

Health Taxes:

A Compelling Policy for
the Crises of Today

Prologue: Our motivation

The Task Force on Fiscal Policy for Health convened in 2018 to assess the role of fiscal policies to address the large and growing burden of noncommunicable diseases (NCDs).

Based on these deliberations, we know that

“... large excise taxes on tobacco, alcohol, and sugary beverages are essential to reaching the targets set by the Sustainable Development Goals related to ensuring healthy lives, ending poverty, and promoting full and productive employment. Such taxes can also contribute to domestic revenue mobilization.”

In 2019 we released our first report "Health Taxes to Save Lives: Employing Effective Excise Taxes on Tobacco, Alcohol, and Sugary Beverages"¹, concluding that health taxes are an "underutilized tool" for improving population health.

The Task Force reconvened in 2024 to assess progress on health taxes since our 2019 report and to consider the impacts of recent economic, health, social, and environmental crises.

For this report, the Task Force commissioned additional background papers on health taxes to update the evidence, assess short-term revenue potential, and understand the role of health taxes in the current era of multiple crises. We find that health taxes continue to be underutilized despite the powerful impact they have in reducing preventable death and disease – a particularly glaring act of neglect in a world that has experienced a massive pandemic. We also find that health taxes are an

underutilized tool for addressing fiscal constraints. Despite facing multiple global crises – a pandemic, recession, increasing poverty, wars, climate change, inflation – few countries have implemented one of the simplest and most beneficial ways to help ease fiscal pressures: increasing health taxes on tobacco, alcohol, and sugary beverages.

Given our collective experience with macroeconomic, fiscal, and public health policies – in and outside of government positions – we offer this report to demonstrate that raising excise taxes on tobacco, alcohol, and sugary beverages and improving their design, administration, and enforcement is critical for improving health while providing an excellent source of additional revenue, in the short-term as well as the long-term.

Urgency is required, for both health and economic reasons. It is time for countries and the international community to work together and substantially raise effective excise taxes on tobacco, alcohol, and sugary beverages. The simple act of raising health taxes can improve health and generate revenues, thereby giving countries more resources to face other big challenges of our times.

¹ <https://www.bloomberg.org/program/public-health/task-force-fiscal-policy-health/>

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Key messages

1.

Urgent action is needed to reduce the deaths and disease linked to the consumption of tobacco, alcohol, and sugary beverages, especially in low- and middle-income countries.

Each year, they kill over 10 million people worldwide with economic costs of over \$4 trillion.

2.

Health taxes are good for health and good for budgets, making them a unique and timely policy solution for the polycrisis of today.

The recent pandemic along with recession, inflation, and geopolitical conflicts have led to a health and fiscal crisis that can be mitigated by raising health taxes. Yet progress on alcohol and tobacco taxes have stalled, and taxes on sugary beverages are making progress but remain far too low.

3.

The highest priority is for all countries to raise and reform tobacco taxes.

Of the three products considered in this report, tobacco continues to cause the most death and illness in the world and extensive guidance and country experience on effective tax policy is available. Despite this, tobacco tax policy has actually regressed in 76 countries; some 87 percent of the world's one billion smokers now live in countries where cigarettes are equally or more affordable than in 2019.

4.

Without decisive action today, millions of lives will be needlessly lost.

Taxes that generate a 50 percent increase in real prices of tobacco, alcohol, and sugary beverages would save 50 million lives over 50 years and could raise US\$3.7 trillion globally over just five years, including US\$2.1 trillion in low- and middle-income countries (LMICs). If allocated to health, this would increase government health care spending by 12 percent globally and by 40 percent in LMICs. These taxes are relatively quick to implement, reduce health systems costs, do not put economic growth at risk, and can thus help to alleviate the current fiscal crises.

5.

We call on all countries to urgently and substantially raise health taxes, prioritizing tobacco, and continue increasing them above the level of inflation and economic growth.

This will require strong and sustained political will to counter the opposition from affected industries and their allies and should be actively supported by multilateral agencies. Governments will need to limit the industries' interference with policy making, harness public support, and make the case that health taxes are a win-win for health and for revenues.

Introduction

In times of crisis, it is easy to lose sight of simple solutions that can give us more time, resources, and space to face difficult and complex problems. Raising health taxes is one of those simple solutions.

By reducing consumption of unhealthy products, health taxes improve people's lives, reduce demands on the healthcare system, and increase labor productivity, while generating revenues. By reducing pressure on health expenditure and providing more revenue, they enable governments to tackle many other complex crises.

The years since 2019 have been just such a time of crisis. Since this Task Force issued its report, "Health Taxes to Save Lives" (hereafter "the 2019 TF Report"), the world has experienced a global pandemic and recession, increasing global poverty, outbreaks of wars, inflation, and natural disasters associated with climate change. At times like this, substantial increases in excise taxes on harmful products like tobacco, alcohol, and sugary beverages are among the simplest ways to generate urgently needed revenues with the added advantages of saving lives and reducing healthcare costs.

Recap: Health taxes reduce consumption, improve health, and raise revenues

The 2019 TF Report noted that of all the factors contributing to the world's 41 million annual deaths from noncommunicable disease, risk factors underlying more than 10 million of those deaths were entirely preventable: unhealthy consumption patterns of tobacco, alcohol and sugary beverages that lead to premature death and disease from cardiovascular conditions, cancers, respiratory diseases, diabetes, and injuries. The report summarized evidence showing that health taxes are one of the most cost-effective ways to prevent these diseases and save lives.

The mechanism by which health taxes improve health is straightforward: when prices go up, people tend to buy less of a product and spend on other things instead. Taxes on tobacco, alcohol, and sugary beverages raise their prices, encouraging consumers to quit using those products altogether or consume less. In both cases, this improves health and productivity.

The way health taxes are designed, administered, and enforced makes a difference to how effective they are at saving lives and raising revenue. In 2019, the Task Force recommended that countries design their health taxes to be easy to administer and enforce and hard for manufacturers to manipulate. A robust set of resources to guide countries in adopting effective health tax design and follow best practices for implementation are available to help countries ensure health taxes are effective.

Simulations for the 2019 TF Report estimated that a one-time tax increase leading to a 50 percent rise in prices for these products could avert over 50 million premature deaths over the next 50 years, 88 percent of them in low- and middle-income countries. Yet, premature death is only one consequence of unhealthy consumption. Reducing tobacco, alcohol, and sugar consumption improves the quality of life for people while they are alive, preventing and reducing needless suffering from years lived using oxygen tanks, injuries from domestic violence and traffic crashes, or loss of limbs to amputation resulting from diabetes.

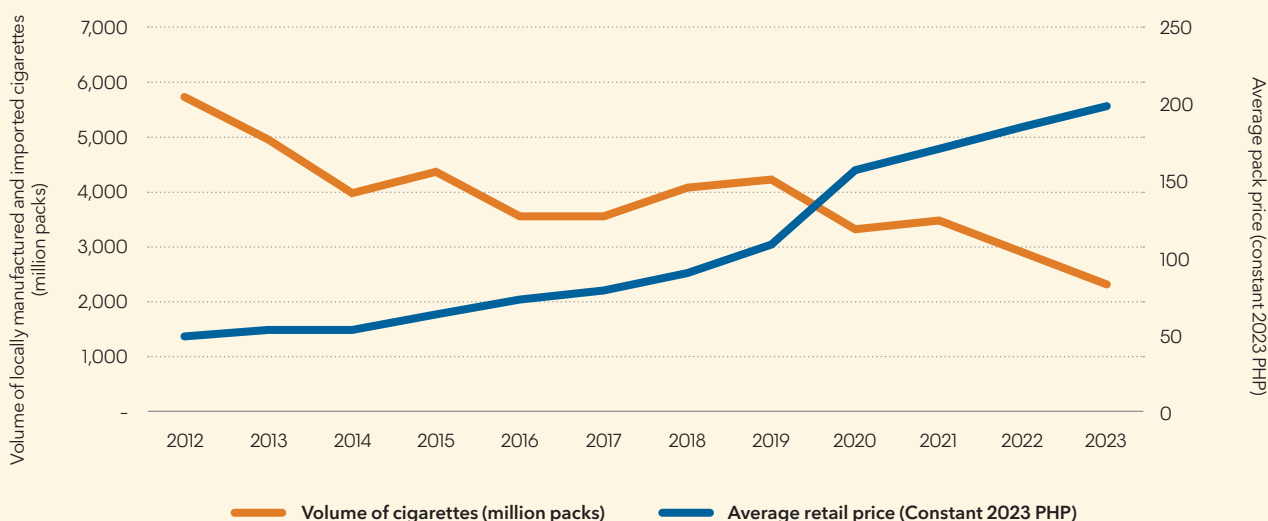
Health taxes also generate substantial revenue for national treasuries (See Country Spotlights). Overall, in 2019, countries generated revenues of 0.6 percent of GDP with tobacco taxes and 0.3 percent of GDP with alcoholic beverage taxes (1). The 2019 TF Report provided estimates that increasing excise taxes to raise prices by 50 percent could raise US\$20 trillion in additional revenues in present discounted value over the next 50 years.

Substantial, sustained, and successful: Excise taxes on tobacco in the Philippines

Since 2012, Philippine governments have significantly increased tobacco excise taxes through four successive reform bills and across two different administrations, led by Benigno Aquino III and Rodrigo Duterte. The success was in part the result of the government framing the taxes as a health reform, in partnership with health campaigners, as well as leadership from President Aquino and successive governments (2). As a result, by 2020, tobacco prices rose by a factor of six and smoking prevalence declined among adults

from 30 percent (2009) to 20 percent (2021) and among youth from 18 percent (2007) to 10 percent (2019) (3,4). Tobacco excise revenue increased from PHP 40.8 billion (US\$1 billion) in 2012 to PHP 160.3 billion (US\$2.9 billion) in 2022, equivalent to an increase from 0.3 percent to 0.7 percent of GDP.² The portion of this funding earmarked for the country’s national insurance fund, PhilHealth, finances about 90 percent of the insurance premiums to include people who are poor, aged, or unemployed due to disabilities (5).

Figure 1: Cigarette Sales and Real Prices in the Philippines, 2012-2023



Data Source: Price calculated based on Euromonitor data; Volumes from DoF Philippines
 Note: Prices are average retail price in constant 2023 pesos

After reviewing the large body of evidence on the benefits of health taxes, the Task Force on Fiscal Policy for Health called on all countries to rapidly and significantly increase health taxes on tobacco, alcohol, and sugary beverages to save lives and raise tax revenues. The Task Force also called for countries to adopt efficient excise tax structures, to improve tax administration, and to join in resisting undue influence by industries that manufacture, sell, and distribute these unhealthy products.

² Data source: Philippine Government Bureau of Internal Revenue statistics (<https://www.dof.gov.ph/statistical-data/general-government/>). The figures are in 2022 real terms, as calculated with the GDP deflator index and official exchange rates as reported in the World Bank Development Indicators.

Going backward: Health tax policies have stalled or regressed since 2019

Despite the growing volume of evidence demonstrating that health taxes can improve health and raise revenues, progress since the 2019 Task Force report has stalled or gone backwards in most countries – except for the adoption of sugary beverage taxes in more countries. Few countries are raising health taxes and, when they do, the increases are often not even keeping pace with inflation and income growth. Consumption of harmful products remains large or is increasing, and without more significant increases in health taxes, the associated burden of death, disease, and injury will continue. At the same time, countries will lose potential revenues.

Tobacco: Little progress on taxes for one of the greatest threats to public health

Of the three products considered in this report, tobacco continues to cause the most death and illness in the world. This is not to say that public health initiatives are without success. Between 2000 and 2022, the global share of adults using tobacco has fallen from 32.7 percent to 20.9 percent (6). However, this relative success over 30 years masks a rise in the total number of smokers (7), due in part to the industry’s strategy of pivoting to low- and middle-income countries’ markets at the same time as these regions had substantial population growth. This has shifted the overall burden of tobacco-related diseases from high-income countries to low- and middle-income countries.

Additionally, tobacco companies aggressively market to young people, especially in low- and middle-income countries (LMICs) where youth populations are large and growing (8). From 1999 to 2018, smoking prevalence among young people (ages 13 to 15) either stayed the same or rose in 60 out of 135 countries for which data was available (9). From 2012 to 2020, e-cigarette use among

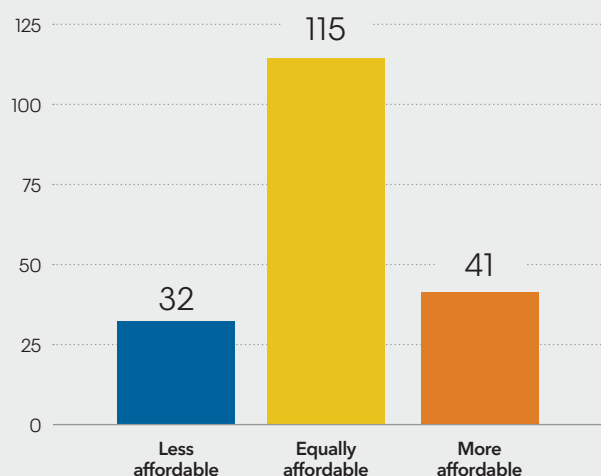
youths increased in 7 of 10 surveyed countries (10). Fortunately, young people are more price responsive than adults. As a result, tobacco excise taxes have proven to be effective at discouraging young people from initiating smoking (11).

The scale of the problem is sometimes hard to grasp. One of every five people in the world over the age of 15 smokes (6), and half of them will die prematurely from smoking related illnesses (12-15). The world has more than one billion smokers and hundreds of millions of people use other tobacco products (16).

The consequences? About eight million premature deaths a year – that is, 13 percent of all deaths worldwide or one-fifth of all deaths from non-communicable diseases (15). And the numbers of deaths cannot convey how many millions of people require portable respirators to survive, experience poor health from high blood pressure, or live with the consequences of strokes. All of this leads to lower productivity and higher healthcare costs, estimated at 1.8 percent of global GDP or almost two trillion dollars annually in 2012 (17).

After years of modest progress, government action on tobacco excise taxes has faltered. In 2020, the excise tax for the most-sold brand averaged 41.4 percent of retail price among the 183 countries with cigarette taxes. In 2022, this figure was 42 percent, virtually unchanged and well below the recommendation of at least 70 percent of retail price. Comparing 2022 to 2016, cigarettes became more affordable in 41 countries, were equally affordable in 115, and less affordable in only 32 of them (Figure 2) (20). In other words, only 17 percent of the world’s countries have made progress in making cigarettes less affordable. In the rest, the cost to the consumer of buying cigarettes relative to income has either dropped or stayed the same.

Figure 2: Number of countries by change in affordability of cigarettes between 2016 and 2022



Source: Drope and Powell 2024

Note: Affordability is defined as a change in the percentage of per capita GDP required to purchase 2000 cigarettes of the most sold brand.

Alcohol: Destructive, costly, and growing

Alcohol consumption is another leading cause of death and disease. It continues to appear in advertising and entertainment, associated with happy times and celebrations. Rarely pictured is the human toll: 2.6 million premature deaths in 2019, including over 700,000 from injuries (21). Alcohol disproportionately impacts youth, with the highest proportion (13 percent) of alcohol-attributable deaths in 2019 among those aged 20–39 (21).

Research continues to accumulate confirming that alcohol consumption is a major risk factor for cancer (22), a wide range of injuries (23), and domestic violence (24). Alcohol's economic costs are extremely large, estimated at 2.6 percent of global GDP (25). About two-fifths of these costs are direct health expenditures while the other three-fifths are productivity losses.

Alcohol consumption has been rising uninterrupted for decades with much less governmental and research attention than is warranted. Globally, alcohol consumption per adult (age 15 or older) has risen from about 5.9 liters of pure alcohol in 1990 to 6.5 liters in 2017 and is projected to increase further to 7.6 liters in 2030 (26). Over the same period, the share of adults who drink alcohol has also risen from 45 percent to 47 percent and is projected to reach 50 percent in 2030 (26).

Despite its human and financial cost, alcohol is not heavily taxed. Fewer governments reported applying excise taxes on alcohol (149) than tobacco (183) and the average excise tax share of alcohol prices is only about 17 percent compared to 42 percent of tobacco prices (19,27). The average excise tax as a share of price has not changed much in recent years, if at all (28). It is not surprising, therefore, that government tax policies regarding alcohol have not kept pace with inflation or real income growth. Consequently, alcohol has become more affordable in most countries for which data is available (29).

Sugary beverages: The tip of the iceberg

Sugary beverages contribute to the upward trend in sugar consumption worldwide (30,31) that has been linked to higher prevalence of obesity, diabetes, and cardiovascular disease (32). Age-standardized prevalence of obesity has risen from about 9 percent for women in 1990 to 19 percent in 2022, and from 5 percent to 14 percent over the same period for men. Even among school-aged children, obesity has risen from 2 percent to 7 percent for girls and from 2 percent to 9 percent for boys (33). In 2021, 537 million adults were living with diabetes, 75 percent of whom were in low- and middle-income countries (34).

The result: more than a billion people in 2022 lived with obesity and were at risk for significant health problems (33). The economic costs of the illnesses associated with obesity are projected to reach some US\$4.3 trillion in 2035, almost 3 percent of global GDP (35).

Among products with added sugar that are devoid of nourishment, sugary beverages³ are particularly widespread and their consumption has increased. Between 1990 and 2018, the global average number of sugary beverage servings per week among adults grew from 2.3 to 2.7, an increase of about 16 percent⁴; among children and adolescents, the average number of weekly servings increased by 23 percent. In both age groups, consumption over this period grew the most in Sub-Saharan Africa (36,37). Between 2018 and 2023, global sales rose from 358 billion liters to 376 billion liters (38). Reducing sugary beverage consumption is additionally challenging given some of the alternatives that the food and beverage industries develop and market as solutions to growing sugar intake. WHO has determined that non-sugar sweeteners (NSS) do not control weight and may be harmful (39). This suggests that countries need to consider including regulation and taxation of products with NSS.

Consumption is highest in Latin America and the Caribbean (7.8 servings per week) and lowest in South Asia (0.7 per week). Many small island states in the Caribbean have extremely high sugary beverage consumption.

Table 1: Evidence on the Effectiveness of Sugary Beverage Taxes

The 2019 TF Report clearly laid out the health effects and social costs of tobacco, alcohol, and sugary beverages. It demonstrated how health taxes are an extremely cost-effective way to reduce consumption and save lives, especially for tobacco and alcohol.

At that time, the evidence base for tobacco and alcohol excise taxes was well-established but not as advanced regarding sugary beverage excise taxes. In the last five years, researchers have analyzed experiences with sugary beverage taxes and confirmed the hypotheses laid out in our previous report.

Sugary beverage taxes ...	
... lead to reduced sales.	In 16 places where sugary beverage tax policies were implemented, sales fell by an average of 15 percent and the associated price elasticity of demand was -1.59 (45).
... do not lead to significant consumption of other high calorie products.	When people stop consuming sugary beverages, they are not substituting for them by consuming other high calorie foods at all or in significant amounts (46-50).
... improve oral health.	Improvements in oral health after introducing taxes on sugary beverages have been demonstrated in Mexico, the UK, and the US (51-53).
... have reduced obesity.	Evaluations of sugary beverage taxes in the UK and Mexico found reductions in obesity prevalence among adolescent girls but not boys (54,55). Studies in three U.S. cities that adopted sugary beverage taxes found lower body mass index among high school students, with larger effects for girls and non-white students.
... have not adversely affected employment or other labor market outcomes.	Recent reviews have demonstrated that sugary beverage taxes have not adversely affected employment or other labor market outcomes (57-59).

Source: Drope and Powell, 2024.

People drink nine times the global average for sugary beverages in Saint Vincent and the Grenadines, four times more in Barbados, and twice as much in Saint Lucia (36,40). In many of these countries, the incidences of diabetes and obesity are extremely high.

In contrast to tobacco and alcohol taxes, many countries have moved forward on sugary beverage excise taxes. Since 2018, taxes on sugary beverages have been adopted in 41 more countries and are now levied in 132 countries.⁵ Research over the last five years has confirmed that these taxes are a cost-effective means to improve health and generate revenue without harming the economy (41) (Table 1).

Nevertheless, sugary beverage taxes are still extremely low. Globally, the median excise tax share of prices for carbonated sugary beverages is only 3.4 percent (42). These are well below the 20 percent share of sugary beverage prices that is widely seen as a minimum benchmark for eliciting behavior change (43). Others

have argued that sugary beverage taxes need to be substantially higher – roughly 20 to 50 percent of sale price – just to account for the health harms and the factors that distort consumer choices (44).

The world is needlessly losing a golden opportunity to save lives and improve fiscal balances. As of 2024, few countries are raising health taxes. Even when they do, the increases are often insufficient even to keep pace with inflation and income growth. Accordingly, in the last five years, cigarettes have remained as affordable or become more affordable in 83 percent of the world’s countries. Production and sales of alcoholic and sugary beverages have risen beyond pre-pandemic levels. Without significant increases in health taxes, the associated burden of death, disease, and injury will continue. Countries are simply not giving health taxes the life-and-death attention they require. Meanwhile, other world events have made raising health taxes even more compelling.

³ Sugary beverages refer to any beverage that is sweetened with sugar or other caloric sweeteners including brown sugar, corn sweeteners, corn syrup, dextrose, fructose, glucose, high fructose corn syrup, honey, lactose, malt syrup, maltose, molasses, raw sugar, and sucrose. Examples of sugary beverages include regular soda, fruit punch, sports drinks, energy drinks, sweetened waters, and coffee and tea beverages with added sugar.

⁴ One serving is defined as 8oz (248 grams).

⁵ World Bank SSB Database, last updated October 2023, at: <https://ssbtax.worldbank.org/>

Looking forward: Health taxes are more important than ever

Before 2020, the imperative to raise health taxes as a cost-effective way to reduce avoidable disease and death was already apparent. Subsequently, the COVID-19 pandemic graphically demonstrated that raising health taxes is indispensable. People in poor health from tobacco, alcohol, or obesity had worse outcomes from COVID-19 infection (60–68). The accompanying economic crisis pushed millions into extreme poverty and led countries into debt by forcing them to raise spending at a time of declining revenue. When interest rates subsequently rose, servicing those debts created further fiscal distress. Thus, at the very time countries have rising demands for healthcare and other social investments, they are facing tougher constraints on government spending (69). Health taxes are described as a win for health and a win for revenues. By contrast, COVID-19 unleashed a lose-lose crisis.

The last five years have taught us more about the need for health taxes.

Consequences, impact, and lessons from COVID-19

COVID-19 was a global catastrophe, like the Spanish Flu or World War II, leading to a worldwide decline in life expectancy. In its first two years, COVID-19 caused 7 million confirmed deaths, but estimates suggest the true number was closer to 17 million (70). Overall, there have been about 27 million excess deaths since the start of the pandemic, whether from COVID-19 or other causes, and over 775 million confirmed cases of COVID-19, with many continuing to live with the consequences of long COVID today (71,72).

COVID-19 dramatically demonstrated how people in poor health from noncommunicable diseases suffer more than others when they contract infectious diseases. It also showed how health systems facing a major emergency are ill-equipped to maintain essential healthcare services for the normal burden of disease.

People who use tobacco, consumed alcohol, were obese or had diabetes experienced higher risks during the pandemic. These factors were associated with more severe outcomes from COVID-19 infections and a greater likelihood of hospitalization and death (60–62,64–67). Overall, countries with a greater disease burden from noncommunicable diseases had higher mortality rates from COVID-19 (73–75).

These findings are not specific to the coronavirus. People with noncommunicable diseases are weakened in ways that make them susceptible to poor outcomes from many illnesses (76). Thus, by reducing the burden of noncommunicable diseases, health taxes are a necessary part of policies to increase resilience in the face of future health emergencies, natural disasters, and the effects of climate change.

The growing burden of noncommunicable disease has long been straining healthcare resources, a situation greatly exacerbated by the pandemic. Many countries have yet to recover their ability to care for people with NCDs much less recover their levels of elective treatment or outpatient attendance after the disruptions of the pandemic (77). Reducing the burden of noncommunicable disease will help health systems address future pandemics, especially if international cooperation provides mechanisms and funding to assure opportune and equitable responses (78).

Health taxes are among the most cost-effective health interventions available, even without including these additional systemwide benefits (79). Yet in times of crisis, it is the systemwide effects that matter. Considering the additional benefits from increasing the population's resilience and from reducing pressures on healthcare systems, it is apparent that current cost-effectiveness measures for health taxes are significantly underestimated.

There is urgency to raising revenues.

In addition to its impact on health and healthcare services, the pandemic caused a massive recession. This resulted in 71 million people being pushed back into poverty in 2020, the first rise in global poverty since 1998 (80). Subsequently, the economic disruptions caused by COVID-19 and the invasion of Ukraine drove up oil and food prices, further slowing global growth, and contributing to higher interest rates (81,82).

In 2020 and 2021, governments increased spending to mitigate the social consequences of the pandemic using programs like cash transfers. To prevent economic collapse, they also extended credit and offered subsidies to businesses. Simultaneously, lower economic activity reduced government revenues.

This led to a rise in public borrowing and increasing debt. In 2020, global borrowing rose 28 percentage points to 256 percent of GDP (83). Between 2023 and 2024, public and publicly guaranteed debt rose by 10 percent in low- and middle-income countries. In low-income countries, the rate of debt growth was nearly 40 percent (84).

When global interest rates rose in 2022, fiscal problems worsened. Overall, 3.3 billion people live in countries which spend more on interest payments than on health or education (85). Furthermore, projections suggest interest payments per capita will increase through 2027, further stressing fiscal accounts (86).

Unfortunately, most low- and middle-income country governments do not raise adequate revenues, even in more normal times. In low-income countries, the tax share of national income averages 14 percent, compared to 21 percent in lower-middle-income countries, 29 percent in upper-middle-income countries, and 38 percent in high-income countries (87).

While the economic crisis forced countries to deal with extreme fiscal challenges, tobacco companies were largely unaffected; and alcohol and sugary beverage producers experienced

only temporary setbacks. During 2020, major tobacco companies maintained their sales revenues and increased gross profit margins, while gross profits and net profits held steady.⁶ In 2020, alcohol and sugary beverage sales revenue and profits declined. However, sales and profits recovered for sugary beverage producers in 2021 and for alcohol producers in 2022 (68).

Health taxes are the right taxes to raise today

The need for more revenues in low- and middle-income countries is pressing, and health taxes are a relatively simple and efficient way to raise them (88). Furthermore, they have beneficial effects on the economy by correcting externalities, shifting the tax portfolio towards a more optimal mix, increasing productivity, and reducing the economic drain of health spending. The examples of Pakistan (Country Spotlight 2) and Lithuania (Country Spotlight 3) demonstrate how bold action to raise health taxes can rapidly reap benefits.

Country Spotlight 2

Bold action on tobacco taxes in Pakistan to save lives and raise revenues

Pakistan has 3 percent of the world's smokers, placing it among the top 10 countries in the world in terms of smoking. It has about 32 million tobacco users accounting for one-fifth of its adult population (89). About 160,000 people die of smoking related causes each year and the country loses some 1.6 percent of GDP in productivity and higher health costs (90). From 2022 to 2023, Pakistan increased its Federal Excise Duty (FED) on cigarettes three times. Overall, these reforms led to a 209 percent increase in FED rates since fiscal year 2021-22. As a result, FED revenue increased by 44 percent from fiscal year 2022-23 to 2023-24 – with the revenue from the 2023-2024 fiscal year exceeding PKR 200 billion (about US\$735 million) (89,91). The price increases also reduced consumption by 19.2 percent (92). While the bold tax increases of 2022-2023 successfully reduced consumption and raised revenue, Pakistan still has more to do, as the average excise tax share in the consumer price of cigarettes still remains significantly below the benchmark of 70 percent (at 55 percent) (91).

⁶ After adjusting for a one-off major write down in 2019 when Altria wrote down the value of investments in JUUL by 8.6 billion due to regulatory uncertainty.

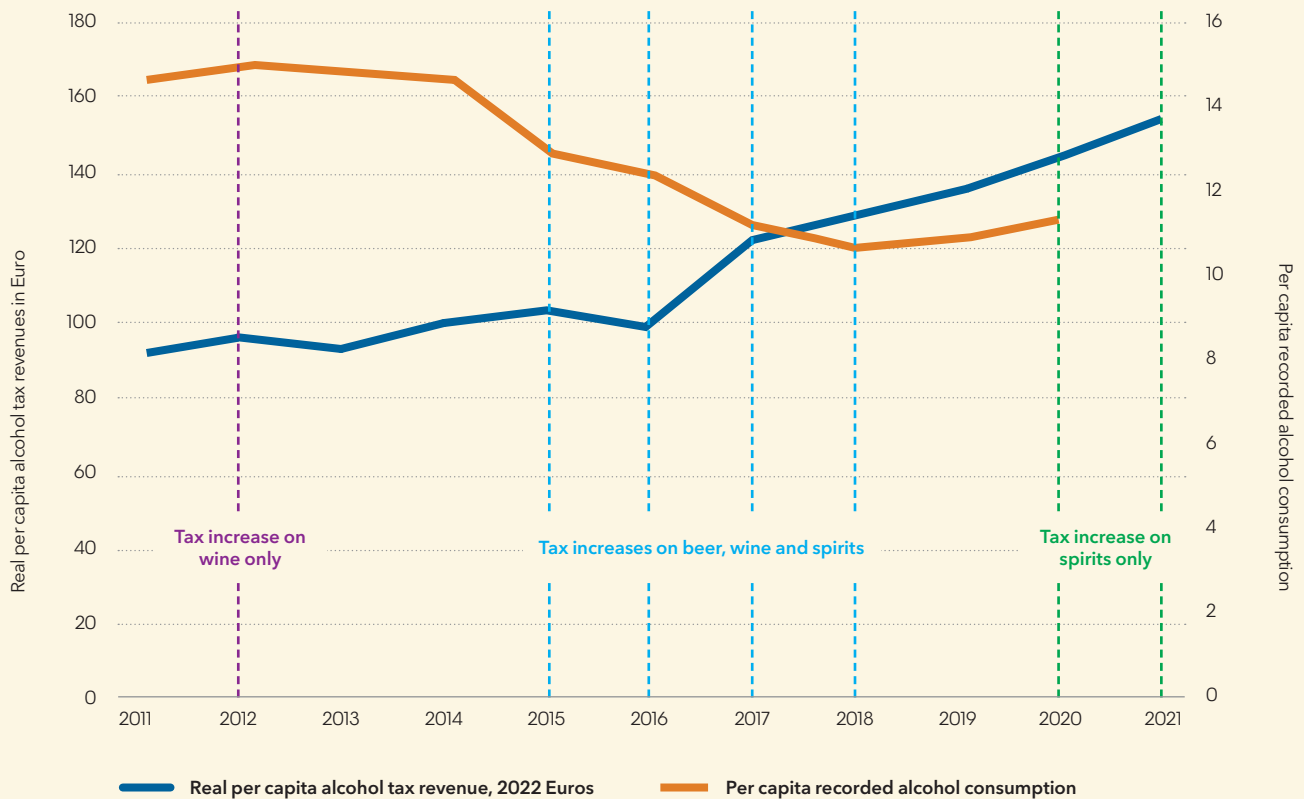
Country Spotlight 3

Sustained action on alcohol taxes in Lithuania

Since 2014, Lithuania has repeatedly and substantially increased excise taxes on beer, wine, and spirits. As a result, per capita alcohol excise tax revenue nearly doubled from 2015 to 2022, and by 2022 accounted for almost three percent of the country's total tax revenue (about US\$490 million or US\$176 per capita) (93). At the same time, alcohol consumption decreased (Figure 3). The largest single tax increase (in 2017) more than

doubled taxes on beer and wine (94,95): this tax increase alone averted an estimated 1,452 deaths in the following year (96). Other research documented the effect of the tax on lower cancer (97) and suicide rates (98). Moreover, these gains went disproportionately more to those in lower socioeconomic groups, pointing to the broadly progressive nature of these taxes.

Figure 3: Per capita alcohol excise tax revenue and recorded alcohol consumption in Lithuania, 2011-2021



Source: Adapted from J. Manthey et al. 2024

Excise taxes are relatively simple to raise in a short time frame. Tobacco, alcohol, and – increasingly – sugary beverage excise taxes are already levied in most countries and tax administration systems to collect those taxes are already in place. Years of research and experience have culminated in numerous technical guides, including from international agencies, to assist relevant authorities – whether Ministries of Finance, Parliaments, or revenue agencies – to design and implement effective health taxes (Table 2).

Table 2: Technical resources for health tax design and implementation

The following resources are available from the World Bank, the WHO and the IMF:

All three products

- World Bank (2023). Why Health Taxes Matter: A Mechanism to Improve Health and Revenue Outcomes. Global Tax Program Health Taxes Knowledge Note Series; no. 1 Washington, D.C.: World Bank Group. <http://documents.worldbank.org/curated/en/0994446002132366565/IDU036b3c4370c15f047e2087a3029ed3a36321f>
- World Bank (2023). Health Taxes and Inflation. Global Tax Program Health Taxes Knowledge Note Series; no. 2 Washington, D.C.: World Bank Group. <http://documents.worldbank.org/curated/en/099531302232310282/IDU12744ac8c17576141e219feal171a74ecce7e>

Tobacco

- World Health Organization. WHO technical manual on tobacco tax policy and administration, 2021. Geneva: World Health Organization. <https://www.who.int/publications/i/item/9789240019188>
- Petit and Nagy (2016). How to Design and Enforce Tobacco Excises?. IMF How To Notes, 2016(003). <https://doi.org/10.5089/9781475546651.061>

Alcohol

- World Health Organization. WHO technical manual on alcohol tax policy and administration, 2023. Geneva: World Health Organization. <https://www.who.int/publications/i/item/9789240082793>
- Mansour, Petit, and Sawadogo. How To Design Excise Taxes on Alcoholic Beverages. IMF How To Notes, 2023(004). <https://doi.org/10.5089/9798400257902.061>

Sugary beverages and other products that contribute to obesity

- World Health Organization. WHO manual on sugar-sweetened beverage taxation policies to promote healthy diets, 2022. Geneva: World Health Organization. <https://www.who.int/publications/i/item/9789240056299>
- Petit, Mansour, and Wingender. How to Apply Excise Taxes to Fight Obesity. IMF How To Notes, 2021(008). <https://doi.org/10.5089/9781513585697.061.A001>

Health taxes are also the right taxes to raise now because they are efficient. They correct the mispricing that makes tobacco, alcohol, and sugary beverages cheap relative to their social costs (i.e., externalities). A few examples of these social costs include people being exposed to secondhand smoke, being injured by people driving under the influence of alcohol, or paying more to support public healthcare for treating avoidable cases of diabetes and stroke. Consumers' own decisions are also distorted by systematically misjudging the long-term risks of consumption relative to their perceived short-term benefits (99). This impediment to good decision-making is exacerbated by the addictive features of all three products.⁹

Furthermore, every peso or pound that can be raised through taxing “bads” is another peso or pound that does not have to be raised by taxing “goods” (e.g., employment or income). When considered purely from a tax efficiency perspective, the tax rate that should be levied on a product that has harmful externalities may go beyond the levels required to deal with the associated harms because it can simultaneously offset the need for other taxes that discourage something useful (104).

Instead of slowing growth, health taxes also contribute to economic productivity by improving population health (105). Diseases and injuries associated with consuming tobacco, alcohol, and sugary beverages are a drag on economic growth because they lead to increased absenteeism and lower productivity from workers showing up sick, as well as premature retirement and premature death of working age individuals. Furthermore, healthier populations do not have to use resources for healthcare services. In these ways, higher health taxes help countries lower healthcare cost pressures that obstruct policies to fulfill national aspirations for universalizing equitable health coverage.

By correcting externalities, shifting the tax portfolio towards a more optimal mix, and increasing productivity, health taxes are the right taxes to raise now.

Health taxes have significant short-term revenue potential

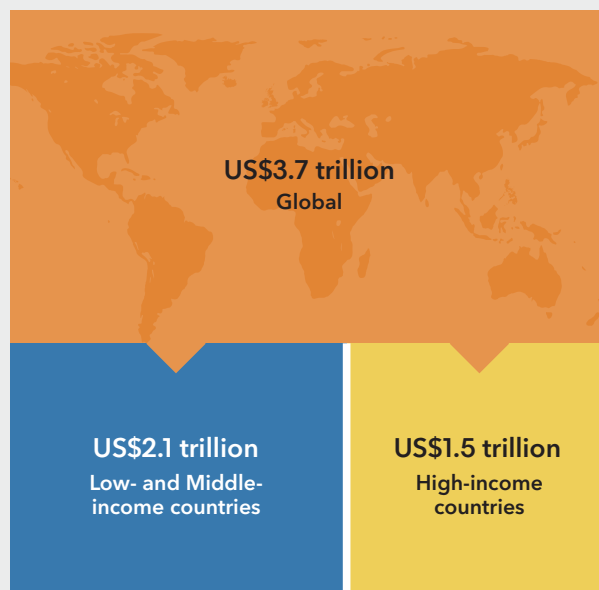
A background report commissioned by the Task Force (106) found that raising excise taxes on tobacco, alcohol and sugary beverages enough to generate a 20 percent price increase would generate US\$2.2 trillion over five years, of which about two-thirds (US\$1.3 trillion) would be mobilized in low- and middle-income countries. Raising health taxes enough to generate a 50 percent increase in prices would generate about US\$3.7 trillion in additional revenues over five years. Of this, US\$2.1 trillion would be raised in low- and middle-income countries and US\$1.5 trillion in high-income countries (Figure 4). If allocated to health, this would increase global government health budgets by 12 percent and in LMICs by 40 percent. Per capital health expenditures in LMICs would increase from US\$160 to US\$224 (Figure 5).

By raising excise taxes enough to generate a one-time increase in prices by 20 percent, tobacco taxes would contribute an additional US\$488 billion over 5 years to government revenues and would reduce consumption by about 10 percent. Forty-one million people globally would quit smoking due to the higher prices, including 33 million people in LMICs. For alcohol, the revenue generated would be about US\$1.3 trillion and consumption would fall by about 12 percent. For sugary beverages, the revenue generated would be about US\$415 billion along with a decline in consumption of about 24 percent.

Over 100 million people – 10 percent of the world's smokers – would quit smoking if all countries increased tobacco taxes enough to raise cigarette prices by 50 percent.

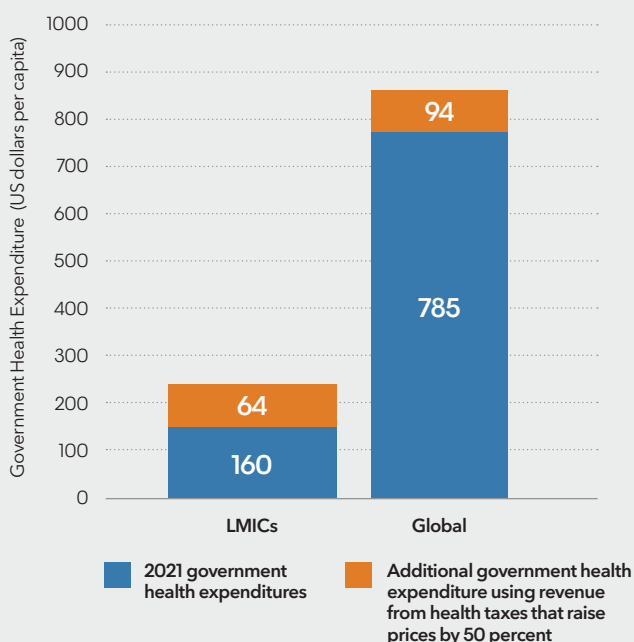
Raising excise taxes enough to generate a one-time increase in prices by 50 percent would generate correspondingly larger changes in revenues and consumption for tobacco and alcohol. Tobacco taxes would generate an additional US\$1 trillion in revenues over 5 years

Figure 4: Potential additional revenues over 5 years from a one-time increase in health taxes on tobacco, alcohol, and sugary beverages that raises all prices 50 percent, by country income groups



Source: Summan and Laxminarayan 2024.

Figure 5: Per capita government health expenditures and potential additional per capita health expenditure using revenue from a one-time increase in health taxes on tobacco, alcohol, and sugary beverages that raises all prices 50 percent



Source: Suman and Laxminarayan 2024; Domestic general government health expenditure per capita sourced from WHO Global Health Observatory

⁹ The addictiveness of tobacco and alcohol are well-established. While evidence on sugar has demonstrated its neurological effects and many features characteristic of addiction, its addictiveness is still under study. See, for example, (100–103).

and would reduce tobacco consumption by nearly one-quarter. Over 100 million people would quit smoking, including nearly 85 million people living in LMICs. Alcohol would generate an additional US\$2.4 trillion in revenues and reduce consumption by 30 percent. Sugary beverages would raise an additional US\$328 billion in revenues, reducing consumption by 60 percent.¹⁰ Low- and middle-income countries account for the largest share of all of these potential revenues: 59 percent in the case of tobacco, 56 percent in the case of alcohol, and 73 percent in the case of sugary beverages. This is a consequence both of their large share of the world's population and of global consumption.

Overall, by raising taxes to increase prices by 50 percent in real terms, over 50 years, lower consumption would avoid 50 million premature deaths. Tobacco taxes would be responsible for avoiding over half of these (27.2 million), with alcohol taxes avoiding 21.9 million and sugary beverage taxes avoiding 2.2 million. Subsequent increases would save even more lives and bring in additional revenue.

Other health taxes and complementary fiscal and public policies for health

Health taxes on tobacco, alcohol, and sugary beverages are highly cost-effective tools to reduce consumption. Their impact can be magnified further with the implementation of complementary policies, such as advertising bans, restrictions on places and times of sales, graphic warnings, bans on promotional activities, restrictions on lobbying, and programs supporting individuals who want to quit or reduce consumption. In cases where governments subsidize tobacco, alcohol or sugary beverages, the elimination of subsidies can release funds for other healthier uses while removing some incentives for production (107,108). Health taxes might also be warranted for other unhealthy products, like ultra-processed foods.

Ultra-processed foods

Added sugars are a highly problematic aspect of today's modern food industry, but they are not the only factor contributing to unhealthy diets. In recent

years, attention has turned to ultra-processed foods as a distinct category. Ultra-processed foods tend to be derived from foods but are designed to increase sales, reduce costs, and become habit-forming without regard for nutritional content. The category overlaps with, but is not the same as, foods high in saturated fats, sugar, and sodium.

More than half the total calories consumed in many high-income countries are from ultra-processed foods. In middle-income countries this figure ranges from 20 to 40 percent. Younger people are likely to consume a diet higher in ultra-processed foods than their elders.

Consuming ultra-processed foods is associated with major health risks like obesity and diabetes. A review of 45 meta-analyses encompassing almost 10 million participants found direct associations between ultra-processed food consumption and 32 indicators of poor health, involving cancerous, mental, respiratory, cardiovascular, gastrointestinal, and metabolic conditions, as well as higher mortality risk (108).

One important factor in the trend toward consuming ultra-processed foods is relative prices. Thus, fiscal policies could play a role in promoting healthy diets by taxing ultra-processed foods and subsidizing healthy ones.

A set of countries – including Colombia, Ethiopia, Hungary, Mexico, and seven island nations¹¹ – have introduced taxes on ultra-processed foods and other integrated policies to support healthier diets. These countries have enacted national-level excise taxes on ultra-processed foods, distinguished primarily in terms of containing large quantities of saturated fats, sugar, and sodium. As experience with these policies unfolds, research will be able to fill the gaps that remain in understanding why ultra-processed foods are displacing wholesome foods, how they contribute to the disease burden, and what kinds of public policies are most effective at mitigating their impact on population health and on equity.

¹⁰ Many factors affect good excise tax design and how revenue responds to tax increases. Key among these is the price elasticity of demand, or the responsiveness of quantity to changes in price. Demand for sugary beverages is relatively elastic. This means that an excise tax that raises their prices by 50 percent will generate substantial revenues - but less than an excise tax that raises prices by 20 percent. However, the health impacts of a 50 percent increase are much greater than that of a 20 percent increase. By contrast, tobacco and alcohol demands are quite inelastic and so an excise tax that increases prices by 50 percent generates substantially more revenue than one that raises prices by 20 percent, while also having a much larger health impact.

¹¹ Dominica, French Polynesia, Fiji, New Caledonia, Samoa, Tonga and Vanuatu.

The moment is now: A winning policy with successful political strategies

The imperative of raising health taxes has not changed since the first report. These taxes are effective—they reduce use and save lives. They are economically efficient since they tax “bads” rather than “goods” like labor and income. They are also simply too low, have not risen appreciably in the last five years, and have not been deployed ambitiously to make harmful products less affordable.

So, what is stopping countries from taking stronger action?

The biggest hurdle to raising health taxes has been opposition from the industries that produce tobacco products, alcoholic beverages, and sugary beverages. The playbook for this opposition is so well-known that it can be easily summarized (109–111). When health taxes are proposed, industries begin by denying harms, then promote doubt, divert attention, spread disinformation, create front organizations, and varnish their reputations. When health taxes proceed through the legislative or regulatory process, they influence proposals to make them less effective and offer substitute policies. When health taxes are enacted, industry seeks to delay or reverse policies through court actions. We also know that industries have regularly lied to the public about the harm caused by their products, bribed politicians, and used tactics like smuggling to influence public policies and promote market expansion (112–115).

In this section, we provide some strategies for a government, or parts of a government, who wish to counter industry pressure and raise health taxes.

Countering industry myths

A key aspect of industry resistance is disinformation about the effects of health taxes on consumption, economic growth, employment, the wellbeing of the poor, and illicit trade.

We reviewed these issues in our 2019 report and concluded that arguments that health taxes will not reduce consumption do not stand up to rigorous independent research.

We also found that improving health taxes on tobacco, alcohol, and sugary beverages raises worker productivity and contributes to economic growth. Research studies consistently find neutral or positive impact on employment from health taxes as consumers shift spending to other sectors and governments spend revenues on more labor-intensive services.

The distributional effects of health taxes are also generally positive when the impact of harmful consumption on poor households is considered. Consumption of unhealthy products diverts household spending from more healthy products, causes health problems, reduces labor supply, and increases healthcare expenditures (116,117).

When illicit trade occurs, it does not fully offset the ability to raise revenues and reduce consumption, and increases in tobacco taxes have consistently produced health and revenue benefits, even in the presence of revenue leakages. Furthermore, health taxes are not the primary factor driving illicit trade. For tobacco, research has shown that law enforcement and tax administration are the main factors accounting for differences in illicit trade across countries and across time (13). Policies, such as coordinating health tax policies across adjacent countries, can also help limit illicit trade. Despite the strength of this evidence, industries continue to directly and indirectly promulgate doubt about these facts.

Industry has promoted the idea that health taxes are controversial, but they do not have to be. Health taxes are not a partisan issue. Governments that raise health taxes come from every part of the ideological spectrum (Spotlight 1 and Spotlight 5).

In addition, surveys consistently show substantial support for health taxes, often supported by majorities of the population. For example, in a recent survey of five countries with very different characteristics, a majority of people supported raising taxes on tobacco, alcohol, and sugary beverages (Figure 6)¹².

Figure 6: Public support for raising health taxes

	Tobacco	Alcohol	High-sugar drinks
Colombia	66%	61%	61%
India	59%	63%	60%
Jordan	66%	91%	59%
Tanzania	74%	74%	69%
USA	65%	55%	47%
Average	66%	69%	59%

Source: Gallup Measuring Public Perceptions of Noncommunicable Diseases survey, 2021-2022; Dugan 2022.

Other surveys have shown similar levels of support for health taxes, including a significant number of people who are themselves consumers of these products (118, 119). In 2012, 70 percent of Malaysians favored raising tobacco taxes, including 32 percent of current smokers. A survey in Mexico during 2022 found that higher tobacco taxes were favored by 77 percent of all respondents and 72 percent of those who smoke (120).

Public support is often higher when respondents are asked about raising health taxes earmarked for popular programs. For example, more people in Australia, France, the United Kingdom and the United States indicated they would support sugary beverage taxes if they knew the revenue would be used for health programs (122).

Industry opposition is persistent and strong while public support is positive but diffuse. Thus, when governments decide to raise health taxes, they need to communicate in a way that mobilizes the basic popular support for improving health and minimizes opposition to increasing taxes.

Strategies to raise health taxes, as well as to enact other complementary policies, are well documented (123-127). Successful government strategies generally involve action on multiple fronts, including efforts to frame the debate, mobilize public support, reach out and amplify messages, weaken industry opposition, and above all, be persistent (see Country Spotlights).

¹² Samples were nationally representative of the resident civilian, noninstitutionalized, adult population (18+) of the entire country, including rural areas. See Dugan 2022 for further details and survey questions.

Strategies to Raise Health Taxes

Frame the issue

Mobilize support

Be Persistent

Communicate Strategically

Actively counter industry opposition

Framing the issue may be the single most important aspect of any strategy. Winning the debate against industry opposition often hinges on whose narrative becomes most salient. The fundamental challenge for governments is to highlight the benefits of health taxes and overcome general opposition to higher taxes.

Demonstrating how health taxes generate benefits can rely on existing or new research to establish country-specific estimates of lives saved, diseases averted, and additional revenue. In some cases, it is helpful to show where a country stands relative to its peers in terms of tax levels, or the disease burden associated with unhealthy consumption. Sometimes public support can be strengthened by committing to apply new revenues to popular programs, such as general health insurance (Spotlight 1, Philippines) or specific children's health programs (United States (129)). The right framing will be compelling to the public while disarming the narrative promoted by opponents (124).

Mobilizing support is essential for raising health taxes, and framing the debate is one part of the process. Governments seeking to raise health taxes have natural allies in professional groups like tax justice groups, cancer, lung and heart associations, grassroots public health advocacy initiatives, youth groups, and patient and survivor groups (130). Additionally, other countries' experiences can serve as a powerful motivator; countries have successfully benchmarked their tax increase efforts to their regional and economic peers.

Strategic communication is essential if the narrative provided to justify health tax increases is going to become the dominant frame for debate. Coalition partners are important to this process. Governments have also enlisted the media to spread information by providing the research, evidence, and examples

that support health taxes (131). Exposing industry strategies to oppose health taxes is important, both to neutralize their efforts and to delegitimize their participation. Carrying out this debate in public can be an effective option.

Actively counter industry opposition. Explicit tactics are needed to weaken the industry's resistance to health taxes. First, governments must legislate and enforce restrictions on efforts by industry to influence policymaking and compromise government officials. Second, governments can harness popular sentiment, both in support of better health and in opposition to industries profiting from human suffering. Third, governments can counter the tobacco, alcohol, and sugary beverage industries' effort to co-opt other industries by focusing on the economic benefits of a healthier workforce and consumers with more purchasing power. Finally, industry's false and misleading arguments must be confronted directly with the evidence, and their reports publicly discredited by exposing that they are self-serving and typically secretive about sources and methods.

Persistence and policy continuity may be the most difficult challenge. After successful efforts to raise health taxes, industry will craft new strategies to recapture markets and influence potential future tax changes. To have lasting impact, governments may need to maintain an environment supportive of health taxes, regularly engaging the public to renew and sustain the positive framing for health taxes, while maintaining the capacity to mobilize new initiatives whenever windows of opportunity arise. This persistence has to be maintained from election to election and government to government, and cross-party support is imperative.

Country Spotlight 5

Policy Persistence in Colombia: Support for health taxes crosses party lines

In December 2022, the Colombian president signed new tax reforms which introduced taxes on sugary beverages. The proposals were put forward and supported by a coalition of 70 members of congress from all parties, 37 non-governmental organizations, and reinforced by several medical associations, researchers, and universities (129). The passing of the sugary beverage tax came as the third of a series of positive health tax increases by three successive governments from different sides of the political spectrum, demonstrating a long-term continued effort in promoting these policies. Political consensus was not always easy to reach, and business interests engaged in intense lobbying against such measures at various stages (123). First, in 2016, President Juan Manuel Santos's government implemented in separate laws two major tax increases on tobacco and alcohol products. These revenues are earmarked for the health sector. Subsequently, under President Iván Duque's administration, the VAT on sugary drinks was extended to the final consumer (rather than taxing beverages at the factory gate). More recently, President Gustavo Petro signed the 2022 tax reform to introduce additional specific taxes on sugary beverages and on ultra-processed foods. Colombia's continued success in this area demonstrates the results of a long-term effort by many actors across the political spectrum and emphasizes the importance of persistent policy work both inside and outside of government.

Country Spotlight 6

Tobacco taxes in Ethiopia: Collaboration in framing the debate around health

In February 2020, the Ethiopian parliament passed a law updating tobacco taxes. Passing the law relied upon supportive actors in government agencies working with civil society organizations to create a common policy narrative (128). Government officials were supported in this through meetings with and evidence generated by the World Health Organization and World Bank experts (128). To disseminate the narrative and generate public support, parliament held a series of public hearings and broadcast public debates on local and national television (128). Stakeholders and the public were invited to submit position statements and raise questions, with responses given by officials from the Ministry of Health and the Ethiopian Food and Drug Authority. This provided an opportunity to draw attention to the financial and health costs of tobacco use, and the potential health and revenue gains from taxing tobacco, and counter industry narratives.

Call to action

Effective implementation of higher health taxes is a proven and simple solution for the fiscal and health crises facing most low- and middle-income countries today. Higher health taxes will generate revenues and reduce ill-health, giving governments more room and capacity to deal with the other pressing problems of the day. The moment to act is now.

The Task Force reached five key conclusions:

1. Urgent action is needed to reduce the deaths and disease linked to the consumption of tobacco, alcohol, and sugary beverages, especially in low- and middle-income countries. Each year, they kill over 10 million people worldwide with economic costs of over \$4 trillion.
2. Health taxes are good for health and good for budgets, making them a unique and timely policy solution for the polycrisis of today. The recent pandemic along with recession, inflation, and geopolitical conflicts have led to a health and fiscal crisis that can be mitigated by raising health taxes. Yet progress on alcohol and tobacco taxes have stalled, and taxes on sugary beverages are making progress but remain far too low.
3. The highest priority is for all countries to raise and reform tobacco taxes. Of the three products considered in this report, tobacco continues to cause the most death and illness in the world and extensive guidance and country experience on effective tax policy is available. Despite this, tobacco tax policy has actually regressed in 76 countries; some 87 percent of the world's one billion smokers now live in countries where cigarettes are equally or more affordable than in 2019.
4. Without decisive action today, millions of lives will be needlessly lost. Taxes that generate a 50 percent increase in real prices of tobacco, alcohol, and sugary beverages by 50 percent would save 50 million lives over 50 years and could raise US\$3.7 trillion globally over just five years, including US\$2.1 trillion in low- and middle-income countries (LMICs). If allocated to health, this would increase government health care spending by 12 percent globally and by 40 percent in LMICs. These taxes are relatively quick to implement, reduce health systems costs, do not put economic growth at risk, and can thus help to alleviate the current fiscal crises.
5. We call on all countries to urgently and substantially raise health taxes, prioritizing tobacco, and continue increasing them above the level of inflation and economic growth. This will require strong and sustained political will to counter the opposition from affected industries and their allies, and should be actively supported by multilateral agencies. Governments will need to limit the industries' interference with policymaking, harness public support, and make the case that health taxes are a win-win for health and for revenues.

The Task Force recommends six specific actions:

1. Countries should significantly increase health taxes, improving their design and strengthening enforcement, to make tobacco, alcohol, and sugary beverages less affordable, reduce consumption, prevent unnecessary death and disease, and raise revenues.
2. Countries should give the highest priority to raising and reforming tobacco excise taxes given they have the greatest impact on lives saved but as yet remain underutilized.
3. Countries should continue increasing health taxes regularly above the level of inflation and economic growth to ensure that the taxes rise in real terms and products become less affordable over time.
4. Countries should work to counter industry resistance, through framing the debate, mobilizing support, and enacting legislation and policies to limit the influence of companies that manufacture and market unhealthy products, particularly to young people.
5. Countries should act to ensure wider policy coherence, such as reducing production subsidies and limiting marketing and availability.
6. Countries should avail themselves of technical and financial resources from the International Monetary Fund, World Bank, World Health Organization, regional health authorities and development banks to implement effective health tax policies; and the multilaterals institutions should proactively promote effective health tax increases whenever they engage countries in fiscal policy dialogues.

Task Force Background Papers

Klemperer, Katherine and Pete Baker 2024. "Health taxes in the polycrisis era." Background Paper for the Task Force on Fiscal Policy for Health. New York: Bloomberg Philanthropies.

Ng, Shu Wen 2024. "Taxing Ultra-Processed Foods (UPFs) or Foods high in fat, sodium and sugar (HFSS)." Background Paper for the Task Force on Fiscal Policy for Health. New York: Bloomberg Philanthropies.

Summan, Amit and Ramanan Laxminarayan 2024. "Short-Term Revenue Potential of Excise Taxes on Tobacco, Alcohol, and Sugary Beverages." Background Paper for the Task Force on Fiscal Policy for Health. New York: Bloomberg Philanthropies.

Drope, Jeffrey and Lisa M. Powell 2024. "Using Fiscal Policy to Promote Health: A Five-Year Update on Taxing Alcohol, Tobacco, and Sugar-Sweetened Beverages." Background Paper for the Task Force on Fiscal Policy for Health. New York: Bloomberg Philanthropies.

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For more information on the Task Force on Fiscal Policy for Health visit:

<https://www.bloomberg.org/program/public-health/task-force-fiscal-policy-health/>

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References

1. World Bank. Unpacking the empirics behind health tax revenue. Washington, DC: World Bank; 2023 Nov. (Global Tax Program Health Taxes Knowledge Note Series). Report No.: 4.
2. Kaiser K, Bredekamp C, Iglesias R. Sin Tax Reform in the Philippines: Transforming Public Finance, Health, and Governance for More Inclusive Development. Washington, DC: World Bank; 2016. Available from: <https://hdl.handle.net/10986/24617>
3. Philippine Statistics Authority, Department of Health, Philippines. 2021 Philippines Global Adult Tobacco Survey. 2023 Dec. Available from: https://drupal.gtssacademy.org/sites/default/files/country_docs/2021-GATS-Country-Report.pdf
4. Global Youth Tobacco Survey Fact Sheet, Philippines, 2019. World Health Organization; 2021 Apr. Available from: <https://extranet.who.int/ncdsmicrodata/index.php/catalog/937/download/6620>
5. The Health Policy Development and Planning Bureau. 2022 Sin Tax Annual Report. Manila, Philippines; 2022. Available from: <https://external-doh.com/wp-content/uploads/2023/09/2022-DOH-Annual-Sin-Tax-Report.pdf>
6. World Health Organization. WHO global report on trends in prevalence of tobacco use 2000–2030. Geneva; 2024. Available from: <https://iris.who.int/bitstream/handle/10665/375711/9789240088283-eng.pdf?sequence=1>
7. Reitsma MB, Kendrick PJ, Ababneh E, Abbafati C, Abbasi-Kangevari M, Abdoli A, et al. Spatial, temporal, and demographic patterns in prevalence of smoking tobacco use and attributable disease burden in 204 countries and territories, 1990–2019: a systematic analysis from the Global Burden of Disease Study 2019. *The Lancet*. 2021 Jun 19;397(10292):2337–60.
8. World Health Organization. Hooking the next generation: how the tobacco industry captures young customers. Geneva; 2024. Available from: <https://iris.who.int/bitstream/handle/10665/376853/9789240094642-eng.pdf?sequence=1>
9. Ma C, Xi B, Li Z, Wu H, Zhao M, Liang Y, et al. Prevalence and trends in tobacco use among adolescents aged 13–15 years in 143 countries, 1999–2018: findings from the Global Youth Tobacco Surveys. *The Lancet Child & Adolescent Health*. 2021;5(4):245–55.
10. Njie GJ, Kirksey Jones C, Jacques N, Adetokun A, Ross J, Owens A, et al. Changes in Tobacco Product Use Among Students Aged 13 to 15 Years in 34 Countries, Global Youth Tobacco Survey, 2012–2020. *Prev Chronic Dis*. 2023 Aug 3;20:220410.
11. Friedson A, Li M, Meckel K, Rees DI, Sacks DW. Cigarette taxes, smoking, and health in the long run. *Journal of Public Economics*. 2023 Jun;222:104877.
12. Jha P, Peto R. Global effects of smoking, of quitting, and of taxing tobacco. Vol. 370, *New England Journal of Medicine*. Massachusetts Medical Society; 2014. p. 60–8.
13. NCI, WHO. Monograph 21 The Economics of Tobacco and Tobacco Control. US National Cancer Institute Tobacco Control Monograph 21. 2016;NIH Public(No. 16-CA-8029A):688.
14. Peto R. Smoking and death: the past 40 years and the next 40. *BMJ*. 1994 Oct;309(6959):937–9.
15. World Health Organization. WHO report on the global tobacco epidemic, 2023: protect people from tobacco smoke. Geneva; 2023. Available from: <https://iris.who.int/bitstream/handle/10665/372043/9789240077164-eng.pdf?sequence=1>
16. Reitsma MB, Flor LS, Mullany EC, Gupta V, Hay SI, Gakidou E. Spatial, temporal, and demographic patterns in prevalence of smoking tobacco use and initiation among young people in 204 countries and territories, 1990–2019. *The Lancet Public Health*. 2021 Jul;6(7):e472–81.
17. Goodchild M, Nargis N, D’Espaignet ET. Global economic cost of smoking-attributable diseases. *Tobacco Control*. 2018;27(1).
18. WHO. WHO technical manual on tobacco tax policy and administration. World Health Organization; 2021. Available from: <https://www.who.int/publications/i/item/9789240019188>
19. Drope J, Powell LM. Using Fiscal Policy to Promote Health: A Five-Year Update on Taxing Alcohol, Tobacco, and Sugar-Sweetened Beverages. Bloomberg Philanthropies; 2024. (Background Paper for the Task Force on Fiscal Policy for Health).
20. Drope J, Oo S, Lee H, Dorokhina M, Guerrero-López C, G RI, et al. Cigarette Tax Scorecard. 3rd ed. *Tobacconomics*; 2024.
21. World Health Organization. Global status report on alcohol and health and treatment of substance use disorders. Geneva; 2024 Jun. Available from: <https://iris.who.int/bitstream/handle/10665/377960/9789240096745-eng.pdf?sequence=1>
22. Rehm J, Shield KD, Weiderpass E. Alcohol consumption. A leading risk factor for cancer. *Chemico-Biological Interactions*. 2020;331(109280).
23. Chikritzhis T, Livingston M. Alcohol and the Risk of Injury. *Nutrients*. 2021;13(8):2777.
24. Mayshak R, Curtis A, Coomber K, Tonner L, Walker A, Hyder S, et al. Alcohol-Involved Family and Domestic Violence Reported to Police in Australia. <https://doi.org/10.1177/0886260520928633>. 2020 Jun;37(3–4):NP1658–85.
25. Manthey J, Hassan SA, Carr S, Kilian C, Kuitunen-Paul S, Rehm J. What are the Economic Costs to Society Attributable to Alcohol Use? A Systematic Review and Modelling Study. *Pharmacoeconomics*. 2021;39(7):809–22.
26. Manthey J, Shield KD, Rylett M. Global alcohol exposure between 1990 and 2017 and forecasts until 2030: a modelling study. *Lancet*. 2019;393:2493–502.
27. World Health Organization. Global report on the use of alcohol taxes, 2023. Geneva; 2023. Available from: <https://iris.who.int/bitstream/handle/10665/374614/9789240086104-eng.pdf?sequence=1>
28. World Health Organization. Global report on the use of alcohol taxes, 2023. Geneva: World Health Organization; 2023. Available from: <https://iris.who.int/handle/10665/374614>
29. Kilian C, Manthey J, Neufeld M, Rehm J. Affordability of alcoholic beverages in the European Union. *European Addiction Research*. 2023;29(1):63–6.
30. BDJ Team. A global outlook on sugar. BDJ Team. 2017 Mar 3;4(3):17045.
31. United States Department of Agriculture Foreign Agricultural Service. Sugar: World Markets and Trade. 2024 May. Available from: <https://apps.fas.usda.gov/psdonline/circulars/sugar.pdf>
32. Meng Y, Li S, Khan J, Dai Z, Li C, Hu X, et al. Sugar- and Artificially Sweetened Beverages Consumption Linked to Type 2 Diabetes, Cardiovascular Diseases, and All-Cause Mortality: A Systematic Review and Dose-Response Meta-Analysis of Prospective Cohort Studies. *Nutrients*. 2021 Jul 30;13(8):2636.

33. NCD Risk Factor Collaboration. Worldwide trends in underweight and obesity from 1990 to 2022: a pooled analysis of 3663 population-representative studies with 222 million children, adolescents, and adults. *The Lancet*. 2024 Mar 16;403(10431):1027-50.
34. International Diabetes Federation. *IDF Diabetes Atlas 2021*, 10th Ed. Brussels, Belgium: International Diabetes Federation; 2021. Available from: <https://diabetesatlas.org/atlas/tenth-edition/>
35. Okunogbe A, Nugent R, Spencer G, Powis J, Ralston J, Wilding J. Economic impacts of overweight and obesity: current and future estimates for 161 countries. *BMJ Global Health*. 2022 Sep 1;7(9):e009773.
36. Lara-Castor L, Micha R, Cudhea F, Miller V, Shi P, Zhang J, et al. Sugar-sweetened beverage intakes among adults between 1990 and 2018 in 185 countries. *Nat Commun*. 2023 Oct 3;14(1):5957.
37. Lara-Castor L, Micha R, Cudhea F, Miller V, Shi P, Zhang J, et al. Intake of sugar sweetened beverages among children and adolescents in 185 countries between 1990 and 2018: population based study. *BMJ*. 2024 Aug 7:e079234.
38. Euromonitor. 2024.
39. World Health Organization. *Use of non-sugar sweeteners: WHO guideline summary*. Geneva; 2023. Available from: <https://iris.who.int/bitstream/handle/10665/375565/9789240083479-eng.pdf?sequence=1&isAllowed=y>
40. Singh GM, Micha R, Khatibzadeh S, Shi P, Lim S, Andrews KG, et al. Global, Regional, and National Consumption of Sugar-Sweetened Beverages, Fruit Juices, and Milk: A Systematic Assessment of Beverage Intake in 187 Countries. *PLoS ONE*. 2015 Aug;10(8). Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4526649/>
41. World Health Organization. *WHO Manual on Sugar-Sweetened Beverage Taxation Policies to Promote Healthy Diets*. Geneva: World Health Organization; 2022.
42. WHO. *Global report on the use of sugar-sweetened beverage taxes 2023*. World Health Organization; 2023. 59 p. Available from: <https://www.who.int/publications/i/item/9789240084995>
43. UNICEF. *Sugar-Sweetened Beverage Taxation*. 2022 Mar. (Policy Brief). Available from: [https://www.unicef.org/media/116681/file/Sugar-Sweetened%20Beverage%20\(SSB\)%20Taxation.pdf](https://www.unicef.org/media/116681/file/Sugar-Sweetened%20Beverage%20(SSB)%20Taxation.pdf)
44. Allcott H, Lockwood BB, Taubinsky D. Regressive Sin Taxes, with an Application to the Optimal Soda Tax*. *The Quarterly Journal of Economics*. 2019 Aug 1;134(3):1557-626.
45. Andreyeva T, Marple K, Marinello S, Moore TE, Powell LM. Outcomes Following Taxation of Sugar-Sweetened Beverages: A Systematic Review and Meta-analysis. *JAMA Network Open*. 2022 Jun;5(6):e2215276-e2215276.
46. Bleich SN, Dunn CG, Soto MJ. Association of a sweetened beverage tax with purchases of beverages and high-sugar foods at independent stores in Philadelphia. *JAMA Netw Open*. 2021;4(6).
47. Gibson LA, Lawman HG, Bleich SN, Yan J, Mitra N, LeVasseur MT, et al. No Evidence of Food or Alcohol Substitution in Response to a Sweetened Beverage Tax. *American Journal of Preventive Medicine*. 2021;60(2):e49-57.
48. Oddo VM, Leider J, Powell LM. The impact of Seattle's sugar-sweetened beverage tax on substitution to sweets and salty snacks. *J Nutr*. 2021;151(10):3232-9.
49. Petimar J, Gibson LA, Yan J, Bleich SN, Mitra N, Trego ML, et al. Sustained impact of the Philadelphia Beverage tax on beverage prices and sales over 2 years. *Am J Prev Med*. 2022;62(6):921-9.
50. Saelens BE, Rowland M, Qu P, Walkinshaw L, Oddo V, Knox M, et al. *Twelve Month Report: Store Audits & Child Cohort - The Evaluation of Seattle's Sweetened Beverage Tax*. Public Health-Seattle and King County; 2021.
51. Hernández-F M, Cantoral A, Colchero MA. Taxes to Unhealthy Food and Beverages and Oral Health in Mexico: An Observational Study. *Caries Research*. 2021;55(3):183-92.
52. Petimar J, Gibson LA, Wolff MS, Mitra N, Corby P, Hettinger G, et al. Changes in Dental Outcomes After Implementation of the Philadelphia Beverage Tax. *Am J Prev Med*. 2023;65(2).
53. Rogers NT, Conway DI, Mytton O, Roberts CH, Rutter H, Sherriff A, et al. Estimated impact of the UK soft drinks industry levy on childhood hospital admissions for carious tooth extractions: interrupted time series analysis. *BMJ Nutrition, Prevention & Health*. 2023;6:e000714.
54. Gračner T, Marquez-Padilla F, Hernandez-Cortes D. Changes in weight-related outcomes among adolescents following consumer price increases of taxed sugar-sweetened beverages. *JAMA Pediatr*. 2022;176(2):150-8.
55. Rogers NT, Cummins S, Forde H, Jones CP, Mytton O, Rutter H. Associations between trajectories of obesity prevalence in English primary school children and the UK soft drinks industry levy: An interrupted time series analysis of surveillance data. *PLoS Med*. 2023;20(1):1004160.
56. Flynn J. Do sugar-sweetened beverage taxes improve public health for high school aged adolescents? *Health Economics*. 2023 Jan;32(1):47-64.
57. Marinello S, Powell LM. *A Review of the Labor Market Impacts of Local Sugar-Sweetened Beverage Taxes in the United States*. Research Brief. Policy, Practice and Prevention Research Center, University of Illinois Chicago; 2021.
58. Mounsey S, Veerman L, Jan S, Thow AM. The macroeconomic impacts of diet-related fiscal policy for NCD prevention: A systematic review. *Economics and Human Biology*. 2020;37:100854.
59. Mounsey S, Powell LM, Chaloupka JF. *The Labour Market Impact of Health Taxes*. In: Lauer JA, Sassi F, Soucat A, Vigo A, editors. *Health Taxes: Policy and Practice*. World Scientific Book; 2023.
60. Bailey KL, Sayles H, Campbell J, Khalid N, Anglim M, Ponce J, et al. COVID-19 patients with documented alcohol use disorder or alcohol-related complications are more likely to be hospitalized and have higher all-cause mortality. *Alcoholism: Clinical and Experimental Research*. 2022 Jun;46(6):1023-35.
61. Clift AK, Ende A von, Tan PS, Sallis HM, Lindson N, Coupland CAC, et al. Smoking and COVID-19 outcomes: an observational and Mendelian randomisation study using the UK Biobank cohort. *Thorax*. 2022 Jan 1;77(1):65-73.
62. Gallus S, Scala M, Possenti I, Jarach CM, Clancy L, Fernandez E, et al. The role of smoking in COVID-19 progression: a comprehensive meta-analysis. *European Respiratory Review*. 2023 Mar 31;32(167). Available from: <https://err.ersjournals.com/content/32/167/220191>
63. Gao Y dong, Ding M, Dong X, Zhang J jin, Kursat Azkur A, Azkur D, et al. Risk factors for severe and critically ill COVID-19 patients: A review. *Allergy*. 2021;76(2):428-55.
64. Khalangot M, Sheichenko N, Gurianov V, Vlasenko V, Kurinna Y, Samson O, et al. Relationship between hyperglycemia, waist circumference, and the course of COVID-19: Mortality risk assessment. *Exp Biol Med (Maywood)*. 2022 Feb 1;247(3):200-6.
65. Mantovani A, Byrne CD, Zheng MH, Targher G. Diabetes as a risk factor for greater COVID-19 severity and in-hospital death: A meta-analysis of observational studies. *Nutrition, Metabolism and Cardiovascular Diseases*. 2020 Jul 24;30(8):1236-48.

66. Martono, Fatmawati F, Mulyanti S. Risk Factors Associated with the Severity of COVID-19. *Malays J Med Sci.* 2023 Jun;30(3):84-92.
67. Sawadogo W, Tsegaye M, Gizaw A, Adera T. Overweight and obesity as risk factors for COVID-19-associated hospitalisations and death: systematic review and meta-analysis. *BMJ Nutr Prev Health.* 2022 Jan 19;5(1):10-8.
68. Lane C. Navigating the pandemic: health taxes and the financial performance of big tobacco, big alcohol, and big beverage companies. Center for Global Development; 2024.
69. Kurowski C, Evans DB, Tandon A, Eozenou PHV, Schmidt M, Irwin A, et al. From Double Shock to Double Recovery: Implications and Options for Health Financing in the Time of COVID-19. *Health, Nutrition & Population Discussion Paper.* 2021;
70. IHME. Institute for Health Metrics and Evaluation. 2022 [cited 2024 May 10]. COVID-19 Projections. Available from: <https://covid19.healthdata.org/>
71. Our World in Data. Our World in Data. 2024 [cited 2024 Sep 2]. Estimated cumulative excess deaths during COVID-19. Available from: <https://ourworldindata.org/grapher/excess-deaths-cumulative-economist-single-entity>
72. World Health Organization. World Health Organization Data. 2024 [cited 2024 Sep 2]. WHO COVID-19 dashboard. Available from: <https://data.who.int/dashboards/covid19/cases>
73. Azarpazhooh MR, Morovatdar N, Avan A, Phan TG, Divani AA, Yassi N, et al. COVID-19 Pandemic and Burden of Non-Communicable Diseases: An Ecological Study on Data of 185 Countries. *Journal of Stroke and Cerebrovascular Diseases.* 2020 Sep 1;29(9):105089.
74. Bollyky TJ, Tohme S, Kiernan S. Noncommunicable Diseases Kill Slowly in Normal Times and Quickly in COVID-19 Times | Council on Foreign Relations. 2021. Available from: <https://www.cfr.org/article/noncommunicable-diseases-kill-slowly-normal-times-and-quickly-covid-19-times>
75. Oshakbayev K, Zhankalova Z, Gazaliyeva M, Mustafin K, Bedelbayeva G, Dukenbayeva B, et al. Association between COVID-19 morbidity, mortality, and gross domestic product, overweight/ obesity, non-communicable diseases, vaccination rate: A cross-sectional study. *Journal of Infection and Public Health.* 2022 Feb 1;15(2):255-60.
76. He Y, Sun J, Ding X, Wang Q. Mechanisms in Which Smoking Increases the Risk of COVID-19 Infection: A Narrative Review. *Iranian Journal of Public Health.* 2021 Mar;50(3):431-7.
77. van Ginneken E, Reed S, Siciliani L, Eriksen A, Schlepper L, Tille F, et al. Addressing backlogs and managing waiting lists during and beyond the COVID-19 pandemic. Copenhagen: WHO Regional Office for Europe; 2022. Report No.: 47. Available from: <https://eurohealthobservatory.who.int/publications/i/addressing-backlogs-and-managing-waiting-lists-during-and-beyond-the-covid-19-pandemic>
78. Hassoun N, Basu K, Gostin L. Pandemic preparedness and response: a new mechanism for expanding access to essential countermeasures. *HEPL.* 2024 May 31;1-24.
79. WHO. Tackling NCDs: best buys and other recommended interventions for the prevention and control of noncommunicable diseases (2nd Edition). Geneva: World Health Organization; 2024. Available from: <https://www.who.int/publications/i/item/9789240091078>
80. Mahler DG, Yonzan N, Lakner C. The Impact of COVID-19 on Global Inequality and Poverty. Policy Research Working Paper Series. 2022 Oct 5; Available from: <https://ideas.repec.org/p/wbk/wbrwps/10198.html>
81. Welsh C. Center for Strategic & International Studies. 2024. Russia, Ukraine, and Global Food Security: A Two-Year Assessment. Available from: <https://www.csis.org/analysis/russia-ukraine-and-global-food-security-two-year-assessment>
82. World Bank. Global Economic Prospects, January 2023. Washington, DC: World Bank; 2023. Available from: <https://openknowledge.worldbank.org/server/api/core/bitstreams/254aba87-dfeb-5b5c-b00a-727d04ade275/content>
83. IMF. Debt Dynamics. 2022. Available from: <https://www.imf.org/external/pubs/ft/ar/2022/in-focus/debt-dynamics/>
84. World Bank. International Debt Report 2023. The World Bank; 2023. Available from: <http://elibrary.worldbank.org/doi/book/10.1596/978-1-4648-2032-8>
85. UNCTAD. A world of debt. 2023 Jul. Available from: <https://unctad.org/publication/world-of-debt>
86. Kurowski C, Evans DB, Tandon A, Eozenou PHV, Schmidt M, Cain JS, et al. From Double Shock to Double Recovery - Implications and Options for Health Financing in the Time of COVID-19. Washington, D.C: World Bank; 2022 Sep. Available from: <https://openknowledge.worldbank.org/server/api/core/bitstreams/76d5786b-9501-5235-922a-caa71f99f0fc/content>
87. United Nations University World Institute for Development Economics Research. The Government Revenue Dataset. 2021. Available from: <https://www5.wider.unu>.
88. World Bank. Health Taxes and Inflation (English). Washington, D.C: World Bank Group; 2023 Feb. (Global Tax Program Health Taxes Knowledge Note Series). Report No.: 2. Available from: <http://documents.worldbank.org/curated/en/099531302232310282/IDU12744ac8c17576141e219fea117a74ecce7e>
89. Social Policy and Development Centre. Pakistan- Tobacco Fact Sheet 2024-25. 2024 Apr. Available from: <https://spdc.org.pk/publications/pakistan-tobacco-fact-sheet-2024-25>
90. Durr-e-Nayab, Nasir M, Memon JA, Siddique O. The Economic Cost of Tobacco-Induced Diseases in Pakistan. Pakistan Institute of Development Economics; 2021. (PIDE Research Report). Report No.: 2021:2. Available from: <https://ideas.repec.org/p/pid/rreport/20212.html>
91. Social Policy and Development Centre. Finance Act 2024: Implications of Cigarette Tax Policy. 2024 Jun. (SPDC Policy Brief). Available from: <https://tobacconomics.org/files/research/930/spdc-pb-budget-2024-25-implications-final.pdf>
92. Social Policy and Development Centre. Cigarette tax hike in Pakistan resulted in reduced consumption and a shift towards cheaper brands. 2024 Jun. Available from: <https://www.spdc.org.pk/publications/cigarette-tax-hike-in-pakistan-resulted-in-reduced-consumption-and-a-shift-towards-cheaper-brands>
93. Mišćikienė L, Goštautaitė Midttun N, Galkus L, Belian G, Petkevičienė J, Vaitkevičiūtė J, et al. Review of the Lithuanian Alcohol Control Legislation in 1990–2020. *International Journal of Environmental Research and Public Health.* 2020 Jan;17(10):3454.
94. Rehm J, Štelemėkas M, Badaras R. Research Protocol to Evaluate the Effects of Alcohol Policy Changes in Lithuania. *Alcohol and Alcoholism.* 2019 Jan 1;54(1):112-8.
95. Štelemėkas M, Manthey J, Badaras R, Casswell S, Ferreira-Borges C, Kalėdienė R, et al. Alcohol control policy measures and all-cause mortality in Lithuania: an interrupted time-series analysis. *Addiction (Abingdon, England).* 2021 Oct;116(10):2673.
96. Rovira P, Belian G, Ferreira-Borges C, Kilian C, Neufeld M, Tran A, et al. Alcohol taxation, alcohol consumption and cancers in Lithuania: A case study. *Nordic Studies on Alcohol and Drugs.* 2022 Feb 1;39(1):25-37.
97. Lange S, Jiang H, Štelemėkas M, Tran A, Cherpitel C, Giesbrecht N, et al. Evaluating the Impact of Alcohol Policy on Suicide Mortality: A Sex-Specific Time-Series Analysis for Lithuania. *Archives of Suicide Research.* 2023 Apr 3;27(2):339-52.
98. Manthey J, Gobiņa I, Isajeva L, Neneman J, Reile R, Štelemėkas M, et al. The Impact of Raising Alcohol Taxes on Government Tax Revenue: Insights from Five European Countries. *Applied Health Economics and Health Policy.* 2024;1-12.

99. Allcott H, Lockwood BB, Taubinsky D. Should We Tax Sugar-Sweetened Beverages? An Overview of Theory and Evidence. *Journal of Economic Perspectives*. 2019 Aug 1;33(3):202-27.
100. Avena NM, Rada P, Hoebel BG. Evidence for sugar addiction: Behavioral and neurochemical effects of intermittent, excessive sugar intake. *Neuroscience & Biobehavioral Reviews*. 2008 Jan;32(1):20-39.
101. Greenberg D, Peter JVS, Mantovani A, Tchounwou PB. Sugars and Sweet Taste: Addictive or Rewarding? *International Journal of Environmental Research and Public Health* 2021, Vol 18, Page 9791. 2021 Sep;18(18):9791.
102. Jacques A, Chaaya N, Beecher K, Ali SA, Belmer A, Bartlett S. The impact of sugar consumption on stress driven, emotional and addictive behaviors. *Neuroscience & Biobehavioral Reviews*. 2019 Aug 1;43(1):178-99.
103. Westwater ML, Fletcher PC, Ziauddeen H. Sugar addiction: the state of the science. *European Journal of Nutrition* 2016 55:2. 2016 Jul;55(2):55-69.
104. Parry IWH, West SE, Laxminarayan R. Fiscal and Externality Rationales for Alcohol Policies. *BE Journal of Economic Analysis and Policy*. 2009 Jul;9(1). Available from: <https://www.degruyter.com/document/doi/10.2202/1935-1682.2133/html>
105. World Bank. Why Health Taxes Matter: A Mechanism to Improve Health and Revenue Outcomes. Washington, DC: World Bank; 2023 Feb. (Global Tax Program Health Taxes Knowledge Note Series). Report No.: 1. Available from: <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099446002132366565/idu036b3c4370c15f047e2087a3029ed3a36321f>
106. Summan A, Laxminarayan R. Short-Term Revenue Potential of Excise Taxes on Tobacco, Alcohol, and Sugary Beverages. Background Paper for the Task Force on Fiscal Policy for Health. *Bloomberg Philanthropies*; 2024.
107. Rodríguez-Mireles S, López-Valcárcel BG, Serra-Majem L. When Industrial Policies Conflict With Population Health: Potential Impact of Removing Food Subsidies on Obesity Rates. *Value in Health*. 2021 Mar;24(3):336-43.
108. Amaglobeli D, Benson T, Moguees T. Agricultural Producer Subsidies: Navigating Challenges and Policy Considerations. Washington, D.C.: International Monetary Fund; 2024 Aug. Available from: <https://www.imf.org/en/Publications/IMF-Notes/Issues/2024/08/26/Agricultural-Producer-Subsidies-Navigating-Challenges-and-Policy-Considerations-553529>
109. Lane MM, Gamage E, Du S, Ashtree DN, McGuinness AJ, Gauci S, et al. Ultra-processed food exposure and adverse health outcomes: umbrella review of epidemiological meta-analyses. *BMJ*. 2024 Feb 28;384:e077310.
110. Capewell S, Lloyd-Williams F. The role of the food industry in health: lessons from tobacco? *British Medical Bulletin*. 2018;125(1):131-43.
111. Oreskes N, Conway EM. *Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming*. Bloomsbury Publishing; 2010.
112. Savell E, Gilmore AB, Fooks G. How Does the Tobacco Industry Attempt to Influence Marketing Regulations? A Systematic Review. *PLOS ONE*. 2014 Feb;9(2):e87389.
113. Collin J, Hill S. Structure and Tactics of the Tobacco, Alcohol, and Sugary Beverage Industries. 2019. Available from: <https://data.bloomberglp.com/dotorg/sites/2/2019/04/Structure-and-Tactics-of-the-Tobacco-Alcohol-and-Sugary-Beverage-Industries.pdf>
114. Oreskes N, Conway EM. *Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming*. Bloomsbury Publishing; 2010.
115. Saloojee Y, Dagli E. Tobacco industry tactics for resisting public policy on health. *Bulletin of the World Health Organization*. 2000;78:902-10.
116. US Securities and Exchange Commission. SEC Charges Two Global Tobacco Companies With Bribery. U.S. Securities and Exchange Commission; 2010. Available from: <https://www.sec.gov/news/press/2010/2010-144.htm>
117. Fuchs A, Gonzalez Icaza MF, Paz DP. *Distributional Effects of Tobacco Taxation: A Comparative Analysis*. Washington, DC; 2019. (World Bank Policy Research Working Paper). Available from: <https://papers.ssrn.com/abstract=3368579>.
118. Fuchs A, Pierola D. *The Distributional Impacts of Health Taxes*. Washington, DC: World Bank; 2022. (Equitable Growth, Finance & Institutions Insight). Available from: <https://documents1.worldbank.org/curated/en/099428212132220794/pdf/IDU056d507be09c3b046030a906088bfbdb3bccde.pdf>.
119. Gallus S, Lugo A, La Vecchia C, Boffetta P, Chaloupka FJ, Colombo P, et al. Pricing Policies And Control of Tobacco in Europe (PPACTE) project: cross-national comparison of smoking prevalence in 18 European countries. *European Journal of Cancer Prevention*. 2014 May;23(3):177.
120. Movendi International. *Public Support for Alcohol Taxation*. Stockholm: Movendi International; 2023.
121. Campaign for Tobacco Free Kids. *Tobacco Tax in Mexico - Opinion Poll*. Campaign for Tobacco Free Kids; 2022 Jun.
122. Dugan A. *Global Study: Harm From Noncommunicable Diseases Underrated*. Gallup Blog. 2022. Available from: <https://news.gallup.com/opinion/gallup/401279/global-study-harm-from-noncommunicable-diseases-underrated.aspx>
123. Eykelenboom M, Stralen MMV, Olthof MR, Schoonmade LJ, Steenhuis IHM, Renders CM. Political and public acceptability of a sugar-sweetened beverages tax: A mixed-method systematic review and meta-Analysis. *International Journal of Behavioral Nutrition and Physical Activity*. 2019 Sep;16(1):1-19.
124. Carriedo A, Koon AD, Encarnación LM, Lee K, Smith R, Walls H. The political economy of sugar-sweetened beverage taxation in Latin America: lessons from Mexico, Chile and Colombia. *Globalization and Health*. 2021 Dec;17(1):1-14.
125. Koon AD, Marten R. Framing health taxes: a scoping review. *BMJ Global Health*. 2023 Oct;8(Suppl 8):e012055.
126. Lauer JA, Sassi F, Soucat A, Vigo A, editors. *Health Taxes: Policy And Practice*. World Scientific Publishing Company; 2023. Available from: <https://library.oapen.org/handle/20.500.12657/61366>
127. Lwin KS, Koon AD, Rasanathan K, Ahsan A, Erku D, Mialon M, et al. Framing health taxes: learning from low- and middle-income countries. *BMJ Global Health*. 2023 Oct 1;8(Suppl 8):e012955.
128. Wright A, Smith KE, Hellowell M. Policy lessons from health taxes: A systematic review of empirical studies. Vol. 17, *BMC Public Health*. 2017.
129. American Lung Association. *Cigarette & Tobacco Taxes*. 2024. Available from: <https://www.lung.org/policy-advocacy/tobacco/tobacco-taxes>
130. Cárdenas-Torres PA, Orozco-Nuñez E, Dreser-Mansilla AC, Torres-de la Rosa CP, Pérez-Tamayo EM. Challenges to the development of taxation policies for sugar-sweetened beverages in Colombia. *BMJ Global Health*. 2024 Jan 1;8(Suppl 8):e012074.
131. Vital Strategies. 2023. *Colombia's Groundbreaking Tax on Sugar-Sweetened Beverage | 2022 Year in Review*. Available from: <https://www.vitalstrategies.org/colombias-groundbreaking-food-taxes-2022-year-in-review/>
132. Erku D, Yigzaw N, Tegegn HG, Gartner CE, Scuffham PA, Garedew YT, et al. Framing, moral foundations and health taxes: interpretive analysis of Ethiopia's tobacco excise tax policy passage. *BMJ Global Health*. 2023 Oct 1;8(Suppl 8):e012058.
133. Global Health Advocacy Incubator. *Global Health Advocacy Incubator*. 2023. *Colombia Enacts Two Major Healthy Food Policies*. Available from: <https://www.advocacyincubator.org/news/2023-01-04-colombia-enacts-two-major-healthy-food-policies>

