

Health Taxes and the IMF

WHAT 15 YEARS OF POLICY ADVICE REVEAL

 Sanjeev Gupta and Ainhoa Petri-Hidalgo

Abstract

Noncommunicable diseases (NCDs) impose immense health and economic costs worldwide, with a disproportionate burden on low- and middle-income countries. Excise taxes on tobacco, alcohol, and sugar-sweetened beverages (SSBs) are recognized as an effective policy instrument that both curbs consumption and mobilizes public revenue. Yet, actual collections fall far below potential. This paper reviews 15 years of International Monetary Fund (IMF) policy advice on health taxes (2010–2024) across bilateral surveillance, lending programs, technical assistance, and multilateral surveillance. While health policy is not part of the IMF’s direct mandate, the institution influences it indirectly through its work on the tax mix and domestic resource mobilization. Based on over 5,400 IMF documents, the analysis finds that health taxes have not been a central focus of IMF engagement—and are typically framed in fiscal, rather than health, terms. References to health taxes peaked between 2017 and 2019, particularly in program-linked conditionality, whereas technical assistance remained episodic, reflecting its demand-driven nature. IMF advice did not vary across income groups or regions, despite wide disparities in fiscal capacity and health burdens, nor was it aligned with countries’ untapped revenue potential or actual excise performance. This suggests an opportunity for the IMF to place greater emphasis on health taxes in countries with low revenue-to-GDP ratios, where they could advance domestic resource mobilization while delivering a “double dividend” of better health outcomes and higher revenues.

Health Taxes and the IMF: What 15 Years of Policy Advice Reveal

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Center for Global Development

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Introduction

Noncommunicable diseases (NCDs)—such as cardiovascular disease, cancer, diabetes, and chronic respiratory conditions—account for over 70 percent of global deaths each year. According to the WHO (2024), they also inflict major economic costs, amounting to an estimated US\$514 billion annually. A disproportionate number of these deaths—about three-quarters of all NCD deaths globally—occur in low- and middle-income countries, underscoring the urgency of addressing NCDs as a global development priority. A significant portion of this health burden stems from preventable risk factors—including tobacco use, excessive alcohol consumption, and diets high in added sugars. Excise taxes on these so-called “sin” goods offer a powerful tool to reduce harmful consumption while generating public revenue. Strengthening prevention efforts through higher excise taxes could avert over 50 million premature deaths over the next 50 years—roughly 1 million annually—and yield considerable savings in health-care spending (Task Force on Fiscal Policy for Health, 2019).

Unsurprisingly, this issue has garnered growing attention from both domestic and international policymakers. WHO consistently underscores the importance of curbing global consumption of tobacco, alcohol, and sugary products to improve public health. In parallel, both the IMF¹ and World Bank² are increasingly advocating health taxes as a dual tool: They not only promote better health outcomes but also mobilize crucial revenue in developing nations. However, implementing and designing these taxes can be particularly challenging in countries with limited administrative capacity and weak tax enforcement. In such situations, policymakers often prioritize taxes that promise higher and more reliable revenue.

This paper assesses the International Monetary Fund’s advice on health taxes over the 15-year period from January 1, 2010, to the end of 2024. The IMF provides extensive guidance on taxation to its member countries through its surveillance of national economic policies, its lending programs to countries facing macroeconomic imbalances, and its support for capacity development in tax policy and administration (see Box 1 for an overview of the IMF’s core activities and the modalities through which they are delivered). Given the duration of the period under review, the study aims to evaluate how the IMF’s advice on health taxes to member countries has evolved over time and whether it has been consistent across regions and income groups.

The paper is structured as follows: Section II outlines the economic rationale for health taxes and highlights the experience of selected countries in implementing them. Section III presents an estimate of the revenue potential from taxes on tobacco, beer, spirits, and sugar-sweetened beverages for as many IMF member countries as are available, also disaggregated by income group and region. Section IV provides an analysis of IMF advice on health taxes in the context of Article IV surveillance reports, lending programs, and capacity development support in tax policy

1 See Petit and Nagy (2016); Petit, Mansour, and Wingender (2021); Mansour, Petit, and Sawadogo (2023); and Benitez et al. (2023).

2 See Bird (2015).

and administration for its entire membership. It then assesses whether IMF advice was in any way influenced by estimates of the revenue potential of health taxes and overall performance of taxes or excises. The study also examines whether health taxes have featured in the IMF’s multilateral surveillance. Finally, Section V concludes with key findings and offers recommendations for the way forward.

Rationale for health taxes and selected country experiences

Health taxes, such as excise duties on tobacco, alcohol, and sugar-sweetened beverages (SSBs), are based on Pigouvian theory (1920). They aim to make consumers pay for the social costs of these products—like higher public health spending, lost productivity, and premature deaths—thereby aligning individual choices with broader societal well-being. For instance, tobacco-related health costs alone are estimated to exceed 1.8 percent of global GDP (Goodchild et al., 2018).

BOX 1. IMF core activities

The IMF has three core activities: surveillance of member country policies, financial assistance to countries facing macroeconomic imbalances, and capacity development. These functions are delivered through both bilateral (country-specific) and multilateral (global and regional) modalities, all aimed at fostering international monetary cooperation and financial stability. While health policy is not part of the IMF’s direct mandate, the institution can influence it indirectly through its work on the tax mix and domestic resource mobilization.

- **Surveillance:** The IMF monitors the global economy and the economic policies of its members to identify risks and recommend policies that promote stability and sustainable growth.
 - *Bilateral surveillance:* Regular assessments—or “health checks”—of individual economies, carried out through Article IV consultations. IMF staff visit the country, meet with officials, and publish reports assessing policies and offering recommendations.
 - *Multilateral surveillance:* Monitoring global and regional trends through flagship reports such as the *World Economic Outlook (WEO)*, *Global Financial Stability Report (GFSR)*, *Fiscal Monitor (FM)*, and *Regional Economic Outlooks (REO)*. These examine spillovers across countries and assess the health of the international monetary system.

- **Financial assistance:** The IMF provides financing to members facing balance-of-payments problems, giving them time to adjust policies and restore stability.
 - Common lending programs include the *Stand-By Arrangement (SBA)* and *Extended Fund Facility (EFF)*, both tied to reform commitments.
 - Emergency instruments, such as the *Rapid Financing Instrument (RFI)*, provide quick support with limited conditions in response to crises like natural disasters.
- **Capacity development:** The IMF offers technical assistance and training to help countries strengthen institutions and skills in areas such as tax administration, public financial management, central banking, and statistics. This support, provided at the country's request, underpins the effectiveness of both surveillance and lending.

The IMF organizes its work geographically through five area departments—Africa (AFR), Asia and Pacific (APD), Europe (EUR), Middle East and Central Asia (MCD), and Western Hemisphere (WHD). For analytical and policy purposes, the IMF also classifies countries by income level. Member countries are grouped into low-income developing countries (LIDCs), emerging market and middle-income economies (EMEs), and advanced economies. This classification helps tailor surveillance, program design, and technical assistance to countries' economic structures, financing needs, and institutional capacity.

Beyond correcting these “externalities,” these taxes also act as a behavioral commitment device; that is, they help tackle internalities. They help consumers, who often prioritize immediate gratification over long-term health, reduce harmful consumption by making it more expensive (Gruber & Kőszegi, 2001; Petit & Nagy, 2016). Even if these taxes disproportionately affect lower-income individuals, they can still improve overall welfare if these price-sensitive groups significantly reduce their consumption in response.

A growing body of evidence confirms both the health and financial benefits of these taxes. Studies show that increased excise taxes lead to significant drops in smoking rates, especially among young people and low-income populations (Chaloupka et al., 2012). Similar effects have been observed for alcohol and SSBs (Sassi et al., 2015). Meta-analyses reveal that even moderate tax increases can reduce consumption while boosting revenue (Summan and Laxminarayan, 2024). For example, the estimated price elasticity for cigarettes is -0.4 , for alcohol -0.5 , and for sugary drinks up to -1.6 .

Public support for “sin taxes” often depends on whether people trust how the money will be used. When the revenue is used for clear, beneficial purposes, it is easier to gain public acceptance and even increase taxes later. For instance:

- Mexico's 2014 sugary drink tax was successful because the increased revenue was specifically set aside for nutrition programs. This transparency helped build broad support and allowed for future tax increases (Colchero et al., 2016).

- Ethiopia’s 2020 tobacco tax reform faced resistance from the tobacco industry, but the government gained public backing through televised parliamentary hearings and engagement with civil society groups (Erku et al., 2023).
- In 2023, Colombia became one of the first countries in Latin America to extend health taxes beyond tobacco and alcohol by introducing a levy on ultra-processed products and SSBs, starting at 10 percent (Task Force on Fiscal Policy for Health, 2024).
- The Philippines uses a “soft earmarking” approach for its tobacco tax revenue, dedicating a portion to healthcare. This means the allocations are somewhat flexible and can be adjusted during the budget process, unlike “hard earmarking,” which involves more rigid, fixed funding (*Noncommunicable Diseases Progress Monitor 2020*, 2020).

Potential for sin taxes

In low-income developing countries (LIDCs) and emerging market economies (EMEs), revenues increased by an average of 2–4 percent of GDP between 1990 and 2011 (Benitez et al., 2023). However, progress stalled between 2012 and 2020, with tax-to-GDP ratios plateauing at about 13 percent in LIDCs and 17 percent in EMEs, and some LIDCs collecting less than 10 percent of GDP. Benitez et al. (2023) estimate that LIDCs could raise their tax-to-GDP ratios by up to 8 percent, and EMEs by around 5 percent, through tax system and institutional reforms. Central to this effort is the Value Added Tax (VAT), which has faced challenges due to exemptions and reduced rates that have diminished its effectiveness. There is also scope to strengthen personal income taxes by broadening the base and applying higher rates to capital income (e.g., interest, dividends, and capital gains). Significant additional revenue could be raised from excise duties on petroleum products, alcohol, tobacco, and unhealthy foods such as sugary drinks. These taxes should be among the first to increase in difficult times, as they do not typically slow growth or reduce employment (Task Force on Fiscal Policy for Health, 2019). Ultimately, however, the ability to levy such taxes depends on each country’s administrative capacity, as discussed below.

In this regard, a recent study (Gupta, Jalles, and Petri-Hidalgo, 2025) assesses the extent to which 97 IMF member countries are mobilizing revenues from health-related taxes and identifies the size of untapped potential. The analysis covers excises on tobacco, beer, spirits, and sugar-sweetened beverages (SSBs), using stochastic frontier methods that account for differences in income, consumption patterns, demographics, and governance. Revenue frontiers are estimated for tobacco, while rate-based frontiers (excise as a share of retail price) are used for beer, spirits, and SSBs. Actual collections are then benchmarked against these frontiers to produce “tax effort scores.”³

3 While the stochastic frontier framework is applied consistently across products, the interpretation of tax-effort scores differs. For tobacco, the revenue-based frontier reflects both (i) policy choices on statutory rates and structures and (ii) the efficiency of administration and compliance. A low score may therefore indicate under-taxation, weak enforcement, or both. For beer, spirits, and SSBs, the rate-based frontiers capture how intensively products are taxed relative to structural peers, without directly observing revenue outcomes. In these cases, “effort” reflects policy intent in rate-setting, shaped by both structural factors and political economy constraints. Consequently, effort scores for tobacco are not directly comparable with those for alcohol and SSBs, and differences should be interpreted considering these conceptual distinctions.

Key findings include:

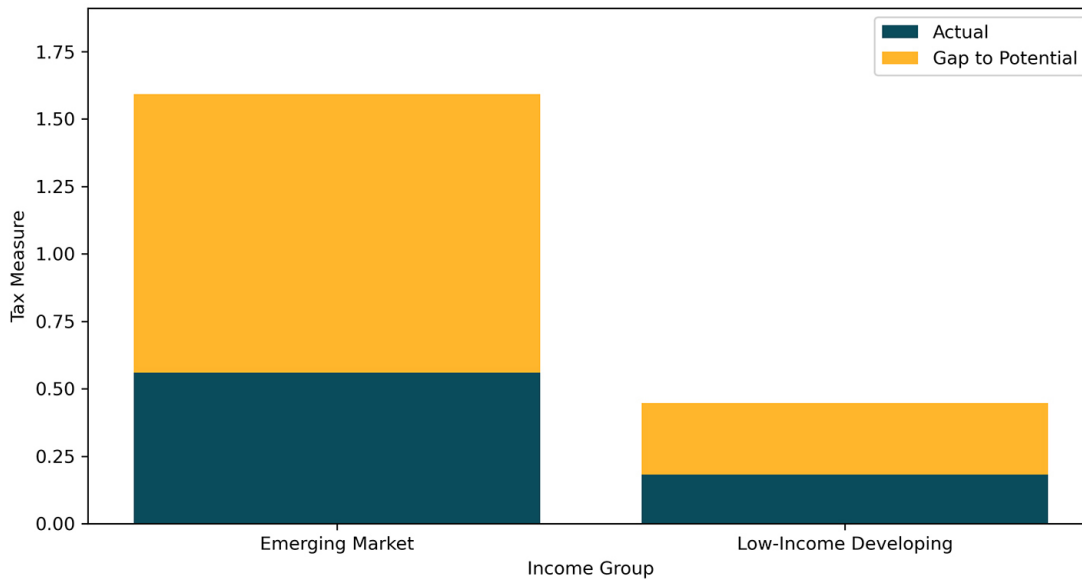
- **Tobacco:** Countries collect on average 0.4 percent of GDP in excise revenue, against a feasible 1.5 percent, leaving a gap of 1.1 percent of GDP. Countries such as Argentina, China, and Niger perform close to potential, while many low-income countries fall significantly below.
- **Beer:** On average, countries apply 35 percent of feasible excise rates. Advanced economies (e.g., Norway, Finland) perform well, while others, such as Lebanon, under-collect relative to potential.
- **Spirits:** Collections reach only one-quarter of feasible levels. Some countries, including Turkmenistan and North Macedonia, are close to the benchmark, whereas others—including high-income economies such as Japan—fall well short.
- **SSBs:** This category shows the largest shortfall, with collections averaging just 15 percent of feasible rates. Aside from a few countries (Bangladesh, Oman, Rwanda), most capture less than 10 percent of potential revenues.

The results suggest that some countries could raise additional revenue from sin taxes, provided they have sufficient administrative capacity. Policymakers must therefore weigh the relative revenue potential of sin taxes against alternatives such as the VAT when allocating limited administrative resources. Where a well-designed VAT is already performing as expected, the case for higher sin taxes is even stronger. Ultimately, the appropriate level of sin taxation is country-specific and depends on administrative capacity, which in turn is influenced by factors such as regional tax policies and the risk of smuggling from low-tax jurisdictions.

Figures A1–A4 illustrate these gaps across products and countries by income group (and by IMF departments in Appendix).⁴ Tobacco tax collections fall particularly short in EMEs and LIDCs (Latin America and the Caribbean, the Middle East and North Africa, and Sub-Saharan Africa). By contrast, advanced economies show the largest gap for beer and spirits, mainly in North America. The most pronounced shortfalls, however, are in SSB taxes, especially in EMEs—notably in Latin America and the Caribbean, and in the Middle East and North Africa.

4 The IMF divides the world into three major groups: 41 advanced economies, 96 emerging market and middle-income economies, and 58 low-income developing countries (see Statistical Appendix of Fiscal Monitor (2025)).

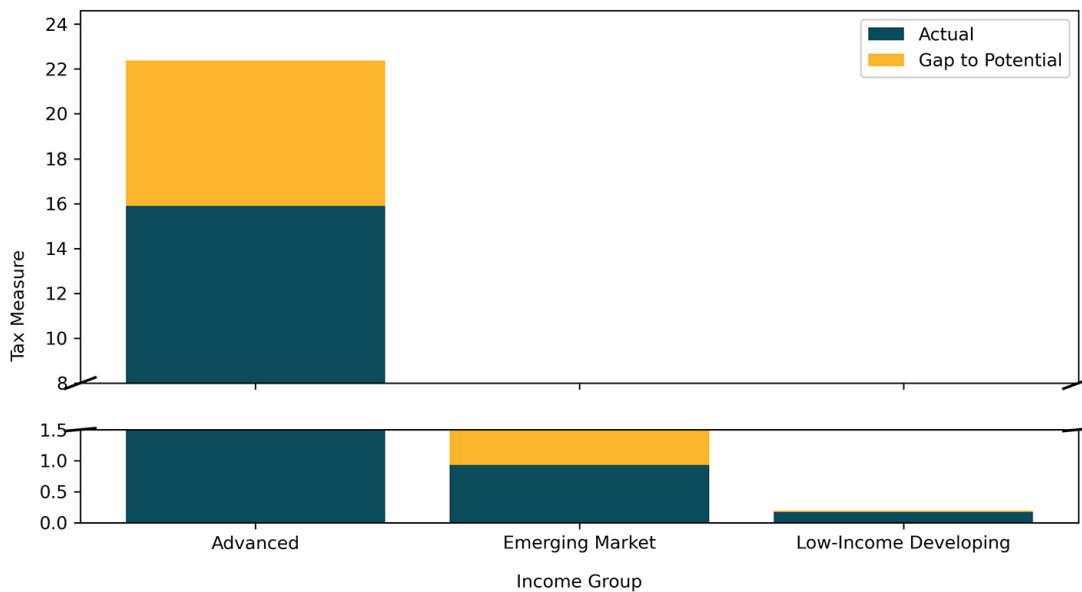
FIGURE 1. Tobacco tax: Actual vs. gap to potential by income group



Note: Data for advanced economies is not available for tobacco.

Sources: IMF Staff Country Reports and Gupta, Jalles, and Petri-Hidalgo (2025).

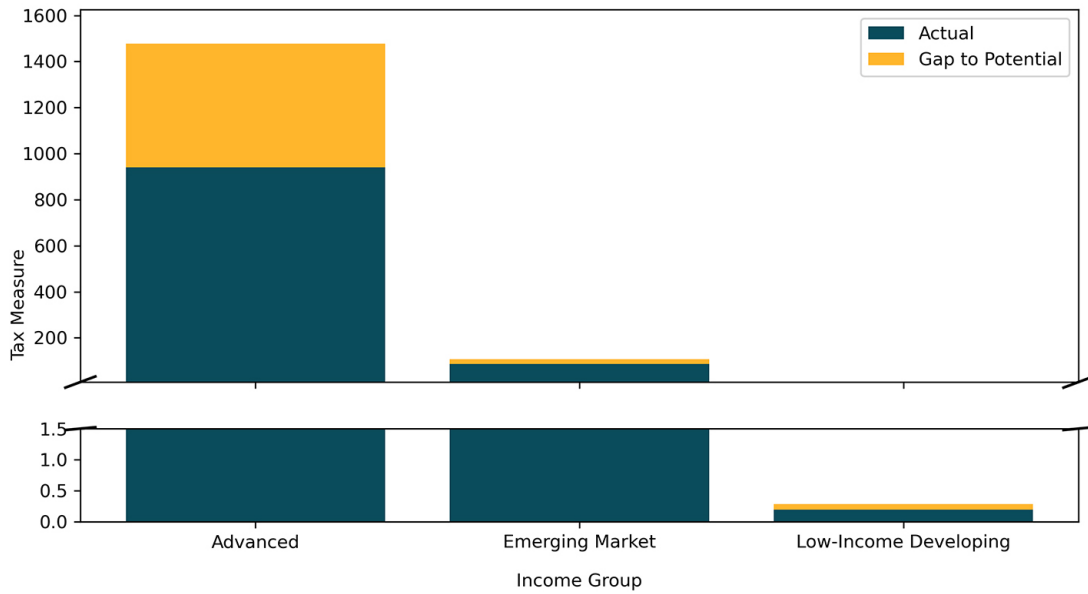
FIGURE 2. Beer tax: Actual vs. gap to potential by income group



Note: Break in the v-axis inserted to improve visibility of smaller values.

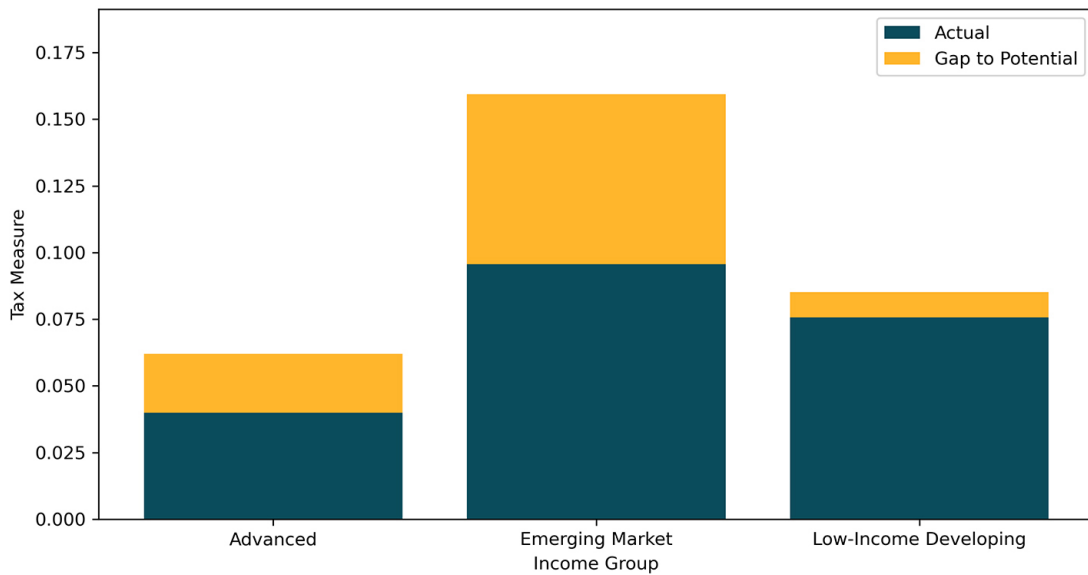
Sources: IMF Staff Country Reports and Gupta, Jalles, and Petri-Hidalgo (2025).

FIGURE 3. Spirits tax: Actual vs. gap to potential by income group



Note: Break in the v-axis inserted to improve visibility of smaller values.
 Sources: IMF Staff Country Reports and Gupta, Jalles, and Petri-Hidalgo (2025).

FIGURE 4. SSBs tax: Actual vs. gap to potential by income group



Sources: IMF Staff Country Reports and Gupta, Jalles, and Petri-Hidalgo (2025).

IMF advice on health taxes

Our study reviews key IMF documents issued over a 15-year period, from January 1, 2010, to December 31, 2024, to assess the extent and depth of IMF advice on health taxes. The review covers both the regular surveillance of member countries' economic policies and the design of economic programs in countries facing macroeconomic imbalances. One-third of IMF resources are devoted to capacity building in emerging and low-income countries, but our focus is confined to technical assistance reports on tax policy and administration.

Specifically, we examined Article IV Staff Reports and Selected Issues Papers, as well as documents related to IMF-supported programs, including letters of intent. As noted earlier, we also reviewed technical assistance reports on tax policy and administration, as well as IMF publications on multilateral surveillance (World Economic Outlook, Fiscal Monitor, and Regional Economic Outlooks). In total, our database comprised more than 5,400 IMF publications.⁵

The results are organized by IMF departmental regions: Africa (AFR), Europe (EUR), Western Hemisphere (WHD), Middle East and Central Asia (MCD), and Asia and Pacific (APD). They are also classified by income level, following IMF methodology: advanced, emerging markets, and low-income developing countries.

Our methodology involved identifying specific discussions on health taxes in the IMF documents noted above. We examined whether the documents addressed different health taxes—such as those on tobacco, alcohol, and sugary drinks. Based on this review, we constructed a country-level index with four equally weighted components. One point was assigned for a simple mention of health taxes; an additional point if the document explicitly suggested raising such taxes; another point if raising these taxes was included as a condition of the IMF program (e.g., as a structural benchmark); and finally, an additional point if IMF technical assistance in tax policy or administration explicitly recommended increases in specific health taxes. Thus, countries with an overall score of zero were excluded from the index. We use this index throughout the paper to assess the IMF's policy advice on health taxes.

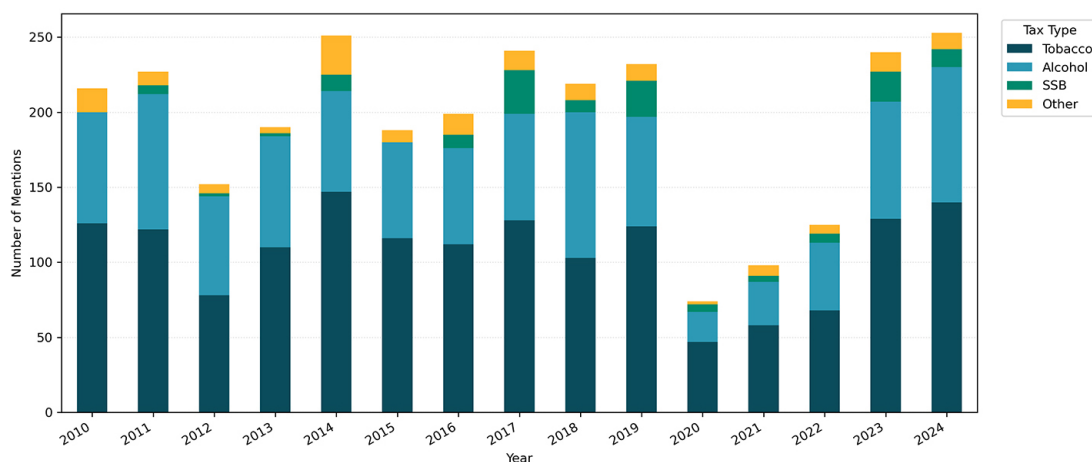
We first plotted this index against the estimated potential of sin taxes, as discussed in the previous section, to assess whether IMF advice sought to fully capture this potential. Since estimates of tax potential are available for only 97 countries due to data limitations, we also plotted the index against the actual revenue performance (revenue-to-GDP ratio and excises in relation to GDP) for all IMF member countries.

⁵ We reviewed 5,484 country reports, including program documents, 457 TA reports, and 228 multilateral surveillance reports. Not all technical assistance reports are public, as publication requires consent of member countries. Since May 2009, IMF policy has granted countries discretion over the publication of TA reports.

In addition, all multilateral surveillance documents were reviewed to assess the extent to which health taxes were discussed in these reports.

To conduct this review, we developed a Python-based text mining and classification tool to process IMF documents. The tool identifies, extracts, and codes references to health taxes, using a combination of keyword searches, proximity rules, and contextual filters to distinguish relevant fiscal advice from unrelated mentions.⁶ This approach enabled the consistent application of our four-component index across more than 5,400 IMF publications. The full code, together with implementation details, is available upon request from the authors.

FIGURE 5. Mentions of health taxes by type (2010–2024)



Notes: “Other” includes generic health-tax language and any health-tax mention not explicitly tagged as tobacco, alcohol, or SSB. Non-health excises are filtered out by the rules.

Source: IMF Staff Country Reports.

Health taxes in IMF surveillance, programs, and technical assistance to countries

Discussion of health taxes in IMF documents—spanning surveillance, program, and technical assistance work—has not followed a steady trajectory over the past fifteen-year period, instead reflecting shifting fiscal priorities. References rose steadily through the mid-2010s, peaking in 2017–2019, when excises on tobacco, alcohol, and SSBs were more frequently framed in the context of fiscal reform and revenue mobilization (Figure 5).⁷ Tobacco taxation was the most frequently discussed in IMF documents, followed by alcohol taxation. This momentum was abruptly interrupted in 2020, as the COVID-19 crisis shifted IMF advice toward emergency lending, health system

⁶ The text-mining tool was implemented in Python using *PyMuPDF* and *PyPDF2* for PDF text extraction, *NLTK* for sentence tokenization, regular expressions for pattern matching, *pandas* and *xlsxwriter* for structured outputs, and *tqdm* for progress tracking.

⁷ The number of IMF documents have varied over time from 409 in 2010 to 315 in 2024, with an average of 322 per year.

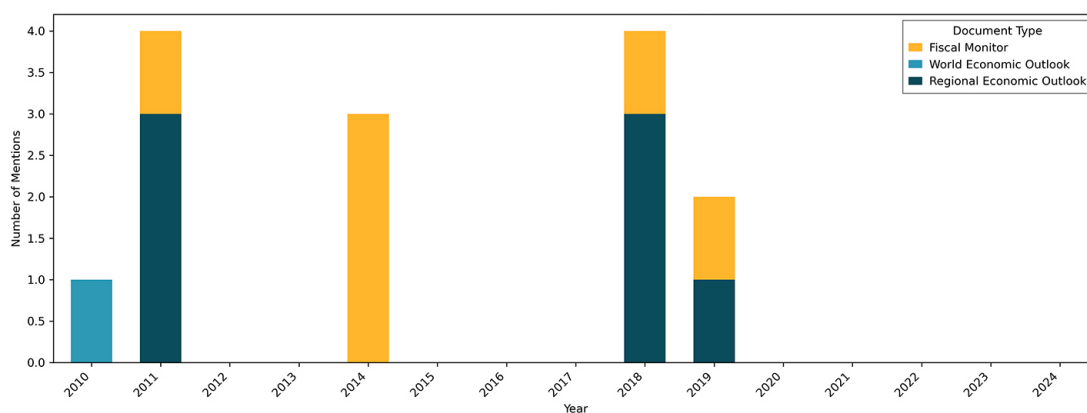
financing, and macroeconomic stabilization (Lane, 2022).⁸ Discussion of health taxes reemerged after 2021, though at lower levels than before the pandemic, indicating that while health taxes returned to the agenda, they now competed with post-pandemic concerns such as debt sustainability and climate policy. While not evident from Figure 5, cross-country variation in the coverage of health taxes is equally revealing. The absence of discussion on health taxes in countries such as Afghanistan, Angola, Andorra, Argentina, Azerbaijan, Belarus, Bolivia, Eritrea, Liechtenstein, Syria, Turkmenistan, Venezuela, and Yemen can be explained by limited IMF engagement, political instability, or conflict. The cases of Andorra and Liechtenstein are best explained by their very recent accession to the Fund—in 2020 and 2024, respectively.

Taken together, these patterns align with the IMF’s mandate. Engagement on health taxes has been context-dependent, reflecting member countries’ priorities. Their absence in fragile or conflict-affected states is somewhat surprising, though it may reflect lower consumption of tobacco and alcohol in these countries. Recognizing this dynamic provides important context for interpreting the IMF’s approach in multilateral surveillance.

Multilateral surveillance

In the World Economic Outlook, Fiscal Monitor, and Regional Economic Outlook, the treatment of excises ranges from broad benchmark references to detailed catalogues of policy measures, and at times acknowledges their dual role in advancing both fiscal and health objectives.

FIGURE 6. Mentions of health taxes by IMF document type (2010–2025)



Source: IMF Staff Country Reports.

⁸ Out of 80 countries that received IMF emergency financing in the pandemic’s first phase, only three had any reference to health taxes in their loan documents. Moreover, during April 2020–November 2021, IMF programs contained only one health-tax-related prior action and zero structural benchmarks on health taxes (Lane, 2022). It appears this decline occurred because the international community filled fiscal gaps in these countries with unconditional aid and because governments, facing an economic shock, delayed tax hikes to avoid hurting households’ purchasing power.

The IMF's multilateral surveillance—through the *World Economic Outlook (WEO)*, *Fiscal Monitor (FM)*, and *Regional Economic Outlook (REO)*—has engaged only marginally with health taxes, and when it has, the framing has been overwhelmingly fiscal rather than health considerations, consistent with the IMF's core mandate on fiscal policy (Figure 6).

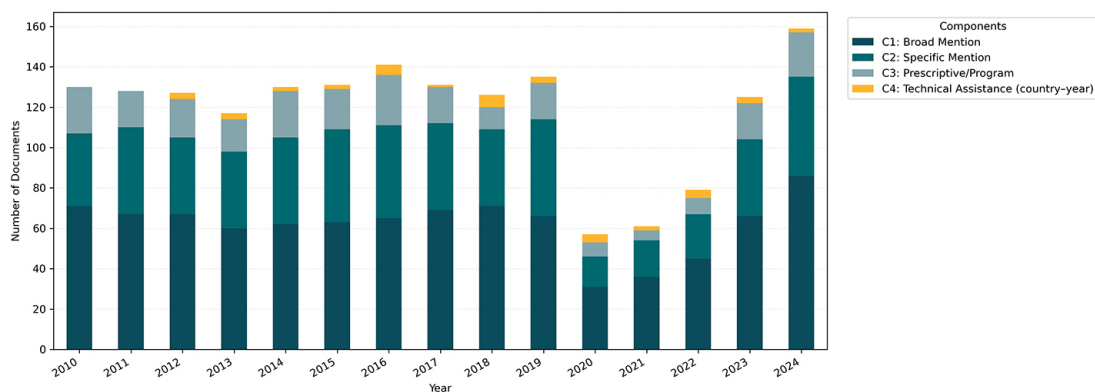
The *World Economic Outlook* has given health taxes virtually no attention. Between 2010 and the end of 2024, the only reference appears in a 2010 footnote, where tobacco and alcohol excises are mentioned alongside VAT and property tax reforms in the context of fiscal consolidation for advanced, high-debt economies. The advice was comparative rather than normative: In “some” advanced G20 countries, excises were below the advanced G20 average and raising them could strengthen revenues. This was framed explicitly as a revenue mobilization measure for debt sustainability in the post-2008 crisis environment, not as a health intervention. The absence of any other WEO references underscores the peripheral status of health taxes in the Fund's flagship surveillance product.

The FM presents a more varied picture, reflecting its role in cataloging fiscal measures and exploring policy trade-offs. In 2011, tobacco excises appeared as one among many country-specific measures (Spain's increase), framed entirely in terms of strengthening fiscal credibility. By April 2014, the FM briefly adopted a more expansive framing, noting that tobacco excises had “contributed to the decline of smoking” while also mobilizing revenues, and suggesting scope to raise taxes on alcohol and sugar-sweetened beverages. This is one of the few instances in multilateral surveillance where health and fiscal objectives are explicitly linked. In October 2014, however, the emphasis shifted back to fiscal neutrality, citing Estonia's use of higher tobacco and alcohol excises to offset cuts in employer social contributions, while stressing that property and environmental taxes are “usually preferred.” Later mentions in 2018—Saudi Arabia's introduction of tobacco and beverage excises as part of non-oil revenue diversification—and 2019—EU excise floors on cigarettes and alcohol as a precedent for carbon pricing—also framed excises in fiscal or institutional terms rather than as health policy.

The REOs provide a different perspective by documenting actual policy choices across diverse political and economic settings. The 2011 MCD REO reported that Algeria temporarily reduced taxes on sugar and edible oil to ease social tensions, while Jordan lowered tariffs or fuel taxes as part of reform measures. These cases highlight the use of tax reductions for short-term social safety net purposes rather than for fiscal or health objectives. In contrast, the 2018 SSA REO characterized excises as an “underexploited” revenue source, noting that the region collected only 1.4 percent of GDP from excises—less than half the level in Emerging Europe—and highlighted both design options (specific vs. ad valorem) and examples of reforms, including tobacco and alcohol tax increases in Ghana and Malawi. Similarly, the 2011 WHD REO noted Jamaica's modification of alcohol taxes as part of a broader package of fiscal measures. Taken together, these examples illustrate that while REOs have generally emphasized country-specific policy actions, only in one instance have they explicitly raised the issue of under taxation at the regional level.

Altogether, these reports reveal a consistent pattern: Health taxes are not a central theme of IMF multilateral surveillance. When they are mentioned, they are framed primarily as fiscal instruments, occasionally as examples of international coordination, and only rarely with explicit recognition of health benefits. The April 2014 FM stands out as the clearest acknowledgment of excises’ dual role in promoting health and mobilizing revenue. The REOs, by contrast, highlight the political economy of tax policy in practice, where measures are often reversed, diluted, or repurposed in response to shocks and social pressures.

FIGURE 7. Index components of health tax mentions (2010–2024)



Source: IMF Staff Country Reports.

IMF advice across surveillance, programs, and technical assistance to member countries

The index component-level breakdown in Figure 7 sheds light on how the IMF has engaged with health taxes in discussions with its member countries beyond simple mentions. Broad references (C1) and commodity-specific mentions (C2) dominate throughout the period, reflecting a tendency to acknowledge excises in general or cite specific goods, such as tobacco and alcohol, without advancing concrete recommendations. The peak between 2017 and 2019 stands out not just for the volume of references, but for the rise in program-linked conditionality (C3), when health taxes were more actively embedded in IMF-supported fiscal reforms. That surge coincided with heightened global policy attention to noncommunicable diseases: the revision of the WHO’s “Best Buys” in 2017 that spotlighted excise taxation, the political momentum of the 2018 UN High-Level Meeting on NCDs, and high profile advocacy such as the Task Force on Fiscal Policy for Health (*Tackling NCDs: “Best Buys,”* 2017; *Third UN High-Level Meeting on Non-Communicable Diseases*, 2018; Task Force on Fiscal Policy for Health, 2019). Together, these created both impetus and legitimacy for embedding health taxes into reform programs. At the same time, the IMF’s Fiscal Affairs Department released practical guidance on tobacco excise design (Petit and Nagy, 2016).

Within IMF programs (C3 in the index), the focus was overwhelmingly on tobacco: Around 90 percent of program-linked references mentioned tobacco, often alongside alcohol (63 percent), while only about 10 percent referred to SSBs. This indicates that where structural conditions were applied, they were primarily framed in terms of tobacco taxation. As summarized in Box 2, these measures were almost exclusively fiscal in nature—implemented through structural benchmarks or prior actions rather than quantitative performance criteria—and concentrated in low-income countries under arrangements supported by the Poverty Reduction and Growth Trust (PRGT).

BOX 2. IMF program conditionality on health taxes

When health excise-related conditions appear in IMF programs, they are primarily fiscally—not health—motivated. They are typically framed as measures to enhance domestic revenue mobilization or modernize the tax system.

Almost all identified measures take the form of structural benchmarks or prior actions. Roughly half of all cases occur in sub-Saharan Africa, with the remainder distributed across Eastern Europe, Central Asia, and Latin America. Tobacco is the most frequent product focus, followed by alcohol. Most measures appear under PRGT-supported programs such as Extended Credit Facility (ECF) arrangements, though a few are found in Stand-By Arrangements (SBA) and Extended Fund Facility (EFF) as well.

- El Salvador (2010, SBA): Introduced excise taxes on alcoholic and carbonated beverages and tobacco, with expected yield of 0.3 percent of GDP.
- Haiti (2012, ECF): Structural benchmark to raise excise taxes on cigarettes and alcohol and called for introducing fiscal stamps (“vignettes”) to strengthen inspection and control.
- Ukraine (2014, SBA): Prior action to increase excise tax rates by 25 percent for alcohol and tobacco, and by 42.5 percent for beer.
- Armenia (2015, EFF): Prior action requiring parliamentary approval of higher excise tax rates on vodka and cigarettes, projected to raise 0.1 percent of GDP.
- Madagascar (2015, ECF): Prior action to increase excise duties on beverages.
- Zambia (2022, ECF): Structural benchmark to raise excise duties on alcohol and cigarettes, alongside reinstatement of petroleum excises.
- Equatorial Guinea (2019, EFF): Structural benchmark to implement excise taxes on imported beverages, and tobacco, following IMF technical assistance.
- Ethiopia (2024, ECF): Prior action adjusting specific rates on alcohol and tobacco, with projected revenue gains of 0.3 percent of GDP.
- Moldova (2017, EFF/ECF): Prior action to raise excise rates on cigarettes and oil products, aligning them gradually with EU directive minimums.

Technical assistance advice on health taxes (C4), by contrast, remains concentrated in selected years, such as 2012, 2016, 2018, and 2022, reflecting the demand-driven nature of this activity. These cases mark the most substantive engagement, where the IMF provided hands-on guidance for the design or administration of excise systems. The sharp decline across all components in 2020 reflects the pivot to emergency financing and pandemic response, and although references to health taxes have since recovered, the post-COVID period has been characterized by a reversion to broad and specific mentions rather than programmatic or technical advice.

Engagement by income level

By income level, IMF engagement on health taxes has been concentrated in emerging markets, which account for about half of broad (C1) and specific references, as well as program conditions (C3). Advanced economies represent about one-fifth of mentions, with low-income developing countries making up the rest. Technical assistance (C4), shows a similar concentration in emerging markets (Box 3). In the post-COVID period (2023–2024), these patterns sharpened: Broad and specific references remained centered in EMEs, with no cases in advanced or LIDCs in publicly available reports. TA advice has centered on technical design issues—such as ad valorem versus specific taxes, indexation, and enforcement.

BOX 3. IMF technical assistance advice on health taxes

IMF technical assistance (TA) on tax policy and administration is demand-driven. Between 2010–2024, we identified 37 TA reports that addressed health taxes. Engagement is heavily concentrated in EMEs (78 percent), with advanced economies (13 percent) and LIDCs (9 percent) accounting for the remainder.

By commodity, TA advice focused most on tobacco (58 percent) and alcohol (54 percent), while sugar-sweetened beverages (SSBs) featured in just 13 percent of cases. This emphasis on tobacco is consistent with global consensus on its health and fiscal costs.

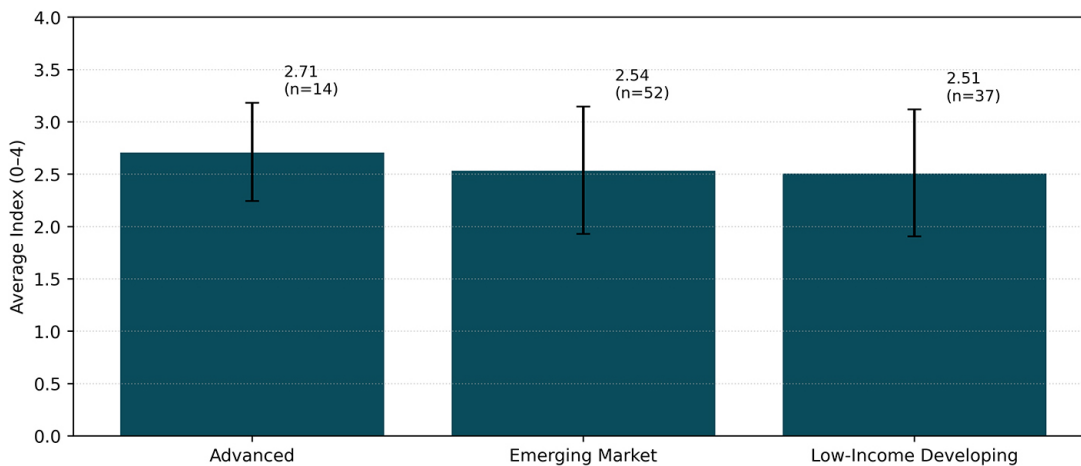
Examples from TA reports illustrate the scope of IMF technical assistance advice:

- Philippines (2012): Excise revenues had fallen sharply—from 2.6 percent of GDP in 1997 to 0.8 percent in 2010—due to low rates, lack of indexation, and a multi-tier structure that encouraged mispricing. IMF TA recommended a phased increase in specific excise rates on tobacco and alcohol, with CPI-based indexation, elimination of the tiered system, and harmonized alcohol taxation by content. Measures to curb illicit trade and domestic/imported differentials were also advised.

- Chile (2020): With high alcohol consumption and reliance on ad valorem excises, TA advice recommended a shift to specific taxes by alcohol content. On tobacco, advice emphasized stronger enforcement and taxation of novel nicotine products, rather than rate hikes. For sugary drinks, it suggested strengthening the 2014 reform by moving to a specific tax per gram of sugar.
- Albania (2022): Alcohol generated little revenues due to exemptions and reduced rates for small producers, encouraging informality and smuggling. Recommendations included tightening exemptions, eliminating preferential rates, and indexing excises.
- Iceland (2014): The sugar excise, first introduced in 1987 and redesigned in 2013—was deemed too low to influence consumption. TA recommended either repealing the tax or redesigning it to better target obesity, for example, by higher rates or shifting sugary products to the standard VAT.
- Ukraine (2016): Despite high alcohol consumption and related harm, excises were among the lowest in the region. TA recommended large increases in beer and spirits excises to EU-comparable levels, improved compliance by levying excises at first sale, and tighter monitoring. On tobacco, it supported Ukraine's policy of annual specific rate hikes in line with EU benchmarks.

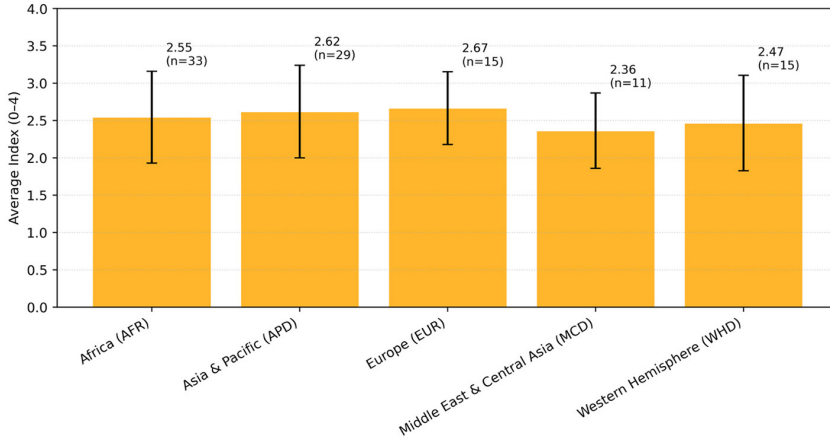
These cases show that TA advice often addressed technical design issues—such as ad valorem versus specific taxes, indexation, and enforcement. However, support has remained concentrated in middle-income countries.

FIGURE 8. IMF health tax index (post-COVID average, 2023–2024) by income group



Source: IMF Staff Country Reports.

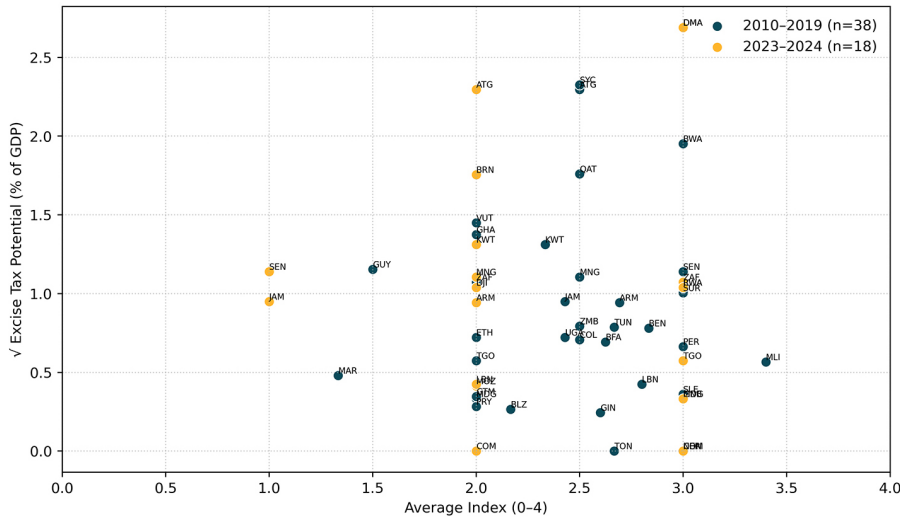
FIGURE 9. IMF health tax index (post-COVID average, 2023–2024) by region



Source: IMF Staff Country Reports.

Figures 8 and 9 present post-COVID index averages by income group and region. Across income groups, advanced, EMEs, and LIDCs all fall within a narrow band (2.4–2.6), with no statistically significant differences despite sharp contrasts in fiscal capacity and health burdens. Regional variation is similarly modest: averages cluster between 2.2 and 2.7, with EUR and APD somewhat higher and MCD and AFR somewhat lower.

FIGURE 10. IMF health tax index vs. tobacco excise tax potential (per-country averages, \sqrt{y} -axis)

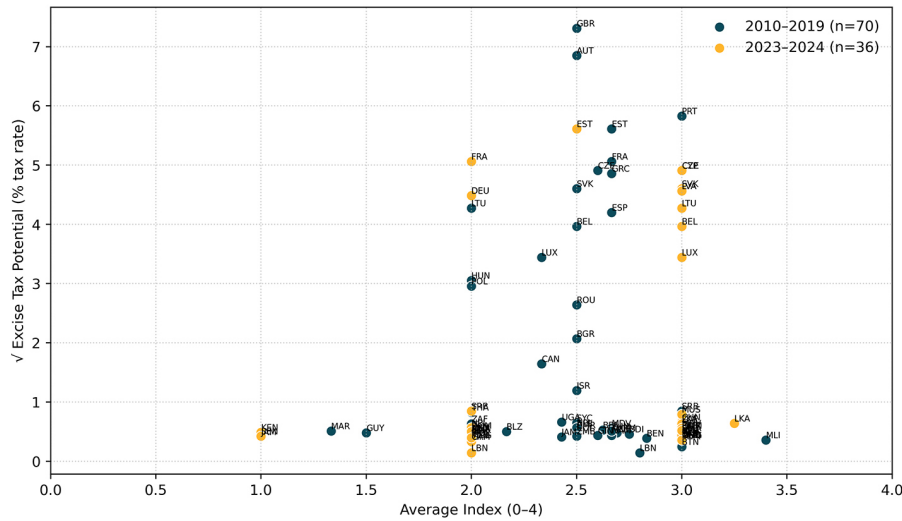


Notes: To improve readability, the y-axis is presented on a square-root scale. This transformation expands the lower range of values while compressing the upper range, making it easier to distinguish countries clustered at low to mid potential levels without altering the relative ordering.⁹ Each dot represents one country’s average index score and average tax potential over the specified period (2010–2019 or 2023–2024).

Sources: IMF Staff Country Reports and Gupta, Jalles, and Petri-Hidalgo (2025).

9 Using a logarithmic scale yielded broadly similar results. Log-scaled figures are available from the authors upon request.

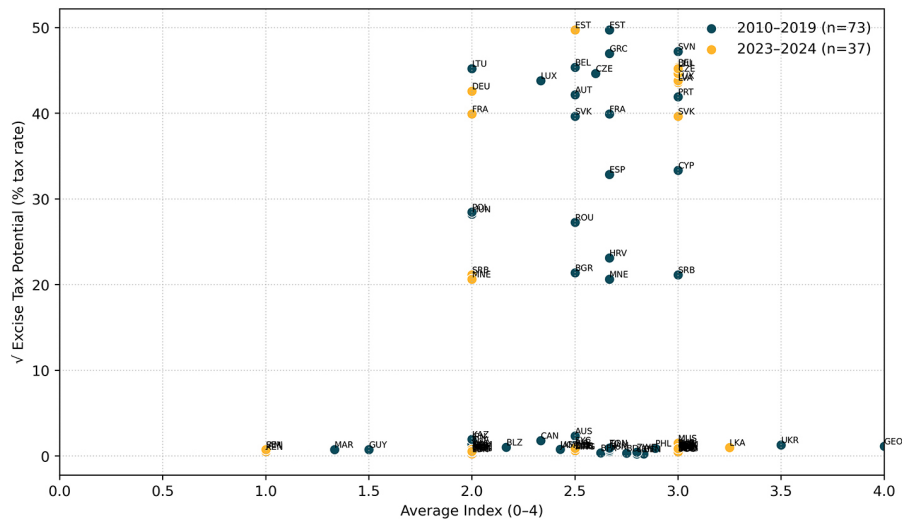
FIGURE 11. IMF health tax index vs. beer excise tax potential (per-country averages, \sqrt{y} -axis)



Notes: To improve readability, the y-axis is presented on a square-root scale. This transformation expands the lower range of values while compressing the upper range, making it easier to distinguish countries clustered at low to mid potential levels without altering the relative ordering.¹⁰ Each dot represents one country's average index score and average tax potential over the specified period (2010–2019 or 2023–2024).

Sources: IMF Staff Country Reports and Gupta, Jalles, and Petri-Hidalgo (2025).

FIGURE 12. IMF health tax index vs. spirits excise tax potential (per-country averages, \sqrt{y} -axis)



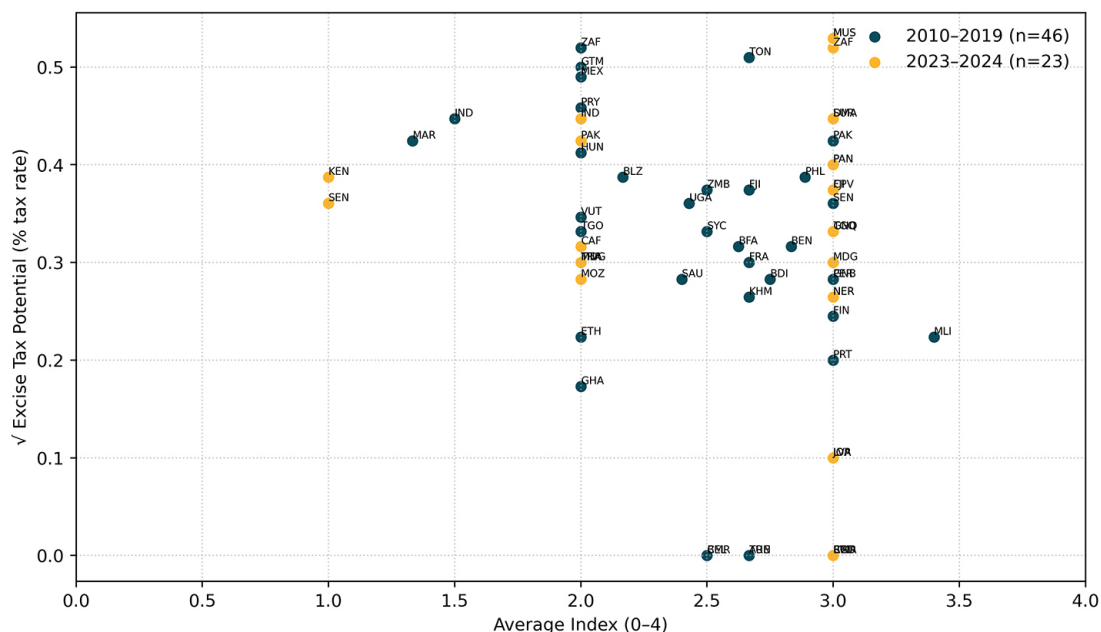
Notes: To improve readability, the y-axis is presented on a square-root scale. This transformation expands the lower range of values while compressing the upper range, making it easier to distinguish countries clustered at low to mid potential levels without altering the relative ordering.¹¹ Each dot represents one country's average index score and average tax potential over the specified period (2010–2019 or 2023–2024).

Sources: IMF Staff Country Reports and Gupta, Jalles, and Petri-Hidalgo (2025).

¹⁰ Using a logarithmic scale yielded broadly similar results. Log-scaled figures are available from the authors upon request.

¹¹ Using a logarithmic scale yielded broadly similar results. Log-scaled figures are available from the authors upon request.

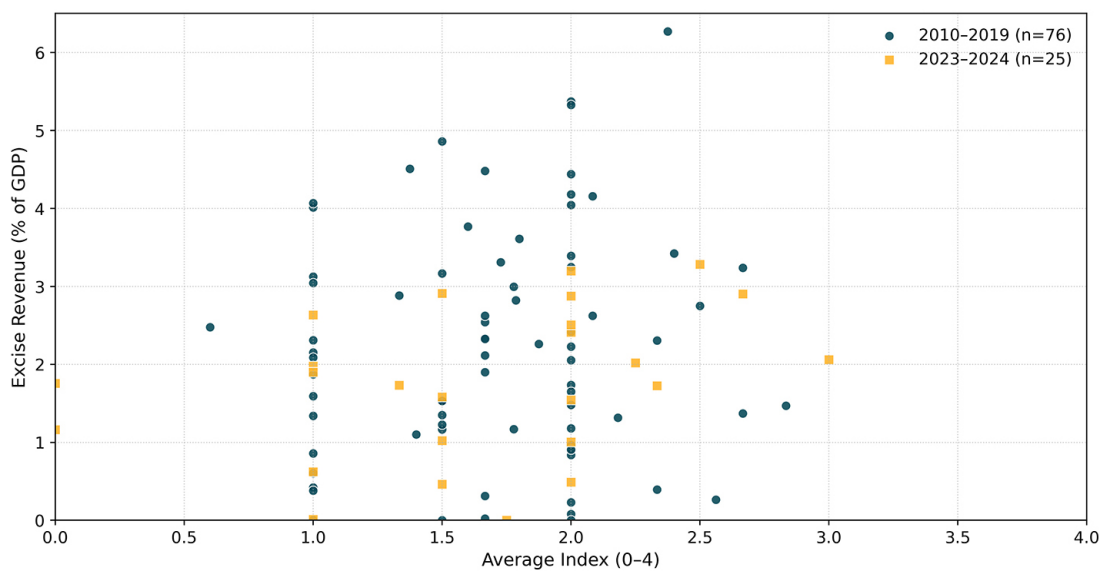
FIGURE 13. IMF health tax index vs. SSBs excise tax potential (per-country averages, \sqrt{y} -axis)



Notes: To improve readability, the y-axis is presented on a square-root scale. This transformation expands the lower range of values while compressing the upper range, making it easier to distinguish countries clustered at low to mid potential levels without altering the relative ordering.¹² Each dot represents one country's average index score and average tax potential over the specified period (2010–2019 or 2023–2024).

Sources: IMF Staff Country Reports and Gupta, Jalles, and Petri-Hidalgo (2025).

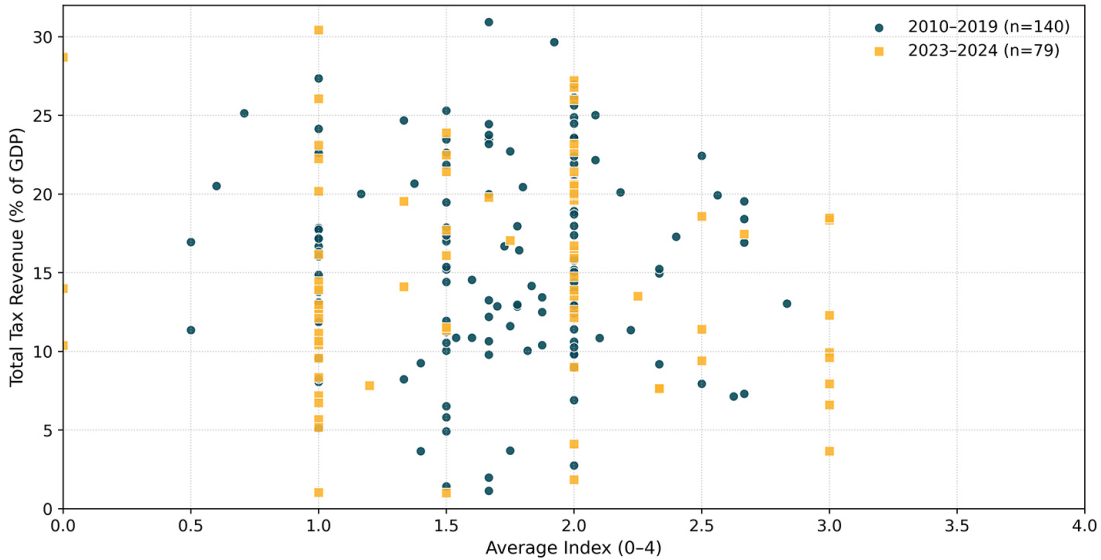
FIGURE 14. IMF health tax index vs. actual excise revenue (pre- and post-COVID)



Sources: IMF Staff Country Reports and Government Finance Statistics.

¹² Using a logarithmic scale yielded broadly similar results. Log-scaled figures are available from the authors upon request.

FIGURE 15. IMF health tax index vs. total tax revenue (pre- and post-COVID)



Sources: IMF Staff Country Reports, WoRLD database, Public Finances in Modern History database, and World Bank World Development Indicators. Where 2023 or 2024 values were unavailable, the most recent year's value was carried forward.

Figures 10–15 examine whether IMF engagement on health taxes has corresponded to fiscal opportunity, distinguishing the pre- (2010–2019) and post-COVID (2023–2024) periods. This split is motivated by the clear break between the pre- and post-COVID periods shown in Figure 5. Figures 10–13 compare countries' annual average index scores (calculated as the mean value for each country across 2010–2019 and separately for 2023–2024) with estimated excise tax potential across tobacco, alcohol, spirits, and SSBs. Figure 14 relates the index to actual excise revenues as a share of GDP, and Figure 15 extends this to total tax revenue as a share of GDP. In all cases, the x-axis shows IMF engagement on health taxes (from 0 to 4 on our index), while the y-axis shows fiscal opportunity, measured as excise tax potential or realized revenues. The results suggest that IMF advice was not systematically related to fiscal opportunity. Figure 15 further shows that IMF engagement on health taxes has not been conditioned by countries' overall revenue mobilization capacity; both high-tax and low-tax countries cluster around mid-level index scores. Overall, the relationship is weak: Countries with large untapped potential or relatively high realized revenues did not consistently receive more intensive IMF attention. For example, the United Kingdom, France, and Germany show high untapped beer excise potential, yet only mid-level index scores, while smaller economies such as Guyana and Belize receive similar levels of attention despite low potential.

In some cases, higher index scores appear in settings with relatively modest potential—for instance, Niger (tobacco, beer, spirits), Guinea-Bissau (tobacco, beer, spirits), Bangladesh (SSBs, spirits), and Nicaragua (tobacco, SSBs). The partial exception is tobacco, where post-COVID values show a modest upward shift, suggesting closer alignment between IMF advice and excise potential (Figure 10). Togo, Mauritania, and Bangladesh illustrate this trend, with higher index scores in 2023–24 relative to their potential.

As shown in Figure 5, tobacco has been the most frequently discussed health tax in IMF documents. This modest alignment likely reflects the wider availability of comparable data, such as the WHO's 75 percent tax-to-price benchmark, and strong international consensus on tobacco taxation as a public health measure. Still, the correlation remains weak. Outliers such as Senegal (low on both axes) and Iran (high potential but only moderate engagement) highlight the absence of a consistent pattern.

The temporal comparison reinforces how COVID-19 reshaped priorities. In the pre-pandemic years, references were more numerous and distributed across higher index values, particularly during the 2017 to 2019 peak, when health taxes were more frequently integrated into broader fiscal reform agendas (Figures 10–13). In the post-COVID period, however, the number of references declined and clustered more narrowly around mid-level index scores (Figures 14–15). This narrowing is visible across commodities: In spirits (Figure 12), Estonia, Greece, and Luxembourg have very high untapped potential but only mid-range IMF index scores, while countries such as Turkey combine high potential with limited engagement. By contrast, Ukraine and Georgia display relatively high IMF index scores despite low measured potential. For SSBs (Figure 13), Mexico and South Africa stand out for stronger engagement, reflecting their pioneering soda tax reforms, whereas Senegal and Kenya, with moderate potential, receive relatively little IMF attention.

Variation across commodities further underscores selectivity. Beer and spirits show the weakest correspondence between potential and advice, consistent with their relatively marginal presence in IMF documents (Figure 5). Many countries have significant room to grow alcohol excise revenues. Where alcohol was discussed, it was often grouped with tobacco or other excises. This may reflect greater political sensitivity of alcohol taxation, as well as weaker international advocacy compared to tobacco. By contrast, SSBs attracted greater attention in the later years, reflecting the rise of soda taxes in international debates. The interest in SSB taxation appears to have grown as part of a broader global shift towards NCDs and innovative revenue sources.

Summary of key findings and the way forward

Tobacco use, excessive alcohol consumption, and diets high in added sugars add significantly to the health burden in all countries. Excise taxes on these products provide a powerful policy tool: They discourage harmful consumption while generating much-needed public revenue. Yet collections remain far below potential. On average, countries collect only 0.4 percent of GDP in tobacco excise revenues, compared to a feasible 1.5 percent. Revenue shortfalls are especially pronounced in spirits, where collections reach only one-quarter of potential, and in SSBs, where less than 10 percent of potential revenues are captured. Regional disparities are also evident. Tobacco tax collections fall particularly short in EMEs and LIDCs (in Latin America and the Caribbean, the Middle East and North Africa, and Sub-Saharan Africa). In advanced economies (mainly North America), by contrast, the largest gaps are in beer and spirits. The most severe shortfalls are in SSB taxation,

especially in EMEs in Latin America and the Caribbean and in the Middle East and North Africa and advanced economies.

Against this backdrop, we reviewed key IMF documents issued between January 1, 2010, and December 31, 2024, to assess the extent and depth of IMF advice on health taxes. The review covered country surveillance, IMF-supported programs for members facing macroeconomic imbalances, technical assistance on tax policy and administration, and multilateral surveillance documents.

As noted earlier, health taxes are not a central theme of IMF policy advice. This reflects the Fund’s core mandate: safeguarding the stability of the international monetary system. In practice, the IMF promotes international monetary cooperation, exchange rate stability, and balanced trade growth. It also conducts surveillance of monetary, fiscal, exchange rate, and financial policies critical for macroeconomic and financial stability.

Within this mandate, fiscal policy advice has been wide-ranging, spanning revenue and expenditure policies, and delving into tax systems to help countries mobilize revenues in ways that balance efficiency, equity, and administrative capacity. Health taxes have appeared in this context but primarily framed as fiscal instruments. In multilateral surveillance, they have occasionally been cited as examples of international coordination, but rarely with explicit acknowledgment of their health benefits.

The IMF engages more on health taxes than its mandate strictly requires. References to health taxes in surveillance, programs, and technical assistance peaked between 2017 and 2019—marked not only by a higher volume of mentions but also by more frequent program-linked conditionality, with excise tax increases embedded in IMF-supported fiscal reforms. Technical assistance advice, by contrast, has been more episodic, reflecting its demand-driven nature. It is worth noting that not all technical assistance reports are public, as publication depends on member country consent. It is likely therefore that the IMF’s TA on tax policy and administration is not fully captured in our analysis. Importantly, the IMF’s advice on health taxes did not vary across income groups or regions, despite significant differences in fiscal capacity and health burdens. This points to an opportunity for the IMF to place greater emphasis on health taxes in regions with low revenue-to-GDP ratios, where they could support domestic resource mobilization while delivering a “double dividend” of better health outcomes and higher revenues.

The way forward

EMEs and LIDCs urgently need to raise domestic revenues, which have stagnated since 2012. In some LIDCs, more than one-third of government revenues are absorbed by interest and debt service. Where administrative capacity exists, raising health taxes offers a relatively straightforward way to confront the growing incidence of noncommunicable diseases while generating additional revenues—the “double dividend.” Yet large shortfalls persist: Tobacco tax collections are especially

weak in EMEs and LIDCs—particularly in Latin America and the Caribbean, the Middle East and North Africa, and Sub-Saharan Africa—while advanced economies show sizeable gaps in beer and spirits (mainly North America), and SSB taxation lags across advanced economies and EMEs. IMF advice could therefore more explicitly support countries in realizing this revenue potential as part of its broader work on tax mix and domestic resource mobilization. Still, the appropriate level of sin taxation remains country-specific, shaped by administrative capacity, regional tax policies, and smuggling risks.

Appendix. Gaps in tobacco, alcohol, and SSB excise revenues by IMF regional department

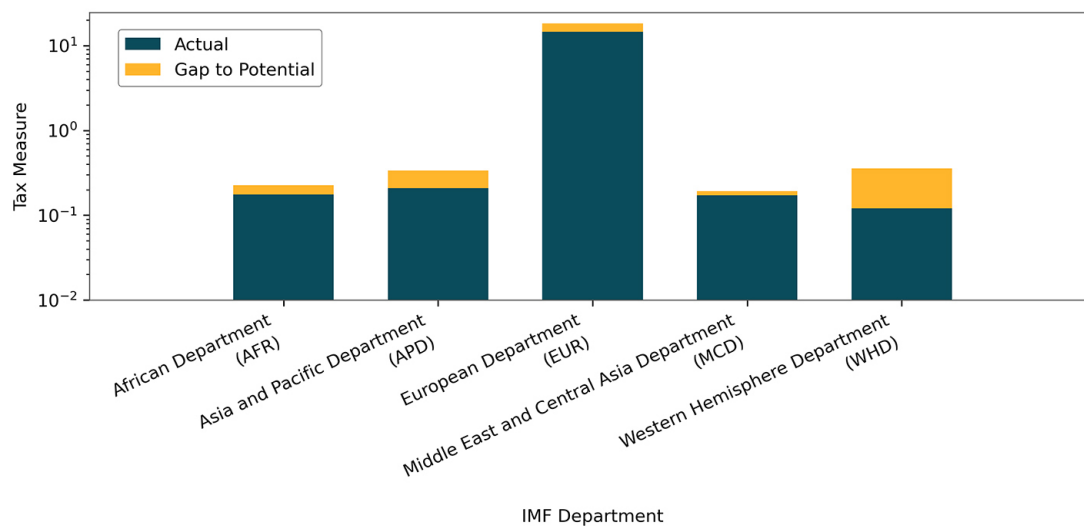
FIGURE A1. Tobacco tax: Actual vs. gap to potential by IMF department



Notes: Middle East and Central Asia Department average is affected by Afghanistan's tobacco tax collections, which exceed the potential.

Sources: IMF Staff Country Reports and Gupta, Jalles, and Petri-Hidalgo (2025).

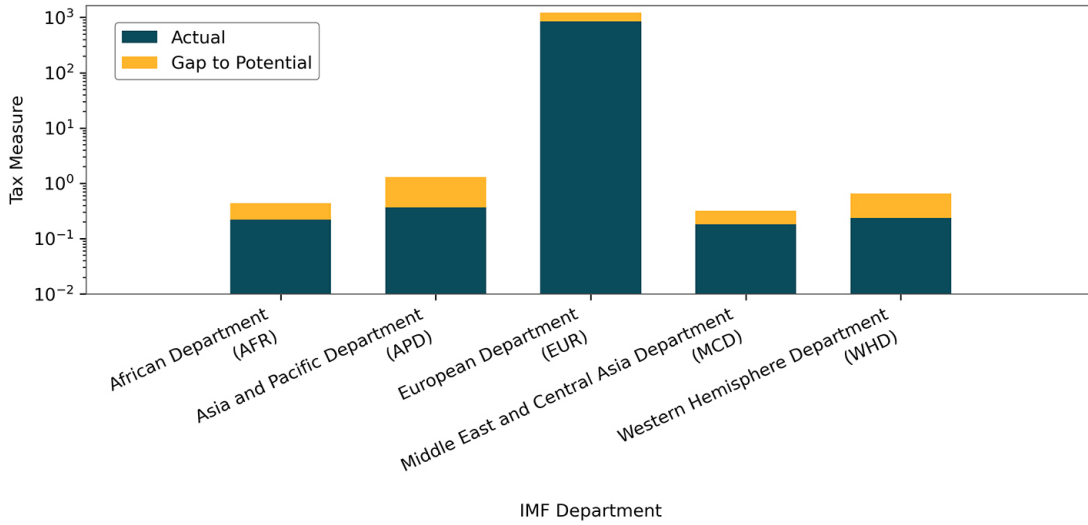
FIGURE A2. Beer tax: Actual vs. gap to potential by IMF department



Note: y-axis is on a log scale to display both large and small values.

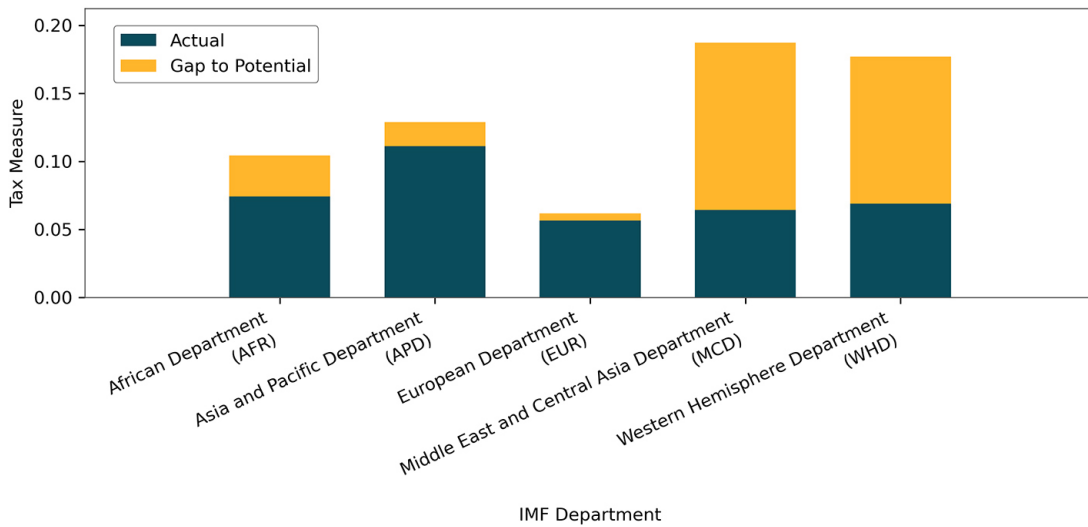
Sources: IMF Staff Country Reports and Gupta, Jalles, and Petri-Hidalgo (2025).

FIGURE A3. Spirits tax: Actual vs. gap to potential by IMF department



Note: y-axis is on a log scale to display both large and small values.
 Sources: IMF Staff Country Reports and Gupta, Jalles, and Petri-Hidalgo (2025).

FIGURE A4. SSBs tax: Actual vs. gap to potential by IMF department



Sources: IMF Staff Country Reports and Gupta, Jalles, and Petri-Hidalgo (2025).

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