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# A TECHNICAL REPORT ON THE POTENTIAL TO INCREASE STATE BUDGET REVENUE BY AMENDING THE LAW ON PRO-HEALTH EXCISE TAXES IN VIETNAM

Local Health System Sustainability Project

Task Order I, USAID Integrated Health Systems IDIQ

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## Local Health System Sustainability Project

The Local Health System Sustainability Project (LHSS) under the USAID Integrated Health Systems IDIQ helps low- and middle-income countries transition to sustainable, self-financed health systems as a means to support access to universal health coverage. The project works with partner countries and local stakeholders to reduce financial barriers to care and treatment, ensure equitable access to essential health services for all people, and improve the quality of health services. Led by Abt Associates, the five-year, \$209 million project will build local capacity to sustain strong health system performance, supporting countries on their journey to self-reliance and prosperity.

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# ACRONYMS

<b>ABV</b>	Alcohol by Volume
<b>CIF</b>	Cost, Insurance, and Freight
<b>GDP</b>	Gross Domestic Product
<b>SSB</b>	Sugar-Sweetened Beverage
<b>TaXSiM</b>	Tobacco Tax Simulation Model
<b>VAT</b>	Value Added Tax
<b>VND</b>	Vietnamese Dong
<b>WHO</b>	World Health Organization

## EXECUTIVE SUMMARY

In 2020, the Government of Vietnam approved its comprehensive National Finance Strategy for 2021–2025, with a vision toward 2030<sup>1</sup> to increase revenue and meet its growing social sector needs. Currently, 4 percent of government revenue is raised through excise taxes, including pro-health excise taxes. The law covering these pro-health taxes is presently being amended by the Ministry of Finance, providing an opportunity to explore how raising/reforming these taxes could increase revenues. The Local Health System Sustainability Project has used the World Health Organization’s TaXSiM (Tobacco Tax Simulation Model) to examine the potential for increased tax rates and modified tax structures to increase the revenue contribution of pro-health taxes on tobacco, alcohol, and sugar-sweetened beverages (SSB).

The scenarios for revenue gains from tax reforms are based on initial proposals by the Ministry of Finance in 2017 and supplemented with tax increase scenarios proposed by the Ministry of Health, the WHO and HealthBridge Canada. The analysis defines each scenario in terms of the good’s proposed tax rate and the tax structure (ad valorem, specific, or mixed).<sup>2</sup> For each scenario, the change in consumption is estimated based on the impact of the tax-induced price increase and consumer price elasticities.<sup>3</sup> Thus, tax revenues are estimated for the proposed tax scenarios given.

The existing excise taxes on alcohol and tobacco have raised approximately VND 62 trillion (US\$2.7 billion) per year in recent years. The results of the analysis in this report show that all the proposed scenarios for each of the three taxed goods increase revenue over the period 2023-2025, by between VND 14,804 billion (US\$ 646 million) under the conservative Ministry of Finance scenario and VND 36,954 billion (US\$ 1,612 million) under the most ambitious scenario analyzed.

The report recommends that the government raise pro-health excise taxes at greater rates than is currently proposed by the Ministry of Finance in order to increase the revenue raised. Furthermore, the report suggests that the tax structure be modified from an ad valorem-only to a mixed structure to increase revenue and help limit manufacturers’ opportunities to mitigate the impact of tax-induced price increases on consumption.

Given the estimated revenues presented in this report and the lessons learned from a companion report to this one, also by the project (LHSS, 2021), that reviewed international experience with pro-health excise taxes, the following strategies are proposed for consideration by Vietnam’s Ministry of Finance.

To ensure the successful passing of pro-health excise tax legislation reform:

- i. Conduct political economy analysis and support evidence generation that will facilitate evidence-based advocacy supporting pro-health tax increases and sugar-sweetened beverages tax introduction.
- ii. Develop industry specific strategies for advocacy (directed to the National Assembly) and communication (directed to the public) to present evidence and limit misinformation to counter industry opposition.

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<sup>1</sup><http://www2.chinhphu.vn/portal/page/portal/chinhphu/noidungchienluocphattrienkinhtexahoi>

<sup>2</sup> Ad valorem taxes are a percentage based on the price of the good, specific taxes are a fixed amount based on a physical unit of the good (e.g., a pack of cigarettes), and a mixed system applies both ad valorem and a specific tax to the same good.

<sup>3</sup> Two elasticities are considered (1) price elasticity of demand, which is the change in quantity demanded due to the change in price and (2) income elasticity, which is the change in demand due to changing incomes.

- iii. Build coalitions including support from the health ministry, academia, non-governmental and political champions in preparation for 2023 National Assembly where the bill will be debated.

To restructure pro-health excise taxes to increase revenue and efficiency the proposed legislation reform should include the improved tax structure amendments:

- i. Propose that excise tax rates are indexed to inflation to protect revenues from devaluation.
- ii. Propose a change in the tax structure over time from the current ad valorem only structure to a mixed tax structure that introduces and then increases a specific tax which mitigates manipulation by manufacturers and provides a more stable revenue stream than an ad valorem tax. Over time a larger proportion of revenue would be derived from the specific tax.
- iii. Propose mandatory routine rate and structure reviews to ensure that rates are not outpaced by income growth and to respond to other structural issues (for example the implementation of laws prohibiting public consumption of alcohol and tobacco products).

To ensure advocacy and effectiveness of pro-health excise taxes with evidence:

- i. Collate and present economic and health data in partnership with recognized thought leadership institutions – academic, non-governmental or international – that effectively communicates (a) the revenue gains from increased taxes, (b) the potential impact on industry, (c) the potentially positive cost benefit comparison of the revenue gains and industry impact and (d) the potential health gains, specifically the decrease in unhealthy consumption levels of tobacco, alcohol and sugar-sweetened beverages.

# I. BACKGROUND

The Government of Vietnam has approved its National Finance Strategy for 2021–2030 to increase government revenue and meet growing social sector needs. These include needs in the health sector due to the disease burden of an aging population, the increasing incidence of non-communicable diseases, and the increasing benefit package costs and hospital reimbursement rates under the Social Health Insurance scheme. Raising domestic revenue is also necessary to address Vietnam’s reduced access to concessional development bank lending due to its graduation to middle-income country status and the high levels of debt and budget deficits that it has accumulated over recent years (Teo et al., 2019). Furthermore, the COVID-19 pandemic has affected the country’s economy in terms of increased spending on health, estimated to be up to US\$ 4.39 billion for prevention and control in 2021 (Minh 2021). The World Bank estimated that the economy would still grow by up to 4.8 percent in 2021 and suggested that the country should address the consequences of the pandemic by improving the depth and effectiveness of its social protection programs.

One way that the country generates domestic revenues is in the form of excise taxes. Vietnam’s National Assembly defines these taxes as applying to specific goods and services that are (i) not encouraged due to their harmful effects on health, (ii) usually consumed by high-income consumers in the society, and (iii) are unnecessary services. Excise taxes on goods harmful to health, for example, alcohol, tobacco, and sugar-sweetened beverages (SSBs) are called pro-health taxes. Vietnam currently imposes excise taxes on alcohol and tobacco, with tax rates for these two goods ranging from 35 percent to 75 percent (Vietnam National Assembly 2016). These taxes are in addition to the general sales tax imposed on alcohol and tobacco goods produced domestically and the import duties charged on imported alcohol and tobacco goods. A tax on SSBs has been discussed but is not yet policy.

In 2019, a World Bank study looked at data for 2000–2017 and concluded that government revenue was unlikely to be a significant source of additional funding for the health sector (Teo et al. 2019). Vietnam was entering a period of fiscal consolidation, and any new excise tax revenue would not be earmarked for health. The study therefore recommended that efficiency improvements were the most feasible way to increase resources available for health. Since 2019, however, the Office of the Government of Vietnam has begun to look at ways to increase its total revenues and the Ministry of Finance is planning to revise the laws for sales tax, corporate income tax, and excise tax.

The Ministry of Finance has asked the Institute of Finance Strategy to review excise taxes in Vietnam and propose recommendations for revising the excise tax law. The institute suggested that the Local Health System Sustainability Project Vietnam activity conduct the review on a subset of pro-health excise taxes to inform the broader review of excise taxes. The project conducted two studies on the impact and experience of pro-health taxes on general government revenues. One study summarized Vietnam’s experience and developed scenarios to analyze the revenue impact of:

- i. Increasing the excise tax rates for existing pro-health excise taxes on tobacco and alcohol, and
- ii. Introducing a new pro-health excise tax on SSBs to expand the tax base.

The companion study summarized international experience from countries at a similar development level to Vietnam, that is, low- and middle-income countries. This report combines the results of the two studies, to provide recommendations to the finance ministry on its potential strategy options for using pro-health excise taxes to raise revenues for Vietnam.



## 2. OBJECTIVE

The objectives of this study are to:

- Review the current regulatory framework of pro-health excise taxes in Vietnam, including the history of the taxes, their content and collection, and how much revenue they currently raise.
- Develop different scenarios for increasing existing pro-health excise taxes on tobacco and alcohol and implementing a new pro-health excise tax on SSBs. Estimate the potential impact on consumption and government revenue under each scenario.
- Propose potential strategies for implementing current and new pro-health excise tax policies to raise revenues for the Government of Vietnam, incorporating best practices identified during the international review of pro-health excise taxes and considering factors such as feasibility of implementation and political will.

## 3. CURRENT STATUS OF PRO-HEALTH TAXES IN VIETNAM

This section of the report reviews the current taxes levied on tobacco, alcohol, and SSBs as well the structure and changes over time in pro-health excise taxes specifically.

### 3.1 TAXATION OF CONSUMER GOODS

In Vietnam, consumer goods are subject to several taxes. Each good is subject to a standard consumption tax, the Value Added Tax (VAT). Goods regulated by the excise tax law may also be subject to an additional special consumption tax – an excise tax. Imported goods may also be subject to an import tax. Other taxes include an environment tax (not applicable to tobacco, alcohol, or SSBs) and a business income tax (applicable to tobacco, alcohol, and SSBs). Special taxes may also be charged; for example, in the case of tobacco products, there is an additional, compulsory contribution to the Vietnam Tobacco Harm Prevention and Control Fund to cover health promotion expenditures.

### 3.2 PRO-HEALTH EXCISE TAX HISTORY

Vietnam has an excise tax law, promulgated by the National Assembly, that applies taxes on several “special” products considered to have potential impacts on public health. Specifically, in 2008, the 12th National Assembly promulgated Law No. 27/2008/QH12 - Law on Excise Tax. Then, in 2014, the 14th National Assembly promulgated Law No. 70/2014/QH13 - Law on Excise Tax which amended and supplemented some articles of the Law on Excise Tax. According to the 2014 law, goods subject to excise tax include tobacco, alcoholic beverages, some automobile types, motorcycles, airplanes, yachts, gasoline and its products, air conditioners, playing cards, and joss papers. Services subject to excise tax include such businesses as nightclubs, massages, karaoke, casinos, reward electronic games, betting, golf, and the lottery.

Of the taxable objects included in the law, currently there are two pro-health taxable goods: tobacco and alcoholic drinks. While developing the revised excise tax law in 2014, the Ministry of Finance initially proposed a new tax on carbonated SSBs but had to drop the proposal from the final submission due to industry opposition. The SSB manufacturing industry claimed that SSBs are not the main reason for health issues (obesity), and that the government should not impose a tax that could negatively affect

businesses while tax revenue gain is questionable (no evidence was presented to support the latter argument).

In 2017, the Ministry of Finance restarted tax law revision. Initial proposals combined five types of taxes into a single bill: VAT, excise tax, business income tax, personal income tax, and a natural resource consumption tax. However, this bundling of taxes faced many obstacles, notably on VAT, and so the ministry decided to break it down into different components. The excise tax law revision was separated from the bundle and given priority. Since 2018, the ministry has continued to refine and improve proposals to the excise tax law. Currently, SSBs are being included in the proposal as a new taxable object, and there are rate increases for tobacco and alcoholic drinks. It is expected that in 2022 the ministry will submit a draft law for consideration by the National Assembly in its 2023 agenda, although this timeline has not yet been confirmed.

### 3.3 CURRENT EXCISE TAX STRUCTURE

Currently, Vietnam applies an ad valorem tax that specifies a percentage on the taxable price. An ad valorem tax is based on the price of the product being sold as opposed to a specific excise tax, which is set as a fixed monetary value per physical characteristic of a product or per unit of sale, for example, a packet of cigarettes. According to the tax law, the tax base, or price basis for applying the ad valorem percentage for pro-health excises, is the ex-factory (or manufacturer's gate) price if the products are produced domestically. If the products are imported, the tax base is the imported price (cost, insurance, and freight costs or CIF<sup>4</sup> price) plus the import tariff.

To avoid the practice of under-reporting the gate price and therefore lowering the tax liability, the Ministry of Finance imposes a maximum gap between the gate price and the price of the first wholesale distributor at 10 percent. In the revised excise tax law of 2014, the maximum gap between factory price and wholesale price was further reduced from 10 percent to 7 percent.

During several tax workshops in 2017, there was discussion on moving the tax base from the factory price to closer to the retail price. This move is not expected to happen in the next revision although it may happen over the longer term. Moving the tax base closer to or to the retail price is desirable from a public health point of view because applying a tax to the retailers potentially minimizes the manufacturers' ability to absorb some of the tax-induced price increase; this in turn results in consumers facing a significant and sudden price increase that would likely have a larger pro-health impact on lowering consumption. As will be seen, the current 75 percent tax rate on tobacco translates to a 35 percent price increase in the retail price, whereas public health practitioners would like to see it applied at the retail point so that it translates to a 75 percent retail price increase. However, industry opposition exists to this structural proposal. An additional concern for the finance ministry is that there are many thousands of retailers and much variation in retail prices as compared to the relatively few manufacturers and importers. This means there would be variation in tax revenue as well, which is undesirable from a planning perspective.

**Tobacco taxes:** Vietnam applies a uniform tax across all tobacco product categories. The uniform tax mechanism was recommended by the World Health Organization (WHO) as being easier for tax administration. This uniform tax was first introduced in the revised excise tax law 2005 [Law 57/2005/QH11] and remains unchanged. Before that, as stipulated in Law 08/2003/QH11 on revised excise tax, Vietnam had a multi-tier system with the lowest tax rate of 25 percent for non-filtered

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<sup>4</sup> A CIF is an international shipping agreement that represents the charges paid by a seller to cover the costs, insurance, and freight of a buyer's order while the cargo is in transit.

cigarettes, 45 percent for filtered cigarettes produced from domestic materials, and 65 percent for filtered cigarettes produced from imported materials.

**Alcoholic taxes:** For alcoholic beverages, there is a tiered system with different tax rates across product categories. The highest tax rate of 65 percent is applied to beers and alcoholic beverages with the alcohol by volume (ABV) above 20 percent, while a lower tax rate of 35 percent is applied to alcoholic beverages with ABV lower than 20 percent. This structure was introduced in the 2014 tax law revision; prior to that, there had been more tiers and rate variation.

### 3.4 RECENT EXCISE TAX RATE INCREASES

In the last 15 years, Vietnam has revised the excise tax law and rates several times, at varying, non-regular intervals. After the increase in 2008, it was not until 2016 that the excise tax rate for tobacco and alcoholic drinks was increased again. According to the law of 2014, taxes on both tobacco and alcoholic drinks were to have increased again between 2016 and 2019. Nor were there increases in 2020 or 2021, even though a draft proposal for these increases was released in 2017. Many complications, due to the tax law's design, industry interference, the COVID-19 pandemic, and the fact that 2021 was an election year, all have resulted in approval delays. Table I summarizes recent tax changes for tobacco and alcohol.

**Table I. Current Excise Tax Rates Applied to Tobacco and Alcoholic Beverages**

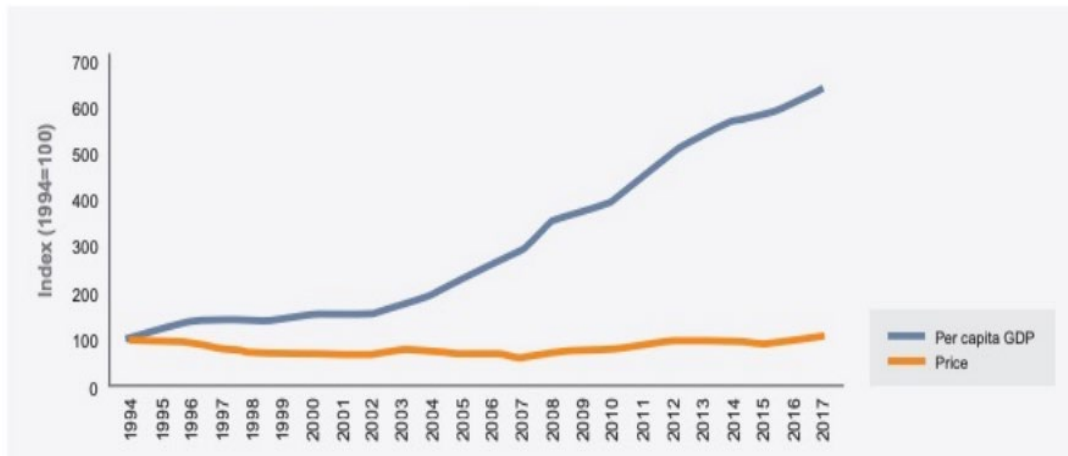
Products	Excise Tax (Ad valorem)
<b>Cigarettes, Cigars, and Other Products from Tobacco Plants</b>	
Jan 2016 – Dec 2018	70%
Jan 2019	75%
<b>Alcohol</b>	
<b>ABV &gt; 20%</b>	
Jan 2016 – Dec 2016	55%
Jan 2017 – Dec 2017	60%
Jan 2018	65%
<b>ABV &lt;20%</b>	
Jan 2016 – Dec 2017	30%
Jan 2018	35%
<b>Beer</b>	
Jan 2016 – Dec 2016	55%
Jan 2017 – Dec 2017	60%
Jan 2018	65%

The level of pro-health excise tax rate increases has also not been large enough to reduce consumption to a desirable target from the public health perspective. For example, recent tax rate increases on cigarettes have not been enough to reduce the tobacco consumption prevalence as required to reach the national target in 2020, set by the Prime Minister. As will be seen in Figure 1 and Figure 2 below, both tobacco and alcoholic drinks are becoming more affordable regardless of tax increase. Inflation-adjusted prices do not have a sustained increasing trend, while real per capita wages and income have significantly increased. Those products, therefore, are becoming relatively cheaper to Vietnamese consumers, creating scope for tax increases.

### 3.5 PRICE TRENDS FOR CIGARETTES AND ALCOHOL

Figure 1 shows that cigarettes are becoming more affordable in Vietnam since the 1990s given the growth in income.

**Figure 1. Cigarettes are Becoming More and More Affordable in Vietnam**

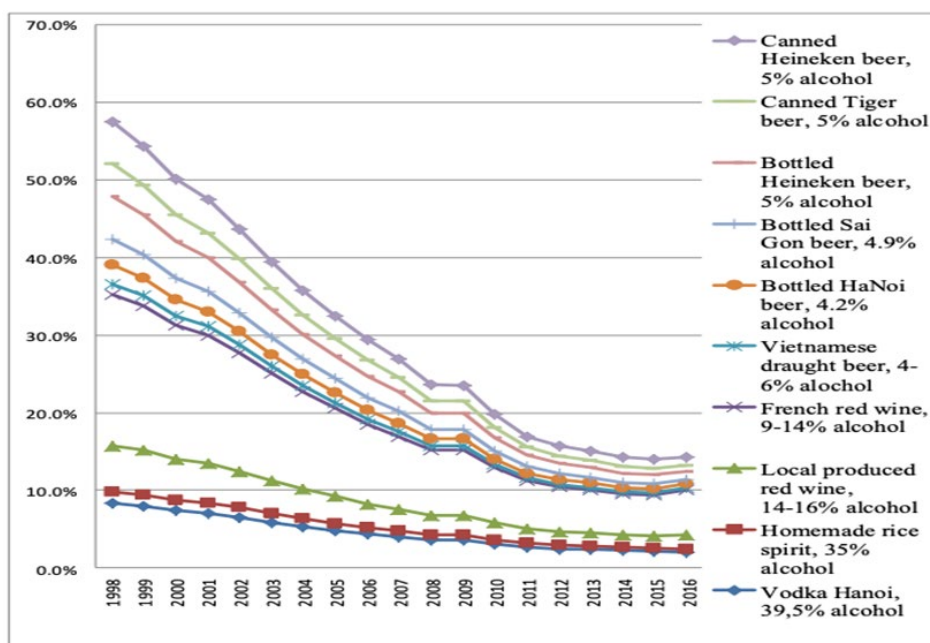


Sources: Data from Economic Intelligence Unit and World Bank Development Indicators. Graph from Blecher et al. (2019).

While the price index of tobacco products is relatively unchanged over the years, the gross domestic product (GDP) per capita index has been increasing and widening the gap with price. Vietnamese can afford to buy a larger number or more expensive cigarettes with their increased income.

A similar case is seen with alcoholic beverages in Figure 2. The vertical axis represents the percentage of monthly GDP per capita needed to buy 10 liters of alcoholic beverages. The downward sloping lines show that all alcoholic beverages have become more affordable over time.

**Figure 2. Change Over Time in Proportion of Monthly Per Capita GDP Required to Buy 10 Liters of Alcoholic Beverages**



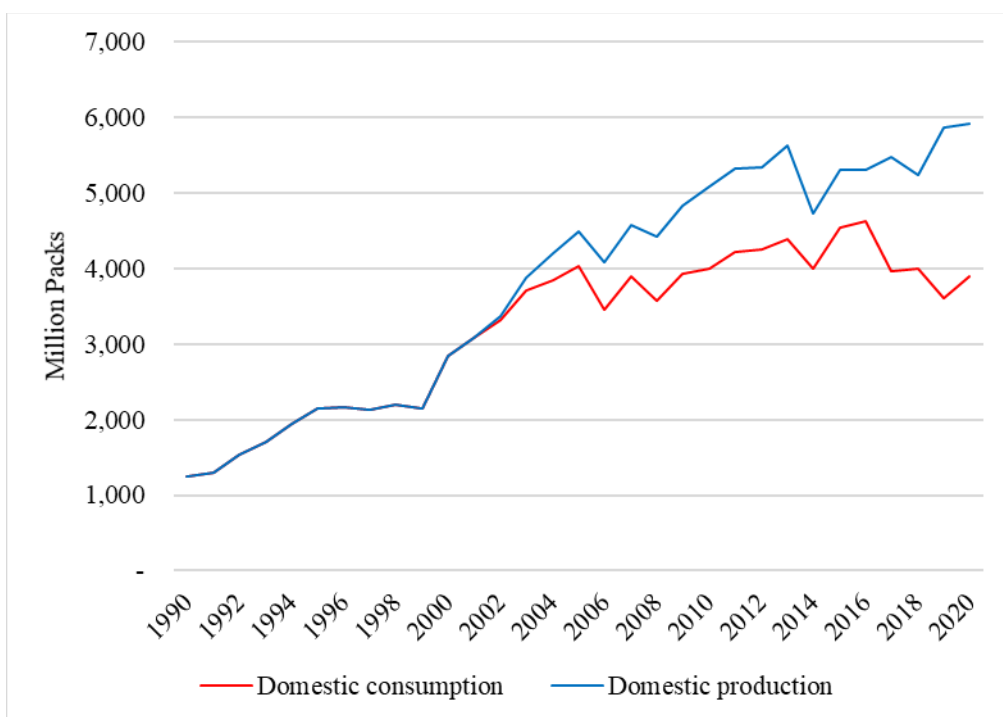
Source: Anh and Thu (2017).

In particular, it should be observed that the largest increases in affordability have occurred for beer relative to locally produced spirits with ABV <20 percent, especially for premium imported beers like Heineken. This observation and subsequent revenue potential may explain the decision to tax beer at the same rate as spirits despite the lower levels of ABV.

### 3.6 CONSUMPTION TRENDS FOR ALCOHOL, TOBACCO AND SSB

With prices beginning low relative to income and becoming more so over time, tobacco, alcohol, and SSB consumption have generally increased over the past decade. Figure 3 presents the trends in domestic production and consumption of cigarettes in Vietnam. The red line shows that cigarette consumption increased over the years and has been falling only since 2016. Still, consumption remains high at nearly 4,000 million packs per year, or 80 billion sticks of cigarettes. The tax rates on cigarettes were increased in 2006, 2008, 2016, and 2019, which is reflected in slight dips in consumption and production, but these have been temporary.

**Figure 3. Tobacco Consumption and Production Trends, 1990–2020**

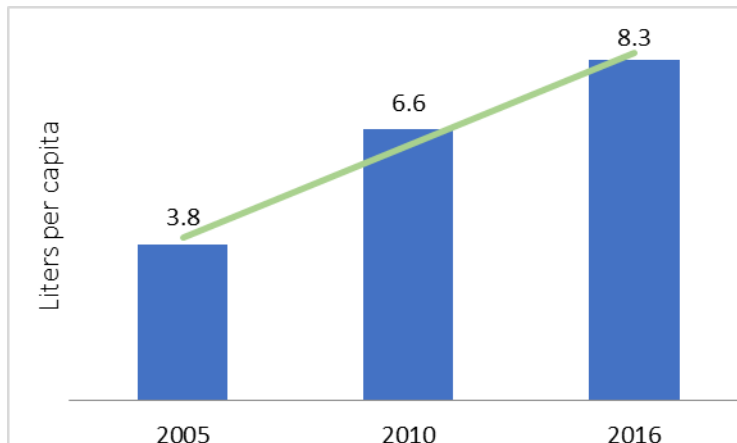


Source: Ministry of Trade and Industry, personal communication with author

The dip in 2014 coincided with the introduction of graphic health warnings on tobacco packs, but as Figure 3 shows, this dip also was temporary, and consumption picked up the year after. It should be noted that domestic tobacco production tracked with consumption up until 2018 but has diverged since 2017, continuing to increase despite the three-year fall in consumption.

Figure 4 presents the increased consumption in alcohol between 2005 and 2016 in liters of pure alcohol per capita (<15 years old) per year in Vietnam. In 2016, a Vietnamese person consumed an average of 8.3 liters of pure alcohol, up from 3.8 liters in 2005 and 6.6 liters in 2010.

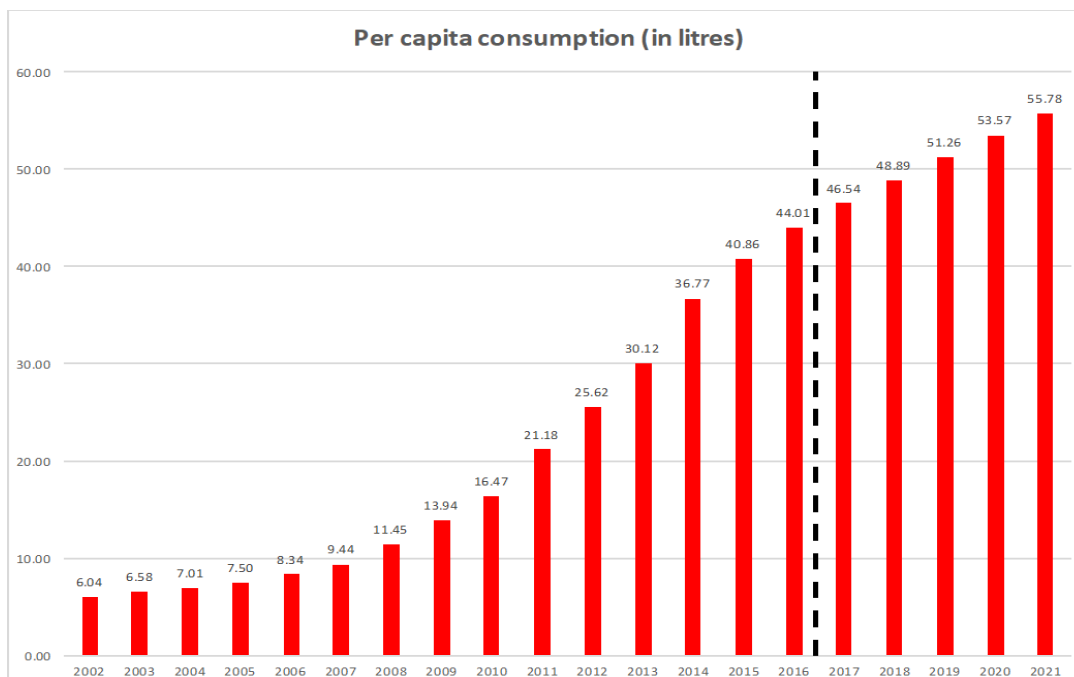
**Figure 4. Alcohol Consumption Trend, 2005–2016  
(liters per capita, 15 years of age and above)**



Source: WHO (2021).

Figure 5 shows the increased consumption trend for SSBs between 2002 and 2021. Data from 2002 to 2016 are actual data, while the data from 2017 through 2021 (after the dotted line) are estimates. It can be seen that the per capita consumption has been steadily increasing.

**Figure 5. SSB Consumption Trend, 2002–2021**



Source: Soft Drinks in Vietnam Report, Euromonitor International, March 2019.

### 3.7 HOW MUCH REVENUE DO PRO-HEALTH EXCISE TAXES CURRENTLY RAISE?

The current excise tax contribution to the state budget from tobacco and alcohol products is significant. Tobacco products currently contribute about VND 14 trillion per year (US\$ 610 million) according to the Vietnam Tobacco Association, while alcohol contributes VND 48 trillion (US\$ 2 billion) according to the Vietnam Association of Beer, Wine and Beverage. The revenue from these two products makes up

approximately 40 percent of all the excise tax revenue, and account for approximately 4 percent of the total state budget revenue,<sup>5</sup> a substantial sum. From a societal perspective, the revenue from tobacco, while significant, is inadequate when compared with the total economic costs of smoking. Anh et al estimated that the total economic cost of smoking in 2011, including the indirect costs of inpatient and outpatient care, and the indirect costs from productivity loss, VND 24.7 trillion (US\$ 1 billion), much higher than the tax revenue from tobacco (Anh et al 2016, Lane and Bhardwaj 2021).

There is currently no earmarked use for the revenue from pro-health excise taxes – they are rolled into the total state budget, which is then allocated across sectors. The health sector allocation has been 9.3 percent on average over the past decade (Teo et al. 2019). According to the WHO's Global Health Expenditure Database, domestic general government health expenditure has grown from VND 104 trillion (US\$ 4.5 billion) in 2016 to VND 174 trillion (US\$ 7.6 billion) in 2019 (WHO, n.d.). The impact of increases in pro-health excise taxes on the health budget would depend on the priority given to health in subsequent allocations, but there is clearly potential for increased State budget revenue to add to funding for health.

## 4. SCENARIOS FOR INCREASING REVENUE FROM PRO-HEALTH TAXES

The purpose of this section is to estimate how different tax scenarios can affect government revenue. As mentioned in the background, since 2017, the Ministry of Finance has been proposing increases in the excise tax for tobacco and alcoholic products and introducing SSB into the excise-taxable objects. The Ministry of Health has proposed other options also supported by guidance from the WHO and HealthBridge Canada. This section looks at different options put forth by different stakeholders and estimates the potential revenue gain.

### 4.1 METHODOLOGY

The report presents results estimated by the WHO Tobacco Tax Simulation Model (TaXSiM) using economic data from the Ministry of Finance for three scenarios of increasing tax rates and modified structures across tobacco, alcohol, and SSB goods.

### 4.2 THE TAXSiM TOOL

This study uses the WHO's TaxSiM that has been adopted by several countries to estimate the impact of tobacco tax increase (WHO 2018). Although the model was designed to estimate consumption and revenue for tobacco taxes, it has been used more broadly. For example, the Pan American Health Organization has used the model to estimate tobacco and alcohol taxes across CARICOM countries (La Foucade et al. 2018). In Vietnam, the model has been applied to tobacco products since 2016 and to alcoholic beverages since 2017. For the purpose of this study, the TaxSiM model was modified to estimate the impact of the application of excise tax on SSBs that are similar to alcoholic beverages in terms of being categorized by unit volume.

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5 Author's own calculation from excise tax revenues reported by the Vietnamese Tobacco Association and Vietnam Association of Beer, Wine and Beverage, and total tax revenue reported by the Ministry of Finance.

## 4.2.1 ESTIMATION APPROACH

To estimate the impact of an excise tax increase on revenue generation, the following process was used.

### Step 1. Estimate the potential impact on consumption

For each product (tobacco, alcoholic beverages, and SSBs), with each tax increase scenario, a simulation model was used to estimate an increase in real retail price. Depending on the availability of data, prices for each brand (in the case of cigarettes) or averages across brands (alcoholic drinks and SSB) were used.

- For tobacco, data were available for every brand with different price ranges.
- For alcoholic drinks, the products are disaggregated into three categories: beer, alcohol with ABV <20 percent, and alcohol with ABV >20 percent. These categories are in line with the different tiers of tax rates, but in practice the categories also have different price ranges.
- For SSBs, data were also available for three categories: carbonated drinks, drinks with fruit or tea flavor, and, finally, energy and supplemental drinks.

Experience from other countries show that prices do not always rise by the full amount of the tax if manufacturers choose to absorb part of the tax. Therefore the assumption that the full amount of the tax is passed on will over estimate the amount of revenue raised.

From estimated price increase (real/inflation adjusted), changes in consumption will be estimated considering two effects:

- Price effect:  $\text{change in consumption} = \text{change in real price} * \text{price elasticity of demand}$
- Income effect:  $\text{change in consumption} = \text{change in real income} * \text{income elasticity of demand}$

These effects will give:

- $\text{New consumption} = \text{baseline consumption} + \text{price-induced change in consumption} + \text{income-induced change in consumption}$

### Step 2. Estimate the potential impact on tax revenue

The potential tax increase is then estimated as follows:

- $\text{Change in tax revenue} = (\text{new tax per unit} * \text{new consumption}) - (\text{previous tax per unit} * \text{previous consumption})$

Note that tax per unit includes the excise tax and the VAT.

## 4.2.2 DATA SOURCES

Data for the study are collected from several sources.

- Baseline data on consumption

Data on consumption (measured by sales) were taken from different sources and had different levels of detail.

- Tobacco products: the Vietnam Tobacco Harm Prevention and Control Fund had complete data for all ranges of products and prices, the General Statistics Office
- Alcohol products: the Ministry of Industry and Trade's reports, the General Statistics Office, the Ministry of Finance
- SSBs products: Production and consumption data are taken from Euromonitor. At present, there is



no detailed price survey for SSBs, so the average price is used for the simulation model.

The baseline consumption data of tobacco products are shown in Table 2.

**Table 2. Baseline Data on Tobacco Product Consumption (million packs)**

Tiers	Year					
	2015	2016	2017	2018	2019	2020
Premium	288,249	285,046	278,656	285,678	280,653	284,234
Mid-range	1,838,821	1,461,009	1,323,155	1,356,065	1,266,905	1,291,584
Economy	1,811,930	2,037,244	2,096,678	2,148,360	2,103,141	2,158,360
<b>Total</b>	<b>3,939,000</b>	<b>3,783,300</b>	<b>3,698,490</b>	<b>3,790,103</b>	<b>3,650,699</b>	<b>3,734,178</b>

Sources: Summary data from General Statistics Office, Ministry of Finance, and Tobacco Harm Prevention and Control Fund.

The baseline consumption data of alcohol products are shown in Table 3.

**Table 3. Baseline Data on Alcoholic Beverage Consumption (liters)**

Type	Year					
	2015	2016	2017	2018	2019	2020
Beers	3,525,166	3,649,894	3,638,835	3,628,872	3,657,743	3,686,844
Alcohol (<20%)	3,008	2,882	2,941	2,966	3,027	3,089
Alcohol (>=20%)	63,374	64,079	64,761	65,467	66,806	68,172
<b>Total</b>	<b>3,591,547</b>	<b>3,716,855</b>	<b>3,706,537</b>	<b>3,697,305</b>	<b>3,727,576</b>	<b>3,758,105</b>

Sources: Summary data from General Statistics Office and Ministry of Finance.

The baseline consumption data of SSB products are shown in Table 4.

**Table 4. Baseline Data on Sugary Beverage Consumption (million liters)**

Type	Year		
	2018	2019	2020
Off-trade	3,725.9	4,036.2	4,361.1
On-trade	2,072.9	2,250.2	2,443.7
<b>Total</b>	<b>5,798.7</b>	<b>6,286.4</b>	<b>6,804.9</b>

Source: Soft Drinks in Vietnam Report, Euromonitor International, March 2019.

### Baseline Data on Prices

Data on prices for alcohol and tobacco were taken from the price survey provided by the General Statistics Office, which collects the data and uses them for consumer price index monitoring. The price data on tobacco products are more detailed, with actual data on the gate price (tax base) available from the Vietnam Tobacco Harm Prevention and Control Fund. This allows more depth to validate the model and estimate the retail margin, using data on tax base and retail prices. The data on the price of SSBs were calculated as averages from the Euromonitor data. Euromonitor has data on total sales by categories, and then total revenue. Therefore, the average price was then calculated as total revenue divided by total sales.

### Data on Elasticities

The price and income elasticity of demand for tobacco were taken from the WHO's TaxSiM and adjusted to suit Vietnam's price and consumption data (Eozenou and Fishburn 2001). The price and income elasticity of demand for alcoholic beverages were taken from the study of Chelwa et al. in 2018, which is based on the 2016 Vietnam Household Living Standard Survey (Chelwa et al. 2019), and the

elasticity of demand for SSBs was obtained from the study of Luong and Vu (2020), which is based on the same household survey. Data on elasticities are shown in the tables below.

Table 5 shows estimates of the price and income elasticity of demand for tobacco products. The price elasticities for the three lines of economy, mid-range, and premium products are assumed to be -0.7, -0.5, -0.3, respectively, reflecting the fact that the poorest group, who tend to buy cheaper brands, are most sensitive to price increases. Income elasticity is assumed to be 0.3 for all brands, which is consistent with that of several developing countries (Goodchild et al. 2021).

**Table 5. Data on Elasticity of Demand For Tobacco Products**

Type	Elasticity	
	Price Elasticity	Income Elasticity
Premium	-0.3	0.3
Mid-Price	-0.5	
Economy	-0.7	

Source: Eozenou and Fishburn (2001).

Table 6 shows the price and income elasticity of demand for alcoholic beverages, with alcohol products divided into three groups exactly as specified in the current excise tax law. Demand for all three products is inelastic to changes in price. The income elasticity of demand for beer is lower than that for other forms of alcohol.

**Table 6. Data on Elasticity of Demand for Alcoholic Beverages**

Type	Elasticity	
	Price Elasticity	Income Elasticity
Beer	-0.317	0.156
Alcohol (<20%)	-0.283	0.401
Alcohol (>=20%)	-0.283	0.401

Source: Chelwa et al. (2019).

Unlike tobacco and alcoholic beverages, price elasticity for SSBs is greater than 1 (Table 7), indicating that demand for this product is very responsive to changes in price. This means prices and taxes will have a greater impact on the consumption of SSBs than the other two product lines. However, the income elasticity of demand is assumed to be 0.3.

**Table 7. Data on Elasticity of Demand for Sugary Beverages**

Elasticity	
Price	Income
-1.14	0.300

Source: Luong and Vu (2020).

## Model Assumptions

The study assumes that the pass-through rate of tax increase on prices is 100 percent. That is, when the excise tax is applied, companies will include the entire amount in the selling price of products to be sold to consumers. The study also assumes that Vietnam's tax system is capable of collecting 100 percent of the tax revenue which may also lead to some overestimation of potential revenue.

For estimating future revenue, the study assumes that the consumer price index will increase at 4 percent annually and GDP per capita will also increase at 4 percent annually (given World Bank estimates of economic growth of 4.8% and Vietnam's General Statistics Office estimates of population growth of 0.8%.)

## Model Limitations

The model in this study has some limitations, as follows:

- First, these are partial, not general equilibrium models. That is, the effects of a tax increase are confined to each individual market and do not include the subsequent effects on other markets and the entire economy. However, this option is suitable for comparison of the tax increase scenarios initially proposed by the Ministry of Finance since, by definition, goods are chosen for the excise tax due to the absence of substitutes that could affect their consumption in the event of a tax-induced price change. Although the three products (tobacco, alcoholic beverages, SSB) are all included in current or future excise tax law, the proposed tax rates and structures are different. For each of the proposals, the finance ministry also provided a separate estimate of potential impacts.
- Second, the model has some limitations in terms of data, especially for SSBs. Because there is no survey on detailed prices for each product line, the average price was used for estimation.
- Third, the model is unable to look at the transfer of products from legal sources (taxed) to illegal or informal sources (untaxed). The results from the model assume that there is no increase in illegal sales after the tax rise. Therefore, the estimated (increased) tax revenue will be an underestimate if some proportion of consumers moves from the legal market to the illegal market. The final revenue can be greater if the market of illegal products is brought under better control.

## Scenario Estimation Results for Revenue from Increased Tobacco, Alcohol, and SSB Taxes

After using input data on price and income elasticity on macroeconomic forecasts, and calculating based on tax increase scenarios, estimates of budget revenue increases are shown in Tables 8–10.

### Estimated increases in budget revenue for increased tobacco excise taxes

Table 8 presents the increased tax revenue if taxes are increased above the current baseline rate of 75 percent in three scenarios. Assuming the excise tax law is submitted in 2022, the next round of tax increases will be 2023. And according to the previous practices, tax rates may be increased on a two-year basis, so the next increase will be in 2025. Three scenarios were estimated: the first one was from the Ministry of Finance’s initial proposal in 2017, and the other two were by the Ministry of Health, as follows:

- i. An ad valorem tax rate increase of 5 percentage points in 2023 and 5 percentage points in 2025
- ii. A change in tax structure to a simple mixed system consisting of an ad valorem tax maintained at the baseline rate of 75 percent and a specific tax of VND 2,000 (US\$ 0.09) per cigarette pack
- iii. A change in tax structure to an enhanced mixed system consisting of an ad valorem tax maintained at the baseline rate of 75 percent and a specific tax of VND 2,500 (US\$ 0.11) per cigarette pack for 2023, and then increased 5,000 (US \$0.22) per cigarette pack in 2025.

**Table 8. Summary of Potential Change in Consumption and Budget Revenue from Tobacco Excise Tax Increase Above 75 Percent Ad Valorem Baseline/Current, for 2023–2025**

	<b>Ad Valorem Only at Increased Rate*</b>	<b>Simple Mixed Excise System (Ad valorem + VND)</b>	<b>Enhanced Mixed Excise System (Ad valorem + VND)</b>
Rates in 2023	80%	75% + 2,000	75% + 2,500
Rates in 2025	85%	75% + 2,000	75% + 5,000
VND billion additional revenue (2023-2025)	5,149	9,821	18,031
US\$ million	225	428	786
% revenue change	27%	62%	96%
% retail price change (in 2023)	2%	18%	23%
% change in sale/consumption (2023)	1% (still increase but less than previous year)	-7.8%	-9.9%
% retail price change (2025)	2%	0%	18%

\*Source: Ministry of Finance 2017

According to Table 8, if the finance ministry increases the tax by 5 percentage points (from 75 percent to 80 percent in 2023 and then to 85 percent in 2025), the total increase in budget revenue by 2025 will be VND 5,149 billion (US\$ 225 million). With the simple mixed system, wherein a specific tax rate of VND 2,000 (US\$0.09) is applied and the ad valorem tax rate remains at 75 percent, the budget revenue can increase by VND 9,821 billion (US\$ 428 million). With the enhanced system, wherein a specific tax rate of VND 5,000 (US\$ 0.22) is applied, and the ad valorem rate remains at 75 percent, the budget can be increased by VND 18,031 billion (786 million).

Note that the rates proposed in the enhanced mixed system, proposed by the Ministry of Health, is estimated by WHO experts as being the price increase required to achieve and exceed the target of reducing smoking prevalence (in men) from the 45.3 percent (Van Minh et al) to the national target approved by the Prime Minister for 2020 of 39 percent.

Both scenarios with the mixed system show a significant amount of budget revenue increase compared to the first scenario with only a 5-percentage point increase in the ad valorem rate. This is because, at the current price, a VND 2,000–5,000 specific tax per pack can increase retail prices by 20 percent to 40 percent, which is higher than an estimated 4 percent increase in retail price with 5 percentage point increase in the ad valorem rate only. The specific tax component also reduces substitution between price ranges as it closes the gap between highest- and lowest-priced cigarettes.

### **Estimated increases in budget revenue for increased alcohol excise taxes**

Table 9 shows the potential estimated additional revenue from two scenarios for alcohol taxes.

- i. An ad valorem tax rate increase of 5 percentage points in 2023 and 5 percentage points in 2025
- ii. An ad valorem tax rate increase of 10 percentage points in 2023 and 10 percentage points in 2025

**Table 9. Summary of Potential Change in Consumption and Budget Revenue from Alcohol Excise Tax Increase Above Current Baseline of 35 Percent (ABV <20%) and 65 Percent (ABV >20% and beer), for 2023–2025**

Type of Excise System under the Revised Law	Ad Valorem, Higher Rates (5 percentage point increase)*	Ad Valorem, Higher Rates (10 percentage point increase)
Rates in 2023	40%; 70%	45%; 75%
Rates in 2025	45%; 75%	55%; 85%
VND billion additional revenue (2023–2025)	7,205	11,067
US\$ million	314	483
% revenue change	11%	17%
% real retail price increase (2023)	3.3%	6.6%
% change in sale/consumption (2023)	-0.23%	-1.27%
% real retail price increase (2025)	3.2%	6.2%
% change in sale/consumption (2025)	-0.20%	-1.15%

\*Source: Ministry of Finance 2017

Table 9 shows the increase in tax revenue when tax increases of 5 percentage points (Ministry of Finance proposal) and 10 percentage points are applied to alcohol products. Estimates show an increase in tax revenues in both scenarios. The higher the increase in the tax rate, the larger the increase in tax revenue. Specifically, if the tax rate is increased by 5 percentage points, the budget can increase by VND 7,205 billion (US\$ 314 million); if the tax rate is increased by 10 percentage points, the budget can increase by VND 11,067 billion (US\$ 483 million).

Note that for alcoholic products, the report did not estimate the option of adding an absolute tax, because it was not included in the original proposal of the Ministry of Finance. However, as pointed out in the case with the tobacco tax, the ministry should consider moving to a mixed system with a specific tax component.

### Estimated Budget Revenue from Introducing SSB Excise Taxes

Table 10 shows the increase in tax revenue when an excise tax is introduced for sugary drinks. Columns 2, 3, and 4 show increase in tax revenue in three scenarios chosen by the team. The international review of pro-health excise taxes by LHSS discusses the Mexico experience where there was a proposed specific tax that resulted in a 20% price increase, but the final legislated tax resulted in a 10% price increase. Assuming that the ad valorem tax rate is passed through to the consumer, then the scenarios below equate to the Mexican experience. The Kingdom of Saudi Arabia passed a 50% ad valorem tax on SSBs hence a third, more ambitious scenario is worth considering).

- i. An ad valorem tax rate increase to 10 percent in 2023 that is maintained in 2025
- ii. An ad valorem tax rate increase to 20 percent in 2023 that is maintained in 2025
- iii. An ad valorem tax rate increase to 40 percent in 2023 that is maintained in 2025

The higher the increase in the tax rate, the greater the increase in tax revenue up to the estimated 40 percent tax rate because the decreased consumption is compensated by the increased revenue. Specifically, if the tax rate is 10 percent, the budget can increase by VND 2,450 billion (US\$ 107 million), and if the tax rate is 20 percent, the budget can increase by VND 4,763 billion (208 million). The last column presents the most ambitious scenario of a 40 percent tax rate. With this rate, retail price of sugary drinks would increase by nearly 20 percent, and budget revenue would increase by VND 7,856 billion (US\$ 343 million).

**Table 10. Summary of Potential Change in Consumption and Budget Revenue from SSB Excise Tax, for 2023–2025**

Type of Excise System Under The Revised Law	Ad Valorem, 10%*	Ad Valorem, 20%	Ad Valorem, 40%
Rates in 2023 and 2025	10%	20%	40%
VND billion additional revenue (2023-2025)	2,450	4,763	7,856
US\$ million	107	208	343
% revenue change	NA	NA	NA
% real retail price increase (2023 and 2025)	5%	10%	20%
% change in sale/consumption (2023)	-6%	-13%	-23%

\*Source: Ministry of Finance 2017

Note that for sugary beverages, the report did not estimate a scenario adding a specific tax because the consultation with the Ministry of Finance and relevant partners showed low feasibility of this option. It is considered more feasible to introduce a new tax on an ad valorem basis, particularly given that there are many different categories of SSB that might require different levels of specific tax and that the data to set these rates are not yet available. However, the Ministry of Finance and the government could still investigate and consider the specific tax system or mixed tax system, as those two systems are considered as best practices (see LHSS 2021).

#### Simulation Analysis: How High Can Taxes Go Before Revenue Stops Raising and Starts Falling?

The results presented show proposed scenarios that are close to the rates proposed by the Ministry of Finance, Ministry of Health or WHO recommendations. It is worth considering the question of how high taxes can be raised while still increasing budget revenue – do the scenarios presented get close to the point where revenue starts to fall and might therefore be considered too risky? To answer this question, the study conducted a simulation experiment with gradual increases of tax rates for all three products starting from the existing rates presented in Table 11. As the table shows, for tobacco, beer, and alcoholic drinks with ABV >20 percent, the current tax increases are very far below the rates at which revenue begins to decrease.

**Table 11. Maximum Excise Tax Rate that can be Imposed without Reducing State Tax Revenue**

	Tobacco	Alcohol	Beer	SSB
Price elasticity of demand	-0.5	-0.283	-0.317	-1.14
Income elasticity of demand	0.3	0.401	0.156	0.3
Excise tax rate at which tax revenue starts to decrease	340%	570%	505%	76%
Excise tax rate at current time	75%	65%	65%	0%

To understand Table 11, recall that the impact on consumption includes both the increase in prices (causing decreased consumption) and the increase in income due to economic growth (causing increased consumption). The impact on revenue from increasing taxes on each product will be the net of three effects:

- Possible budget revenue decrease (reduced consumption due to tax induced price increase)
- Possible revenue increase (increase in tax rate per product item sold)

- Possible revenue increases due to increased income (increased in consumption)

In addition, it is necessary to consider that Vietnam's population is still growing at an average of 0.8 percent per year according to the General Statistics Office forecast. This growth of population contributes to industries' sales and thus can increase tax revenues.

For tobacco products, the price elasticity of demand is quite low (-0.5), so when taxes increase, the change in consumption is relatively small. In addition, the income elasticity of demand is 0.3. According to simulated calculations, the excise tax rate must increase to 340 percent before the tax revenue starts to fall. Compared to the current tax rate of 75 percent, there is still ample space for tax increases.

The situation is similar for alcoholic beverages, which also have relatively low-price elasticities of demand, even lower than tobacco products (with both beer and other alcohol at -0.3). The income elasticity of demand is quite high for alcohol but slightly lower for beer. Taking all the factors into account, the tax rates of alcohol and beer can increase as much as 570 percent and 505 percent, respectively, and tax revenue can still be higher than at the current rate. That is, the space to implement the tax increase policy is also very large.

However, for sugary drinks, the price elasticity of demand is high at -1.14. This elasticity is greater than 1, that is, any percentage in price will result in a greater percentage decrease in consumption. Therefore, taking all factors into account, the maximum tax rate that can be increased without reducing tax revenue is much lower than for tobacco and alcoholic beverages. According to calculations, the tax on sugary drinks can increase up to 76 percent. It is also important to note that this is only a calculation of tax rate per product and does not consider the effect on substitute products. As a study by Luong and Vu (2020) has shown, consumption of sugary beverages can increase consumption of alcohol, beer, tea, milk, and so forth. Among them, alcohol and beer products are subject to the excise tax and thus can increase budget revenue.

#### Discussion on Shifting Within the Same Product Line and Substitute Products

In practice, there are arguments that raising excise taxes does not necessarily reduce consumption because the products (such as tobacco, alcoholic beverages, and possibly SSBs) are addictive in nature. Therefore, when price increases, many consumers will downshift by switching to cheaper products of the same type. If downshifting happens, from a revenue perspective:

- Under a specific tax rate revenue may be unchanged or increased. A specific tax is collected by volume, alcohol content, or sugar content rather than price so changes in price only affect revenue if overall consumption changes (i.e., consumers switch away from all alcohol products or all SSBs to other untaxed products). Revenue may also be increased if a specific tax is introduced as part of a mixed system and lower retail-priced SSBs are higher in sugar content and therefore subject to more tax per unit volume than higher retail-priced SSBs.
- Under an ad valorem tax rate revenue may be reduced if the current ad valorem tax is maintained and not re-structured in such a way as to minimize the price gap between the highest- and lowest-priced goods (see tobacco tax scenario estimates for scenarios 2 and 3, where the price gap is reduced by the introduction of the specific tax).

## 5. POTENTIAL STRATEGIES FOR IMPLEMENTING CURRENT AND NEW PRO-HEALTH EXCISE TAX POLICIES

The scenario analyses in this report demonstrate the potential for increasing revenue from pro-health excise taxes in Vietnam. However, there is much work to be done to realize this potential. A companion report to this one (LHSS 2021) reviewed the experience of implementing pro-health taxes in other low- and middle-income countries. That report described best practices and implementation experiences from eight countries and identified lessons that could be applicable to Vietnam's efforts at implementing tax legislation, updating tax structure to increase revenue, and evaluating tax impact. Some of the examples are highlighted in this section.

### 5.1 STRENGTHENED TAX LEGISLATION PROCESSES

International experience with implementing pro-health taxes suggests that proponents of such taxes, whether ministries of finance or health, need to be prepared for industry opposition to the tax legislation. Vietnam's Ministry of Finance experienced this when it proposed an SSB tax in 2014. Moreover, during the COVID pandemic, industry has argued that depressed economies and reduced consumer demand make it imperative for government to lower rather than increase or introduce taxes to counter the negative economic impact of the pandemic. However, data on consumption for Vietnam do not support reduced consumption over 2020 for tobacco, alcohol, or SSBs. Rather, there have been slight increases, which underline the potential and importance of pro-health tax revenues from these sources. Consumption and manufacturing data are important evidence to use in advocating for taxes and addressing misinformation from industry.

International experience stresses the importance of connecting the pro-health tax legislation to the prevailing political priority. For example, the SSB tax legislation in Mexico had public support but was rejected by Congress in May 2013 and then passed in October when the finance ministry successfully tied the legislation to broader fiscal reforms. The legislative reform proposal was backed by politicians, civil society, and academics in a strategic coalition supported by funding from Bloomberg Philanthropy. Similar legislation failed to pass parliamentary voting in Colombia despite public support. It is theorized that the failure of the primary proponent, the Ministry of Health, to tie the legislation to political priorities led to the legislative failure. While some countries have tied tax legislation to fiscal policy, others have introduced taxes, especially SSB taxes, to reduce consumption; revenue generation is a secondary motivation. If research shows that the public in Vietnam feels strongly about improved access to health services, especially in a pandemic situation, it may be that tying tax legislation to increased financing for health is a strategy that increases the chance of successful legislation. Results from political economy analysis can be combined with revenue and consumption data to generate evidence that can be used to support advocacy for pro-health taxes and to counter industry misinformation about the potential negative impact of these taxes on the economy. Political economy analysis can also reveal champions and opposition to tax legislation, providing information on which institutions are potential coalition partners to build support for tax proposals.

The estimates in this report demonstrate that tax increases on tobacco, alcohol, and SSB could increase the State budget. If there was no change in the percentage of the total budget allocated to health expenditure, for every VND 1,000 raised from pro-health taxes, an additional VND 93 (9.3%) would be allocated to the health sector. Based on this assumption, the estimates suggest that the tax increases proposed by the Ministry of Finance could raise an extra VND 1,377 billion (US\$ 60 million) each year for the health sector and even more if any of the more ambitious scenarios are legislated.



## 5.2 IMPROVED TAX STRUCTURE

The review of best practices in the international review highlighted several aspects of tax structure that are important to get right to maximize revenue efficiently and to have a chance at successfully reducing consumption simultaneously. Vietnam has already implemented several of these, including reducing the variable tax tiers for tobacco and alcohol. But more could be done in terms of best practices. Vietnam should shift from applying ad valorem taxes only, to a mixed system that includes an ad valorem tax and introduces a specific tax. Restructuring the taxes to include a specific element would have a significant, positive impact on revenue and simultaneously increase the pro-health impact through reduced consumption of alcohol and tobacco. The introduction of a specific tax also would mitigate against manufacturers manipulating pricing structures or reporting to lower the tax base and amount of tax owed since the specific tax is based on the good's presentation, for example, volume or cigarette pack, rather than the retail price. Similarly, the specific tax will have the same value whether collected from the manufacturer or the retailer, unlike an ad valorem tax, where revenue will vary depending on the prices quoted by the manufacturer, middleman, or retailer, all of which will be different. A mixed tax structure that includes both a specific tax and an ad valorem tax may be the most effective and efficient approach, as it retains the benefits of an ad valorem tax – which mitigates the impact of inflation on tax revenues, something a specific tax does not do because its real value decreases with inflation. Tobacco taxes in the Ukraine use this approach, and it led to 14-fold increase in tax revenue equivalent to US\$1.46 billion while reducing smoking prevalence from 26 percent to 20 percent between 2007 and 2017. The restructuring of tobacco taxes was phased in over the 10-year period. In 2008 there was an existing specific tax on all tobacco products and an ad valorem tax rate. An additional minimum specific tax rate for cigarettes was introduced and subsequently increased annually. The ad valorem tax rate was decreased over the 10-year period while the existing specific tax on all tobacco products was increased. At the end of the 10 years, most of the tobacco tax revenue had switched from being derived from the ad valorem tax to coming from the two specific taxes.

An additional point to note from the Ukraine and Mexico examples mentioned above is the importance of including routine tax adjustments in the tax legislation policy to ensure that taxes increase in line with inflation and economic growth. Both countries tried to legislate that tax rates would be routinely reviewed, annually at least, and legally tied to inflation for automatic adjustments so that the real value of tax revenue does not fall as inflation rises. Mexico was partially successful – the legislation included the review, but then the review was not implemented for several years. Ukraine was unable to include this clause due to industry opposition. Its inclusion would be very important to Vietnam because, as this report demonstrates, income growth has far outstripped tax-induced price increases and made alcohol and tobacco more affordable. Automatic adjustment is also important to the specific tax component, otherwise a fixed nominal specific amount can be quickly diminished in real term, after adjusted for inflation. This presents both an opportunity for increased revenue and some mitigation against the negative health impacts of increased consumption.

## 5.3 THE IMPORTANCE OF TAX EVALUATION AND IMPACT

Evaluation and evidence of impact are critical to supporting regular tax increases in the face of industry opposition. For example, the data included in this report on consumption can be used to counter industry opposition on economic grounds and the data for revenue supports fiscal space expansion, which is attractive to legislators. Ongoing monitoring and evaluation of the impact of taxes is also important so that adjustments can be made to improve tax collection or address bottlenecks or leaks in the tax system, update elasticity estimates over long periods of time, and evaluate the pro-health impact of these taxes. Evaluation requires partnership between public health researchers, tax administrators, and finance ministry teams and resources, so it is ideal if this requirement and funding for it are included

in legislation or in finance ministry annual implementation planning to ensure that resources are available for evaluation.

## 6. CONCLUSIONS

The Government of Vietnam can raise substantial amounts of additional revenue using the tax rates and structures proposed by the Ministry of Finance for pro-health taxes on tobacco and alcohol. The tax rates currently in use are far below what is feasible to implement without causing a fall in revenue generation due to decreased consumption. This is true not only for Vietnam but for nearly all low- and middle-income countries.

In recent years tobacco excise taxes have contributed about VND 14,000 billion (US\$ 610 million) per year to the state budget and alcohol taxes about VND 48,000 billion (US\$ 2 billion) per year. Using the WHO's TaXSiM model and the Ministry of Finance's 2017 proposals, it is estimated that over the period 2023-2025, an additional VND 5,149 billion (US\$ 225 million) could be raised from adjusted taxes on tobacco and an additional VND 7,205 billion (US\$ 314 million) from adjusted taxes on alcohol. However, by adjusting the structure of the taxes to include a specific tax in addition to the current ad valorem tax, the potential additional revenue could be as high as VND 18,031 (US\$ 786 million) for tobacco. Not only would the revenue be higher, but this tax structure would also realize the pro-health intention of these taxes by lowering consumption of tobacco and alcohol. In the case of tobacco, this would lower the prevalence of smoking by 5 percentage points, down to the Prime Minister's expressed goal of 39 percent. Aligning the tax increase with this goal may be a useful strategy for the Ministries of Finance and Health to consider.

The introduction of an SSB tax could raise at least VND 2,450 billion (US\$ 107 million) in revenue over 2023–2025 according to model estimates. International experience with introducing a new pro-health tax like an SSB tax suggests several important strategies, including evidence gathering, strategic coalition building, and advocacy that the Ministry of Finance should consider implementing immediately to ensure a more successful experience with SSB tax legislation in Vietnam's National Assembly in 2023.

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