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Building Tax Capacity for Growth and Development: Evidence-Based Analysis for Mobilizing Domestic Revenue

Prepared by Katherine Baer, Matthieu Bellon, Matt Davies, Ruud De Mooij, Vitor Gaspar, Andrea Lemgruber, Mario Mansour, Fayçal Sawadogo, Misa Takebe, and Charles Vellutini

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Executive Summary

Tax capacity is central to state capacity and sustainable development. Recent research suggests that developing countries should aim for a tax-to-GDP ratio of at least 15 percent—enshrined in the United Nations (UN) Compromiso de Sevilla (Seville Commitment)[1]—to achieve stronger institutions, deeper financial markets, and sustainable economic growth.

Tax revenue in many developing countries remains persistently below 15 percent, with little progress over the past decade. Today, 71 developing countries have tax-to-GDP ratios below 15 percent. Of these, 23 are fragile and conflict-affected states (FCSs), 38 are resource rich, and 40 are in the low-income group. Estimates suggest that low-income developing countries could on average mobilize about 5 percent of GDP in additional tax revenues through comprehensive reform of their tax system. Yet many in this group will need to further improve their institutional capacity to reach a 15 percent tax-to-GDP ratio.

Tax system approach. Effective revenue mobilization requires close integration of tax policy, tax law, and revenue administration—reflected in what has come to be known in the tax literature as the "tax system approach." Grounded in this approach, the medium-term revenue strategy offers a comprehensive reform path to achieve tax ratios of at least 15 percent of GDP. However, many low-income developing countries, especially FCSs, may need to start with a more pragmatic, sequenced approach as discussed in this IMF Departmental Paper. Options for tax design and revenue administration include the following:

Tax Design

- **Base broadening**: International experience shows revenue is best mobilized by broadening the tax base—through rationalizing tax expenditures, improving value-added tax (VAT) design, and limiting exemptions—rather than by raising already high statutory tax rates on compliant taxpayers.
- **Improving indirect taxes:** VAT often underperforms in low-tax countries where rationalizing exemptions and preferential rates could nearly double revenue. Excises are easy to administer and justified by health or environmental goals, with untapped potential in developing economies.
- **Reforming tax incentives:** Investment tax holidays and exemptions are often ineffective and costly. Cheaper alternatives are investment credits and accelerated depreciation.
- **Simple taxes.** Tax design could initially prioritize simplicity and feasibility as administrative capacity is being developed, for example, by using taxes with a few collection points and final withholding taxes.
- **Diversifying revenue sources**: Personal income tax expansion, stronger natural resource taxation, and property taxes can mobilize revenue in equitable ways.

Tax Compliance

[1] The United Nations Member States formally adopted the Compromiso de Sevilla at the Fourth International Conference on Financing for Development in Seville, June 30–July 3, 2025. The agreement aims at addressing the significant financing gap for sustainable development. Details can be found here FFD4 Outcome Booklet.

- **Cultivating tax compliance.** Governments can promote tax compliance by establishing administrative presence in the whole country, investing in tax education programs, working in partnership with other government agencies and civil society organizations, and promoting open communication on tax issues.
- **Simplicity and practicality.** There are broad benefits to the revenue administration and to taxpayers from adopting clear norms, transparent rulings, simple tax forms, harmonized procedures, user-friendly IT systems, and easy collection entry points.
- **Compliance risk management**. Differentiating taxpayers based on their size and compliance behavior is an effective approach, including combining large taxpayer offices to secure revenue for relevant economic sectors with streamlined administration for small taxpayers to encourage formalization and "normalize" compliance.
- **Digitalization.** Adopting simple and flexible digital solutions that can be expandable over time, starting with core functions (for example, registration, return filing, payments) for large taxpayers can be especially effective in low-capacity environments.
- **Governance.** Promoting capable and consistent leadership, adopting clear rules governing integrity, engaging in financial management and reporting, implementing strong internal and external oversight functions, investing in recruiting and training people based on meritocratic principles, and managing through goals setting and performance monitoring are the foundation for good governance of revenue institutions and are key to encouraging tax morale and taxpayer compliance.

Building tax capacity is ultimately a domestic political process, rooted in each country's social contract. Yet capacity development—through technical advice, training, and peer learning—has proven effective in strengthening tax systems, particularly in low-income and FCSs. Tax capacity building is a central part of the IMF's work and integrated with surveillance and lending. To maximize impact, it is comprehensive, country-led, and aligned with broader fiscal and macroeconomic reforms. The new Global Public Finance Partnership embodies this approach, coordinating international support to help countries mobilize domestic revenue and advance the Sustainable Development Goals, as emphasized in the Compromiso de Sevilla.

Acronyms and Abbreviations

AEs	advanced economies
CIT	corporate income tax
DRM	domestic revenue mobilization
EMEs	emerging market economies
FAD	IMF Fiscal Affairs Department
ISORA	International Survey on Revenue Administration
LEG	IMF Legal Department
LIDCs	low-income developing countries
LTOs	Large Taxpayer Offices
MTRS	Medium-Term Revenue Strategy
RA-GAP	Revenue Administration Gap Analysis Program
SDGs	Sustainable Development Goals
TADAT	Tax Administration Diagnostic Assessment Tool
VAT	value-added tax

Introduction

Strengthening tax capacity has long been a central priority for developing countries. The UN Sustainable Development Goals (SDGs), adopted in 2015, explicitly call for "improved domestic resource mobilization, including through enhanced capacity for tax and other revenue collection." An adequate tax capacity is widely recognized as a critical foundation for financing public services, infrastructure, and social development and a key aspect of state building to support the economy. Yet despite international commitments and reform efforts, progress during the past decade has been modest and uneven across countries.

The urgency of building stronger revenue systems has only intensified. Many developing economies are facing rising debt vulnerabilities, shrinking fiscal space, and declining external support. Indeed, Official Development Assistance to low-income developing countries (LIDCs) has fallen in recent years, while net inflows from private and bilateral creditors have weakened. High public debt ratios and rising associated debt service costs are adding to the pressures from essential spending on health, education, and infrastructure. Strengthening domestic revenue mobilization (DRM) is therefore indispensable. As underlined in the Compromiso de Sevilla*,* adopted at the Fourth Financing for Development Conference (June 30–July 3, 2025), there is "a pressing need to ensure that domestic resource mobilization becomes a reliable, sustainable, and equitable source of financing for development" (UN 2025).

In discussions about enhancing tax capacity, 15 percent is a widely cited benchmark for the minimum tax-to-GDP ratio. This target features prominently in international initiatives, including the Compromiso de Sevilla, which states: "We call on development partners to collectively at least double this support to developing countries by 2030. This increase should be targeted at developing countries aiming to increase tax-to-GDP ratios, especially those seeking to increase their ratios to at least 15 percent." Although the 15 percent threshold is not based on exact science, an empirical literature on tax capacity supports the existence of a "tipping point" beyond which growth tends to accelerate. Although estimates of that tipping point are usually somewhat below 15 percent, it appears that the growth effects occur only if improved tax capacity is sustained and continues beyond that point. Indeed, the persistence of higher tax ratios appears more important than temporarily exceeding them. As such, the 15 percent benchmark emphasized in the Seville declaration serves as a practical and operational target for policy and international support.

This paper explores how developing countries can build tax capacity to achieve the goal of mobilizing revenue beyond the 15 percent threshold. It starts with a short review of the empirical evidence on the 15 percent threshold, drawing on IMF research in Gaspar, Jaramillo, and Wingender (2016a) and Bellon and Warwick (forthcoming), using a novel IMF revenue data set (Mansour and others 2025). It then presents stylized facts on revenue performance and new estimates of countries' tax potential and tax gaps—following Benitez and others (2023)—which highlights both the scale of the global challenge and the opportunities for countries to achieve a revenue ratio that exceeds 15 percent. The paper then examines policy and administrative reforms to strengthen tax capacity, applying a "tax systems approach" that underscores the complementarities between tax policy, the legal framework, and revenue administration. The discussion is anchored in core principles of good taxation and aims to provide evidence-based insights to guide countries' efforts in mobilizing reliable and equitable revenues for development. The paper complements two IMF reports to the G20, "Alternative Options for Revenue Mobilization" (IMF 2024a) and "Enhancing Domestic Revenue Mobilization through Strengthening Tax Administration" (IMF 2025b). These papers go deeper into some specific aspects of tax design and revenue administration but are less focused on the specific challenges of countries below 15 percent.

Why 15 Percent Matters

This section discusses the empirical base for achieving a tax-to-GDP ratio in a sustained manner of at least 15 percent of GDP—as enshrined in the Compromiso de Sevilla—to support growth and development. It also shows that such tax capacity building should be part of a broader development strategy. The section forms the starting point for further analysis in the paper on how to achieve this objective.

Tax capacity is a cornerstone of state capacity, which in turn underpins private sector development and broader economic growth. The intellectual roots of this perspective can be traced to Joseph Schumpeter more than a century ago, most notably in *The Theory of Economic Development* (1911) and *The Crisis of the Tax State* (1918). In the latter, Schumpeter argued that the modern state is fundamentally a "tax state": taxation both defines and enables the state, making it the primary source of state capacity. In the former, he emphasized that economic progress originates with entrepreneurial innovation, which requires access to resources and finance. These ideas converge in the complementarities between the public and private sectors. The state derives revenues from private economic activity, thereby sharing in national prosperity, while the private sector benefits from the state's provision of essential public goods—ranging from security, property rights, and justice, to infrastructure, health, and education. Importantly, the state also plays a central role in financial development and stability. A broad-based and credible tax system underpins investor confidence in public debt, positioning the state as a guarantor of financial stability and development. Economic success therefore rests on nurturing this symbiotic relationship between public and private sectors, whereas breakdowns in trust and cooperation risk giving way to conflict and stagnation.

A growing body of research suggests the existence of a threshold in taxation beyond which countries can escape a "low-tax, low-growth trap" and transition to a "high-tax, high-growth path." Although a stylized narrative, it highlights that taxation is about more than revenue. When broadly accepted by citizens, taxation is closely linked to good governance, legal certainty, effective provision of public goods, and sustained prosperity. The challenge for empirical analysis lies in the fact that taxation and growth are deeply embedded in complex social, political, financial, and economic dynamics, where many variables evolve together. As Card Mas, and Rothstein (2008) show, such environments can generate multiple equilibria, with outcomes shaped by perceptions, beliefs, and expectations. In these settings, small changes in certain variables may trigger large shifts elsewhere. Building on this insight, Gaspar, Jaramillo, and Wingender (2016b) proposed that a tipping point exists in the tax-to-GDP ratio beyond which long-term growth rises sharply. Using a regression discontinuity design and historical data (1800–1980 for 30 countries and 1965–2011 for 139 countries), they identified such a threshold and documented a persistent growth acceleration once it was crossed. These findings have since been replicated and extended with more recent data by Choudhary, Ruch, and Skrok (2024) and Bellon and Warwick (forthcoming), reinforcing the evidence for a tax-to-GDP tipping point.[2]

Strong institutions are critical for building tax capacity and sustaining growth. Besley and Persson (2011, 2014) highlighted the broader concept of state capacity, encompassing the wide range of capabilities required for effective governance. Building on this idea, Gaspar, Jaramillo, and Wingender (2016a) examined four case studies—China, Colombia, Nigeria, and Spain—and showed how improvements in tax capacity can catalyze

[2] Both Gaspar, Jaramillo, and Wingender (2016b) and Choudhary, Ruch, and Skrok (2024) use the same data set and locate the tax tipping point at about 13 percent of GDP. Using an updated data set, Bellon and Warwick (forthcoming) re-estimates the tax tipping point at slightly above 10 percent of GDP and demonstrates that this change is primarily driven by considerable and widespread upward revisions to historical nominal GDP series, implying lower tax-to-GDP ratios.

broader state capacity development. Their analysis emphasized the importance of political conditions, including robust institutions, inclusive politics, and credible leadership.

Crossing the tax-to-GDP tipping point is associated with not only stronger growth but also institutional improvements. Bellon and Warwick (forthcoming) compare countries that successfully crossed the tipping point ("crossers") with similar countries that did not ("non-crossers"), using a difference-in-difference framework. They find that GDP per capita in crossers rises significantly faster than in non-crossers, with GDP increasing by about an additional 10 percentage points after a decade. In addition, crossers exhibit meaningful improvements in government effectiveness and financial development relative to their peers.

Sustained progress beyond the tipping point is essential. Bellon and Warwick (forthcoming) distinguish between "long-haulers"—countries that continued to build tax capacity after surpassing the tipping point—and "bouncers," which subsequently slipped back below it. Before reaching the threshold, both groups display similar tax ratios (about 8 percent of GDP) and cross the tipping point within three years (Figure 1). The divergence occurs afterward: long-haulers continue to raise tax revenues, typically reaching 13–16 percent of GDP within a decade, while bouncers stagnate. The growth effects mirror this pattern: long-haulers achieve per capita income growth 16 percent higher than non-crossers over 10 years, whereas bouncers show little difference from countries that never crossed at all (Figure 2). These findings underscore that temporary or unstable increases in tax capacity yield no durable benefits; only sustained progress secures the transition from a low-growth trap to a high-growth path.

Evidence suggests that the growth gains from strengthening tax capacity come from better public governance and more effective public expenditure. Bellon and Warwick (forthcoming) shows that only long-haulers experience improvements in government effectiveness and financial development (Figure 3) and that they use the additional revenue to increase public investment, unlike bouncers. Hence, long-haulers' sustained revenue mobilization and accelerated growth gains are crucially associated with the effective use of additional revenue, implying that their growth increases because they spend more and better, enabling a greater delivery of public goods and investments to strengthen other institutional capacity. Further, effective delivery of public goods may be important for tax morale and compliance, thereby supporting sustained revenue mobilization and a virtuous cycle of development. This result is in line with the findings of IMF October 2025 Fiscal Monitor (IMF 2025a), which shows how enhancing spending efficiency and reallocating resources strategically can improve growth prospects without increasing overall spending.

Enhancing tax capacity also fosters domestic public bond market development, which is central to deepening financial markets and expanding private sector access to finance. In this regard, the role of the state extends beyond revenue mobilization. Brollo (forthcoming) examined the relationship between tax capacity and domestic government bond markets across 12 advanced and 17 developing economies during 1990–2020. Her findings indicate a strong and statistically significant link, particularly in developing economies: a one standard deviation increase in the tax-to-GDP ratio is associated with an increase of nearly 14 percentage points in the ratio of domestic public securities to GDP. This relationship remains robust after controlling for other drivers of financial development identified in the literature. Brollo's research thus provides further evidence of the link between taxation and financial development, even without reference to a tipping point.

Figure 1. Tax Tipping Point to GDP Ratio
(Simple average of tax-to-GDP ratio)

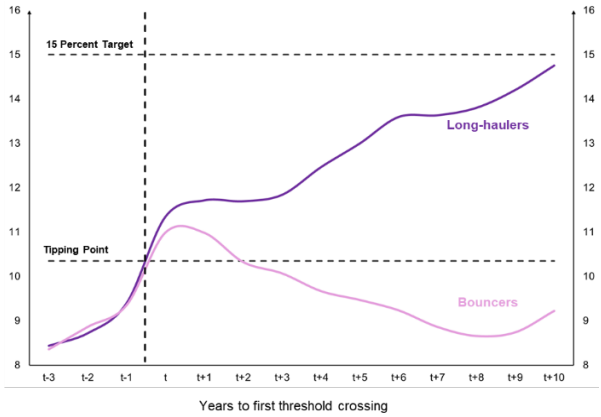
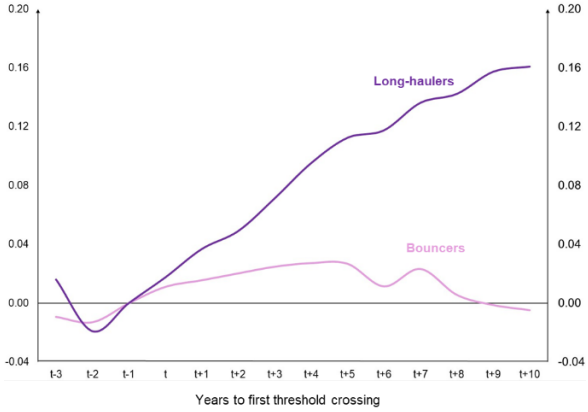


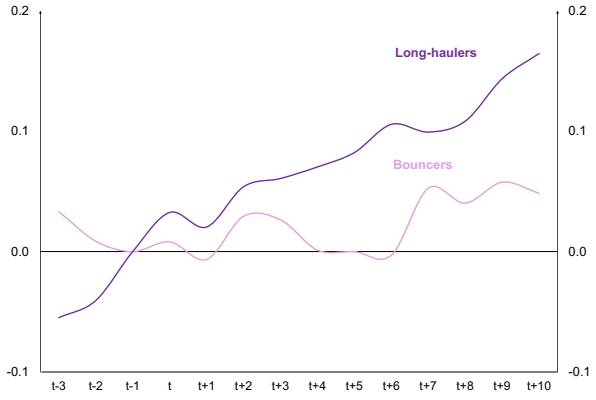
Figure 2. Economic Growth Rate
(Simple average of log GDP per capita, relative to non-crossers)



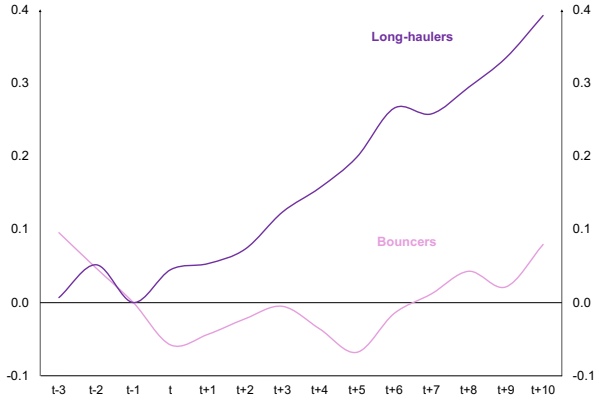
Source: Inspired by Bellon and Warwick, forthcoming.
Note: Figures 1 and 2 focus on "crossers," namely countries that increase their tax-to-GDP ratio above the 10.3 precent tax threshold in the data set during 1965–2019. *t* indicates the year the country crossed the tipping point threshold for the first time. The figures show the evolution of tax-to-GDP ratios and log GDP per capita in the three years before the first observed crossing of the threshold, and in the following 10 years. The figures split crossers into two groups of equal sizes between "bouncers" and "long-haulers," depending on how often the tax ratio remains above the threshold in the years after crossing.

Figure 3. Financial Development and Governance Effectiveness of Long-Haulers and Bouncers

1. Financial Development
(Simple average, relative to non-crossers)



2. Government Effectiveness
(Simple average, relative to non-crossers)



Source: Bellon and Warwick, forthcoming.
Note: Panels 1 and 2 cover the same countries depicted in Figure 1 and 2, indicating the year the country crossed the tipping point threshold for the first time. The analysis was conducted using the Financial Development Index from Sviridzenka (2016) and the Government Effectiveness index from the World Bank World Governance Indicators (Kaufman and Kraay 2024). The two indexes are normalized to have a mean of 0 and standard deviation of 1.

These findings underscore the importance of countries raising their tax-to-GDP ratios in a sustained manner to at least 15 percent of GDP, as part of a broader development strategy. The Compromiso de Sevilla explicitly enshrines this target. Yet the 15 percent benchmark should not be pursued in isolation. On the one hand, tax systems must be of high quality—designed to minimize distortions, support growth, and maintain legitimacy by being perceived as fair and understandable. On the other hand, durable tax capacity building must go hand-in-hand with broader institutional and economic development, including sound governance and

deepening financial markets. Only within such a comprehensive framework can higher tax ratios translate into sustainable development and enable lasting economic take-off.

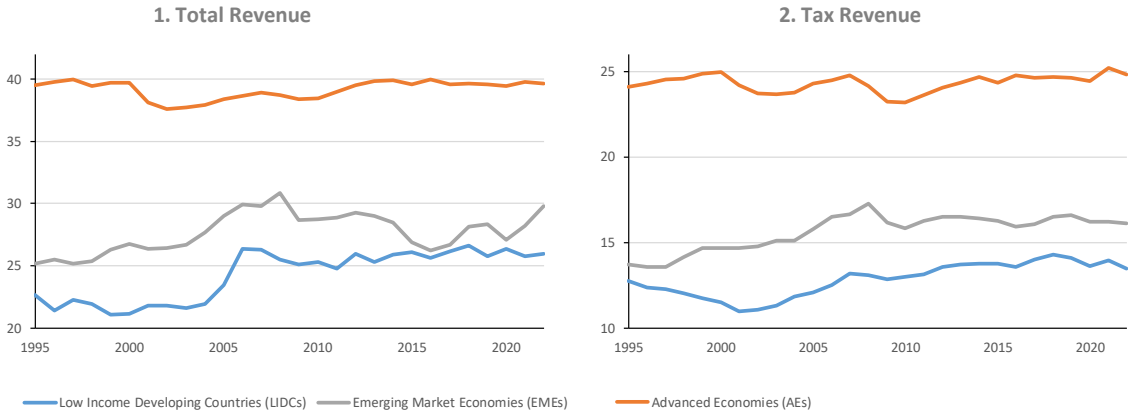
The Size of the Global Challenge

This section discusses revenue performance of developing countries, using the IMF World Revenue Longitudinal Database (WoRLD) database (Mansour and others 2025). It elaborates on trends in revenue, identifies countries with a tax-to-GDP ratio below 15 percent, and estimates the tax potential for countries, reflecting the ability to achieve a tax ratio exceeding 15 percent through tax system reform. The section also looks at the pattern of revenue growth in countries that have achieved sustained revenue gains in the past.

Total revenue and tax revenue. Figure 4 presents the evolution of government revenue in LIDCs, emerging market economies (EMEs), and advanced economies (AEs). Total revenues (Figure 4, panel 1) were approximately 29 percent of GDP in EMEs and 25 percent in LIDCs in 2022. These levels are somewhat higher than in 1995 but have remained relatively stable since 2010, as most of the increase occurred during the first decade of the 21st century. Tax revenues (Figure 4, panel 2, excluding social security contributions) constitute the primary source of budgetary funds across all country groups, accounting for nearly two-thirds of total revenues in AEs and slightly more than 50 percent in both EMEs and LIDCs. Tax revenue ratios increased between the early 2000s and 2010 but have since stabilized. Notably, the average tax-to-GDP ratio in LIDCs remains below 15 percent. Non-tax revenues comprise economic rents from nonrenewable and renewable natural resources (including oil and gas, mining, forestry, and fishing), grants, social security contributions, and various fees and other levies.

Figure 4. Total Revenue and Tax Revenue Development, 1995–2022

(Percent of GDP)



Sources: IMF 2025 and Mansour and others 2025.
Note: Simple averages across countries.

An important factor in shaping tax levels is resource wealth.[3] To illustrate this finding, the figures presented in this section will distinguish between two groups of LIDCs and EMEs: (1) resource-rich LIDCs and EMEs, defined as those with an average ratio of natural resource rents above 9 percent of GDP [4] and (2) non-resource-rich LIDCs and EMEs.[5] Among the resource-rich developing countries, Figure 5 shows that tax revenue has remained broadly stable and low, at about 8 percent of GDP, since the early 1990s. For these countries, non-tax resource revenue constitutes an important source of government funds, although it has declined somewhat since the early 2000s. In contrast, non-resource-rich developing countries have experienced an increase in tax revenues of approximately 2 percentage points of GDP, primarily driven by growing contributions from taxes on sales and production. Non-tax revenues in this group mainly consist of grants, which may face increasing constraints in the near future due to declining official development assistance.

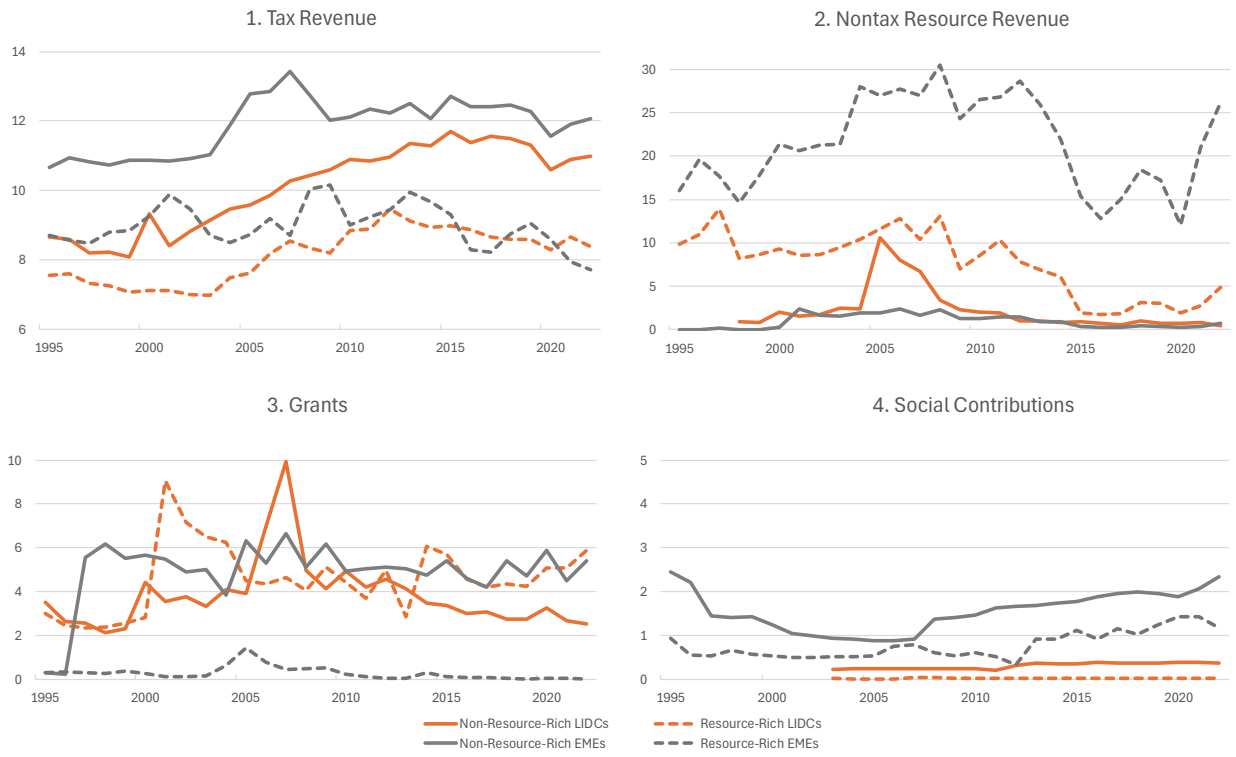
[3] Another important factor is fragile and conflict-affected states (FCSs). FCSs tend to exhibit persistently lower revenue performance and higher reliance on non-tax revenues such as foreign aid and natural resources. This paper does not specifically address issues related to FCSs; for further analysis, see, for example, Akitoby, Honda, and Primus (2020); Baer and others (2021); and Mansour and Schneider (2019).

[4] The classification of resource rich countries is based on natural resource rents to GDP, with the 75th percentile over the period, that is, 9 percent of GDP, serving as the benchmark to identify those with significant resource endowments. For details about the natural resource rents measure, refer to the World Bank Metadata Glossary.

[5] The group of resource-rich and non-resource-rich LIDCs each includes 20 countries and the group of resource-rich and non-resource-rich EMEs includes 18 and 13 countries, respectively. Some countries may have fallen below the 15 percent threshold due to recent discoveries of natural resources.

Figure 5. Evolution of Key Revenue Sources in Developing Countries with Tax Ratios below 15

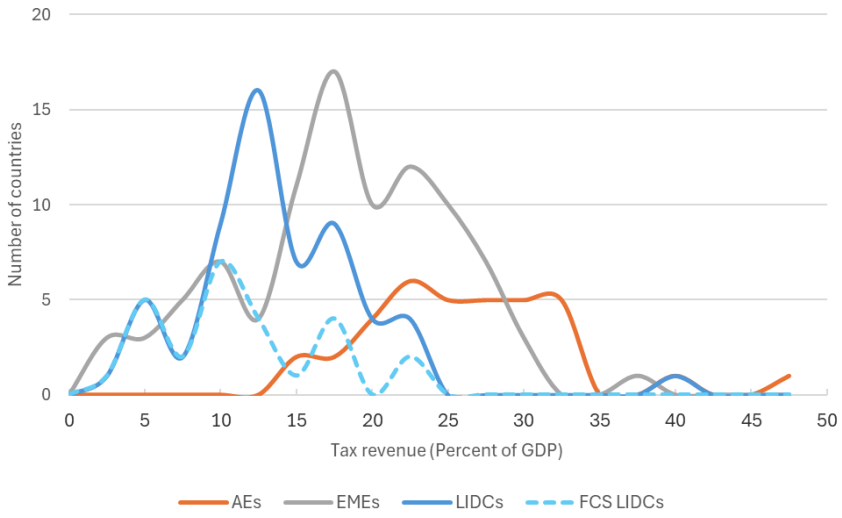
(Percent of GDP)



Sources: Authors, based on IMF 2025 and Mansour and others (2025).
Note: Figures show simple averages across country groups. The group of resource-rich countries is built using natural resource rents from the World Bank World Development Indicators, with the 75th percentile, that is, 9 percent of GDP, serving as the benchmark to identify those with significant resource endowments. Resource-rich countries are therefore defined as countries with an average ratio of natural resource rents to GDP over the period above 9 percent of GDP. The sample includes countries with a tax-to-GDP ratio below 15 percent (see Annex 3). The observed spike in nontax resource revenue in 2006 in panel 2 is driven by a large increase in oil related revenue in São Tomé and Principe and Sudan. In addition, the spike in panel 3 around 2007 for grants in non-resource-rich LIDCs is attributed to the IMF Heavily Indebted Poor Country completion point in some countries, including Niger in 2004 and São Tomé and Príncipe in 2007. In panel 4, Tuvalu has been an outlier for several years and was removed from the sample. EMEs = emerging market economies; LIDCs = low-income developing economies

A large number of countries feature tax-to-GDP ratios below 15 percent. Figure 6 shows the distribution of countries with respect to their tax-to-GDP ratio. The distributions of EMEs and AEs are centered at about 17.5 and 27.5 percent of GDP, respectively, and exhibit significant dispersion. For LIDCs, the distribution of tax-to-GDP is tightly centered at about 12.5 percent, with only 18 out of 58 countries collecting more than 15 percent. In FCSs LIDCs, the distribution of their tax-to-GDP is centered at about 10 percent, with only 6 out of 26 countries collecting more than 15 percent of GDP. Notably, among the 20 FCSs LIDCs with a tax-to-GDP ratio below 15 percent, 13 are resource-rich.

Figure 6. Country Dispersion around Tax Revenue, 2021



Sources: Authors based on IMF 2025 and Mansour and others (2025*)*
Note: The data cover 2021 and exclude social contributions. Figures are simple averages across countries. Countries with a tax-to-GDP ratio below 10 percent are either fragile and conflict-affected or resource-rich with ample non-tax revenue. AEs = advanced economies; EMEs = emerging market economies; FCS = fragile and conflict-affected state; LIDCs = low-income developing economies

Estimating tax potential. The key question for DRM is how much additional tax revenue countries can reasonably mobilize, especially those below the 15 percent threshold. This figure can be inferred from estimates of tax potential, defined as the estimated maximum possible level of tax revenue in a country, given its conditions in terms of income per capita, economic structure, openness to trade, and institutions.[6] By deducting actual revenue collection levels from this estimated potential, the authors obtain the so-called tax gap, that is, the remaining space for tax revenue mobilization through reform of policy and administration (Figure 7). The baseline model estimates a tax potential in LIDCs and EMEs of, respectively, 17.7 and 21.5 percent of GDP. Compared to actual tax ratios, this implies a tax gap of about 5 percent of GDP for both groups. However, when the authors control for natural resource rents,[7] the tax potential drops slightly to 17.3 of GDP in LIDCs and 21.3 percent in EMEs. This confirms the importance of resource wealth for tax revenue mobilization but also highlights that the results of tax potential and tax gap are highly sensitive to the selected specification as noted in Mansour and others (2025).[8]

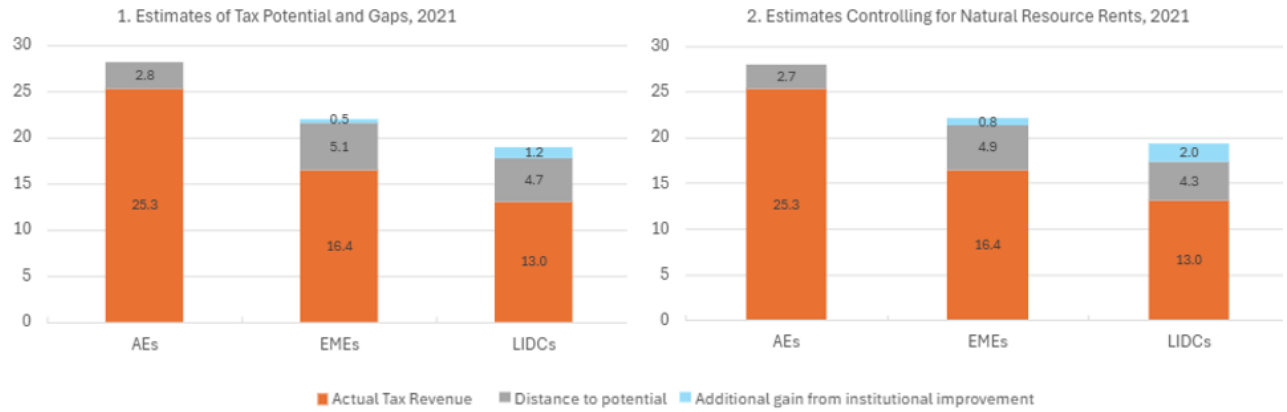
Increasing tax potential. Figure 8 shows the estimated tax potential and tax gaps for countries with tax ratios below 15 percent. Many countries in this group have a tax potential between 15 and 20 percent, thus indicating a feasible path for passing the revenue threshold of 15 percent through reform of the tax system. However, some countries feature an estimated tax potential that is well below 15 percent. For them, mobilizing tax revenue will be more challenging through reforms of tax policy and administration. Instead, improving institutions might be the key priority to improve the tax potential itself. For instance, following the approach in Benitez and

[6] Benitez and others (2023) describes in Annex 1 the econometric specification and the estimation methodology, along with the variables selected in the regression analysis.
[7] This specification extends the baseline model with total natural resource rents in percentage of GDP from the World Bank World Development Indicators. Details about this variable are at the Metadata Glossary.
[8] Estimates should therefore be interpreted with caution and only serve as broad indications of the long-term revenue mobilization potential, rather than as policy targets. See also Badunenko and Kumbhakar (2016); McNabb, Danquah, and Tagem (2021); and Van Nguyen and others (2021).

others (2023), Figure 7 shows how tax potential would rise if the quality of public institutions in LIDCs—in general, not just tax institutions—is improved to mimic the level in EMEs (and that of EMEs to mimic the level of AEs). The results suggest that this could raise an additional revenue of 1.2 percent of GDP for LIDCs and 0.5 percent of GDP for EMEs. In the specification with natural resource rents, the additional revenue is estimated at 2.0 and 0.8 percent of GDP for these respective groups.

Figure 7. Tax Potential and Tax Gap Estimates

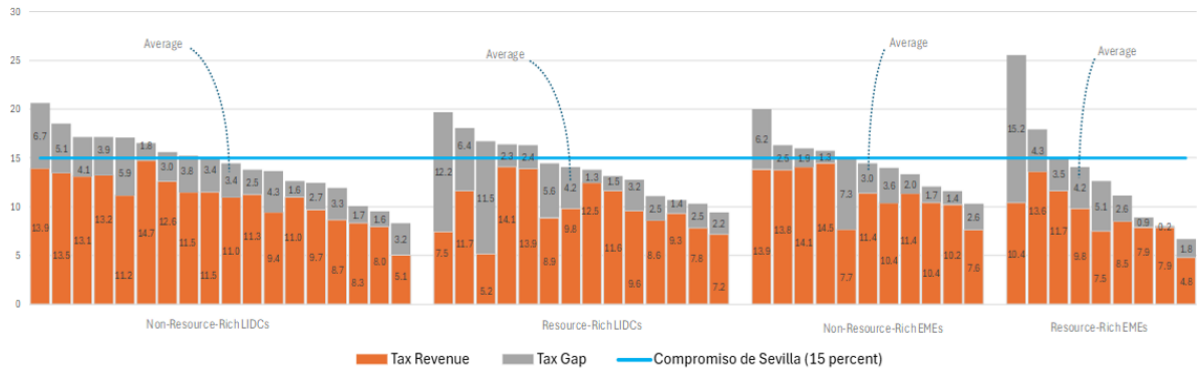
(Percent of GDP)



Sources: Benitez and others 2023; Mansour and others 2025; and IMF staff estimates using IMF 2025.
Note: The panels in the figure show simple averages across county groups. The grey area denotes the tax gap, the difference between potential and actual taxes. The additional gain from institutional improvement (blue area) is obtained using a different econometric specification wherein actual values for low-income developing countries (LIDCs) are replaced by values for emerging market economies (EMEs) and actual values for EMEs are replaced by values for advanced economies (AEs). All estimates are for 2021. Annual estimates of tax potential vary; the average gaps over 2017–21 were as follows: under the base line model (panel 1) 4.9 percent of GDP for LIDCs, 4.6 percent for EMEs, and 3 percent for AEs; under the control for natural resources rent model (panel 2), 4.5 percent of GDP for LIDCs and EMEs, and 2.9 percent for AEs.

Figure 8. Tax Potential Estimates and the Compromiso de Sevilla

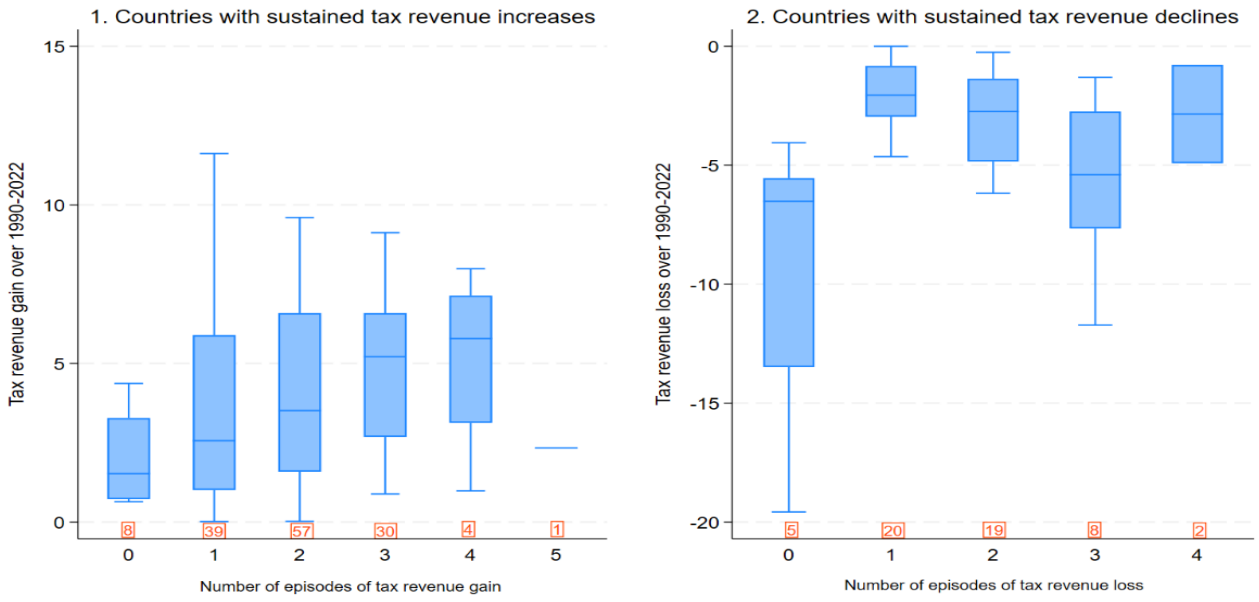
(Percent of GDP)



Sources: Benitez and others 2023; Mansour and others 2025; and IMF staff estimates using IMF 2025c.
Note: The distance to potential is based on Mansour and others (2025) and Benitez and others (2023). Actual tax revenue is for 2022. Countries without data for 2022 are excluded. The estimated distance to potential is the average estimated value over 2020–22. The group of resource-rich countries is built using natural resource rents from the World Bank World Development Indicators, with the 75th percentile, that is, 9 percent of GDP, serving as the benchmark to identify those with significant resource endowments. Resource-rich countries are therefore defined as countries with an average ratio of natural resource rents over the period above 9 percent of GDP. The sample includes countries with a tax-to-GDP ratio below 15 percent (see Annex 3). EMEs = emerging market economies; LIDCs = low-income developing economies

Countries with large revenue gains have managed to sustain tax increases over extensive episodes. The authors look at the experience of countries that have managed to achieve a sustained increase in revenue. Figure 9 indicates a positive association between the number of episodes of sustained tax increases and the magnitude of the cumulative revenue gain. An episode of tax increase (or tax loss) is defined here as a period of at least three consecutive years of increase (decrease). Figure 9 shows that most countries with a sustained revenue gain experience one, two, or three episodes of increase; countries with a sustained loss mostly experience one or two periods of decline. For countries that gain, the median cumulative gain in tax revenue rises markedly with the number of episodes, from less than 2 percent of GDP for those with occasional revenue increases to more than 6 percent for those with four episodes of increase. The variability in the gain narrows with the larger number of episodes. These findings underscore the importance of structuring tax reform as a process, rather than a one-off intervention. Among countries with tax revenue declines, those with zero episodes of decline tend to exhibit the highest and most volatile losses. This finding suggests that erratic tax revenue collapses result in the most severe losses. In contrast, countries with one episode of sustained underperformance show the smallest median tax revenue loss of about 2 percent of GDP with a small dispersion.

Figure 9. Distribution of Tax Revenue Gains and Losses and Performance Sustainability
(Percent of GDP)



Sources: IMF staff, based on IMF 2025c and Mansour and others 2025.
Note: Outlier values are omitted. Episodes of gains (losses) are defined as consecutive increases (declines) in tax revenue-to-GDP for at least three years during 1990–2022. The number of countries by number of episodes is presented in red boxes on the *x* axis. Countries are classified either in the increasing or declining groups, such that a country cannot be included in both groups. Annex 1 and 2 provide further information on countries with gains and losses during 1990–2022.

How to Make Progress?

This section explores options for countries to boost their tax-to-GDP ratios sustainably beyond 15 percent. It builds on Slemrod's tax systems approach, which emphasizes that tax policy (tax law) and revenue administration are inseparable components of taxation and accounting; such interdependencies is necessary for achieving effective, efficient, and equitable taxation with high compliance. This is followed by an overview of alternative options for the design of taxes and the management of tax compliance through effective and efficient revenue administration. The section draws from empirical analysis and IMF capacity development experience for groups of countries, while recognizing that more tailored approaches are needed at the country level given wider heterogeneity across countries.

Tax Systems Approach

Achieving development objectives requires not only raising more revenue but also ensuring high quality of revenue mobilization. Governments typically have several options to increase revenue, such as higher tax rates, broader tax bases, denial of refund claims, investment in digital tax administration, increasing tax audits, and more. Yet not all of these options are equally desirable or sustainable in supporting development. Tax systems are commonly evaluated against the following key criteria: Effectiveness, Efficiency, Equity, and Compliance. *Effectiveness* refers to the extent to which tax measures are implemented as prescribed by law. *Efficiency* requires minimizing economic distortions, for instance investment, savings, employment, productivity, and consumption. *Equity* reflects the system's progressivity, ensuring that tax burdens rise with income or wealth in line with ability to pay—but also horizontal equity so that people in equivalent circumstances are treated similarly. Finally, *Compliance* highlights the importance of administrative capacity to implement and sustain the tax. A compliance focus requires approaches that reinforce the relationship between the tax administration and the universe of taxpayers by promoting *and* enforcing compliance.

In low-capacity countries, strong tax administration is a fundamental requirement for effective, efficient, and equitable revenue mobilization. The tax system approach pioneered by Slemrod emphasizes that taxation should be understood not as a set of isolated policy measures, but as an interconnected system where tax policy and revenue administration are inseparable (Slemrod and Gillitzer 2013; Keen 2025). Rather than assuming that governments can design "optimal" taxes and then simply implement them, the approach highlights that administrative feasibility, compliance costs, and taxpayer behavior fundamentally shape which policies can work in practice. In this approach, building effective tax capacity requires designing policies that are administratively realistic and mutually reinforcing, while also investing in administrative capability—recognizing that the effectiveness of any tax depends on how well the whole system functions. This is particularly relevant for developing countries, where the common phrase "tax policy is tax administration" (de Jantscher andBird, 1992) underscores that for those countries administrative capacity is often a more binding constraint. By encouraging policymakers to recognize the trade-offs and complementarities within the system, the tax system perspective supports reforms that balance real-world complexity with the goals of raising revenue, ensuring efficiency, and enhancing equity. The tax system approach is particularly relevant for LIDCs with tax-to-GDP ratios below 15 percent (see Annex 3).

The tax system's approach highlights the trade-offs and complementarities between tax design, the legal framework, and revenue administration:

- **Tax design.** Administrative constraints may justify the use of simple tax handles, but also broad-based indirect taxes with few exceptions and low rates. If administrative capacity is limited, taxes that are easy to administer may be given prevalence over others, even if, in ideal circumstances, they are less efficient or less equitable. For instance, certain transaction taxes (for example, on real estate) or trade taxes might be relatively distortive but are easy to collect. Similarly, flat final withholding taxes on certain payments (such as interest or dividends) can be easy to collect, but do not allow for differentiation in the rate structure. Yet revenues can also be mobilized in relatively simple ways that are still efficient and equitable. Excises on fuel or addictive consumption are relatively straightforward to administer and provide a stable revenue stream, while supporting clean and healthy behavior. Area-based property taxes can generate reliable income, while adding progressivity to the tax system. And a VAT with limited exemptions and an effective refund system can raise significant revenues, even at modest tax rates, with minimal distortions and at limited administrative costs.

- **Legislative framework.** Tax laws should be designed and drafted using four key principles: (1) understandability (making the tax law easy to read and follow); (2) organization (dealing with the internal organization of the tax law and its coordination with other tax laws); (3) effectiveness (ensuring the tax law achieves its policy objectives); and (4) integration (making the tax law consistent with the legal system of the implementing country). The legislative frameworks which together govern the entire tax system also need to be well designed, by properly structuring the substantive tax laws and separating them from procedural tax laws. Substantive tax laws (such as the income tax, VAT, property tax, customs, and excise tax laws) as well as the tax procedures laws (such as the tax administration laws) should conform to international good practices, provide for tax certainty, and secure taxpayers' trust. Clear and transparent laws, rules, regulations and guidance should ensure consistency of procedures across tax types, reduce discretionary powers of officials, and mitigate compliance costs (Aw and others 2025). Tax legislation should also ensure that data can be routinely obtained from third parties (such as financial institutions, digital platforms, or exporters), digital innovations can be introduced without further legislative change (electronic data exchange, digital signatures, electronic invoicing), and modern debt management practices and robust enforcement provisions are in place (prosecution for certain cases, certainty on penalties). A clear and transparent dispute resolution mechanism is essential to ensure smooth enforcement operations and reduce legal bottlenecks. The processes followed to make tax laws and to monitor them is also critical to achieving improved DRM outcomes.

- **Revenue administration.** Tax policies only come to life through implementation, leading to compliance with tax laws. Tax and customs administrations—referred to here as revenue administrations (RAs)—are central to executing tax laws and thereby shaping tax capacity. They are essential in attaining high and consistent taxpayer compliance with their tax law obligations. If they fail, tax noncompliance not only undermines revenue mobilization but also creates distortion by putting compliant taxpayers at a competitive disadvantage. It can harm equity and the perceived fairness of taxation, thereby undermining the integrity and legitimacy of the tax system and, ultimately, the state itself. Dabla-Norris and others (2020) find that better tax administration attenuates the productivity gap of small and young firms relative to larger and older firms so that better revenue administration can contribute to efficiency in resource allocation and raise productivity and growth.

Moreover, tax systems are an intrinsic part of the overall relations between the state and its citizens. Efficient and transparent public spending, clear reporting and accountability lines within the public

administration, and merit-based and sound decision-making structures are enablers of enhanced trust in government, higher tax morale, and stronger tax compliance.

The Medium-Term Revenue Strategy (MTRS) provides a useful framework for integrated tax system reform; it is also a pragmatic way of ensuring that the effort to improve tax capacity is sustained over time, thereby delivering broader gains, as discussed earlier. The MTRS is a country-owned, whole-of-government approach to generating tax revenue that recognizes the importance of the link between taxation and the spending side of the budget, emphasizes the criticality of sustained political commitment, and embraces the tax systems approach by stressing the close linkages and complementarities between tax policy, revenue administration, and the legal framework as interdependent components of a unified system. While flexible, the MTRS demands sustained commitment to reforms and clear performance indicators.[9] Hence, even where ministers or governments change, ongoing commitment to an MTRS gives certainty and transparency of the reform path for all stakeholders.

For countries with limited capacity, a simplified, practical approach to reform can be more appropriate. The MTRS may be too demanding for an administration with limited capacity. Sequencing reforms to match fragile contexts and maintaining flexibility in the face of political and economic disruptions are essential for many countries. Building tax capacity in such environments requires investment in the core pillars of tax policy and revenue administration. On the tax policy side, simple tax handles may be employed as long as the capacity of the tax administration is limited. On the administration side, the focus should be on core administrative functions, sound processes and systems, skilled human resources, adequate infrastructure, and an organizational culture anchored in leadership, vision, and integrity. Customs administrations also commonly play a key role for revenue collection in such countries, including FCSs, and require effective capacity building. A pragmatic approach can be a starting point for the reform process, which could later be supplemented by an MTRS to manage sustained progress and achieve the 15 percent tax revenue threshold

Improving Tax Design

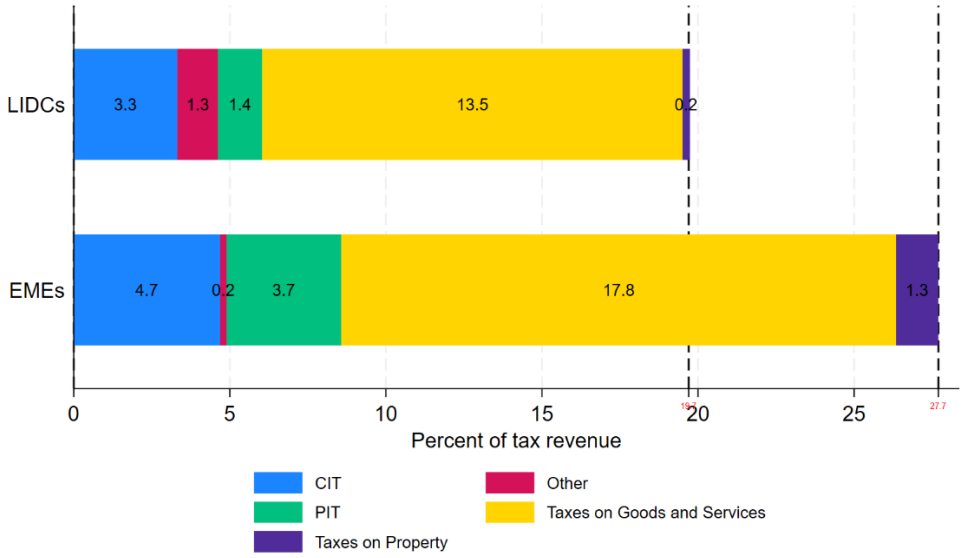
Governments need appropriate institutions to identify, evaluate, and choose between various options for tax reform. This calls for the establishment of an adequate tax policy unit to forecast and analyze the impact of tax reforms, prepare legislation to implement those policies, interact with revenue administrations regarding implementation, and deal with international tax matters in bilateral and multilateral settings (Grote 2017). Ultimately, the appropriate tax reform will be specific for each country and decided by a well-informed political process. This subsection discusses some common lessons from international experience on how revenue mobilization can be advanced through the design of tax systems—thereby illustrating the importance of evidence-based analysis and tools.

Base broadening. Successful tax reforms have often relied on broadening the tax base, rather than increasing statutory tax rates, especially in countries wherein such rates are already relatively high. One way to do this is by rationalizing—in many cases, reducing—tax expenditures. These are policies resulting from special provisions in the tax code at the cost of forgone tax revenue (for example, reduced rates, exemptions, tax

[9] The Platform for Collaboration on Tax is currently undertaking a review of the Medium-Term Revenue Strategy framework aiming at improving its flexibility, increasing country's ownership of reforms, and providing additional guidance on implementation. The primary objective of the review is to integrate lessons learned over the past eight years and leverage these insights to refine and strengthen the approach, creating a more practical and responsive framework to the needs of developing countries. The revamped framework is expected to be published in 2026. For further details, see PCT (2024)

holidays, deferrals) relative to a benchmark system. As shown in Figure 10, total tax expenditures amount to about 19.7 percent of tax revenue on average in LIDCs and 27.7 percent in EMEs. Although some tax expenditures may be justified—for instance, to address market failures—they often receive less scrutiny than direct spending and can proliferate over time. Moreover, they often considerably complicate tax administration.[10] A comprehensive review of tax expenditures can help identify options to broaden the tax base and mobilize additional revenues (Beer and others 2022; Heady and Mansour 2019), while also enhancing equity and efficiency of the tax system. Although tax expenditure assessments can be highly sophisticated in AEs, less costly alternatives based on simpler models exist. These can make a material difference in the tax policy debate to identify options for revenue mobilization.

Figure 10. Estimates of Tax Expenditures
(Percent of total tax revenue)



Sources: Global Tax Expenditures Database; IMF 2025c; and Mansour and others 2025.
Note: Averages during 2014–23. The sample includes 21 low-income and developing economies (LIDCs) and 13 emerging market economies (EMEs) with a tax-to-GDP ratio below 15 percent (see Annex 3). At the country level, the most useful and perhaps robust use of these estimates is their trend over time, by type of tax. Because benchmark systems and estimation methodologies differ across countries, comparing, aggregating, or averaging tax expenditure estimates should be used at best as indicative of the size of such expenditures. Moreover, the quality and coverage of tax expenditures estimates in developing countries tend to be relatively weak, adding to the uncertainty of using them for comparative analysis across countries. CIT = corporate income tax; PIT = personal income tax.

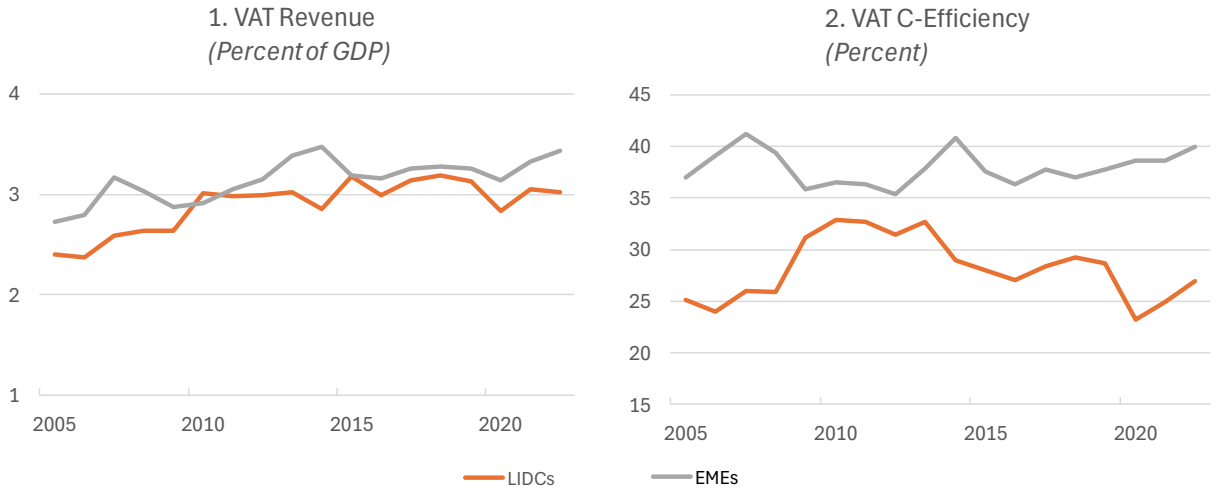
Investment tax incentives. A common tax incentive in LIDCs is full exemption from corporate income tax (CIT) or personal income tax (PIT), including in special economic zones or in the form of temporary tax holidays. These exemptions generally aim to attract foreign direct investment. Yet exemptions have often proven ineffective in achieving this objective, while imposing significant fiscal costs—and raising broader governance concerns (PCT 2015, 2025). Surveys consistently show that these tax incentives rank low among the factors influencing multinationals' location decisions. They are often redundant, meaning that investment would have occurred even in their absence. Other types of tax incentives, designed to reduce the cost of investment, such as investment tax credits, accelerated depreciation, or expensing—tend to deliver more investment per dollar of foregone revenue. The implementation of the Global Minimum Tax may provide an opportunity for countries to

[10] Pecho and others (2024) discuss the administration of tax incentives in developing economies.

reconsider their incentives, since it will reduce the effectiveness of tax exemptions (IMF 2024a). Finally, and particularly for countries below the tipping point, the challenges associated with applying these complex rules should not be underestimated.

Value-added taxes. Over the past decades, the VAT has spread across the developing world and has become a major source of revenue in many low-capacity countries. More than 160 countries have a VAT—in some form—which generates about a quarter of total tax revenue worldwide. Its key advantages include efficient taxation of final consumption at destination, a staged non-cascading collection mechanism, and supporting compliance. VAT revenue performance can be measured by C-efficiency, which is calculated as the actual VAT revenue as a share of potential, with potential measured by the standard VAT rate multiplied by a broad measure of final domestic consumption. The average C-efficiency ratio in 2022 was only 0.27 and 0.40 in LIDCs and EMEs, respectively[11] (Figure 11, panel 2). This low C-efficiency reflects two possible shortcomings of the VAT in low-capacity countries: a policy gap and a compliance gap (see next section). The policy gap points to extensive VAT expenditures, such as reduced rates and exemptions. Such VAT concessions are generally poorly targeted instruments to achieve equity or economic objectives, as discussed in IMF (2019), as they generally involve high cost in foregone revenue, complicate administration and undermine tax compliance. Rationalizing these VAT expenditures can significantly increase revenue. For instance, if LIDCs would move their C-efficiency to the level of EMEs (40 percent), VAT revenue would increase by approximately 2.3 percentage point of GDP, that is, an increase of 75 percent relative to its 2022 level.

Figure 11. VAT Revenue and C-efficiency



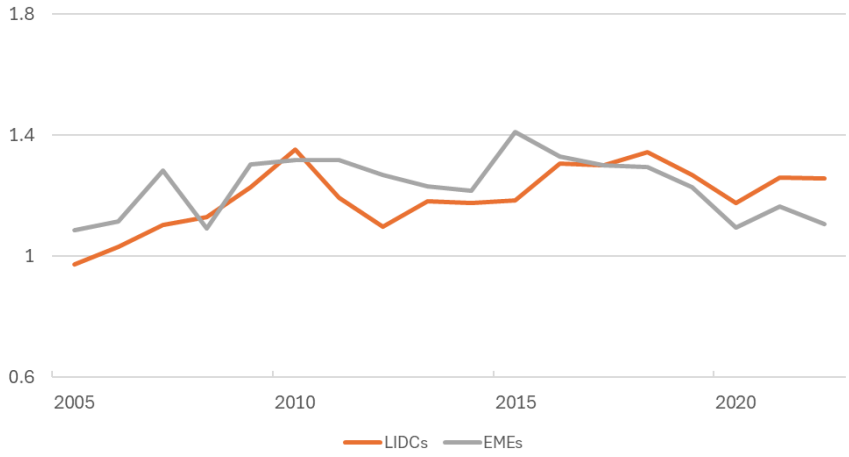
Sources: Authors, based on IMF 2025c and Mansour and others 2025.
Note: C-efficiency is the revenue yield, in percentage points of GDP, of one point of the standard VAT rate. The sample includes countries with a tax-to-GDP ratio below 15 percent (see Annex 3). EMEs = emerging market economies; LIDCs = low-income developing economies.

Excise taxes. Excises are commonly levied on alcohol, tobacco, unhealthy food and energy products (Mansour, Petit, and Sawadogo 2023; Petit and Nagy 2016; Petit, Mansour, and Wingender 2021). Excises on addictive goods are generally motivated by bounded rationality of households and lack of self-control, which can justify government intervention in their pricing. Countries thus use these excises as part of their policy to improve health outcomes, although revenue raising objectives are important as well. Excises on energy products are

[11] The average VAT rate in 2022 is approximately 13 percent in emerging market economies and 16 percent in low-income developing countries with a tax-to-GDP ratio below 15 percent (see Annex 3).

usually rationalized based on pollution externalities—in developing countries, they are mostly applied to fuel products and act as the primary form of carbon taxation. For developing countries, excises have special appeal since concentrated production and high import shares make revenue collection relatively easy—yet their revenue yield has been stable at a low level (Figure 12), suggesting that further increases are possible. There is scope to increase revenue from these excises without any adverse distributional effects (Cnossen 2020).

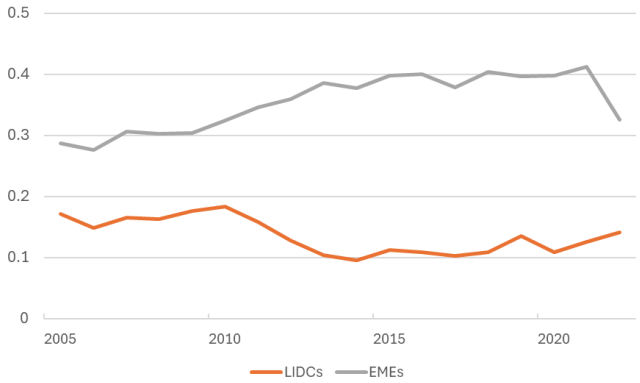
Figure 12. Excise Tax Revenue
(Percent of GDP)



Sources: Authors, based on IMF 2025c and Mansour and others 2025.
Note: Data include revenues from all excise taxes, including those on fuel products, which tend to be the largest tax base for excises. The sample includes countries with a tax-to-GDP ratio below 15 percent (see Annex 3). EMEs = emerging market economies; LIDCs = low-income developing economies.

Real property taxes. Recurrent real property taxes, imposed on gross property values, are among the least distortive to economic growth because their base is immobile. If capitalized into house prices, they can also be somewhat progressive since home ownership generally increase with income and net total wealth holdings. Recurrent property taxes in LIDCs raise about 0.15 percent of GDP, compared to 0.30 percent in EMEs (Figure 13) and more than 1.5 percent of GDP in AEs. In many countries, there is scope to exploit this tax more effectively by raising tax rates, updating property values to market prices and, especially in developing countries, improving cadasters and scaling up administrative capacity (Grote and Wen 2024). Advances in digital mapping technologies based on satellite data provide effective solutions for identifying property parcels and buildings. Aerial and satellite imagery can play a key role in supporting property tax administration in a cost-efficient way (Ali, Deininger, and Wild 2020; Grote and Wen 2024). Where capacity is limited, an area-based system can be used to approximate property values at a lower cost of administration.

Figure 13. Property Tax Revenue
(Percent of GDP)



Sources: Authors, based on IMF 2025c and Mansour and others 2025.
Note: Data include revenues from recurrent property taxes and property transfer fees. The sample includes countries with a tax-to-GDP ratio below 15 percent (see Annex 3). EMEs = emerging market economies; LIDCs = low-income developing economies.

Personal income taxes. PIT revenue is much lower in developing countries compared to AEs and often requires some sophistication in the administration. However, in non-resource LIDCs, and particularly in sub-Saharan Africa, the growth of the PIT revenue-to-GDP ratio has been significant. In 2021, sub-Saharan African countries collected 2.6 percent of GDP, 1.1 percentage points more than they did in 1995 (Benedek, Benítez, and Vellutini forthcoming). To expand the base of the PIT, countries can do more; particular areas of reforms included simplified tax regimes for micro-enterprises and self-employed and rationalizing PIT expenditures—in particular, allowances and deductions based on gross income and without caps on eligible amounts, whose tax benefit tend to accrue primarily to higher income individuals by design.

For resource-rich countries, strengthening the taxation of natural resources remains a critical priority (Box 1). In many cases, fiscal regimes in the sector can be enhanced to ensure an adequate share of location-specific rent is captured by the state. This objective can be achieved through fiscal regimes combining a moderate ad valorem royalty, a resource rent tax, and the standard CIT (IMF 2012). These components respectively ensure early revenue from the start of production, allow the state's revenue share to rise with rents as prices increase or costs fall, and tax the normal return to equity at the corporate level—which is generally creditable against the CIT on worldwide income in the home country of multinationals. At the same time, countries facing declining resource reserves or environmental constraints on extraction will need to gradually shift toward mobilizing non-resource revenues to support sustainable development and fiscal resilience.[12]

Import tariffs provide for a relatively easy tax collection mechanism at the border. They remain an important source of revenue for many developing countries—often more than 2 percent of GDP. Higher revenue could possibly be mobilized by improved customs administration, as discussed in the next section. However, tariffs are generally inefficient—especially when multiple rates apply to different products and origins—and tend

[12] It is important to note here that in developing countries there is a one-to-one negative relationship between tax revenues and revenues from natural resources (Benitez and others 2023). This suggests that these countries view natural resource revenues as a substitute source for tax revenue. In advanced economies, this relationship is absent; countries tend to keep the level of their tax revenue stable (in percent of GDP) when they earn more revenue from natural resources. This suggests that these countries view natural resource revenues as opportunities to invest in additional societal projects or to save for future generations.

to increase inequality and complicate administration. As low-capacity countries develop their institutional capacity, tariffs are therefore generally phased out and replaced by more efficient and more equitable taxes.

Box 1. Using FARI for Mining and Petroleum Tax Policy Analysis

The design of tax policy for mining and petroleum projects can be informed by the IMF's framework for Fiscal Analysis of Resource Industries (FARI). FARI is a methodology for model-based tax policy analysis quantifying how the cashflow generated by natural resource extraction can be shared between investors and government. The analysis can benchmark a country's natural resource tax regime against international comparators. The FARI framework incorporates a standardized set of fiscal and investor indicators. Box Figure 1.1 compares three different tax regimes applied to a gold mine: (i) corporate income tax (CIT) and a flat rate royalty, (ii) CIT plus a resource rent tax, and (iii) CIT plus a royalty rate increasing with the commodity price. Under regime (i), the government share declines as the project profitability increases, due to the absence of fiscal instruments that can capture a share of the increase in profits. Regimes (ii) and (iii) can be designed to yield the same government share of project cashflow (looking at the average effective tax rate), but regime (ii) with the resource rent tax is preferable since it results in a lower break-even price for the investor and a relatively stable average effective tax rate for all project outturns above a minimum rate of return. Regimes (ii) and (iii) are both preferable to regime (i).

Box Figure 1.1. Stylized Analysis of Effective Tax Rates

Source: Authors, using IMF's Fiscal Analysis of Resource Industries model.

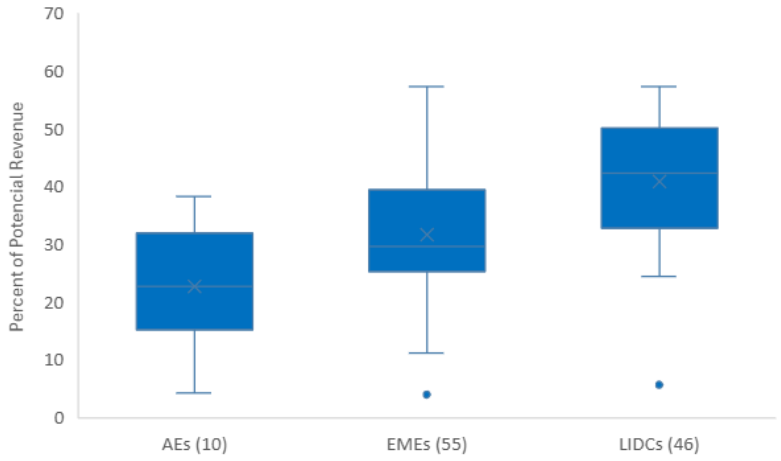
Fostering Tax Compliance

This section uses data and analyses from the Tax Administration Diagnostic Assessment Tool (TADAT), the Revenue Administration Gap Analysis Program (RA-GAP), and the International Survey on Revenue Administration (ISORA) to identify weaknesses in compliance and priorities for reform. The IMF has developed these tools over the past decade to support capacity development activities, often to diagnose and benchmark revenue administrations and establish a baseline for reforms and to measure their impact.

There is significant scope in LICs to increase revenues through improved tax compliance. This can be inferred from estimates of tax compliance gaps. IMF assessments (Figure 14) show that VAT compliance gaps in LICs are on average 41 percent of potential VAT revenue—or 3 percentage points of GDP. Some countries have gaps that reach almost 60 percent of potential. Increasing tax compliance supports base broadening through the inclusion of agents or transactions that are escaping tax liabilities and encourages a more effective and fair tax system. Baer and others (forthcoming) find that improvements in RA performance, as measured by TADAT assessments, can reduce compliance gaps (Figure 15). On average, if LICs were to increase their overall TADAT score from approximately a D+ to a C+, they could expect their VAT compliance gap to decrease by 7.3 percentage points, equivalent to 0.6 percent of GDP. Including spillover effects on CIT compliance, the total revenue gain could reach 1.3 percent of GDP. Even though estimates of the CIT gap are less common than those available for the VAT, available studies show even larger compliance gaps for the CIT.[13] Drawing on ISORA data, ECLAC (2020), Adan and others (2023), and Atsebi, Gueorguiev, and Nose (forthcoming) also find that comprehensive strengthening of revenue administration can raise tax revenue by 1 to 3 percentage points of GDP (Figure 16).

Overall, these findings suggest that addressing noncompliance can, over time, yield large revenue gains.

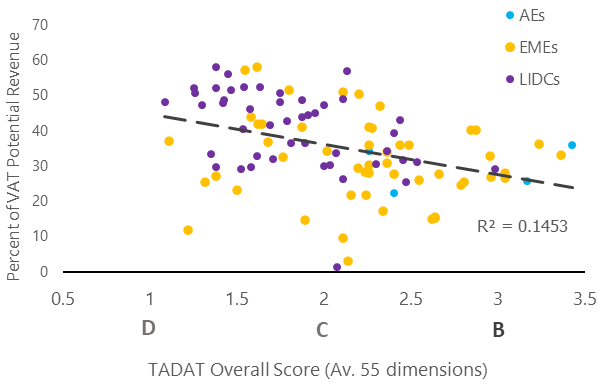
Figure 14. VAT Compliance Gap by Country Income Group



Source: Barra and Prokf'yeva 2025.
Note: The number of countries is provided in parentheses on the *x* axis. The estimates of the gap are percentages of potential tax revenues as required by current law and based on aggregate consumption. AEs = advanced economies; EMEs = emerging market economies; LIDCs = low-income developing economies.

[13] ECLAC (2020) estimates an average corporate income tax compliance gap of 52 percent of potential, equivalent to 3.3 percent of GDP, for Latin American emerging market economies (Argentina, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Mexico, Panama, Peru, Dominican Republic, and Uruguay

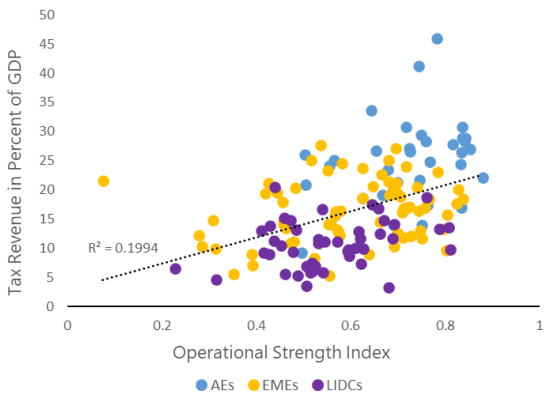
Figure 15. VAT Compliance Gap and TADAT Score



Source: Baer and others, forthcoming.

Note: AEs = advanced economies; EMEs = emerging market economies; LIDCs = low-income developing economies; TADAT = Tax Administration Diagnostic Assessment Tool; VAT = value-added tax.

Figure 16. ISORA Operational Practices and Revenue Collection



Source: Authors, based on ISORA.

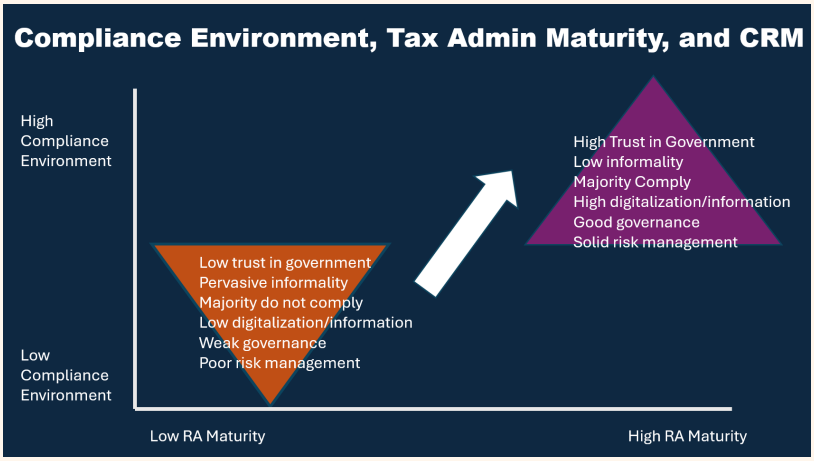
Note: AEs = advanced economies; EMEs = emerging market economies; LIDCs = low-income developing economies; ISORA = International Survey on Revenue Administration

Yet improving tax compliance by effectively implementing tax laws is a daunting task in countries with weak administrative capacity. Effective revenue administration depends on an enabling environment with respect to economic, social, political, and institutional factors, which are mostly absent in low-capacity countries. For example, in these countries RAs operate amid sizable informal sector activity, subsistence business activities, low educational levels, limited access to technology, incipient financial sector, weak accounting standards, and poor governance—elements that are essential for a sound RA *system.* They affect not only the RA, but also its institutional partners and the broader taxpayer community. Such countries face a conundrum: having to mobilize revenues in an environment that is conducive to low compliance levels but lacking an RA with institutional and governance capacity to address such pervasive noncompliance. This problem can become a vicious cycle that hinders DRM efforts (Box 2). RAs in such countries are resource-deprived and ineffective. Their ineffectiveness restrains tax policies. The low compliance trap is one example of a mechanism that can lead to multiple equilibria. Countries in this situation fall into the category that Bellon and Warwick (forthcoming) define earlier in the paper as “bouncers”: countries that are not able to sustainably cross and consistently exceed the minimum threshold for tax revenue, growth, financial development, and improved governance.

Box 2. Escaping the Low Compliance Gap

Low-income developing countries (LIDCs) face a two-pronged challenge: increasing the revenue administration (RA) institutional maturity while putting in place structural conditions that enable an environment of higher tax compliance. Escaping the low maturity–low compliance trap requires consistent effort over time and strategies that are fit for purpose. The difficulty arises from changing the societal attitude toward compliance, or "tax morale." Pervasive noncompliance may even create a situation wherein countries face an inverted "compliance pyramid" that is contrary to the standard compliance pyramid, which originated from Australia and spread across countries of the Organisation for Economic Co-operation and Development during the 2000s, and later to emerging market economies and LIDCs (OECD 2004). In the standard model, those who comply make the base of the pyramid, and the RA focuses its efforts and instruments on the smaller number of taxpayers who do not comply (top layers of the pyramid). The objective is to exercise pressure to move noncompliant taxpayers toward the base of the pyramid (compliant group), so they adjust to the norm. However, the compliance trap may create a situation wherein most of the population does not comply with tax laws due to ignorance, marginalization, state absence, or intentionality. In such environments, informality, for example, is rampant. ILO (2019) states that the informal economy thrives mostly in a context of fragility wherein operating outside the formal economy is usually the only way to secure livelihood. The challenge is thus to invert the pyramid by broadening the number of those who operate within the tax net and gradually create a culture of voluntary compliance, as illustrated in Figure 2.1. Solving this problem requires a whole-of-government approach that goes beyond the scope of the RA. However, the RA does play a central role in addressing these challenges through a variety of instruments, from tax education initiatives to targeted enforcement action. This will take time and resources, aligned under a clear and sequenced strategy.

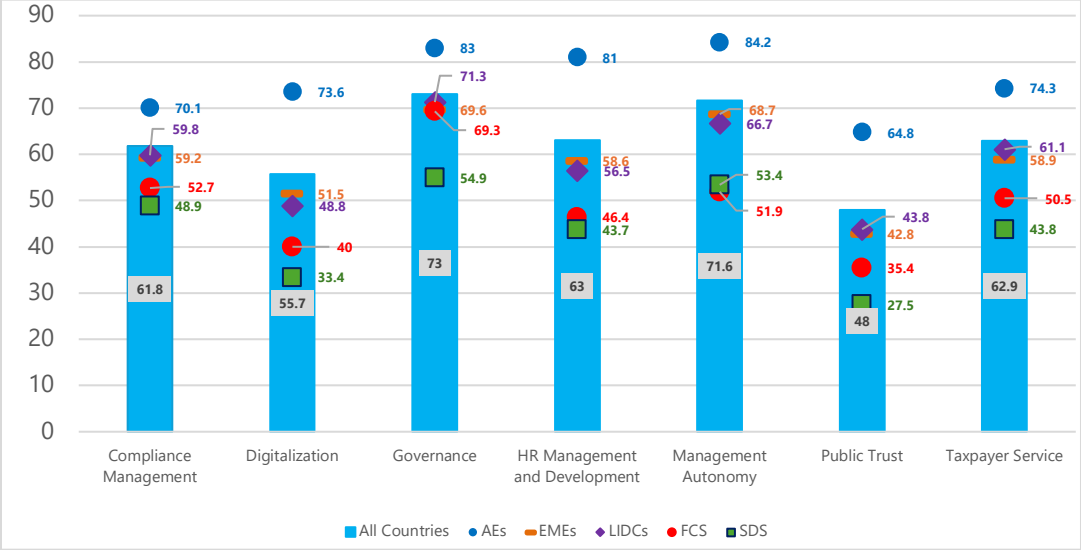
Box Figure 2.1. Compliance Environment, Tax Administration Maturity, and CRM



Source: Authors.
Note: CRM = compliance risk management; RA = revenue administration.

Building capacity in revenue administration requires a holistic and sustained approach to improve its key functions and enabling factors across the board.[14] Data from TADAT suggest that tax administrations in LIDCs generally exhibit weak performance in all common performance outcome areas—with the lowest scores reported in FCSs. Data from ISORA indicate that FCSs and small developing states, in particular, perform poorly across several RA institutional and operational indicators. For instance, the ISORA composite indicators on digitalization, governance, HR management, autonomy, and public trust indicate that these countries have significant gaps, even compared to other LIDCs (Figure 17). But improvements in these areas should not be piecemeal, given the strong complementarities across the key functions and the main enabling factors of an RA. Sustained improvement should therefore be based on a comprehensive strategy.

Figure 17. ISORA Composite Scores on Revenue Administration Horizontal Capabilities, 2022



Source: IMF 2025b.
Note: Scores are expressed as a percentage of the maximum achievable score per category. The score for each horizontal capability is compiled using the responses to a series of ISORA questions (mostly of the "yes/no" type) related to a particular topic. Each score has several weighted components, and each component is based on one or more specific ISORA questions. A participant's score is calculated based on their responses to these questions. The higher the number of positive responses, the higher the resulting score. The resulting score for each capability is thus a reflection of the degree of "good" practice or the extent of "good" structural foundations as assessed by the respondent. AEs = advanced economies; EMEs = emerging market economies; FCS = fragile and conflict-affected state; LIDCs = low-income developing economies; SDS = small developing state.

In countries with the weakest administrative capacity, early efforts should focus on the "basics" of revenue administration to improve tax compliance. For these countries, a comprehensive approach is impractical and should be considered only over the medium term. In the short term, priority should be given to improving the core administrative functions, such as accurate and complete taxpayer registration, on-time filing, on-time payment, effective audit, and enforcement processes. This approach would aim at broadening the taxpayer base, establishing "tax presence" across the country and ultimately enhance compliance. Although it expands the taxpayer net, the RA should also extend its services and control throughout the territory. Many countries with tax ratios below 15 percent have areas of remote access where the state is largely absent. Broad-based taxes require broad-based administration, and implementation should be perceived as fair and encourage

[14] Key functions are integrity of the registered taxpayer base, effective risk management, supporting voluntary compliance, timely filing of tax declarations, timely payment of taxes, accurate reporting in declarations, effective tax dispute resolution, efficient revenue management, and accountability and transparency, see the nine Tax Administration Diagnostic Assessment Tool performance outcome areas. The key enablers are legislation and policy framework, digital technology, funding, governance, human resources, and organization. See IMF (2025a) for further details.

tax education and voluntary compliance across a country's jurisdiction. Digitalization can support this goal as virtual transactions, including through mobile phones, are complementary to physical presence.

For low-capacity countries, the following areas of revenue administration are often the highest priority: compliance risk management, segmentation, digitalization and governance, which we will discuss in turn. These also broadly apply to customs administration, which remains a key player for domestic revenue mobilization in LIDCs.

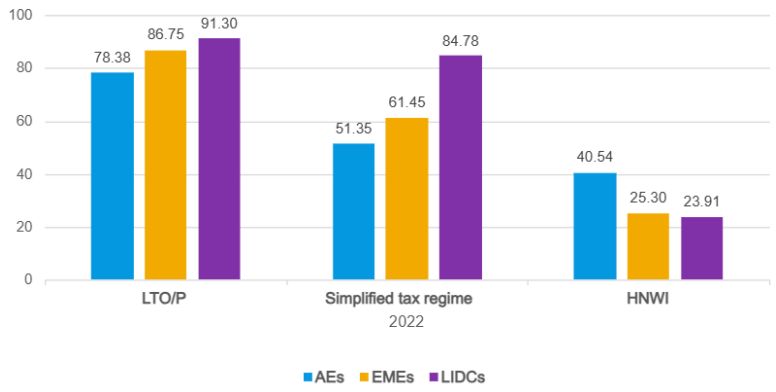
- **Compliance risk management (CRM)** has been widely adopted to ensure tax administrations optimize revenue collections by improving taxpayer compliance across the four basic tax obligations: registration, timely filing, timely payment, and correct reporting. It is a methodology used to systematically identify compliance risks within the taxpayer population and determine how to mitigate and treat them in the most effective and efficient way. Yet despite having been widely adopted over the past decades, CRM practices are largely ineffective in LICs. For instance, while 75 percent of tax administrations declare having a formal CRM strategy,[15] TADAT scores on risk management have the worst performance across all assessed areas (Acedo and others 2024). In these countries, CRM has been applied narrowly primarily to select taxpayers for audit but has not led to a better understanding of taxpayers' behaviors to allocate corporate resources, design strategies, and address noncompliance.[16] D'Agosto and others (2025) demonstrate that RAs can benefit from using IMF Revenue Administration–Gap Analysis Program information to better inform their CRM strategies, for instance, by analyzing sector-specific breakdowns of noncompliance. Even though countries below the tipping point have limited capacity to undertake such studies, with support from capacity development they can implement a simplified CRM approach (for example, data cross-checking between tax and customs administrations, external wealth indicators for certain self-employed categories). This approach helps prioritize resource allocation to the sectors, economic activities and types of taxpayers that are more prone to noncompliance, often yielding better results in terms of revenue collection than in countries that do not implement such approaches.

- **Segmenting taxpayers** based on their size has been a worldwide trend, with some effective results when LICs focus on large, medium, and small businesses. RAs, even in low-capacity settings, have used this approach as an entry point to CRM recognizing that different taxpayer groups have different compliance behaviors, business complexity, and service and assistance needs. Reflecting this, since the 1990s the IMF has supported the establishment of Large Taxpayers Offices (LTOs) to help RAs in many LICs leverage their (often scarce) resources, focus on the largest revenue risks, and pilot broader modernization efforts.[17] Low-capacity RAs have also been overwhelmed by managing many small taxpayers. In response, LICs have

[15] ISORA (2024) collected data from 37 advanced economies, 80 emerging market economies, and 47 low-income developing countries.
[16] On the positive side, Barra and Prokof'yeva (forthcoming), using the novel Reverse IMF Revenue Administration–Gap Analysis Program methodology, find that compliance gaps decreased in low-income developing economies during 2010–23 by an average of 4.5 percentage points. LICs that reduced gaps more significantly have applied CRM in a clear and pragmatic way, mainly through effective taxpayer segmentation combined with digitalization of processes and use of data (including third-party data).
[17] A targeted approach to large taxpayers helps provide a platform for low-capacity administrations to start identifying and analyzing risks associated with international transactions. Even though these are understandably complex operations, usually there are a limited number of multinational companies operating in specific areas in LICs. The LTO approach, with selected personnel who can learn from peer countries and receive capacity development support, offers a pragmatic solution to build capacity in this area. The IMF has developed a new tool to help tax administrations identify gaps and improve their processes and systems to address international tax risks called Framework for International Tax Administrative Strengthening.

introduced presumptive or simplified tax regimes more than AEs and EMEs.[18] Today, segmentation focusing on large and small taxpayers is more prevalent in LICs than in EMEs and AEs, except for controlling high net wealth individuals (Figure 18), which tend to be fewer in LICs. LIC LTOs monitor about 5 percent of corporate taxpayers and generate 63 percent of revenues, significantly more than in EMEs and AEs (Figures 19 and 20). LTOs, including in resource-rich countries, have increasingly adopted organizational structures and processes specialized by sector. LICs assign considerably more resources to their LTOs compared to AEs (Figure 20), but this does not ensure they are applying CRM effectively, given these countries have larger compliance gaps and lower TADAT scores. It is thus crucial for LIC RAs to go beyond adopting segmentation as an organizational proxy for CRM by adopting the full *practice,* not only the *form,* required to manage compliance risks effectively. Many LIDCs have also adopted a specific focus on medium taxpayers—a segment that offers considerable untapped revenue potential. Concrete measures include the creation of Medium Taxpayers' Offices with specialized personnel, the adoption of streamlined procedures and digital solutions (see below), and the usage of more direct and clear communication channels with taxpayers (including help desks and educational materials in accessible formats).

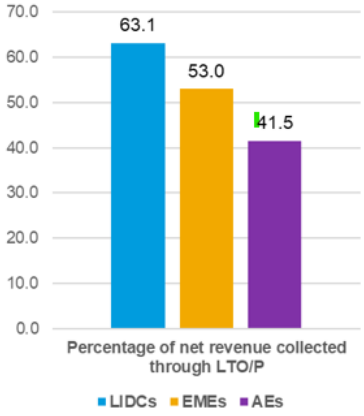
Figure 18. Percentage of Administrations with LTO/P, Simplified Tax Regime, and HNWI Program



Source: Authors, based on ISORA (2022).
Note: AEs = advanced economies; EMEs = emerging market economies; HNWI = high net wealth individual; LTO/P = IMF, Large Taxpayer Office/Program; LIDCs = low-income developing economies.

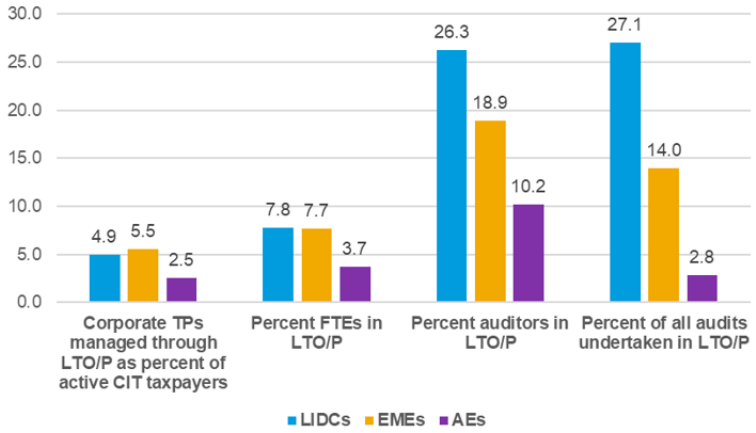
[18] Although outside the scope of this paper, it is noteworthy that providing integrated solutions for small taxpayers, including simplified legislation and presumptive systems, easy procedures written in simple language, help desks and targeted services, broader coverage in rural and remote areas (for example, through weekly or monthly visits of mobile task forces), among other measures, is key to help a country address informality. The objective is to reduce compliance costs and facilitate ways citizens can feel the presence of the state and the benefits of becoming part of the formal economy (for example, access to credit).

Figure 19. Percentage of Net Revenue Collected through LTO/P



Source: Authors, based on ISORA 2022.
Note: AEs = advanced economies; EMEs = emerging market economies; LTO/P = IMF, Large Taxpayer Office or Program; LIDCs = low-income developing economies.

Figure 20. LTO/P-Related Ratios



Source: Authors, based on ISORA 2022.
Note: AEs = advanced economies; CIT = corporate income tax; EMEs = emerging market economies; FTEs = full-time employees; LTO/P = IMF, Large Taxpayer Office or Program; TPs = taxpayers.

- **Digitalization** is an important enabler of RA institutional development if it helps develop core functions and efficient processes. Ample evidence supports this assertion: Bellon and others (2022) report that electronic fiscal devices in Peru increased reported firm sales by 5 percent in the year following adoption. Nose and Mengistu (2023) show that adopting e-invoicing can improve revenue mobilization by 0.7 percent of GDP in developing countries. Although digital transformation has reshaped the RA business in recent decades, not all countries have reaped the benefits. The picture is particularly dire for countries below a 15 percent tax-to-GDP ratio, which often lack internet access and an adequate electricity infrastructure. RAs in LICs and small developing states have low ISORA digitalization scores[19] (Figure 17). Customs administrations in LICs show a similar pattern: advanced e-signatures for customs transactions are used in 11 percent of total transactions in LICs versus nearly 80 percent in AEs. As technology evolves, accelerating further with the spread of

[19] ISORA uses a compendium of 42 questions about the use of digital technology by tax administrations, with scores on a scale from 0 to 100, to estimate the indicator on digitalization.

artificial intelligence, there is an increased risk that low-income countries will lag further behind, reinforcing the vicious cycle mentioned in Box 2. Many LIC RAs cannot finance investments to adapt continuously to new technology, and their staff often have limited skills in technology. But they do not have the option of missing out on digital transformation; this would make it even harder to achieve the 15 percent objective. The key is to adopt cost-effective technologies to help revamp outdated processes, modernize core functions, and improve integrity by reducing face-to-face interactions. Guinea-Bissau provides an instructive example (Box 3). Finally, given their inter-linkages with different public and private stakeholders (for example, banks, notaries, border agencies, tax intermediaries), RAs in LIDCs play a role in spearheading broader state modernization efforts (this has been, for example, the case in Latin America). Expanding the capacity to exchange and analyze data through robust information systems that are integrated with third-party and governmental institutions can significantly enhance the effectiveness of DRM.

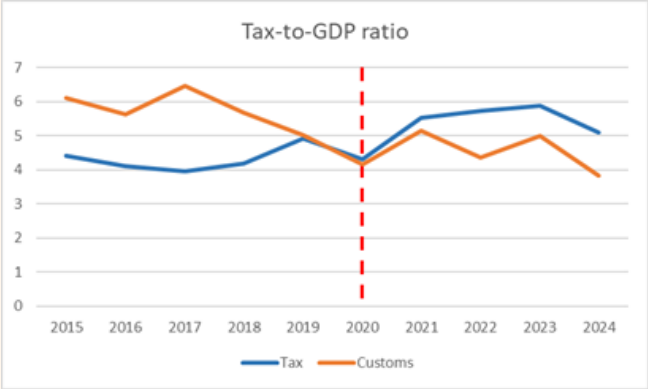
Box 3. Digitalizing from Scratch in a Country of Low Tax Capacity: The Case of Guinea-Bissau

During the COVID-19 pandemic Guinea-Bissau's tax administration faced an impasse. It only collected about 4 percent of GDP but had to close its offices, halting all face-to-face services, the only means of interaction with taxpayers. All tax filing and payments were manually processed. With IMF support, Guinea-Bissau adopted Kontaktu: a Minimum Viable Product of an open-source website for electronic filing and payment. It is accessible via computers and smartphones and can be hosted on commercial clouds or government servers.

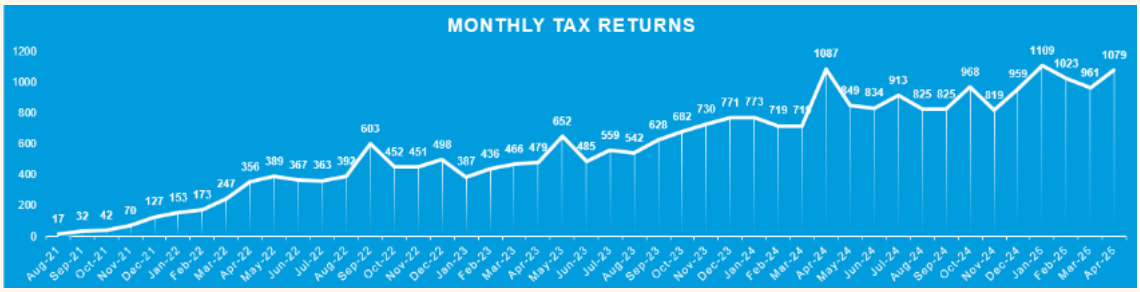
Digitalization through Kontaktu has ushered in a major change in the context of fragility and scarce resources. It has ended manual processing of returns and payments and has shown how much progress is possible if digitalization is part of a coherent and scalable strategy. Kontaktu has become the backbone of the tax administration’s institutional transformation and has reaped efficiency gains for the taxpayer community. Starting with a focus on large taxpayers, since 2022 it has expanded to all medium-size taxpayers, demonstrating the use of segmentation in the adoption of major IT solutions. Payment through the banking system and telecoms has been introduced and is steadily increasing. The new system has helped revamp core processes, reduce face-to-face interactions, and improve governance.

Digitalization through Kontaktu has been conducted in the context of broader capacity building supporting strategic and operational functions of the tax administration—which is the right approach to countries with low capacity. Therefore, even though it is not possible to pinpoint single factors behind the increase in revenue mobilization, collections by the tax administration increased from an average of 4.3 percent of GDP before Kontaktu to 6 percent of GDP in 2023 (Box Figure 3.1). In contrast, tax revenue collected by customs decreased from an average of 5.8 percent of GDP to 5.1 percent of GDP in the same period.

Box Figure 3.1. Guinea-Bissau:Tax to GDP Radio



Box Figure 3.2 Guinea Bissau: Monthly Electronic Tax Returns Received



Source: Authors based on IMF 2025c, and Guinea-Bissau authorities.

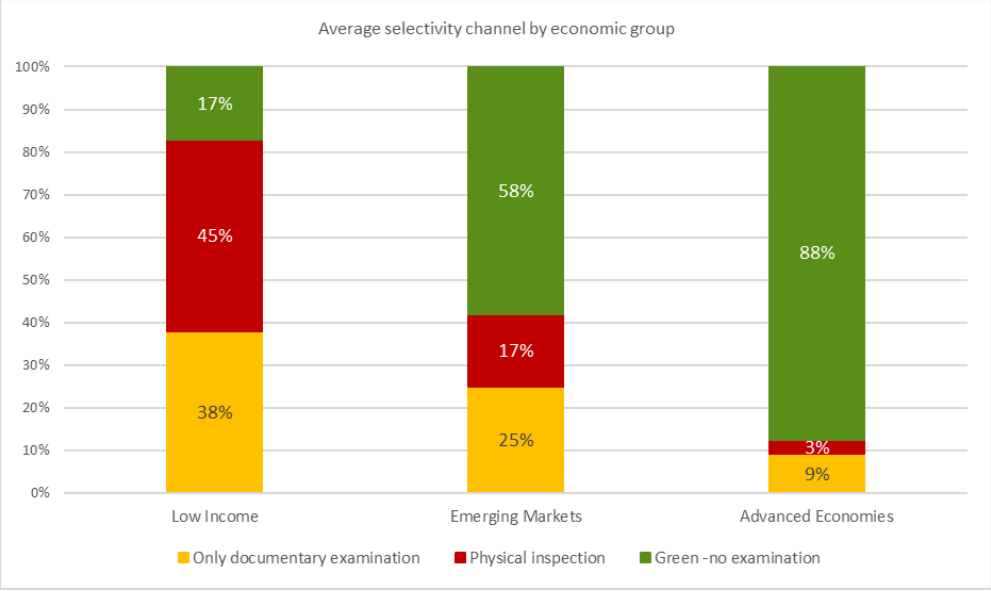
- **Good governance** underpins effective and fair revenue administration. Establishing core functions in tax and customs administration without addressing governance weaknesses, increasing transparency, and strengthening public trust is a recipe for failure. Ignoring these factors has led to rent seeking, corruption, and abuse of the state's taxing power, further damaging public trust and the culture of compliance.[20] Key governance considerations in RAs include establishing clear rules governing institutional integrity and financial management, implementing strong oversight functions, and ensuring effective reporting mechanisms. Further, countries must safeguard their RAs from political interference to enable independent decision-making, including in the audit function. The ISORA composite indices for "Governance" and "Public Trust" (Figure 17) show a sizable gap in relation to good practices in LICs. Looking at the underlying factors behind such gaps, TADAT indicates that the areas with the weakest performance are public confidence in tax administration, publication of strategies and plans, and investigating wrongdoing and maladministration. Establishing a sound results-driven managerial framework is crucial for setting goals, meeting milestones and targets, and evaluating performance. Poor

[20] To help countries identify key weaknesses their RAs need to address in these areas, the IMF is developing the Revenue Administration Governance and Integrity Assessment (RAGIA) framework (planned for introduction in 2026). Applying this framework and adopting measures to strengthen specific aspects of RA governance will increase the chance that RAs carry out reforms based on solid institutional foundations. The RAGIA framework is a comprehensive, hands-on approach that can be applied across countries to support good governance and integrity in RAs.

strategic and performance management mean it is practically impossible to implement transformational RA reforms, which require sustained leadership, ownership, and innovation over the medium term.

- **Customs administration** is an essential component of a healthy tax system approach**.** Although the focus is often on improvements in tax administration, more attention should be given to customs administration. The relevance of customs administration for DRM, trade facilitation, and economic growth in LICs is often overlooked. Indeed, customs collect on average almost 40 percent of total revenues in LIDCs (mainly VAT on imports and tariffs). As in tax administration, risk management in customs is incipient in LIDCs. Their traditional risk managementapproach has been the use of selectivity channels during the clearance of goods.[21] Despite 90 percent of LIDCs declaring they have risk management procedures in place, their customs agencies still apply documentary and physical examination to 83 percent of goods during the clearance process, compared to 12 percent in AEs (Figure 21). Failure to apply risk management slows customs procedures significantly and is detrimental to the business environment. It may also weaken governance, as red tape becomes an invitation to bribes to reduce clearance times for businesses. Finally, good collaboration between customs and tax authorities is critical for an effective RA *system.* An example of this is the exchange of third-party (customs) data, crucial for detecting noncompliance with domestic tax obligations.

Figure 21. Customs Administration Risk Management Selectivity Channels
(Percent)



Source: Perez and others 2022.

[21] The channels are green, authorizing the immediate release of goods; yellow, requiring the review of import documentation to check for risks such as tariff misclassification; and red, implying a physical inspection of containers and cargo.

Support for Building Tax Capacity

This final section discusses how capacity building activities by the IMF and others can support efforts to improve tax capacity and help countries achieve a tax-to-GDP ratio above the 15 percent threshold.

The international community can play an important role in supporting countries to enhance their tax capacity, but it is subsidiary and subordinate to the domestic political process. Tax and broader public finance reform is an intrinsically political process, reflecting the underlying social contract between the government and the population. This social contract differs across countries and over time. It can only be domestically determined and driven. Nevertheless, once political commitment to tax and public finance reform is in place, international support to design, finance and implement the reform can be transformative, particularly in developing and fragile economies. This is why international support for domestic revenue mobilization is so prominent in the Compromiso de Sevilla and the fourth UN Financing for Development conference.

Capacity development (CD) can make a substantial contribution to country-led tax capacity initiatives. Building tax capacity takes time, as it requires careful consideration of the appropriate design of tax policies and strengthening of the institutions that administer those policies—as set out in the previous sections. Technical advice, training and peer learning on policy design, process design, institutional structure, reform management and leadership can help countries embark on reform processes drawn from experiences elsewhere while ensuring they remain tailored to the local context. There is also evidence that CD is associated with improvements in tax capacity (IMF 2024b).

This link is reflected in the importance of fiscal capacity building in the IMF's operations. CD makes up over a third (37 percent) of the IMF's country operations and is closely integrated with the other two elements of IMF country work: surveillance (38 percent) and lending (24 percent). Public finance is the largest area of IMF CD. Total annual expenditure on public finance CD is about $128 million and about $98 million of that was financed by external donors, reflecting the importance of international partnership in this area. Tax policy and revenue administration CD accounted for almost half this expenditure. In FY2025 alone in the revenue area, the IMF Fiscal Affairs Department (FAD) provided CD support to 148 countries across all regions of the world and all income categories. The majority of this support was focused on low-income and fragile economies. The IMF Legal Department (LEG) has provided significant CD on the design and drafting of legislative frameworks, in coordination with FAD, consisting of the drafting of new tax laws and regulations or implementing amendments to existing frameworks. LEG has provided legislative drafting CD to more than 70 countries, amounting to more than 200 tax laws and regulations.

Going forward, more comprehensive and better coordinated CD can contribute to more impactful country-led tax reforms. Tax system reform processes work best when they are embedded within a broader macro-economic reform strategy that is supported by international finance, including from the IMF. Tax capacity CD should be integrated within a programmatic public finance approach that takes account of the linkages between policy and administration level—as highlighted in the tax system approach—and between revenue and spending. This approach should be medium-term in nature and have clearly articulated objectives and intermediate steps that integrate political-economy conditions and the underlying social contract of the country. Such an approach enables efficient and coordinated support from development partners. This support needs to

be tailored to the specific country conditions and flexible enough to adapt to changing priorities.[22] That said, strong leadership and effective management change are essential elements for implementing reforms that strengthen institutional frameworks. A whole-of-government approach to mobilizing domestic revenue in low-capacity countries is critical to ensure that all relevant institutions are actively engaged and aligned toward common fiscal objectives.

[22] The Global Public Finance Partnership (GPFP), which the IMF launched in 2024, is specifically designed to deliver CD in line with these principles. The GPFP is a funding vehicle that is supported by 15 bilateral partners and works in close coordination with multilateral partners, in particular through the Platform for Collaboration on Tax and through the IMF and World Bank Joint Domestic Resource Mobilization Initiative. It provides coordinated revenue and spending CD to countries in all regions with a particular focus on developing and fragile economies.

Annex 1. Countries with a Gain of at Least 5 percent of GDP, 1990–2022

Countries	Income Group	Number of years of gains	Number of gain episodes	Percentage of gain years	Total gains	Gain per episode	Gain per year
Nauru	EME	8	1	0.6	26.4	26.4	3.3
Kosovo	EME	14	1	0.6	19.7	19.7	1.4
Georgia	EME	18	2	0.7	18.2	9.1	1.0
Zimbabwe	LIDC	9	1	0.5	6.8	6.8	0.8
Nepal	LIDC	17	3	0.8	12.7	4.2	0.7
The Bahamas	EME	11	2	0.6	7.3	3.7	0.7
West Bank and Gaza	LIDC	9	1	0.7	5.9	5.9	0.7
Afghanistan	LIDC	9	2	0.6	5.8	2.9	0.6
St. Vincent and the Grenadines	EME	13	2	0.5	8.0	4.0	0.6
Argentina	EME	15	3	0.6	9.1	3.0	0.6
Mozambique	LIDC	20	1	0.6	11.6	11.6	0.6
Tanzania	LIDC	13	1	0.6	7.4	7.4	0.6
Greece	AE	17	2	0.6	9.6	4.8	0.6
Nicaragua	LIDC	16	2	0.7	8.9	4.5	0.6
Democratic Republic of the Congo	LIDC	15	1	0.7	8.3	8.3	0.6
El Salvador	EME	17	2	0.6	8.9	4.4	0.5
Maldives	EME	14	2	0.4	7.3	3.6	0.5
Malawi	LIDC	13	3	0.6	6.6	2.2	0.5
Tonga	EME	14	2	0.6	7.0	3.5	0.5
Kyrgyz Republic	LIDC	18	2	0.6	8.8	4.4	0.5
Jamaica	EME	14	1	0.7	6.8	6.8	0.5
Armenia	EME	17	3	0.6	8.2	2.7	0.5
Solomon Islands	LIDC	14	2	0.6	6.8	3.4	0.5
Slovenia	AE	16	2	0.6	7.2	3.6	0.4
Cambodia	LIDC	17	2	0.7	7.6	3.8	0.4
Ghana	LIDC	21	3	0.7	9.0	3.0	0.4
Azerbaijan	EME	16	2	0.6	6.8	3.4	0.4
Timor-Leste	LIDC	14	1	0.7	5.9	5.9	0.4
Honduras	LIDC	18	3	0.6	7.5	2.5	0.4
Guinea-Bissau	LIDC	19	3	0.6	7.8	2.6	0.4
Tajikistan	LIDC	16	2	0.7	6.6	3.3	0.4
Burkina Faso	LIDC	20	4	0.6	8.0	2.0	0.4
Micronesia	EME	16	3	0.6	6.3	2.1	0.4
Burundi	LIDC	16	3	0.5	6.2	2.1	0.4
Montenegro	EME	14	2	0.7	5.4	2.7	0.4
Korea	AE	14	2	0.5	5.3	2.7	0.4
Tunisia	EME	18	2	0.6	6.8	3.4	0.4
Albania	EME	16	1	0.6	6.0	6.0	0.4
Cyprus	AE	17	3	0.6	6.2	2.1	0.4
France	AE	23	3	0.7	8.4	2.8	0.4
Norway	AE	17	3	0.5	6.2	2.1	0.4
Chile	EME	18	4	0.6	6.3	1.6	0.3
Belize	EME	17	2	0.7	5.5	2.7	0.3
Italy	AE	18	4	0.6	5.3	1.3	0.3
Saudi Arabia	EME	18	3	0.6	5.2	1.7	0.3
Senegal	LIDC	19	2	0.7	5.3	2.6	0.3
Benin	LIDC	22	3	0.7	6.0	2.0	0.3
Samoa	EME	19	1	0.6	5.1	5.1	0.3
Rwanda	LIDC	21	3	0.7	5.7	1.9	0.3
United Kingdom	AE	20	3	0.6	5.3	1.8	0.3
LIDCs (22 countries)		16	2	0.6	7.5	4.2	0.5
EMEs (20 countries)		15	2	0.6	9.0	5.8	0.7
AEs (8 countries)		18	3	0.6	6.7	2.6	0.4

Source: Authors, based on IMF 2025c.

Note: AEs = advanced economies; EMEs = emerging market economies; LIDCs = low-income developing countries.

Annex 2. Countries with a Loss,1990–2022

Countries	Income Group	Number of years of loss	Number of loss episodes	Percentage of loss years	Total loss	Loss per episode	Loss per year
Algeria	EME	18	1	0.6	-4.6	-4.6	-0.3
Bosnia and Herzegovina	EME	14	3	0.6	-1.3	-0.4	-0.1
Botswana	EME	12	0	0.5	-19.6		-1.6
Canada	AE	15	2	0.5	-1.9	-0.9	-0.1
Central African Republic	LIDC	15	1	0.5	-3.2	-3.2	-0.2
Croatia	EME	15	2	0.6	-0.5	-0.3	0.0
Czech Republic	AE	13	2	0.5	-1.9	-1.0	-0.1
Djibouti	LIDC	20	2	0.6	-6.0	-3.0	-0.3
Ecuador	EME	6	1	0.7	-0.9	-0.9	-0.2
Equatorial Guinea	EME	19	2	0.6	-6.1	-3.0	-0.3
Eritrea	LIDC	15	2	0.6	-2.3	-1.1	-0.2
Estonia	AE	12	1	0.4	-1.9	-1.9	-0.2
Ethiopia	LIDC	16	1	0.5	-0.8	-0.8	-0.1
Fiji	EME	8	0	0.5	-5.5		-0.7
Finland	AE	18	2	0.6	-1.0	-0.5	-0.1
Guyana	EME	13	1	0.4	-1.9	-1.9	-0.1
Hungary	EME	19	3	0.6	-6.6	-2.2	-0.3
Ireland	AE	18	3	0.6	-11.7	-3.9	-0.7
Israel	AE	14	2	0.5	-2.8	-1.4	-0.2
Kiribati	LIDC	16	2	0.5	-3.5	-1.8	-0.2
Lao P.D.R	LIDC	10	2	0.5	-0.8	-0.4	-0.1
Latvia	AE	10	1	0.4	-0.2	-0.2	0.0
Lebanon	EME	14	1	0.5	-2.5	-2.5	-0.2
Libya	EME	18	4	0.6	-4.9	-1.2	-0.3
Malaysia	EME	20	2	0.6	-5.9	-2.9	-0.3
Marshall Islands	EME	9	1	0.5	-2.7	-2.7	-0.3
Moldova	LIDC	14	2	0.5	-2.7	-1.4	-0.2
Mongolia	EME	8	1	0.6	-3.1	-3.1	-0.4
Nigeria	LIDC	7	1	0.3	-0.4	-0.4	-0.1
North Macedonia	EME	7	1	0.4	0.0	0.0	0.0
Panama	EME	17	3	0.6	-3.0	-1.0	-0.2
Papua New Guinea	LIDC	18	1	0.6	-2.2	-2.2	-0.1
Paraguay	EME	12	1	0.5	-0.1	-0.1	0.0
Poland	EME	14	1	0.5	-4.6	-4.6	-0.3
Republic of Congo	LIDC	16	2	0.5	-1.4	-0.7	-0.1
Romania	EME	15	3	0.6	-4.2	-1.4	-0.3
Sao Tome and Principe	LIDC	13	0	0.6	-13.5		-1.0
Seychelles	EME	19	3	0.6	-8.6	-2.9	-0.5
Singapore	AE	16	1	0.5	-3.2	-3.2	-0.2
Slovak Republic	AE	17	2	0.6	-4.8	-2.4	-0.3
Sri Lanka	EME	16	3	0.6	-6.7	-2.2	-0.4
Sudan	LIDC	19	4	0.6	-0.8	-0.2	0.0
Thailand	EME	13	2	0.5	-1.6	-0.8	-0.1
Trinidad and Tobago	EME	18	2	0.6	-6.2	-3.1	-0.3
Turkmenistan	EME	8	1	0.6	-2.8	-2.8	-0.4
Tuvalu	EME	8	0	0.5	-4.1		-0.5
Türkiye	EME	10	1	0.5	-0.8	-0.8	-0.1
UAE	EME	14	2	0.5	-4.8	-2.4	-0.3
Uzbekistan	LIDC	18	3	0.6	-2.5	-0.8	-0.1
Vanuatu	EME	14	2	0.5	-0.3	-0.1	0.0
Venezuela	EME	5	0	0.5	-6.5		-1.3
Yemen	LIDC	15	2	0.5	-3.6	-1.8	-0.2
Zambia	LIDC	12	1	0.5	-1.1	-1.1	-0.1
LIDCs (15 countries)		15	2	0.5	-3.0	-1.4	-0.2
EMEs (29 countries)		13	2	0.5	-4.2	-1.9	-0.3
AEs (9 countries)		15	2	0.5	-3.3	-1.7	-0.2

Source: Authors, based on IMF 2025c.

Note: AEs = advanced economies; EMEs = emerging market economies; LIDCs = low-income developing countries.

Annex 3. Classification of Countries with a Tax-to-GDP Ratio below 15 percent in 2022

Country	Resource endowment status	Income group	FCS status
Angola	Resource-Rich	EME	Non FCS
Azerbaijan	Resource-Rich	EME	Non FCS
Benin	Non-Resource Rich	LIDC	Non FCS
Bangladesh	Non-Resource Rich	LIDC	Non FCS
Brunei Darussalam	Resource-Rich	EME	Non FCS
Bhutan	Non-Resource Rich	LIDC	Non FCS
Central African Republic	Resource-Rich	LIDC	FCS
China	Non-Resource Rich	EME	Non FCS
Cote d'Ivoire	Non-Resource Rich	LIDC	Non FCS
Democratic Republic of the Congo	Resource-Rich	LIDC	FCS
Republic of Congo	Resource-Rich	LIDC	FCS
Comoros	Non-Resource Rich	LIDC	FCS
Costa Rica	Non-Resource Rich	EME	Non FCS
Djibouti	Non-Resource Rich	LIDC	Non FCS
Dominican Republic	Non-Resource Rich	EME	Non FCS
Algeria	Resource-Rich	EME	Non FCS
Ecuador	Resource-Rich	EME	Non FCS
Egypt	Resource-Rich	EME	Non FCS
Ethiopia	Resource-Rich	LIDC	FCS
Gabon	Resource-Rich	EME	Non FCS
Ghana	Resource-Rich	LIDC	Non FCS
Guinea	Resource-Rich	LIDC	Non FCS
The Gambia	Non-Resource Rich	LIDC	Non FCS
Guinea-Bissau	Resource-Rich	LIDC	FCS
Equatorial Guinea	Resource-Rich	EME	Non FCS
Guatemala	Non-Resource Rich	EME	Non FCS
Guyana	Resource-Rich	EME	Non FCS
Haiti	Non-Resource Rich	LIDC	FCS
Indonesia	Non-Resource Rich	EME	Non FCS
Iran	Resource-Rich	EME	Non FCS
Iraq	Resource-Rich	EME	FCS
Kenya	Non-Resource Rich	LIDC	Non FCS
Cambodia	Non-Resource Rich	LIDC	Non FCS
St. Kitts and Nevis	Non-Resource Rich	EME	Non FCS
Kuwait	Resource-Rich	EME	Non FCS
Lao P.D.R	Non-Resource Rich	LIDC	Non FCS
Liberia	Resource-Rich	LIDC	Non FCS
Libya	Resource-Rich	EME	FCS
Sri Lanka	Non-Resource Rich	EME	Non FCS
Madagascar	Non-Resource Rich	LIDC	Non FCS
Mexico	Non-Resource Rich	EME	Non FCS
Marshall Islands	Non-Resource Rich	EME	FCS
Mali	Non-Resource Rich	LIDC	FCS
Myanmar	Resource-Rich	LIDC	FCS
Mauritania	Resource-Rich	LIDC	Non FCS
Malawi	Non-Resource Rich	LIDC	Non FCS
Malaysia	Resource-Rich	EME	Non FCS
Niger	Non-Resource Rich	LIDC	FCS
Nigeria	Resource-Rich	LIDC	FCS
Oman	Resource-Rich	EME	Non FCS
Pakistan	Non-Resource Rich	EME	Non FCS
Panama	Non-Resource Rich	EME	Non FCS
Papua New Guinea	Resource-Rich	LIDC	FCS
Paraguay	Non-Resource Rich	EME	Non FCS
Qatar	Resource-Rich	EME	Non FCS
Rwanda	Non-Resource Rich	LIDC	Non FCS
Saudi Arabia	Resource-Rich	EME	Non FCS
Sudan	Non-Resource Rich	LIDC	FCS
Sierra Leone	Resource-Rich	LIDC	Non FCS
Somalia	Resource-Rich	LIDC	FCS
South Sudan	Resource-Rich	LIDC	FCS
Sao Tome and Principe	Non-Resource Rich	LIDC	FCS
Chad	Resource-Rich	LIDC	FCS
Togo	Resource-Rich	LIDC	Non FCS
Turkmenistan	Resource-Rich	EME	Non FCS
Timor-Leste	Resource-Rich	LIDC	FCS
Tuvalu	Non-Resource Rich	EME	FCS
Tanzania	Non-Resource Rich	LIDC	Non FCS
Uganda	Resource-Rich	LIDC	Non FCS
Vietnam	Non-Resource Rich	LIDC	Non FCS
Yemen	Resource-Rich	LIDC	FCS

Source: Authors, based on IMF 2025c.
Note: EME = emerging market economy; FCS = fragile and conflict-affected state; LIDC = low-income developing country.

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