Domestic Revenue Mobilization in WAEMU

Ljubica Dordevic and Anamaria Maftei

SIP/2025/070

IMF Selected Issues Papers are prepared by IMF staff as background documentation for periodic consultations with member countries. It is based on the information available at the time it was completed on April 17, 2025. This paper is also published separately as IMF Country Report No 25/111.

2025 JUN



IMF Selected Issues Paper African Department

Domestic Revenue Mobilization in WAEMU Prepared by Ljubica Dordevic and Anamaria Maftei

Authorized for distribution by Luca A Ricci
June 2025

IMF Selected Issues Papers are prepared by IMF staff as background documentation for periodic consultations with member countries. It is based on the information available at the time it was completed on April 17, 2025. This paper is also published separately as IMF Country Report No 25/111.

ABSTRACT: Domestic Revenue Mobilization (DRM) is essential for financing economic and social development and ensuring debt sustainability in WAEMU, particularly in light of rising interest, high security spending, and the prospective reduction in foreign aid. While DRM has generally improved over the past two decades, it remains below the former target and exhibits significant disparities across countries, affected by structural challenges – such as narrow tax bases, limited enforcement capacity, and widespread informality. Strengthening tax policy and revenue administration (by streamlining tax systems, rationalizing exemptions, and improving compliance), supported by enhanced regional oversight and cooperation, is critical to ensuring sustainable revenue mobilization.

RECOMMENDED CITATION: Ljubica Dordevic and Anamaria Maftei, Domestic Revenue Mobilization in WAEMU. IMF Selected Issues Paper (SIP/2025/070). Washington, DC: International Monetary Fund.

JEL Classification Numbers:	E62, H2, O23
Keywords	WAEMU, revenue mobilization, taxation, tax policy, revenue administration
Author's E-Mail Address:	Idordevic@imf.org; amaftei@imf.org

SELECTED ISSUES PAPERS

Domestic Revenue Mobilization in WAEMU

West African Economic and Monetary Union

Prepared by Ljubica Dordevic and Anamaria Maftei¹

¹ Prepared by Ljubica Dordevic (AFR) and Anamaria Maftei (FADT1), with much appreciated insights on revenue administration by Rene Ossa (FADR2) and Fayçal Sawadogo (FADT1) on tax potential and IMF WoRLD, and excellent research support by Fiona Hesse-Triballi. We would like to thank Luca Antonio Ricci, Christophe Waerzeggers, Mario Mansour, Lawrence Norton, and the authorities for their suggestions and comments.

WEST AFRICAN ECONOMIC AND MONETARY UNION

April 17, 2025

SELECTED ISSUES

Approved By
Luca A. Ricci
African Department

Prepared By Ljubica Dordevic and Anamaria Maftei

CONTENTS DOMESTIC REVENUE MOBILIZATION IN WAEMU A. Background _______3 B. Tax Revenue Sources 6 C. Tax Potential _____ E. Policy Recommendations ______ 12 1. The New DRM Action Plan (2024) _______11 **FIGURES** 1. Revenue 2. Tax and Non- tax Revenue ______4 3. Progress in Achieving the Tax-to-GDP Target ______4 4. Government Tax Revenue ______5 5. Distribution of Total Revenue and Tax Revenue 5 6. Sources of Tax Revenue _____ 7. Statutory Tax Rates ______ 7 8. Tax Performance Indicators_______8 9. Tax Potential in WAEMU Countries ______9 10. Tax Gap _____ 11. Opinion on the Level of Corruption within the Institutions in the WAEMU Region _______12

WEST AFRICAN ECONOMIC AND MONETARY UNION

ANNEXES

I. Data Sources Comparison	15
II. Estimating Tax Potential	16

DOMESTIC REVENUE MOBILIZATION IN WAEMU¹

Domestic Revenue Mobilization (DRM) is critical for financing economic and social development and ensuring debt sustainability in WAEMU, especially in light of rising interest, high security spending, and the prospective reduction in foreign aid. It is a cornerstone of the authorities' reform programs and one of the most pressing policy challenges. Over the last two decades, DRM in WAEMU has improved overall, but it has shown a persistently large heterogeneity—and even divergence—in revenue performance across countries. The secondary criterion of the suspended Convergence Pact, which sets a 20 percent floor on the tax to GDP ratio, remains a high bar for most WAEMU countries, reflecting a generally narrow tax base, weak enforcement capacity, and high informality, among other factors. Going forward, a renewed commitment to streamline tax systems, rationalize exemptions, and improve compliance would durably support revenue mobilization. Regional surveillance mechanisms should ensure effective implementation and enforcement of regional DRM commitments, while enhancing regional cooperation on revenue administration, as well as supporting collaboration and knowledge transfer within the union.

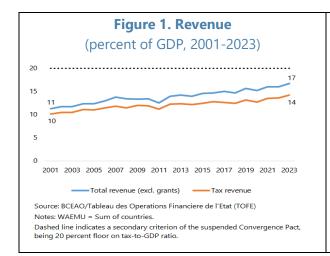
A. Background

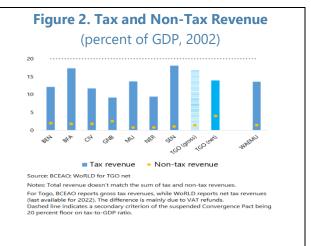
- 1. DRM is one of the most pressing policy challenges in WAEMU and a cornerstone of most authorities' reform programs. Boosting domestic revenue is essential to support fiscal consolidation efforts and meet the Sustainable Development Goals (SDGs), including poverty and inequality reduction, as well as adequate access to basic public services (e.g., health, education, water, and electricity), while covering high security spending needs. DRM is also critical to rebuild buffers to increase resilience to future shocks, as well as to ensure both debt sustainability and financial stability, especially in light of tightening financing conditions (with rising yields and shortening maturities on regional sovereign issuances), risks of crowding out the private sector (due to systemic liquidity shortages), and prospective reduction in foreign aid. The WAEMU Convergence Pact (2015)—suspended and expired in 2020—included a secondary convergence criterion on the tax-to-GDP floor being 20 percent, which remains extremely important and should be preserved in a future adoption of a fiscal rule. WAEMU also receives technical assistance on DRM from the IMF and other partners.
- 2. Since 2001, WAEMU revenue has increased significantly overall, however with large heterogeneity across member countries (Figures 1 and 2).² Total revenue (excluding grants)

¹Prepared by Ljubica Dordevic (AFR) and Anamaria Maftei (FADT1), with much appreciated insights on revenue administration by Rene Ossa (FADR2) and Fayçal Sawadogo (FADT1) on tax potential and IMF WoRLD, and excellent research support by Fiona Hesse-Triballi. We would like to thank Luca Antonio Ricci, Christophe Waerzeggers, Mario Mansour, Lawrence Norton, and the authorities for their suggestions and comments.

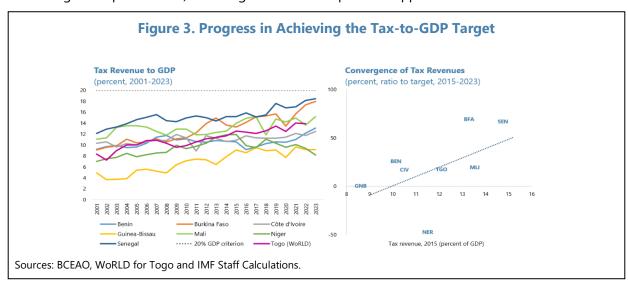
² In Figure 1, we use BCEAO data since 2001 which is the first year for which the data is internally consistent, i.e., the sum of the country-level values matches the WAEMU value. In Figure 2, we focus on 2022, because (unlike for other WAEMU countries) BCEAO reports Togo data on gross basis, so—for comparison—we draw Togo data on net basis from IMF fiscal department's database WoRLD last available in 2022. Note that in BCEAO data total revenue generally doesn't exactly match the sum of tax and non-tax revenues, so the 2022 total revenue in Figure 1 is slightly different than the sum of its components in Figure 2. Annex 1 presents the comparison between BCEAO data, WoRLD, and IMF country teams' macroframeworks showing that they are greatly aligned.

increased from 11 percent of GDP to 17 percent of GDP between 2001 and 2023, and tax revenue from 10 to 14 percent of GDP over the same period – with the latter far below the 20 percent floor indicated by the Suspended Pact. Tax revenue accounts for most of total revenue in all countries (over 80 percent share on average), ranging from 9 percent of GDP in Guinea Bissau to 18 percent of GDP in Senegal.

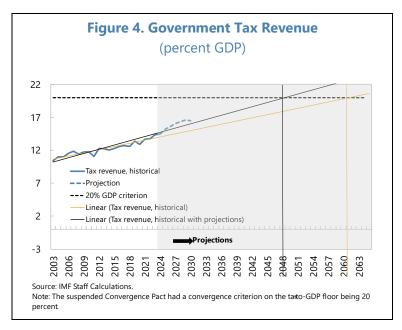




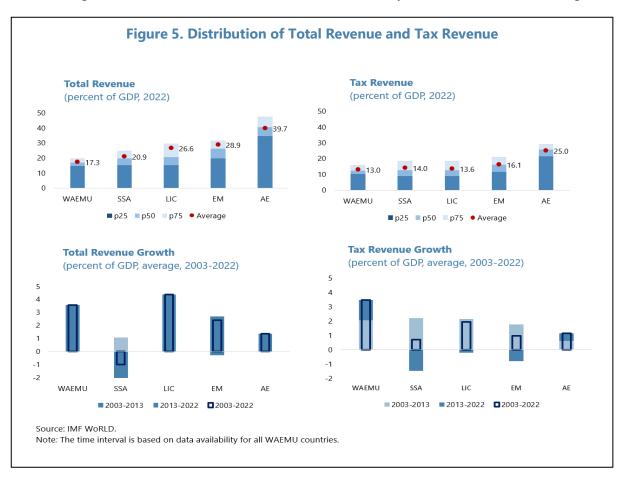
3. Moreover, there has been a divergence in tax revenues between countries, with those originally having the strongest tax collection accounting for the bulk of the progress at the regional level. Figure 3 shows that Senegal and Mali—which had the highest tax collection as a share of GDP in 2001—improved significantly and still rank in the top 3 in 2023. In contrast, other countries (except Burkina Faso, which marked the strongest progress) are closing the gap slowly or not at all, so the country heterogeneity of tax revenue to GDP remains high. When focusing on a more recent period—i.e., from 2015 when the criterion was first set at 20 percent of GDP—we can see in Figure 3 that countries that were closer to the 20 percent tax revenue target in 2015 are closing the gap faster than those that started off from a lower level of tax revenue (with Niger even recording a sharp reduction). Convergence would require the opposite to be the case.



4. **Despite stronger revenue** growth over the last two decades than most peers (especially in taxes), the WAEMU region lags behind its peers in 2022 revenues (Figure 5). Simple comparisons of medians and averages between WAEMU and peer groups show that WAEMU is below other SSA and LIC countries for total revenue, and slightly even for tax revenue, while lagging EM and AE significantly. Much of the growth recorded over the last two decades of available data in WAEMU is attributed to tax revenues, whose growth

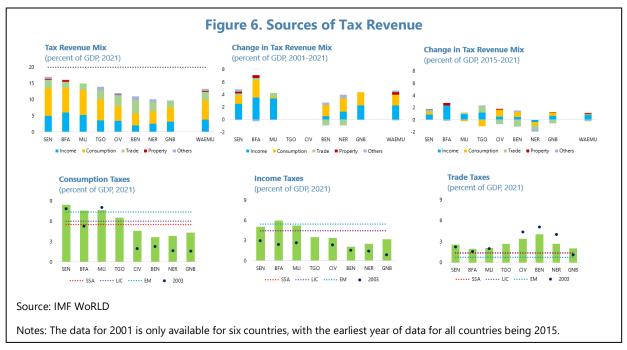


outperformed all peer groups analyzed. Nevertheless, based on a trend calculated via both past trends and current staff projections, it will take WAEMU until 2048 to reach the 20 percent GDP tax revenue target. This timeline extends to 2061 if the trend is only based on historical data (Figure 4).



B. Tax Revenue Sources

5. The WAEMU has been undergoing a tax transition, shifting reliance from trade taxes to income and consumption taxes (Figure 6). Comparing data for 2015 and 2021 (as the earliest and the latest years with data availability for the main tax revenue components for all countries), most WAEMU countries rely primarily on consumption taxes followed by income taxes as the main sources of tax revenue, except Benin that still relies comparably more on trade taxes. Property and other taxes are very low, albeit slightly growing in a few countries. Income and consumption tax increased in most countries as a share of GDP, while trade tax stagnated or decreased in most countries. WAEMU has had a Common External Tariff (CET) in place since 2000, which was extended to the ECOWAS in 2015, and reliance on trade taxes has been declining slightly since 2015. ³

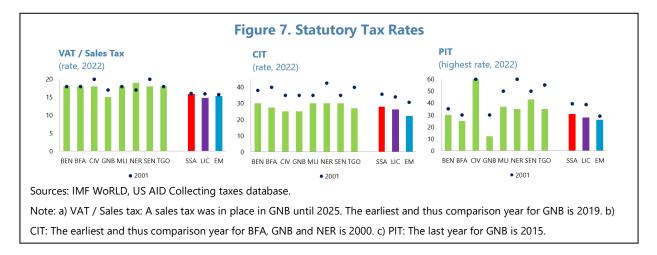


6. Regional tax harmonization in WAEMU is quite advanced *de jure* (Figure 7) but remains not fully effective *de facto*. The evolution of the legal framework for tax coordination in the WAEMU reflects the key objective of ensuring that national tax policies do not distort the functioning of the internal market through tax competition. Three elements describe tax harmonization: equalization of tax rates, a common definition of national tax bases, and uniform application of agreed rules (IMF, 2013). On value-added tax (VAT), there is a requirement of a VAT rate range at 15-20 percent, with exceptions at a lower rate 5-10 percent for up to 10 goods and services from an exhaustive list provided in the regional legislation (<u>Directive 02/98/CM</u>, <u>Directive 02/2009/CM</u>)⁴. For corporate income tax (CIT), there is a requirement of a single CIT rate ranging

³ Regulation n°02/97/CM/UEMOA of November 28, 1997, adopting the Common External Tariff of the West African Economic and Monetary Union (WAEMU).

⁴ A common framework for the taxation of excise goods is established in three directives on petroleum products (<u>Directive 06/2001/CM</u>), tobacco (<u>Directive 01/2017/CM</u>) and other goods and services deemed harmful (<u>Directive 03/2009/CM</u>).

25-30 percent (<u>Directive 08/2008/CM</u>). Although countries are aligned with WAEMU regional directives on statutory VAT and CIT rates, which fall within the prescribed range, some countries have very generous exemptions. Personal income tax (PIT), on the other hand, which is only partially subject to tax harmonization, shows wide variation across countries, with the highest rate in a country ranging from 10 percent in Guinea Bissau to 60 percent in Côte d'Ivoire. ⁵ The significant decline in both CIT and PIT rates in most WAEMU countries is in line with international trends.

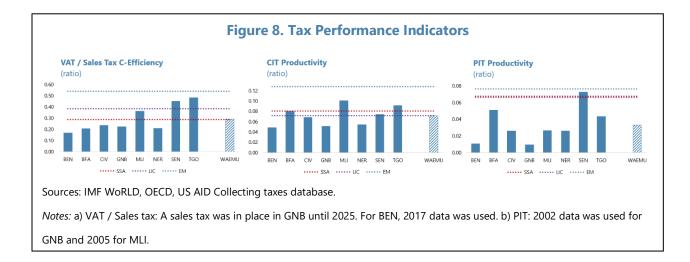


7. Furthermore, there is significant heterogeneity in how much WAEMU countries collect versus what would be implied by their statutory tax rates (Figure 8). VAT/sales tax C-efficiency ⁶, CIT productivity and PIT productivity ⁷ are key indicators used to evaluate the effectiveness of tax systems in mobilizing revenue. Lower values often signal issues related to narrow tax bases (exemptions and special regimes), weak compliance, and/or a large informal sector. Overall, these tax performance metrics underline disparities across countries and tax types. Some member states excel above the LIC and SSA averages and approach EM levels—such as Senegal in PIT productivity, Mali in CIT productivity and Togo in VAT C-efficiency. Meanwhile, Benin and Guinea Bissau show significant gaps across all three indicators, highlighting challenges in mobilizing tax revenue (e.g., Benin has very generous CIT exemptions and multiple rates).

⁵ While there is no comprehensive PIT directive, the tax treatment of capital income sets minimum and maximum withholding tax rates, but investments in certain priority sectors can benefit from exemptions or special provisions (Directive 02/2010/CM).

⁶ "VAT/sales tax collection efficiency" measures the ratio of actual consumption revenue to the potential revenue that would be collected if the tax rate were applied uniformly across all consumption, without exemptions or reduced rates. The measure should, however, be interpreted with caution, since it is impacted by deduction restrictions (VAT) or cascading on inputs (sales tax). For example, refund bottlenecks or denied credits artificially inflate C-efficiency, while creating a hidden cost for businesses and distorting their economic decisions.

⁷ "CIT (PIT) productivity" evaluates the corporate (personal) income tax's effectiveness by comparing actual revenue to the product of the statutory CIT (PIT) rate and GDP, reflecting the extent to which corporate profits (individual income) are captured in the tax base. Productivity theoretically ranges between 0 and 1, with 1 representing a scenario where all corporate profits are fully taxed at the statutory rate without any exemptions or avoidance. However, in practice, values significantly below 1 are common due to deductions, tax incentives, and noncompliance. Comparing CIT productivity across countries should be contextualized with factors like economic structure, tax enforcement, and corporate behavior.



C. Tax Potential

Next, we estimate the tax potential of WAEMU countries⁸.

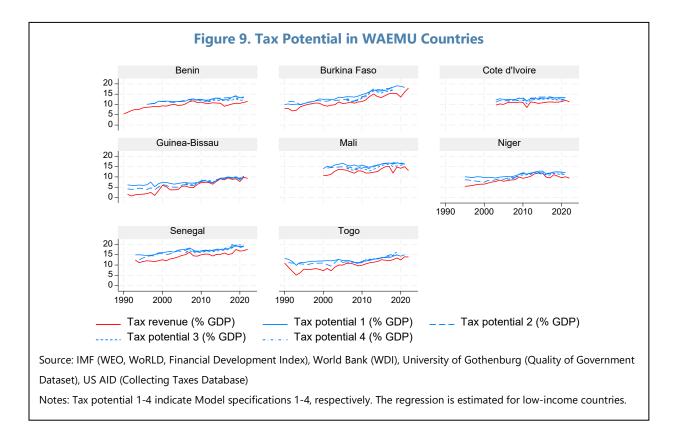
- 8. The stochastic frontier model is an econometric approach used to estimate a country's tax capacity by analyzing the gap between actual and potential tax revenue (based on given fundamentals) 9. Annex 2 presents regression-based analysis which allows for separation of inefficiency effects from random noise in the observed data. The model assumes a functional relationship between tax revenue and explanatory variables—such as GDP, trade openness, governance, and demographic features—with a composed error term that accounts for inefficiency and random shocks. The inefficiency component captures deviations due to structural, administrative, or policy-related constraints, as evaluated at existing fundamentals (i.e., abstracts from the higher tax revenue that could be achieved by, e.g., enhancing governance).
- **9. Four different specifications are estimated, predicting various levels of the maximum potential tax-to-GDP ratio (Figure 9).** ¹⁰ The tax gap represents the difference between actual and potential tax revenue. The degree of this gap varies by country and over time (see Annex 2 for regression equation and regression outputs). In Niger and Togo, the tax gap fluctuated strongly and narrowed over time, but tax revenue still falls short of its potential. Guinea-Bissau shows limited space for leveraging tax capacity, highlighting structural limitations. In Benin and Burkina Faso, inefficiencies have widened in recent years, indicating opportunities for better revenue mobilization.

⁸ For similar approaches, see Binin and Kobyagda and (2021), Trinnou (2021), Dossa and Bakena (2024), and Dama et al. (2024).

⁹ Non-tax revenue is excluded from the analysis due to outliers that can bias the estimates. Generally, relying on yields from natural resources for fiscal sustainability poses several risks: revenue volatility due to price fluctuations, resource depletion, economic instability from overdependence, and governance challenges like rent-seeking.

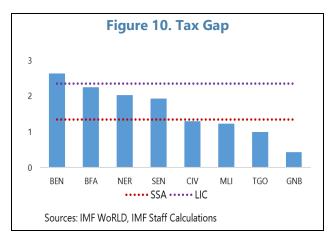
¹⁰ The results should be interpreted with caution, as they are sensitive to the specification assumptions—as also discussed in similar studies—and as broad policy indicators for long-term revenue mobilization strategies, rather than as policy targets.

Overall, the results underscore unfulfilled revenue potential in WAEMU countries, with persistent challenges in closing the tax gap.



10. Given the macroeconomic characteristics of WAEMU countries, there is scope to raise more tax revenue (Figure 10).

The below illustrates the tax gap as a percentage of GDP for several countries in 2021, compared to two benchmarks: the Sub-Saharan Africa (SSA) median (red dotted line) and the Low-Income Countries (LIC) median (purple dotted line). Among the countries, Benin has the highest tax gap, above the LIC average and indicating significant underperformance in tax collection relative to



its potential. Burkina Faso exceeds the SSA average but falls below the LIC benchmark. Guinea-Bissau has the smallest tax gap, suggesting limited scope for increasing tax revenue, given current fundamentals. The remaining countries (Côte d'Ivoire, Mali, Niger, Senegal, and Togo) display varying levels of tax gaps, suggesting differing degrees of inefficiency or structural barriers in tax collection.

D. Progress Achieved in DRM

- 11. The WAEMU region has made significant progress in DRM, but the pace of reforms remains insufficient to achieve the regional tax revenue objective (20 percent of GDP) in the near future.
- 12. Areas of advancement in DRM include examples such as:
- Transition from reliance on international trade taxes to domestic revenue sources. Several countries have prioritized reforms in property taxation. For instance, Niger abolished a two-year exemption on property taxes for income-generating real estate.
- **Limiting tax exemptions and preferential regimes.** WAEMU countries are now striving to produce annual tax expenditure reports (<u>Decision 08/2015/CM</u>), quantifying the fiscal impact of exemptions and special regimes on revenue. This effort aims to enhance transparency and accountability in tax practices.
- Elimination of small, low-yield taxes with high administrative costs. For example, Mali has undertaken a comprehensive reform of its General Tax Code and fiscal procedures. Guinea-Bissau has simplified its tax system by implementing a new VAT law and gradually deploying digital tax services. Benin has reformed its corporate income tax and personal income tax systems, moving toward simpler, broader-based tax models to enhance efficiency and revenue generation.
- **Progress on revenue administration.** Recent improvements in revenue administration include: i) strengthened fundamentals (registers of large and medium-sized taxpayers made reliable; implemented central administration structure; introduced prerequisites for results-based management and risk analysis); and ii) digital tools implemented (electronic declaration, telepayment, automated invoicing program). As a result, many operational indicators improved in several countries. In tax administration, the number of taxpayers filing regular returns increased significantly, VAT return ratios also improved as well as the number of geolocated taxpayers. In customs, administration functions—such as valuation and post-clearance audit practices or the risk-based clearance procedure—have also seen substantial positive changes.
- The WAEMU also adopted a New DRM Action Plan in 2024, with improvements over the 2019 Plan (Box 1).

Box 1. The New DRM Action Plan (2024)

In 2024, WAEMU adopted a new DRM Action Plan, modifying the 2019 plan (Decision 02/2019/CM). The 2024 DRM Action Plan introduces a Medium-Term Revenue Mobilization Strategy¹ aimed at coordinating reforms to promote efficiency and accountability. The previous Action Plan (2019) did not outline an equivalent strategy. However, the deadline for MTRS adoption by all WAEMU countries set for the end of 2025 under the new Plan, seems rather ambitious given the prerequisites of such strategies (broad consensus, sustained political commitment, comprehensive tax reforms etc.).² In the immediate term, tax policy/TADAT diagnostics could be prioritized for most countries. Critically, given the expired Convergence, Stability, Growth, and Solidarity Pact (PCSCS), the 2024 Action Plan is mainly motivated by weak performance in terms of tax revenues, and no longer refers to the non-compliance of member states with the secondary convergence criterion of 20 percent of GDP.

In terms of **tax and customs policies**, the amendments are marginal, highlighting the limited progress made by member states in adopting measures for improving DRM. An exception is the study on the methods of taxing agricultural profits, carried out at the request of the WAEMU Commission. The 2024 Action Plan no longer envisages a revision of Directive 03/2009 harmonizing excise duties, which proposed to expand the number of taxable products from 8 to 12, generalized the application of excises on all passenger vehicles (regardless of engine power), and increased the *ad valorem* rate on non-alcoholic and alcoholic drinks. However, in terms of property taxes, the new Plan aims to improve knowledge of taxable land through census and digitalization, and set up a one-stop shop to centralize land-related formalities. Concerning tax competition between member states due to tax expenditures, the 2024 Action Plan removes the previous references to the Mining Code and to the granting of exemptions in the research phase. For the investment phase, it limits exemptions to certain goods and services (without further specifications).

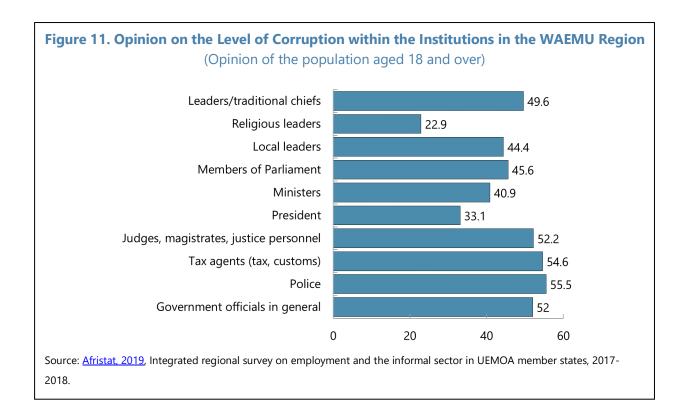
On **tax administration**, there are no substantial differences compared to the 2019 Action Plan, as the focus is mainly on generic revenue administration measures. Thus, the most important challenge will be to tailor these measures to the concrete situations faced by WAEMU members.

E. Policy Recommendations

- 13. Before diving into policy recommendations, it is important to note that progress on DRM achieved to date, as well as policy recommendations, should recognize the structural challenges faced by WAEMU countries. These include, but are not limited to:
- **Sectors which are intrinsically difficult to monitor and tax correctly:** this includes both old sectors (such as informal ones) and new ones (such as, e.g., e-commerce);
- **High perception of corruption: which complicates tax compliance;** public institutions are often perceived as corrupt, as documented in the Afristat report (2019) and shown in Figure 11;

¹ Medium-Term Revenue Mobilization Strategy (MTRS) is a comprehensive national strategy to support revenue mobilization in the medium term, by coordinating reforms relating to legislation, tax policy, and tax and customs administrations.

² So far, among WAEMU countries, Benin, Burkina Faso, Cote d'Ivoire and Senegal have adopted MTRS, while it is in the pre-formulation stage in Togo.



- Security issues: which complicate tax collections;
- Increasing international tax competition: many countries have a high dependence on large taxpayers, especially multinationals.

Regional Authorities

Strengthening revenue harmonization and surveillance of DRM reforms while enhancing regional cooperation on revenue administration and knowledge transfer in the Union is needed, while safeguarding the objectives of the WAEMU treaty in terms of neutrality of taxation on the mobility of capital and goods and services.

14. Specific policy actions could include:

- Revise and Modernize DRM Directives. A revision of the VAT directive could improve refund mechanisms, broaden the tax base, and address digital economy taxation. Similarly, updating the CIT directive is crucial to align with global tax reforms (e.g., by adopting a minimum corporate tax), limit tax competition through regionally agreed constraints, and unify the tax structure across sectors. Additionally, revising the capital income taxation directive would help address cross-border tax avoidance by simplifying and improving the neutrality of portfolio income taxation. Excise tax directives could benefit from a reassessment of their adequacy.
- **Consolidate and Evaluate Tax Incentives**. Authorities should: simplify and consolidate tax incentives by removing them from Investment Codes and placing them under the General Tax

Code; regularly review and assess the effectiveness of existing tax incentives, while considering a revision of <u>Decision 08/2015/CM</u> (Art. 5) on expenditure, and exclude from the benchmark tax system the incentives granted through regional directives; and ascertain that tax reliefs comply with regional frameworks to promote consistency and fairness.

- Strengthen Surveillance of DRM Reforms. Annual assessments of Member States' reforms and conformity with regional regulations have already been conducted for several years. Introduction of DRM measures in the quintennial plan of the New Convergence Pact should be accelerated, with all key elements: document the realization of the previous year, indicate the objectives for the current year and the following years, and clarify the measures taken and planned for each year towards achieving those objectives. Furthermore, the WAEMU Commission should also undertake regular analytical work on member states' tax practices. For example, its quarterly report on multilateral surveillance could deepen analysis of revenues. A stronger commitment might also be required in terms of: i) capacity building (e.g., impact assessment of tax measures); ii) legal framework (the WAEMU Commission's mandate to enforce recommendations or sanctions); and iii) institutional and political support for harmonizing tax policies and regulations across WAEMU.
- Support Knowledge Transfer in the Union. This could be done, e.g., by holding periodical workshops/seminars to share best practices among WAEMU countries and from countries outside of WAEMU.
- **Regional Cooperation and Exchanges in Revenue Administration.** The regional authorities could provide support to national bodies through direct capacity development or regional workshops to identify best practices in implementing recommended measures.

National Authorities

Ramp up efforts to simplify tax systems, broaden the tax base, and improve compliance.

15. Specific policy measures could include:

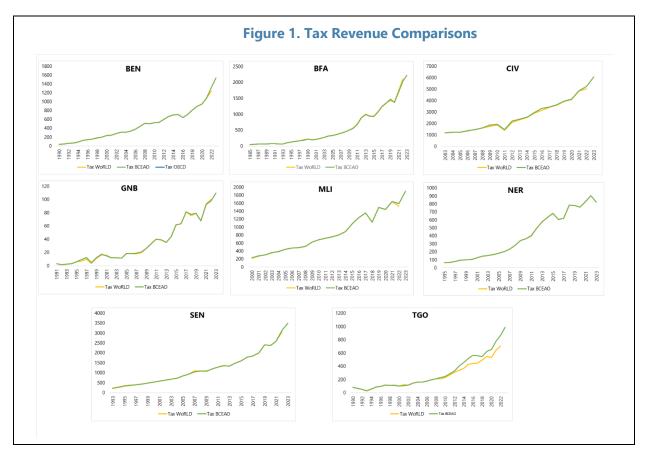
- **Ensure Compliance with Regional DRM Regulations.** Taxation in WAEMU countries is not always fully compliant with the harmonized tax frameworks, creating inconsistencies that hinder regional integration. This concerns both de jure compliance (e.g., tax incentives that deviate from the directives) and de facto application (e.g., unequal enforcement of tax laws). Addressing these gaps is crucial to improving tax revenue collection, ensuring fair competition, and strengthening economic cohesion within the union.
- Conduct Regular Reviews of Tax Systems. Identify opportunities to simplify the tax systems and rationalize exemptions. The focus of taxation should be on taxes that have the highest potential to boost revenue, while eliminating low-yield taxes. All countries should conduct thorough reviews of exemptions and special regimes to identify and eliminate those that do not serve a clear economic purpose, while ensuring that those preserved comply with the regional framework to promote consistency and fairness. These measures would also support transparency in taxation.

- Strengthen Tax Sources Not Subject to the Regional Framework. In these areas, member countries have more leeway to shape their tax regime:
 - Property taxation. Focus on systematic property valuations, enhancing local administrative capacities, and simplifying the tax code, to bolster fiscal health while ensuring fair contributions from property owners.
 - o **PIT.** Enhance PIT progressivity by adjusting the tax schedules to ensure that higher incomes are taxed at appropriate progressive rates, addressing equity concerns. Streamline complex regimes to reduce inefficiencies and rationalize income exemptions to broaden the tax base.
 - SME. Simplify SME taxation to reduce compliance costs and incentivize formalization.
 Consolidate schemes (entrepreneurs and micro-enterprises) into a single regime and smoothen the tax burden to remove obstacles to growth.
- **Strengthen Revenue Administration.** This could be done by: i) strengthening the management and governance mechanisms of revenue administrations (improving risk management, better capitalization of investments in computerization and digitalization); ii) improving tax functions (optimizing tax registration procedures, investing in tax capacity building, and boosting tax literacy and awareness among the population; implementing large-scale automated cross-checking systems; modernizing revenue accounting, tax arrears management and VAT credit refunds); and iii) improving customs functions (strengthening customs valuation and clearance, implementing an automated risk management system, and strengthening post-clearance audit).
- Ensure Good DRM Governance and Transparency, including through anti-corruption measures. Such advancements would support trust in institutions and tax compliance.

Annex I. Data Sources Comparison

The Central Bank of West African States (BCEAO) set up an economic and financial database—called EDEN (*Entrepôt de Données Economiques et Financières*)—as part of making available to the public the statistical information it develops or collects, including to researchers, universities and research centers. The database contains 15,000 series grouped into six blocks, namely: Real sector; Monetary and financial sector; Public finance sector; External sector; Monetary issuance sector; and Social sector. The database is accessible at: https://edenpub.bceao.int/

The IMF's World Revenue Longitudinal Database (WoRLD) tracks government revenue trends in 193 countries since the early 1990s. WoRLD tracks directly 9 key components of tax and non-tax revenues, which together contribute about 82 percent of government revenue globally. WoRLD is updated annually to provide insight into recent developments affecting governments' fiscal position. The database is accessible at: https://www.imf.org/en/Topics/fiscal-policies/world-revenue-longitudinal-database. The WoRLD sample starts from 2015 because of detailed fiscal data availability for some countries, especially TGO and CIV. The TGO net value was used for the database, to ensure comparability to other countries.



Annex II. Estimating Tax Potential

The stochastic frontier model for tax revenue takes the form:

$$ln(TaxRev_{it}) = \beta_0 + \beta_1 ln(X_{it}) + v_{it} - u_{it}$$

Where:

 $TaxRev_{it}$ is the tax revenue collected by country i in year t.

 X_{it} represents explanatory variables affecting tax revenue, such as GDP, trade openness, or governance indicators.

 v_{it} is a two-sided symmetric error term representing statistical noise (e.g., measurement errors, external shocks). It is assumed to be normally distributed.

 u_{it} is the one-sided non-negative tax inefficiency, capturing deviations from the frontier (maximum potential revenue) due to factors like tax evasion, exemptions, and administrative weaknesses. It follows a half-normal distribution.

True Random Effects are used, assuming time-invariant heterogeneity is uncorrelated with explanatory variables.

The inefficiency term u_{it} provides insights into the gap between actual and potential tax revenue performance. The tax effort is computed as:

$$Tax\ effort = exp^{-u_i}$$

where values close to 1 indicate higher efficiency.

VARIABLES	Model 1	Model 2	Model 3	Model 4
GDP per capita, PPP (constant 2017 international \$)	2.98***	3.50***	1.89***	
	(0.29)	(0.38)	(0.40)	
GDP per capita, PPP (const \$, squared)	-0.16***	-0.20***	-0.10***	
	(0.02)	(0.02)	(0.02)	
GDP per capita (constant 2010 US\$)				0.29***
				(0.04)
GDP growth (annual %)				-0.01
				(0.01)
Agriculture, forestry, and fishing, value added (% GDP)	-0.11***	-0.03	-0.06***	-0.01
	(0.02)	(0.03)	(0.02)	(0.02)
Trade (% GDP)	0.20***	0.24***	0.23***	0.20***
	(0.02)	(0.02)	(0.02)	(0.03)
The Bayesian Corruption Indicator	-0.17**	-0.27***	-0.20***	-0.19**
	(0.08)	(0.06)	(0.06)	(0.05)
Total natural resource rents (% GDP)	-0.10***	-0.08***	-0.03**	-0.01
, ,	(0.01)	(0.01)	(0.01)	(0.01)
FDI, net inflows (% GDP)	, ,	0.00	0.01*	0.01**
		(0.01)	(0.01)	(0.01)
FD: Financial development index		0.37***	0.29***	0.27**
•		(0.03)	(0.03)	(0.03)
Unemployment (% of total labor force) (ILO est.)		-0.02	-0.02**	-0.03*
		(0.01)	(0.01)	(0.02)
Inflation, consumer prices (annual %)		-0.02***	-0.01	-0.01
		(0.01)	(0.01)	(0.01)
Grants revenue		(7	0.03***	0.02**
			(0.01)	(0.01)
Self-employed, total (% of total employment, ILO est.)			-0.34***	-0.25**
			(0.07)	(0.06)
Fragile States Index			0.27***	0.35**
-			(0.10)	(0.10)
Constant	-10.48***	-11.15***	-5.01***	0.59
	(1.17)	(1.50)	(1.77)	(0.73)
Observations	1,221	946	607	547
Number of countries	54	51	47	49
U-sigma	0.323	0.260	0.141	0.157
V-sigma	0.0931	0.0929	0.0801	0.0662

Source: IMF (WEO, WoRLD, Financial Development Index), World Bank (WDI), University of Gothenburg (Quality of Government Dataset), US AID (Collecting Taxes Database), Fund for Peace (Fragile States Index).

Note: The regression is estimated for low-income countries. Standard errors in parentheses: *** p<0.01, ** p<0.05, * p<0.1.

References

Afristat (2019). Integrated Regional Survey on Employment and the Informal Sector in the UEMOA Member States (ERI-ESI, 2017-2018)

Binin, Kouadio Yves Arnaud, and Larba Issa Kobyagda, and (2021). Analysis of the Potential and Fiscal Effort of the Countries of the West African Economic and Monetary Union, African Multidisciplinary Tax Journal, 2021 Issue 1, p. 22-41

Dama, Alou Adessé, Anouck Daubrée, and Grégoire Rota-Graziosi (2024). Tax Capacity in the West African Economic and Monetary Union: An Assessment of Tax Efforts and Tax Gaps of WAEMU Member States, FERDI Policy brief No 272.

Dossa, Urbain Gbodjinou, and Daniel Rodrigue Bakena (2024). Digitalisation et Mobilisation des Recettes Fiscales dans les Pays de l'UEMOA, African Scientific Journal, Volume 03, Numéro 23, pp: 1155 – 1181.

Mansour, Mario, and Grégoire-Rota Graziosi (2013). Tax Coordination, Tax Competition, and Revenue Mobilization in the West African Economic and Monetary Union, IMF WP /13/163

Trinnou, Par Gbêmèho Mathieu (2021). Document d'Etude et de Recherche N° COFEB/DER/2021/03.