

Healthy budgets and healthy people

Finance ministry views on the importance, strengths and limitations of tobacco tax revenue and its uses

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About this report

Healthy budgets and healthy people: Finance ministry views on the importance, strengths and limitations of tobacco tax revenue and its uses is a report written by The Economist Intelligence Unit and sponsored by the World Heart Federation (WHF), a global non-governmental umbrella organisation for scientific and medical groups, patient communities, and other societies interested in cardiovascular health. The content of this report is solely the responsibility of The Economist Intelligence Unit and the views expressed do not reflect those of the WHF.

This publication explores the beliefs and attitudes of senior finance ministry officials on every aspect of tobacco taxation, including its purpose, setting of appropriate rates, illicit trade, enforcement and implications for spending possibilities, including financing universal health coverage.

The research occurred in two phases. As background, The Economist Intelligence Unit conducted an extensive literature and data survey of tobacco taxation and related issues. It also looked at the possible links of such levies to spending, in particular on universal healthcare.

The second phase involved in-depth interviews with ten ministers, former ministers and senior officials at ten finance ministries spread across the world, as well as further in-depth desk research on matters arising from those discussions and the original literature survey.

Our thanks are due to the following interviewees for their time and insight (listed alphabetically):

Interviewees

- Santiago Afonso, chief of advisers to the minister, Ministry of the Treasury, Argentina
- Chris Axelson, chief director for economic tax analysis, National Treasury, South Africa
- Hon. Mauricio Cárdenas, former minister, Ministry of Finance and Public Credit, Colombia
- Yuriy Dzhygyr, deputy minister, Ministry of Finance, Ukraine
- Terhi Järvikare, director-general of the tax department, Ministry of Finance, Finland
- Idrissa Kanu, director of revenue and tax policy, Ministry of Finance, Sierra Leone
- Ahmed Kouchouk, vice-minister of finance for fiscal policies and institutional reform, Ministry of Finance, Egypt
- Hon. Cesar Purisima, former secretary (minister), Department of Finance, Philippines
- Hon. Ryan Straughn, MP, minister, Ministry of Finance, Barbados
- Syed Shabbar Zaidi, chairman, Federal Board of Revenue, Pakistan

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Executive summary

Taxation is the most effective, least used, public health intervention in the struggle to curb a major global epidemic.

Tobacco use remains widespread: despite ongoing declines, nearly a third of adult males worldwide still smoke. The death toll from the practice, 8.1m per year in 2017, rivals that of all communicable diseases combined. The direct and indirect costs of tobacco-induced disease eat up 1.8% of global GDP.

Out of all the ways to stop tobacco use, taxation stands out. Sound scientific evidence supports a range of effective interventions, with many found in the MPOWER package created by the World Health Organisation (WHO). But taxation is one of the most potent ways of reducing demand through raising the retail price. Indeed, the WHO sees the main role of these taxes as improving public health.

Yet, of the interventions contained in the Framework Convention on Tobacco Control—a treaty with over 180 state parties—taxation is the least used. Under one in five countries, with an aggregate of just 13% of the world's population, impose the WHO's recommended level of taxes—at least 75% of the price of the nationally most popular brand of cigarettes.

In order to better understand the environment for tobacco taxation, the study looks at the views of officials working in ministries of finance. The key findings include the following:

The context

Those involved in tobacco tax policy need to apply a complex tool to a marketplace that can change in myriad ways as a result. Tobacco excise taxes impose a charge on the

sale or manufacture of tobacco products. These are normally based on the pre-tax price or the number of units involved. Both kinds of levy trigger a range of potential marketplace responses. Some are the intended result, notably lower tobacco consumption and higher government revenue. Others are not, such as suppliers changing price structures, consumers seeking out cheaper supply, and the potential rise of illicit trade. The less desirable, from a policymaker's view, and the more welcome behaviour changes within the market are sides of the same coin. Accordingly, tax policy needs to shape the details of the taxes to minimise effects that the government does not want, and to maximise the ones it does.

Policymakers need to act within a context of key players disagreeing markedly about the market impact of tobacco tax. Tobacco companies and public health advocates agree that taxation greatly affects the marketplace, but sharply differ on how it does so. Two main areas of disagreement exist.

- *Can taxation that aims to reduce the volume of a trade deliver substantial revenue gains at the same time?* Here, experience and economic theory give the same message. In most countries, especially those with low excise levies currently, increased tobacco tax can yield a drop in product consumption and greater state revenue. This is the so-called win-win of tobacco tax. In already high-tax jurisdictions, this eventually turns into a win-draw. In Western Europe, over the last decade, tax revenue per cigarette rose by 39%. Over the same period consumption declined and so did, slightly, the overall tax received. Even here, though, the wider economic benefits of a reduction

in tobacco-related disease still probably make the policy cost effective.

- *Does taxation, to any extent, influence greater illicit trade in tobacco?* Widespread agreement exists that illicit trade is an important issue. Tobacco companies frequently oppose higher duties by arguing that they will increase such illegality. Accordingly, the industry funds a substantial amount of research by third parties that gives their views on the extent of the problem and the effect of taxes on it. Public health advocates and allied academics reject these studies, arguing that they lack transparent, replicable methodologies. Their own research also tends to find lower levels of illicit trade in the same markets. Instead, health advocates argue that illicit trade is a result of poor tax administration and enforcement. They have a stronger case than the industry but sometimes go too far in downplaying the importance of tax to illicit trade. Higher duties do create additional incentive to engage in illicit trade. In many cases, this leads to higher levels of illegality, even if not to the extent the industry claims.

The views from the finance ministry

Finance ministry officials are enablers of political decisions, not the ones who make the choices. Although they are aware that they play the leading role in designing and implementing tax, interviewees were quite clear that any of their proposals have to pass political and legal muster. As Cesar Purisima, former finance minister in the Philippines, told us, “the political dynamic can be complicated.” On the legal side, even a body such as the European Commission—a strong promoter

of tobacco control—disallowed a Hungarian tax increase. The reason was not related to the products it targeted, but to the measure’s violation of EU state aid rules. The particular challenges vary by country, but every ministry has to shape policy with an eye towards its specific constraints.

Whatever the dominant driver, finance ministries pursue both higher revenue and the health benefits of tobacco tax simultaneously. Finance ministry officials tend to see the health and revenue benefits of tobacco tax as, in practice, distinct issues that need to be aligned. At any given ministry, the impetus for policy change might be either: Ukraine’s tax rises in recent years had a clear revenue impetus. In Finland, the initial policy consideration was health. The nature of tobacco tax, however, means that officials generally see any increase as capable of advancing both goals at the same time. As Yuriy Dzhygyr, deputy minister of finance for Ukraine, put it, his country’s search for revenue from this source was “a clear public policy win-win waiting to happen.” Despite the dual goals of tobacco excises, in their quotidian work and measures of policy success, finance ministries focus more on the financial side of tax. They tend to leave health policy to their colleagues in other ministries.

Finance ministries consult with a range of stakeholders on tobacco tax issues but retain control of the policy for themselves. Most officials we interviewed spoke of good co-operation with ministries of health, in particular exchanges of pertinent data in setting tax policy. Finance ministry officials were also open to discussing tax policy with relevant non-government organisations (NGOs) and international bodies. In countries

with large tobacco industries they typically had tax-related discussions with executives from these companies as well. All of these players, though, fall short of being long-term partners in a joint enterprise. As a senior finance ministry official from a high-income country in Latin America says of his organisation “[we] are in charge of tax policy.”

Illicit trade is a widespread concern arising from government officials’ own experience.

At every finance ministry where we interviewed officials, illicit trade forms an important part of thinking and strategy on tobacco taxation. This attitude arises not from industry-funded reports and lobbying, which are typically treated with great caution, but on data collected by their own officials. The extent of the challenge varies by country. However, Ahmed Kouchouk, vice-minister of finance for fiscal policies and institutional reform in the Egyptian Ministry of Finance, summed up the general feeling: “If you have somebody who can compete with a 70% or 80% margin [because they do not pay tax], you can imagine how much influence they can have on the market,” he says. “It is something you cannot and should not ignore.”

Better enforcement, rather than permanently low tax rates, is generally seen as the key to tackling the challenge around illicit trade. Illicit trade does not lead to countries forgoing tobacco excises, but it does shape how they are imposed and, in particular, enforced. Countries adopt various strategies to minimise the potential for illicit trade. Even in Finland, where it is a relatively small problem, the government tends to make frequent, small tax adjustments so that they can monitor the market impact. One common thread was widespread support for better

enforcement, rather than permanently low tax rates, as the key to addressing illicit trade. Not surprisingly, major tobacco excise increases tend to be accompanied by improved enforcement measures. Where enforcement capacity is lacking for some reason, illicit trade can balloon quickly. Very fragile states might not be able to pursue an effective tobacco tax policy. The experience of the countries from which we interviewed officials, however, suggests that this is very much the exception.

In principle, finance ministry interviewees are averse to hypothecation.

None of the interviewees defended earmarking of funds from tobacco tax for health, or other reasons, on a theoretical level. The most common attitude was that of Terhi Järvikare, the director-general of the tax department in Finland’s Ministry of Finance: “Our general policy is to avoid linking tax revenues to expenditures. We don’t consider it.”

But some will support earmarks when the resulting complications are small and the potential political gains large.

According to the WHO, 37 out of 195 countries earmark at least a part of tobacco excise revenue for some form of health spending, including in some of the countries where we interviewed officials. However, in certain circumstances, they are willing to take what Mauricio Cárdenas, former Colombian finance minister, calls “a pragmatic approach.” In such cases, the amount of money involved is typically small enough that the government would have spent that much on the budget item in question anyway. As Mr Cárdenas says, the contribution of earmarked funds from Colombia’s 2016 tobacco tax reform to healthcare overall is “not a major number.” On the other hand, framing the tobacco tax as a

support for health spending can be politically advantageous. Even in absence of earmarking, discussing the two as linked “will increase public support for, and reduce resistance to, the tax to a very large extent,” says Idrissa Kanu, Sierra Leone’s director of revenue and tax policy in the Ministry of Finance.

Interviewees were not receptive to the idea that tobacco taxes could create a large enough fiscal space to make substantial progress toward universal health coverage. Various international bodies and NGOs are promoting tobacco taxation, sometimes along with sugar and alcohol taxes, as a source of revenue for

pursuing the Sustainable Development Goals. However, they focus particularly on universal health coverage. Interviewees tended to raise two problems with this idea. First, in several countries, the challenge of meeting current financial commitments is such that any new revenue is already spoken for. Second, the amount that could be raised from tobacco tax simply is not that large compared with what is needed. Chris Axelson, chief director for economic tax analysis in South Africa’s National Treasury explains, next to the requirements of rolling out a national insurance plan, what tobacco tax could provide “would not be a huge amount of revenue.”

Section I—Tobacco taxation: An overview

The ongoing health and economic challenge of tobacco

Tobacco control is a work in progress with much heavy lifting still needed. Worldwide, in 2017 32.7% of men and 5.8% of women smoked, according to the latest data from the World Health Organisation (WHO).¹

Prevalence has dropped substantially in recent decades, a trend expected to continue. But it won't be fast enough to reach the widely adopted voluntary target of a 30% relative reduction in smoking rates between 2010 and 2025. The WHO forecasts that the decline will be only 22% over that period.²

Tobacco's ongoing toll on human health makes further progress urgent. Some Global Burden of Disease data show the impact of smoking's decline clearly: the death rate per capita from tobacco-induced disease has diminished steadily, by 15%, between 1990 and 2017.³ While welcome, this is simply keeping up with progress in other areas of health: the percentage of deaths globally due to tobacco was, after rounding, the same at the start and end of this period, at 14%. Population growth, however, means that more individuals than ever are dying from tobacco use in one form or another—8.1m in 2017—roughly the same that died from all communicable diseases that year, but all preventable.⁴

This health damage carries a marked economic burden. A recent study estimated that, including direct payments for treatment

and indirect effects on the ability of people to work, smoking-induced disease cost the world 1.8% of its GDP in 2012, the most recent year with available data.⁵

Meanwhile, the geography of tobacco's impact is shifting. High-income countries, still heavily affected by tobacco use, have seen declines in all of the health metrics above, but upper-middle-income ones have seen growth in each.⁶ Related economic damage cannot be far behind.

Taxation and tobacco control: A powerful but underused intervention

The decline in tobacco use is no accident. Public health efforts in various countries against the habit date back decades. At the international level, the entry into force of the Framework Convention on Tobacco Control (FCTC) in 2005 marked the beginning of a crucial new stage in this struggle. The treaty commits parties—currently 181 with more than 90% of the world's population⁷—to a multi-faceted range of measures. To help with national implementation, the WHO has organised relevant commitments into its MPOWER framework, an acronym for six categories:

- monitor tobacco use and prevention policies;
- protect people from tobacco smoke;

¹ WHO, *Report on the Global Tobacco Epidemic 2019*, 2019, <https://apps.who.int/iris/bitstream/handle/10665/326043/9789241516204-eng.pdf?ua=1>

² WHO, *WHO global report on trends in prevalence of tobacco smoking 2000–2025*, 2nd ed., 2018, <https://apps.who.int/iris/bitstream/handle/10665/272694/9789241514170-eng.pdf?ua=1>

³ Institute for Health Metrics and Evaluation, "GBD Compare Data Visualization," 2018, <http://vizhub.healthdata.org/gbd-compare>

⁴ IMHE, "GBD Compare Data Visualization," 2018, <http://vizhub.healthdata.org/gbd-compare>

⁵ Mark Goodchild et al., "Global economic cost of smoking-attributable diseases," *Tobacco Control*, 2018, <https://tobaccocontrol.bmj.com/content/tobaccocontrol/27/1/58.full.pdf>

⁶ IMHE, "GBD Compare Data Visualization," 2018, <http://vizhub.healthdata.org/gbd-compare>

⁷ WHO FCTC, "Parties to the WHO Framework Convention on Tobacco Control," web page accessed 13 July 2019, <https://www.who.int/fctc/cop/en/>

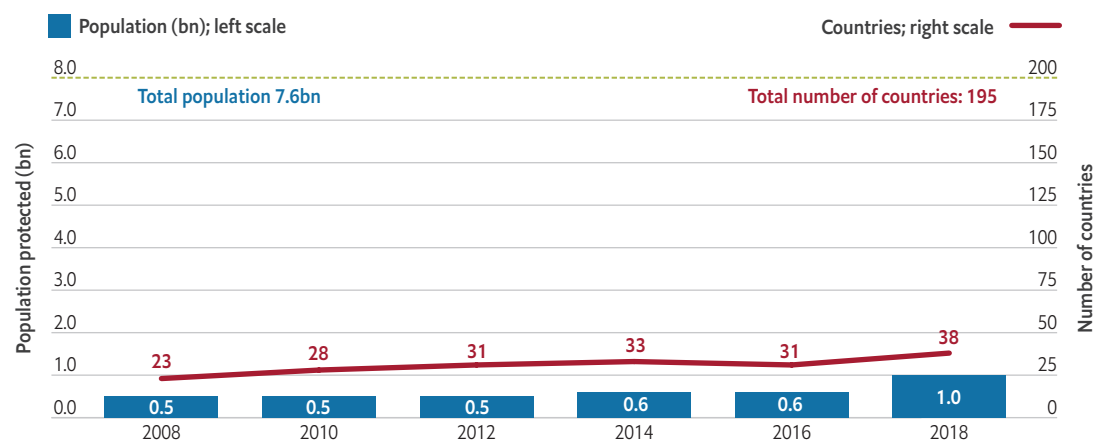
- offer help to quit tobacco use;
- warn about the dangers of tobacco;
- enforce bans on tobacco advertising, promotion and sponsorship; and
- raise taxes on tobacco.

Interventions in all these areas are important. However, raising taxes, and through this tobacco's price, has arguably the biggest impact of any FCTC commitment.⁸ A recent analysis demonstrates this power. Improvements in national scores measuring overall MPOWER implementation, which are regularly produced by the WHO, correlate with drops in smoking prevalence. When a separate affordability measure is introduced to this regression, though, the MPOWER score ceases to be statistically significant. This does not mean the other interventions lack effect, as sound scientific evidence supports each.

Rather, raising prices has the most visible and immediate impact on tobacco use, statistically overwhelming other anti-tobacco tools in the short term.⁹

Given its powerful potential effect, countries are making surprisingly incomplete use of taxation. On the one hand, 92% of parties to the FCTC have some form of tax targeting tobacco.¹⁰ This breadth of policy, though, is not matched by depth in adopting best practice. The WHO's Report on the Global Tobacco Epidemic 2019 notes that the least commonly achieved MPOWER target worldwide is taxation-related: that taxes as a whole make up at least 75% of the retail price of the most commonly purchased cigarette. Currently under one in five countries, with collectively 13% of the world's population, have taxes this high.¹¹

Progress in total tax on cigarettes $\geq 75\%$ of retail price (2008-18)



⁸ Corne van Walbeek and Samantha Filby, "Analysis of Article 6 (tax and price measures to reduce the demand for tobacco products) of the WHO's Framework Convention on Tobacco Control," *Tobacco Control*, 2018, <https://tobaccocontrol.bmj.com/content/tobaccocontrol/early/2018/07/25/tobaccocontrol-2018-054462.full.pdf>; Shannon Gravely et al., "Implementation of key demand-reduction measures of the WHO Framework Convention on Tobacco Control and change in smoking prevalence in 126 countries: an association study," *Lancet Public Health*, 2017, <https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667%2817%2930045-2/fulltext>; Janet Chung-Hall et al., "Impact of the WHO FCTC over the first decade: a global evidence review prepared for the Impact Assessment Expert Group," *Tobacco Control*, 2018, https://tobaccocontrol.bmj.com/content/tobaccocontrol/28/Suppl_2/s119.full.pdf.

⁹ Yanyun He et al., "The association between cigarette affordability and consumption: An update," *PLoS One*, 2018, <https://journals.plos.org/plosone/article/file?id=10.1371/journal.pone.0200665&type=printable>.

¹⁰ Corne van Walbeek and Samantha Filby, "Analysis of Article 6 (tax and price measures to reduce the demand for tobacco products) of the WHO's Framework Convention on Tobacco Control," *Tobacco Control*, 2018, <https://tobaccocontrol.bmj.com/content/tobaccocontrol/early/2018/07/25/tobaccocontrol-2018-054462.full.pdf>; Janet Chung-Hall et al., "Impact of the WHO FCTC over the first decade: a global evidence review prepared for the Impact Assessment Expert Group," *Tobacco Control*, 2018, https://tobaccocontrol.bmj.com/content/tobaccocontrol/28/Suppl_2/s119.full.pdf.

¹¹ WHO, *Report on the Global Tobacco Epidemic 2019*, 2019, <https://apps.who.int/iris/bitstream/handle/10665/326043/9789241516204-eng.pdf?ua=1>.

Moreover, the report adds, “since 2008, progress in raising taxes has been remarkably slow.” Similarly, a recent report on FCTC implementation—with different measures than those used for MPOWER—compared the extent to which countries had fulfilled that treaty’s 13 substantive articles in 2016 and 2018. In relative terms, change around Article 6, which covers taxation and prices, was the third slowest.¹²

The disconnect between taxation’s potential and its application in tobacco control has various possible explanations. According to a WHO official, the biggest hindrance is tobacco industry interference. Meanwhile, though, Article 6 also does not include highly detailed commitments, instead leaving state parties very wide latitude in its application. The text reads: “Without prejudice to the sovereign right of the Parties to determine... their taxation policies, each Party should take account of its national health objectives concerning tobacco control and adopt... measures which may include: Implementing tax policies...on tobacco products.”

Action in this area also runs up against practical problems arising from the institutional split between the government departments responsible for public health and taxation. A WHO FCTC Impact Assessment Group that visited 12 countries in 2016 found that health officials frequently did not understand the technicalities of tobacco taxation. Perhaps accordingly, these civil servants focused more on interventions that they could enact and control, such as smoke-free places. An additional complication, the

assessment group found, is that “in many countries, the relationship between the health ministry and the finance ministry (and related government institutions) is quite strained.”¹³ Indeed, even international health programmes miss opportunities with finance officials. FCTC 2030—a WHO FCTC Convention Secretariat project to support low- and middle-income country governments in tobacco control—has been active in Sierra Leone. However, Idrissa Kanu, the country’s director of revenue and tax policy in the Ministry of Finance, notes that the resulting technical assistance has not extended until recently to “tobacco taxation and the setting of tax rates.”

On the other hand, finance officials may simply not be fully aware of the contribution they can make. Mauricio Cárdenas, who was Colombia’s minister of finance when the country raised tobacco taxes substantially in 2016, traces the roots of that reform back to learning about the low price of cigarettes in his country relative to the region, and the danger this in turn posed to public health. “The minute I was aware of that,” he recalls, “I was interested in raising taxes.”

A more effective application of taxation in anti-tobacco efforts will inevitably involve ministries of finance. Too little, though, has been written about how these institutions approach this issue, including their imposition, collection, and revenue disbursement. This study, drawing on in-depth interviews with ten government officials across the world as well as substantial desk research, seeks to shed light on the thinking of these key players in tobacco control.

¹² Economist Intelligence Unit calculations based on WHO, *2018 global progress report on implementation of the WHO Framework Convention on Tobacco Control*, 2018, https://www.who.int/fctc/reporting/WHO-FCTC-2018_global_progress_report.pdf.

¹³ Corne van Walbeek and Samantha Filby, “Analysis of Article 6 (tax and price measures to reduce the demand for tobacco products) of the WHO’s Framework Convention on Tobacco Control,” *Tobacco Control*, 2018, <https://tobaccocontrol.bmj.com/content/tobaccocontrol/early/2018/07/25/tobaccocontrol-2018-054462.full.pdf>; Janet Chung-Hall et al., “Impact of the WHO FCTC over the first decade: a global evidence review prepared for the Impact Assessment Expert Group,” *Tobacco Control*, 2018, https://tobaccocontrol.bmj.com/content/tobaccocontrol/28/Suppl_2/s119.full.pdf.

The roles and impact of a tax: A necessary excursion into economics

Before turning to the views of ministry officials, though, the basics of tobacco taxation and its attendant controversies are an essential prologue.

The tobacco tax menu for policymakers

The Oxford English Dictionary (OED) defines tax as “a compulsory contribution to state revenue, levied by the government on personal income and business profits or added to the cost of some goods, services, and transactions.”

Conceptually, governments could raise income from tobacco in any number of ways, including higher rates of income tax on growers or manufacturers, or a licence fee to operate in the market. Today, in practice, the universally preferred approach consists of levies either on the production of tobacco-containing goods or on transactions involving them. The most common forms, which countries combine in diverse ways, are:

- **General sales taxes:** these are typically *ad valorem* (calculated as a percentage of a product’s price) and applied to many transactions in the economy, including those involving tobacco.
- **Excise taxes:** these are applied to specific goods or types of goods, such as different forms of tobacco. They can also be *ad valorem*, in which case they might be charged at the point of wholesale or retail sale or at the point of manufacture. Alternatively, they can be for a standard amount per unit, a so-called specific excise tax, which is typically assessed on the product’s producer.
- **Customs duties:** these are paid by the importer of specific goods into a jurisdiction. They also can be assessed per unit or *ad valorem*. Customs duties therefore, in practice, have the same effect as excise taxes on goods that are not produced domestically. The Maldives, for example, bans growing or processing tobacco and, rather than an excise tax, imposes a per cigarette customs charge. For other countries, having identical rates of customs and excise levies ensures that domestic and foreign tobacco face the same tax barriers.

Although all these taxes, where they exist, affect the price of tobacco, the ones most relevant to its control are the excise and customs charges (hereafter collectively called, for simplicity, excise taxes because of their similar impact when properly structured). General sales taxes, given their wider application, are set in a way to balance the government’s revenue needs with the policy aim of not unduly threatening economic activity. This should limit any impact on consumption.

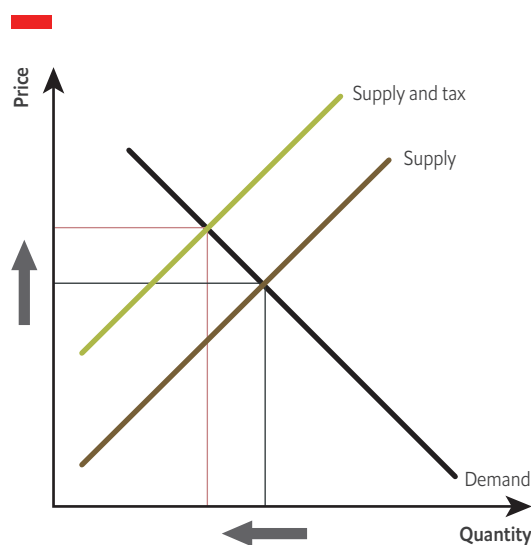
The tax iceberg below the surface

The OED definition and preceding discussion are both correct and yet risk giving an inaccurate impression through saying too little.

Taxation is about far more than taking money out of an economy. It is an intervention in a complex, multi-actor marketplace, which, by disturbing an existing equilibrium, can drive any or all of a wide range of behaviour changes, depending on the circumstances.

In simple markets, the price and quantity sold of a good depends on the amount buyers are willing to pay at a given price (the so-called demand curve) and how much suppliers

can provide at a given price (the so-called supply curve). Where the two curves meet reflects the price and quantity of the market equilibrium. In economic terms, a rise in taxes increases the price at which suppliers can bring goods to the market, shifting the supply curve, thereby disturbing the equilibrium.



What happens next depends on the nature of the market and the attitudes of those in it. At one extreme, if the product is absolutely essential for the consumer—think insulin for diabetics—demand will remain constant so that the suppliers can shift the higher price to the buyer (in the chart, instead of the black line at an angle, it would be vertical). Conversely, if consumers simply will not pay more than the current price, suppliers who can afford it have to swallow the new cost to the extent they can (the black line would be horizontal). Those who cannot do so will leave the market, voluntarily or through bankruptcy. Both of these will lead to lower sales. For most taxes, the result is a bit of both: prices go up somewhat, and sales simultaneously decline, based on what the market will bear, reaching a new equilibrium.

The measure of the shift in sales volume before and after any price change, including those driven by tax changes, is called elasticity (formally, here, price elasticity of demand). This is calculated as the percentage drop in sales divided by the percentage change in price. Elasticity can vary between products (even very similar ones such as different brands of the same good), between countries based on local consumer preferences, between socio-economic groups, and over time. Nevertheless, except in extreme circumstances, a tax rise will both raise the prices consumers pay and reduce the amount they buy.

This, though, is far from the end of the matter. In any market, all things being equal, consumers would rather pay less for the goods they purchase, and suppliers would rather be able to sell at a price-volume combination that maximises profit. Accordingly, a tax rise provides an incentive to minimise the effect of the levy to the extent that it is possible.

Faced with a tax, a consumer might:

- as discussed, buy fewer of the goods in question at the higher price;
- leave the market entirely;
- temporarily leave the market, but re-enter when greater income increases relative affordability (a shift in the demand curve to counteract the one of the supply curve);
- seek substitute, lower cost products that meet demand in some way;
- seek any alternative, legal market where the tax does not apply, and overall prices are lower;
- seek an alternative, illicit market where the tax does not apply, and overall prices are lower; or
- engage in political activity to oppose the tax or, at an extreme, in violent resistance.

A supplier, meanwhile, might, among other things:

- raise prices;
- cut back on production;
- leave the market entirely, as it is no longer profitable;
- reduce pre-tax prices, thereby absorbing consumer cost;
- find efficiencies to reduce production costs;
- begin producing similar goods that attract less tax or adjust the properties of the market good sufficiently so that it falls outside the tax;
- maximise ongoing profit by adjusting pre-tax prices across a range of similar products so that the highest overall increase is on those items with the lowest elasticity;
- increase activity in any alternative, legal market where the tax does not apply, and overall prices are lower;
- increase activity in any illicit market where the tax does not apply, and overall prices are lower; or
- engage in political activity to oppose the tax or, at an extreme, in violent resistance.

These are general, possible reactions: none are predetermined but all have occurred in different markets at different points in history. Barring violent tax revolts, modern tobacco taxes have also elicited all of them.

Some of these behaviour changes are precisely the point of using taxes for tobacco

control. A rich body of academic research from various countries shows that price increases drive lower overall consumption. Current buyers either cut back or leave the market altogether, while non-consumers, especially the young, are less likely to enter it.¹⁴ Meanwhile, for those still willing to pay more, the extra money goes into state coffers.

On the other hand, taxation—including both its rates and the form it takes—while a powerful tool, can also be a blunt one, potentially causing behaviour change that does not help meet the health aims of the measure.

Product substitution, for example, has a bright and a dark side. Buying nicotine patches instead of cigarettes as a personal strategy to manage withdrawal is welcome from a medical perspective. Conversely, a switch from a more expensive to a less costly brand of cigarette or kind of tobacco is of little health benefit. In Europe, for example, tax differentials largely drove a small but measurable shift from manufactured to roll-your-own cigarettes.¹⁵ In India, the relatively much higher price of cigarettes compared to *bidis*—tobacco rolled in a leaf, which also happens to do much more damage to health—likely accounts for the latter's ongoing greater popularity, especially among those of lower socio-economic status. India taxes cigarettes more heavily, but the excise levels are still so low in absolute terms that it is hard to say if they contribute directly to *bidi* use. That said, improved socio-economic status seems to lead smokers to shift to cigarettes.¹⁶

Profit-seeking producers understandably abet this search for substitutes. Where specific

¹⁴ For a recent review of the data, see Chapter 4 of US National Cancer Institute, and WHO, *The Economics of Tobacco and Tobacco Control*, National Cancer Institute Tobacco Control Monograph 21, 2016, https://cancercontrol.cancer.gov/brp/tcrb/monographs/21/docs/m21_complete.pdf.

¹⁵ Annerie Bouw, *Tobacco Taxation in the European Union: An Overview*, 2017, <http://documents.worldbank.org/curated/en/493581492415549898/pdf/114324-REPLACEMENT-PUBLIC-25-4-2017-19-59-40-TTEUR.pdf>.

¹⁶ Priya Mohan et al, "Assessment of Tobacco Consumption and Control in India," *Indian Journal of Clinical Medicine*, 2018, <https://journals.sagepub.com/doi/full/10.1177/1179916118759289>; Pratibha Pawar et al., "The relation between price and daily consumption of cigarettes and bidis," *Indian Journal of Cancer*, 2014, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4573987/>.

details of the product trigger higher taxes—such as the length of the cigarette—these might be modified. Similarly, manufacturers tend to absorb more of the impact of *ad valorem* taxes for low cost cigarettes, which normally have higher elasticity, by keeping the pre-tax prices down.¹⁷ The companies make up for this loss by charging more for the lower-elasticity premium brands. In the UK, to cite just one example, a study found that, in 2000-10, controlled for inflation, the price of the lowest cost category of cigarette barely changed, while that of the highest cost grew by around 10% as a result of this strategy.¹⁸

Alternative legal sources may also have an impact where available. A 2016 study found that each year roughly a quarter of smokers in the EU legally purchased cigarettes in another country, over half of these giving a cheaper price as the reason.¹⁹ Although the aggregate volume of this trade in Europe is not large, it can become problematic. The Danish Ministry of Finance uses as a working assumption that, if domestic prices exceed those in neighbouring Germany by around 10%, the amount of tobacco bought there by Danes will begin to rise markedly.²⁰ In such an event, for a tobacco company, the simplest thing would be to stock shops on the German side of the border more and ship less to Danish ones.

Illicit trade also does occur. The contentious debate around the level of such trade and

its relationship with taxation is examined below. Suffice it to say here that, without some perceived superior value proposition, consumers would be unlikely to buy illicit tobacco. The attraction is usually a lower price,²¹ but not always. In several countries illicit cigarettes actually cost more than properly taxed ones, presumably because purchasers see them as having qualities that are worth the extra outlay.²² Even in such cases, price, and therefore tax, is an inevitable part of any broader value equation.

Important market actors have engaged in illicit activity. Although the major transnational tobacco companies insist that they wish to reduce the volume of this trade, evidence of their abetting it in some places, in the recent past at least, is strong. Between 2004 and 2010 these businesses paid an aggregate total of US\$2.15bn to the EU and member states in order that the latter drop fraud litigation.²³ Nor are large firms the only ones. Mighty Corporation, a domestic Filipino cigarette manufacturer until 2017 serves as an example. In that year it paid the largest tax fine in the country's history—P25bn (about US\$500m)—for its improper activities.²⁴

Nor are those producing or selling tobacco products the only ones complicit in tax evasion. Studies in the UK and the US have shown that often buyers of low-cost cigarettes see illicit sales as justifiable. They also consider the

¹⁷ For a review of tobacco company strategies, see Hana Ross et al., "Undermining government tax policies: Common legal strategies employed by the tobacco industry in response to tobacco tax increases," *Preventative Medicine*, 2017, <https://www.sciencedirect.com/science/article/pii/S0091743517302165>.

¹⁸ Anna Gilmore et al., "Understanding tobacco industry pricing strategy and whether it undermines tobacco tax policy: the example of the UK cigarette market," *Addiction*, 2013, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3746125/>.

¹⁹ Israel Agaku, "Impact of cigarette price differences across the entire European Union on cross-border purchase of tobacco products among adult cigarette smokers," *Tobacco Control*, 2016, <https://tobaccocontrol.bmj.com/content/25/3/333>.

²⁰ Danish Ministry of Finance, *Moderate prisstigninger på cigaretter kan være gavnlige for samfundsøkonomien*, 2019, <https://www.skm.dk/media/1890614/moderate-prisstigninger-paa-cigaretter-kan-vaere-gavnlig-for-samfundsoekonomien.pdf>.

²¹ World Bank, "Confronting Illicit Tobacco Trade: A Global Review of Country Experiences," 2019, <http://documents.worldbank.org/curated/en/677451548260528135/pdf/133959-REPL-PUBLIC-6-2-2019-19-59-24-WBGTobaccolllicitTradeFINALvweb.pdf>.

²² Jennifer Brown, "An analysis of purchase price of legal and illicit cigarettes in urban retail environments in 14 low- and middle-income countries," *Addiction*, 2017, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5600117/>.

²³ OLAF European Anti-Fraud Office, "Tobacco smuggling," https://ec.europa.eu/anti-fraud/investigations/eu-revenue/cigarette_smuggling_en.

²⁴ "Special Report: Government cracks down on cigarette smuggling, counterfeiting," *PhilStar Global*, 4 March 2019, <https://www.philstar.com/headlines/2019/03/04/1898507/special-report-government-cracks-down-cigarette-smuggling-counterfeiting>.

provision of reduced-price products by vendors clearly involved in tax evasion to constitute a money-saving service to purchasers.²⁵

Finally, incorrectly applied, tax may not have a lasting effect because the true driver in an economic market is perceived affordability, not price per se. In comparing the impact of a market intervention over a very short time, the two are interchangeable. Over the longer term, economic growth, insofar as it brings higher average incomes, is typically associated with a rise in tobacco consumption.²⁶ It is noteworthy that in US-dollar terms the highest tobacco taxes are in developed countries. However, the product is generally the least affordable, according to WHO data—which measures cost per average income—in low-GDP nations. This leaves open the risk of a rapid increase in smoking prevalence in quickly growing emerging markets.²⁷

The point of this overview is that engagement in any or all of these specific, and sometimes complex, strategies to minimise the economic impact of a tax does not represent manipulative behaviour to undermine tobacco control (barring involvement in illicit trade or, where it exists, wilful misrepresentation of facts in public debates). These strategies are simply how markets tend to react. If taxes are being used to bring about behaviour change with desirable health outcomes, it is not deviant for other market actors to change their behaviour, within the law, to permit ongoing tobacco use at as low a cost as possible. The positive—from a health viewpoint—and the negative are two sides of

the same coin. Those charged with designing tax have to take them both into account.

Indeed, WHO best practice advice recognises this implicitly. It recommends, among other strategies, widespread use of simple, specific excise taxes rather than a multi-tier or *ad valorem* approach. Similarly, it discourages disparities in levies on different kinds of tobacco consumption. Both give markets fewer ways, beyond reduced consumption, to react to the impact of taxes. The WHO also encourages regular reviews and increases in these levies, partly in order to avoid the real value of the taxes being undermined by inflation and economic growth—two dangers with simple excise.²⁸

Economics, then, indicate that diverse reactions among market participants are a given when any taxes change. Those working in finance ministries need to bear this in mind. As Ahmed Kouchouk, vice-minister of finance for fiscal policies and institutional reform in the Egyptian Ministry of Finance, puts it, “the civil service has to be aware of the situation, of market dynamics, of stakeholder interests and views.” Adding to the complexity for these officials are the strongly contrasting claims among stakeholders about the net impact that market reactions will have on tax effectiveness.

Points of contention

Tobacco companies and public health advocates opposed to tobacco agree on one thing. As an internal Philip Morris memo put it in the mid-1990s, “While marketing

²⁵ Sharon Meltzer and Chris Martin, “A brief overview of illicit trade in tobacco products,” Chapter 5 of OECD, *Illicit Trade: Converging Criminal Networks*, 2016, https://www.oecd-ilibrary.org/governance/illicit-trade/a-brief-overview-of-illicit-trade-in-tobacco-products_9789264251847-8-en.

²⁶ For a recent review of the data, see Chapter 4 of US National Cancer Institute, and WHO, *The Economics of Tobacco and Tobacco Control*, National Cancer Institute Tobacco Control Monograph 21, 2016, https://cancercontrol.cancer.gov/brp/tcrb/monographs/21/docs/m21_complete.pdf.

²⁷ Yanyun He et al., “The association between cigarette affordability and consumption: An update,” *PLoS One*, 2018, <https://journals.plos.org/plosone/article/file?id=10.1371/journal.pone.0200665&type=printable>.

²⁸ WHO, *WHO Technical Manual On Tobacco Tax Administration*, 2011, https://apps.who.int/iris/bitstream/handle/10665/44316/9789241563994_eng.pdf?sequence=1

restrictions on public and passive smoking do depress volume, in our experience taxation depresses it much more severely.”²⁹ Not surprisingly, though, these two groups make different assertions about the broader market impacts of tobacco tax.

The revenue available: The win-win lasts a long time

One issue is the extent to which increased tobacco taxation may be self-defeating as a revenue raising tool. Tobacco industry lobbyists point out that any levy that seeks to destroy the market from which it gets money is ultimately unsustainable, or at least will raise less revenue than expected.³⁰ The wording used by those involved in anti-tobacco efforts, meanwhile, might seem to miss an apparent logical problem. For example, a 2018 World Bank brief, in one paragraph, advocates raising taxes “to make these deadly products *unaffordable* [italics added]” but in the next talks about how doing so expands a country’s tax base.³¹ This, at first glance, incongruous combination is actually not at all a contradiction. It describes what is often referred to as the win-win of tobacco tax.

In practice, the win-win does occur frequently. Repeated studies have shown an increase in overall government revenue and drop in consumption from the imposition of tobacco taxation.³² This apparent contradiction arises because, in most countries, tobacco taxation is in an economic sweet spot. On the one hand, taxes will never constitute all of the price of

tobacco anywhere: farmers, manufacturers and retailers do not work for free. Thus, increasing taxes by a given percentage, even if fed through to the retail price, will not have the same percentage impact on what consumers pay.

On the other hand, although regrettably low from a public health point of view, in almost every study worldwide, tobacco elasticity is between 0 and -1 (and typically between -0.2 and -0.8 depending on the country, socio-economic group, and specific tobacco product studied).³³ This means that a 1% increase in overall price will lead to less than a 1% drop in consumption.

Especially when taxes make up a relatively small part of the price of tobacco, even a proportionately large rise in a tax will see the higher levy per product more than making up for the lower volume sold. In 2018, on average in countries reporting to the WHO, taxes accounted for 52% of the price of the most popular national brands of cigarettes.³⁴ Even at an elasticity of -0.8, in a simple market and in the absence of any other reaction by consumers or suppliers, doubling this tax rate would still increase revenue by roughly 17%. In similar conditions, in a country where taxes make up the currently MPOWER-recommended level of 75% of the overall price, the government would lose money by doubling taxes, but still have roughly 1% more revenue if it just upped its tax rates by half. The actual elasticity levels found in most research suggest that potential income would be even higher.

²⁹ Quoted in M Scollo and M Winstanley, *Tobacco in Australia: Facts and issues*, 2018, <https://www.tobaccoinustralia.org.au/chapter-13-taxation/13-10-arguments-against-tax-increases-by-tobacco-industry>.

³⁰ Katherine Smith et al., “What is known about tobacco industry efforts to influence tobacco tax? A systematic review of empirical studies,” *Tobacco Control*, 2013, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3701860/>.

³¹ World Bank, “Taxing Tobacco: A win-win for public health outcomes and mobilizing domestic resources,” 28 March 2018, <https://www.worldbank.org/en/topic/tobacco/brief/taxing-tobacco-a-win-win-for-public-health-outcomes-mobilizing-domestic-resour>.

³² For a comprehensive, recent review of the data, see US National Cancer Institute and WHO, *The Economics of Tobacco and Tobacco Control*, 2016, https://cancercontrol.cancer.gov/brp/tcrb/monographs/21/docs/m21_complete.pdf.

³³ US National Cancer Institute and WHO, *The Economics of Tobacco and Tobacco Control*, 2016, https://cancercontrol.cancer.gov/brp/tcrb/monographs/21/docs/m21_complete.pdf.

³⁴ Economist Intelligence Unit calculations, based on data in WHO, “National taxes and retail price for a pack of 20 cigarettes, globally,” Table 9-1, Appendix IX, *WHO report on the global tobacco epidemic*, 2019, https://www.who.int/tobacco/global_report/Table-9-1-Taxes-and-retail-price-for-a-pack-of-20-cigarettes-most-sold-brand.xls?ua=1.

Of course, the losers in such scenarios are the tobacco companies. They make the same, or a lower, rate of profit per unit sold, so the smaller volume cuts gross income. Where governments also own major cigarette companies—as they do in China and, to a lesser extent, Japan—this has revenue implications, but that is a separate issue.

A simple thought experiment, though, shows that this cannot go on forever. Finland, for example, has a policy goal of eliminating smoking by 2030. If it succeeds, obviously nobody will be paying its tobacco excise taxes.

The question is: what are the limits of the win-win economic sweet spot? Sales and tax data suggest that, unlike much of the world, Western Europe may be on the edge. This is easier to show if one considers the differences between the EU15—those countries already in the EU before 2004—and the nations that have joined since. The latter have a shorter history of vigorous tobacco control but have been more active since joining the EU.³⁵ Between 2008 and 2017, their average tax revenue per 100 cigarettes increased by 128%, from €4.27 to €9.77. During that time, sales volume dropped by 40% and tobacco tax receipts rose by 36%. These results are similar to the win-win found in many developing countries.

By 2008 the EU15 had advanced much further on tobacco control, with revenue per 100 cigarettes at €12.87. By 2017 this had risen by 39% to €17.85. This increase and other

measures help explain a 30% drop in cigarette sales over the same period. However, over those years, total revenue from tobacco excise tax declined slightly—by just under 3%. This does not take into account the direct and indirect economic benefits of any resultant lower rates of tobacco-induced disease. Nevertheless, for this region, the health-revenue win-win is starting to become more of a win-draw; still a worthwhile option, but one requiring a more nuanced sell.

What sets these countries apart is not low consumption: in 2014, daily smoking prevalence, at 22%, was above the global average.³⁶ Nor are cigarettes particularly hard to afford: 2,000 cost, on average, 1.8% of GDP per head in these countries, which is low by global standards.³⁷ Instead, the already high rates of tax—in all of these states taxes make up at least 68% of the price of the most purchased cigarette and in nine the figure is over 75%³⁸—mean that further increases have a greater effect on the overall price than when that proportion is lower. Other elements of tobacco control may also have had an impact on elasticity, making smokers more ready to quit should a good reason arise.

Even within the region, however, individual countries may buck the trend. Finland saw faster tobacco tax increases than its EU15 peers between 2008 and 2017, as well as greatly increasing revenue. Looking ahead, Terhi Järvikare, director-general of the tax department in the country's Ministry

³⁵ Figures in this discussion from Economist Intelligence Unit calculations based on data from European Commission, "Tax receipts: Manufactured tobacco," July 2018, https://ec.europa.eu/taxation_customs/sites/taxation/files/resources/documents/taxation/excise_duties/tobacco_products/rates/ex; European Commission, "Releases for consumption of cigarettes 2002-2017," 2018, https://ec.europa.eu/taxation_customs/sites/taxation/files/docs/body/tobacco_products_releases-consumption.pdf.

³⁶ WHO European Health Gateway information, "% of regular daily smokers in the population, age 15+," https://gateway.euro.who.int/en/indicators/hfa_421-3010-of-regular-daily-smokers-in-the-population-age-15plus/visualizations/#i. The 2016 global figure was 16% (WHO, *WHO global report on trends in prevalence of tobacco smoking 2000-2025*, 2nd ed., 2018, <https://apps.who.int/iris/bitstream/handle/10665/272694/9789241514170-eng.pdf?ua=1>).

³⁷ Economist Intelligence Unit calculations, based on data in WHO, "Affordability of the most sold brand of cigarettes, globally," Table 9-6, Appendix IX, *WHO report on the global tobacco epidemic*, 2019, https://www.who.int/tobacco/global_report/Table-9-6-Affordability.xls?ua=1.

³⁸ WHO, "National taxes and retail price for a pack of 20 cigarettes, globally," Table 9-1, Appendix IX, *WHO report on the global tobacco epidemic*, 2019, https://www.who.int/tobacco/global_report/Table-9-1-Taxes-and-retail-price-for-a-pack-of-20-cigarettes-most-sold-brand.xls?ua=1.

of Finance, explains that the government hopes, through a tobacco tax rise in the coming four years, to grow current annual receipts of €1.1bn by a further €200m. She is convinced that the planned taxes will raise more revenue, but it is “too early to say if we will get the full €200m. This depends on how fast consumption decreases. The latest figures for 2019 show that the decrease has been faster than anticipated.” Overall, the evidence suggests that the win-win goes on for a long time with most countries—especially the large number with low tax rates—still able to benefit. Nevertheless, it can eventually run out.

The extent of illicit trade

Illicit trade in tobacco involves a range of activities. Each—whether involving growing, manufacture, cross-border shipment, or sale—have in common that they go either improperly reported or outright unrecorded. This allows those involved to evade tax.

Activities conducted in the shadows are notoriously hard to measure. So too here. The most recent estimate from an academic study indicates that, in 2007, 11.6% of cigarette sales were illicit, while the WHO hedges its bets and says one in ten.³⁹ Those writing on this area typically use data from Euromonitor, a market-research firm, although health advocates have pointed out that its national figures vary a surprising degree from year to year and have recently criticised it for beginning to take tobacco industry funding.⁴⁰ That said, the company puts non-duty paid

cigarettes at 7.8% of all sales worldwide, and 10.3% outside of China—a huge market that tends to dominate global figures. Euromonitor and the 2007 study both estimate the cost to governments in lost tax at around US\$40bn per year.⁴¹

Both tobacco companies and the public health community agree in public that illicit activity is a big problem, although the latter is understandably wary of industry’s stated commitment to addressing it. It is also a governmental concern: at the international level, the Protocol to Eliminate Illicit Trade in Tobacco Products, which entered into force in September 2018 and currently has 55 state parties, is designed specifically to combat it.⁴²

The point of contention is the link between the level of tobacco taxation and the extent of illegal trade. The tobacco industry regularly criticises new taxes by claiming that they will drive illicit sales. The obvious implication is that measured reductions in licit market volume—and attendant health benefits—are illusory to the extent that tobacco users have not actually cut back but left the legal market.⁴³ Accordingly, leading players in the tobacco industry, either directly or through various foundations, fund major consultancies or research firms to calculate and publish estimates of illicit trade in most major markets worldwide.

Unfortunately, this research often seems to exaggerate the extent of the problem in individual nations. A recent review by academics at the UK’s University of Bath,

³⁹ Luk Joossens et al., “The impact of eliminating the global illicit cigarette trade on health and revenue,” *Addiction*, 2010, <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1360-0443.2010.03018.x>; WHO, “Tobacco,” fact sheet, 29 May 2019, <https://www.who.int/news-room/fact-sheets/detail/tobacco>.

⁴⁰ Evan Blecher et al., “Euromonitor data on the illicit trade in cigarettes,” *Tobacco Control*, 2015, <https://tobaccocontrol.bmj.com/content/24/1/100>; Allen Gallagher and Anna Gilmore, “Euromonitor International now accepts tobacco industry funding,” *Tobacco Control*, 2019, <https://blogs.bmj.com/tc/2019/04/08/euromonitor-international-now-accepts-tobacco-industry-funding-a-win-for-pmi-at-the-expense>.

⁴¹ Euromonitor, *Illicit Trade in Tobacco Products*, 2018, <https://www.euromonitor.com/illicit-trade-in-tobacco-products/report>.

⁴² Available at https://apps.who.int/iris/bitstream/handle/10665/80873/9789241505246_eng.pdf?sequence=1

⁴³ Katherine Smith et al., “What is known about tobacco industry efforts to influence tobacco tax? A systematic review of empirical studies,” *Tobacco Control*, 2013, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3701860/>.

looked into what the paper calls “independent” researchers measuring the same markets as tobacco-funded studies. In 31 out of the 35 cases they found, the estimates of illicit tobacco-related activity were far lower than in industry-funded studies.⁴⁴ Other research since tells a similar story.⁴⁵

The picture is not this black and white. Of the 35 studies used, only 21 came from refereed journals or academic publishers. The remaining 14 studies were put out by anti-smoking or anti-cancer groups, almost all referring to studies in Australia, most in the state of Victoria. These groups, while independent of tobacco companies, also have a vested interest and do not always appear dispassionate about the evidence. Although the weight of studies still suggests overly high figures in tobacco-funded research, it also can depend on the specific research. An OECD comparison of measurements of illicit trade in 2012 from the *Tobacco Atlas*—which drew on figures from consultancy Euromonitor—and KPMG industry-funded studies found that while the latter gave higher figures in 12 cases, the former did in nine.⁴⁶

The bigger problem than specific numbers is disagreement over methodology, which the industry-funded pieces rarely reveal. As the University of Bath study puts it, industry-funded studies routinely “feature substantial methodological problems and fail to meet the standards of accuracy and transparency that

are set by high-quality research publications.”⁴⁷ And according to the *Tobacco Atlas*,⁴⁸ “Studies paid for and presented by cigarette manufacturers are generally not independently verified or peer-reviewed and, unlike academic research studies, are not replicable. Growing evidence suggests that these industry-commissioned studies typically grossly overstate the illicit cigarette trade problem.”

If tobacco companies overplay this card, it reflects their lack of other good ones. On the other hand, those campaigning for higher taxes tend, again rhetorically at least, to underplay their contribution to illicit trade. In so doing they can give an inaccurate impression.

Sometimes the wording is restrained and academically defensible: the US National Cancer Institute argues that “the evidence shows that non-tax factors including weak governance, high levels of corruption, poor government commitment to tackling illicit tobacco, ineffective customs and tax administration, and informal distribution channels for tobacco products are often of equal or greater importance” than tax rates in the level of illicit trade.⁴⁹ Others go further, such as the World Bank’s recent claim that “Tobacco taxes play only a minor role in illicit trade,”⁵⁰ and an influential 2019 report from Bloomberg Philanthropies argues that “higher price levels are actually associated with less illicit trade, suggesting that other factors are

⁴⁴ Allen Gallagher, “Tobacco industry data on illicit tobacco trade: a systematic review of existing assessments,” *Tobacco Control*, 2019, <https://tobaccocontrol.bmj.com/content/28/3/334>.

⁴⁵ See, for example, Rijo John and Hana Ross, “Illicit cigarette sales in Indian cities: findings from a retail survey,” *Tobacco Control*, 2019, <https://tobaccocontrol.bmj.com/content/27/6/684>; American Cancer Society, *El consumo de cigarros ilícitos en México. Una estimación robusta y transparente para apoyar la toma de decisiones*, 2019, http://salud.edomex.gob.mx/imca/documentos/omexdat/publicaciones/consumo_cigarros_ilicitos_mex.pdf.

⁴⁶ Sharon Meltzer and Chris Martin, “A brief overview of illicit trade in tobacco products,” Chapter 5 of OECD, *Illicit Trade: Converging Criminal Networks*, 2016, https://www.oecd-ilibrary.org/governance/illicit-trade/a-brief-overview-of-illicit-trade-in-tobacco-products_9789264251847-8-en.

⁴⁷ Allen Gallagher, “Tobacco industry data on illicit tobacco trade: a systematic review of existing assessments,” *Tobacco Control*, 2019, <https://tobaccocontrol.bmj.com/content/28/3/334>.

⁴⁸ American Cancer Society and Vital Strategies, *Tobacco Atlas*, 6th ed., 2018, https://tobaccoatlas.org/wp-content/uploads/2018/03/TobaccoAtlas_6thEdition_LoRes_Rev0318.pdf.

⁴⁹ US National Cancer Institute and WHO, *The Economics of Tobacco and Tobacco Control*, 2016, https://cancercontrol.cancer.gov/brp/tcrb/monographs/21/docs/m21_complete.pdf.

⁵⁰ World Bank, “Confronting Illicit Tobacco Trade: A Global Review of Country Experiences,” 2019, <http://documents.worldbank.org/curated/en/677451548260528135/pdf/133959-REPL-PUBLIC-6-2-2019-19-59-24-WBGToBaccollicitTradeFINALvweb.pdf>.

at work," including government administrative and enforcement capacity.⁵¹

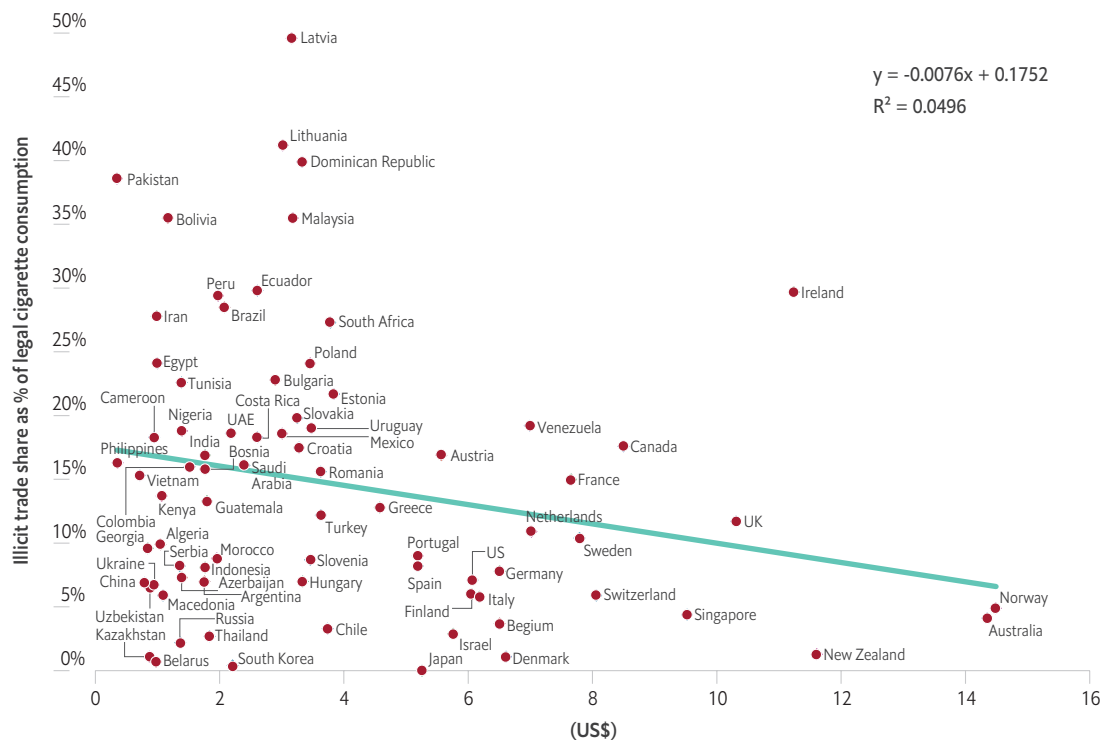
These pieces, and similar ones, all use the same graph of illicit tobacco trade levels by country in 2012 and the US dollar price. This shows no strong correlation, and even the weak trend indicates that, if anything and contrary to what one might expect, higher prices accompany lower levels of illicit trade.

The problem is that the combination of data used in the comparison tells only part of the story. The US dollar price is higher, by and large, in high-income countries where, as the chart shows, illicit trade tends to be lower. This suggests that illicit suppliers are not

selling as much into markets where they could make the most hard currency.

It does not, however, consider the consumer sufficiently. Those countries with the highest taxes are largely high-income, and, as noted above, tend as a group already to have the most affordable cigarettes when measured by price per average GDP. Consumers would, all things being equal, be less likely to take on the risk of purchasing illicit goods if the net effect on their pocketbooks is relatively small. On the other hand, where the net amount of taxes is higher compared with ability to purchase—even if they are relatively low compared with other countries in percentage terms—illicit supply becomes a more interesting proposition to buyers.

Percentage of illicit trade volume in total (cigarettes) 2012 and price for pack of 20 of the most popular national brand of cigarettes



Source: US National Cancer Institute, and WHO, *The Economics of Tobacco and Tobacco Control*, National Cancer Institute Tobacco Control Monograph 21, 2016, https://cancercontrol.cancer.gov/brp/tcrb/monographs/21/docs/m21_complete.pdf.

⁵¹ Task Force on Fiscal Policy for Health, *Health Taxes to Save Lives*, 2019, <https://www.bbhub.io/dotorg/sites/2/2019/04/Health-Taxes-to-Save-Lives.pdf>.

In that sense, affordability, which is a much more pronounced problem for tobacco users in developing countries than in richer ones,⁵² would probably have more of an effect on demand decisions. This may explain why the Euromonitor data, which we have not had a chance to analyse in depth, seem to show that smuggling is higher where people find it harder to afford cigarettes. Since the aim of higher taxes is to affect affordability, this is far more relevant on the demand side than looking at US dollar prices.

A more useful approach than comparing national data is to look at the results when countries raise tax rates with limited other change on the demand or enforcement side. Research from Hong Kong and Colombia, even while demonstrating much lower levels of illicit trade than claimed by the tobacco industry, does indicate that the proportion of illicit cigarettes in the overall total sold rose after a tax hike (from 11% to 15% in the first case and 3% to 7% in the latter).⁵³ The Colombian increase might even have been higher had the excise increase not been accompanied by strengthened enforcement. More striking though, customs data from Egypt indicate that illicit trade went from 2% of market share in 2009 to 11% in 2010 after the imposition of new taxes in 2010.⁵⁴ This did not undermine the taxes significantly: in all three of these cases, despite the growth in illegal trade, greater tobacco taxes still led to higher government revenue and lower overall smoking prevalence. It did, however, reduce the size of both desired wins.

Thus, although it does not negate the benefits, all things being equal, higher taxes—by creating a greater incentive to engage in illicit trade—will increase the incentive for, and therefore the extent of, illegal activity. All things, however, are rarely completely equal between two situations, so no simple dose-response relationship exists. In Brazil, substantial tax increases between 2008 and 2013 accompanied a near doubling in the proportion of illicit cigarettes used by daily smokers (from 16.6% to 31.1%). But, even with this development, smoking prevalence went down and tax revenue up.⁵⁵ Meanwhile, in 2017 and 2018 new import duty and excise tax increases in Mongolia actually accompanied a near 50% drop.⁵⁶

And things don't need to stay equal within a given market. Campaigners against tobacco are therefore right to stress that other factors, including improved tax and customs enforcement, play a crucial role in the illicit tobacco picture and can usually more than offset any increased incentive to engage in criminal activity.

However, thinking that enforcement is somehow more important and that taxes play a minor role is missing the point. Both taxes and enforcement need to be taken into account, even if simply to strengthen the latter when raising the former.

⁵² Yanyun He et al., "The association between cigarette affordability and consumption: An update," *PLoS One*, 2018, <https://journals.plos.org/plosone/article/file?id=10.1371/journal.pone.0200665&type=printable>.

⁵³ Tat Chee Sui, "Does smuggling negate the impact of a tobacco tax increase?" *Tobacco Control*, 2015, <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.873.8714&rep=rep1&type=pdf>; World Bank, "Confronting Illicit Tobacco Trade: A Global Review of Country Experiences," 2019, <http://documents.worldbank.org/curated/en/677451548260528135/pdf/133959-REPL-PUBLIC-6-2-2019-19-59-24-WBGTobaccoIllicitTradeFINALvweb.pdf>.

⁵⁴ Mohammed Madbouly, "Egypt New Illicit Trade," Presentation to conference on Illicit tobacco trade and taxation in the Eastern Mediterranean, November 2018, <https://untobaccocontrol.org/kh/waterpipes/wp-content/uploads/sites/2/2018/11/Egypt-New-illicit-Trade.pdf>.

⁵⁵ Roberto Iglesias et al., "Estimating the size of illicit tobacco consumption in Brazil: findings from the global adult tobacco survey," *Tobacco Control*, 2015, <https://tobaccocontrol.bmj.com/content/26/1/53>.

⁵⁶ Hana Ross et al., "Impact of tax increases on illicit cigarette trade in Mongolia," *Tobacco Control*, 2019, <https://tobaccocontrol.bmj.com/content/early/2019/06/18/tobaccocontrol-2018-054904>.

Section II—The view from finance ministries

In this complex, contested context, finance ministries play the leading role in the design and oversight of tobacco tax. Understanding their views is therefore essential when considering the current and likely future application of these levies. In this section, we highlight key insights from interviews with senior officials and ministers in ten countries.

Policy formation and rate setting

Constrained actors

A foundational element of finance ministry thinking is that, although officials play a major role in planning, proposing and implementing tobacco taxes, their powers are limited. A common theme among those interviewed was to stress the need for legislative approval of any proposal. Even where the political executive has strong legislative support, effort is necessary. Mr Kouchouk explains that in Egypt “taxation requires a lot of discussions with and presentations to the parliament. Nothing can be approved without members’ approval. They need to be aware of the full picture.”

When getting such consent, notes Cesar Purisima—a former minister of finance in the Philippines, who led the enactment of the country’s 2012 Sin Tax Reform discussed in a later section—“the political dynamic can be complicated. There may be those that do not want change and feel that they will be disadvantaged.”

In practice, the difficulties vary greatly by country. In Sierra Leone and Barbados, for example, political barriers are negligible. Of the latter, Ryan Straughn, minister in Barbados’ Ministry of Finance, says “there has

never been any difficulty in getting a tobacco excise bill through parliament.”

Conversely, where substantial tobacco interests—either agricultural or manufacturing—exist, things can get more complicated. Mr Purisima explains that the Philippines’ Sin Tax Reform, as well as a 2019 hike in tobacco levies, took the willingness of two successive presidents to expend substantial political capital. Similarly, in the 2016 Colombian tax reform, the government agreed to phase in new tobacco rates over several years, rather than impose it all immediately, as a way to reassure legislators from tobacco growing districts, notes Mr Cárdenas. Sometimes governments do not get everything they want even from generally supportive parliaments. Ukraine’s Rada (parliament) has approved steadily increasing tobacco excise taxes in recent years, but twice refused to make tobacco smuggling a criminal offence, Yuriy Dzhygyr, the deputy minister of finance, reports.

When expedient, finance ministries shape their tobacco tax policymaking and strategy in ways that minimise political challenges.

Accordingly, when expedient, finance ministries shape their tobacco tax policymaking and strategy in ways that minimise political challenges. The Egyptian government has raised tobacco taxes on an annual basis for most years of the last decade and these duties now make up slightly more than the recommended 75% minimum of

the price of cigarettes. Nevertheless, in their annual review of tobacco excise rates, finance ministry officials consult, among others, tobacco industry representatives. This, Mr Kouchouk says, reduces the chance of last-minute surprises to the industry that might create resistance to announced policies. Argentina, meanwhile, has a clear policy of taxing consumption rather than production. “This minimises the impact on farmers. Exports shouldn’t be taxed except by the importing country,” says Santiago Afonso, chief of advisers to the minister in the country’s Ministry of Finance.

Getting laws through legislatures may not always be enough: they also have to pass legal muster. Litigation is a common way that the tobacco industry resists all elements of tobacco control. Taxation is no exception: a recent example is a case by small manufacturers of cigarettes in Argentina, which led to suspension of that part of a 2016 law which shifted away from mostly pure *ad valorem* tax arrangements to a mix containing a specific excise tax component. The Ministry of Finance is working with the Ministry of Health and the country’s tax collection agency, a stand-alone government department, on a joint legal strategy to respond. Although officials think they have a good case, they still need to win. And, even in jurisdictions with a strong anti-tobacco tradition, not everything goes. In 2016 the EC ruled—and was upheld on appeal—that a Hungarian tobacco tax, which hit large sellers more than small shop-owners, breached EU state aid rules and had to be abandoned.

In short, finance ministries play a major role in tobacco taxation, but officials understand that they have far from a free hand.

For which wins are finance ministries playing?

For governments, tobacco taxes clearly have, in Mr Straughn’s words, “a revenue and a health component.” These are not the only potential benefits. An EC official told us that, in addition, the EU also hoped to reduce pollution from cigarette butts, although this was not a leading consideration. Ukraine, meanwhile, is using tobacco levies to support political decentralisation (see box). These additional aims are exceptions to the norm: more money and fewer tobacco-induced diseases are the two constituent elements of the tobacco tax win-win. How do officials at ministries of finance think about these two goals?

For governments, tobacco taxes clearly have, in Mr Straughn’s words, “a revenue and a health component.”

In some countries, one dominates, formally at least. Syed Shabbar Zaidi, chairman of Pakistan’s Federal Board of Revenue, explains that, for his office, tobacco taxation “is not a health issue.” Instead, his government is focused on creating an equitable tax that actually gets collected.⁵⁷ At the other end of the spectrum, Finland’s tobacco excise legislation specifically states that it must support the health objectives of the country’s anti-tobacco law, Ms Järvikare explains.

Most countries, however, fall in the middle, pursuing both aims simultaneously. Indeed, they are not seen as inherently contradictory. At some levels, they are intertwined over the long term in important ways. Mr Purisima recalls that one of the overarching

⁵⁷ This is consistent with the findings of attitudes throughout the Pakistani Ministry of Finance in Durre Nayab et al., *Economics of Tobacco Taxation and Consumption in Pakistan*, 2018, <https://tobaccconomics.org/wp-content/uploads/2019/01/Economics-of-Tobacco.pdf>.

considerations in the Philippines Sin Tax Reform was that improved population health would not only eventually reduce healthcare spending, but also raise economic productivity. The latter is not only good in itself; it expands the tax base.

Whatever the long-term conceptual links, though, as a practical matter finance ministries treat the economic and health gains of tobacco taxation as largely distinct benefits. As one senior official from a high-income Latin American country puts it, “clearly, tobacco tax has another goal apart from raising revenue, which is to discourage tobacco consumption. In this case, tax policy and health policy have to be in line.”

In the eyes of ministry officials, tobacco taxation’s win-win largely removes the need for difficult choices in creating such alignment. Whether the immediate driver of tax reform is health or revenue, finance ministry officials are aware of simultaneous benefits in both areas. In Sierra Leone, for example, health policy was the impetus behind a new tobacco tax but, Mr Kanu expects, the initial impact on smoking prevalence will probably be slight, while the financial gains larger and more immediate. Even in Finland, with the excise’s legal anti-consumption mandate, Ms Järvikare points out, “tobacco tax, of course, has a revenue objective.” In Ukraine, meanwhile, for the six increases in tobacco tax between 2012 and 2016, says Mr Dzhygyr “the need to raise revenue was the dominating factor. In the most dramatic moment, tax code amendments in March 2014 were introduced through a law ‘On averting financial disaster and creating grounds for economic growth in Ukraine.’” That said, he adds, because “raising tobacco taxes was a clear public policy win-win waiting to happen,” it helped contribute to a falling overall adult smoking prevalence from 28% in 2010 to 23% in 2017.

South Africa probably best exemplifies this simultaneous pursuit of both wins. Chris Axelson, chief director for economic tax analysis in the National Treasury, explains that all the country’s sin taxes “really are [imposed] for the health benefits. If the levy did not bring any money, but if smoking decreased, that would be a success.” On the other hand, he adds, when in recent years the government has increased excise tax beyond its stated policy goal—that it should make up 40% of the price of the leading cigarette—the driver has been broader revenue-raising requirements rather than heightened health concerns.

Both revenue and health, then, matter to finance ministry policymakers. A closer look at interview comments and measures of success within ministries, though, indicates that far greater attention tends to be paid to the financial side—not surprising given that this is their day job.

To cite just two examples, when asked about the main benefits of tobacco tax, Mr Kouhouk put first that it “contributes to the revenue of government.” Similarly, Mr Straughn notes, “generally, we look at it in terms of revenue.”

Two factors explain this focus. The first is that, while aware that benefits are accruing to population health, finance ministries concentrate on what they see as their main task. This is part of a practical division of labour with other government departments. In Ukraine, says Mr Dzhygyr, the Ministry of Health, “is responsible for designing and implementing health policy. As a Ministry of Finance, our primary objective is ensuring sufficient revenue collection in line with agreed spending and macro-fiscal policies. Measuring success in this area is relatively straightforward.” Similarly, Mr Purisima notes that, while one major goal of the Sin Tax Reform was to provide greater funds for

healthcare in the Philippines, “the Ministry of Finance’s task was to raise the funds, not to disburse them. The amount of money raised—that should be the primary measure of how successful the reform was.”

The second issue is the challenge of linking fiscal policy directly to health outcomes.

Changes in market activity, such as declines in cigarette purchases, are straightforward to monitor. However, Ms Järvikare explains, “it is difficult to separate the effect of tax increases from other measures in the long-term decrease in consumption.” As for going further and estimating the impact of health gains on health system costs, “we only have tools for

A tool to improve local governance

In Ukraine, local councils rely for financing mainly on transfers from central government. Historically, they have had little authority to raise funds locally, which has posed “a significant barrier to meaningful decentralisation,” says Yuriy Dzhygyr, the deputy minister of finance.

In 2015 the government gave local authorities the option of charging a 5% excise tax on tobacco and alcohol. In 2016 it became mandatory for councils to do so.

One goal was to help fund these councils at a time when the Ukrainian budget was under great stress. The move, though, was more than fiscal: it was part of the country’s broader decentralisation reform. Mr Dzhygyr explains that the tax contributed to the national government’s wider aims in this area, namely: “to strengthen state integrity and create resilient local self-governance.” By giving local authorities more resources in general and a larger stake in tobacco control, it was hoped that communities would take a more active role in political decision-making and also no longer tolerate untaxed, illicit trade, especially cross-border smuggling.

A local excise tax was a new idea in Ukraine and faced some scepticism. Its success

was uneven across the country, reports Mr Dzhygyr. The best results were in the regions bordering the EU, where residents of neighbouring countries with higher cigarette prices bought these goods to take back home. Worse performance, by contrast, occurred along Ukraine’s borders with Russia and Belarus, countries with lower domestic prices.

Overall, however, the tax has been a substantial financial success. Local councils collected more in the first quarter of 2015 than the government had initially projected for all of that year. Its relative importance has declined as these administrative units started to be able to collect local personal and small business income taxes, but continues to provide 2.2% of their revenue (excluding central grants) and 1% including grants. In so doing, the local excise provides some fiscal underpinning to the Ukraine’s broader decentralisation and boosting of local accountability—a process generally considered to be making good progress. On the other hand, notes Mr Dzhygyr, a recent drop in receipts from the tax can only be explained by illicit trade. Taxes can change behaviour, but it takes time.

Almost every official interviewed spoke of widespread information sharing and consultation between their departments and national health ministries.

broad estimates of possible future budget impacts—not nearly enough to make that a part of the budgeting process” says Mr Afonso.

Interaction with key tax policy stakeholders

Tobacco taxes, then, typically have both revenue and health goals. To what extent do these different aims make policy in this area a co-operative, or even a joint, effort of the two relevant ministries?

Almost every official interviewed spoke of widespread information sharing and consultation between their departments and national health ministries. From a ministry of finance viewpoint, their colleagues at the health ministry provide key data on consumption, how price changes are likely to impact it and, in some countries, effects of tobacco use on the broader economy.

That said, this is not an integrated enterprise. What one official told us applies generally: the Ministry of Finance “is in charge of tax policy” but for specific issues consults relevant colleagues to gather useful and relevant data. For most of the officials interviewed, this consultation goes one way, but not always. In Finland, Ms Järvikare describes monitoring of tobacco prices and consumption as a co-operative activity of her ministry and that of social affairs and health, although finance dominates on setting tax policy. In Ukraine, meanwhile, “The Ministry of Health

is responsible for designing and implementing health policy and is expected to lead and initiate policy proposals,” says Mr Dzhygyr. If these involve taxes, he adds, “the Ministry of Finance remains open and has all the necessary instruments to accommodate changes.” The ministry would agree to such policy changes, however, only “so long as it feels it can do so in a fiscally responsible way.” Ultimately, while finance ministry officials will listen to colleagues, the specifics of tax policy are too central to their mission to share with other officials.

Although less intensive, interaction with other stakeholders on tobacco tax is widespread. The degree varies by country. Unprompted references to working with non-government organisations (NGOs) and international agencies were common: former finance ministers of Colombia and the Philippines both reported in particular that NGOs assisted with efforts to win the public relations battles over major excise increases. The latter, Mr Purisima, added that they also provided technical research and examples of international best practice, which helped inform policy in the Philippines.

Again, though, finance ministries work in an ad hoc way with these organisations when they have common goals, rather than being strongly influenced by them. For example, Mr Cárdenas noted the effect that NGOs had in providing information and political activism to support Colombia’s 2016 tax hike, but dismisses as inaccurate claims by some domestic ones that their lobbying drove the measure.⁵⁸ As for international support, as Mr Purisima notes, “we don’t need to reinvent the wheel, so we try to learn from mistakes and best practices.” That said, says Mr Straughn, “ultimately, as a sovereign country, we need

⁵⁸ “Case Study: Colombia’s La Liga successfully lobbies for higher tobacco taxes,” *Prevent 20* website, 2017, https://wecanprevent20.org/wp-content/uploads/2017/02/Prevent20_LaLiga_CaseStudy.pdf.

to make a policy determination based on what the market can bear with respect to any tax. There may be an international recommendation, but we have to take into consideration circumstances on the ground.”

Finally, in countries where tobacco companies are important economic stakeholders, finance ministries will also discuss taxes with them. They are, after all, engaged in a legal industry and, in countries such as Ukraine, Egypt and Argentina, tobacco firms are among the companies that pay the most tax.

Officials interviewed for this study, however, indicate that the influence of the industry on their ministries is limited.

Officials interviewed for this study, however, indicate that the influence of the industry on their ministries is limited. In Egypt, for example, although talking with tobacco companies is part of the policymaking process, Mr Kouchouk explains that health officials have a chance to comment in detail both before and after the industry consultation. Similarly, notes Mr Afonso, “we have to consider tobacco companies’ positions carefully, given that they are among the largest taxpayers. However, the overriding concerns in 2016 [the year of a recent tobacco tax increase] were fiscal and health ones. We do of course listen, but we don’t base policy on their expectations.”

At least for the countries where our interviewees work, finance ministries consult widely and partner where it might be useful, but base tax policy on their own interpretation of government priorities.

Revenue collection

Illicit trade is an important issue...

At every finance ministry from which we interviewed officials, considerations of illicit trade form an important part of thinking and strategy on tobacco taxation. This may explain anti-tobacco activist fears that, in the words of the latest edition of the *Tobacco Atlas*, “Unfortunately, many governments are still reluctant to increase taxes, because they often rely on tobacco industry reports that typically suggest that any additional tax increase will cause declines in tax revenue or a massive increase in cigarette smuggling.”⁵⁹

Our interviews—albeit from a limited number of countries—found no evidence at all that was the case. Thinking within these ministries is much more nuanced, and industry claims are rarely, if ever, taken at face value.

That higher taxes can and, in many cases, do increase the challenge of illicit trade is universally recognised by these officials. Mr Kanu, for example, notes that tobacco excises are like most taxes except that “the key difference is that tobacco is very easy to smuggle. Sierra Leone’s new excise duty is expected to serve as an incentive for illicit trade due to the porousness of our country’s borders.” For him, this is the tobacco tax’s biggest practical challenge.

Mr Kouchouk explains the powerful economic dynamic behind the issue: “If you have somebody who can compete with a 70% or 80% margin [because they do not pay tax], you can imagine how much influence they can have on the market. It is something you cannot and should not ignore.” Nobody dismissed the relevance of the issue. Given that addressing avoidance and evasion issues related to all

⁵⁹ American Cancer Society and Vital Strategies, *Tobacco Atlas*, 6th ed., 2018, https://tobaccoatlas.org/wp-content/uploads/2018/03/TobaccoAtlas_6thEdition_LoRes_Rev0318.pdf.

kinds of tax is part of the warp and woof of life on the revenue side of a finance ministry, this is hardly surprising.

These attitudes, though, do not reflect acceptance of tobacco company-funded studies. Most interviewees extrapolate from their own customs data when looking at illicit trade. As Mr Zaidi notes “These are not academic figures, they are our figures.” If they perceive a link between taxes and illicit trade, it is because of what they see around them.

Even where their own sources of data do not provide an exact picture of the problem, finance ministries tend to take industry-sponsored publications with a grain of salt. Only one interviewee cited such information as part of an explanation for a government action—and in that case the policy adopted was to enforce tax laws more actively rather than reduce rates. More representative is the Argentine ministry’s polite but non-committal approach. As Mr Afonso explains, “tobacco companies say that with taxes you will send people to the informal market. There is no independent verification of those claims, so we weigh them accordingly,” while reporting that the country’s Ministry of Health is trying to collect more robust data on the question. In South Africa, meanwhile, even where the government’s own figures suggested a substantial increase in illicit trade, after consultation with health colleagues the finance ministry rejected the industry’s explanation of the cause.

The biggest impact of the tobacco lobby is not so much on the data used within ministries as on the public profile it gives the issue should

something go wrong. Mr Kouchouk notes, “the industry has extremely strong PR. If there is a problem with illicit trade, it surfaces.”

Although the potential for illicit trade is an issue everywhere, the extent of taxation’s impact on the shadow market varies widely. Mr Kanu calls it a “a very big problem.” How big is hard to say, but the deputy commissioner of Sierra Leone’s domestic tax department estimates that the country loses Le6bn (US\$840m) in tax revenue annually to smuggling.⁶⁰ This is about 40% of the latest reported annual tobacco excise revenue from the country. Meanwhile, in Pakistan, Mr Zaidi says that while just two companies pay 98% of the tobacco excise received, their total market share is only around 60% to 70% in that country.

Although less extensive, Mr Dzhygyr reports that recent tax increases seem to have increased illicit trade to some degree, while Mr Kouchouk says they may have done so in Egypt in certain years. In Finland, on the other hand, Ms Järvikare explains that smuggling, the main source of illicit tobacco in the country, accounts for around 3% to 5% of total consumption—a figure that has remained stable during the recent period of tax increases and one that shows no sign of increasing.

...but surmountable in different ways

Concerns about illicit trade do not discourage countries from using tobacco tax as a health and revenue tool. They do, however, sometimes shape policy details. Among our interviewees, in one case, rates are affected at the margins. Mr Straughn explains that, in

⁶⁰ “Sierra Leone News: NRA nabs illegal cigarettes,” *Awoko Newspaper*, 22 June 2018, <https://awoko.org/2018/06/22/sierra-leone-news-nra-nabs-illegal-cigarettes/>; WHO, “Annual tax revenues from tobacco products at the national/federal level, globally,” Table 8-1, Appendix VIII, *WHO report on the global tobacco epidemic*, 2019, https://www.who.int/tobacco/global_report/Table-8-1-Tobacco-tax-revenues.xls?ua=1.

Barbados, “from a ministry perspective, you are always looking at revenue lines to support the budget. There is always a critical balance between the revenues you expect to receive and setting policy, so you don’t have a degree of smuggling which defeats the purpose.”

An extreme example of the shadow market shaping tax policy is Pakistan’s introduction in 2017 of a low-tax excise tier for the cheapest cigarettes. The aim was to encourage duty payments for the products that make up much of the illicit tobacco trade in the country. The strategy failed, with revenue actually dropping, which re-enforces the WHO’s simpler is more effective message. The government accordingly reversed the policy in 2019.

In other countries, efforts to dampen illicit trade affect the speed with which governments implement change. In Egypt, for example, Mr Kouchouk reports that “If you raise taxes too quickly and by too much, in a way that is not well thought out, you can lose money because of higher illicit trade, which implies that taxes are not being paid.” Even in Finland, where illicit trade is a relatively small problem, Ms Järvikare reports that the government prefers to make many smaller increases in tobacco excise over time, rather than less frequent, larger ones. This is in part so that it can monitor resultant levels of illicit and duty-free trade, as well as not to inadvertently encourage consumers to look for cheaper or potentially illicit supplies.

Although these strategies vary, finance ministry interviewees who commented on the matter all believed that a focus on better

Ms Järvikare reports that the government prefers to make many smaller increases in tobacco excise over time, rather than less frequent, larger ones.

enforcement, rather than permanently low tax rates, was the key to addressing illicit trade. Even as Mr Straughn noted the need for a balanced approach to reduce smuggling, he also spoke of ways to tip that balance, including a review of customs services to eliminate existing weaknesses. One senior official from Latin America added, “We do not ignore the complications of illicit trade, but the related problems cannot limit the state in taking rates to their optimal levels as suggested by our models and by our tax and health policy goals.” Several interviewees also noted ongoing efforts to strengthen the agencies responsible for collection and of anti-evasion efforts.

In particular, initiatives to enhance enforcement are typically integrated into major hikes in tobacco taxes or carried out at nearly the same time. Examples include efforts connected with Sierra Leone’s new taxes in 2018 (substantial fines for anyone caught smuggling and the right to seize improperly imported products from vendors); Colombia’s in 2016 (planners conducted a comprehensive 2015 reform of, and expansion of resources for, the country’s customs service, partly with an eye to tobacco tax reform); and the Philippines in 2012 (improved excise stamps to reduce counterfeiting and better inter-agency co-operation).

Amid this emphasis on enforcement, though, the Protocol to Eliminate Illicit Trade in Tobacco Products receives—perhaps surprisingly—limited attention. On the one hand, none of our interviewees oppose it. As Mr Axelson says, “the treaty is on the radar screen. There are very few cons and a lot of pros. The question is how we can speed up the process to be part of it.” Mr Cárdenas, although no longer in office in Colombia, “would be surprised if we did not ratify [it]. Based on previous experience, I don’t see major obstacles.”

On the other hand, although certainly not hostile, for finance ministries the details of ratifying or acceding to the protocol are often simply not part of their jobs. In Ukraine, for example, the health ministry is dealing with related issues raised by the president's office—a process that Mr Dzhygyr believes should be complete soon. Similarly, in Finland, says Ms Järvikare, “this belongs to the Ministry of Health and Social Affairs, so it's best if they comment on this.” Moreover, in practice, the issue may not be urgent, as nothing stops tax authorities from improving on their own. Mr Axelson says that the South African authorities are already taking steps to be in line with best practice outlined in the protocol without waiting for ratification.

The need for capacity

From a finance ministry viewpoint, investment in effective enforcement efforts is a necessary response to the challenge of illicit trade, and in theory a sufficient one. This is consistent with the WHO's assertion in its 2019 Report on the Global Tobacco Epidemic, that “experiences from numerous countries show that illicit trade of tobacco products can be successfully addressed [by good tax administration and enforcement] even when taxes and prices are increased.”⁶¹ This, however, presupposes a state capacity to enforce its tax law. When that drops substantially, the effectiveness of a vigorous tobacco tax policy can be rapidly undermined (see box).

This explains, in part, the global distribution of high- and low-excise tax countries. As noted earlier, low-income and lower-middle-income countries already have, on average, the least affordable cigarettes and some of the highest rates of illicit tobacco trade. They are also

From a finance ministry viewpoint, investment in effective enforcement efforts is a necessary response to the challenge of illicit trade, and in theory a sufficient one.

more likely to lack the resources to develop increased technical capacity within the civil service. Not surprisingly, on average they have low rates of tobacco tax: one recent study found that, in this group, only 3% had excise that made up three-quarters or more of the price of the most popular cigarette. In high-income countries, this figure hit 44%.⁶²

In some lower-income countries, advising policymakers to raise tobacco taxes, and that better enforcement can overcome any attendant incentive for illicit trade and illegality, is almost certainly an unrealisable ideal. The above-noted study found that more fragile countries “in terms of security, political, economic and social development,” were just as likely to be member states of the FCTC—anybody can sign up—but as a group has implemented higher tobacco taxes much less often.⁶³ At an extreme, where collection capacity is genuinely poor and any formal increase in taxes would be more aspiration than reality, a high tobacco tax policy makes limited sense.

That said, it is important to note that such situations are very much the exception rather than the rule. To begin with, although the World Bank acknowledges that oversight of many forms of tobacco excise “requires strong tax administration with technical capacity,” this is not the case with simple, per unit

⁶¹ WHO, Report on the Global Tobacco Epidemic, 2019, <https://apps.who.int/iris/bitstream/handle/10665/326043/9789241516204-eng.pdf?ua=1>.

⁶² Heikki Hiilamo and Stanton Glantz, “Limited implementation of the framework convention on tobacco control's tobacco tax provision: global comparison,” *BMJ Open*, 2018, <https://bmjopen.bmj.com/content/bmjopen/8/10/e021340.full.pdf>.

⁶³ Heikki Hiilamo and Stanton Glantz, “Limited implementation of the framework convention on tobacco control's tobacco tax provision: global comparison,” *BMJ Open*, 2018, <https://bmjopen.bmj.com/content/bmjopen/8/10/e021340.full.pdf>.

excises. Simpler tax structures can therefore be of great utility in countries with constrained administrative resources.⁶⁴ Moreover, even among the lower-middle-income countries where our interviewees are based, the experience of the Philippines, Ukraine and Egypt show that such governments can provide the necessary tax enforcement. In Sierra Leone, meanwhile, which has the lowest GDP per head of any country in this study, although illicit trade is a substantial problem,

Mr Kanu believes that the introduction of new measures—in this case revenue stamps on cigarette packages—“will serve as a disincentive and go a long way to curb smuggling and enhancing compliance.”

So long as they are stable, and shape their tax policy to their capacity, lower-middle- and low-income countries can combat illicit trade effectively enough to make tobacco tax a serious health and revenue policy option.

Illicit trade will always grow given a chance

Ahmed Kouchouk, vice-minister of finance for fiscal policies and institutional reform in the Egyptian Ministry of Finance, warns that illicit trade “is something that you can deal with, but it will not disappear. It will keep surfacing whenever there is an opportunity.” In particular, if circumstances vitiate the effectiveness of the state’s ability to enforce tax laws, the results can be quick and dramatic.

His own country provides one such example. Between 2009 and 2010, the percentage of illicit tobacco in the Egyptian market rose from 2% to 11% in the wake of a major excise reform. Then things got much worse, with illicit tobacco averaging around 20% of sales in 2011-13.⁶⁵ This high level coincided with the Egyptian Revolution of January 2011 and its immediate aftermath.

Mr Kouchouk explains that this brought “a lot of difficulties in terms of security issues and the deterioration of government enforcement during those years. It is a very normal and expected outcome that we saw more illicit trade.”

In South Africa, tax administration capacity suffered in a different way. Until 2014, the South Africa Revenue Authority (SARS) had a justifiable reputation as a highly competent and effective government department. Over the following four years, until March 2018, it experienced what a recently published judicial enquiry report called “a massive failure of governance and integrity.”⁶⁶ In essence, the report says, the former president, Jacob Zuma, put a political appointee at the head of the agency, who then sought to control it for

⁶⁴ World Bank, *Economics of Tobacco Taxation Toolkit*, 2018, <http://documents.worldbank.org/curated/en/238861522243274209/pdf/124696-REVISED-P154568-IDNTobaccoExciseAssessment.pdf>.

⁶⁵ Mohammed Madbouly, “Egypt New Illicit Trade,” Presentation to conference on Illicit tobacco trade and taxation in the Eastern Mediterranean, November 2018, <https://untobaccocontrol.org/kh/waterpipes/wp-content/uploads/sites/2/2018/11/Egypt-New-illicit-Trade.pdf>.

⁶⁶ *Commission of Inquiry Into Tax Administration and Governance by SARS: Final Report*, 2018, www.thepresidency.gov.za/download/file/fid/1466.

his own agenda by creating, in the report's words, an atmosphere of "intrigue, fear, suspicion and distrust."

Those parts of SARS involved in control of the illicit tobacco trade suffered even more than most. When the new management came in, it dissolved the units once charged with overseeing tobacco tax. Then, the judicial enquiry found, in 2016 a new "Tobacco Task Team" was established. The report added that this group did not look at tax compliance of any sort. Instead, it engaged in politically motivated inquiries that apparently sought compromising information on previous tobacco tax investigators.⁶⁷

South Africa's national accounts reflect what happened at SARS. Between the 2015/16 and 2017/18 fiscal years, collected tobacco tax revenue dropped by 15% despite excise rates increasing.⁶⁸ The number of cigarettes declared by manufacturers declined even more, by 20%.⁶⁹ By 2017 between 30% and 35% of cigarette sales were likely to be illicit, up from around 20% to 25% in 2013.⁷⁰

Chris Axelson, chief director for economic tax analysis in South Africa's National Treasury, reports that this drop lacked any positive explanation: "We did not see a

decrease in the prevalence of smoking." Not surprisingly, "health NGOs [non-government organisations] and the tobacco industry complained to us about the illicit trade and have different suggestions on what should be done." The former blamed criminality within the industry and the latter tax rates.

In both Egypt and South Africa, the preferred solution has been improved enforcement rather than modifying tax rates. In the former, Mr Kouchouk explains, "better security conditions in general and higher enforcement capabilities" reduced illegal sales. That, combined with implementation of a track and trace system for tobacco, helps explain how, by 2017, the illicit share of the market had dropped to 9%.⁷¹

In South Africa, Mr Axelson says, the timing of the increase in illicit trade led the Treasury, the Ministry of Health and SARS (now under new management) to conclude that "this is an enforcement problem." As a result, rather than reducing taxes, the government has been beefing up its efforts to collect them, including placing SARS staff directly in cigarette factories. The data are not yet available but, Mr Axelson notes, initial reports indicate that the situation is improving noticeably.

⁶⁷ *Commission of Inquiry Into Tax Administration and Governance by SARS: Final Report*, 2018, www.thepresidency.gov.za/download/file/fid/1466.

⁶⁸ "Main budget estimate of national revenue: Table 3 of budget review statistical annex," *South African National Budget*, 2019, <http://www.treasury.gov.za/documents/National%20Budget/2019/TimeSeries/Excel/Table%203%20-%20Main%20budget%20estimates%20of%20n>.

⁶⁹ "UCT study suggests the illicit trade in cigarettes targets poor communities in SA," University of Cape Town Press Release, 28 May 2018, https://www.uct.ac.za/sites/default/files/image_tool/images/328/media/releases/2018/2018-05-28_NoTobaccoDay.pdf.

⁷⁰ Nicolle Vellios et al., "Illicit cigarette trade in South Africa: 2002–2017," *Tobacco Control*, 2019, <https://tobaccocontrol.bmj.com/content/early/2019/08/05/tobaccocontrol-2018-054798>.

⁷¹ Mohammed Madbouly, "Egypt New Illicit Trade," Presentation to conference on Illicit tobacco trade and taxation in the Eastern Mediterranean, November 2018, <https://untobaccocontrol.org/kh/waterpipes/wp-content/uploads/sites/2/2018/11/Egypt-New-illicit-Trade.pdf>.

How to spend it

Countries aren't lacking advice on how to spend revenue raised from tobacco taxation. The WHO's guidelines to the FCTC's Article 6 encourage the dedication of some of it to tobacco control.⁷² Numerous NGOs, along with World Bank officials, publicly encourage greater use of such revenue for the expansion of universal health coverage (UHC). Those from the World Bank also bring up this option in discussions with finance ministries, such as that of Ukraine, reports Mr Dzhygyr.

Numerous NGOs, along with World Bank officials, publicly encourage greater use of such revenue for the expansion of universal health coverage.

International declarations are more circumspect, stating facts rather than making commitments. For example, the draft⁷³ 2019 *Political Declaration of the High-level Meeting on Universal Health Coverage*, "notes" that tobacco and alcohol taxes "represent a revenue stream for financing for development in many countries." This largely reuses language of the 2015 Addis Ababa Action Agenda.⁷⁴ Nor is it specific: even a very small amount of regular tax intake is, by definition, a "revenue stream", while spending on just the Sustainable Development Goals would cover a wide range of areas. Development more generally is an even bigger field. By raising the topic, however, such statements implicitly suggest where the money might go.

Such linkage can take on various forms. One is called hypothecation, or earmarking, which

involves a commitment when imposing a tax to spend the money in a specific way. This can be hard hypothecation, a legal requirement that requires legislation to reverse, or soft hypothecation, which is a stated policy goal that can be reversed by the government at any time. Another possible link, albeit even weaker and more conceptual, is that, by increasing revenue, tobacco tax provides the capacity to address unmet needs. Discussion of the latter often includes the term "fiscal space".

The rest of this study looks at how finance ministries think about connections between tobacco taxation and spending on UHC. The latter is particularly prominent on the international political agenda at the moment, and the debate around linking health and tobacco tax is well known among finance ministry officials.

General opposition to hypothecation

Most interviewed officials are averse to the concept of earmarking. "Our general policy is to avoid linking tax revenues to expenditures. We don't consider it," says Ms Järvikare of Finland. Another official adds off the record, "we hate it. We try to eliminate it and to stop it whenever anyone proposes it." Similarly, Mr Kouchouk thinks that, in general, it simply falls short of public finance best practice.

The reasons are various. Taxation and spending are distinct political decisions.

"Our general policy is to avoid linking tax revenues to expenditures. We don't consider it," says Ms Järvikare of Finland.

⁷² WHO, *Guidelines for Implementation of Article 6 of the WHO FCTC*, 2014, https://www.who.int/fctc/guidelines/adopted/Guidelines_article_6.pdf.

⁷³ Seen by The Economist Intelligence Unit, July 2019.

⁷⁴ *Addis Ababa Action Agenda of the Third International Conference on Financing for Development*, 2015, https://www.un.org/esa/ffd/wp-content/uploads/2015/08/AAAA_Outcome.pdf.

Perhaps the clearest indication is that, even while the EC is reviewing the EU's shared tobacco tax policies, when it comes to spending, one commission official told us "fiscal sovereignty remains with the member states, who are free to decide to what extent (if at all) excise duties from tobacco should be used for specific projects."

Notionally connecting taxation and spending does not lessen their separate nature. Even continuing to abide by a legal commitment to spend in a certain way requires an implicit choice by governments not to change the law to obtain more flexibility. As Ms Järvikare explains, basing specific spending on particular taxes reduces the authority of parliament to put money on what is needed. Mr Kouchouk adds that creating such links reduces the government's fiscal flexibility. Finally, these difficulties bring little gain: because money is fungible, once a political choice is made to spend a certain amount in a given area, that could come from anywhere in the budget. Earmarked funds merely reduce the money applied from general revenue, if a hard earmark, or other general revenue, if a soft one.

Moreover, even a notional link between specific taxation and particular spending does not make sense within the budgeting process in many of the countries where our interviewees worked. Spending as a whole, based on government priorities, tends to be balanced with taxation as a whole. The elements of the two simply do not get entangled: as Mr Kanu of Sierra Leone explains, "the government looks at spending on social services such as health, education, etc, and it looks at raising taxes, not only on

tobacco but on all other goods and services consumed in the country."

Finally, giving dedicated funding to any government department presupposes a political decision that it is ready to receive this money. This is not always the case. In Ukraine, Mr Dzhygyr says, "before expanding the size of the country's health budget, we need to reform the healthcare system. This will not happen overnight." Insofar as earmarks are an ongoing commitment without strings, they can impede health system reform as much as promote its economic sustainability.

In specific cases, though, earmarks have support

Despite the general opposition, some countries do hypothecate a portion of their revenue from tobacco in particular towards health-related areas. Of the 195 countries covered in the WHO's 2019 *Report on the Global Tobacco Epidemic*, 37 have earmarks that involve health in some way. The WHO, however, defines this term very broadly to include items such as youth sports programmes. The specifics are highly varied, with cultural activities also sharing the pot in certain states.⁷⁵

This does not necessarily mean that finance ministries in these countries take a different theoretical view to the mainstream one on earmarking. For example, since its 2016 reform, Colombia has set aside most of its new tobacco tax to help fund health insurance, even though Mr Cárdenas says that he is in general opposed to hypothecation. Similarly, despite his comments above, Mr Kouchouk supports Egypt's use of limited earmarks for healthcare. In specific conditions, though,

⁷⁵ WHO, "Use of earmarked tobacco taxes in countries that reported earmarking parts of their excise taxes or excise tax revenues for health purposes," Table 9-4, Appendix IX, *WHO report on the global tobacco epidemic*, 2019, https://www.who.int/tobacco/global_report/Table-9-4-Use-of-earmarked-tobacco-taxes.xls?ua=1.

some finance ministry officials are willing to take, in Mr Cárdenas' words, "a pragmatic approach" and set aside their general opposition to the practice.

But in what circumstances? In general, it is when officials can greatly minimise the problems involved.

One such situation is when they can require other levels of government to spend money in a way consistent with their level's policy. For example, in Colombia, excise taxes are collected and spent by regional authorities, not the national government. Thus, the requirement in national legislation that the tobacco tax be spent on health insurance schemes requires these regional authorities to shape their budgets in a specific way. Mr Cárdenas "absolutely" agreed that one reason for this was to ensure that regional spending aligned with national priorities. He adds that the ability to tap into this source of funds for such purposes makes the national government more interested in raising excise rates in the first place.

Indonesia provides a much more extreme example. In September 2018 the national government was seeking ways to plug the ever-growing budget hole in its universal health insurance fund (called the BPJS), having run through most of its original endowment. Accordingly, the national government took money from a tobacco tax that had been committed to go to regional authorities, which were supposed to use it for health spending, and sent it directly to the insurance fund. The tendency of certain regional authorities to retain rather than spend their funding means that, in some cases, this was putting money to the intended use rather than simply robbing Peter to pay Paul.

Nevertheless, this expedient action could be seen as a sticking plaster rather than a long term, sustainable solution for fully funded UHC. This is because the money covered less than half of the insurance fund's 2018 deficit and even the president of the National Committee for Tobacco Control worried that taking money from the regions in this way might be illegal.⁷⁶ Nevertheless, for a national government seeking to avoid exacerbating its own deficit, spending the region's money has an appeal.

A more common situation in which hypothecated tobacco taxes cause minimal problems is where the amount involved is small compared with the overall amount that governments have committed to spend. Mr Kouchouk explains that Egypt's 2018 Universal Healthcare Law included an additional, earmarked excise tax on tobacco products as part of a much broader set of revenue raising measures. The majority of the money for the UHC programme is meant to come largely from income-based premium payments. New earmarked tobacco excise will probably provide under 1% of the total funding needed for the new health insurance programme.

Similarly, Mr Cárdenas estimates that the tobacco taxes from the 2016 reform provide between 1.5% and 2.5% of total health spending in Colombia. "It contributes just a little bit of what the health sector requires," he explains, so that the government did not need to worry about hypothecation creating budgetary inflexibility.

Mr Kouchouk supports Egypt's use of limited earmarks for healthcare.

⁷⁶ "Using tobacco tax to plug up BPJS deficit tax against law," *Antara News*, 27 September 2018, <https://en.antaranews.com/news/118969/using-tobacco-tax-to-plug-up-bpjs-deficit-tax-against-law>.

This is consistent with most international experience. A 2016 WHO look at nine case studies of tobacco tax earmarking for health found all involved amounts less than 1.33% of overall government spending on health, in most cases much less, except for the case of the Philippines, which was around 36.4% (see box).⁷⁷ Indonesia's use of regional money to fund its insurance fund seems to be in the same ballpark of 1.33%, although it is hard to give an exact figure. The insurance fund's 2018 figures have not yet been released.

When earmarking is so small—or at least small enough compared with planned overall health spending—as to cause no serious difficulties, or one can offload those problems to another level of government, some finance ministries will contemplate it. The most frequently cited reason for doing so is political rather than

Indeed, even when no earmark of any kind exists, presenting tobacco taxes as a way to fund further health spending “will increase public support for, and reduce resistance to, the tax to a very large extent,” says Mr Kanu.

fiscal. Mr Kouchouk says that it is “extremely important to frame” the ultimate reason for the taxes as somehow health related as this is the “key to the community accepting it.”

Mr Purisima adds that when, in 2005, he tried to change tobacco taxation, casting it as a revenue measure, the originally proposed version of the reform was not passed. Very similar ideas did pass in the Sin Tax Reform—

What about the Philippines? A look at the best-known example of tobacco tax earmarking for health

The Philippines earmarking sin tax revenue between 2013 and 2018 is one of the most frequently discussed uses of tobacco—and in this case alcohol—taxes to fund healthcare. It also involves far more money than other examples of health-related hypothecation. Amid these obvious differences, it is interesting how many of the general conclusions about earmarking and tobacco tax funding of health systems in our study still apply.

Policy continuity: rather than funding a completely new policy direction, the reform carried on a long-standing budgetary trend,

visible under the previous administration, of increasing Department of Health (DOH) spending. In fact, the rate of growth in the DOH budget was higher in the five years before 2012 (370% in aggregate) versus the five years after (343%), albeit from a much lower base—this made the absolute increase in the latter five years, (P107bn) much greater than in the first period (P33bn).⁷⁸

Earmarks are as much a political as a fiscal tool: we discuss elsewhere how finance ministry officials see hypothecation as useful with the politics of tax imposition. In

⁷⁷ *Earmarked tobacco taxes: lessons learnt from nine countries*, 2016, https://apps.who.int/iris/bitstream/handle/10665/206007/9789241510424_eng.pdf?sequence=1.

⁷⁸ Economist Intelligence Unit calculations based on data in Philippines Department of Health, “DOH Budget” website, <https://www.doh.gov.ph/node/9297>; Kai Kaiser et al., *Sin Tax Reform in the Philippines: Transforming Public Finance, Health, and Governance for More Inclusive Development*, 2016, <http://documents.worldbank.org/curated/en/638391468480878595/pdf/106777-PUB-PUBLIC-PUBDATE-7-26-2016.pdf>.

the Philippines, it also played a role in the politics of budget allocation. Besides the money from the Sin Tax Reform (STR), a substantially greater increase in Philippines central government revenue occurred after 2012 because of economic growth. The existence of even a large amount of additional money in state coffers, though, was no guarantee that it would be dedicated to health. The STR's soft hypothecation represented a public, political commitment. This insured that the DOH had access to at least some funds rather than having to fight for a share of this new general revenue.

As with earmarks supported by finance ministries in other countries, those in the Philippines were extremely flexible: indeed, the degree of flexibility is greater than often understood. Under the 2012 STR legislation, the entire increase in revenue from alcohol excises and 85% of growth in tobacco excise receipts were earmarked for healthcare. Of this aggregate amount, 80% was supposed to go to "universal health care under the National Health Insurance Program [PhilHealth], the attainment of the millennium development goals and health awareness programs." The remaining 20% were "for medical assistance and [a] health enhancement facilities program."⁷⁹ The DOH has also been required to report in detail annually on how these earmarked funds have been allocated.

Every year, these reports show that at least some notional 80%-20% split of revenue has occurred. How these numbers are reached is more varied. The 2015 and 2018 reports show the money in question unarguably being spent as directed by the law, with the 80% going to PhilHealth and some development goals, while the remaining 20% is spent on medical assistance or facility enhancement.⁸⁰ In 2016, however, of the funds earmarked for universal health coverage (UHC) and development, roughly 25% went to subsidising the ongoing operation of existing hospitals, or to "health policy, regulations, & administration of personnel benefits." Another 14% that year went to enhancement of facilities, which, as the law indicates, should come out of a different pot of earmarked funds. Similarly, in 2017, over 30% of the earmarked UHC funds went to ongoing operations and administration.⁸¹ These uses are not self-evidently within the common understanding of the stated restrictions of the law and, in some countries, would be considered simply core DOH funding. However, because the earmark is a soft one, the government has substantial flexibility in applying the funds across much of the DOH budget.

The earmarked funds were not large enough to undermine the government's flexibility in setting budgets: when, in our study, finance ministries have been comfortable with hypothecation for health, the amounts

⁷⁹ Republic Act No. 10351: An Act Restructuring the Excise Tax on Alcohol and Tobacco Products, 12 July 2012, https://www.lawphil.net/statutes/repacts/ra2012/ra_10351_2012.html

⁸⁰ DOH, *Sin Tax Law Incremental Revenue for Health, Annual Report CY 2015: Details on Expenditure of the Amounts Earmarked for Health*, 2015, https://www.doh.gov.ph/sites/default/files/publications/October_2_2015_Sin_Tax_Report_ao_lv_FREM.pdf; DOH, *Sin Tax Law Incremental Revenue for Health, Annual Report 2018*, 2019, <https://www.doh.gov.ph/sites/default/files/publications/2018%20Sin%20Tax%20Incremental%20Revenue%20Report.pdf>.

⁸¹ DOH, *Sin Tax Law Incremental Revenue for Health, Annual Report CY 2016*, 2016, <https://www.doh.gov.ph/sites/default/files/publications/2016%20DOH%20Sin%20Tax%20Report.pdf>; DOH, *Sin Tax Law Incremental Revenue for Health, Annual Report CY 2017*, 2017, https://www.doh.gov.ph/sites/default/files/publications/2017%20DOH%20Sin%20Tax%20Report_0.pdf

involved have been noticeably lower than the total amount which the government in question budgets for this area. In other words, to meet their policy goals, officials need to top up the health budget with other funds anyway, and the earmark simply lets them use less from another source of revenue than they otherwise would. Thus, the earmarks have limited impact on the ability of countries to allocate funds as they wish. This has been the case in the Philippines since 2016, when the government began using additional general revenue, besides funds those from the STR, to expand the DOH budget. In 2018, for example, P71bn in DOH funding came from sin taxes, compared with P96bn from additional general funds, of which P42bn was pure budgetary growth.⁸² This topping up became especially important since actual STR revenue began to fall short of projections in 2015.⁸³

Sin taxes, on their own, have little impact on UHC's ability to deliver financial protection: the increase in DOH spending in recent years, which roughly matched the rise in STR revenue, provides an interesting real life case of how much of a difference that level of funding can make. Although the STR funds led to a small expansion of the

number of people insured, this was much less than some reports by international institutions imply. In theory, PhilHealth ended up covering 9 percentage points more of the population (93% of the population),⁸⁴ but this was not the doubling or tripling of coverage among the poor as sometimes reported.⁸⁵

Separately, financial protection—a key goal of UHC—has also seen little overall change as a result of STR-related funds. Out-of-pocket spending levels in the Philippines did improve, but again the gain was small: dropping from 58% of all health spending in 2012 to 55% in 2017.⁸⁶ Moreover, the latter figure, in addition to being still too high to be consistent with most definitions of UHC, remains greater than out-of-pocket spending in the years before 2006. Meanwhile, among those with a vulnerable socio-economic status, the extent of impoverishing and catastrophic health spending both actually rose, albeit slightly.⁸⁷ The proportion of the population who had to spend more than 10% of household income on health, for example, grew from 6.1% in 2012 to 6.3% in 2015. This increase is not large, but improved UHC should, all things being equal, lead to a decline.

⁸² EIU calculations based on data from DOH, *Sin Tax Law Incremental Revenue for Health, Annual Report 2018*, 2019, <https://www.doh.gov.ph/sites/default/files/publications/2018%20Sin%20Tax%20Incremental%20Revenue%20Report.pdf>.

⁸³ DOH, *Sin Tax Law Incremental Revenue for Health, Annual Report CY 2017*, 2017, https://www.doh.gov.ph/sites/default/files/publications/2017%20DOH%20Sin%20Tax%20Report_0.pdf

⁸⁴ PhilHealth, *Stats and Charts*, 2012, https://www.philhealth.gov.ph/about_us/statsncharts/snc2012.pdf; PhilHealth, *Stats and Charts*, 2017, https://www.philhealth.gov.ph/about_us/statsncharts/snc2017.pdf.

⁸⁵ See for example, Patricio Marquez et al., *Tobacco Tax Reform: At the crossroads of health and development*, 2017, <http://documents.worldbank.org/curated/en/491661505803109617/Main-report>, which repeats several times that the number of poor families covered rose from 5.2 million in 2012 to 15.3 million in 2015, figures which seem inconsistent with PhilHealth's own coverage reports.

⁸⁶ World Bank data, "Out-of-pocket expenditure (% of current health expenditure)," <https://data.worldbank.org/indicator/SH.XPD.OOPC>.

CH.ZS?locations=PH; Philippines Statistical Authority, "Total Health Expenditures grew by 8.0 percent in 2017," Press release, 18 October 2018, <https://psa.gov.ph/pnha-press-release>.

⁸⁷ WHO, "Financial Protection Indicators – Philippines," Global Health Observatory Universal Health Coverage Data Portal, <http://apps.who.int/gho/portal/uhc-country.jsp>

by one vote in Congress—because it was presented as a health measure. In doing the latter, he advises, “you broaden the coalition pushing for this reform.” Indeed, even when no earmark of any kind exists, presenting tobacco taxes as a way to fund further health spending “will increase public support for, and reduce resistance to, the tax to a very large extent,” says Mr Kanu.

Tobacco taxes and fiscal space

The International Monetary Fund (IMF) defines fiscal space as “the room to raise spending or lower taxes relative to a pre-existing baseline, without endangering market access and debt sustainability.”⁸⁸ The WHO, the World Bank and NGOs often indicate that large funds are available from tobacco tax—some studies imply trillions of dollars—that might expand budgets enough to allow pursuit of UHC and other development goals.⁸⁹

Two barriers, though, mean that fresh tobacco taxes are unlikely to increase government revenue sufficiently to create space for substantial health system expansion in many cases.

First, in a large number of countries, any new revenue is already spoken for. As Mr Axelson says of South Africa, “we have had consistent misses on economic growth. Revenue shortfalls have led to increasing levels of debt to GDP—more than we are comfortable with. We have been raising taxes to fund current programmes. It is difficult to raise them to make additional commitments.” Similarly, as noted above, Ukraine’s tobacco

tax increases were driven by the need for economic consolidation. Meanwhile, Mr Straughn explains that in Barbados, under its IMF-supported recovery plan, tax policy “is much more about stabilising revenues,” than anything else. The countries of these officials are not exceptional. Most low-income and lower-middle-income countries suffer from elevated levels of debt distress in 2018.⁹⁰

The second problem with treating tobacco tax as a bringer of fiscal space is the overall amount available. Finance ministry officials do not see tobacco tax as a route for transforming healthcare. Mr Axelson reports that his government has looked at rolling out national health insurance. Tobacco taxation “would not be a huge amount of revenue” next to its requirements. Similarly, notes Mr Cárdenas, compared with government health spending, what tobacco tax provides “is not a major number.” In Egypt, with a relatively high proportion of tax revenue coming from tobacco, Mr Kouchouk says that while such levies are “among the revenue sources that create fiscal space for more health spending, the budget needed is much higher. It can play a role, but you cannot rely on it alone.” Finally, the money from the Sin Tax Reform in the Philippines, while large compared with previous Department of Health budgets in that country, has had little impact on key measures of financial protection—a fundamental part of UHC.

A close look at the same documents holding out the prospects of trillions in sin tax funding actually back up the restrained views of

⁸⁸ IMF, *Assessing Fiscal Space: An Update and Stocktaking*, 2018, <https://www.imf.org/~media/Files/Publications/PP/2018/pp041118assessing-fiscal-space-update-and-stocktaking.ashx>.

⁸⁹ WHO, *The economic and health benefits of tobacco taxation*, 2015, <https://www.who.int/tobacco/publications/economics/post2015tobacco/en/>; World Bank Group, *High-Performance Health Financing for Universal Health Coverage*, 2019, <http://documents.worldbank.org/curated/en/641451561043585615/Driving-Sustainable-Inclusive-Growth-in-the-21st-Century>.

⁹⁰ IDA, *Addressing Debt Vulnerabilities in IDA Countries: Options for IDA19*, 2019, <http://documents.worldbank.org/curated/en/296411555639304820/pdf/Debt-Vulnerabilities-in-IDA-Countries-Policy-Options-for-IDA19>.

finance ministry officials. A World Bank study of the UHC financing gap looked at the possibilities if every low-income and lower-middle-income country raised its tobacco excise rates enough to increase retail prices by 50%, which on average would mean more than doubling them. In such a situation, if governments assigned the revenue to health spending in proportion to relative allocations in the current budget, the taxes would provide less than two-tenths of a percent of the funds needed to achieve UHC. If governments dedicated half of the resultant new revenue to healthcare—an unexpected and dramatic shift in priorities—this funding stream could fill 1.1% of the gap.⁹¹

Revenue from tobacco tax certainly should not be ignored, and it might provide funds for specific initiatives or be of particular use in individual countries. It also brings substantial and important health benefits independent of revenue. Nevertheless, even assuming unrealistically fair winds, it is unlikely to feature prominently in the voyage toward UHC worldwide.

⁹¹ Economist Intelligence Unit calculations based on data in World Bank Group, *High-Performance Health Financing for Universal Health Coverage*, 2019, <http://documents.worldbank.org/curated/en/641451561043585615/Driving-Sustainable-Inclusive-Growth-in-the-21st-Century>; Task Force on Fiscal Policy for Health, *Health Taxes to Save Lives*, 2019, <https://www.bbhub.io/dotorg/sites/2/2019/04/Health-Taxes-to-Save-Lives.pdf>.

Conclusion: Supporters of tobacco taxation but aware of its limitations

Tobacco use is an epidemic. It kills roughly as many people per year as all communicable diseases combined. Tobacco taxation, as a tool to raise prices, is the single most effective way of getting people to break this deadly habit. It is also one of the least used major interventions in national tobacco control.

The application of these levies is complicated because they are simultaneously a health intervention and a revenue tool. This can be contradictory, although usually it is not. Moreover, as with any tax, they can be a very blunt instrument and create undesirable effects. These can be minimised, but not eliminated, through careful crafting as well as better governance and enforcement.

Finance ministry officials lead the crafting and implementation of taxes. Their views, though, are often not understood. Our discussions with such individuals indicate a nuanced approach. They generally support the health goals of these levies. On the other hand, they wish to apply them in ways consistent with best practice in public finance. These officials often have muted expectations about the total revenue they yield. Both these views set them apart from some anti-tobacco and health advocates in NGOs and international bodies.

Although no single global finance ministry view exists, commonalities of thinking exist in three key areas:

Tax policy and policy formation.

Although conceptually these long-term goals may intertwine, in practice officials see the health and revenue aims of tobacco taxation as distinct aims that require alignment. The win-win associated with these taxes removes difficult choices in prioritisation. Finance ministries take seriously the contribution that tobacco excises make to public health but, in practice, their work and success indicators more often focus on the financial side. Finally, in shaping policy, finance officials consult widely. This almost always involves talking with colleagues in ministries of health. Interaction with relevant NGOs and, where a large tobacco industry exists, its representatives is also common. Consultation with all of these players is usually more a matter of finance ministries' civil servants getting the information they need to shape effective policy rather than a joint effort involving others.

Revenue collection

Illicit trade is an important concern in every finance ministry where we interviewed officials, even though the actual extent varies widely by country. There is widespread recognition that higher excise rates can increase the incentive for tax evasion in various forms. This is a conclusion drawn from experience: estimates from industry-funded research as to the size of the shadow market figure little, if at all, in ministry thinking.

In some cases, a desire to avoid sparking illicit trades affects the way that taxes are implemented, although very rarely the actual rates. The much-preferred response to potential or actual tobacco tax evasion is to improve enforcement to the greatest extent possible.

Spending of tobacco tax revenue, especially on healthcare.

Officials generally oppose hypothecation, whether soft or hard. Some finance ministries are willing to countenance earmarks. This, however, for the most part occurs in two circumstances. The first is when the inflexibility that earmarking might cause can be imposed on other levels of government.

The other is when the amount raised from the hypothecated tax is small compared with the overall budget for the need in question. On the other hand, linkage of tobacco taxes with healthcare in the public mind is seen as a positive way to gain political support. This is true independent of the actual budgetary arrangements. As for the potential of tobacco taxes to provide sufficient fiscal space to allow substantial progress toward more UHC, interviewees see two substantial barriers. First, many low- and middle-income countries already need all the revenue they can get to address current commitments. Second, compared with the amounts required for universal healthcare, tobacco tax revenue is simply not that large.

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