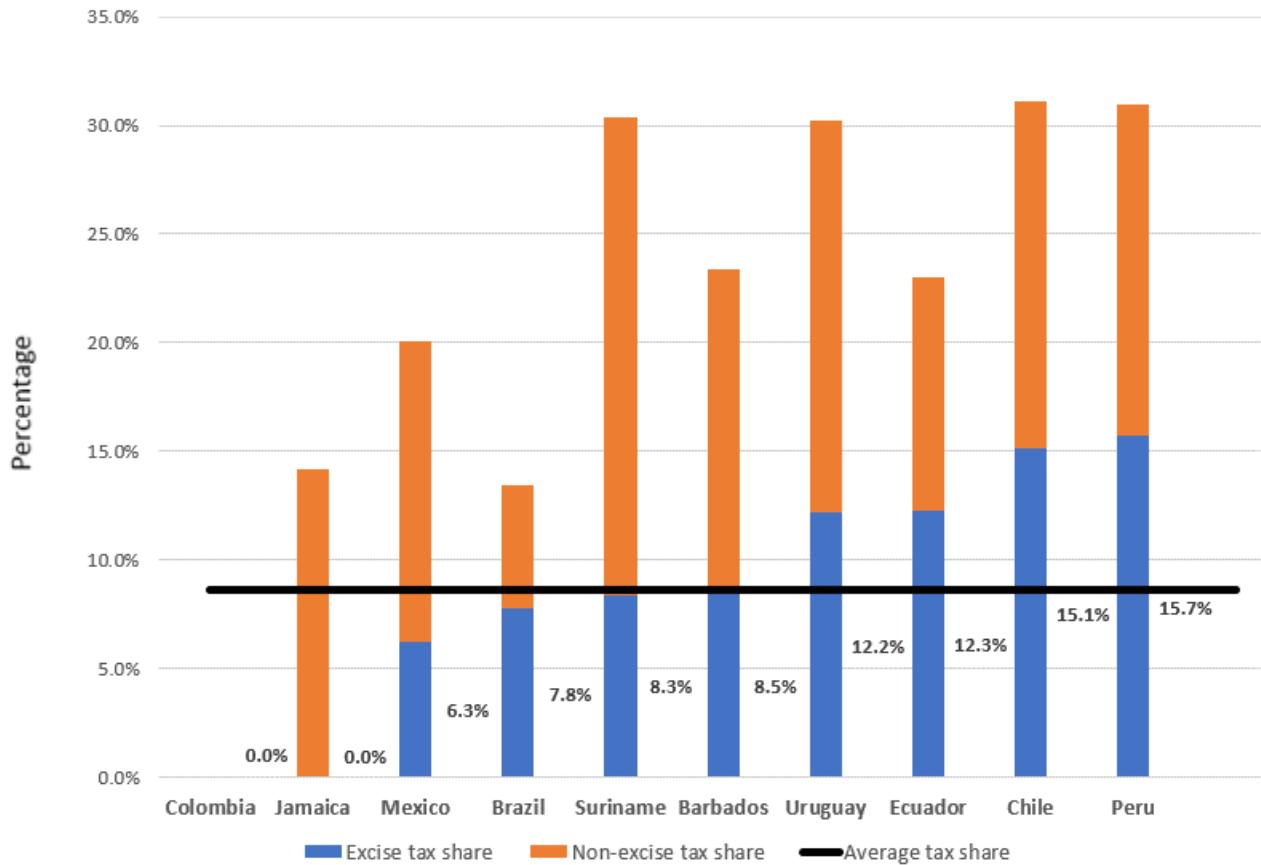
In terms of the types of taxes accounted for in the tax share indicator, Dr. Paraje advocated for the VAT and general import duties to be removed, as these types of taxes do not change relative prices and consequently do not affect individual purchasing decisions. Nevertheless, he acknowledged the need to develop a comparable indicator for tax share that can be used across the entire Region, allowing countries to compare their relative tax share and learn from best practices.

**Figure 4: Tax share for beer in selected countries, 2017**





**Figure 5: Tax share for SSBs in selected countries, 2017**



Source for figures 4 and 5: Paraje, G. Tax legislation on alcohol and SSB in Latin America and the Caribbean. Presentation delivered at Meeting to develop a standardized tax share indicator for alcoholic and sugar-sweetened beverages. July 25, 2018: Washington D.C.

### Discussion

In terms of the method used to calculate the tax share, a ministry of finance personnel highlighted the importance of working with finance authorities to accurately reflect the particularities of many countries regarding the calculation of taxes. Moreover, in response to Dr. Paraje’s proposal to exclude VAT from the tax share calculations, several participants contended that this type of tax should remain in place, because there are still many ways in which VAT can differentiate the affordability of products. For example, a participant noted that in some counties, VAT is not levied on SSBs because they are part of the food basket or are subsidized, so including VAT as part of the tax share indicator is part of a political discussion to provide arguments to exclude them from the food basket. Similarly, another participant noted that, in some countries, the VAT rate for alcoholic beverages is different than for other products.

For alcoholic beverages, participants suggested developing a series of indicators. They noted that a standard drink is the unit most commonly used to standardize comparisons across alcoholic beverages, and as such the final retail price and tax should be calculated per standard drink. The sustainability and

feasibility of having several indicators for each type of product, given that the indicator would need to be calculated for 35 countries every two years, was cited as a potential challenge.

For SSBs, several participants suggested that the tax share should be calculated not only for carbonated SSBs but also for a wider range of products, such as sports and energy drinks. By calculating the tax share for a variety of products, participants argued that governments may consider less-restrictive tax bases, and that it may help identify market distortions due to the type of tax that is applied. Although a variety of indicators may be a useful advocacy tool and inform the design at a country level, the tax share indicator does not seek to exhaust the conversation on how to best design and implement a policy on SSBs at a country level—additional data (e.g., on market share and consumption patterns) and analysis are needed to adequately capture each country’s particular situation. The tax share indicator serves as a starting-point for these conversations and would enable comparison of taxation policies across countries and over time.

### [Working group 2: Best practices and recommendations on construction of the indicator of tax share for alcoholic and sugar-sweetened beverages and preliminary estimations](#)

Participants were divided into working groups according to their field of expertise and interests, as described in Annex 4. A list of guiding questions for working groups was prepared by NMH and participants were asked to respond to these questions. Responses were later discussed in a plenary session.

#### *Alcohol working group*

The alcohol working group made a number of key points:

- The indicator should take into account alcohol strength. A potential means of achieving this is by calculating the tax share per standard drink. It is also important to consider that alcohol strength varies within types for alcoholic beverage categories (e.g., different types of rum can have alcohol content ranging from 38% up to 75%).
- In addition to the tax share indicator, it is important to monitor trends in affordability—e.g., by constructing a supplemental indicator on the percentage of average monthly salary or household disposable income necessary to buy 30 standard drinks.
- The CIF value needs to be collected for all countries but particularly for the Caribbean; a potential secondary source for this information is the United Nations Commodity Trade Statistics Database.
- Affordability indicators need to be developed using GDP per capita, since the wage index may be problematic. Other indicators of affordability should consider household expenditure or disposable income.
- The price dispersion indicator may need to take into account unofficial low-cost sources of alcohol (from illicit trade, duty-free, etc.) to truly capture the range of prices at which various types of alcohol are available in a given country.
- Although other taxes (or subsidies, if applicable) should be considered, including stamp taxes and environmental taxes, the focus should be on excise taxes.

### *Sugar-sweetened beverages working group*

The SSB working group made the following observations:

- The proposed indicator seems appropriate, but other taxes need to be included, such as customs duties (for which CIF value needs to be collected); in addition, supplementary indicators should be considered.
- The method should be transparent in terms of the assumptions made for federal countries that may have differential state taxes applied to SSBs. This would apply to Argentina, Brazil, Canada, Mexico, the United States, and Venezuela.
- Further evaluations and analyses on best practices for SSB taxes need to be conducted before establishing a benchmark. When discussion does begin about establishing a benchmark, consideration should be given to allowing the benchmark to be a dynamic indicator that considers affordability and, in particular, the comparative affordability of substitutes such as water and milk, not simply general products and services in the economy.

## Session III: Challenges in monitoring and evaluating tax policies on alcoholic and sugar-sweetened beverages

### Presentation: Monitoring of tobacco tax policies in Colombia—challenges and lessons learned for alcohol and SSBs

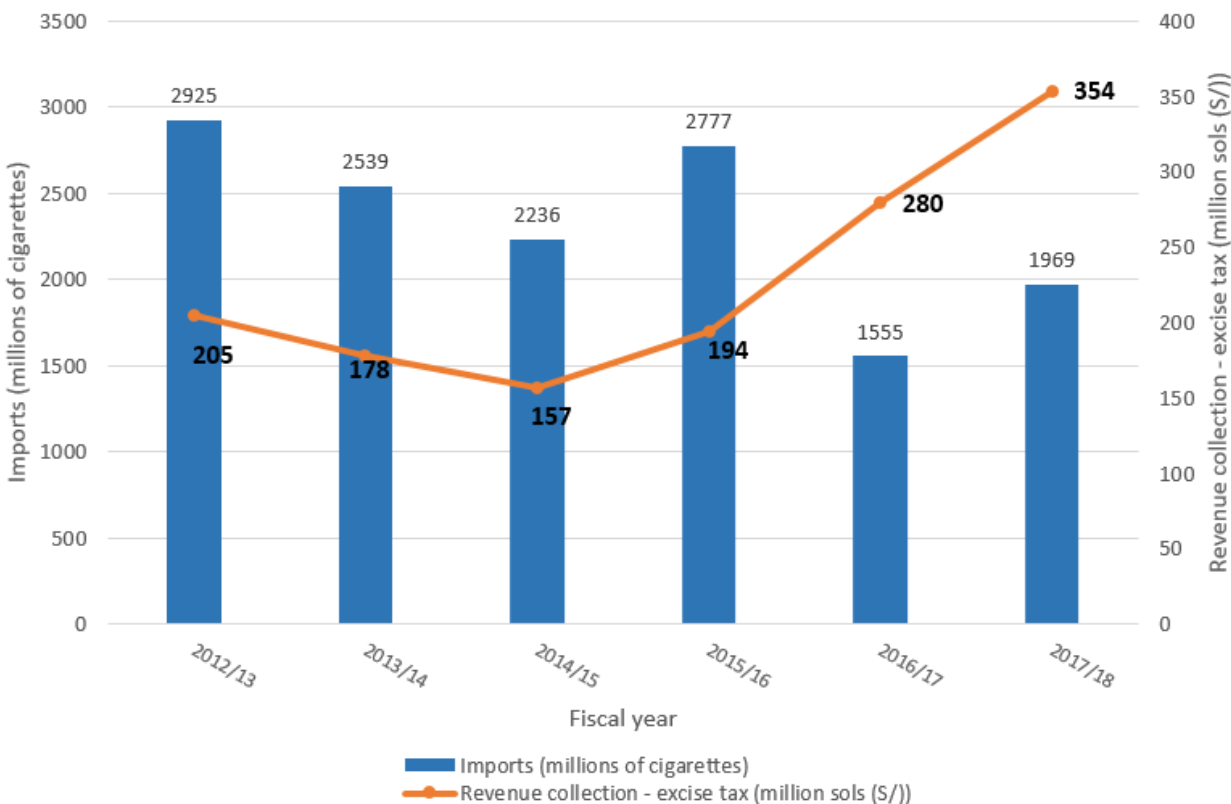
Ms. Blanca Llorente from the Anáas Foundation in Colombia described the work conducted in that country to monitor tobacco tax policies, highlighting the success and shortcomings in the process. The Foundation uses 27 indicators to monitor tobacco taxes and prices, using official governmental sources of information, independent research, and other sources such as price monitoring on the internet and reports of tobacco seizures. Ms. Llorente focused on specific excise-share trends, price per unit in different cities, online prices, price per stick according to the method of purchase (loose cigarettes, pack, or carton), tax structure trends in supermarkets, real prices, affordability, and consumption. She also emphasized the importance of effective intersectoral collaboration and strengthening relationships across sectors to effectively monitor and ultimately improve tax policies.

Three lessons learned from Colombia's experience of monitoring tobacco taxes and SSB prices were presented. First, it is important to establish a baseline by using all publicly available information at the local level—considering that while local information can be more persuasive, international evidence may be used when local research is not available. Second, it is important to monitor SSB taxes and prices early in the policy formulation process to avoid reliance on information provided by the industry. Ms. Llorente acknowledged that it is often difficult to find independent evidence to inform policy decisions and thus national authorities tend to rely on information from the industries, whose interests may conflict with public health objectives. Third, cooperation between public and private stakeholders is strongly recommended, so that clear rules to guarantee transparency and eliminate the influence of industry in public health policies can be established. The evidence and information used to make political decisions should not come solely from the tobacco, alcohol, and processed food industries; protecting health policies from the conflicts of interest that may arise is a priority.

### Presentation: Monitoring of tobacco tax policies in Peru—challenges and lessons for SSB taxation

Dr. Martín Valdivia from the Group for the Analysis of Development (GRADE) in Peru presented statistics on historical changes to tobacco tax policies in Peru as well as changes in the price, tax share, revenue collection, and industry profit margins of the most sold brand of cigarettes in the past 10 years (2009 to 2018). Although total excise revenue from tobacco had been decreasing from 2012 to 2015, the trend reversed after the 2016 tobacco tax increase and has increased from 2016 onward. Along with the increase in revenue, a decrease in cigarette imports was also observed after 2016 (see figure 6).

**Figure 6: Cigarette imports vs. excise revenue, Peru (2012-2018)**



Source: Valdivia, M. Monitoring of tobacco and alcohol tax policies in Peru – challenges and lessons learned for SSBs. Presentation delivered at Meeting to develop a standardized tax share indicator for alcoholic and sugar-sweetened beverages. July 25, 2018: Washington D.C. Data Source: National Superintendency of Tax Administration (SUNAT), Peru's tax administration, <http://www.sunat.gob.pe/operatividadaduanera/>.

Dr. Valdivia noted that the past two tobacco tax increases in Peru were motivated by an overall decline in tax revenues, the slowing of the economy, and recognition that tobacco taxes reduce the consumption of tobacco and associated health expenditures in both the medium and long term. The tobacco industry actively engages in reversing and impeding any further tobacco tax increases by alleging that increases in the illicit trade of tobacco resulting from tax increases are the primary concern. Information on the illicit trade of cigarettes that the industry uses is not transparent or reliable, however, and the speaker emphasized the need to generate information that counteracts the overestimations provided by the tobacco industry.

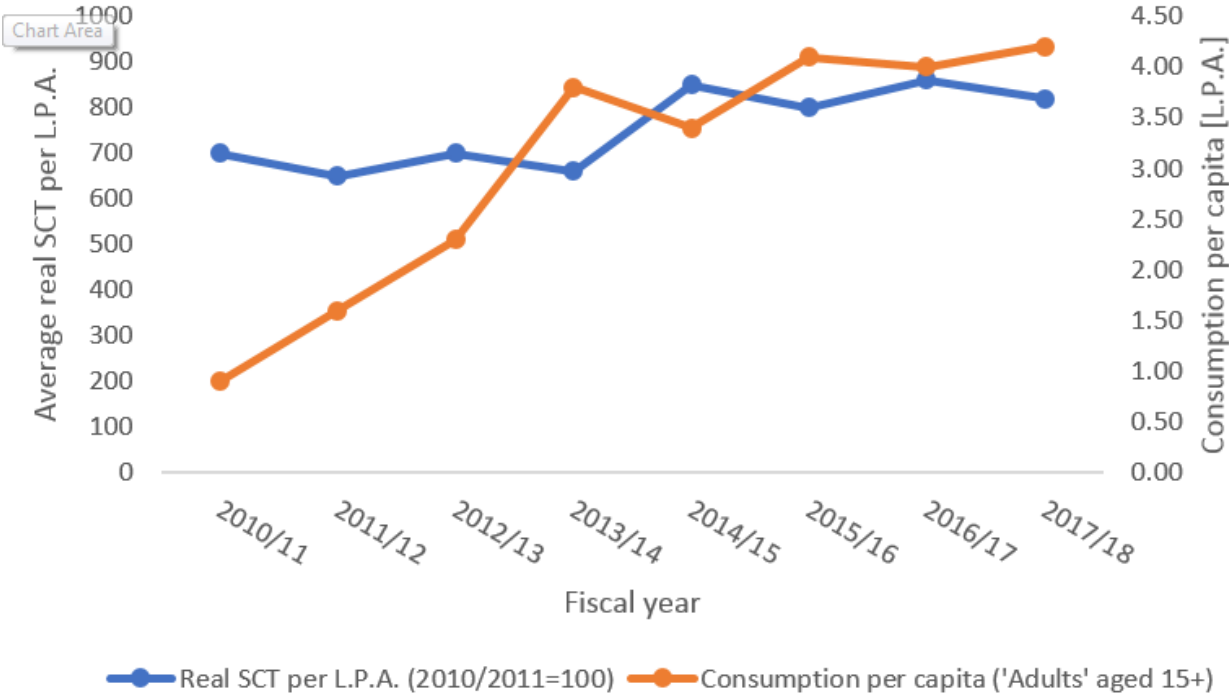
In Peru, taxes on non-alcoholic beverages, including mineral water, have been imposed since 1999. Sports and energy drinks were added in 2006. Recently, the Ministry of Finance increased excise taxes on SSBs, using a tiered system based on sugar content that subjected all non-alcoholic beverages with 6 or more grams of total sugar per 100 ml to a higher excise tax rate. Dr. Valdivia presented evidence showing that

larger product sizes of the same brand attract significantly lower taxes per gram of sugar, and that for local brands (which are generally cheaper), the tax per gram of sugar is less than half compared with that of the premium brand.

Presentation: Monitoring of alcohol taxes in Jamaica

Two speakers from Jamaica, Mr. Fabian Lewis, Director of the Research and Analysis Unit at the Taxation Policy Division in the Ministry of Finance and the Public Service, together with Ms. Peeta Gay Thompson, Health Economist at the Ministry of Health, spoke about the challenges of monitoring alcohol taxes in that country. Ms. Thompson began the presentation by describing the background and tax structure for alcohol in Jamaica, noting that in 2010 there was a shift from an ad valorem excise tax to a specific excise tax (a special consumption tax or SCT), given evidence that the ad valorem tax had distorted competition in the local beverage sector, frustrated responsible drinking efforts, and penalized beverages with lower alcohol content, such as beer. Beyond the change in structure in 2010, Jamaica increased the specific excise tax rate both in 2014 and in 2017. Using this time frame for analysis, Mr. Lewis showed the negative relationship that has been observed in Jamaica between tax rates and alcohol consumption (see figure 7).

Figure 7: Inverse relationship between alcohol excise taxes and consumption per capita in Jamaica



SCT = Special consumption tax. L.P.A = Liter of pure alcohol

Source: Lewis, F and Thompson, PG. Monitoring of alcohol taxes in Jamaica. Presentation delivered at Meeting to develop a standardized tax share indicator for alcoholic and sugar-sweetened beverages. July 25, 2018: Washington D.C.  
 Data Source: Jamaica Customs Agency (JCA), Tax Administration Jamaica (TAJ) and the Ministry of Finance and the Public Service.

In terms of affordability, the relative income price of the most popular brands of beer, wine, and spirits has increased since 2010 (corresponding to a decrease in affordability), which highlights that the tax policy has been effective since 2010. Since its implementation, the specific excise system has produced a constant increase in tax revenues.

Future work should include estimating the price elasticities for beer, spirits, and wine, as well as evaluating the potential of track-and-trace mechanisms to reduce the availability of counterfeit alcoholic beverages.

### Presentation: Monitoring and evaluating the SSB tax in Mexico

Dr. Arantxa Colchero, a researcher from the National Institute of Public Health (INSP) in Mexico, described the burden of NCDs and the health-centered rationale that was used to implement the SSB tax in Mexico. Since January 2014, a specific excise tax of 1 peso per liter has been applied to SSBs. The tax excludes juices and beverages with non-caloric sweeteners. The tax is paid by the producer and is adjusted if the cumulative inflation rate reaches 10%. Ideally, SSB tax revenues should be earmarked for health policies, but this has not been adopted in Mexico.

The INSP has conducted a series of studies to evaluate the impact of the tax on prices, consumption, and employment, as well as to project its impact on health outcomes. In a study conducted in collaboration with the National Institute of Statistics, INSP found that prices in rural areas increased less than in urban areas (16). In addition, purchases of taxed beverages decreased by 6% in the first year and 9.7% in the second year, while purchases of untaxed beverages increased (17,18). The average reduction in purchases of taxed beverages corresponds to a reduction of 5.1 liters per capita per year, but researchers found that the reduction of purchases was larger for households with lower socioeconomic levels. The impacts on health have been assessed in simulation studies: a 6% reduction in SSB consumption could lead to a 2.5% reduction in obesity, and a 10% reduction in SSB consumption would lead to the prevention of 189,000 cases of diabetes and other NCDs in 10 years (19).

In addition to the impact on purchases and health, Dr. Colchero's team also evaluated the impact of the tax on employment, as one of the main arguments used by the SSB industry was that the tax would lead to an increase in unemployment. Using an interrupted time series analysis, they showed that the tax had no impact on the manufacturing industry that produces taxed food and drink products, on the retail outlets that sell food products and beverages, or on the general unemployment rate (10).

The Mexico SSB tax generated approximately US\$ 5 billion in revenue between 2014 and 2017 (20). Although these funds are not earmarked, fiscal law recommends that resources should be assigned to prevention programs (21). To date, water fountains have been installed in over 17,000 schools (22).

To improve the impact of the tax in the future, consideration should be given to adjusting it annually to account for inflation and economic growth, increasing the tax amount to further reduce consumption, and imposing a higher tax rate on beverages with higher sugar content. Finally, in addition to installing water fountains in schools, resources from the SSB tax could be assigned to correct externalities, for

example, by providing safe water in poorer areas or subsidizing healthy food for lower-income households.

### Presentation: Evaluation of the Barbados sugar-sweetened beverage tax

Mr. Cyril Gill, Senior Economist at the Ministry of Finance, Economic Affairs and Investment from Barbados, along with Ms. Miriam Alvarado, from the George Alleyne Chronic Disease Research Centre, University of the West Indies, described the process for implementing and evaluating the SSB tax in Barbados.

Mr. Gill began the presentation by providing an overview of the context under which the International Monetary Fund suggested SSB taxes as a policy option for Barbados. In general, the economy has generally slowed and there is a high prevalence of NCDs, with 64.3% of adults overweight or obese and an 18.7% prevalence rate of diabetes mellitus (23). Within this context, Mr. Gill explained that the evolution of the SSB tax policy was a dynamic process with multiple actors. He also noted several considerations, such as the impact on labor productivity, the protection of populations living under poverty, and evidence-based research, to support policy implementation.

Ms. Alvarado said that SSBs account for 10% of total energy intake and for 43% of all sugar intake in Barbados, with an average intake of 54 grams of sugar per day per capita (24). She proceeded to describe how the 2015 tax was structured, including which beverages are taxed and which are not (beverages with naturally occurring sugars, powders, and artificially sweetened beverages are not taxed). In addition to the new ad valorem excise tax of 10%, there was an adjustment to the VAT basket around the same time.

To assess changes in prices, researchers accessed grocery stores' point-of-sale data, covering the period from January 2013 to October 2016. In response to the application of the 10% ad valorem tax, prices increased by an average of 5.9%, but there was great variability in prices across the different types of retailers, with the price of a 500-ml bottle of Coca-Cola ranging from BDS\$1.96 to BDS\$3.00 on the same day (25). The 10% tax was associated with a reduction in sales of all SSBs of 4.3% and an increase in sales of non-taxed beverages of 5.2% (26). Ms. Alvarado acknowledged that the ad valorem structure may have incentivized brand down-switching. Imported SSBs were reported to account for 66% of total SSB tax revenue, despite making up a much smaller proportion of the total SSB market.

### Concluding remarks

Ms. Sandoval summarized some of the recurring points that were made throughout the meeting and that apply to both alcoholic beverages and SSBs:

- (1) A package of tax share indicators could be proposed as opposed to a single indicator, taking into consideration funding needs for the periodic data collection and systematic calculation of the indicators;
- (2) Including an indicator on affordability should be considered; and



- (3) If benchmarks are to be considered, they should not be based on a specific threshold of taxation, but instead on changes in affordability over time.

Next, Dr. Gomes and Dr. Monteiro summarized the discussions that took place throughout the workshop, particularly during the SSB and alcoholic beverages working groups.

In the SSB working group, the main topics of discussion centered on how to adequately capture the price dispersion of SSBs and different consumption patterns while also considering the comparability of the indicator. For example, regarding price variability, it was noted that prices vary widely between small and large retailers, but also that the price per milliliter is usually considerably lower for larger-sized products. Dr. Gomes suggested that a calculation per milliliter may be a way of ensuring comparability despite different product presentations in different countries.

In terms of consumption patterns, it was noted that the market share of different products varies by country; thus, participants in the SSB group urged that tax legislation and price information be collected on other products, including sports drinks (e.g., Gatorade), energy drinks, chocolate milk, processed fruit juices/nectars, plain milk, and water. For collecting this price and tax information as well as for validating the tax share calculations, participants of the SSB discussion group agreed that collaboration with statistics agencies and ministries of finance is essential. Lastly, although the increased complexity of including subsidies in the tax share calculation was acknowledged, the inclusion of subsidies and discounts in a future iteration of the tax share indicator was encouraged.

In the alcoholic beverages working group, the main topics of discussion centered on how to adequately capture the dispersion of prices, volume, and alcohol content. The issue of how the indicator can capture alcohol content in each alcoholic drink category was emphasized, and the idea of calculating the tax share based on a standard drink size was presented as a possible solution to ensure comparability. Taking this into consideration, it was acknowledged that the questionnaire for collecting price and tax information needs to be expanded to include alcohol content, volume, and price for a variety of products within the same product category, as well as CIF value (which is the base for some taxes). Dr. Monteiro noted that the formula and questionnaire would be shared with WHO Headquarters for consideration for inclusion in future global surveys.

Dr. Blanco adjourned the meeting by reaffirming the commitment of the Risk Factors and Nutrition Unit to continued support for strengthening the monitoring of NCD risk factor taxation policies in the Americas. Lastly, she thanked the researchers and ministries of finance personnel for their valued support and expertise.

## Conclusion

NCDs continue to be a major—and growing—issue for the countries of the Americas. One of the most cost-effective regulatory approaches to address NCDs is to implement taxes on health-harming products associated with NCD risk factors (namely tobacco, alcohol, and SSBs). In addition to decreasing consumption and associated health risks, taxes on NCD risk factors generate revenues that governments can use for health programs and improving the health of their populations, while also helping to ensure the medium- to long-term financial viability of health systems in the Region by preventing NCDs.

Currently, WHO monitors the status of tobacco, alcohol, and SSB taxation policies in different ways. While WHO has monitored the implementation of tobacco tax policies through a standardized indicator for all WHO Member States (the percentage of price that corresponds to taxes on the most sold brand of cigarettes) since 2007, it does not have a standardized indicator to compare or monitor the level of taxation for alcoholic beverages and SSBs. Developing this information is necessary for monitoring tax policies recommended in the WHO Global Action Plan for the Prevention and Control of Noncommunicable Diseases, as well as for analyzing trends and establishing best practices.

Building on the experience of the tax share indicator used by WHO to monitor tobacco taxes, the participants at this meeting provided inputs on how to strengthen the proposed tax share indicator for alcoholic beverages and SSBs to adequately capture the intricacies of these products.

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# ANNEX

## Annex 1: Concept Note

### Meeting to Develop a Standardized Tax Share Indicator for Alcoholic and Sugar-Sweetened Beverages

#### **A. Background and preparatory work**

1. Noncommunicable diseases (NCDs) are responsible for 8 out of 10 deaths (80%) each year in the Americas, and 35% of those deaths occur in people 30-70 years of age (premature deaths). The four main NCDs (cardiovascular diseases, cancer, chronic respiratory diseases, and diabetes) have four common risk factors: tobacco use, harmful use of alcohol, unhealthy diet, and insufficient physical activity.
2. Implementing taxes on unhealthy products associated with NCD risk factors, namely tobacco, alcohol, and sugar-sweetened beverages (SSBs), is among the cost-effective regulatory policies to address NCDs.
3. There is extensive literature demonstrating that both tobacco and alcohol taxation are highly cost-effective interventions to reduce consumption of these products, while there is emerging evidence that excise taxes on SSBs are also effective (27).
4. In addition to decreasing consumption and associated health risks, taxes on NCD risk factors generate revenues that governments could use for health programs and improving population health, while also helping to ensure the medium- to long-term financial viability of health systems in the Region by preventing NCDs.
5. There has also been a growing mandate for effective taxation of tobacco, alcohol, and SSBs at the global and regional levels (28,29,30). Taxation on NCD risk factors is one of the policy options recommended to reduce consumption of risk factors of NCDs on the Updated Appendix 3 of the WHO Global Action Plan for the Prevention and Control of Noncommunicable Diseases 2013-2020.
6. Despite the evidence on the effectiveness of increasing taxes for reducing consumption, evidence also suggests that raising taxes on tobacco, alcohol, and SSBs remains a largely underutilized measure both worldwide and regionally (27,31,32,33,34).
7. While WHO monitors the implementation of tobacco tax policies through a standardized indicator for all WHO Member States (the percentage of price that corresponds to taxes on the most sold brand of cigarettes), it does not have a standardized or similar indicator to compare or monitor the level of taxation for alcoholic beverages and SSBs.

8. Currently, WHO does not monitor the status of tobacco, alcohol, and SSB taxation policies in a comparable manner. Table A provides an overview of the available WHO taxation monitoring tools and their scope.

**Table A: WHO tobacco, alcohol, and SSB taxation monitoring tools**

	Name and purpose of the tool		
	Tobacco	Alcohol	SSB
<b>Tool</b> →  <b>Information collected</b> ↓	<b>WHO Report on the Global Tobacco Epidemic:</b> tracks implementation of MPOWER tobacco control measures	<b>WHO Global Information System on Alcohol and Health:</b> tracks consumption, health consequences, and policy responses	<b>WHO Global Nutrition Policy Review:</b> tracks implementation of nutrition policies and programs
The tool asks whether taxes are applied to these products	Yes	Yes	Yes
The tool collects information establishing types of taxes applied	Yes	Yes	No
The tool collects information on tax rates and base	Yes	No (only on rates)	No
The tool collects information on tax legislation	Yes	Yes	Yes (optional)
The tool requires a technical team validating that tax information reported is supported by respective legislation	Yes	Yes	No
The tool collects information on nominal prices of tobacco, alcoholic beverages, and SSB	Yes	No	No
The tool calculates a comparable and standardized tax share indicator (portion of the price accounted for by taxes)	Yes	No	No

9. Tobacco taxation policies are monitored using a standardized and comparable indicator on tobacco taxes by country (tax share), which represents the total percentage of the final

consumer price that corresponds to indirect taxes. To construct this indicator, it is necessary to have information on tax types, tax rate and base, and prices for tobacco products. This information is collected on a biannual basis through the WHO Report on the Global Tobacco Epidemic. At this point, the tobacco tax share indicator has been calculated for all WHO Member States on six occasions (in 2008, 2009, 2011, 2013, 2015, and 2017).

10. The tobacco tax share indicator informs Member States how close they are to achieving the best practice benchmarks on tobacco taxes established by WHO (indirect tobacco taxes accounting for more than 75% of final consumer price and excise tobacco taxes accounting for at least 70% of final consumer price).
11. As shown in Table A, the existing Alcohol and Nutrition Surveys collect some but not all the information necessary to construct a tax share indicator. The Global Information System on Alcohol and Health (GISAH) collects information on the type of tax and rates applied and collects updated tax legislation but it does not collect information on prices. Consequently, GISAH does not have a comparable indicator across countries of the total tax share for alcoholic beverages. Similarly, the Global Nutrition Policy Review (GNPR) collects information on whether taxation is used to reduce the consumption of unhealthy foods and beverages, but does not collect information on tax types, tax rates, tax base, or prices. The GNPR also does not have a comparable indicator across countries.
12. For the reasons explained above, comparable information on the taxation of alcoholic beverages and SSBs across time and countries remains limited. Nonetheless, developing this information is necessary for monitoring tax policies recommended in the WHO Global Action Plan for the Prevention and Control of Noncommunicable Diseases 2013-2020, as well as for analyzing trends and establishing best practices.
13. In 2016/2018, PAHO/NMH started working toward having a standardized and comparable indicator of taxes on alcohol and SSBs across time and countries. A team comprising members of the NMH REGULA and Economics of NCDs initiatives conducted the following work:
  - a. *Tax legislation, norms, or decrees on alcoholic beverages and SSBs.* The team gathered the tax legislation, norms, or decrees on alcoholic beverages and SSBs through different existing WHO tools (e.g., the WHO Global Information System on Alcohol and Health) and official sources of PAHO Member States (e.g., national legislation databases). For Latin American countries, this work was conducted in early 2016, and for Caribbean countries, in early 2017, with the support of the subregional office for the Caribbean (SPC). Simultaneously, and with the support of an expert on tobacco, alcohol, and SSB taxation and a consultant (of SPC), the collected tax legislation on alcoholic beverages and SSBs was analyzed with the goal of having a description of tax structures at a country level for Latin American countries (November 2016 to January 2017) and for Caribbean countries (March to May 2017).

- b. *Information on prices of selected alcoholic and SSB products* was collected in Latin America (August 2016 to May 2017) and the Caribbean (March to June 2017); as a first step, and in close consultation with the PAHO/NMH Regional advisors on alcohol and nutrition, the team identified a selected group of alcoholic beverages and SSBs for which prices will be collected and, later, a tax share would be calculated. The products identified were:
- one liter and one can of the cheapest brand of SSB
  - one liter and one can of Coca-Cola
  - one liter and one can of the cheapest and most sold brand of beer
  - one liter of the cheapest and most sold brand of spirit
  - one liter of the cheapest and most sold brand of wine
- c. *Development of a methodology to estimate the tax share for alcoholic beverages and SSBs.* The consultant, using as reference the WHO methodology to calculate a tobacco tax share, developed a similar one for alcoholic beverages and SSBs using the information on taxes and prices collected. The tax share for the following products was estimated:<sup>5</sup>
- one liter of Coca-Cola
  - one liter of the most sold brand of beer
  - one liter of the most sold brand of spirit
  - one liter of the most sold brand of wine
- The calculation of the tax share for the cheapest brands remains pending until the validation of the methodology.

## **B. Meeting purpose and objectives**

This meeting has been proposed to present the advances in development of the methodology to calculate the tax share for alcoholic beverages and SSBs and to receive feedback from researchers and ministries of finance personnel. The specific objectives are as follows:

- Obtain feedback from academic experts and ministries of finance personnel on the methodology to calculate a standardized and comparable indicator of the tax share for alcoholic beverages and SSBs.
- Discuss efforts, progress, and challenges in monitoring and evaluating alcohol and SSB taxation policies at the regional and national levels, including lessons learned from tobacco.
- Establish a roadmap to periodically collect the necessary information, using existing WHO/ PAHO tools, and calculation of the tax share of alcoholic beverages and SSBs for PAHO Member States.

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<sup>5</sup> Available at: <http://apps.who.int/iris/bitstream/10665/255874/1/9789241512824-eng.pdf?ua=1&ua=1>. Note that the calculation of the tax share for the cheapest selected products remains pending. PAHO agreed with the consultant that these estimated would be conducted after the methodology had been validated. See Annex 1 for a summary of the current status of collection of legislation, collection of prices and calculation of estimations of tax share for alcoholic and sugar-sweetened beverages.



### C. Deliverables

1. Methodology for calculating the tax share for alcoholic beverages and SSBs validated by academic experts and selected ministries of finance personnel.
2. Roadmap for the collection of tax legislation and prices on alcoholic beverages and SSBs in a periodic way through WHO and PAHO tools and the calculation of the tax share for alcoholic beverages and SSBs for PAHO Member States.

**Table B: Status of collection of legislation, prices, and calculation of tax share in Latin America and the Caribbean**

No.	Country	Collection of tax legislation for alcohol and SSBs current as of	Alcoholic beverage and SSB price and source of information (current as of dates noted)	Estimation of tax share
Member States				
1	Antigua and Barbuda	31 December 2016	May 2017, internet: <a href="http://www.expatistan.com">www.expatistan.com</a>	8 September 2017
2	Argentina	31 December 2016	24 May 2017, internet: <a href="http://www.walmart.com.ar">www.walmart.com.ar</a>	13 October 2017
3	Bahamas	31 December 2016	1 April 2017, liquor vendor	8 September 2017
4	Barbados	31 December 2016	6 April 2017, Massy Stores/Jordans Supermarket	8 September 2017
5	Belize	31 December 2016	15 August 2017, Laughing Supermarket/Galaxy Supermarket	8 September 2017
6	Bolivia	31 December 2016	20 November 2017, Ketal Supermarkets	28 November 2017
7	Brazil	31 December 2016	24 May 2017, internet: <a href="http://www.gpabr.com">www.gpabr.com</a> Grupo Pao de Azucar	13 October 2017
8	Chile	31 December 2016	25 May 2017, internet: Líder	13 October 2017
9	Colombia	31 December 2016	25 May 2017, internet: <a href="http://www.grupoexito.com">www.grupoexito.com</a> Almacenes Éxito	13 October 2017
10	Costa Rica	31 December 2016	25 May 2017, internet: Perimercados	13 October 2017
11	Cuba	N/A	N/A	N/A
12	Dominica	31 December 2016	9 August 2017, Busa/Chubby, N/A	8 September 2017
13	Dominican Republic	31 December 2016	26 May 2017, internet: <a href="http://alsuper.com.do">alsuper.com.do</a> , <a href="http://colmado.com.do">colmado.com.do</a>	13 October 2017
14	Ecuador	31 December 2016	December 2016, Euromonitor International	13 October 2017
15	El Salvador	31 December 2016	26 May 2017, internet: Super Selectos	13 October 2017
16	Grenada	31 December 2016	9 May 2017, Foodland/Buy Smart	8 September 2017
17	Guatemala	31 December 2016	11 August 2017, Almacenes Paiz	13 October 2017

18	Guyana	31 December 2016	3 May 2017, Bounty Supermarket/Budget Supermarket	8 September 2017
19	Haiti	31 December 2016	N/A	8 September 2017
20	Honduras	31 December 2016	30 July 2017, Walmart	13 October 2017
21	Jamaica	31 December 2016	1 April 2017, Shoppers Online/Sampars	8 September 2017
22	Mexico	31 December 2016	26 May 2017, internet: Walmart	13 October 2017
23	Nicaragua	31 December 2016	25 May 2017, internet: La Colonia Supermarket	13 October 2017
24	Panama	31 December 2016	25 May 2017, internet: Riba Smith Supermarket	13 October 2017
25	Paraguay	31 December 2016	24 May 2017, internet: Stock.com.py (online store only)	13 October 2017
26	Peru	31 December 2016	25 May 2017, internet: Plaza Vea Super	13 October 2017
27	Saint Kitts and Nevis	31 December 2016	9 May 2017, Daily Foods/Zheings Supermarket	8 September 2017
28	Saint Lucia	31 December 2016	1 December 2016, Supermarket	8 September 2017
29	Saint Vincent and the Grenadines	31 December 2016	12 May 2017, Supermarket/Kiosk	8 September 2017
30	Suriname	31 December 2016	1 May 2017, Choi's Supermarket/Gui Rong Supermarket	8 September 2017
31	Trinidad and Tobago	31 December 2016	29 April 2017, Massy Stores/Tru Valu/The Meat Cottage	8 September 2017
32	Uruguay	31 December 2016	26 May 2017, internet: Tienda Inglesa	13 October 2017
33	Venezuela	31 December 2016	31 May 2016, Instituto Nacional de Estadística	13 October 2017
Associate members				
34	Aruba	31 December 2016	N/A	N/A
35	Curacao	31 December 2016	N/A	N/A
36	Sint Marteen (Dutch part)	31 December 2016	N/A	N/A
Participating states				
37	Anguilla	31 December 2016	N/A	N/A
38	Bermuda	31 December 2016	N/A	N/A
39	British Virgin Islands	31 December 2016	N/A	N/A
40	Cayman Islands	31 December 2016	N/A	N/A
41	French Guyana	31 December 2016	N/A	N/A

42	Guadeloupe	31 December 2016	N/A	N/A
43	Martinique	31 December 2016	N/A	N/A
44	Montserrat	31 December 2016	N/A	N/A
45	Bonaire	31 December 2016	N/A	N/A
46	Saba	31 December 2016	N/A	N/A
47	Sint Eustatius	31 December 2016	N/A	N/A
48	Turks and Caicos Islands	31 December 2016	N/A	N/A

## Annex 2: Agenda

### Meeting to Develop a Standardized Tax Share Indicator for Alcoholic and Sugar-Sweetened Beverages

Pan American Health Organization  
24-25 July 2018

Organization of American States General Secretariat Building, Washington, D.C.

Day 1: Tuesday, 24 July	
Time	Topic
08:45-09:00	<b>Arrival and registration</b> <i>Room 890 (Ruben Dario)</i> <i>OAS General Secretariat Building</i> <i>1889 F Street N.W. Washington, D.C.</i>
09:00-09:30	<b>Welcome remarks and background</b> <i>Adriana Blanco, Unit Chief, Risk Factors and Nutrition Unit, PAHO/WHO</i> <i>Maristela Monteiro, Senior Advisor, Alcohol and Substance Abuse, PAHO/WHO</i>
09:30-09:50	<b>Objectives and introduction</b> <i>Rosa Sandoval, Regional Advisor on Tobacco Control and Coordinator on Economics of NCDs, NMH/RF, PAHO/WHO</i>
<b>Motivation for developing a standardized indicator</b>	
09:50-10:45	<b>Taxes on tobacco, alcohol, and SSBs as a public health tool (30 minutes)</b> <i>Lisa Powell, Professor and Division Director of Health Policy and Administration in the University of Illinois at Chicago School of Public Health</i>  <b>Questions and answers (25 minutes)</b>
11:00-11:30	<b>Analysis of trends in affordability of alcoholic and sugar-sweetened beverages in the region (20 minutes)</b> <i>Guillermo Paraje, Professor of Economics, Universidad Adolfo Ibáñez, Santiago, Chile</i>  <b>Questions and answers (10 minutes)</b>
11:30-12:00	<b>Monitoring of progress in tobacco, alcohol, and SSB tax policies—WHO tools and gaps (20 minutes)</b> <i>Rosa Sandoval, Regional Advisor on Tobacco Control and Coordinator on Economics of NCDs, NMH/RF, PAHO/WHO</i>  <b>Questions and answers (10 minutes)</b>
12:00-12:30	<b>Strengthening capacity in health taxes (20 minutes)</b> <i>Angeli Vigo, Consultant, HIS/HGF/CEP, World Health Organization</i>  <b>Questions and answers (10 minutes)</b>
12:30-13:45	<b>Lunch break</b>

	<b>Overview of the work conducted by NMH</b>
	<b>Proposal of methodology for calculating the tax share for alcoholic and sugar-sweetened beverages</b> <i>Moderator: Itziar Belausteguigoitia, Specialist, Economics of NCDs, PAHO/WHO</i>
13:45-14:30	<b>Selection of products and collection of prices and legislation on taxes of alcoholic and sugar-sweetened beverages (30 minutes)</b> <i>Luis Galicia, Consultant, PAHO/WHO</i>  <b>Questions and answers (15 minutes)</b>
14:30-15:00	<b>Analysis of legislation and characteristics of tax structure of alcoholic and sugar-sweetened beverages in the region (20 minutes)</b> <i>Guillermo Paraje, Professor of Economics, Adolfo Ibáñez University, Santiago, Chile</i>  <b>Questions and answers (10 minutes)</b>
15:00-16:30	<b>Working group 1: Best practices and recommendations on collection of legislation on taxes, selection of products, and collection of prices of alcohol and SSBs (60 minutes)</b>  Alcohol working group chair: <i>Maristela Monteiro, Senior Advisor, Alcohol and Substance Abuse, PAHO/WHO</i> Rapporteur: <i>Luis Galicia, Consultant, PAHO/WHO</i>  SSB working group chair: <i>Fabio da Silva, Regional Advisor, Nutrition and Physical Activity, PAHO/WHO</i> Rapporteur: <i>Itziar Belausteguigoitia, Specialist, Economics of NCDs, PAHO/WHO</i>  <b>Presentations by working groups (10 minutes each, 20 minutes)</b> <b>Plenary discussion (10 minutes)</b>
16:30-17:45	<b>Methodology for construction of the indicator of tax share for alcoholic and sugar-sweetened beverages and preliminary estimations (45 minutes)</b> <i>Guillermo Paraje, Professor of Economics, Adolfo Ibáñez University, Santiago, Chile</i>  <b>Questions and answers (30 minutes)</b>
17:45-18:00	<b>Key messages of day 1</b> <i>Elisa Prieto, NMH Advisor, Caribbean Subregional Program Coordination, PAHO/WHO</i>
18:00	<b>End day 1</b>

<b>Day 2: Wednesday, 25 July</b>	
<b>Time</b>	<b>Topic</b>
9:00-9:15	<p><b>Summary of day 1</b>  <i>Guillermo Paraje, Professor of Economics, Adolfo Ibáñez University, Santiago, Chile</i>  <i>Luis Galicia, Consultant, PAHO/WHO</i></p>
9:15-10:45	<p><b>Working group 2: Best practices and recommendations on construction of the indicator of tax share for alcoholic and sugar-sweetened beverages and preliminary estimations (60 minutes)</b></p> <p>Alcohol working group chair:  <i>Maristela Monteiro, Senior Advisor, Alcohol and Substance Abuse, PAHO/WHO</i>  Rapporteur:  <i>Luis Galicia, Consultant, PAHO/WHO</i></p> <p>SSB working group chair:  <i>Fabio da Silva, Regional Advisor, Nutrition and Physical Activity, PAHO/WHO</i>  Rapporteur:  <i>Itziar Belausteguigoitia, Specialist, Economics of NCDs, PAHO/WHO</i></p> <p><b>Presentations by working groups (10 minutes each, 20 minutes)</b>  <b>Plenary discussion (10 minutes)</b></p>
11:15-12:15	<p><b>Plenary discussion on the methodology for calculating the tax share indicator of alcohol and SSB taxation (60 minutes)</b>  <i>Guillermo Paraje, Professor of Economics, Adolfo Ibáñez University, Santiago, Chile</i>  <i>Luis Galicia, Consultant, PAHO/WHO</i></p>
12:15-12:30	<p><b>Summary of key messages on the methodology for calculating the indicator of alcohol and SSB taxation (15 minutes)</b>  <i>Itziar Belausteguigoitia, Specialist, Economics of NCDs, PAHO/WHO</i></p>
<b>12:30-13:30</b>	<b>Lunch break</b>
	<p><b>Challenges in monitoring and evaluating tax policies on alcoholic and sugar-sweetened beverages</b>  Moderator: Rosa Sandoval, PAHO/WHO</p>
13:30-14:20	<p><b>Monitoring of tobacco tax policies in Colombia—challenges and lessons learned for alcohol and SSB</b>  <i>Blanca Llorente, Anáas Foundation, Colombia (15 minutes)</i>  <b>Monitoring of tobacco and alcohol tax policies in Peru—challenges and lessons learned for SSB</b>  <i>Martín Valdivia, Group for the Analysis of Development, Peru (15 minutes)</i></p> <p><b>Plenary discussion (20 minutes)</b></p>
14:20-14:55	<p><b>Monitoring of alcohol taxes in Jamaica</b>  <i>Fabian Lewis Director, Research and Analyst Unit, Taxation Policy Division, Ministry of Finance and Public Service, Jamaica</i>  <i>Peeta Gay Thompson, Health Economist, Ministry of Health, Jamaica (15 minutes)</i></p> <p><b>Plenary discussion (20 minutes)</b></p>

15:25-16:15	<p><b>Monitoring and evaluating SSB tax in Mexico</b> (15 minutes)  <i>Arantxa Colchero, Researcher, National Institute of Public Health, Mexico</i></p> <p><b>Evaluation of the Barbados sugar-sweetened beverages taxation</b> (15 minutes)  <i>Cyril Gill, Senior Economist (ag), Micro-Fiscal Section, Economic Affairs Division, Ministry of Finance, Economic Affairs and Investment, Barbados</i>  <i>Miriam Alvarado, George Alleyne Chronic Disease Research Centre, University of the West Indies, Barbados</i></p> <p><b>Plenary discussion</b> (20 minutes)</p>
16:15-16:30	<p><b>Agreements and next steps</b>  <i>Maristela Monteiro, Senior Advisor, Alcohol and Substance Abuse, PAHO/WHO</i>  <i>Fabio da Silva, Regional Advisor, Nutrition and Physical Activity, PAHO/WHO</i>  <i>Rosa Sandoval, Regional Advisor on Tobacco Control and Coordinator on Economics of NCDs, NMH/RF, PAHO/WHO</i></p>
16:30-16:45	<p><b>Closing remarks</b>  <i>Adriana Blanco, Unit Chief, Risk Factors and Nutrition, PAHO/WHO</i></p>

## Annex 3: List of participants

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