The role of fiscal measures in addressing noncommunicable diseases and mental health

Technical background paper #3

Technical background papers have been developed by a team of staff from the WHO, the World Bank and the University of Washington with the input of contracted consultants, as needed; all papers have benefited from the review and feedback of an External Technical Expert Group appointed to support the International dialogue on sustainable financing for NCDs and hental Health. The papers will undergo further review by the WHO and the World Bank; therefore, they do not represent the official positions of both organizations. The papers are the property of the WHO and the World Bank. They may only be

Summary

This paper lays out the opportunities for fiscal policy reform to address noncommunicable diseases (NCDs) and mental health and generate additional resources for health. Much of the paper focuses on health taxes, but it also explores opportunities to remove subsidies on products that are harmful to health. The paper makes a strong case for improved implementation of excise taxes on tobacco, alcohol, and sugar-sweetened beverages. These taxes improve NCDs and mental health outcomes without adverse economic effects.

Key messages

- Tobacco taxes are win-win-win: a win for revenues, a win for public health, and a win for equity. While they are very effective and cost-beneficial, they are a largely underutilized policy instrument to reduce tobacco use. All countries need to quickly move towards a simplified tobacco tax structure focused on a tax share of at least 75% of the final retail price of the most-sold brand and are automatically adjusted based on affordability. Full implementation of tobacco taxes would generate revenues on the order of #-#% of GDP for the average low or middle-income country.
- Alcohol taxes can be important complements to tobacco taxes in countries with significant alcohol consumption. Their health gains would be similar, and the revenue gains might be larger in some instances. Alcohol taxes should also be designed with simplicity in mind.
- Sugar-sweetened beverages taxes represent low-hanging fruit for tackling overweight and obesity and can build a foundation for expanded food and beverage taxes later. Taxes on ultra-processed foods are an emerging area for research, policy experimentation, and shared learning across countries.
- Counter to industry claims, health taxes are progressive when viewed holistically, and they do not harm economic growth or foster illicit trade. Governments need more support from local and international groups to counter industry arguments and interference in the policy process.

- Countries should critically review subsidy programs (and exemptions from value-added tax for health-harming substances) that directly or indirectly substantially contribute to harmful health outcomes. Specific examples include agricultural commodities (e.g., corn, rice, and cattle products) and fossil fuel subsidies (e.g., coal and diesel) that worsen NCD outcomes and contribute to climate change. Repealing these subsidies is politically difficult but urgent. A pragmatic approach to dealing with these subsidies involves targeting the worst subsidies first and using the freed-up resources to soften the economic impact on vulnerable populations.
- Resources generated from higher health can be used to promote better health outcomes. Soft earmarking wherein funds go through the general budget can be considered as they make increased taxes more politically acceptable. Earmarked funds should be small relative to the total health budget and should ideally not displace existing spending but rather be additive.
- Ministries of finance should review their fiscal policy regime to ensure policy coherence among the various fiscal measures and that these are not working at cross purposes with each other. Effective public health measures also promote economic growth and therefore should be framed as investments rather than costs.

Hiking these taxes to levels recommended by WHO could also generate substantial new revenues for many governments. The paper summarizes the pros and cons of earmarking these additional revenues for health and the conditions under which earmarking has been effective. We conclude that, apart from increased budget appropriation to health (covered in other background papers), the ministry of finance has an important role to play in indirectly generating resources for the health sector and improving health outcomes by tackling behavioral and environmental risks through fiscal measures.

Introduction

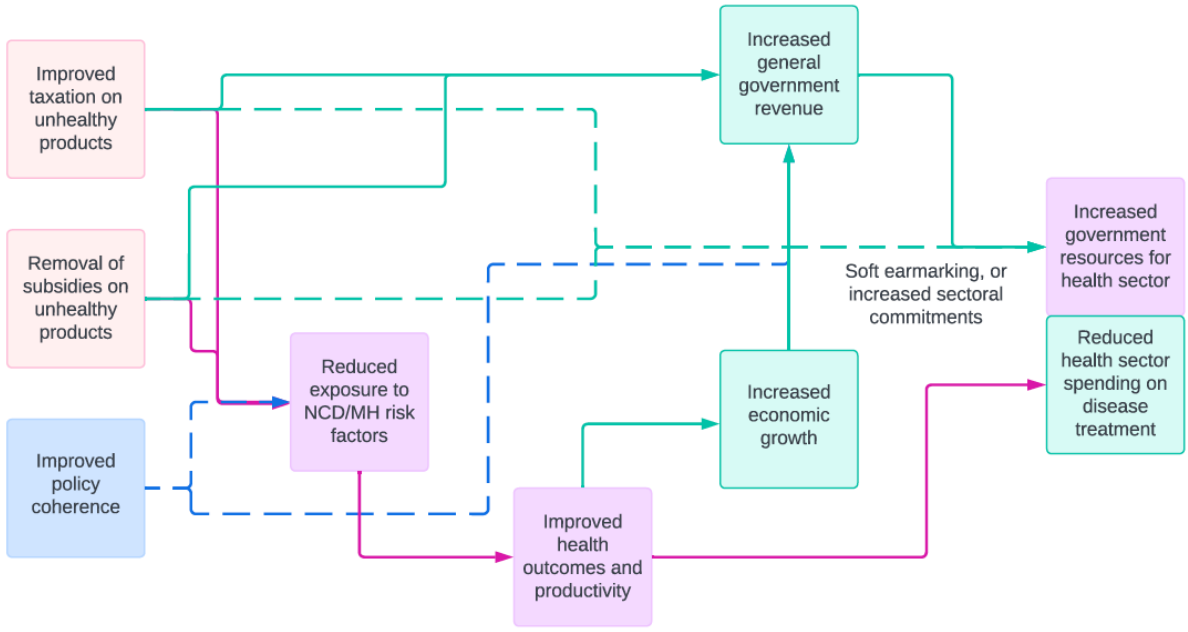
Most countries worldwide are experiencing a steady increase in noncommunicable diseases (NCD) and mental health conditions. These trends are due in part to population growth and aging, as well as increased exposure to behavioral and environmental risk factors like tobacco and violence—factors that are largely outside the control of healthcare systems to address.[1] In many of these same countries, macroeconomic trends have become less favorable, especially following the Covid-19 pandemic. Specifically, many economies are experiencing lower growth rates than during the first two decades of the century, public-sector debt is higher than ever, borrowing costs are high, and inflation has persisted.[2] These latter concerns are consuming finance ministries, creating unfortunate distractions from the need to invest in the long-term health of populations.

Fortunately, ministries of finance have several opportunities to implement fiscal policies that increase government revenues while addressing NCD and mental health risk factors and health outcomes. By improving population health and productivity, these policies can also encourage economic growth and

indirectly lead to more public resources for (often underfunded) healthcare systems.[3] In this background paper, we make the case for greater implementation of "health taxes" and removal of harmful and costly subsidies. (Throughout the paper, we focus specifically on excise taxes, the preferred instrument for curbing consumption.) We argue that finance ministries have a central role to play in addressing NCD and MH conditions through their own tax and subsidy policies, over and above their oversight of health budgets. Consequently, this paper does not address the question of the optimal allocation of government resources to the health sector, nor does it explore mechanisms for improving efficiency of healthcare spending; those topics are covered in other background papers.

We argue that these fiscal policy actions are a "win-win" for health and government finance because of their direct and indirect effects on public resources, economic growth, and health. Figure 1 illustrates how these factors relate to each other. In section 1 of the paper, we demonstrate how governments need to "finish the job" in curbing tobacco use through aggressive hikes in tobacco taxes. Section 2 covers other health taxes, including the emerging topic of taxes on unhealthy food products. In section 3, we address a relatively unexplored area: subsidies that have harmful effects on health. Section 4 covers the technical question of whether to earmark these revenues for NCD and mental health programmes. Section 5 highlights the need for policy coherence within the ministry of finance and the government more broadly. We then conclude with key messages for national and international stakeholders.

Figure 1 Conceptual overview of policy actions recommended in this paper and their consequences



Section 1: Finishing the job on tobacco

Despite progress on tobacco control in the decades following ratification of the Framework Convention on Tobacco Control, the prevalence of tobacco use remains unacceptably high.[4] Many countries are making progress on reducing tobacco use, though in most of these countries the rate of decline is not sufficient to achieve the 30% reduction target set by WHO. The number of smokers is also declining slowly, though as of 2022 there were still an estimated 1.2 billion persons over age 15 who used tobacco.[5] Further, some countries have seen an increase in the affordability of tobacco products because prices have not increased in tandem with incomes.[6]

These challenges underscore the need for enhanced implementation of tobacco control policies. Excise taxes on tobacco products are incredibly effective at curbing tobacco use and can lead to rapid reductions in smoking prevalence, as has been seen in countries like France and South Africa.[7] Benefit-cost analysis have shown that tobacco taxes are one of the very best investments in global health and development, with benefit-cost ratios exceeding 100:1 in most countries—even after accounting for forgone consumer surplus.[8] Cost-effectiveness analysis from WHO-CHOICE generally confirm these findings.[9] Still, the total tax share in most countries is lower than the WHO-recommended level of 75% of final retail price.[10] Frequently, tax structures are also unnecessarily complex, making them difficult to administer and easy to evade.[11] The priority for most countries, then, is to rapidly hike tax rates to WHO-recommended levels while moving towards a single, uniform tax. Countries might also consider legislation that automatically increases tobacco taxes to keep pace with income growth and changes in tobacco prices (i.e., increasing affordability). WHO handbooks provide best practices on tobacco taxes,[11] as well as on alcohol[12] and SSB[13] taxes (see below).

As mentioned previously, the WHO tax share target may not be adequate for some countries where tobacco products are cheap relative to income. For example, reasonably high tax shares in Bangladesh have not translated into large reductions in tobacco use over the past decades. The reasons for this apparent ineffectiveness include (i) increased affordability due to rapid income growth, (ii) a multi-tiered tax structure that incentivizes consumption of lower-priced brands, and (iii) differential pricing strategies used by tobacco companies.[14] For countries in this situation, the policy response will involve a combination of involve rapid hikes in tax share, simplification of tax structures, and automatic provisions for taxes to regularly increase in proportion to economic growth.

The tobacco industry regularly makes several arguments against higher tobacco taxes, which are refuted elsewhere.[11,15,16] Tobacco taxes do not appear to adversely affect employment and economic growth or promote illicit trade.[16,17] Several analyses of the distributional impact of tobacco taxes have shown that, properly implemented, tobacco taxes can be progressive.[18] While it is true that higher prices disproportionately affect the poor, they are generally more price-responsive than the wealthy and experience greater longer-term health and welfare gains from reduced smoking, offsetting the short-term impact of higher prices.[19] These gains in health might in some cases be an argument for allocating additional tobacco tax revenues to health (see section 4).

Finally, economic theory suggests that, in the long run, very high tax rates that reduce tobacco use to low levels would result in declining (and eventually zero) revenue, undermining the revenue gains. However, we have no empirical evidence that this has happened yet in any countries that have high implementation of tobacco control policies.[20] For example, Australia is a high-tax country that has achieved reductions in smoking and increases in revenues, even after tax hikes.[21]

Section 2: Opportunities to expand other health taxes

While tobacco taxes are an exemplar of a health tax, many countries have implemented effective taxes on other unhealthy products. Alcohol and sugar-sweetened beverages (SSBs) have received particular attention in recent years, and ultra-processed foods represent an emerging opportunity.

Like tobacco taxes, alcohol taxes have a long history, and they are an important tool for promoting mental health—including preventing interpersonal violence and suicide.[22] Yet alcohol taxes often suffer from the same implementation challenges as tobacco taxes, including overly complex tax structures and tax rates that are too low.[23] The range of alcohol products and options for taxation also require a more nuanced approach. For example, volume-based taxes may be more effective for cheaper products, while alcohol content-based taxes may be more effective for more expensive products (including spirits) but are more difficult to implement. Additionally, some countries also maintain a system of tax breaks and rebates as well as exemptions for production and marketing that, collectively, create de facto subsidies for the alcohol industry.[24] WHO has produced guidance on preferred tax designs across a range of alcohol products.[12]

SSB taxes have become more common in the last decade, and as of August 2023, over 117 countries and territories covering 57% of the world population have some form of SSB tax.[25] Excise taxes, either targeted or untargeted, are the most common form of tax and are usually based on volume. While evidence for their health impact is still accumulating, they are expected primarily to reduce the incidence of diabetes and its cardiovascular complications, especially by reducing cumulative exposure starting in childhood and adolescence.[26] Further research is needed on the optimal SSB tax level and design to maximize health impact as part of a comprehensive approach to overweight and obesity.[27] Another argument for implementing SSB taxes is that SSBs are low-hanging fruit: SSBs a major source of empty calories and an easy target for taxation, and success in SSB tax implementation can build a foundation for an expanded health tax regime in the future.[1]

Industry arguments against alcohol and SSB taxes resemble those against tobacco taxes, including equity concerns. Again, these arguments are not substantiated by evidence.[16] For example, a study of SSB taxes in South Africa did not demonstrate disproportionate health gains among the poor; however, because SSB consumption is lower among the poor, they would be less affected by SSB price increases than the middle class and wealthy.[28] Overall, there is no evidence of negative impacts from alcohol and SSB taxes.

It is important to recognize the revenue generation potential from health taxes. Recent data suggest that tobacco and alcohol taxes generate, on average, 0.6% and 0.3% of GDP (respectively) in tax revenue. SSB taxes generate less revenue, but they are also not being implemented to the same degree as tobacco and alcohol taxes.[20] Full implementation of tobacco, alcohol, and SSB taxes could generate significant additional revenue, though the speed of revenue generation is an even more compelling argument than its size. Analyses by WHO have demonstrate that hiking tobacco excise taxes could substantially increase the revenue from these taxes, under a wide range of assumptions about the size of the tax increase and the price elasticity of demand.[11]

An emerging opportunity for taxation is ultra-processed foods, which are industrially processed, ready-to-eat products that contain chemically modified food extracts and other additives that enhance taste, texture, and other properties. While methodological limitations and the wide range of such products pose challenges to studying their health risks, a recent umbrella review found convincing evidence of their impact on diabetes, common mental disorders, and potentially cardiovascular disease, with suggestive evidence of their impact on obesity and some cancers (including colorectal cancer).[29] Ecological studies of the relationship between prices of processed foods and obesity rates in sub-Saharan Africa suggests that processed food taxes could be effective at curbing consumption and reducing obesity.[30] In 2023, the government of Colombia was the first to institute a "junk food" law including a tax on ultra-processed foods that will increase to a target of 20% by 2025.[31] The widespread availability of these products in the global food supply underscores an urgent need to research them further and to develop and evaluate tax (and non-tax) policies to disincentivize their consumption.

Finally, in advocating for increases in health taxes, we acknowledge that administrative capacities vary greatly across countries, and the revenue-raising argument is a secondary one. For example, in countries with very low tax-to-GDP ratios (e.g., some low-income countries), one could argue that the priority for revenue generation should be to expand the tax base for broad-based taxes (e.g., value-added tax). Increasing health taxes in these countries might not lead to optimal returns in revenue. This is not to say that the taxes should not be done; behavior change is a sufficient justification for their implementation.

Section 3: Removing harmful subsidies

Government subsidy programmes frequently incentivize unhealthy behaviors and create environmental risks that adversely affect NCD and MH outcomes. A comprehensive approach to fiscal policy for health should include an examination of existing subsidies to ensure that they are not working at cross purposes with health-related policies and health taxes (see Section 5). In some cases, removal of these subsidies could free up substantial government resources while improving health. Although the origin and nature of these subsidies varies country by country, we provide two notable examples in this section to illustrate the opportunities.

The United States Farm Bills include numerous subsidies for farmers to produce commodities such as corn, soybeans, rice, and wheat that contain a high proportion of simple carbohydrates or can be used to create

energy-dense processed foods as well as dangerous products like high-fructose corn syrup. Individuals living in areas where these commodities are subsidized tend to consume them in greater quantities, and this is associated with a higher prevalence of cardiovascular and metabolic risk factors, including obesity.[32] These subsidies were instituted nearly a century ago with the goal of providing affordable nutrition to households, but nowadays the food industry is the major beneficiary of these policies. The cost is substantial: overweight and obesity cost the United States about 1-2% of GDP in direct and indirect medical costs, in addition to the cost of the subsidies themselves, which is about 0.1% of GDP (0.5% of general government revenue).[33] Of course, repealing subsidies is incredibly difficult when the beneficiaries maintain significant influence in the political process.

Fossil fuel subsidies represent another opportunity for improved health and government revenue. In fact, some governments spend more money on energy subsidies than they do on the health sector.[34] Worldwide, these subsidies were estimated at 7.1% of GDP in 2022. Fossil fuel subsidies take two forms, however. Implicit subsidies arise from underpricing the externalities generated by fossil fuels, and these comprise 80% of the economic value of the subsidies. The remainder are explicit subsidies. The challenge in removing explicit subsidies is mostly political: governments need to build a consensus in favor of reform, and they need to ensure the social safety net can protect poorer households from income losses. The IMF is currently undertaking an analysis of the political economy of subsidies.

We propose a pragmatic approach to harmful subsidies that factors in political considerations entails three levels of action. The first level is, at a minimum, for finance ministries to ensure that no new subsidies are introduced that have adverse effects on health (and/or climate[35]). This is an important step in some countries facing pressures to expand subsidies. The second level is to identify the subsidies with the worst health (and/or climate) impact and to phase these out quickly, while implementing measures that protect the poor from the effects of higher prices. Examples in agriculture include sugar, rice, beef, and milk.[34] Examples in the energy sector include coal and diesel. Of course, corn subsidies can promote obesity as well as emissions (via ethanol production), so these are reasonable early targets as well. The third level is a comprehensive overhaul of agriculture and energy subsidies, which might include repurposing some of the increased revenues towards making healthier foods more affordable (e.g., fruits and vegetables) and supporting transitions towards renewable energy.

Section 4: Should resources generated from health taxes be allocated to health?

Public health advocates frequently argue that when a new health tax is implemented, its revenues can and should be used to increase the budget of the ministry of health, e.g., to support further disease prevention and control efforts. While this argument has appeal in its simplicity, “earmarking” is more complicated in practice. In fact, earmarking is a divisive topic, with economists (and finance experts) and health experts often having opposing views. This section reviews the pros and cons of earmarking tax revenues for health in general and NCD or MH programmes in particular.

There are several technical arguments for and against earmarking for health, and these are reviewed in a WHO working paper.[36] On the positive side, earmarking can protect funding for priority disease programmes and in some cases can allow funds to be used more flexibly. By linking a tax (e.g., on tobacco) to specific benefits (e.g., smoking cessation support), the government can potentially soften public resistance to the tax and improve budget efficiency and accountability as well as raise awareness about the cost of the programme being funded.

On the negative side, earmarking can create unnecessary rigidity in the government budget and lead to fragmentation of the health budget, limiting coordination within the health sector and across sectors. Earmarked funds are also more susceptible to large fluctuations in tax revenues, including reduced funding during economic downturns. In extreme cases, earmarking can lead to distortions in the economy or exacerbate inequities in access to specific services. Finally, special interest groups can exert undue influence on the use of earmarked funds, more so than general funds.

It is important to distinguish between "hard" earmarking, where expenditures are linked to revenue sources via legislation, and "soft" earmarking, where revenues are committed to specific purposes or funds but are nonbinding and somewhat flexible. (Soft earmarks also go through the general fund first and are therefore accounted for in the general budget.) The negatives listed previously tend to follow more from hard earmarking than soft earmarking, and hard earmarking is generally regarded as inconsistent with principles of good public financial management. On the other hand, soft earmarking can improve the political acceptability of a proposed health tax. All said, any form of earmarking is at risk of fungibility during the budget development process. Inevitably ministries of finance will see increased health tax revenue as additional resources for health, which might lead to a compensatory reduction in the non-health-tax budget.

A WHO review of nine countries with earmarked tobacco taxes provides some instructive lessons for others.[37] Inasmuch as earmarking was successful, it was probably due to several factors. First, the earmarked fund was a small share of the total health budget and thus did not impose unnecessary rigidity on the overall budget. Second, the funds were used efficiently and were linked to transparent mechanisms for reporting and accountability. Third, the funds were usually used for specific disease prevention or control programmes, e.g., tobacco cessation services. Finally, successful efforts at earmarking tobacco taxes generally had a shorter process, giving less time for political and industry opposition to gain momentum. Inasmuch as some countries struggled to implement or sustain an earmarked tobacco tax (e.g., Poland), it was usually due to a lack of one or more of these factors.

Section 5: Ensuring fiscal policy coherence

We conclude this paper with a note on fiscal policy coherence, i.e., the extent to which different fiscal measures are mutually reinforcing and working towards a common set of goals. Of course, the ministry of finance is primarily concerned with (macro)economic goals, public financial management, and financial regulation, rather than health. However, population health outcomes and health sector-specific activities

strongly influence these non-health goals. Put simply, an unhealthy population stifles economic growth and puts pressure on budgets for health and other social sectors, making the job of the finance ministry more difficult.

Poorly aligned fiscal policies can work against health goals and, indirectly, undermine their own effectiveness. In extreme cases, they can be contradictory. For example, a government seeking to implement an alcohol tax on health grounds while also providing tax exemptions for marketing alcohol products is both deterring and incentivizing consumption. Aside from health taxes and subsidies, finance ministries may have other policies on the books that work at cross purposes. For example, tariffs on essential medicines can end up increasing expenditures on these medicines by (public) health financing agencies tasked with providing financial protection. Finally, during economically challenging times finance ministries are frequently pressured to indiscriminately cut the health budget in the name of fiscal discipline. Unfortunately, this can result in under-provision of essential services, poorer health outcomes and lower productivity, increased medical impoverishment, lower economic growth, and reduced government revenue, perpetuating a vicious cycle.

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