KN1. Why Health Taxes Matter: A Mechanism to Improve Health and Revenue Outcomes¹

The purpose of this note is to provide policy makers an overview of an economic framework for setting health taxes,² with a specific focus on taxing tobacco, alcoholic drinks, and sugar-sweetened beverages (SSBs). It is the first in a series of knowledge notes responding to specific questions around health taxes and key issues raised during health tax reforms.

SUMMARY

More than 11 million preventable premature deaths occur each year due to consumption of tobacco, alcohol, and diets high in sugar-sweetened beverages (SSBs). (Institute of Health Metrics, 2019).

Health taxes are excise taxes imposed on products that have a negative public health impact, and include taxes on tobacco, alcoholic drinks, and sugar-sweetened beverages (SSBs). In their own right, health taxes are one of the most cost-effective policy measures for reducing consumption of these products and associated mortality and morbidity. Relatedly, the economic framework for health taxes has three goals, and highlights their special nature: to reduce externalities related to consumption, e.g., publicly funded healthcare costs, traffic accidents, and secondhand smoke; to cut "internalities" related to individual harm, including death and disability—as well as to generate revenue to meet fiscal needs.

Health tax design and tax administration are critical to achieving positive health and revenue impact. To do so requires tax design that leverages economic principles to make good use of the special nature of health taxes, build effectively on countries' existing tax environments, and account for administrative capacities.

Countries can support both health and revenue outcomes through targeted actions that include diagnostics, modeling, strategy and systems development, monitoring and evaluation, and capacity enhancement.

HEALTH TAXES, AFFORDABILITY, AND HEALTH OUTCOMES

More than 11 million preventable premature deaths occur each year from consumption of tobacco, alcohol, and diets high in sugar-sweetened beverages (SSBs), with approximately 80 percent occurring in low- and middle-income countries (LMICs) (Institute of Health Metrics 2019). Between 1990 and 2019, the share of these deaths as a percentage of total deaths in low- and middle-income countries has risen (Figure 1). Similar shares and upward trends are observed for disability adjusted life years (DALYs), a broader measure of the overall disease burden expressed as the number of years lost due to disability or early death. (DALYs related to tobacco are lower than for alcohol and SSBs, as death and disability due to tobacco occur later in life.) However, measured, tobacco, alcohol and SSB consumption reduce productive years lived, deplete human capital, and reduce economic prosperity.

Along with upward trends in mortality and morbidity, trends in sales volumes of harmful products coincide closely with trends in affordability for each of the three product areas. Affordability is defined as the percent of a country's GDP per capita required to purchase a fixed amount of product, e.g., 100 packs of the most-sold brand of cigarettes. The higher the percentage, the less affordable the product.³

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^{2.} Health taxes are excise taxes imposed on products that have a negative public health impact, e.g., taxes on tobacco, alcohol, sugar-sweetened beverages. The term health taxes almost always refers to excise taxes. Uniform health taxes, like VAT or sales taxes, are not health taxes since they do not change relative prices and reduce consumption through increased cessation, reduced initiation, and intensity of use. Differentiated indirect taxes may function somewhat like excises, although they are not viewed as good practice for administrative reasons. Import tariffs are also not considered health taxes since they influence where something is produced rather than where it is consumed.

^{3.} World Health Organization, Global Health Observatory, "Tobacco Affordability" (World Health Organization, Geneva); https://www.who.int/data/gho/indicator-metadata-registry/imr-details/4613 (accessed December 7, 2022).

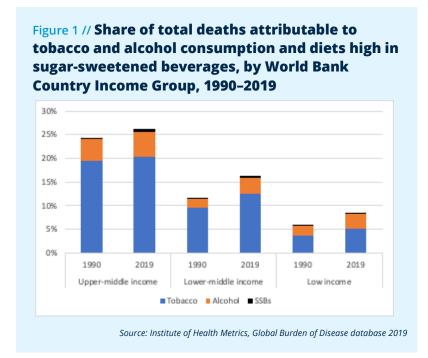
Since 2010, increased prices have resulted in cigarettes becoming less affordable in the majority of LMICs (after a period of increased affordability), and sales have declined every year since 2014. The decrease in affordability has been ascribed to improvements in tobacco tax policy, including several high-profile successes (Blecher 2020)

In contrast to cigarettes, between 1990 and 2016, alcohol (proxied by beer) and SSBs have become more affordable in most countries (Blecher et al. 2018; Blecher et al. 2017). In low- and middle-income countries, sales volumes of beer, spirits, and wine increased dramatically between 2006 and 2019, by 39 percent, 35 percent, and 28 percent, respectively, and SSB sales

volumes rose by 31 percent (Euromonitor database 2020).

WHY HEALTH TAXES? AN **ECONOMIC FRAMEWORK**

Health taxes are excise taxes applied to products such as tobacco, alcohol, and sugarsweetened beverages that cause healthrelated problems and generate harm to individuals as well as to society at large. Because excise taxes can be used to target specific goods and services, they differ from other types of indirect taxes such as Value Added Tax or Goods and Services Tax. Health taxes constitute one of the most cost-effective ways to reduce consumption of unhealthy products, are convenient revenue generators that can be tapped relatively easily in times of need, while sustainably broadening tax bases. To this end, both fiscal and health



considerations become relevant. There are three principal rationales for health taxes: correcting for negative externalities, responding to internalities, and using their revenue raising efficiency.

Externalities.

Excises can be viewed as charges for costs that consumers impose on others, that is, negative externalities. A tax applied to correct for a negative externality is termed a Pigouvian (or Pigovian) tax (Pigou 1920). A well-known externality of smoking is secondhand smoke, which has well-established health consequences for people exposed in the workplace, such as restaurant and hospitality workers, or in the home, such as children (Centers for Disease Control and Prevention 2022).

Alcohol generates a wide range of negative externalities, including a large burden of injuries and deaths resulting from violence and risky behaviors; these include crime, domestic violence, drunk driving, and fetal alcohol syndrome due to drinking during pregnancy. A review of 50 studies examining the impact of alcohol taxes and prices on various harms caused by alcohol concluded that doubling alcohol taxes was associated with an average reduction of 35 percent in alcohol-related mortality, an 11 percent reduction in traffic crash deaths, a 6 percent reduction in sexually transmitted diseases, a 2 percent reduction in violence, and a 1.2 percent reduction in crime (Wagenaar, Tobler, and Komro 2010).

The health costs of treating alcohol, tobacco, and SSB-related diseases are born by society at large through risk pooling in health insurance or publicly financed healthcare (See below for total costs of consumption for each product). Risk pooling also generates moral hazard, since consumers who do not have to bear additional healthcare costs themselves may consume more of these products.

Internalities.

A further justification for using excises to reduce alcohol, tobacco, and SSB consumption comes from internalities: consumers face challenges of self-control and time-inconsistency and can under weigh future health costs, which leads them to fail to act in their own best interest (Gruber and Köszegi 2001). Complementary findings have shown that SSB consumption is higher among consumers who are less informed about nutrition and who profess to have less self-control (Allcott, Lockwood, and Taubinsky 2019a).

The analysis of internalities has improved the case for alcohol and tobacco taxes and provided justification for SSB taxes. Research shows that health taxes should not focus only on externalities, but should also address internalities (Gruber and Köszegi 2008); they estimate that tobacco taxes in the United States should be nearly doubled to account for internalities. Similarly, a growing body of evidence is making a convincing case for taxing SSBs to correct for market failures arising from internalities, with an estimated socially optimal SSB tax in the United States of between 34 and 71 US cents per liter (Allcott, Lockwood, and Taubinsky 2019b).

Many global and country studies have taken a broader approach in estimating the economic cost of consumption by including both externalities and internalities. These approaches combine direct costs, such as medical care and policing (for alcohol), with indirect costs from loss of productive workers due to death and disability. At the global level, these estimates suggest the following:

- The total economic cost for health expenditures and productivity losses due to diseases attributable to smoking, including cancers and heart diseases, is estimated to be equivalent to 1.8 percent of GDP in 2012 based on estimates for all countries (Goodchild, Nargis, and d'Espaignet 2018).
- Annual economic costs in middle- and high-income countries from alcohol consumption, including liver disease, cancers, and road traffic accidents, are estimated to be over 1 percent of GDP in 2009 (Rehm et al. 2009).
- Sugary beverage consumption is one factor contributing to obesity, which has estimated annual economic costs of US\$2 trillion (about 2 percent of global GDP), as well as to diabetes, which in 2019 had costs for healthcare alone of US\$760 billion (2019) (International Diabetes Foundation 2021).

These estimates of the costs attributable to externalities and internalities are significantly higher than revenues from health taxes. Using a sample of 25 large middle- and high-income economies, accounting for three-quarters of global GDP, the economic costs of premature death and disability from tobacco, alcohol, and SSB consumption—excluding direct medical costs—are calculated to be higher, and often significantly higher, than health tax revenues in all 25 countries in the sample (Lane and Bhardwaj 2021).

Revenue raising.

The need for efficient revenue raisers has contributed to the widespread introduction of targeted alcohol and tobacco taxes in most countries in the world, including developing countries. In 2020, 168 countries had excises on tobacco (World Health Organization 2021a); in 2016, 155 countries had excises on beer, 154 countries had excises on spirits, and 139 countries had excises on wine (World Health Organization 2018).

While primarily used in recent years to reduce consumption, excise duties on tobacco, alcohol and SSBs (as well as on fuel) are good candidates for tax revenue purposes as they are easy to identify, sales are high, producers are often few, and- at least for tobacco, alcohol and fuel- few substitutes are equally satisfactory to consumers, so revenue tends to increase with tax increases (Chaloupka, Powell, and Warner 2019). In principle, the revenue maximizing tax rate can be calculated as a function of the share of tax in price (i.e., tax exclusive and tax inclusive prices) and the price elasticity of demand, although in practice it is difficult to estimate the consumer demand response to significant price changes (Crawford and Tanner 1995). Generally, revenues will increase if the price elasticity of demand is less than the inverse of the share of tax in price or, more broadly, tax revenue increases resulting from tax rate increases are more likely if the initial tax share is low and consumer demand is not highly sensitive to price.

As a result, excises are frequently used by countries seeking to raise revenue: an IMF study of 55 episodes in developing countries where tax revenues increased by at least 0.5 percent of GDP per year over three years found that increases in excise taxes were the most common tax policy instrument, accounting for one-quarter of all tax policy actions (Akitoby et al. 2018).

For some countries, health taxes remain an important source of revenue: tobacco taxes in Indonesia accounted for 10.6 percent of total revenue and 1.1 percent of GDP in 2020 (Ross 2021); the Philippines raised tobacco and alcohol revenues from 3.4 percent to 6.4 percent of total revenue between 2012 and 2019;⁴ and tobacco excises contributed 4 percent of fiscal revenues in China in 2016 (Goodchild and Zheng 2018). The revenue-raising efficiency rationale for excises on SSBs is weaker as these products do have close substitutes (e.g., water), and sales value is lower in most countries than for alcohol and tobacco. Existing SSB taxes have been shown to raise between 0.1-.16 percent of GDP in revenue and up to 0.5 percent of total revenue (Lane, Glassman, and Smitham 2021; Petit et al 2021).

^{4.} Computation using OECD revenue data and World Development Indicators for GDP (accessed November 2022).

HEALTH TAX DESIGN

The success of health taxes in bringing about expected benefits—including health improvements through reduced consumption—does not depend solely on rates. Among other things, it depends on how the taxes are designed, specifically, on the type and structure of the tax, including the base to which it is applied. Possibilities include the following:

- The type of tax used can be (a) a *specific* tax with a fixed value by some standard of weight, volume, or measurement (e.g., pesos per unit, per fluid ounce, or per ounce of added sugar content); (b) an *ad valorem* tax, that is, a percentage of the product value at a certain stage of the production and distribution chain (e.g., factory gate, wholesale, or retail price); or (c) a *hybrid or mixed* excise that combines specific and ad-valorem rates (e.g., pesos per unit plus a percentage of the retail price). Ad valorem taxes can also apply a specific tax floor (e.g., a percentage of the retail price subject to a minimum of *x* pesos per unit).
- The structure of the tax can be either (a) *uniform*, applying the same tax per unit of product, independent of product characteristics such as prices or packaging; or (b) *tiered*, applying a different tax per unit depending on product characteristics such as alcohol or sugar content, product price, domestic content, etc.

The economic framework can be used as a guide to the optimal tax design, including tax structures and bases. A consensus sees specific taxes as preferable to ad valorem taxes for all products, from both the public health and the fiscal perspective. This is also evidenced by the growing prevalence of specific and mixed systems favoring specific taxes (on cigarettes) globally (World Health Organization 2021a).

From the *public health perspective*, specific taxes can target the health-harming attributes of a product, e.g., ethanol or sugar, better than an ad valorem tax; specific taxes are therefore more effective at reducing externalities and internalities that are a function of the quantity of goods consumed. Specific taxes are, in general, more reliable revenue generators than ad valorem taxes, provided they are regularly adjusted or indexed to incomes or prices to prevent inflation erosion to counter political inertia that may arise. Strategies to reduce the affordability of products include adopting an "accelerator" policy that raises specific taxes by inflation plus an additional percentage amount each year. (See World Bank Global Tax Program Health Tax Knowledge Note 2 on Health Taxes and Inflation for additional country examples of indexation policies.)

From the *fiscal perspective*, ad valorem taxes incentivize producers to lower prices, potentially as one way to lower their tax liabilities. However, the approach also results in a wider variation in prices than with specific taxes providing that products can be differentiated, i.e. are not homogeneous, incentivizing consumers to trade down when taxes increase, which reduces the impact of the tax increase on overall consumption. Further, producers may cut costs to remain competitive, reducing quality and diversity, as is seen in markets that rely strictly on ad valorem (Keen 1998). Ad valorem taxes are also more difficult to collect due to the difficulties of establishing taxable value at the stage of production at which the excise should be levied, whereas specific taxes are based on physical count, volume, or health-harming content (Thuronyi 1996).

This does not preclude an effective use of *mixed or hybrid systems*, which can also be a good practice when the specific component is the larger component. This may result from excise tax reforms that shift away from a tax structure based only on ad valorem taxes so that excise changes do not result in large tax and price declines on high-price products.

A growing body of evidence indicates positive impacts of health taxes on poverty and welfare. Understanding the distributional and equity implications of increased taxes on tobacco, alcohol, and SSBs can inform whether future health and welfare outcomes will accrue.

Contrary to a common critique of health taxes, empirical studies in a variety of LMICs show that increasing tobacco and SSB taxes are likely to result in progressive, rather than regressive outcomes, once behavioral responses to price shocks are accounted for, as poorer households reduce consumption of these products relatively more as prices rise. Moreover, other medium- and long-term benefits from reducing consumption of these products are often overlooked. Accounting for these benefits, such as reduced medical bills and additional years of productive life, can increase household welfare and offset the short-term negative price shocks on household budgets of raising taxes. Overall, empirical applications of this more comprehensive view of costs and benefits consistently find that the effects of raising taxes on these products are progressive and increase welfare (Fuchs, Paz, and Paula 2019; Fuchs, Mandeville, and Alonso-Soria 2020; Fuchs and Icaza 2021).

Country circumstances (burden of disease, consumption patterns, strength of tax administration and enforcement) are also important factors in tax design. Further, design considerations vary across products, which we consider in the following subsections.

TOBACCO

Raising taxes on tobacco is the most cost-effective policy to reduce tobacco use (U.S. National Cancer Institute and World Health Organization 2016). The externalities and internalities from tobacco consumption relate to the number of cigarettes (or other tobacco products) consumed and do not significantly vary by price or product characteristics (e.g., packaging, filters, length). These conditions favor using uniform specific taxes, meaning that each cigarette carries the same value of tax as it generates the same externalities and internalities. (See Box 1 for a country example of specific tobacco taxes.) However, it does not preclude mixed or hybrid systems as also being a good practice when the specific component is the larger component. The World Health Organization recommends making excise taxes account for at least a 70 percent share of the retail price of tobacco products (and all taxes at least 75 percent of retail price) (World Health Organization 2021b).

Box 1 // Specific tobacco taxes in South Africa

South Africa has a uniform specific tax on cigarettes and has consistently increase the tax rate since the early 1990s. Between 1990 and 2019, real excise taxes per pack rose sevenfold, inflation-adjusted excise tax revenues increased by 203 percent, and real retail prices rose by 251 percent. Sales fell by 60 percent in the same period.

The decline in sales has been associated with a decline in adult smoking prevalence, from 32 percent in the early-1990s (Walbeek 2002) to 18 percent in 2012 (Reddy et al. 2015). Between 1990 and 2019, tobacco's contribution to all-cause mortality declined from 13 percent to 8 percent of all deaths (and from 8 percent to 5 percent of all disability adjusted life years lost (Institute for Health Metrics 2019).



Figure 1.1 // Tobacco taxes, prices, and consumption in South Africa, 1961-2019

(van Walbeek 2020)

ALCOHOL

The complexity of the alcohol market and of alcohol-related harm presents many challenges in terms of health tax policy design; further influenced by domestic context and other factors, no single best practice, as for tobacco, has emerged. The complexities include the following:

- The alcohol market is more highly differentiated than tobacco, with large variations in alcohol content and price between beer, wine, and spirits.
- Alcohol consumption has two different dimensions affecting health: the average volume of alcohol consumed and patterns of consumption, especially heavy or binge drinking (Rehm et al. 2009). These are not necessarily impacted by taxes in the same manner (Nelson 2015), although recent research demonstrates that heavy drinkers react to higher taxes in the same fashion as do other drinkers (Saffer, Gehrsitz, and Grossman 2022).
- Worldwide, about one-quarter of alcohol consumption is unrecorded. Although unrecorded consumption does
 not automatically increase with higher taxation, potential increases in the level of unrecorded alcohol
 consumption and mitigating measures should be considered when planning and implementing substantial

increases in alcohol taxation (Rehm et al. 2022). Mitigating measures can include strengthening tax laws, strengthening enforcement activities, and raising penalties for illicit production (Sornpaisan et al. 2017).

If the externalities and internalities of alcohol consumption are directly related to the volume of consumption of alcohol (ethanol) then alcoholic beverages with higher alcohol content should be taxed more than beverages with lower alcohol content. This is achieved by making the alcohol content the base for the specific tax (e.g., peso/ethanol volume/drink volume) or creating alcohol content tiers, with the tax rising as alcohol content rises.

Internalities and externalities, however, may vary across individuals. With a specific tax based on alcohol content, lowercontent alcohol products become cheaper than higher-alcohol products for a given volume, raising concerns that the tax may encourage increased youth drinking, including greater initiation and experimentation, and may also increase access to other vulnerable populations (including those with alcohol use disorders) or encourage binge drinking (Sornpaisan et al. 2017).

Rather than vary taxes across individuals, which would be impractical, countries may adopt uniform specific taxes with tax floors to discourage consumption of very cheap alcohol products, minimum unit pricing (MUP), or hybrid systems; Thailand, for example, sets alcohol excises as the higher of specific and ad valorem taxes, which is equivalent to an ad valorem tax with a specific floor. This approach does however add additional complexity to a specific tax only regime.

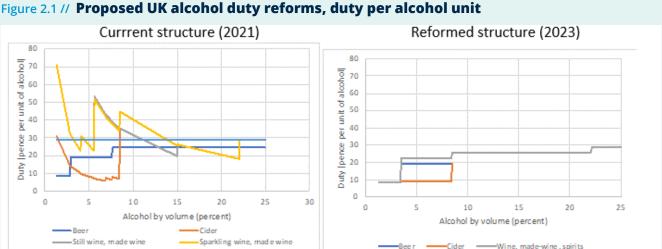
A large variation in the prices of alcohol products, combined with a large variation in alcohol harm, can result in complicated excise tax systems for alcohol, highlighting the need for alcohol tax expertise and experience when providing technical assistance to country authorities. (See Box 2.)

No international guideline exists for alcohol taxation as one does for cigarette taxation. In practice, the tax burdens vary widely. A study of 26 OECD countries found the percentage of excise taxes in average off-premise alcohol prices ranged from 5 percent in Luxembourg to 59 percent in Iceland for beer, and from 0 percent in France to 26 percent in Iceland for wine.

Box 2 // Reform of the complex system of alcohol taxation in the United Kingdom

The United Kingdom applies different tax structures and rates on beer, cider, wine, and spirits. Beer attracts a specific excise per liter of absolute alcohol, with the rate graduated in three tiers based on alcohol content; cider is taxed through a volumetric excise, i.e., not on alcohol content, with three tiers based on alcohol content and two additional tiers with volumetric taxes based on alcohol content for sparkling cider; wine has a volumetric rate, with four tiers based on alcohol content and two additional tiers with volumetric taxes based on alcohol content for sparkling wine and a single alcohol-content-based specific tax for distilled spirits.

In 2021, the UK Treasury announced a reform of the alcohol duty system, to come into effect in 2023, with the objective of making the tax structure simpler and more economically rational by eliminating distortions and arbitrary distinctions and by reducing the administrative burden on producers. The proposed system sets specific taxes in proportion to the alcohol by volume (ABV) content, replacing volume-based taxes for cider and wine. Products of the same ABV, as far as practicable, pay the same tax. The alcohol tax is progressive in that the more harmful higher ABV products pay more tax per unit of alcohol than lower ABV products.



Source: (UK Treasury 2021)

Excise taxes also vary significantly across types of spirits, e.g., ranging from 19 percent in the United States to 67 percent in Sweden for gin. The authors conclude that the tax burden on alcoholic beverages is low in OECD countries, indicating ample room in those countries for increasing alcohol excise taxes, particularly for beer and wine (Ngo et al. 2021).

SUGAR-SWEETENED BEVERAGES

Diets high in sugar contribute to overweight and obesity, which cause a wide range of illnesses, including type 2 diabetes. The WHO recommends that people limit free sugars to 10 percent of their total energy intake (World Health Organization 2015). SSBs are the main source of free sugars in many countries (e.g., 69 percent in Mexico, accounting for nearly 10 percent of total energy intake (Aburto et al. 2016)). Thus, taxing SSBs reduces consumption of the largest contributor to free sugar and targets the item that contributes most to the externalities and internalities (Allcott, Lockwood, and Taubinsky 2019b). Countries with high per capita sugar consumption and a correspondingly high burden of disease from obesity and diabetes have been leaders in introducing SSB taxes to counter rising non-communicable diseases (World Bank 2020).

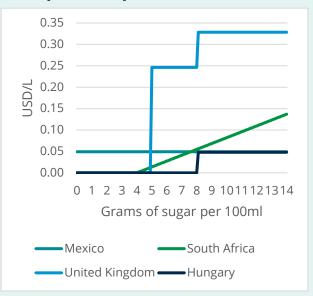
Beverages higher in sugar content are likely to result in higher externalities and internalities, and, similar to alcohol, this favors tax structures that levy a specific tax based on the grams of sugar rather than on the volume of the beverage. Novel tax designs, including thresholds and/or tiers based on sugar content, may target externalities and internalities even more directly and encourage product reformulation to lessen sugar and thus lower tax liabilities. (See Box 3.)

Box 3 // Recent experience in SSB tax design

Recent experience in the design of SSB taxes show substantial experimentation: Mexico imposes uniform specific tax on volume; Hungary has a uniform specific tax on volume with a threshold of 8g of sugar per 100ml; the United Kingdom established a tiered specific tax with a threshold of 5g of sugar per 100ml; and South Africa levies a sugar content based specific tax with a threshold of 4g of sugar per 100ml (Figure 3.1).

Different tax structures generate different incentives for firms. In the UK, evidence shows that manufacturers engaged in product reformulation to lower sugar content to reduce their tax liability (Scarborough et al. 2020). In South Africa, 18 of the top 30 most-popular taxed SSBs reduced their sugar content to below the 4g threshold to avoid their tax liability entirely and a further 9 reduced their sugar content to reduce their tax liability (Heneck 2022).

Figure 3.1 // SSB taxes, selected countries (US\$ per liter equivalent)



Source: GTP estimations.

The economic framework for health taxes supports including all sugary drinks in the SSB tax base, at least those above a minimum threshold level of sugar per volume. Some jurisdictions also apply excise taxes to sugar-free diet drinks (e.g., Philadelphia) and/or bottled water (e.g., Ethiopia). This tax base is not justified, however, as sugar-free beverages do not generate similar externalities and internalities to those of SSBs; i.e., they are not risk factors for diabetes and obesity. Conversely, some jurisdictions exclude products from the tax. South Africa, for example, excludes 100 percent fruit juice; but while this sugar occurs naturally and is not added, it is sugar nonetheless, causing the same harm by generating externalities and internalities as well (Wojcicki and Heyman 2012; Gill and Sattar 2014). Externalities caused by plastics may also be addressed in ways other than by taxing bottled water, which may reduce access to safe drinking water and thus produce other health-harming side effects. Nonetheless, even if an SSB tax covers all sugary drinks there is still a need to assess whether consumers substitute other sugary products as a result of SSB taxes.

There is no agreed benchmark for SSB taxes (as there is for tobacco taxes), in part because sugar consumption per capita varies considerably across countries, as do the externalities and internalities. Evidence to date suggests that most SSB taxes are a relatively small proportion of price (<10 percent) and that the average reduction of consumption is 15 percent (Andreyeva et al. 2022). Evaluations to date suggest that SSB consumption reductions translate to 5 to 22 kilocalories (kcals) per capita per day. These levels of reduction are insufficient to meaningfully impact health outcomes in a timely manner,

although research shows that the 10- to 20-year time horizon will produce important results (Popkin and Ng 2021). The impact of higher SSB taxes recently introduced by some members of the Gulf Cooperation Council (GCC) (50 to 100 percent) may provide additional evidence for an SSB tax benchmark.

THE LINK BETWEEN TAX POLICY AND ADMINISTRATION

If policy expectations are not aligned to the realities of the environment, they can undermine both public and administrator trust and confidence in the policy tools used, as well as provide space for industry pushback. The ease and simplicity of administration and voluntary compliance depends, to a large extent, on making quality policy choices that take into account product-specific challenges such as heterogeneity, intended versus unintended substitution, systems of assessment of the tax base, tax structures, and others. Also, governments provide critical support to excise administrations in terms of resources (budgetary, staff, and technical equipment) and defense against industry and political challenges.

The functions of making policy decisions and of administering and enforcing policies should be clearly separate. The former is typically a ministry function, and the latter is shared between customs and domestic tax administrations. However, continuous communication, dialogue, and cooperation between the two is essential and helps achieve the following:

- Excise administrations provide policy makers with vital information on emerging trends to enable informed and timely policy decisions.
- Tax implementation efforts benefit from guidance in interpreting the provisions of the law.
- Feedback on policy decisions is exchanged related to implementation realities and related costs, improving the effectiveness in achieving policy objectives.

EXCISE TAX ADMINISTRATION

Health taxes will not result in the desired health and fiscal impact if they are poorly implemented or if capacity is not available to administer them.

Tax administration challenges and responses will vary across countries, but some general considerations that apply include:

- Tax evasion and avoidance incentives are typically unusually high for alcohol and tobacco (with a high value of tax to volume). This may require excise stamp regimes, specialized track and trace systems, and bonded warehouses.
- Health tax administration can require significant regulatory expertise, including interactions with systems that deal with standards setting, measurement, and labelling.
- Producers will have incentives to lobby policy makers and tax administrators to counter tax reforms. For instance, producers might promote certain tax regimes to hurt competitors or exploit arguments around illicit trade.
- Improved data and analysis of government revenue loss resulting from tax avoidance and evasion of alcohol, tobacco, and SSBs, as well as monitoring industry lobbying practices, pricing, and marketing strategies, can help to curb counterproductive actions.
- Country reforms in tax administration demonstrate how improvements can enhance tax compliance and increase tax revenues (Box 4).

Box 4 // Tax administration reform episodes

Strengthened tax administration has helped to curb tax evasion, including illicit trade, and increase tax revenue. Examples include the following:

- Kenya adopted numerous measures on tobacco and alcohol excise taxes, including a track and trace system for domestic consumption and an excisable goods management system for exports. The system includes fiscal marks that provide greater transparency, allowing real-time authentication by the public. Furthermore, the system is sustainable, cost effective, and can be updated on an ongoing basis to respond to changing risks and challenges. It has resulted in dramatic reductions in tax evasion and increased tax revenues (Ross 2017). Nonetheless, a track and trace system is not a panacea that can address all tax administration weaknesses and success is in part reliant on vigilant enforcement in the field.
- The United Kingdom's approach to strengthening excisable goods tax administration included systematically assessing the scale of tax evasion; creating a new enforcement agency; deploying overseas intelligence officers to intercept and seize smuggled products before they enter the country; increasing criminal and civil sanctions; adding more customs officers and x-ray scanners to increase border enforcement; requiring covert markings on cigarette packs to allow authorities to authenticate products; and focusing on disrupting supply and distribution chains of illicit products. These efforts occurred while simultaneously increasing taxes on excisable products and measuring dramatic declines in illicit volumes (Blecher 2019).

As such, building the right expertise in health taxes is critical, both to support regular administrative functioning and to curb unintended outcomes such as tax evasion and avoidance (World Bank 2019). Customs and domestic taxation authorities should work in close collaboration by sharing information for risk management, audits, and enforcement purposes; undertaking joint operations where feasible; and developing administrative capacities. In any case, the administration of health taxes (typically part of the excise administration) involves additional administrative capacity beyond general direct tax administration that warrant a specialized service either within domestic tax administration itself or aligned with customs, depending on such factors as share of imports. (See Box 5.)

Box 5 // Typical building blocks of health excise tax administration

Operations

- 1. Registration and licensing of all excise operators (producers, manufacturers, importers, exporters, wholesale, transport and distribution, warehousing, and possibly retail)
- 2. Specific production and storage rules—electronic and remote surveillance of production lines; detailed and real time accounts of inventories
- 3. Tight monitoring of all movements of excisable goods among production, import, export, storage, and retail shops, allowing tracking and tracing of excisable products
- 4. Digital excise tax declarations and electronic payments of dues
- 5. Management of excise debt—system of duty suspension, time and point of taxation
- 6. Alignment of excise procedures in tax and customs

Guarantees

- 7. Financial guarantees to be provided by excise operators
- 8. Physical guarantees including excise marks, stamps, and markers applied to products/packings

Cooperative arrangements

- 9. Cooperation and joint interventions between Customs and tax administrations, as well as other government agencies, including international partners
- 10. Working with excise operators (information on laws and regulations, IT interface, taxpayer service, costs of administration, and fees for excise administration services)

Compliance

- 11. Intelligence, exchange of information, data consolidation, and analysis
- 12. Methodology and systems for managing excise administration risks—risk profiling
- 13. Post-declaration control of exemptions and differentiated rates
- 14. Excise (inland) inspection, audit, and enforcement powers of excise administration officers
- 15. Safeguards for the integrity of excise administration staff—anti-corruption measures

Remedies

- 16. Refund of excise duties
- 17. Appeals and legal remedies to disputes

ACTIONS COUNTRIES CAN TAKE TO IMPROVE HEALTH AND REVENUE OUTCOMES

The building blocks for improving health tax outcomes include (a) diagnostics and analysis, including tax administration capacity needs and broader political economy constraints; (b) modelling; (c) excise tax strategy; (d) monitoring and surveillance; and (e) capacity building. While presented individually, these areas are closely interlinked, magnify one another when used in tandem, and can be leveraged across product areas and in the realms of both policy and administration (Table 1). The Global Tax Program health tax workstream collaborates with global practices and country teams from across the Bank to provide support to countries considering reform across all areas of health taxes. To counter negative political economy considerations, such as industry lobbying, these actions generally must be complemented with public communication, stakeholder analysis, and, potentially, measures such as complementary spending on health promotion to garner the necessary support for implementing health taxes.

Table 1. // Action Matrix to Improve Health Tax Outcomes

| Building Block | Policy | Administration |
|-----------------------------------|--|--|
| Diagnostics and analysis | Assess tax structure, base and rates, trends in key metrics including prices, price distribution, affordability, volume, and revenue, including benchmarking to peer countries | Assess the impact of tax policy on administration; investigate industry structure; tax evasion and compliance with international obligations (e.g., Protocol to Eliminate Illicit Trade in Tobacco Products) |
| Modeling | Impact of tax structure, base and rate changes on prices, price distribution, volumes, tax revenues, health impact and distributional impact | Examine illicit trade, tax gap, and impact of innovative mechanisms for improving supply chain control |
| Strategy and systems development | Excise tax policy reviews or excise roadmap development that include recommendations for reform | Development of market surveillance systems, supporting implementation of supply chain control systems like track and trace systems and fiscal marks |
| Monitoring and surveillance | Surveillance of prices and revenue, and linked to data generated via effective administrative systems | Using market surveillance for price monitoring; evaluating the performance and cost effectiveness of a supply chain control systems (e.g. track and trace) |
| Capacity building | Skill building, country-to-country knowledge sharing, leveraging resources of technical assistance providers including the World Bank Group | |

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