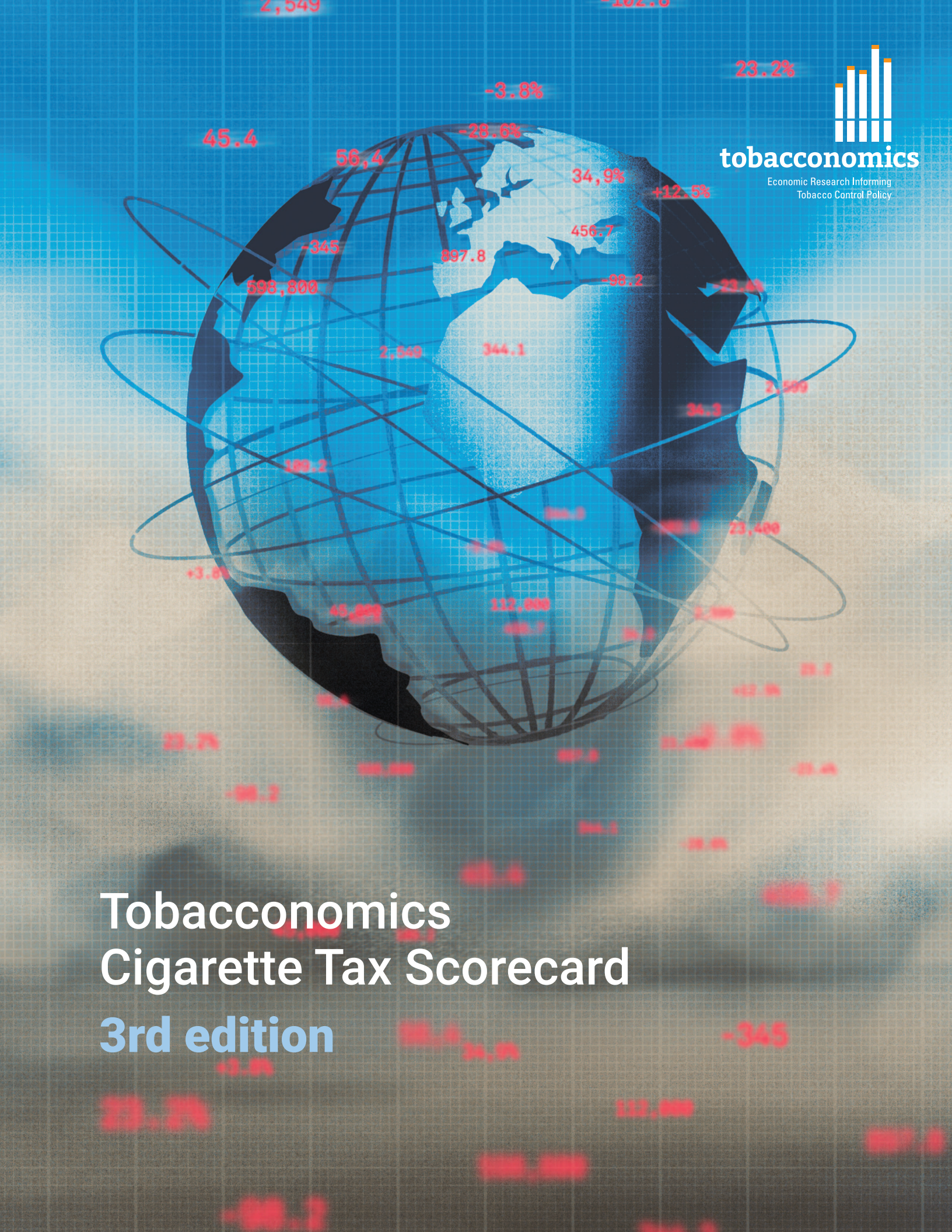

tobacconomics

Economic Research Informing Tobacco Control Policy

Tobacconomics Cigarette Tax Scorecard

3rd edition

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About Tobacconomics: Tobacconomics is a collaboration of leading researchers who have been studying the economics of tobacco control policy for more than 30 years. Founded by Professor Frank Chaloupka at the University of Illinois Chicago, the team is dedicated to helping researchers, advocates, and policy makers access the latest and best research about what's working—or not working—to curb the consumption of unhealthy goods and the associated economic impacts. As a program now based in the Bloomberg School of Public Health at Johns Hopkins University (JHU), Tobacconomics is not affiliated with any tobacco or alcohol manufacturer. Visit **www.tobacconomics.org** or follow us on Twitter at **www.twitter.com/tobacconomics**.

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For any comments or questions about this Scorecard, please email us at info@tobacconomics.org.

We very much look forward to hearing from you.

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Foreword

In 2019, the high-level *Task Force on Fiscal Policy for Health* recognized tobacco as one the world's leading public health threats and called on all countries to increase tobacco taxes to save lives and raise tax revenues to spend on societal goals. It estimated that higher taxes that raised prices by 50 percent could avert over 27 million premature deaths while raising over US$3 trillion of additional revenues worldwide over the next 50 years.

Unfortunately, we are not making progress on this agenda. As this 3rd edition of the *Tobacconomics Cigarette Tax Scorecard* shows, progress on tobacco taxes has stalled since 2019. The pick-up in inflation post-COVID has further weakened the impact of existing taxes and, in many countries, cigarettes are now *more affordable* than previously. The result is that there are still over one billion smokers worldwide. Millions of lives are being needlessly lost because of this global collective policy inertia.

Policy makers, civil society and the research community must work together to regain the momentum, counter industry opposition, and implement key tobacco control policies. Tobacco taxes remain one of the most important and cost-effective public health measures, and it is essential that initiatives such as the *Scorecard* continue to track our collective progress.

Masood Ahmed
President
Center for Global Development

Foreword

The WHO Framework Convention on Tobacco Control

(WHO FCTC) which entered into force on 27 February 2005 and has 183 Parties, is an evidence-based treaty developed in response to the concern of the international community about the devastating worldwide health, social, economic and environmental consequences of tobacco consumption and exposure to tobacco smoke. Article 6 of the treaty recognizes that price and tax measures are an effective and important means of reducing tobacco consumption.

Parties also have negotiated and adopted Guidelines for implementation of Article 6 of the WHO FCTC to assist them in meeting the objectives and obligations of the tax and price provisions of this article. These Guidelines recognize that effective taxes on tobacco products that lead to higher consumer prices are desirable because they lower consumption and prevalence, and in turn reduce mortality and morbidity and improve the health of the population. In addition, it is a well-known fact that tobacco use creates a significant economic burden on society at large. Higher direct health as well as higher indirect costs associated with productivity losses and premature disability and death due to tobacco-related disease, combine to create the full negative impact of tobacco use. Effective tobacco taxes not only reduce these negative impacts through reduced consumption and prevalence, but they also contribute to the reduction of government expenditures for health-care costs associated with tobacco consumption while at the same time providing a much-needed revenue stream for many countries to finance development activities.

Indeed, it goes without saying that Article 6 of the WHO FCTC is a fundamental cornerstone of every country's tobacco control strategy.

The present edition of the scorecard shows that the overall score for tax performance has dropped considerably from the last edition (after improving from 2018 to 2020). This is driven mainly by governments not raising taxes enough to make cigarettes less affordable. Too many countries are also not adjusting, as they should, annually for inflation. Another issue is that a substantial number of governments still do not have ideal tax structures (multi-tiered structures and/or reliance on ad valorem), which leaves plenty of space for cheap cigarettes.

There is clearly an urgent need to strengthen implementation of Article 6 of the Convention not least as this is considered a priority in the Global Strategy to Accelerate Tobacco Control 2019-2030.

Parties to the WHO FCTC have also adopted the Protocol to Eliminate Illicit Trade in Tobacco Products, which entered into force in 2018 and now has 68 Parties. The Protocol provides invaluable guidance for tobacco tax administration, control and enforcement.

Dr Adriana Blanco Marquizo
Head of Secretariat of the WHO Framework Convention on Tobacco Control

Foreword

The time has come for Ministries of Finance and Health to sit together and make tobacco tax reform happen. The economic and social costs of tobacco use are unacceptably high. A fact is a fact: tobacco taxes are the most effective tool available to governments to stop the smoking pandemic and, in the short term, to raise revenue to fund government spending including health care. The call for enhanced tobacco tax reform sounds loud, doesn't it?

Many countries have implemented tobacco tax policies, with different degrees of success, based on tax design guidelines provided by the World Health Organisation. Despite this, tobacco tax reforms have been insufficient to turn the tide on tobacco use and its associated disease epidemic, as illustrated by the new edition of the Scorecard.

Cigarettes have not become less affordable, and the effectiveness of tobacco excise taxes is gradually evaporating. Why? Because tobacco taxes are too often designed without considering factors such as inflation, real income growth, tax administration capacity and the tobacco industry's strategic reactions to tobacco tax increases. To reverse this downward trend, governments have to respond to the Scorecard's call for coherent and ambitious – domestic, regional and international – tobacco tax reform. There really is no good reason to wait!

Bert Brys
Senior Tax Economist
Organisation for Economic Co-operation and Development

Executive Summary

There was great hope in the public health community during the COVID-19 pandemic that governments would show a renewed and vigorous interest in public health. For the most part, these aspirations did not materialize.

Specifically, among the proponents of tobacco taxation as a public health tool to drive down tobacco consumption—widely recognized as one of the best tools in our public health toolbox—there was optimism that this would be a watershed moment in which governments would recognize the enormous utility of this intervention and implement widely. After all, early in the pandemic, there was evidence that smokers were faring worse in terms of severe illness. Moreover, the economic shock of the pandemic meant that governments were mostly spending far more than usual while facing significant tax revenue shortfalls.

The modest improvements documented in the previous (second) edition of the *Tobacconomics Cigarette Tax Scorecard*—released more than one year into the pandemic—did not entirely reflect this urgency. Unfortunately, the news in this third edition of the Scorecard is worse still: there is a decline in the overall ratings, and this is true across all regions. Governments have made insufficient progress in addressing the world's leading cause of preventable death, tobacco use, even though the most effective tool—increased tobacco taxation—would save millions of lives and increase government revenues that could be readily allocated to health and other prosperity-enhancing policies. The last Scorecard showed that the global average cigarette tax score rose modestly from 1.89 (out of 5.00) in 2014 to 2.25 in 2020, but this edition shows that it dropped back down in 2022 to 1.99. The most dramatic change in the 2022 results was the dramatic increase in the number of countries where cigarette affordability has not changed, or worse, where cigarettes are becoming more affordable.

Recent research provides strong evidence that the treaty that underpins tobacco control globally, the World Health Organization (WHO) Framework Convention on Tobacco Control (FCTC), is helping to drive down prevalence particularly by lessening youth initiation (Paraje et al., 2024). The treaty promotes many evidence-based, non-price measures to reduce tobacco use, but a cornerstone remains Article 6, which obligates Parties to use tax and price measures to reduce the demand for tobacco products, especially among young people to prevent initiation (WHO, 2003). The Guidelines on Article 6, developed and adopted by the Conference of the Parties, are based on evidence, best practices, and implementation experiences of tax and price measures to reduce tobacco consumption (WHO, 2014). The evidence shows unequivocally that when countries raise tobacco taxes, consumption declines (Ngo et al., 2023).

According to the WHO, approximately one billion people live in a country that meets the minimum WHO benchmark for tobacco taxation in which the share of taxes in total retail price exceeds 75 percent (WHO, 2023). This represents roughly 12 percent of the world population whereas the remaining more than seven billion people are living in countries where tobacco taxes are not reaching their potential to save lives and generate new, much-needed tax revenues. This widespread failure to meet the WHO

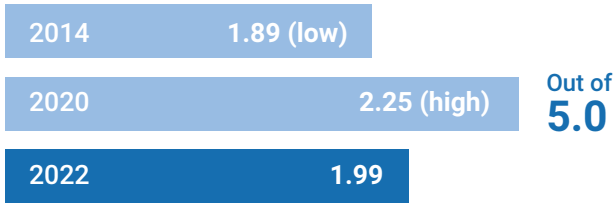
benchmark represents a significant missing link in the realization of the full potential of the world's first public health treaty to curb tobacco use. There is a clear disparity between what governments have agreed to do and what they have implemented. The technical case for this intervention is extremely well documented but the political will among governments and other key stakeholders lags far behind. If governments fail to address the tobacco epidemic, the cost will be hundreds of millions of lives in the coming decades (Dai et al., 2022).

The global economy in the last five years has been unpredictable. In 2020, the global economy contracted by more than three percent due to the COVID-19 pandemic, but it rebounded by a little more than six percent in 2021 and then continued to grow just above three percent in each of 2022 and 2023 (IMF, 2024). Throughout this unstable time, the largest four multinational tobacco companies continued to post consistently large profits (Chaloupka, et al., 2021). Though the absolute number of cigarettes sold appears to be declining (Drope et al., 2022), the tobacco industry generally maintained or improved profits by raising cigarette prices in some countries, except most notably in many lower-income countries where the industry seeks to expand its market (Sheikh et al., 2023), with obvious negative implications for global health equity.

The current context presents an opportunity for urgent action. Rather than allowing the tobacco companies to capture additional profits through their own price increases while imposing substantial burdens on public health systems, governments should instead encourage increases in cigarette prices by substantially and regularly raising tobacco taxes (Mirza, 2019). These additional tax revenues can then be used to address the health and economic challenges of the future.

What's New in this Third Edition of the Scorecard?

This third edition of the Scorecard shows that many countries have stalled or even reversed progress on tobacco taxes, and overall average scores are declining. From 2014 to 2020, the global average score rose modestly from 1.89 (out of 5.00) to 2.25, but in 2022 it dropped back down to 1.99.



From 2020 to 2022, overall scores improved in only 31 countries (down from 67 from 2018 to 2020). Meanwhile, scores worsened in 76 countries from 2020 to 2022, up from 37 from 2018 to 2020. Overall scores stayed the same in 55 countries from 2020 to 2022 compared to 64 from 2018 to 2020.

2020 to 2022
31 countries' scores improved

2018 to 2020
67 countries' scores improved

2020 to 2022
76 countries' scores declined

2018 to 2020
37 countries' scores declined

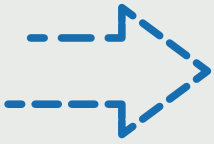
Only 68 of the 170 countries for which data are available score 2.50 or higher out of a maximum of five points, down from 77 countries in 2020.

Since the second edition of the Scorecard, average overall scores declined from 2020 to 2022 in all WHO regions, with Africa showing the smallest decline. Among the World Bank country income groups, only the average score of the low-income countries demonstrated a slight improvement, of 0.08 points, while the other three groups showed significant decline, particularly the high-income country group.

This edition continues the use of the same rubric, assigning countries a score from 0 to 5—with 5.00 being the best possible score—across each of four components. The four components are: cigarette price, change in cigarette affordability, tax share, and excise tax structure. Each of these four components scores is then averaged to generate a country's overall score.

In addition to the overall score trends highlighted above, the component average scores also reveal that:

The average change in affordability score fell across all regions. The results show that the average annual percentage change in affordability decreased in all regions. On average, cigarettes are even becoming more affordable in one region, Europe. In the other regions, the pace at which cigarettes were becoming less affordable has weakened significantly.



The tax structure score has barely changed through the three editions of the Scorecard. Though we have seen several countries take the important step of reforming problematic structures, too many governments maintain complex tiered systems and/or rely only on ad valorem taxes, both of which permit the selling of very cheap brands, which greatly undermine any tax increases.

Cigarette prices generally declined in this edition after increasing in many countries in the previous (second) edition. The evidence clearly shows that in most countries, governments are failing to sufficiently raise taxes and, as a result, prices are not increasing, with detrimental effects for both public and fiscal health. This is especially worrisome because youth are very sensitive to price and more likely to initiate with lower prices.

In 2022, only two countries—France and Mauritius—scored higher than four points out of five. Neither of these scored above four in the previous edition. In 2020, five countries had received a score higher than four: Australia, Botswana, Ecuador, New Zealand and Seychelles. In this edition, however, all five countries have dropped below a score of four, driven almost exclusively by decreases in their change in affordability scores. Whereas in the last edition each of these five countries had scored well across the component scores, it is particularly important to highlight how these governments had adjusted for inflation and implemented regular and significant increases in cigarette taxes, all of which led to reductions in cigarette affordability. In the last two years, however, these and many other governments have failed to maintain tax increases at a sufficient pace and as a result cigarettes are no longer becoming less affordable.

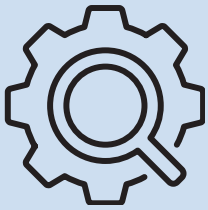
The most recent data show that global progress on tobacco taxation is uneven at best, and very disappointing at worst. Many governments are still failing to effectively employ tobacco taxes as a public health instrument. Article 6 of the FCTC reflects the nearly global consensus that tobacco taxes have a much broader intent—to increase the price of tobacco products so that they are less affordable and, ultimately, to reduce tobacco use globally. More than two decades since the adoption of the FCTC, challenges remain with governments' commitments to raising excise taxes on tobacco products. It is our hope that this third edition of the *Tobacconomics Cigarette Tax Scorecard* motivates Parties to strengthen their commitment to Article 6 and tobacco taxation as a public health tool as well as for non-Parties to recognize the enormous public health and fiscal potential of this intervention.

Introduction

The Scorecard scores cigarette tax policy performance in 170 countries using a transparent and simple grading scheme. The Scorecard is designed to evaluate and inform effective cigarette tax policy by showing specific areas of improvement for each country's tax policy.

This third edition of the *Tobacconomics Cigarette Tax Scorecard* combines the newly released tobacco tax data from the biennial *WHO Report on the Global Tobacco Epidemic, 2023 (RGTE)* with other key macroeconomic data to assess countries' cigarette tax policies. It seeks to determine if governments' tobacco tax policies are consistent with the widely accepted international best practices articulated in the WHO Framework Convention on Tobacco Control (FCTC) Article 6 Guidelines, the 2021 *WHO Technical Manual on Tobacco Tax Policy and Administration,* the *NCI-WHO Monograph 21: The Economics of Tobacco and Tobacco Control*, the World Bank *Tobacco Tax Reform* and *Curbing the Epidemic* reports, and other seminal research on effective tobacco taxation.

Extensive guidance on best practices in tobacco taxation has been developed by the Parties to the FCTC, the World Health Organization (WHO), the World Bank, and researchers worldwide. This Scorecard assesses countries' cigarette tax policies with respect to their consistency with the following sources of best practices in cigarette taxation:



WHO FCTC Article 6 and Article 6 Guidelines (2014)

The WHO FCTC is the world's first public health treaty under the auspices of the WHO, entering into force in February 2005. It currently has 183 Parties, covering more than 90 percent of the global population. Article 6 of the treaty compels Parties to use tax and price measures to reduce the demand for tobacco products, especially among young people (WHO, 2003), while acknowledging tax sovereignty. The Conference of the Parties adopted Guidelines on Article 6 based on decades of rigorous evidence, widely-accepted and tested best practices, and experiences of the Parties that have successfully implemented tax and price measures to reduce tobacco consumption (WHO, 2014).

WHO Technical Manual on Tobacco Tax Policy and Administration (2021)

This technical manual details best practices to inform governments on the development of their tobacco taxation policy, facilitating the achievement of their health and revenue objectives while also promoting their broader development strategy. The manual guides readers through the

necessary steps to create and implement the strongest tobacco taxation policies for their specific countries, provides illustrative recent examples from a variety of countries and regions, and includes practical advice on how to navigate the political process and engender the right support for tax policy change (WHO, 2021). The Scorecard also draws upon the first edition of the manual that emphasized the critical role of excise taxes specifically, particularly highlighting that they change the price of tobacco products relative to other goods in contrast to more general taxes (WHO, 2010).

World Bank *Tobacco Tax Reform* (2017) and *Curbing the Epidemic* reports (1999)

These reports examine economic questions and policy options for tobacco taxation and other tobacco control measures, analyze global trends in tobacco use, and assess the consequences of tobacco control for health, economies, and individuals. Both reports draw on the existing global evidence, particularly evidence from low- and middle-income countries (World Bank, 2017; Jha & Chaloupka, 1999).

NCI-WHO *Monograph 21: The Economics of Tobacco and Tobacco Control* (2018)

The Monograph systematically examines the extensive global research and evidence base surrounding the economics of tobacco control (NCI & WHO, 2018). Chapter 4 of the Monograph discusses models of the demand for tobacco products, evidence of the impact of taxes and prices on the demand for tobacco products, and the effect of factors such as age and gender on sensitivity to changes in the price of tobacco products. Chapter 5 of the Monograph reviews the evidence on the design and administration of tobacco taxes.

The Scorecard derives scores largely from data in the tax/price-related appendices of the *RGTE*, which reports 2022 data. The report monitors the status of the tobacco epidemic and the most effective and cost-effective government interventions—both price and non-price measures—for reducing tobacco consumption. Comparable scores are constructed for 2020, 2018, 2016, and 2014 using data from the 2021, 2019, 2017, and 2015 *RGTE*, respectively, to assess changes over time in cigarette tax systems.

The Cigarette Tax Scorecard assesses countries' cigarette tax systems with respect to their consistency with the four established best practices for cigarette taxation on a five-point grading system outlined below:

COMPONENT 1
Cigarette Price

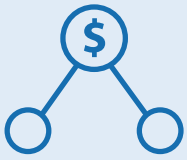
Price is a key determinant of tobacco use. While higher prices reduce consumption, cigarettes are relatively price inelastic: an increase in price will result in a less-than-proportional decline in consumption. Therefore, price must be sufficiently high to reduce consumption enough to generate clear public health benefits. Any metric that compares prices across countries must be based on a measure that accounts for consumers' purchasing power—accordingly, purchasing power parity (PPP) adjusted prices are used here. The highest score goes to a PPP-adjusted price of ten international dollars or higher in 2018,[1] adjusted for inflation, for a pack of 20 cigarettes of the most-sold brand. This is based on price distribution among countries and over time and the threshold at which experts observe sizeable negative effects on consumption.

COMPONENT 2
Changes in Cigarette Affordability

In addition to price, income also affects demand. Rapid economic growth resulting in increases in income can offset increases in taxes and prices and limit their impact on consumption. A large and growing body of empirical evidence demonstrates that increasing affordability of cigarettes leads to an increase in consumption, while decreasing affordability reduces consumption. Therefore, increases in cigarette taxes and prices must be high enough to reduce cigarette affordability and negatively affect use. The Scorecard gives the highest score for a statistically significant annual average change in affordability of 7.5 percent or more between 2016 and 2022 that is the result of at least one excise tax increase during that period (rather than the result of changes in other macroeconomic factors or industry pricing schemes). Like the previous two editions, this edition of the Scorecard uses a six-year window because it captures better the stability of these changes rather than just one or two years of change.

COMPONENT 3
Tax Shares

Tax share denotes the percentage of retail price that is tax(es). Tax shares should be high enough to reduce tobacco use while also allowing governments to gain revenue from the price increase. If a price increase results from industry price increases alone, consumption will fall, but the new revenues will go only to the tobacco companies. The Scorecard component gives the highest scores for a 70-percent-or-greater excise share and a 75-percent-or-higher *total* tax share, averaging the separate scores for each of the two tax shares to create a single tax share score. Excise taxes are more likely to change relative prices among cigarettes and other products, so these are particularly important. However, because some countries have very complex structures wherein other taxes comprise a significant share of price, it is important to incorporate the share of all taxes in the retail price.



COMPONENT 4
Tax Structure

Appropriate tax structures are critical in ensuring that tax increases reduce tobacco use and increase government revenues. The Scorecard gives the highest score for either: (1) a uniform specific excise tax that is automatically adjusted (typically for inflation but sometimes in other substantive ways); or (2) a mixed excise tax with a greater tax share for the specific component in addition to a minimum tax, an automatic adjustment to the specific tax component, and the use of the retail price as the base for the ad valorem tax component.

[1] The Scorecard uses 2018 as the reference year because these were the data from the first edition and keeping it consistent to 2018 dollars permits users to compare more meaningfully across time.

The Scorecard aims to provide a comprehensive, transparent, objective, and simple approach to assessing the strength of cigarette tax systems globally. By using the four components outlined above, the Scorecard recognizes that a single indicator is insufficient. The most widely used indicator—the share of retail cigarette prices that are accounted for by taxes—captures one aspect of cigarette taxes, but countries can have high tax shares and still see low cigarette prices and increasing cigarette affordability. Moreover, the tax share does not capture the strengths and weaknesses of countries' tax structures. For example, weak tax structures create greater variability in cigarette prices that allow smokers to trade down to cheaper brands when taxes rise, limiting the health and revenue benefits of higher taxes.

Finally, with each edition, the Scorecard authors draw from the latest findings in the literature. There is continuing research on the effects of tobacco tax globally but especially in low- and middle-income countries, where the tobacco industry is particularly striving to increase its market size. Studies on the importance of both tax structure and affordability have advanced significantly since the publication of these seminal works, as has scholarly work on the tobacco industry's common counterarguments to raising taxes such as effects on employment, potential regressivity, and illicit trade. See Drope and Powell (2024) for a narrative review of this latest literature.

Road Map to the Scorecard

This Scorecard describes the overall scoring results, changes over time, and the scoring for each of the four components. Appendices provide the country-by-country overall scores by ranking, alphabetically by each grading component, and by all years to show changes in scores over time. Data presented by region reflect the six regional groupings defined by WHO (African region – AFR; region of the Americas – AMR; Eastern Mediterranean region – EMR; European region – EUR; South-East Asia region – SEAR; and Western Pacific region – WPR), while data presented by income level reflect the country income categories defined by the World Bank (matching the year of the WHO price data from the *RGTE*). The Scorecard along with Cigarette Tax Scorecard Component Notes, interactive maps, selected country- and region-specific briefs, as well as a full set of country score PowerPoint slides are available on the Tobacconomics website at **www.tobacconomics.org**. Note that several of the main data sources used here regularly update their data including prices and several key macroeconomic indicators. Thus, when reviewing or utilizing older scores, it is critical to use the scores in the most recent edition of the Scorecard as they are the most accurate using the most up-to-date data available.

II Cigarette Tax Scorecard – Overall Scores

The overall cigarette tax scores for 2022 are presented in Figure 1 and Table 1 for the 170 countries with available data for each of the four components. This composite score is constructed as the simple average of the scores for each of the four key components: cigarette price, change in cigarette affordability, share of taxes in cigarette prices, and cigarette tax structure. The overall possible score can range from a low of zero for countries that score zero on each component, to a high of five for countries that receive the highest score on each component. Scores for each of the four components are discussed below.

Using the data from 2022, only two countries received an overall score higher than four—France and Mauritius—which is a decrease from and no longer includes any of the five countries that scored above 4.0 in 2020. The higher scores of these countries are driven by their high absolute prices (score=5) and high tax shares (score=4.5). Both countries fall somewhat short on tax structure. Mauritius utilizes a uniform excise tax but does not have regular adjustments. Without these adjustments, at a minimum for inflation, there is a higher probability that prices will not continue to increase, and products will become more affordable. France uses a mixed tax structure but relies more on their ad valorem tax than the specific one. Fortunately, the specific component is increased annually, and this has helped to maintain high prices and tax share. Both countries' performance in the change in affordability component is better than most countries but still does not reach the highest score of 5.0, which reflects at least a 7.5 percent annual decline in affordability.

All five high-scoring countries from 2020 fell below an overall score of four in 2022: Australia, Botswana, Ecuador, New Zealand, and Seychelles. The main reason these countries' scores fell was that their tax rates simply are not making tobacco products less affordable. In all cases there was no statistically significant change in affordability over the previous six years. Several of these countries had previously done an excellent job regularly raising taxes beyond inflation and growth, but they slowed down or stopped recently, and this is reflected in their affordability and overall scores. These countries otherwise have strong fundamentals including uniform specific systems with some mechanism for annual adjustments, but they really must pay attention to institutionalizing regular increases beyond inflation with a very specific goal of making tobacco products less affordable to improve their scores once more.

At the other end of the spectrum, Iraq had a score of zero again in 2022, reflecting its lack of a cigarette excise tax and minimal other taxes, resulting in very inexpensive cigarettes.[2] Iran, Kuwait, Laos, Libya, and the Marshall Islands perform only marginally better, with overall scores of 0.25 in 2022. Four of these five countries scored zero on tax structure and thus have immediate work to do implementing even basic tax structures, let alone using other best practices. Among the 170 in the Scorecard, eight countries reported having no excise tax on cigarettes at all: Antigua and Barbuda, Cuba, Democratic People's Republic of Korea, Iraq, Lebanon, Maldives, Federated States of Micronesia, and Nauru.

[2] It is important to note that Iraq has experienced complex emergency situations in the recent past, which the Eighth FCTC Conference of Parties acknowledged in a consensus decision FCTC/COP8(20) reinforcing that tobacco control should not be overlooked anywhere because the evidence strongly demonstrates that the tobacco industry is working aggressively to increase consumption in all countries.

Only three countries improved their scores by more than one point: Kenya (0.875 to 2.5) from the African region, and Japan (2.25 to 3.5) and Tuvalu (0.857 to 2.625) from the Western Pacific region.

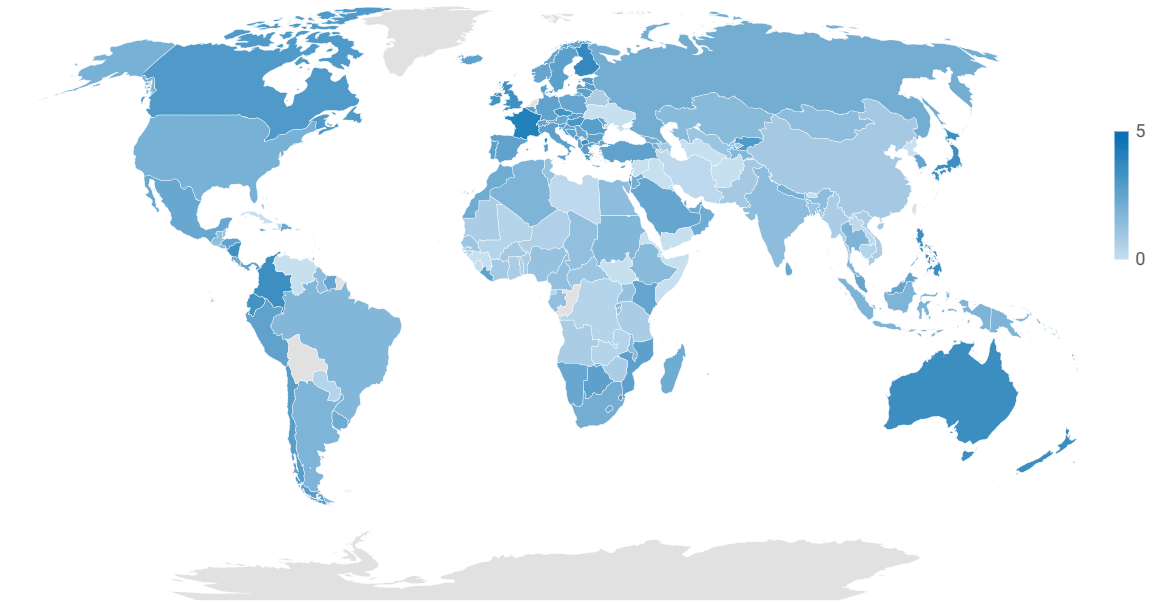
As shown in Table 2, the European regional average is once again the highest of the WHO regions with an average score of 2.64, but this is down from 2.90 in 2020. The relatively high score in the European region reflects generally stronger tax structures, and higher taxes and prices that result from the European Union's (EU) tobacco tax directive, with which the member countries are required to comply. The regional effect also extends to countries aspiring to join the EU, which are required to implement taxes similar to the EU's. As of the first trimester of 2024, this directive is under revision by the European Commission (EC), and there is clearly a lot at stake in the changes they make. Considering the results here—driven mainly by the lack of change in affordability—the EC would be wise to consider best practices carefully and implement provisions that ensure the regular updating of tax rates across the EU.

Looking at the other regions, the Western Pacific region has inched into second place at 2.02, slightly ahead of the previous (2020) second place region, the Americas, at 1.97 in 2022. The Americas region saw the largest drop from 2020 at -0.39, which like Europe was driven mostly by the countries' poor performance in the change in affordability score.

Although the African region continues to rank lowest at 1.53 in 2022, it had the smallest absolute change in score (-0.12). However, it scored poorly on change in affordability in both 2020 and 2022.

Table 3 presents the scores by World Bank income category. Like the last two editions of the Scorecard, there is a clear relationship between overall scores and country income, with average scores mostly rising with country income. Notably, though still receiving the lowest average score, the only income group that improved in overall score from 2020 to 2022 was the low-income group, moving from 1.39 to 1.47. The high-income country group, on the other hand, saw the largest decline from 3.04 in 2020 to 2.61 in 2022.

Figure 1 Overall cigarette tax scores, 2022



Note: Countries in gray lack necessary data to generate this measure.

Table 1 Overall cigarette tax scores, 2022

Score < 1.0 N=35	1.0 ≤ Score < 2.0 N=42	2.0 ≤ Score < 3.0 N=70	3.0 ≤ Score < 4.0 N=21	Score ≥ 4.0 N=2
Azerbaijan	Algeria	Belgium	Finland	France
Burkina Faso	Argentina	Chile	Australia	Mauritius
China	Barbados	Denmark	New Zealand	
Côte d'Ivoire	El Salvador	Fiji	North Macedonia	
Democratic Republic of the Congo	Indonesia	Gambia	Philippines	
Pakistan	Papua New Guinea	Greece	Colombia	
Angola	Thailand	Israel	Japan	
Belarus	Brazil	Latvia	Nicaragua	
Benin	Comoros	Romania	United Kingdom of Great Britain and Northern Ireland	
Bolivia (Plurinational State of)	Kiribati	Samoa	Czechia	
Ghana	Sudan	Slovakia	Ecuador	
Mauritania	Tajikistan	Slovenia	Ireland	
Micronesia (Federated States of)	Ethiopia	Bahamas	Hungary	
Myanmar	Kazakhstan	Botswana	Malta	
Solomon Islands	Malawi	Italy	Seychelles	
Togo	Nauru	Lithuania	Singapore	
United Republic of Tanzania	Rwanda	Mozambique	Canada	
Viet Nam	Cabo Verde	Portugal	Estonia	
Zimbabwe	Dominica	Sweden	Eswatini	
Niger	Egypt	Vanuatu	Kyrgyzstan	
Antigua and Barbuda	Guyana	Albania	Montenegro	
Cambodia	India	Bosnia and Herzegovina	Netherlands (Kingdom of the)	
Congo	Mongolia	Bulgaria		
Equatorial Guinea	Saint Vincent and the Grenadines	Croatia		
Guinea-Bissau	Sao Tome and Principe	Germany		
Haiti	Trinidad and Tobago	Honduras		
Mali	Burundi	Iceland		
Paraguay	Cameroon	Liberia		
Zambia	Chad	Panama		
Iran (Islamic Republic of)	Gabon	Peru		
Kuwait	Guatemala	Spain		
Lao People's Democratic Republic	Belize	Türkiye		
Libya	Maldives	Tuvalu		
Marshall Islands	Nigeria	Bahrain		
Iraq	Tunisia	Kenya		
	Uganda	Malaysia		
	Bangladesh	Norway		
	Central African Republic	Poland		
	Grenada	Republic of Korea		
	Senegal	Republic of Moldova		
	Uzbekistan	Saudi Arabia		
	Saint Kitts and Nevis	Serbia		
		Suriname		
		Switzerland		
		Austria		
		Cyprus		
		Dominican Republic		

Table 1 Overall cigarette tax scores, 2022, continued

Score < 1.0 N=35	1.0 ≤ Score < 2.0 N=42	2.0 ≤ Score < 3.0 N=70	3.0 ≤ Score < 4.0 N=21	Score ≥ 4.0 N=2
		Jamaica Lesotho Mexico Namibia Sri Lanka Madagascar Morocco Oman United Arab Emirates Uruguay Armenia Costa Rica Georgia Jordan Luxembourg Qatar Russian Federation South Africa Nepal Saint Lucia Timor-Leste United States of America		

Note: Countries in each column are listed in order of their scores, from highest to lowest, and alphabetically when scores are identical.

Table 2 Overall cigarette tax scores, globally and by WHO region, 2022

Region	AFR	AMR	EMR	EUR	SEAR	WPR	Global
Score	1.53	1.97	1.48	2.64	1.64	2.02	1.99
Change 2020–2022	(-0.12)	(-0.39)	(-0.43)	(-0.26)	(-0.35)	(-0.16)	(-0.25)

Table 3 Overall cigarette tax scores, globally and by World Bank income group, 2022

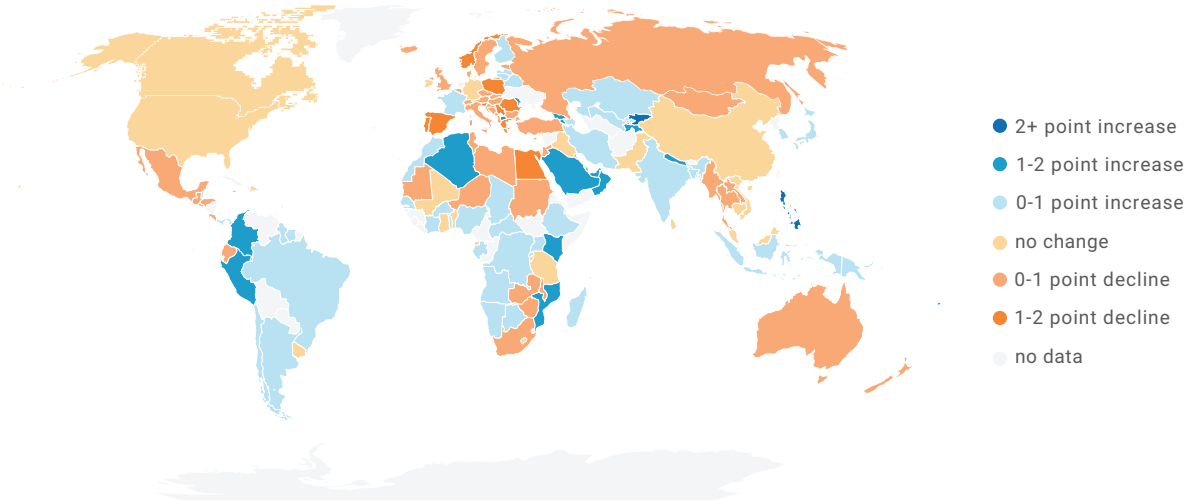
Income group	Low	Lower-middle	Upper-middle	High	Global
Score	1.47	1.49	1.98	2.61	1.99
Change 2020–2022	(+0.08)	(-0.26)	(-0.26)	(-0.43)	(-0.25)

Change Over Time

Despite the setback in 2022 highlighted above, Figure 2 below shows that over the past eight years there has still been some improvement in the overall scores, with the global average score a little higher in 2022 compared to 2014. Among the 161 countries for which scores could be computed in both years, overall scores have improved in 70 countries, stayed the same in 26 countries, and worsened in 65 countries. Scores improved the most in Kyrgyzstan (+2.38), Philippines (+2.38), Mozambique (+2.00), United Arab Emirates (+2.00), Colombia (+1.88), and Tuvalu (+1.88), followed by Bahrain, Oman, and Saudi Arabia with overall gains of 1.75 points each. Note that of these leaders only Colombia, Mozambique, and Tuvalu experienced score increases from 2020 to 2022.

It is important to consider starting points when noting the changes in Figure 2. For example, some of the countries showing decline were high performers in 2014 and while they may have taken a step back, they may also still objectively be performing well or at least adequately. On the other hand, some of the countries that have experienced improvements had very low starting points and may still be struggling to implement many of the best practices in tobacco tax policies.

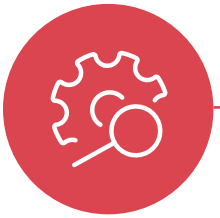
Figure 2 Changes in countries' overall scores, 2014–2022



Note: Countries in gray lack available data to generate this measure.

Cigarette Price III

Given the extensive evidence on the impact of prices on smoking behavior, the price of cigarettes is a key indicator for the performance of a country's tobacco tax system. This Scorecard component is based on the price of a 20-cigarette pack of the most-sold brand in international dollars, adjusted for purchasing power parity (PPP).[3] According to the prices reported for 2022,[4] scores are based on the following:



Scoring – Cigarette Price:

5: Price ≥ 10.0 Intl$ PPP
4: 8.0 ≤ price < 10.0
3: 6.0 ≤ price < 8.0
2: 4.0 ≤ price < 6.0
1: 2.0 ≤ price < 4.0
0: Price < 2.0 Intl$ PPP

Figure 3 presents the cigarette price scores for 2022. Among the 170 countries with available data, 20 countries received the highest score of five (down from 28 in 2020), led by Ireland (Intl$ PPP 19.47), Fiji (Intl$ PPP 18.88), New Zealand (Intl$ PPP 18.74), Sri Lanka (Intl$ PPP 18.55), and Australia (Intl$ PPP 18.36). Fourteen countries received a score of zero (up from 12 in 2020), with the lowest prices in Iraq (Intl$ PPP 0.83), Democratic Republic of the Congo (Intl$ PPP 0.86), and Paraguay (Intl$ PPP 0.96).

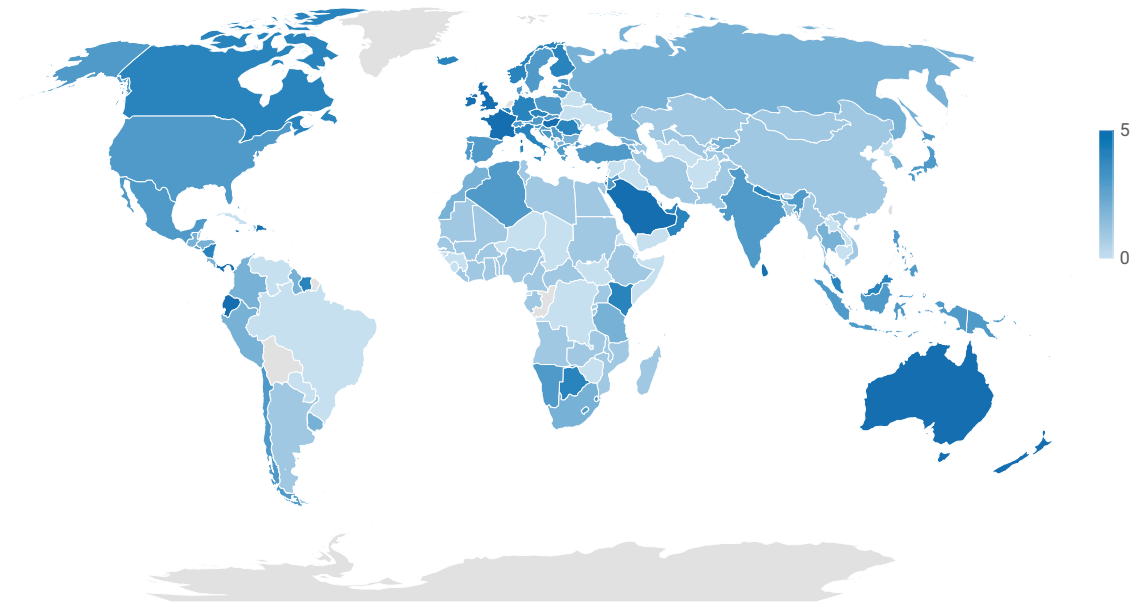
As demonstrated in Table 4, average cigarette prices were highest in the South-East Asia, Western Pacific, and European regions and lowest in the African region. This pattern is similar to 2020. Average cigarette prices (adjusted for inflation) decreased across all WHO regions from 2020 to 2022, with the largest decrease in the South-East Asia Region (-1.83), followed by the Americas region (-0.50) and the Eastern Mediterranean region (-0.34). Average prices and price scores rise with country income, as shown in Table 5. Average cigarette prices in low-income countries increased for this Scorecard by $0.26 (~10 percent).

In the previous Scorecard, Africa had been the only region that experienced a decrease in average price, by Intl$ PPP 0.19. The last edition of the Scorecard raised this issue, noting that lowering prices makes inexpensive cigarettes more accessible to low-income populations, especially young people. With the findings in this new edition demonstrating average price decreases across all WHO regions, this concern remains relevant.

[3] Purchasing power parity is a common metric used to compare countries' currencies based on an exchange that allows one to buy the same amount of goods and services in each country.

[4] These prices are converted to 2018 prices to compare them with those in previous editions of the Scorecard.

Figure 3 Cigarette price scores, 2022



Note: Countries in gray lack available data on this measure.

Table 4 Average cigarette price ($Intl PPP) and average price score, globally and by WHO region, 2022

Region	AFR	AMR	EMR	EUR	SEAR	WPR	Global
Price	$3.90	$6.29	$5.69	$7.27	$7.46	$7.38	$6.11
Change 2020–2022	(-$0.17)	(-$0.50)	(-$0.34)	(-$0.17)	(-$1.83)	(-$0.30)	(-$0.37)
Score	1.44	2.55	2.20	2.98	2.89	2.50	2.37
Change 2020–2022	(-0.07)	(-0.28)	(+0.03)	(-0.14)	(-0.31)	(-0.15)	(-0.14)

Note: Countries with updates in the 2020 scores are presented in Appendix Table 4 (compared to the scores shown in the second edition of the Scorecard).

Table 5 Average cigarette price ($Intl PPP) and average price score, globally and by World Bank income group, 2022

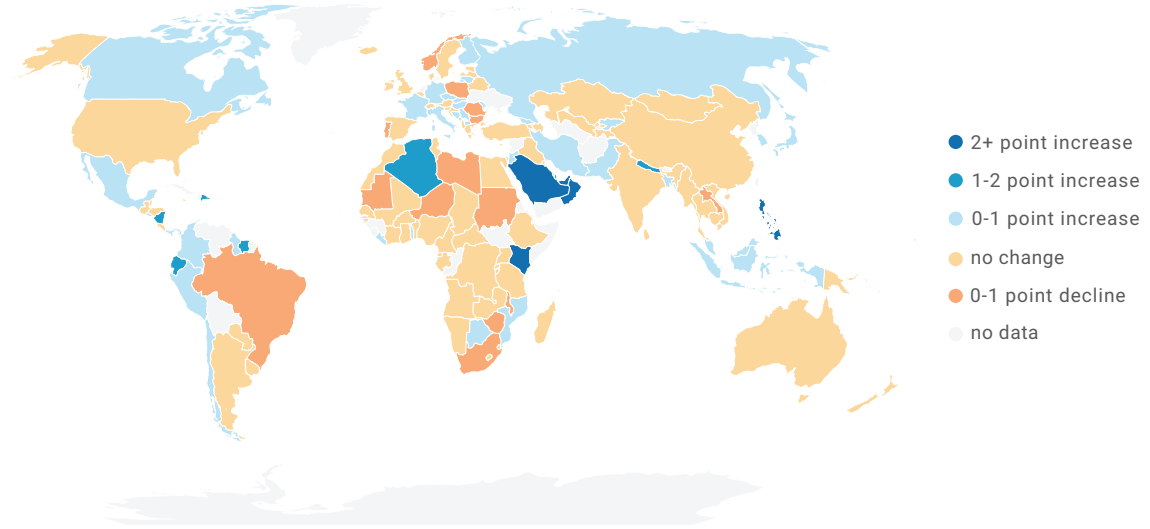
Income group	Low	Lower-middle	Upper-middle	High	Global
Price	$2.76	$4.53	$5.84	$8.86	$6.11
Change 2020–2022	(+$0.26)	(-$0.58)	(-$0.60)	(-$0.60)	(-0.37)
Score	0.83	1.69	2.27	3.56	2.37
Change 2020–2022	(+0.08)	(-0.17)	(-0.29)	(-0.24)	(-0.14)

Note: Countries with updates in the 2020 scores are presented in Appendix Table 4.

Change Over Time

Despite the decrease from 2020 to 2022, cigarette price scores have mostly risen over time. In 2014, the overall average was 1.95 out of 5.00, rising to 2.51 in 2020, but dropping slightly to 2.37 in 2022. As shown in Figure 4 below, the number of countries receiving the highest score has risen from 10 in 2014 to 20 in 2022 (though it was higher in 2020 at 28 countries), while the number of countries receiving the lowest score has decreased from 18 in 2014 to 14 in 2022 (it was 12 in 2020). Over the eight years of the analysis, seven countries have experienced more than a two-point increase, whereas eighteen countries have seen a zero-to-one-point decline.

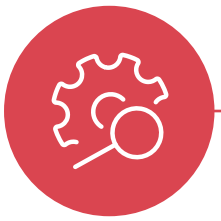
Figure 4 Changes in countries' price scores, 2014–2022



Note: Countries in gray lack available data on this measure.

IV Change in Cigarette Affordability

Cigarette taxes need to increase enough to raise prices by more than income increases to make cigarettes less affordable. The second scoring component assesses changes in cigarette affordability over a six-year period. Affordability is defined as the percentage of per capita GDP required to purchase 2,000 cigarettes of the most-sold brand, with an increase in this measure implying that cigarettes are becoming less affordable over time. To avoid giving credit to countries where affordability has fallen due to reduced incomes or higher industry prices, higher scores are given to countries where the reduction in affordability has at least partially resulted from a cigarette excise tax increase. The 2022 scores for this component are based on statistically significant changes[5] in the affordability of the most-sold brand of cigarettes between 2016 and 2022, as follows:



Scoring – Change in Affordability:

5: 7.5% average annual change or higher
4: 5.0% ≤ average annual change < 7.5%
3: 2.5% ≤ average annual change < 5.0%
2: Average annual change < 2.5%
1: Reduced affordability, but no excise tax increase
0: Increased affordability or no statistically significant change

Figure 5 presents the scores for the changes in cigarette affordability between 2016 and 2022. Among the 188 countries with available data, **only nine countries received the highest score of five (compared to 26 in 2020 and 20 in 2018)**, led by Liberia (average annual reduction in affordability of 18.7 percent), the Philippines (17.24 percent), and Kenya (13.24 percent). In the second edition, the highest scores were concentrated in the Persian Gulf region largely due to a major regional tobacco excise tax reform in 2020. Notably, all these countries' scores fell in this third edition, reinforcing the important point that although the introduced ad valorem tax had a substantial immediate effect and naturally keeps up with inflation, it cannot keep pace if real income is also growing.

In contrast, a large majority of countries—156 of the 188—received a score of zero (up from 116 countries in 2020). A score of zero can mean four different dynamics. Accordingly, of the 156 zero-scoring countries:

1) 25 countries had no tax increase and cigarettes became more affordable.
2) 16 countries had a tax increase, but it was too small, and cigarettes still became more affordable.
3) 56 countries had no tax increase and no change in affordability.
4) 59 had a tax increase but no change in affordability.

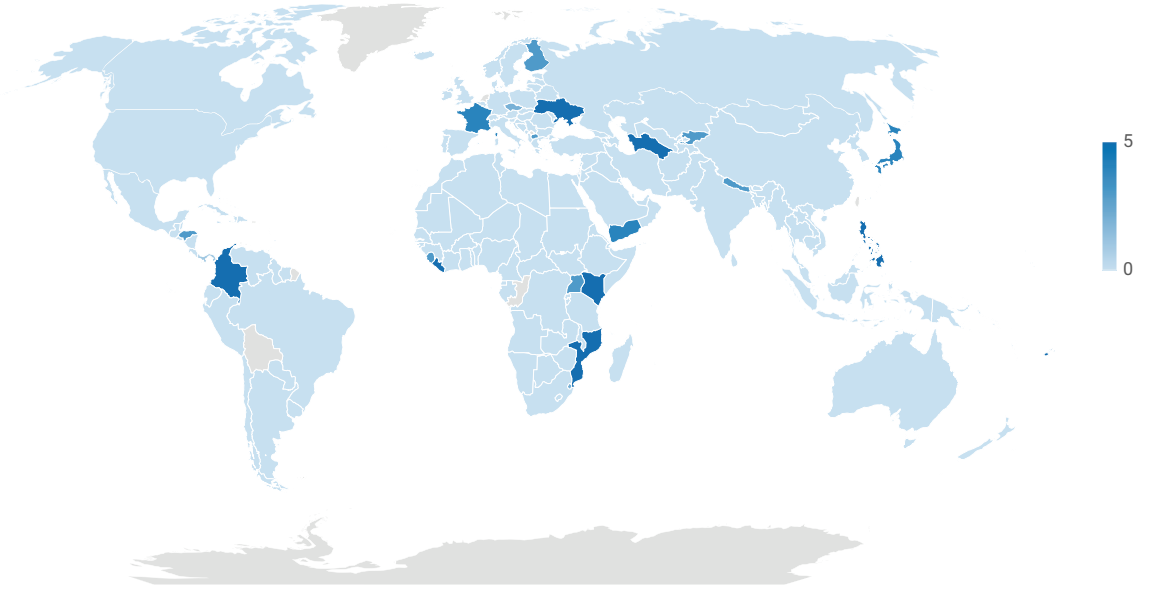
[5] Statistically significant change in affordability is based on the approach used in the RGTE, which uses a simple model that regresses the natural logarithm of the affordability measure on a year variable.

In addition, 15 countries had no tax increase, but cigarettes became less affordable (because of industry price increases possibly combined with slow economic growth).

Table 6 shows the average changes in affordability among countries that have seen changes in affordability, by region, as well as the average scores regionally and globally for the affordability component of the Scorecard. In computing these averages, countries with non-significant changes in affordability were assigned a score of zero. All six regions experienced substantial declines in average percent change and average score. The region with the best change in affordability average raw score (average annual percent change over six years) was the Eastern Mediterranean region with an average annual decline of 3.87 percent (though down from an average annual decline of 6.09 percent in 2020). In 2022, the six-year affordability change average in four of the regions hovered around one percent — Africa (0.74), the Americas (0.93), South East Asia (1.12), and the Western Pacific (1.16). Unfortunately, the European region experienced a small average increase in affordability—that is, cigarettes across the region became more affordable on average.

As shown in Table 7, even though the group's average declined from 2020 to 2022, the lower-income countries scored the best on the affordability measure in 2022. Broadly among income groups, this represents a substantial shift in the order because this income group scored the worst on the affordability measure in 2020. In this edition, high-income countries had the worst average change in affordability at only 0.36 percent following a large drop from 2020's average of 3.35 percent average annual change.

Figure 5 Affordability change scores, 2022



Note: Countries in gray lack available data on this measure.

Table 6 Average annual cigarette affordability change and affordability change score, globally and by WHO region, 2022

Region	AFR	AMR	EMR	EUR	SEAR	WPR	Global
Affordability change **Change 2020–2022**	0.74% (-0.94%)	0.93% (-3.55%)	3.87% (-2.22%)	-0.58% (-2.08%)	1.12% (-3.26%)	1.16% (-1.15%)	0.81% (-2.03%)
Score **Change 2020–2022**	0.66 (-0.51)	0.32 (-0.88)	0.20 (-1.75)	0.47 (-0.84)	0.30 (-1.48)	1.21 (-0.08)	0.55 (-0.80)

Note: Countries with updates in the 2020 scores are presented in Appendix Table 4.

Table 7 Average annual cigarette affordability change and affordability change score, globally and by World Bank income group, 2022

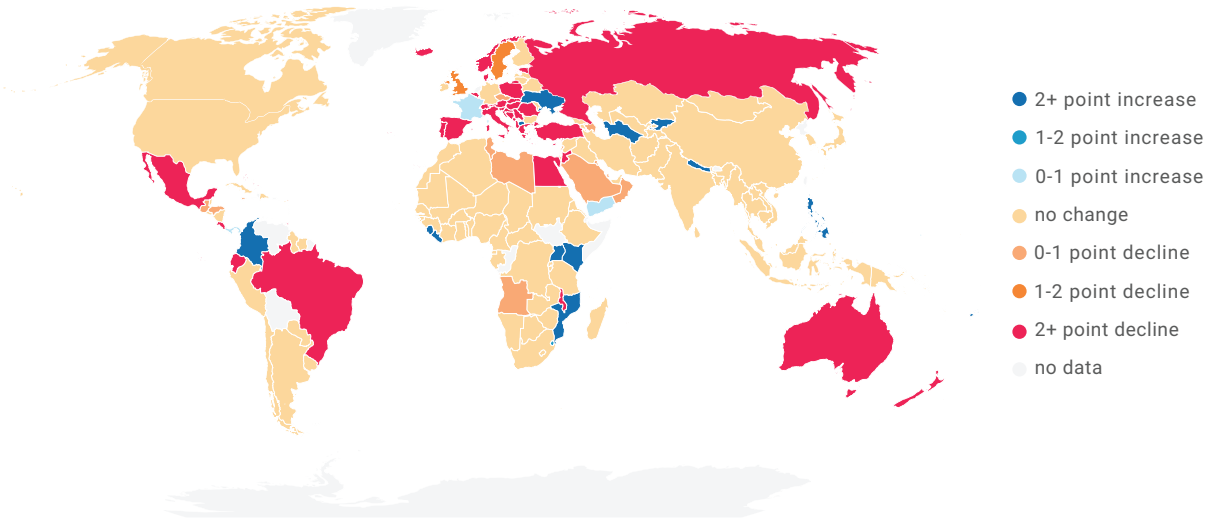
Income group	Low	Lower-middle	Upper-middle	High	Global
Affordability change **Change 2020–2022**	1.12% (+0.57%)	1.48% (-1.04%)	0.47% (-3.26%)	0.36% (-2.99%)	0.81% (-2.03%)
Score **Change 2020–2022**	0.96 (-0.27)	0.58 (-0.67)	0.63 (-0.77)	0.26 (-1.18)	0.55 (-0.80)

Note: Countries with updates in the 2020 scores are presented in Appendix Table 4.

Change Over Time

As demonstrated in Figure 6 below, over the past eight years there has been some volatility in the cigarette affordability scores. The global average score of 1.13 in 2014 went up to 1.35 in 2020 only to go down to 0.55 in 2022. This latest set of scores also saw the lowest number of countries obtaining the highest score of five (from 13 countries in 2014 to 26 countries in 2020 to 9 in 2022). Furthermore, over the past eight years, while 15 countries experienced more than a two-point increase, 41 countries saw a two-point-or-greater decline.

Figure 6 Changes in countries' affordability change scores, 2014–2022



Note: Countries in gray lack available data on this measure.

V Tax Share

The most commonly used metric for assessing the strength of countries' cigarette tax systems has been the share of taxes in retail cigarette prices. More than two decades ago, the World Bank recommended that taxes should account for between two-thirds and four-fifths of cigarette prices. More recently, in the *RGTE*, the WHO describes countries where taxes make up at least 75 percent of retail price as the highest achieving countries. Others have focused on the share of excise taxes in retail prices, given that excise taxes are more important in raising the price of cigarettes relative to the prices of other products and, as a result, will have a greater impact on cigarette smoking. Each measure has its own strengths and limitations. For these reasons, the Scorecard tax share component is based on the average of the scores for two tax share indicators—one based on the share of all taxes in cigarette prices and the other focused on the share of excise taxes in prices. The scoring for each is as follows:

Scoring – Total Tax Share:

5: 75% total tax share or higher
4: 65% ≤ share < 75%
3: 55% ≤ share < 65%
2: 45% ≤ share < 55%
1: 35% ≤ share < 45%
0: Total tax share < 35%

Scoring – Excise Tax Share:

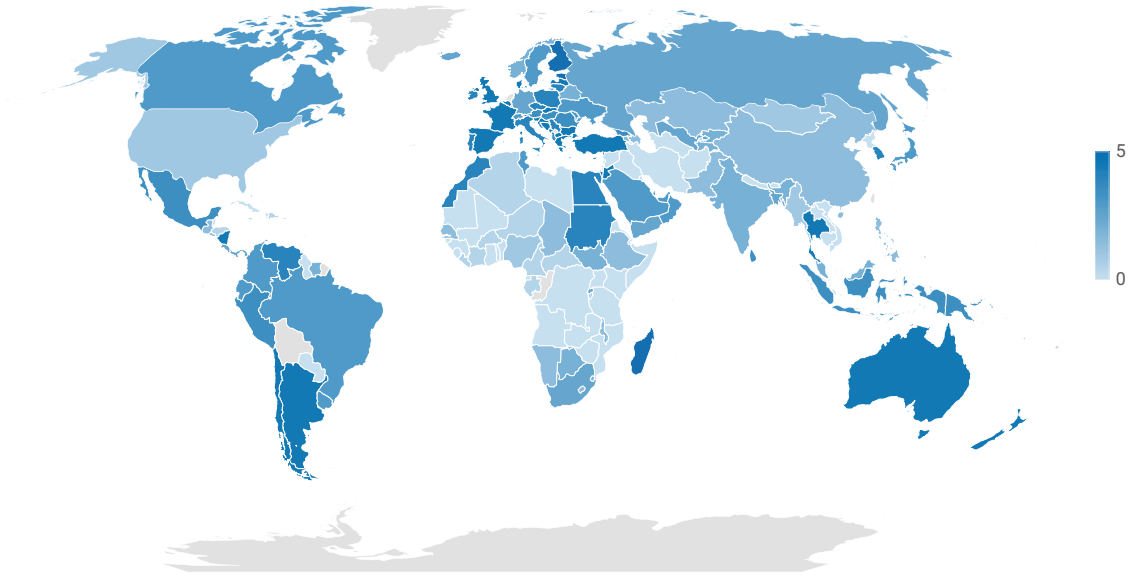
5: 70% excise tax share or higher
4: 60% ≤ share < 70%
3: 50% ≤ share < 60%
2: 40% ≤ share < 50%
1: 30% ≤ share < 40%
0: Excise tax share < 30%

Figure 7 presents the cigarette tax share scores for 2022. Of the 184 countries with available data, **four received the highest score of five** (that is, scoring a "5" on both total tax share and excise tax share): Andorra (78.31 percent total tax share, 74.00 percent excise tax share), Estonia (88.17 percent, 71.50 percent), Finland (89.44 percent, 70.09 percent), and Madagascar (87.74 percent, 70.94 percent). An additional 36 countries received the highest score for their total tax share but not for their excise tax share. On the other hand, Palau and San Marino received the highest excise tax share score for exceeding 70 percent, but both received a lower total tax share score. At the other end of the spectrum, 41 countries scored zero for both measures.

As demonstrated in Table 8, tax shares and tax share scores are highest in the European region, largely due to the European Union tobacco tax directive that requires member states to implement relatively high excise taxes on cigarettes. In contrast, tax shares and scores are lowest in the African region. The Eastern Mediterranean region experienced the highest average gains in total tax share while the Western Pacific had the largest increase in excise tax share from 2020 to 2022. This is welcome news for the Western Pacific since in the last edition it showed a decrease in both average total and excise tax shares. In the last edition, Africa saw the most improvement in both types of tax shares, but positive change has unfortunately slowed in this edition. **From 2020 to 2022, both average total tax share and average excise tax share decreased in the Americas region.**

Despite the recent drop in tax share performance in high-income countries, as with cigarette prices, tax shares and tax share scores tend to rise with country income; the average tax share score is nearly three times higher in high-income countries than in low-income countries. Nevertheless, average excise tax shares, and total average tax share fell in the high-income country group between 2020 and 2022.

Figure 7 Tax share scores, 2022



Note: Countries in gray lack available data on this measure.

Table 8 Average total tax shares, excise tax shares, and tax share scores, globally and by WHO region, 2022

Region	AFR	AMR	EMR	EUR	SEAR	WPR	Global
Total tax share **Change 2020–2022**	41.26% (+1.06%)	46.90% (-2.02%)	55.42% (+6.61%)	71.64% (+0.04%)	44.92% (+2.00%)	53.74% (+1.25%)	54.14% (+0.83%)
Total tax share score **Change 2020–2022**	1.32 (+0.09)	1.91 (-0.15)	2.76 (+0.36)	4.15 (+0.04)	2.00 (+0.09)	2.44 (+0.11)	2.56 (+0.05)
Excise tax share **Change 2020–2022**	27.19% (+0.59%)	33.09% (-2.07%)	36.58% (+3.29%)	55.40% (+0.21%)	32.58% (+1.50%)	39.38% (+3.96%)	39.13% (+0.81%)
Excise tax share score **Change 2020–2022**	0.75 (+0.05)	1.29 (-0.08)	1.82 (+0.07)	3.02 (+0.08)	1.45 (+0.18)	1.84 (+0.17)	1.78 (+0.05)
Combined tax share score **Change 2020–2022**	1.03 (+0.07)	1.60 (-0.12)	2.29 (+0.22)	3.59 (+0.06)	1.73 (+0.14)	2.14 (+0.14)	2.17 (+0.05)

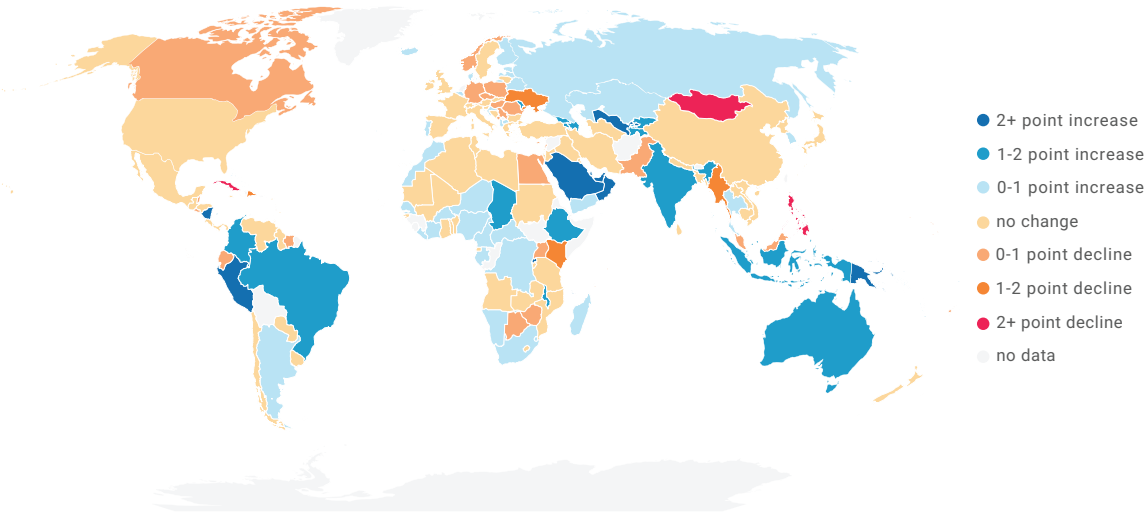
Table 9 Average total tax shares, excise tax shares, and tax share scores, globally and by World Bank income group, 2022

Income group	Low	Lower-middle	Upper-middle	High	Global
Total tax share **Change 2020–2022**	42.32% (+1.44%)	43.76% (+1.09%)	54.42% (+0.70%)	67.48% (-1.61%)	54.14% (+0.83%)
Total tax share score **Change 2020–2022**	1.57 (+0.20)	1.62 (+0.03)	2.55 (+0.00)	3.78 (-0.11)	2.56 (+0.05)
Excise tax share **Change 2020–2022**	28.75% (+1.73%)	30.23% (+0.44%)	38.61% (+1.32%)	51.36% (-1.61%)	39.13% (+0.81%)
Excise tax share score **Change 2020–2022**	0.90 (+0.07)	1.06 (+0.06)	1.70 (+0.08)	2.83 (-0.13)	1.78 (+0.05)
Combined tax share score **Change 2020–2022**	1.24 (+0.13)	1.34 (+0.04)	2.12 (+0.04)	3.30 (-0.12)	2.17 (+0.05)

Change Over Time

As demonstrated in Figure 8 below, over the past eight years there has been only modest improvement in tax share scores over time, with the global average score rising from 1.91 in 2014 to 2.12 in 2020 to 2.17 in 2022. Of the 180 countries with data for both 2014 and 2022, 73 experienced no change in their tax share score. **Tax share scores increased in 69 countries between 2014 and 2022, led by a 4.5-point increase in Nicaragua, which implemented significant cigarette excise tax increases in 2017 and in 2019, and 3.0 to 3.5-point increases in some Gulf Cooperation Council countries (Bahrain, Oman, Qatar, Saudi Arabia, and the United Arab Emirates).** At the same time, tax share scores fell from 2014 to 2022 in 38 countries. Over the past six years, 11 countries have experienced more than a two-point increase, while three countries (Cuba, Mongolia, and Philippines) have seen more than a two-point decline).

Figure 8 Changes in countries' tax share scores, 2014–2022



Note: Countries in gray lack available data on this measure.

Excise Tax Structure VI

The structure of an excise tax greatly determines its effectiveness in achieving its public health and revenue goals, with simple, uniform tax structures typically having greater impact and being easier to administer. Tiered excise tax structures with rates varying based on price, cigarette length, presence of a filter, cigarette packaging, production type and/or level, and/or other factors make cigarette taxes more difficult to administer and easier to avoid and are, thus, significantly less effective than other tax structures. Structures that only rely on ad valorem taxes are more difficult to administer and vulnerable to manipulation by the industry. This component of the Scorecard assesses multiple dimensions of cigarette excise tax structures as follows:

Scoring – Tax Structure:

5: A uniform specific tax with an automatic inflation or other adjustment; or a uniform mixed system with greater share of specific tax, with an automatic adjustment for the specific component, the retail price as the base for the ad valorem component, and a minimum specific tax

4: A uniform specific tax or uniform mixed system with a greater share of specific tax but without other features listed above

3: A uniform mixed system with a greater share of ad valorem tax

2: A uniform ad valorem tax

1: A tiered specific or ad valorem excise tax

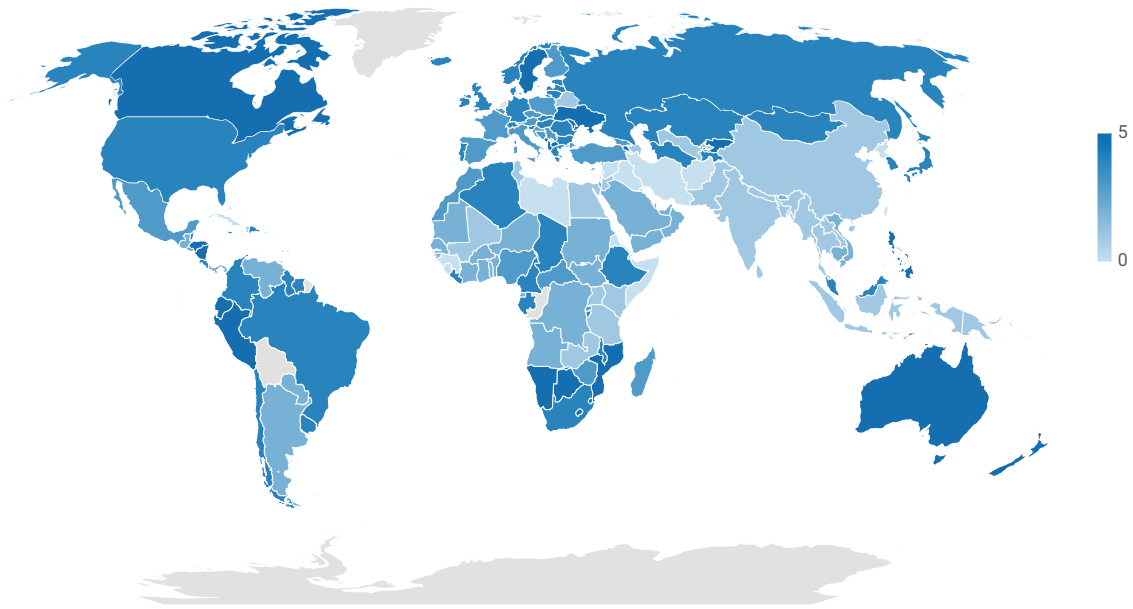
0: No excise tax

Figure 9 presents the tax structure scores for 2022. Of the 184 countries with available data, 21 countries received the highest score of five. These include countries from four of the six regions: Africa, the Americas, Europe, and the Western Pacific, suggesting that best practices have widely diffused across the globe. Additionally, countries from all four income groups scored a five. Moreover, these countries with strong tax structures score an overall average of 2.93 (compared to 1.99 overall) suggesting that they tend to do better overall—in other words, structure generally helps to drive performance in the other areas of the Scorecard. Most countries that score a five on this component implement a uniform specific cigarette excise tax that is automatically adjusted for inflation or other factors. Only Montenegro, North Macedonia, Republic of Moldova, Sweden, and Ukraine apply a uniform mixed system with a greater share for the specific tax, an automatic adjustment for the specific tax, a retail price base for the ad valorem tax, and a minimum specific tax. An additional 66 countries use either a uniform specific tax that is not automatically adjusted or a mixed system with a greater share of specific tax that does not include each of the three features required for the highest score. These governments are very close to achieving optimal structure, but very often the failure to implement some of these last features has major consequences for long term efforts to make tobacco products less affordable. Twenty-four countries use a uniform mixed system that gives greater weight to the ad valorem component, while 34 apply a uniform ad valorem tax. There are 28 countries (up from 27 in 2020 and down from 31 in 2018) that use some form of tiered excise tax structure, with rates varying based on price, cigarette length, presence of a filter, cigarette packaging, production type and/or level, and/or other factors.

The average tax structure scores by WHO regions are presented in Table 10. The European region and the region of the Americas are the highest-performing regions for this component. The lowest-scoring regions are South-East Asia and the Eastern Mediterranean. The low score for the South-East Asia region reflects the tiered cigarette excise tax systems implemented in many of the region's countries, including Bangladesh, India, Indonesia, Myanmar, Nepal, Sri Lanka, and Thailand. The low score for the Eastern Mediterranean region results from the lack of a cigarette excise tax in several countries, including Iran, Iraq, Kuwait, Lebanon, and Libya, and a reliance on ad valorem-based structures in many others. **From 2020 to 2022, the African region showed the largest gains in tax structure score average**, while the average in the Americas decreased slightly. In the last edition, there were several countries, including Mozambique, that implemented major structural reforms. In this edition, there was much less major structural reform, and this was an impediment to progress in a substantial number of countries.

The average scores by World Bank income groups are presented in Table 11. The high-income country group continues to score the best on average, even though its average declined slightly from 2020 to 2022, followed by the upper-middle income country group. Notably, the low-income country group average has overtaken the low-middle group, which results from both more strong improvements among those countries and a decline in the lower-middle income average.

Figure 9 Tax structure scores, 2022



Note: Countries in gray lack available data on this measure.

Table 10 Average tax structure scores, globally and by WHO region, 2022

Region	AFR	AMR	EMR	EUR	SEAR	WPR	Global
Score **Change 2020–2022**	2.98 (+0.14)	3.29 (-0.30)	1.24 (-0.11)	3.63 (+0.05)	1.18 (+0.08)	2.68 (+0.10)	2.91 (+0.04)

Table 11 Average tax structure scores, globally and by World Bank income group, 2022

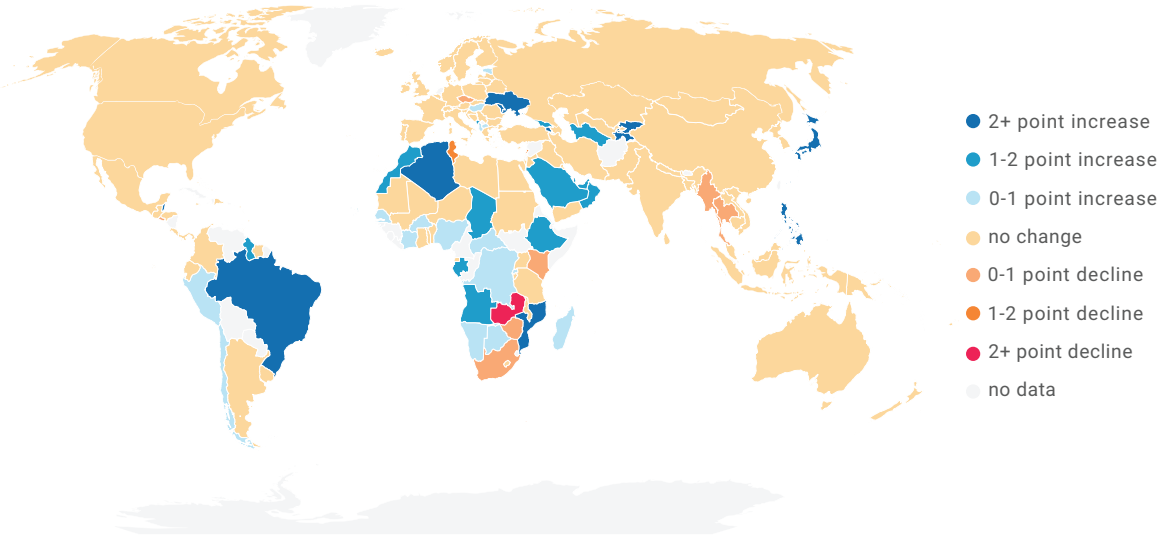
Income group	Low	Lower-middle	Upper-middle	High	Global
Score	2.67	2.38	3.02	3.38	2.91
Change 2020–2022	(+0.45)	(-0.22)	(+0.15)	(-0.06)	(+0.04)

Change Over Time

As demonstrated in Figure 10 below, tax structure scores have improved in some countries, rising from a global average score of 2.46 in 2014 to 2.88 in 2020 and to 2.91 in 2022. Most countries have not changed their tax structures in the last two years. The most significant changes to tax structure were implemented in Armenia, Belize, Kyrgyzstan, Mozambique, Philippines, Republic of Moldova, and Ukraine. An additional 37 countries saw improvements in their tax structure score in the longer 2014 to 2022 time frame. A common improvement was to eliminate a tiered structure in favor of one that treats cigarettes uniformly. Other key improvements that higher-performing countries implemented were automatic adjustments of their specific tax to keep up with or outpace inflation and/or economic growth, and shifting to retail price as the base for an ad valorem component of the tax.

In contrast, thirteen countries saw their tax structure score fall from 2014 to 2022, including Kenya (reinstatement of a tiered specific tax in 2015), and Thailand (replacement of a uniform ad valorem tax with a tiered ad valorem tax based on retail price). The largest score declines were seen by Zambia and Lebanon. For Lebanon, the decline in score is due to the government introducing an exemption from the excise tax on tobacco for local producers in this period, likely designed to discourage imports and consumption of them. Not surprisingly, the local brands are the most-sold brands, so there is effectively no excise tax. Thus, Lebanon received a score of zero for its tax structure. Zambia also recently introduced a tiered tax structure.

Figure 10 Changes in countries' tax structure scores, 2014–2022



Note: Countries in gray lack available data on this measure.

VII Limitations

The four-component measure developed in this report has several limitations. It does not include a measure of the effectiveness of tax administration, which is critical for minimizing tax avoidance and evasion. As a result, the Scorecard may overstate the strength of tax systems in some countries with high taxes and prices, falling affordability, and good tax structures. To some extent, the tax structure component will capture aspects of tax administration, given that simple uniform specific excise taxes are easier to administer and create fewer opportunities for tax avoidance and evasion (in other words, illicit trade), but this component will miss other key aspects of tax administration.

A second limitation is the focus on cigarette taxation, which is the direct result of a lack of comprehensive and reliable data on the taxation of other tobacco products. Even obtaining prices systematically across countries and time is difficult. The issue of other tobacco products—including bidis, smokeless tobacco, and water pipe tobacco—is of particular importance for countries in which their consumption is high. Similarly, the Scorecard does not account for newer products like electronic cigarettes and heated tobacco products. To the extent that taxes and prices on these non-cigarette products are low—relative to cigarette taxes and prices—there will be opportunities for substitution to the relatively cheaper products, reducing the health and revenue benefits of effective cigarette taxes.

Several of the components that comprise the overall score—including price, changes in affordability, and tax shares—are limited to the most-sold brand of cigarettes in each country. As a result, they do not reflect the variability in cigarette prices and the opportunities for smokers to switch to cheaper brands as cigarette taxes and prices rise. Again, this is partially, but not fully, captured by the tax structure component, given that the tax structures that score highest are those that reduce variability in prices across cigarette brands.

Additionally, some components are highly dependent on cigarette companies' pricing strategies. To the extent that cigarette companies raise prices by more than the amount of a tax increase—behavior typically referred to as "over-shifting"— the tax share component may not fully reflect the tax increases implemented in several countries. Alternatively, some countries may score well on the affordability component, despite modest cigarette tax increases, if cigarette companies are increasing prices by much more than taxes are rising. Public health in these countries will often still benefit from the higher prices because consumption will likely go down, but most of the difference in these new prices will go to companies' profits rather than government tax revenues. Similarly, if industry producer prices are very low to start, tax shares can be very high, but retail prices can remain low, and cigarettes can be highly affordable. To some extent, the multiple components of the overall score address some of these limitations, albeit imperfectly.

Finally, the thresholds used in determining the scores for the individual components are to some extent arbitrary. That said, these thresholds are in part based on relevant recommendations and empirical evidence, as well as on the distribution of the data for each component. While changes in the thresholds would change the component-specific and overall scores, changes would have less impact on the relative scores (among countries and/or over time).

Despite these limitations, this Scorecard provides the most comprehensive assessment of national cigarette tax systems to date. As more comprehensive, consistently collected data on tax administration, other tobacco product taxes, and other factors become available, the Scorecard will be refined and improved.

Conclusion VIII

This edition of the Scorecard shows that, overall, scores have decreased slightly since the second edition released in 2021, suggesting that tobacco tax policies have become slightly less effective on average. From 2014 to 2020, the global average score rose from 1.89 (out of 5.00) to 2.25, but it has dropped back to 1.99 according to 2022 data. The previous Scorecard revealed that from 2018 to 2020, the average overall scores across all WHO regions and country income groups showed improvement, but this edition shows that from 2020 to 2022 every region's average overall score decreased, while only the low-income country income group's overall score increased (and only slightly). In 2020, the second edition noted that not even half of countries (77 of the 170) for which data were available scored 2.50 or higher out of a maximum of five points, but in this edition that number fell to 68. These uneven reforms indicate a largely lost opportunity to improve public health and help engender sustainable economic growth.

The small improvements in two of the four component scores—tax share of price and tax structure—were not sufficient to lead to an increase in the average overall score globally or in any individual region. The large shift in the change in affordability component in the wrong direction—in many countries, cigarette affordability is not changing or cigarettes are becoming more affordable— is by far the most troubling for public health. Clearly, governments are not increasing taxes sufficiently to affect prices enough to drive the changes in affordability that decades of evidence have demonstrated will drive down consumption. The authors acknowledge that the context of the previous (2nd) edition was undoubtedly unusual because of the brief but very substantial and widespread economic crisis that stemmed from the initial COVID-19-related lockdowns. In this edition, the post-pandemic economic recovery—often rapid— is likely affecting some of these results. The recovery has included widespread inflationary pressures, which wreak some havoc on pricing and also governments' will to raise taxes. In the end, however, the importance of a solid tax structure is irrefutable as the foundation for effective tobacco tax policy, and it is only in countries with regular and sufficient tax increases (that is, outpacing inflation and economic growth) where cigarettes will become less affordable.

Though the FCTC's overwhelming adoption globally has been a great victory for public health, the slow and uneven progress on Article 6 is problematic. The lack of implementation of effective cigarette tax policies, combined in some countries with strategic pricing by the tobacco industry, are impeding progress towards the achievement of the FCTC's goal of ending the global tobacco epidemic. Hopefully, through systematic monitoring and publications such as this Scorecard, governments will see their shortcomings in the context of global consensus on best practices and act vigorously to accelerate progress in cigarette tax policies, so that the full health and revenue potential of Article 6 of the FCTC can be realized.

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Appendices

Appendix Table 1 Overall ranking of cigarette tax scores, 2022

Country	Overall score (2022)	Country	Overall score (2022)
France	4.13	Gambia	2.88
Mauritius	4.13	Greece	2.88
Finland	3.75	Israel	2.88
Australia	3.63	Latvia	2.88
New Zealand	3.63	Romania	2.88
North Macedonia	3.63	Samoa	2.88
Philippines	3.63	Slovakia	2.88
Colombia	3.50	Slovenia	2.88
Japan	3.50	Bahamas	2.75
Nicaragua	3.38	Botswana	2.75
United Kingdom of Great Britain and Northern Ireland	3.38	Italy	2.75
Czechia	3.25	Lithuania	2.75
Ecuador	3.25	Mozambique	2.75
Ireland	3.25	Portugal	2.75
Hungary	3.13	Sweden	2.75
Malta	3.13	Vanuatu	2.75
Seychelles	3.13	Albania	2.63
Singapore	3.13	Bosnia and Herzegovina	2.63
Canada	3.00	Bulgaria	2.63
Estonia	3.00	Croatia	2.63
Eswatini	3.00	Germany	2.63
Kyrgyzstan	3.00	Honduras	2.63
Montenegro	3.00	Iceland	2.63
Netherlands (Kingdom of the)	3.00	Liberia	2.63
Belgium	2.88	Panama	2.63
Chile	2.88	Peru	2.63
Denmark	2.88	Spain	2.63
Fiji	2.88	Türkiye	2.63
		Tuvalu	2.63

Appendix Table 1 Overall ranking of cigarette tax scores, 2022

Country	Overall score (2022)	Country	Overall score (2022)
Bahrain	2.50	Algeria	1.88
Kenya	2.50	Argentina	1.88
Malaysia	2.50	Barbados	1.88
Norway	2.50	El Salvador	1.88
Poland	2.50	Indonesia	1.88
Republic of Korea	2.50	Papua New Guinea	1.88
Republic of Moldova	2.50	Thailand	1.88
Saudi Arabia	2.50	Brazil	1.75
Serbia	2.50	Comoros	1.75
Suriname	2.50	Kiribati	1.75
Switzerland	2.50	Sudan	1.75
Austria	2.38	Tajikistan	1.75
Cyprus	2.38	Ethiopia	1.63
Dominican Republic	2.38	Kazakhstan	1.63
Jamaica	2.38	Malawi	1.63
Lesotho	2.38	Nauru	1.63
Mexico	2.38	Rwanda	1.63
Namibia	2.38	Cabo Verde	1.50
Sri Lanka	2.38	Dominica	1.50
Madagascar	2.25	Egypt	1.50
Morocco	2.25	Guyana	1.50
Oman	2.25	India	1.50
United Arab Emirates	2.25	Mongolia	1.50
Uruguay	2.25	Saint Vincent and the Grenadines	1.50
Armenia	2.13	Sao Tome and Principe	1.50
Costa Rica	2.13	Trinidad and Tobago	1.50
Georgia	2.13	Burundi	1.38
Jordan	2.13	Cameroon	1.38
Luxembourg	2.13	Chad	1.38
Qatar	2.13	Gabon	1.38
Russian Federation	2.13	Guatemala	1.38
South Africa	2.13	Belize	1.25
Nepal	2.00	Maldives	1.25
Saint Lucia	2.00	Nigeria	1.25
Timor-Leste	2.00	Tunisia	1.25
United States of America	2.00	Uganda	1.25

Appendix Table 1 Overall ranking of cigarette tax scores, 2022

Country	Overall score (2022)	Country	Overall score (2022)
Bangladesh	1.13	Paraguay	0.50
Central African Republic	1.13	Zambia	0.50
Grenada	1.13	Iran (Islamic Republic of)	0.25
Senegal	1.13	Kuwait	0.25
Uzbekistan	1.13	Lao People's Democratic Republic	0.25
Saint Kitts and Nevis	1.00	Libya	0.25
Azerbaijan	0.88	Marshall Islands	0.25
Burkina Faso	0.88	Iraq	0.00
China	0.88	Afghanistan	.
Côte d'Ivoire	0.88	Andorra	.
Democratic Republic of the Congo	0.88	Bhutan	.
Pakistan	0.88	Brunei Darussalam	.
Angola	0.75	Cook Islands	.
Belarus	0.75	Cuba	.
Benin	0.75	Democratic People's Republic of Korea	.
Bolivia (Plurinational State of)	0.75	Djibouti	.
Ghana	0.75	Eritrea	.
Mauritania	0.75	Guinea	.
Micronesia (Federated States of)	0.75	Lebanon	.
Myanmar	0.75	Monaco	.
Solomon Islands	0.75	Niue	.
Togo	0.75	Palau	.
United Republic of Tanzania	0.75	San Marino	.
Viet Nam	0.75	Sierra Leone	.
Zimbabwe	0.75	Somalia	.
Niger	0.63	South Sudan	.
Antigua and Barbuda	0.50	Syrian Arab Republic	.
Cambodia	0.50	Tonga	.
Congo	0.50	Turkmenistan	.
Equatorial Guinea	0.50	Ukraine	.
Guinea-Bissau	0.50	Venezuela (Bolivarian Republic of)	.
Haiti	0.50	Yemen	.
Mali	0.50		

* Note: For overall country scores marked by (.) there are insufficient data.

Appendix Table 2 Overall and component cigarette tax scores by country, 2022

Country	2022				
	Absolute price	Affordability change	Tax share	Tax structure	Overall score
Afghanistan	.	0	.	.	.
Albania	2	0*	3.5	5	2.63
Algeria	3	0	0.5	4	1.88
Andorra	.	0	5.0	4	.
Angola	1	0	0.0	2	0.75
Antigua and Barbuda	2	0	0.0	0	0.50
Argentina	1	0	4.5	2	1.88
Armenia	2	0*	1.5	5	2.13
Australia	5	0	4.5	5	3.63
Austria	3	0	3.5	3	2.38
Azerbaijan	1	0	1.5	1	0.88
Bahamas	5	0	2.0	4	2.75
Bahrain	5	0	3.0	2	2.50
Bangladesh	1	0	2.5	1	1.13
Barbados	3	0	0.5	4	1.88
Belarus	0	0*	2.0	1	0.75
Belgium	4	0	4.5	3	2.88
Belize	1	0	0.0	4	1.25
Benin	1	0*	0.0	2	0.75
Bhutan	.	0	0.0	2	.
Bolivia (Plurinational State of)	2	0	0.0	1	0.75
Bosnia and Herzegovina	3	0	4.5	3	2.63
Botswana	4	0	2.0	5	2.75
Brazil	0	0*	3.0	4	1.75
Brunei Darussalam	.	.	.	.	.
Bulgaria	2	0*	4.5	4	2.63
Burkina Faso	1	0	0.5	2	0.88
Burundi	1	0	0.5	4	1.38
Cabo Verde	2	0	0.0	4	1.50
Cambodia	0	0*	0.0	2	0.50
Cameroon	1	0	0.5	4	1.38
Canada	4	0	3.0	5	3.00
Central African Republic	1	0	0.5	3	1.13
Chad	0	0	1.5	4	1.38
Chile	3	0	4.5	4	2.88
China	1	0*	1.5	1	0.88
Colombia	2	5	3.0	4	3.50
Comoros	1	0	4.0	2	1.75
Congo	0	0	0.0	2	0.50
Cook Islands	.	.	4.0	4	.

Appendix Table 2 Overall and component cigarette tax scores by country, 2022

Country	2022				
	Absolute price	Affordability change	Tax share	Tax structure	Overall score
Costa Rica	2	0	2.5	4	2.13
Croatia	3	0*	4.5	3	2.63
Cuba	.	0	0.0	0	.
Cyprus	3	0*	3.5	3	2.38
Czechia	4	2	4.0	3	3.25
Côte d'Ivoire	1	0*	0.5	2	0.88
Democratic People's Republic of Korea	.	.	0.0	0	.
Democratic Republic of the Congo	0	0*	1.5	2	0.88
Denmark	3	0	4.5	4	2.88
Djibouti	.	.	.	.	.
Dominica	1	1	0.0	4	1.50
Dominican Republic	5	0	0.5	4	2.38
Ecuador	5	0	3.0	5	3.25
Egypt	1	0*	4.0	1	1.50
El Salvador	3	0	1.5	3	1.88
Equatorial Guinea	0	0	0.0	2	0.50
Eritrea	.	0	.	.	.
Estonia	3	0*	5.0	4	3.00
Eswatini	3	2	2.0	5	3.00
Ethiopia	1	0	1.5	4	1.63
Fiji	5	5	0.5	1	2.88
Finland	4	3	5.0	3	3.75
France	5	4	4.5	3	4.13
Gabon	1	0	0.5	4	1.38
Gambia	2	4	1.5	4	2.88
Georgia	2	0	3.5	3	2.13
Germany	4	0	2.5	4	2.63
Ghana	1	0	0.0	2	0.75
Greece	3	0	4.5	4	2.88
Grenada	2	0*	0.5	2	1.13
Guatemala	2	0*	1.5	2	1.38
Guinea	.	0	.	.	.
Guinea-Bissau	0	0*	0.0	2	0.50
Guyana	2	0*	0.0	4	1.50
Haiti	1	0	0.0	1	0.50
Honduras	2	3	0.5	5	2.63
Hungary	5	0	3.5	4	3.13
Iceland	4	0	2.5	4	2.63
India	3	0*	2.0	1	1.50

Appendix Table 2 Overall and component cigarette tax scores by country, 2022

Country	2022				
	Absolute price	Affordability change	Tax share	Tax structure	Overall score
Indonesia	3	0	3.5	1	1.88
Iran (Islamic Republic of)	1	0	0.0	0	0.25
Iraq	0	0	0.0	0	0.00
Ireland	5	0*	4.0	4	3.25
Israel	4	0*	4.5	3	2.88
Italy	4	0	4.0	3	2.75
Jamaica	5	0	0.5	4	2.38
Japan	3	4	3.0	4	3.50
Jordan	3	0	4.5	1	2.13
Kazakhstan	1	0	1.5	4	1.63
Kenya	4	5	0.0	1	2.50
Kiribati	1	0*	2.0	4	1.75
Kuwait	1	0	0.0	0	0.25
Kyrgyzstan	2	3	2.0	5	3.00
Lao People's Democratic Republic	0	0*	0.0	1	0.25
Latvia	3	0	4.5	4	2.88
Lebanon	.	0	0.0	0	.
Lesotho	3	0	1.5	5	2.38
Liberia	1	5	0.5	4	2.63
Libya	1	0	0.0	0	0.25
Lithuania	3	0	4.0	4	2.75
Luxembourg	2	0*	3.5	3	2.13
Madagascar	1	0*	5.0	3	2.25
Malawi	1	0	1.5	4	1.63
Malaysia	4	0*	2.0	4	2.50
Maldives	5	0	0.0	0	1.25
Mali	1	0*	0.0	1	0.50
Malta	4	0	4.5	4	3.13
Marshall Islands	0	0*	1.0	0	0.25
Mauritania	1	0	0.0	2	0.75
Mauritius	5	3	4.5	4	4.13
Mexico	3	0	3.5	3	2.38
Micronesia (Federated States of)	1	1	1.0	0	0.75
Monaco	.	0	.	.	.
Mongolia	1	0*	1.0	4	1.50
Montenegro	3	0	4.0	5	3.00
Morocco	2	0	4.0	3	2.25
Mozambique	1	5	0.0	5	2.75
Myanmar	1	0	1.0	1	0.75
Namibia	3	0	1.5	5	2.38

Appendix Table 2 Overall and component cigarette tax scores by country, 2022

Country	2022				
	Absolute price	Affordability change	Tax share	Tax structure	Overall score
Nauru	5	1	0.5	0	1.63
Nepal	4	3	0.0	1	2.00
Netherlands (Kingdom of the)	4	0	4.0	4	3.00
New Zealand	5	0	4.5	5	3.63
Nicaragua	4	0	4.5	5	3.38
Niger	0	0*	0.5	2	0.63
Nigeria	1	0	1.0	3	1.25
Niue	.	.	.	.	.
North Macedonia	2	3	4.5	5	3.63
Norway	4	0	2.0	4	2.50
Oman	4	0	3.0	2	2.25
Pakistan	1	0	1.5	1	0.88
Palau	.	1	4.5	4	.
Panama	5	1	2.5	2	2.63
Papua New Guinea	3	0*	3.5	1	1.88
Paraguay	0	0	0.0	2	0.50
Peru	2	0	3.5	5	2.63
Philippines	3	5	1.5	5	3.63
Poland	3	0*	4.0	3	2.50
Portugal	3	0*	4.0	4	2.75
Qatar	3	0	3.5	2	2.13
Republic of Korea	2	0*	4.0	4	2.50
Republic of Moldova	2	0	3.0	5	2.50
Romania	4	0*	3.5	4	2.88
Russian Federation	2	0	2.5	4	2.13
Rwanda	1	0	2.5	3	1.63
Saint Kitts and Nevis	2	0	0.0	2	1.00
Saint Lucia	2	1	1.0	4	2.00
Saint Vincent and the Grenadines	2	0	0.0	4	1.50
Samoa	3	3	1.5	4	2.88
San Marino	.	0	4.5	2	.
Sao Tome and Principe	1	1	0.0	4	1.50
Saudi Arabia	5	0	3.0	2	2.50
Senegal	1	0	1.5	2	1.13
Serbia	3	0	4.0	3	2.50
Seychelles	5	0	3.5	4	3.13
Sierra Leone	.	3	.	.	.
Singapore	5	0	3.5	4	3.13
Slovakia	3	0	4.5	4	2.88
Slovenia	3	0*	4.5	4	2.88

Appendix Table 2 Overall and component cigarette tax scores by country, 2022

Country	2022				
	Absolute price	Affordability change	Tax share	Tax structure	Overall score
Solomon Islands	1	0	1.0	1	0.75
Somalia	.	0*	.	.	.
South Africa	2	0	2.5	4	2.13
South Sudan	.	0*	2.0	2	.
Spain	3	0	4.5	3	2.63
Sri Lanka	5	0	3.5	1	2.38
Sudan	1	0	4.0	2	1.75
Suriname	4	0	2.0	4	2.50
Sweden	3	0*	3.0	5	2.75
Switzerland	3	0	3.0	4	2.50
Syrian Arab Republic	.	0	.	.	.
Tajikistan	1	0	2.0	4	1.75
Thailand	2	0	4.5	1	1.88
Timor-Leste	2	0	2.0	4	2.00
Togo	1	0	0.0	2	0.75
Tonga	.	4	4.0	1	.
Trinidad and Tobago	2	0	0.0	4	1.50
Tunisia	1	0	3.0	1	1.25
Türkiye	3	0	4.5	3	2.63
Turkmenistan	.	5	0.0	4	.
Tuvalu	3	5	0.5	2	2.63
Uganda	1	3	0.0	1	1.25
Ukraine	.	5	3.0	5	.
United Arab Emirates	4	0	3.0	2	2.25
United Kingdom of Great Britain and Northern Ireland	5	0	4.5	4	3.38
United Republic of Tanzania	2	0	0.0	1	0.75
United States of America	3	0	1.0	4	2.00
Uruguay	2	0	3.0	4	2.25
Uzbekistan	1	0	2.5	1	1.13
Vanuatu	3	0	4.0	4	2.75
Venezuela (Bolivarian Republic of)	.	.	4.0	2	.
Viet Nam	1	0*	0.0	2	0.75
Yemen	.	4	2.5	2	.
Zambia	1	0*	0.0	1	0.50
Zimbabwe	0	0	0.0	3	0.75

* Indicates significant increases in cigarette affordability (no "*" means no change or change that is not statistically significant—see text for more information).
Note: For overall country scores marked by (.) there are insufficient data.

Appendix Table 3 Overall cigarette tax scores by country: 2014, 2016, 2018, 2020, and 2022

Country	Overall score				
	2014	2016	2018	2020	2022
Afghanistan	0.00	0.25	0.25	0.00	.
Albania	2.88	3.00	2.25	2.63	2.63
Algeria	0.63	2.13	2.25	2.38	1.88
Andorra	.	.	.	.	.
Angola	0.50	.	0.50	2.25	0.75
Antigua and Barbuda	0.75	0.25	0.25	0.75	0.50
Argentina	1.63	2.13	2.13	2.13	1.88
Armenia	0.75	0.88	1.13	1.88	2.13
Australia	4.13	4.25	4.63	4.50	3.63
Austria	3.13	3.00	2.50	2.38	2.38
Azerbaijan	0.75	3.00	0.63	0.88	0.88
Bahamas	3.63	3.75	.	2.75	2.75
Bahrain	0.75	1.25	3.88	3.75	2.50
Bangladesh	0.88	1.13	2.38	2.38	1.13
Barbados	2.63	2.63	2.13	.	1.88
Belarus	0.63	0.63	0.63	0.75	0.75
Belgium	3.50	3.25	3.25	3.25	2.88
Belize	0.38	1.38	1.50	1.50	1.25
Benin	0.75	0.75	0.75	0.75	0.75
Bhutan	.	.	.	.	.
Bolivia	1.13	1.13	0.88	0.88	0.75
Bosnia and Herzegovina	3.63	3.88	3.88	3.63	2.63
Botswana	2.38	2.13	2.63	4.13	2.75
Brazil	1.63	2.88	2.13	2.00	1.75
Brunei Darussalam	.	.	.	.	.
Bulgaria	2.88	2.63	3.00	2.88	2.63
Burkina Faso	0.50	0.50	1.63	0.88	0.88
Burundi	1.38	1.38	1.38	1.38	1.38
Cabo Verde	0.75	0.75	0.75	1.50	1.50
Cambodia	0.50	0.50	0.50	0.50	0.50
Cameroon	.	1.38	1.38	2.13	1.38
Canada	3.00	3.13	3.75	4.00	3.00
Central African Republic	0.75	.	0.88	.	1.13
Chad	0.50	0.88	1.63	2.38	1.38
Chile	2.38	3.50	3.63	3.88	2.88
China	0.88	1.00	1.00	0.88	0.88
Colombia	1.63	1.63	2.38	3.38	3.50
Comoros	1.13	1.13	1.63	1.75	1.75
Congo	0.88	1.13	2.13	2.00	0.50
Cook Islands	.	.	.	.	.

Appendix Table 3 Overall cigarette tax scores by country: 2014, 2016, 2018, 2020, and 2022

Country	Overall score				
	2014	2016	2018	2020	2022
Costa Rica	3.13	2.13	2.13	2.00	2.13
Croatia	3.50	3.25	2.50	2.63	2.63
Cuba	.	.	.	.	.
Cyprus	3.88	3.88	2.38	2.38	2.38
Czechia	3.63	3.38	3.25	3.00	3.25
Côte d'Ivoire	0.50	0.75	0.75	0.75	0.88
Democratic People's Republic of Korea	.	.	.	.	.
Democratic Republic of the Congo	0.50	0.50	0.63	0.88	0.88
Denmark	3.38	2.63	2.63	3.00	2.88
Djibouti	.	0.50	.	.	.
Dominica	1.25	1.25	1.25	1.25	1.50
Dominican Republic	2.38	2.38	2.38	2.38	2.38
Ecuador	3.63	4.75	4.38	4.63	3.25
Egypt	2.63	2.63	2.50	1.75	1.50
El Salvador	2.00	2.00	1.88	2.13	1.88
Equatorial Guinea	0.50	0.75	0.75	0.75	0.50
Eritrea	.	.	.	.	.
Estonia	3.63	2.88	2.88	3.00	3.00
Eswatini	.	2.38	2.25	2.50	3.00
Ethiopia	0.75	0.50	0.50	1.50	1.63
Fiji	1.50	1.75	2.75	2.88	2.88
Finland	3.38	3.38	3.38	3.75	3.75
France	3.63	3.63	3.63	3.88	4.13
Gabon	0.75	0.75	0.75	0.75	1.38
Gambia	2.88	2.88	2.88	3.13	2.88
Georgia	0.88	1.38	1.63	3.63	2.13
Germany	2.63	2.88	2.88	3.13	2.63
Ghana	0.75	0.75	0.75	0.75	0.75
Greece	4.13	3.88	3.88	3.88	2.88
Grenada	1.38	1.38	1.13	.	1.13
Guatemala	1.63	1.38	1.38	1.38	1.38
Guinea	.	0.50	.	0.50	.
Guinea-Bissau	.	0.75	0.75	.	0.50
Guyana	0.75	0.75	1.75	1.50	1.50
Haiti	.	.	.	.	0.50
Honduras	2.88	2.25	1.88	2.63	2.63
Hungary	3.75	3.88	2.88	2.88	3.13
Iceland	3.50	2.50	2.50	2.38	2.63
India	1.13	2.38	1.63	1.75	1.50
Indonesia	1.25	1.38	1.50	2.38	1.88

Appendix Table 3 Overall cigarette tax scores by country: 2014, 2016, 2018, 2020, and 2022

Country	Overall score				
	2014	2016	2018	2020	2022
Iran (Islamic Republic of)	0.00	1.00	0.50	2.00	0.25
Iraq	0.00	0.00	0.00	0.00	0.00
Ireland	3.25	3.25	3.25	3.38	3.25
Israel	2.88	3.88	3.63	2.88	2.88
Italy	3.50	2.50	2.75	2.75	2.75
Jamaica	2.63	2.88	3.13	3.13	2.38
Japan	2.50	1.50	1.50	2.25	3.50
Jordan	2.63	2.63	3.38	3.38	2.13
Kazakhstan	1.38	2.63	2.75	2.63	1.63
Kenya	1.13	1.63	0.88	0.88	2.50
Kiribati	2.00	1.75	1.75	1.75	1.75
Kuwait	0.50	0.75	0.75	0.75	0.25
Kyrgyzstan	0.63	0.63	2.88	3.50	3.00
Lao People's Democratic Republic	0.50	1.25	0.50	0.50	0.25
Latvia	2.75	2.88	2.88	2.88	2.88
Lebanon	1.50	1.50	0.00	0.00	.
Lesotho	2.38	.	2.13	2.38	2.38
Liberia	.	0.50	0.50	2.63	2.63
Libya	0.75	0.50	0.50	0.50	0.25
Lithuania	2.50	2.75	3.38	3.38	2.75
Luxembourg	3.13	2.88	2.38	2.38	2.13
Madagascar	1.88	2.13	1.88	1.88	2.25
Malawi	2.25	.	.	.	1.63
Malaysia	2.50	2.75	2.88	2.75	2.50
Maldives	1.00	0.75	1.13	1.50	1.25
Mali	0.50	0.50	0.50	0.50	0.50
Malta	2.88	3.13	3.13	3.13	3.13
Marshall Islands	0.63	0.50	0.50	0.50	0.25
Mauritania	1.00	0.75	0.75	0.75	0.75
Mauritius	3.88	2.88	3.25	3.13	4.13
Mexico	2.88	2.13	2.13	2.38	2.38
Micronesia (Federated States of)	0.63	0.88	0.75	0.75	0.75
Monaco	.	.	.	.	.
Mongolia	2.13	1.75	1.63	1.63	1.50
Montenegro	3.63	3.38	3.88	3.50	3.00
Morocco	1.63	1.63	2.38	2.63	2.25
Mozambique	0.75	0.25	0.50	2.50	2.75
Myanmar	1.38	0.75	0.63	1.00	0.75
Namibia	1.88	2.00	2.00	2.13	2.38
Nauru	.	1.25	1.25	1.63	1.63

Appendix Table 3 Overall cigarette tax scores by country: 2014, 2016, 2018, 2020, and 2022

Country	Overall score				
	2014	2016	2018	2020	2022
Nepal	0.75	1.00	1.75	2.00	2.00
Netherlands	3.88	3.88	3.13	3.00	3.00
New Zealand	4.63	4.75	4.38	4.63	3.63
Nicaragua	.	1.63	1.88	2.88	3.38
Niger	0.75	0.63	0.50	0.50	0.63
Nigeria	0.75	0.75	0.75	1.25	1.25
Niue	.	.	.	.	.
North Macedonia	2.13	2.38	2.88	3.38	3.63
Norway	3.75	3.75	3.63	3.63	2.50
Oman	0.50	0.75	0.75	3.75	2.25
Pakistan	0.88	1.13	0.75	0.88	0.88
Palau	.	2.88	3.88	3.63	.
Panama	2.13	2.13	2.13	2.13	2.63
Papua New Guinea	1.13	1.63	1.50	1.50	1.88
Paraguay	.	0.50	0.50	0.50	0.50
Peru	1.38	3.13	3.63	2.88	2.63
Philippines	1.25	2.50	3.75	3.63	3.63
Poland	4.13	3.75	2.75	2.75	2.50
Portugal	3.88	2.88	2.88	2.75	2.75
Qatar	0.50	0.75	0.63	3.88	2.13
Republic of Korea	2.00	2.50	2.50	2.50	2.50
Republic of Moldova	0.88	1.13	1.38	3.13	2.50
Romania	4.50	3.13	3.38	3.13	2.88
Russian Federation	2.63	3.13	3.38	3.50	2.13
Rwanda	0.75	1.63	1.63	1.63	1.63
Saint Kitts and Nevis	1.00	1.00	1.00	.	1.00
Saint Lucia	1.88	2.13	1.88	2.13	2.00
Saint Vincent and the Grenadines	1.25	1.25	1.75	1.50	1.50
Samoa	2.88	2.38	2.88	2.88	2.88
San Marino	.	.	.	.	.
Sao Tome and Principe	0.75	0.75	1.50	1.25	1.50
Saudi Arabia	0.75	1.25	3.75	3.75	2.50
Senegal	0.63	0.88	1.88	0.88	1.13
Serbia	3.63	3.63	3.88	3.25	2.50
Seychelles	3.38	3.13	3.13	4.13	3.13
Sierra Leone	0.25	0.00	1.25	1.25	.
Singapore	3.13	3.13	3.25	3.25	3.13
Slovakia	3.38	3.38	2.88	2.75	2.88
Slovenia	4.13	3.63	2.88	2.88	2.88
Solomon Islands	0.75	0.75	0.50	.	0.75

Appendix Table 3 Overall cigarette tax scores by country: 2014, 2016, 2018, 2020, and 2022

Country	Overall score				
	2014	2016	2018	2020	2022
Somalia	.	.	0.00	0.00	.
South Africa	2.38	1.88	2.25	2.38	2.13
South Sudan	.	.	.	.	.
Spain	3.88	2.63	2.88	2.63	2.63
Sri Lanka	2.38	2.13	3.38	3.63	2.38
Sudan	2.00	2.00	2.00	1.75	1.75
Suriname	2.13	2.00	3.63	3.50	2.50
Sweden	3.25	3.00	2.75	2.75	2.75
Switzerland	3.25	3.00	2.50	2.50	2.50
Syrian Arab Republic	.	.	.	.	.
Tajikistan	0.50	0.50	2.38	1.38	1.75
Thailand	2.00	2.25	1.75	1.75	1.88
Timor-Leste	1.38	1.25	1.50	1.50	2.00
Togo	0.50	0.75	0.75	1.88	0.75
Tonga	1.50	2.75	3.63	3.75	.
Trinidad and Tobago	2.75	3.00	3.00	3.00	1.50
Tunisia	2.00	1.75	1.75	1.75	1.25
Turkey	3.63	2.63	2.88	2.88	2.63
Turkmenistan	1.50	2.00	3.00	.	.
Tuvalu	0.75	1.25	1.00	0.88	2.63
Uganda	0.63	0.75	0.75	1.25	1.25
Ukraine	1.63	2.75	3.38	3.75	.
United Arab Emirates	0.25	0.75	3.50	3.75	2.25
United Kingdom of Great Britain and Northern Ireland	3.88	3.88	3.63	3.63	3.38
United Republic of Tanzania	0.75	0.50	0.50	0.75	0.75
United States of America	2.00	2.00	2.00	2.00	2.00
Uruguay	2.25	2.25	2.25	3.25	2.25
Uzbekistan	0.50	0.63	0.63	2.13	1.13
Vanuatu	.	2.38	2.13	2.13	2.75
Venezuela (Bolivarian Republic of)	.	.	.	.	.
Viet Nam	0.75	0.88	0.88	0.88	0.75
Yemen	.	.	.	.	.
Zambia	1.25	1.63	1.38	1.38	0.50
Zimbabwe	1.38	2.63	1.13	1.00	0.75

Note: For overall country scores marked by (.) there are insufficient data.

2020 Score Updates

Countries with updates in their 2020 component scores are presented below. Since the overall score is the average of the four component scores, the overall scores for these countries have also been updated accordingly. The scores are revised based on the updated information in the most recent *RGTE* data (2023) and other data sources.

Appendix Table 4 2020 Score updates

2020 price score updated	2020 affordability change score updated
Albania	Andorra
Comoros	Argentina
Costa Rica	Burkina Faso
Gambia	Canada
Guyana	Chad
Japan	Cook Islands
Kuwait	Czechia
Lebanon	Finland
Libya	France
Marshall Islands	Gambia
Micronesia (Federated States of)	India
Namibia	Ireland
Nauru	Nepal
Nepal	Panama
Nicaragua	Peru
Oman	Republic of Moldova
Pakistan	Sierra Leone
Palau	Slovenia
Papua New Guinea	Somalia
Russian Federation	Syrian Arab Republic
Samoa	Trinidad and Tobago
Sierra Leone	Tuvalu
Suriname	United Kingdom of Great Britain and Northern Ireland
Tonga	Uzbekistan
Tuvalu	Vanuatu
United Arab Emirates	
Zimbabwe	

Appendix Table 4 2020 Score updates

2020 tax share score updated	2020 tax structure change score updated
Argentina	Australia
Bahrain	Yemen
Bangladesh	
Finland	
Liberia	
Maldives	
Montenegro	
Nicaragua	
South Sudan	
Ukraine	
Vanuatu	
Viet Nam	
Yemen	

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