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Health Taxes

Proposed United Nations Handbook on Health Taxes for Developing Countries
Chapter 2 – An Introduction for Policymakers: Looking at health taxes through different lenses

Summary

This note is provided to the Committee ***for discussion*** and ***final approval***.

Health taxes are excise taxes on tobacco, alcohol, sugar-sweetened beverages and other harmful products that are intended to reduce their consumption, thus improving health outcomes. Health taxes therefore directly support a number of the Sustainable Development Goals.

At its Twenty-fourth Session, the Committee approved the Subcommittee's proposed work program (E/C.18/2022/CRP.4) that would focus on producing a handbook on health taxes for developing countries. At its Twenty-seventh Session, the Committee considered a draft of *Chapter 2 – An Introduction for Policymakers: Looking at health taxes through different lenses* (E/C.18/2023/CRP.49).
This chapter presents the topic of health taxes at a high level, appropriate for ministers of finance or health. It focuses on some issues that may be viewed differently by different ministries in order to assist each ministry in understanding why their counterparts at the other ministry may be taking certain positions.

The Committee did not have any specific comments on this chapter at its Twenty-seventh Session. The text of Chapter 2 presented in this note is identical to that in E/C.18/2023/CRP.49 except for the correction of some minor typographical errors and the addition of the marked references to recent events in Section I.b.

The chapter is provided to the Committee for ***final approval*** at its Twenty-eighth Session.

Chapter 2: An Introduction for Policymakers: Looking at health taxes through different lenses

Contents

Introduction

Interest in health taxes for revenue and public health purposes is increasing. While excise taxes on products such as tobacco, alcohol, and sugar (hereinafter referred to as health taxes) have existed for a long time, they are receiving increasing attention from finance and public health experts. For the former, there is renewed interest in them as important underutilized sources of government revenues, particularly in low- and lower middle-income countries. The latter is principally motivated by them being effective tools to reduce the consumption of products associated with the rise of chronic diseases.

Although finance and public health experts may have different objectives, there is much common ground. In addition to improving health outcomes, these taxes will improve economic efficiency and inclusive growth prospects - and raise government revenues. Optimizing these benefits requires investing in tax administration capabilities as well as intra-governmental collaboration. This chapter sets the stage and introduces some important concepts discussed throughout the handbook. It is meant to be accessible for a wider audience of officials, especially within the areas of health and finance.

I. Setting the Scene

a. Mortality and morbidity linked to tobacco, alcohol and SSB consumption are on the rise in low- and middle-income countries

Consumption of tobacco, alcohol, and sugar-sweetened beverages (SSBs) are leading global risk factors for premature deaths and disability. Tobacco use is a leading cause of preventable death and is associated with increased risk of several types of cancer, heart disease, stroke, and respiratory diseases. Likewise, alcohol consumption is also a leading risk factor for death and disability and is associated with a range of negative health outcomes, including liver disease, cancer, cardiovascular disease, and mental health problems. In addition, alcohol use contributes to road traffic accidents, interpersonal violence and suicide. Excessive use of SSBs is associated with increased risk of obesity, type 2 diabetes, and other chronic diseases.

The negative health outcomes associated with alcohol, tobacco and SSB consumption are especially on the rise in low- and lower middle-income countries. Compared with rich countries, the negative health effects are currently relatively limited in low- and lower-middle income countries, see table 1. Still, if unchecked, the trends can offset the general health improvements these countries have experienced in recent decades. Consumption of these products or the conditions associated with excessive consumption are also emerging as independent risk factors for COVID-19, e.g., smoking and obesity, adding further pressure on overburdened health systems.

Table 1: Trends in Deaths and DALYs Across Country Income Groups and by risk factor as percent of deaths/DALYS from all causes

WB income group	Commodity	Deaths			DALYs		
		1990	2019	Trend	1990	2019	Trend
High-income	Tobacco	23.0%	16.9%	↓	16.5%	12.8%	↓
	Alcohol	5.7%	5.1%	↓	5.9%	5.1%	↓
	SSBs	0.6%	0.5%	↓	0.4%	0.4%	↑
Upper-middle-income	Tobacco	19.4%	20.4%	↑	11.2%	13.2%	↑
	Alcohol	4.6%	5.2%	↑	3.9%	5.0%	↑
	SSBs	0.4%	0.5%	↑	0.2%	0.3%	↑
Lower-middle-income	Tobacco	9.5%	12.5%	↑	5.0%	6.9%	↑
	Alcohol	2.0%	3.4%	↑	1.4%	2.8%	↑
	SSBs	0.2%	0.4%	↑	0.1%	0.2%	↑
Low-income	Tobacco	3.7%	5.2%	↑	1.9%	2.5%	↑
	Alcohol	2.1%	3.0%	↑	1.2%	1.9%	↑
	SSBs	0.1%	0.2%	↑	0.0%	0.1%	↑

Note: DALYs stand for disability-adjusted life-years. It is an assessment of the overall burden of disease. One DALY represents the loss of the equivalent of one year of full health[1].
Source: Global Burden of Disease Study (2019)

b. The urgent need to increase the fiscal space

The Sustainable Development Goals are not being achieved. Success is held back by severe financing constraints facing the developing countries: constraints that have been gravely aggravated by the COVID-19 pandemic and the consequences of the war in Ukraine.[2] The key to achieving the SDGs, besides preserving peace and lowering geopolitical tensions, is having a plan to finance them. This was emphasized by United Nations Secretary-General António Guterres in his briefing to the General Assembly on major priorities for 2022: "we must go into emergency mode to reform global finance" (Guterres, 2022).

The need for increased financing of the SDGs is well established.[3] The challenge is especially daunting for the poorest countries. For many low-income countries, the annual financing need amounts to 10-20 percent of GDP, a forceful reminder that achieving the SDG requires a substantial global effort. No country, and especially not poor countries with a narrow tax base and weak tax administrations, can raise that amount of revenues. The UN Sustainable Development Report 2022 pointed at six pathways for increased SDG financing, one of which is domestic tax revenues. The other pathways include borrowing from multilateral development banks, sovereign borrowing on international capital markets, ODA, philanthropic giving, and debt restructuring. The SDGs are dependent on substantial progress along all these pathways.[4]

[1] See a more detailed definition in https://www.who.int/data/gho/indicator-metadata-registry/imr-details/158 (accessed 19 April 2023).
[2] ***UN SDG progress report from September 2023 SDG Summit, available at: https://unstats.un.org/sdgs/report/2023/***
[3] See for example IMF Staff Discussion Note No. 2021/003 "A Post-Pandemic Assessment of the Sustainable Development Goals" and Note by the UNCTAD secretariat (TD/B/EFD/5/2) "Financing for development: Mobilizing sustainable development finance beyond COVID-19".
[4] ***See proposed SDG Stimulus package: https://www.un.org/sustainabledevelopment/wp-content/uploads/2023/02/SDG-Stimulus-to-Deliver-Agenda-2030.pdf***

Domestic resource mobilization is especially important for a country's development. When governments have more tax revenue, they tend to spend more on public services. An increase in government revenues has a positive effect on many SDGs and the effect is bigger in lower-income countries than in higher-income countries. In addition to directly impacting the SDGs, an increase in government revenues will also have an indirect effect through an improvement in governance. Over time, as governance improves, there will be further increases in government revenue, which will further improve governance and so on, forming an important virtuous circle (Hall and O'Hare, 2022).

Excises taxes can be an attractive source of income in low income and lower middle-income countries. Excise tax reforms can be pursued even with relatively weak institutions. One of the key reasons for this is that in comparison to other types of taxes, they are relatively simple and inexpensive to administer and enforce since excises are collected at source from a small number of manufacturers or importers.

II. Why health taxes in low income and lower middle-income countries?

a. Improving population health

Health taxes that result in higher prices change behaviour and health outcomes. It is widely accepted that the use of alcohol and tobacco duties is an effective way to reduce consumption of these products. There is also considerable evidence that high tax rates on SSBs will reduce consumption and have a positive health outcome (Wright et al., 2017). The evidence is similar for taxes targeting unhealthy foods, though there are a smaller number of studies and the taxes in question were often more complicated.

There is a high potential for health benefits in developing countries from increasing health taxes. The health costs associated with the consumption of tobacco, alcohol, SSBs are not adequately accounted for in the prices of these products, and the gaps are particularly large for low- and lower middle-income countries. For instance, by 2020, 40 countries in the world applied WHO's recommended level of taxation on tobacco products, whereby total taxes should represent 75 per cent or more of retail prices. Among these, only 15 are middle-income (out of 104 middle-income countries) and only 1 is low-income (out of 29 low-income countries). Consequently, 87 per cent of the world population lives in countries where taxes on tobacco are considered too low (World Health Organization, 2021b).[5] Increasing retail prices through taxation for tobacco, alcohol and SSBs will result in significant gains in life years for both developing and developed countries.

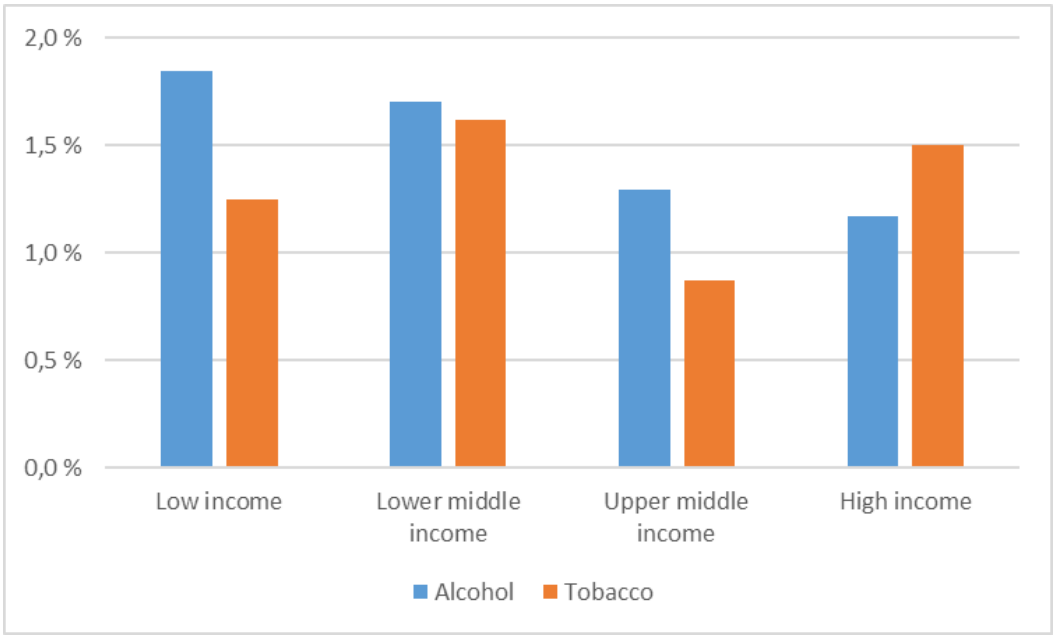
Health taxes work best if implemented as part of a comprehensive intervention package. Political economy may also limit the feasibility of how much health benefits can be achieved by health taxes alone. Studies of health benefits and revenue potential, especially on SSBs are quite often model-based and not real-world evaluations. The models typically assume a significant increase in the retail price, associated with a substantially higher tax increase than most tax increases that have been implemented even in high-income countries. Such significant increases may be politically challenging to implement. A gradual increase can be one option if excises taxes are unpopular among the public, although that may reduce the health effect. Acknowledging this trade-off, maximum impact requires health taxes to be implemented alongside complementary measures such as public information campaigns to educate citizens on the harms and costs of consumption and measures to reduce the attractiveness and availability of the products.

[5] At $4.10 (Intl$ PPP), the average cigarette prices in African countries are the lowest in the world, and they decreased from 2018 to 2020. The tobacco industry keeps prices low in Africa in order to expand their market in the region. Moreover, the African region did not raise its cigarette taxes by more than average income increases between 2014 and 2020, which means that cigarettes become more affordable for its citizens (Chaloupka, F., Drope, J., Siu, E., Vulovic, V., Mirza, M., Rodriguez-Iglesias, G., Ngo, A., Laternser, C., Lee, H., Dorokhina, M., & Smith, M. (2021). Tobacconomics cigarette tax scorecard (2nd ed.). Chicago: IL, Health Policy Center, Institute for Health Research and Policy, University of Illinois Chicago. www.tobacconomics.org). With this trend, WHO estimates that the number of tobacco-attributable deaths on the continent will double by 2030.

b. Raising government revenues

While health taxes are generally meant to discourage consumption, they can also help improve fiscal balance. Studies suggest that the potential revenue gains from health taxes in some low- and middle-income countries can be between 0.5 pct. of GDP and 1 pct. of GDP, but with big variations between countries (see for example Davis, 2019, Summan et al., 2020, Van Walbeek, 2014). As already noted, these estimates usually do not account for whether the tax increases leading to those gains are justified or economically feasible.[6] Feasibility may require a gradual increase, which will reduce revenue generation (and health effects), at least in the short run. Currently, excise taxes on tobacco and alcohol on average amount to a small share of total taxes, see figure 1. Still, in some countries, health taxes constitute an important source of government funding, see box 1.

Figure 1 Excise tax revenues from tobacco and alcohol as per cent of total tax revenues by country grouping, 2020.



Source: OECD Revenue Statistics, 2020.

Box 1: Health taxes in the Philippines

Throughout two Presidential administrations, the Philippines has managed to substantially increase excise taxes on tobacco, alcohol, and sugar sweetened beverages (SSBs). Before the Sin Tax Reform Act was passed, taxes on the lowest-priced cigarette brands were at Php 2.72. The Sin Tax Reform Act of 2012 led to an increase of Php 30.00/pack by 2017, while fiscal reforms undertaken in 2019 have led to an increase of taxes to Php 60.00/pack in 2023. These tax increases have shown an increase in the prices of the most sold brand, from Php 40.50 in 2012 to Php 138.00[7] in 2022. Cigarette affordability[8] has decreased from 1.31%[9] in 2012 to 5.95% despite increases in income and changes in the income tax in the country.

[6] Most studies are based on modelling or predictive experiments. With more and more countries implementing new kinds of health taxes, there are numerous opportunities for real-world evaluations to substantially strengthen the current evidence-base.
[7] WHO Report on the Global Tobacco epidemic 2023 (forthcoming)
[8] Affordability is calculated as the percent of GDP per Capita required to purchase 2000 cigarettes of the most sold brand of cigarettes.
[9] WHO Report on the Global Tobacco epidemic 2021

Alcohol taxes on the lowest priced brands pre-reform were Php 8.27/liter for Fermented Liquors, Php 11.65 per proof liter for distilled spirits that used local materials, and Php 126 per proof liter for those that did not. Under the 2012 tax reform, fermented liquor taxes by 2017 were at Php 23.50 per liter, while distilled spirits, regardless of materials, were now taxed at 20% of net retail price and a specific tax component of Php 20.00 per proof liter. The 2012 tax reform made the Philippine excise taxes on alcohol compliant with World Trade Organization rules, as well as provided for indexation of tax rates to inflation. The 2020 tax reform law has taxes on distilled spirits at 22% of net retail price and a Php 59.00 per proof liter specific tax component, while fermented liquors are now taxed at Php 41.00 per liter. Data from the Global Status Report on Alcohol and Health showed that alcohol per capita consumption in the country dropped from 7.1 in 2010 to 6.6 liters of pure alcohol in 2016.[10]
Taxes on sugar-sweetened beverages were introduced in the Philippines under the Tax Reform for Acceleration and Inclusion Law of 2017, which imposed a Php 6.00 per liter tax on beverages using purely caloric and non-caloric sweeteners and a Php 12.00 per liter tax on beverages that used high fructose corn syrup.

Consistent with the primary goal of both reforms, the large tax and price increases and reduced affordability led to a sharp reduction in smoking in the Philippines. Current tobacco users in 2009 were at 29.7%, which fell to 23.8% in 2015, and further down to 19.5% in 2021. This represents a decline of 34.4% in prevalence from 2009 to 2021. Cigarette removals[11] fell by almost 40%[12] from 2012 to 2021. While other tobacco control measures were implemented during this time, surveys indicate that much of the reduction in smoking was due to the large tax and price increase.

A second major goal of the reform was to raise revenues to help finance the Philippines' health insurance program. Tobacco excise taxes rose from 32 billion pesos in 2012 to 174 billion pesos[13] in 2021, a 443% increase in revenues despite the drop in tobacco use caused by the tax and price increase. Five percent of the total revenues from tobacco was to be used by tobacco-producing provinces to promote economically viable alternatives for tobacco farmers and workers, while 50%[14] of the total excise tax collections were to be used for health – 80% for Universal Health Care (UHC) and 20% for the Medical Assistance and Health Facilities Enhancement Program[15]. Total revenues from excise taxes on alcohol products had 60% allocated for Universal Health Care, 20% of Medical Assistance and Health Facilities Enhancement Program, and 20% for the attainment of Sustainable Development Goals. Additionally, 50% of total excise revenues from SSBs are allocated for health, with 80% for UHC and 20% for Medical Assistance and Health Facilities Enhancement Program. This led to 90%[16] of the country being enrolled in the National Health Insurance Program, which includes free insurance premiums for the poor and Senior Citizens.

[10] WHO Global status report on alcohol and health 2018, Philippines country profile https://www.who.int/publications/i/item/9789241565639.
[11] Cigarette removals are used as a proxy for consumption. Those are cigarettes produced as reported to Internal Revenue.
[12] Bureau of Internal Revenue Data, Philippines
[13] Bureau of Internal Revenue Data, Philippines
[14] Republic Act no. 11457, Official Gazette, Republic of the Philippines, 30 August 2019, https://www.officialgazette.gov.ph/2019/08/30/republic-act-no-11457/
[15] Republic Act no. 11467, Official Gazette, Republic of the Philippines, 22 January 2020, https://www.officialgazette.gov.ph/2020/01/22/republic-act-no-11467/
[16] 2022 Sin Tax Annual Report, Department of Health Philippines

Health tax revenues should be considered within an economic framework aiming to minimize negative externalities and internalities and not necessarily maximize tax revenues. However, since health tax rates are generally considered to be below the socially optimal level in most countries, excise tax revenues rarely account for the total economic costs to society.[17] The economic framework of externalities and internalities is conceptually important, because they by themselves justify health taxes. A consumer might rationally smoke, or drink alcohol or SSB because the enjoyment they gain may outweigh the health harms. However, from a societal perspective what matters is whether their consumption imposes harms on others (externalities) or themselves that they do not correctly internalize (internalities), see II.c (i.e. the next paragraph).

c. Correcting for negative externalities (harm to others and society) and negative internalities (harm to oneself)

The normative case for health taxes is to integrate "hidden costs of consumption" in the price of certain products. In addition to the revenue aspect, which historically has been most important, the public health motive provides an additional rationale for taxing certain products on the grounds that their consumption is unhealthy, and more specifically that it engenders two types of effects: negative "externalities" and "internalities".

Negative externalities are the adverse effects that consumption has for others and the society. The use of tobacco exposes others to smoke and to its health impacts, including cancer and cardio-vascular disease; alcohol causes violent behaviour and traffic accidents, among others. The society at large also pays a price in terms of increased health expenditures and loss of labour. Since the prices of these products do not incorporate such costs, they do not provide adequate incentives for the consumer to take the broader effects of his/her behaviour into account. Tax is an instrument for accounting for these consumption externalities.

Negative internalities are the adverse effects that consumption has for oneself. Consumers might fail to internalise information on the unhealthy effects of products, or they can make choices that they later regret. The very addictive nature of some products also makes it difficult to quit once you have started. Recent research in behavioural science has shown that well-targeted "nudges" from the government can be very effective in correcting such behaviour and securing better outcomes from a social welfare standpoint. Taxes, then, can be part of a package of measures nudging individuals away from unhealthy behaviours (Thaler and Sunstein, 2008).

d. Possibly strengthening inclusive and sustainable growth

Over the long term, the most important part of any country's national wealth is the value of its labour. To utilize the great potential of its citizens should be any government's number one priority. Sustained economic growth is dependent on a healthy and educated population. The fatal NCD epidemic could have serious adverse effects on growth and development. The fiscal space to invest in human capital, inherently limited in low-income countries, has worsened still from the ongoing multiple crises. While it will take a global effort to collectively advance towards the sustainable development goals, the main responsibility lies in countries themselves.

Taxing goods that are harmful to long-term growth and public health is one effective solution. Growing consumption of unhealthy products has dire implications for human-capital outcomes and economic productivity. Health taxes constitute one of the most cost-effective ways to pursue health impact. The revenues generated also help governments summon the resources they need to increase development-related spending. As noted above, when governments have more tax revenue, they spend more on public services. The virtuous circles between government revenues and governance and the positive relationship between governance and economic growth is well-established.

[17] See Goodchild et al., 2018, on smoking and Baumberg, 2009, on alcohol.

III. What Health Ministers need to know about tax administration and fiscal policy

a. Enforcement and compliance of taxes impose a cost for governments and businesses (and possible implications for employment)

Fiscal policy determines the composition and level of government revenues and expenditures, including taxes. In addition to providing collective goods (including police, defence, and a legal system) – arrangements not easily financed in a private market – the public sector is responsible for various welfare schemes (such as school, health services and a social security net). A key objective for the government is to have a tax system that enables pursuing these tasks with the least negative consequences for the economy and with a distribution of the tax burden that is perceived to be fair.

There are costs related to taxes (but health taxes are different). Generally, taxes disrupt the decisions of consumers and producers, reduce their utility, and create market inefficiencies. A central tax policy advice is therefore to have a broad tax base and low rates, which will entail the least negative effects for the economy. Health taxes are different. Since the prices of the unhealthy products are arguably too low, consumption is too high, health taxes can help improve market efficiency. Health taxes are therefore an ideal financing source for governments as they both raise revenues and improve efficiency. Still, health taxes, like other taxes, generate various – though low – administrative and enforcement costs; it requires a well-functioning tax administration to collect taxes and to ensure that everyone pays its fair share.

b. Align tax policy to administrative capacity

Tax administration capacity is improving in many low-income countries but is still relatively weak. Tax capacity in sub-Saharan Africa (SSA) improved between 1985 and 2018, consistent with increasing tax-to-GDP ratios since the late 1990s, albeit with considerable variation across countries. The fiscal contract – the exchange of tax revenues for public goods and services – is important for tax capacity, while corruption erodes tax morale and compliance (Tagem and Morrissey, 2021). Although national tax administrations in SSA have undergone considerable reforms in recent decades, the potential for further improvement is still big (Moore, 2020). The minimum tax to GDP ratio needed to support core government functions is estimated at 15 pct. of GDP (Gaspar et al., 2016). Many low-income countries have lower tax levels than that. Technically, health-related taxes may be relatively easy to implement compared with many other taxes.

Limited administrative capacity favours specific excise taxes. These are excises based on physical measures (number of cigarettes, volume or strength of alcohol, weight of sugar, etc.). They offer greater advantages than ad valorem taxes, which are proportional to prices. Compliance checks for the former entail simple controls at the customs, the factory gates or the lab, compared to more complex value accounting for the latter. The skills required to assess and collect specific excises are therefore easier to obtain than for other taxes. Furthermore, the administration of specific excises has similarities with the collection of import duties, an area of taxation in which many low- and lower-middle income countries have capacities and experience. Specific excises must be adjusted over time to account for inflation and for changes in real incomes (if the objective is to keep affordability constant), which is easy to do.

While specific taxes may lead to better health outcomes, ad valorem taxes can generate higher government revenues. When products are differentiated (cigarettes, alcoholic drinks and SSBs are typical cases), specific taxes add the same amount to the price of all product varieties, while ad valorem taxes increase price differences between varieties. It has been observed that the pass-through of taxes hikes to prices is higher for specific excises than for ad valorem (see for instance (Griffith et al., 2010, World Health Organization, 2021c). As specific taxes also provide lesser incentives to consumers to compensate for the price increase by switching to lower-quality products, they are generally believed to trigger stronger reductions in demand – and therefore better health outcomes. Ad valorem taxes, by contrast, while more complex, allow governments to gain more revenue from higher-value products and can have a greater revenue potential (World Health Organization, 2014, Sassi et al., 2013). On the other hand, better health outcomes from specific taxes will also reduce health-related expenditures. Mixed tax

structures, comprised of both specific and ad valorem components, or an ad valorem tax with a minimum tax floor, are quite common. They combine the benefits of both tax structures (guaranteed minimal revenue and price gaps reduction from the specific excise component and lower risk for tax erosion due to inflation from the ad valorem component) with some challenges remaining (need for enhanced tax capacity for the implementation of the ad valorem component).

c. What is the objective of the tax?

It is important to decide on the main objectives when designing health taxes. There may be potential conflicts between objectives. For example, if the purpose of a tax is to achieve health gains via behavioural change, it must be set at a sufficiently high level and often much higher than those currently levied. In contrast, if the aim of a new tax is to raise revenue, then taxes set at a rate that is high enough to incentivize behavioural changes may be less desirable, if they reduce the stability of associated revenues, and a lower rate may be more appropriate. Still, there are also many instances where high tax increases have been followed by large revenue increases in lower middle-income countries. Finally, considered within an economic framework, the main rationale for health taxes is to minimize externalities and internalities, cf. IIb.

d. Earmarking taxes for health does not automatically increase the health budget and Ministries of Finance generally do not approve of earmarking

Ministries of Finance generally do not approve of earmarking because it hampers the budget process. The budget is the central tool to distribute public resources. A comprehensive budget process ensures that all initiatives need to compete, revealing alternative uses and helping to select initiatives with the overall highest priority. Earmarking or other types of shielding can result in initiatives being funded without the benefit of competition under a budget prioritization process. Efficient use of public resources is an important precondition to utilizing the economies' growth potential.

Earmarking may disturb fiscal policy management. As already noted, a sound fiscal policy is crucial in the pursuit of a stable economic environment, which is attractive for investments. Earmarking can limit the scope for discretionary fiscal policy to counteract economic fluctuations. Earmarking or shielding in terms of keeping items off the budget will render the budget less of an effective tool to conduct a sound fiscal policy.

Earmarking to help introduction of a new tax may not always work as intended. Public support for new consumption taxes, or tax increases, is generally low and earmarking the revenue for specific purposes can increase public and political support for taxes. However, governments may fail to abide by initial earmarking commitments once taxes have been implemented. Earmarking also makes spending vulnerable to fluctuations in the earmarked tax, although revenues from health taxes are quite stable over time due to consumers' addiction. Lastly, earmarking may tempt politicians to reduce health sector allocations in the general budget.

Soft earmarking may help address some of the above-mentioned challenges. As discussed in more details in section IV.e below, soft earmarking can be an effective way to fund priority health programmes that are lacking resources as the dedicated amount generally goes through the general budget, it is regularly reviewed by the legislative and is therefore a democratic approach that also helps build consensus.

IV. What Finance Ministers need to know about health taxes

a. Tobacco, alcohol and SSB consumption have big effects on health and the economy

Tobacco, alcohol and SSB consumption is associated with the rise in mortality and morbidity in low- and middle-income countries. In 2019, more than 11 million people died from exposure to these risk factors worldwide, which was 20 percent of total deaths that year.[18] Most of the deaths occurred in the populous middle-income countries (8.5 million), and use of tobacco is by far the deadliest risk factor (6.5 million in those groups of countries). These risk factors are also associated with a rise in years lived in bad health, cf. table 1. Beyond the effects for the individuals and health expenditures for the society, these trends are likely to hamper economic growth prospects, although the specific effects are difficult to estimate. Estimates from one study show that the total economic cost due to alcohol consumption in selected high-income and middle-income countries represents around 2.5 percent of GDP and 2.1 percent of GDP, respectively.[19] Lastly, the negative health trends can affect inequality as affected households bear a higher risk of impoverishment (Tremmel et al., 2017, Murphy et al., 2020).

b. Health taxes can be an effective instrument to improve population health

It is well-established that higher prices or taxes on alcohol, tobacco and SSBs are an effective way to reduce demand. There is a substantial body of research and evidence collected over many countries and years, which shows that a significant increase in the excise tax and subsequent price of tobacco products is consistently an effective tool for reducing tobacco consumption (see for example (IARC, 2011) and (Chaloupka et al., 2011). Consumers in low- and middle-income countries tend to be slightly more responsive than in high-income countries, particularly the young and the more vulnerable groups of population (US National Cancer Institute and World Health Organization, 2016). Research shows that a one-time tax-induced 50 percent price increase on tobacco, alcohol and SSBs has the potential to avert more than 60 million deaths over 50 years with more over 52 million being averted in LMICs (Summan et al., 2020).

c. Health taxes can improve economic efficiency

The current prices charged for unhealthy products do not adequately reflect the societal costs that these products hold for society and the individuals. As described in sections I and II, there are vast health and economic consequences associated with the consumption of these products, cf. discussion of negative externalities and internalities. In addition, the tax revenue that governments collect from taxing these products is not sufficiently large to justify the costs to society. As a result, intervening in the form of health taxes in the markets for unhealthy products is merited as the consumption of these goods are market failures, and lead to a net loss of economic value. Appropriately designed health taxes can be a useful tool to address these market failures.

Governments use health taxes when they deliberately want to discourage consumption of unhealthy products. A general tax policy principle is that the tax system should induce economic agents to change their behaviour as little as possible in response to the taxes levied. This principle is mainly pursued by using broad bases and low rates. There are, however, situations where governments deliberately want to use the tax system to steer economic behaviour. This is the case in the presence of externalities and internalities, as mentioned above. An efficient tax system would thus create a distortion by inducing agents to internalize these effects, reducing activity in the case of negative externalities and internalities, see IV a) and chapter 4 for a fuller description of tax efficiency.

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[18] GBD (2019).

[19] Rehm, J., Mathers, C., Popova, S., Thavorncharoensap, M., Teerawattananon, Y., & Patra, J. (2009). Global burden of disease and injury and economic cost attributable to alcohol use and alcohol-use disorders. *Lancet, 373*(9682), 2223-2233.

d. Health taxes can benefit the poor

Health taxes can be progressive. When the response to a health tax is relatively pronounced among low-income consumers, they experience a relatively big increase in their budget to be used on other (more useful) goods. Their financial situation and general welfare can also improve through reduced health spending (World Health Organization, 2021c, World Health Organization, 2023, Forthcoming-, World Health Organization, 2022f). For instance, evidence from the Mexican SSB tax consistently shows larger declines in the SSBs consumed by lower-income households relative to higher-income households (Colchero et al., 2017a, Colchero et al., 2016, Colchero et al., 2017b). In addition, lower-income households also experience relatively greater health benefits (Thow et al., 2014, Eyles et al., 2012).

Progressivity depends on how consumers respond to the tax. As noted, poorer groups may be more price sensitive than other groups, and therefore more likely to change their behaviour in response to a tax. In addition, it is important to acknowledge that a regressive tax does not necessarily imply that tax increases will be regressive. If poorer consumers are more responsive, the burden of the tax may shift more to wealthier consumers (Chaloupka et al., 2012). However, if demand is price inelastic (as is typical for many unhealthy products), those with lower incomes who continue to buy these products have less to spend on basic needs, such as housing, heating, and healthy food, potentially at the expense of their health and general welfare.

Progressivity also depends on how tax revenues are spent. The progressivity or regressivity of a tax system should be assessed holistically. As previously described, using expenditure policies to improve health outcomes can make a tax system progressive. This can be important to reach vulnerable individuals that experience an increased fiscal burden from health taxes (the smoking poor will be worse off than the non-smoking poor and the smoking poor will be worse off than the smoking rich). For policy makers concerned about the regressive potential of taxes on unhealthy products, another potential response can be to subsidize other healthy foods, such as fruit and vegetables. In this way, it may be possible to put together a package of policies in which there can be some confidence that the overall impact on poverty will be negligible.

e. "Soft earmarking" may make sense

Earmarking plays a role in the implementation of health taxes. It is shown that commitments to earmarking the revenue from health taxes for specific purposes, such as funding health system improvement or obesity prevention, can increase public and political support for taxes (see for example (Thow et al., 2011) and (Somerville et al., 2015)). Earmarking may be particularly relevant for low- and middle-income countries, in which strategies to provide universal health coverage are dependent on the effective expansion of public sector financial resources.

There are different types of earmarking. There is generally a distinction between “hard” and “soft” earmarking. When a tax is legally earmarked for a particular service or program, and this tax revenue is the main source of revenue, the tax earmarking is described as “hard”. The link between the revenue source and expenditure is obliged by legislation, and rigidity of this agreement means that excess revenue is not allowed to be allocated elsewhere. “Soft” earmarked taxes refers to taxes that are designated for a particular program or service and the spending usually needs to be supplemented with alternative, general revenue (Cashin et al., 2017). They are often also not legally binding and the revenues go through the common or general fund before being disbursed to the targeted program.

Soft earmarking may secure public support for health taxes without causing the concerns traditionally related to earmarking. Earmarking of public funds is politically contentious and often opposed by ministries of finances, cf. III d. A major concern is that earmarking creates budget rigidity, which could lead to the inefficient allocation of resources. The more flexible feature of soft earmarking makes this concern less valid. In addition, policy makers may time constrain the earmark if there is major concern about budget rigidity (Cashin et al., 2017). All in all, soft earmarking can be an effective

instrument in the political economy of health taxes – securing public support without many negative side effects.

f. International framework

The WHO Framework Convention on Tobacco Control (WHO FCTC) recognizes that price and tax measures are an effective and important means of reducing tobacco consumption. The treaty entered into force in 2005 and has 182 Parties. Member States that have become Parties to the Convention have a legal obligation to implement the provisions of the treaty, including Article 6 (Price and tax measures to reduce the demand for tobacco) by " … *implementing tax policies and, where appropriate, price policies, on tobacco products so as to contribute to the health objectives aimed at reducing tobacco consumption* … ". Parties have adopted Guidelines for implementation of Article 6 of the WHO FCTC to assist them in meeting the objectives and obligations under that provision. Parties to the WHO FCTC have also adopted the Protocol to Eliminate Illicit Trade in Tobacco Products, which entered into force in 2018. The Protocol provides invaluable guidance for tobacco tax administration, control and enforcement. Member States that are Parties to the Protocol have an international commitment to implement the obligations contained in it.

Reducing non-communicable diseases are part of the Sustainable Development Goals (SDGs). SDG 3 is about ensuring healthy lives and promoting well-being for all at all ages. Target 3.4 says that premature mortality from non-communicable diseases shall be reduced by one third by 2030 through prevention and treatment. Progress on SDG 3 also plays a key role in the success of socially and economically focused SDGs, as already discussed. Additionally, the Addis Ababa Action Agenda, which helps provide a global framework for financing the SDGs, highlights the relevance of tobacco taxation as a key mechanism to reduce demand and save lives while also increasing domestic resources for development (Addis Ababa Action Agenda, 2015).

There is increased interest in health taxes among multilateral institutions and the international community. The World Health Organization has for decades endorsed economic measures including taxes in its strategy for prevention of noncommunicable diseases. There has been growing interest in the use and design of health taxes from organizations such as the UN, the IMF, the World Bank and the OECD, suggesting that opportunities exist for collaboration between the health and finance sectors. The establishment of the UN Tax Committee's Subcommittee on Health Taxes, tasked to provide guidance on the implementation of health taxes, i.e., this Handbook, is a reflection of the global traction health taxes have gained.

V. What Governments need to know about health taxes

a. Likely opposition from some industry and other vested interests

While it seems to be a common agreement that tobacco, alcohol and SSB consumption is associated with negative health outcomes, there are disagreements about the remedies. Common arguments made against health taxes by industry are that they are ineffective in achieving health outcomes, have limited revenue potential, are regressive, hurt employment and increase illicit trade. All these issues are discussed in this handbook. Amid country differences, a general lesson is that a well-designed health tax that is properly enforced is an effective tool to improve health and can also be an efficient revenue generator. Another lesson is that health taxes do not occur in a vacuum, cf. Section V.c below. They should be part of government programs that also include regulations and public education campaigns. Finally, when effective, improved public finances (increased revenues and reduced health expenditures) enable governments to invest more in health systems and enforcement capacity. So, while the industry may have some valid points, their advocacy against health taxes also needs to be seen as input from a commercial stakeholder.

Possibly the most common industry argument is that increasing health taxes will entail more smuggling and illicit trade. There is certainly a risk that the introduction of (or increase in) health-related taxes on unhealthy products increases the attractiveness of illicit alternatives, be they similar products that have evaded taxation through illegal manufacturing or trade, or informally produced substitutes (e.g. home-distilled spirits). The risks are particularly high when the state's taxation and law enforcement capacities are limited and the informal sector is large, as is the case in many lower middle- and low-income countries. While appreciating that this risk may have some implications for how high the tax can be, especially for countries with porous borders with lower taxing countries, it is first and foremost a governance problem. This can best be addressed by ensuring a consistent regulatory framework and strong tax administration and control capacities, rather than foregoing tax increases.

Industry actors may contest the legality of a health tax. Litigious action often entails a claim from industry that the taxation policy is a breach of trade agreements. Certain international trade agreements stipulate that domestic taxes must not discriminate based on a taxed good's country of origin, unless there is a health justification. Health taxes therefor have an advantage over other taxes such as import tariffs and these disputes are often defendable in court (World Health Organization, 2021c, World Health Organization, 2022, Forthcomingn, World Health Organization, 2022f).

Industry actors may argue that health taxes reduce government revenue as consumption of these products decrease. This chapter has shown that there is potential for increasing government revenue using health taxes. The demand for unhealthy products is predominantly inelastic, meaning that an increase in the price of those products will result in a less than proportional decrease in their consumption. One of the reasons for this inelastic demand is the relatively addictive nature of these products, especially tobacco. Country evidence shows this to be true: an increase in tax rates will result in an increase in government revenue, at least in the short and medium term, and especially in LMICs (World Health Organization, 2021c). In the long run, behavior is likely to change and tax revenues may decline . Still, the combined health benefits and reduced health care costs will likely be larger than the declining revenues.

Industry actors may claim health taxes result in large-scale losses of employment. In most economies, the long-term impact of health taxation on employment is likely to be neutral or even slightly positive, as lower expenditure on unhealthy products will result in higher expenditure in other sectors of the economy. Job losses in the industries are often the result of technological changes and moves away from using labour. Some industries (e.g. tobacco) are capital intensive, so refocusing on more labour intensive industries may be good for employment. It is crucial to conduct objective research to assess the impact of a policy change on labour market outcomes in order to formulate further policy which can mitigate any potential negative consequences (World Health Organization, 2021c, World Health Organization, 2023, Forthcoming, World Health Organization, 2022f).

b. Longer-term benefits for individuals and economy

It is important that Governments take a broad view to facilitate an economic and societal transition. The implementation of health taxes and regulations may lead to job losses for farmers and industry workers. A similar argument could be made against the "green transition", where certain industries are rendered obsolete. This needs to be taken seriously, and an important first step is to understand the size of the relevant sector in relation to a country's overall economy. As already discussed, to secure public support and to ensure a fair distribution of the burden of transition, it is important to alleviate negative impacts by helping workers most affected. Experience suggests that many more jobs can be created in more beneficial sectors by taxing tobacco and using the revenues in other sectors (Sabir et al., 2021).

c. Health taxes in combination with other targeted health policy measures improve health

One should not ask too much of health taxes by themselves. Human responses to price changes are complex, and vary by context and over time, making it difficult to estimate economic and social impact. Such estimates are particularly vulnerable to uncertainty over longer periods. The decrease in consumption can be larger in the long run as habits are gradually broken (Zhen et al., 2011). On the other side, consumers can also over time become more accustomed to higher prices (Sharma et al., 2014). Services to help consumers cease use of unhealthy products, along with measures such as smoke-free areas and graphic health warning labels, can help support individuals' reduction of tobacco consumption. Using the tax revenues to provide services to low-income populations promotes equity. The use of revenue can contribute to wealth redistribution and mitigate health inequalities, as discussed above.

Health taxes are most effective when implemented within a package of interventions. For alcohol taxes, other effective and complementary policies may include strengthening restrictions on alcohol (e.g. regulating the hours when alcohol sales are allowed, establishing a national minimum legal drinking age), or stronger enforcement of drink driving restrictions (e.g. establishing and enforcing blood-alcohol concentration (BAC) limits) (World Health Organization, 2022d). Both tobacco and alcohol consumption should be decreased by improving interventions and treatments for addiction. This would entail improving health and social welfare systems to not only address alcohol and tobacco addiction, but also support affected families, and the treatment of conditions that may result from consumption (World Health Organization, 2022d). Across countries, individuals should have access to interventions if they wish to quit alcohol or tobacco use (World Health Organization, 2022d, World health Organization, 2022b). Enforcing bans or implementing comprehensive restrictions on industry advertising, marketing, promotions, and sponsorships are effective policies too. Policies that promote reformulating the package sizes of SSBs and unhealthy food into smaller sizes may also result in a decrease in their consumption (Marteau et al., 2015).

d. The key role of data and analytical capability of both ministries of finance and health to inform discussion, socialization and implementation.

The SDGs are said to represent an unprecedented statistical challenge. On one hand, a lot more high-quality data is needed just to monitor progress on the SDGs. But even before that, data are critical to conducting useful analysis on what kind of interventions are likely to bring the achievement of the SDGs closer. In one striking example of the need for better data, two-thirds of the data used to measure global poverty — and therefore progress on SDG1 — is inferred. The World Bank has over 6,000 distributions in its database but only a third — about 2,000 — are real survey data. Two-thirds of the country-year pairs in the database, then, are extrapolated or interpolated. Bad data quality is also prevalent in many other areas and especially in low-income countries.

Improved health data and analyses can pave the way for better policies. An efficient health taxation system necessitates that policy makers continuously collect and analyse data to ensure that the choice of tax structure and rates are appropriate to achieve their public health and revenue goals. This includes among several things data on the market for unhealthy goods, such as the nature and degree of competition, the market share and the elasticities or responsiveness of the products being consumed to prices. With the latter, for instance, policy makers would want to know that lower income groups are more responsive or will decrease their demand to a larger extent than higher income groups when there is an increase in price, to ensure that tax increases remain progressive.

Data collection is also necessary to ensure that the health tax policies are having the intended effects. For instance, if an alcohol tax policy has been designed to target heavy alcohol consumption, alcohol consumption and any other factors which may affect alcohol consumption need to be monitored and eventually evaluated during and after the tax policy changes. Developing specific indicators to monitor the outcomes of interest can be an effective method of ensuring that policy goals are continuously achieved. For instance, for tobacco control, countries are classified by the WHO as implementing total taxes on tobacco products at the highest level when they represent at least 75 per cent of the retail price.

There are various tools available to policy makers to assess the impact of their excise taxation policies on government revenue, consumption levels and health outcomes. A simple tool which policy makers can use specifically to assess the impact of a tobacco tax policy reform or increase on prices, consumption and revenues is the WHO's TaXSiM tool.[20],[21] The OECD's Strategic Public Health Planning for NCDs (SPHeP-NCDs) model is a microsimulation tool which can be used to model the impact of taxation and other pricing policies on consumption of products with an impact on population health (alcohol, tobacco and dietary nutrients) on life expectancy, disease prevalence and other health utilities like disability-adjust life years as well as economic dimensions including healthcare expenditure and workforce productivity.[22] However, the quality of the outputs of these simulation models largely depends on the quality of the data input, and collecting this type of data should be made a priority.

VI. Prospects for health taxes

a. Important promises of triple wins (health, revenue, equity)

Many developing countries face one of the most challenging economic environments in years. Slow recovery from the pandemic, rising food and energy prices, and high levels of public debt have devastating effects on incomes and food security. 2022 was the second year in a row in which the world was no longer making progress on the SDGs partly due to slow or non-existent recovery in poor and vulnerable countries. Multiple and overlapping health and security crises have led to a reversal in SDG progress. This is a major setback. Even before the pandemic progress was too slow to reach the 2030 deadline, but at least poorer countries made greater gains than rich countries.

Domestic resource mobilization is center stage in the pursuit of an inclusive development. To be sure, getting the SDG agenda on track through 2030 (and beyond), especially for low-income countries, requires a significant increase in external finance from rich countries to poor countries. At the same time, it is vital to strengthen domestic resource mobilization. Not only because it is the most sustainable source of revenue. But because tax is about state building and economic and societal progress.

Health taxes have many benefits that should make them appealing across government stakeholders. A general feature of taxes is that they distort economic behaviour. They tend to reduce production and consumption, creating market inefficiencies. This is one of the costs of raising taxes. Health taxes are different because they influence behaviour in a way that improves market efficiency. They reduce unhealthy behaviour and may also incentivize the transition to more productive industries. Adding to this the potential for increased government revenue should make health taxes an easy sell for any government concerned with public health, public finances, and inclusive development.

Understanding the political economy and the local context are decisive for successful implementation of health taxes. These taxes can be unpopular among consumers and in the affected industries. Governments committed to health taxes may consider increasing the general funding for health and social programmes to get public support. Framing taxes as pro-health measures and soft earmarking the revenues in support of health programmes may contribute to increased public acceptance and support for implementing a tax – of course to the extent that commitments are consistently respected by the government.

Building broad alliances may also help governments counter opposition and succeed in implementing health taxes. Having well-respected experts and academic institutions on board from the beginning of a process can ensure access to independent evidence. Active civil society organizations can further strengthen outreach to the public. Similarly, broad media coverage has been found to help shape public opinion (Carriedo Lutzenkirchen, 2018).

[20] Available here: https://apps.who.int/iris/bitstream/handle/10665/260177/WHO-NMH-PND-18.3-eng.pdf
[21] Similar tools are currently being developed by WHO for alcohol and SSB taxes.
[22] More information here: http://oecdpublichealthexplorer.org/ncd-doc/_2_1_Modelling_Principles.html

b. Investment in tax administration – policy is never better than what can be implemented

Even the soundest tax policies will have muted impacts if they are not implemented effectively. Constraints on the ability of tax administrations to implement policies is a first-order topic in developing countries, coining the phrase "tax administration is tax policy." A weak tax administration compared to peers may suggest similarly modest tax policy ambitions or make policy ambitions unrealistic. Improvements in tax policies and tax administrations need to work in tandem for reforms to be effective. Although excise taxes are relatively easy to collect, challenges remain. Administration and enforcement capacities must be in place to mitigate the risks of illicit trade and fraud. See chapter 4 and 7 for a discussion of how to ensure that health taxes are easy to administer and comply with.

Information exchange among government entities is crucial for development planning and revenue generation. Health and tax authorities need to cooperate to monitor health, social and economic impacts and take corrective actions as necessary. Tax measures should be integrated within a broader public health strategy addressing NCDs and risk factors. Tax policy must be carefully planned and should consistently follow clear long-term objectives. Investing in digital infrastructure can be a powerful engine for effective service delivery, promoting accountability and enabling inter-agency and international collaboration within core government functions.

Investing in core government functions will ensure reaping the benefits from sound policies. The active use of pro-health taxes as an instrument to achieve both public health and revenue objectives requires prior work on organisational development, capacity building and planning in a range of areas, from excise tax administration and enforcement to NCD strategy design and deployment.

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