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Research Report

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FERDI Policy Brief, No. B272

Provided in Cooperation with:

Fondation pour les études et recherches sur le développement international (FERDI), Clermont-Ferrand

Suggested Citation: Dama, Alou Adessé; Daubrée, Anouck; Graziosi, Grégoire Rota (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. B272, Fondation pour les études et recherches sur le développement international (FERDI), Clermont-Ferrand

This Version is available at:

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Tax Capacity in the West African Economic and Monetary Union An Assessment of Tax Efforts and Tax Gaps of WAEMU Member States

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The Fourth International Conference on Financing for Development, scheduled to take place in Spain from June 30 to July 3, 2025, will address and revitalize strategies for Domestic Revenue Mobilization (DRM) essential to achieving the Sustainable Development Goals (SDGs). Building on the 2015 Addis Ababa conference, which highlighted the pivotal role of national tax systems in financing sustainable development, DRM—particularly through enhanced tax revenues—has emerged as a key priority for numerous nations, spurring a series of tax reforms.



* This document was produced as part of the FERDI-WAEMU agreement (AS-1).

.../... This note aims to evaluate the tax capacity of the eight Member States of the West African Economic and Monetary Union (WAEMU),¹ with a specific focus on estimating their respective tax efforts and identifying tax gaps, including the value-added tax (VAT) gap and the corporate income tax (CIT) gap.²

The WAEMU Commission has issued various tax Directives primarily designed to harmonize national tax systems³ and promote economic integration within the Union. Consequently, the tax bases and rates for principal taxes, including VAT, excise duties, customs duties with a Common External Tariff (CET), CIT, and taxes on capital income, are closely aligned across member countries. This level of harmonization exceeds that of the European Union, which has not yet adopted a common CIT base, for example. Additionally, WAEMU Commission Directives contribute to strengthening the Member States' capacity to mobilize tax revenues. The Commission has also enacted a Decision concerning tax expenditures,⁴ mandating their assessment and annual publication. Tax expenditures represent a reduction in tax revenue stemming from preferential regimes relative to a standard tax system, such as reduced tax rates or bases or tax exemptions.

The tax gap analysis presented herein contributes to the Commission's ongoing efforts to enhance DRM within Member States. This comprehensive analysis explicitly includes an assessment of the tax expenditures implemented by Member States. A tax gap is defined as the difference between potential and actual

tax revenues, with various methodological approaches available for estimating potential revenues based on data availability. Tax gaps embody two key dimensions: a political dimension, inherently connected to the analysis of tax expenditures, and an administrative dimension, encompassing both law enforcement and issues of tax avoidance or evasion. Accordingly, tax gap analysis functions as a complementary tool within the Commission's broader initiatives to strengthen DRM capacities across Member States, serving as a critical preliminary step for identifying potential areas for tax reform. Additionally, it offers a systematic evaluation of the effective implementation of Community tax Directives within Member States.

In 2022, the average tax revenue within WAEMU was 13.8 percent of Gross Domestic Product (GDP), below the 20 percent minimum threshold established as one of WAEMU's convergence criteria. An econometric evaluation of tax efforts reveals that, on average, tax gaps amounted to 6.2 percent of GDP over the 2018-2022 period. Approximately half of these gaps were due to tax expenditures (e.g., exemptions, reduced rates), while the remainder reflected compliance gaps linked to informality, tax evasion, administrative inefficiencies, and similar factors. Tax gaps varied across countries, ranging from 4.4 percent of GDP in Guinea-Bissau to 8.2 percent of GDP in Senegal. Annually reported by each member country, tax expenditures varied between 1 percent of GDP in Côte d'Ivoire and 6.2 percent in Senegal. This variation reflects not only the relative generosity of tax exemptions across countries but also differences in the scope and rigor applied in defining and estimating tax expenditures.⁵ Compliance gaps are inferred by subtracting tax expenditures from total tax gaps; therefore, underestimations or

1. WAEMU consist of 8 countries: Benin, Burkina Faso, Côte d'Ivoire, Guinea Bissau, Mali, Niger, Senegal, and Togo.

2. The details of the analysis were the subject of a report communicated by FERDI to the UEMOA Commission and are available at: <https://ferdi.fr/programmes/fiscalite-pour-le-developpement>

3. See Directive No. 03/2009/CM/UEMOA on excise duties, Directive No. 01/2017/CM/UEMOA on excise duties for tobacco products, Directive No. 02/98/CM/UEMOA, amended by Directive No. 02/2009/CM/UEMOA on VAT, and Directives No. 01/2008/CM/UEMOA and No. 08/2008/CM/UEMOA on CIT.

4. Decision No. 08/2015/CM/UEMOA of July 2, 2015.

5. Geourjon and Rota-Graziosi (2014) already highlighted an overestimation of tax expenditures by considering as tax expenditures VAT exemptions at customs for VAT liable firms, particularly extractive and generally export-oriented industries. These exemptions are more an alternative way to compensate for a failing mechanism in VAT credit refunds.

limited reporting of tax expenditures result in artificially larger compliance gaps.

VAT represents a crucial, if not the most significant, source of tax revenue for Member States.⁶ VAT C-efficiency is assessed by estimating potential VAT revenue, calculated by applying the standard VAT rate to household final consumption. Tax gaps vary from 7.8 percent of GDP in Senegal to over 12 percent in Niger. These estimates assume optimal VAT application and exclude considerations for the informal sector or self-consumption by agricultural households. A third methodological approach, utilizing input-output tables, facilitates the evaluation of both informality and tax impact, while distinguishing between political and administrative tax gaps across economic sectors. This method results in lower VAT gaps than previously estimated, ranging from 1.7 percent of GDP in Burkina Faso to 5.2 percent in Benin.

The remainder of this note is structured as follows: The first section defines the concept of tax gaps and their estimation through the tax effort approach; the second section introduces alternative methods for assessing VAT gaps; and the final section concludes with proposals for tax reform.

► Defining Tax Gaps and Methodologies for Their Assessment

A tax gap represents the difference between potential revenue and actual revenue collected. Potential revenue reflects the income that would be generated under perfect application of the benchmark tax system—without exemptions, derogatory measures, administrative inefficiencies, or tax avoidance behaviors. Thus, the tax gap has two key dimensions: a political dimension, known as the policy gap, associated

with tax expenditures, and an administrative dimension, referred to as the compliance gap.

There are two principal methodologies for estimating potential tax revenue, applicable to specific taxes or an entire tax system. The choice between these methods depends on the tax in question and data availability. The first method, a bottom-up approach, utilizes taxpayer surveys, administrative records, and results from random tax audits, aggregating micro-level data to derive a macro-level assessment. The second, a top-down approach, relies on macroeconomic data from national statistical offices or international institutions to estimate tax bases, with necessary adjustments incorporated.

Both methods are used by the British government, which has developed a detailed framework for tax gap analysis. HM Revenue & Customs (HMRC, 2024) recommends the top-down approach for indirect taxes and the bottom-up approach for direct taxes. In the UK, direct tax gaps are estimated using three tools: random tax audits; cross-referencing data from third parties (such as banks and employers); and targeted modeling for specific taxpayer segments. For indirect taxes, the top-down method is supplemented by household consumption surveys.

In the WAEMU context, tax gap assessment is conducted using the top-down approach, based on an econometric estimation of tax effort through a stochastic frontier model. This approach is largely economic, relying on macroeconomic data to estimate potential tax revenues. The selected explanatory variables align with those commonly employed in the academic literature: GDP per capita, the agricultural share in the economy, trade openness, and natural resource rents.⁷

The stochastic frontier model operates on the

6. Guinea-Bissau had not yet adopted VAT during the studied period (2018-2022).

7. Caldeira et al. (2019) and Benitez et al. (2023) adopt a similar approach.

assumption that economic agents cannot exceed an ideal frontier, which represents the maximum achievable level given the constraints of available resources. When applied to taxation, this frontier signifies the potential tax revenue attainable based on the size and structural characteristics of the economies under study. The model employed, the Generalized True Random-Effects (GTRE) model,⁸ presents distinct advantages: it accounts for random shocks and differentiates between permanent and temporary factors affecting countries' tax effort. The stochastic frontier model is defined as follows:

$$RF_{i,t} = \alpha + f(X_{i,t}, \beta) + \mu_i + v_{i,t} - \eta_i - \varphi_{i,t},$$

where $RF_{i,t}$ is the dependent variable, representing the logarithm of the tax burden, defined as the ratio of tax revenue to GDP. The indices i and t correspond to country i and year t , respectively. $X_{i,t}$ is a vector of control variables influencing the tax to GDP ratio, including GDP per capita (income level), the share of agriculture in GDP (economic structure), and international trade (imports and exports as a percentage of GDP) as an indicator of trade openness, and natural resource rents (indicating resource wealth). The terms $\eta_i > 0$ and $\varphi_{i,t} > 0$ represent persistent and time variant inefficiencies, while μ_i and $v_{i,t}$ represent random effects and stochastic noise respectively.

Several methods for estimating the parameters of the GTRE model have been proposed in the literature. Colombi et al. (2014) introduced a maximum likelihood estimator; Kumbhakar, Lien, and Hardaker (2014) recommended a multi-step procedure; Tsionas and Kumbhakar (2014) developed a Bayesian approach; while Badunenko and Kumbhakar (2016) and Filippini and Greene (2016) advanced a simulated maximum likelihood method. For this analysis, we adopt the latter approach.⁹

Table 1 (see following page) presents the main results of the methodology outlined above. Tax effort appears relatively consistent across Member States, ranging from 0.47 in Benin to 0.53 in Niger and Togo. This uniformity may indicate similarities in tax systems across WAEMU Member States, suggesting effective implementation of WAEMU Directives on tax harmonization. It may also reflect comparable economic characteristics among these countries, as determined by the four macroeconomic variables in the analysis (GDP per capita, size of the agricultural sector, trade openness, and natural resource rents). Nevertheless, the landlocked countries within the Union (Burkina Faso, Mali, Niger) are generally poorer and less open to trade than the coastal Member States.

In contrast, the composition of tax gaps—between tax expenditures and compliance gaps—reveals discrepancies in the quality of tax expenditure assessments among Member States. The WAEMU Decision on tax expenditures (No. 08/2015/CM/WAEMU of July 2, 2015) lacks specific guidelines regarding which taxes to include or the methodology to apply.

This tax effort analysis has been extended to all sub-Saharan African (SSA) countries. However, not all countries produce an annual assessment of tax expenditures, complicating the breakdown of tax gaps into policy and compliance gaps. On average, WAEMU Member States demonstrate a slightly higher tax effort (0.58) compared to other SSA countries (0.56). Despite this, WAEMU countries exhibit a lower average tax revenue: 13.81 percent of GDP compared to 13.95 percent for other SSA countries. The tax effort approach considers key structural factors affecting tax revenue. For instance, a country with limited wealth and an agricultural economy, such as Burundi, will naturally have lower

8. This model was introduced by Colombi et al. (2014), Kumbhakar, Lien, and Hardaker (2014), and Tsionas and Kumbhakar (2014).

9. Our approach differs from Caldeira et al. (2019) in the method

used for estimating the model's parameters. The authors use the three-step decomposition of Kumbhakar, Lien, and Hardaker (2014). For a discussion of the implementation process, see Horncastle, Kumbhakar, and Wang (2015).

tax revenue than a wealthier, industrialized, or trade-oriented country. These structural factors (GDP per capita, agricultural sector size, trade openness, and natural resource rents) define each country's tax potential. While the former may have a lower potential tax burden, it might display a higher tax effort due to efficient tax policies and/or administration.

The tax effort approach thus accounts for each country's structural strengths and weaknesses. In this context, WAEMU countries, on average, are more structurally disadvantaged than other SSA countries; they tend to be poorer, more reliant on agriculture, less open to trade or potentially richer in natural resources. Nonetheless, they exhibit a slightly higher tax effort, likely due to more efficient policies and/or tax administrations.

However, this heightened tax effort is insufficient to counterbalance the structural disadvantages of WAEMU Member States and elevate their tax burden to that of other SSA countries.

Table 1 also highlights a “resource curse” effect. Oil-exporting countries, such as Gabon, Equatorial Guinea, and Nigeria, show significantly lower tax efforts relative to other African countries, which is also mirrored in their tax burdens. This is partly because revenue-sharing mechanisms in the oil sector often rely on contractual arrangements, such as production-sharing agreements, rather than specific taxes like royalties. Consequently, oil activities contribute minimally to tax revenues, generating non-tax revenues instead, which fall outside the scope of this assessment methodology.

Table 1. Tax to GDP ratio and Tax Gaps in WAEMU (average for the period 2018-2022)

Country	Tax Revenue	Total Tax Effort	Potential Tax Revenue	Tax Gap	Policy Gap (2021)	Compliance Gap
	Percentage of GDP		Percentage of GDP	Percentage of GDP	Percentage of GDP	Percentage of GDP
Benin	10.91	0.47	16.69	5.78	2.00	3.78
Burkina Faso	15.18	0.52	22.44	7.26	1.20	6.06
Côte d'Ivoire	12.30	0.49	18.63	6.33	1.03	5.30
Guinea-Bissau	8.45	0.48	12.84	4.40		
Mali	14.12	0.52	20.93	6.81	3.00	3.81
Niger	10.37	0.53	15.23	4.86	1.92	2.94
Senegal	16.99	0.52	25.17	8.17	6.20	1.97
Togo	13.27	0.53	19.57	6.30	2.30	4.00
Average WAEMU member States	12.70	0.51	18.94	6.24	2.52	3.98
Average SSA countries	13.74	0.49	20.80	7.06		
Some other SSA countries						
South Africa	26.26	0.54	38.44	12.17		
Burundi	17.04	0.61	23.76	6.71		
Gabon	11.14	0.39	17.93	6.78		
Equatorial Guinea	7.15	0.33	11.90	4.76		
Kenya	15.67	0.55	22.76	7.09		
Nigeria	6.14	0.42	9.69	3.55		
Rwanda	16.52	0.53	24.34	7.82		

Sources: authors.

The tax effort methodology can also be applied to estimate tax gaps for the main types of taxes.

Table 2 (see below) presents the tax effort and tax gap for VAT and CIT across WAEMU Member States for the period 2018-2022.

VAT serves as the primary source of revenue, contributing between 2.79 percent of GDP in Côte d'Ivoire and 6.44 percent of GDP in Togo. The average VAT gap stands at 2.26 percent of GDP, with values ranging from 1.60 percent in Côte d'Ivoire to 3.03 percent in Senegal. The VAT effort and gap in WAEMU countries are broadly comparable to those found in other SSA countries. In contrast, CIT demonstrates a considerably higher tax effort, despite yielding lower tax revenues—2.1 percent of GDP within WAEMU compared to nearly 2.8 percent across SSA. While WAEMU Member States experience structural economic disadvantages, as reflected in the four macroeconomic variables, their heightened tax effort enables them to partially mitigate these challenges.

Potential CIT revenue within WAEMU averages 3.3 percent of GDP, notably lower than the 4.5 percent observed in other SSA countries. CIT

is a vital tax in developing economies, yet its base and effectiveness are susceptible to aggressive tax optimization by multinational corporations and the influence of double taxation treaties based on the OECD model,¹⁰ which generally favor capital-exporting countries over developing countries (see Beer and Loeprick, 2021).¹¹ A more granular analysis of CIT in WAEMU, along with a study of the impact of double taxation treaties ratified by Member States, would be valuable for identifying potential risks to their tax revenues. Additionally, it is crucial to consider that the ratification of even a single double taxation treaty by any WAEMU Member State with a tax haven or “privileged tax jurisdiction” could expose all other Member States, given the multilateral nature of the treaties binding them.

10. On November 22, 2023, 125 countries voted for the resolution A/C.2/78/L.18/Rev.1, tabled by the African Group under the title: “Promotion of inclusive and effective international tax cooperation at the United Nations” at the UN Headquarters in New York. This resolution transfers some competencies in defining a framework convention on international tax cooperation from the OECD to the United Nations.

11. Analyzing the impact of double taxation treaties in 41 African countries over the period 1985-2015, Beer and Loeprick (2021) show empirically that the existence of a treaty reduces CIT revenue by around 5% without significantly increasing Foreign Direct Investment (FDI). The revenue loss increases to 15% if one of the parties to the treaty is Mauritius. On June 14, 2019, Senegal terminated its tax treaty with Mauritius.

Table 2. VAT and Corporate Income Tax Effort and Gaps (2018-2022)¹

Country	VAT				CIT			
	Tax Revenue	Total Tax Effort	Potential Tax Revenue	Tax Gap	Tax Revenue	Total Tax Effort	Potential Tax Revenue	Tax Gap
	Percent of GDP		Percent of GDP	Percent of GDP	Percent of GDP		Percent of GDP	Percent of GDP
Burkina Faso	4.71	0.51	7.02	2.31	3.04	0.50	4.58	1.54
Côte d'Ivoire	2.79	0.43	4.38	1.60	1.59	0.36	2.61	1.02
Guinea-Bissau					1.52	0.40	2.42	0.91
Mali	4.85	0.49	7.33	2.48	2.73	0.48	4.13	1.40
Niger	3.62	0.49	5.48	1.86	1.55	0.47	2.36	0.82
Senegal	5.96	0.49	8.99	3.03	2.37	0.42	3.73	1.37
Togo	6.44	0.54	9.41	2.97	2.05	0.45	3.18	1.13
Average WAEMU member States	4.73	0.49	7.10	2.37	2.12	0.44	3.29	1.17
Average SSA countries	4.33	0.46	6.69	2.35	2.79	0.40	4.46	1.67

Sources: authors.

1. Guinea-Bissau did not have VAT during the studied period. Detailed tax revenue data was not available for Benin.

► Alternative Approaches to Estimating the VAT Tax Gap: C-Efficiency and the Input-Output Table (IOT)

One limitation of the previous tax effort method in assessing tax gaps is the potential for underestimating revenue capacity. Results from the stochastic frontier approach can vary based on the macroeconomic data and the specific sample of countries analyzed (in this case, developing countries). To supplement the tax effort approach, two additional methods can be employed to assess tax gaps for certain taxes, such as VAT.

In addition to the tax effort approach, alternative methodologies utilizing macroeconomic data have been developed, particularly for assessing VAT. The first of these is VAT C-efficiency, which adjusts final household consumption¹² to account for elements like self-consumption. C-efficiency is defined as the ratio of actual VAT revenue to potential VAT revenue, where poten-

tial revenue is derived by applying the standard VAT rate to final household consumption. C-efficiency ranges from 0.21 in Côte d'Ivoire to 0.43 in Senegal and Togo, meaning Côte d'Ivoire collects only 21 percent of its theoretical VAT revenue. VAT gaps calculated with this approach are significantly higher than those obtained via the econometric tax effort method, ranging from 7.8 percent of GDP in Senegal to 12.05 percent in Niger. These figures presume the flawless application of VAT on household and public sector consumption, without accounting for exemptions, reduced rates, or the significant informal sector in WAEMU Member States.

A second alternative approach for estimating VAT gap is the use of Input-Output Table (IOT). This method is neither purely top-down nor bottom-up; since it combines data on the structure of the economy provided by IOT. This approach allows assessing VAT gaps at the sectorial levels.

The first step in this approach is to estimate theoretical VAT revenue, which should closely approximate the actual VAT collected. This estimation requires accounting for both the formality level within each sector and the VAT rate applied

12. Some analyses also include the final consumption of public administrations.

Table 3. VAT C-efficiency in the WAEMU in 2021¹

	Tax Revenue	C-Efficiency (1)	C- Efficiency (2)	Tax Gap(1)	Tax Gap (2)
	<i>Percent of GDP</i>			<i>Percent of GDP</i>	<i>Percent of GDP</i>
Burkina Faso	4.95	0.34	0.32	9.60	10.53
Côte d'Ivoire	2.78	0.21	0.20	10.75	11.25
Mali	4.85	0.32	0.30	10.43	11.32
Niger	3.61	0.23	0.22	12.03	12.75
Senegal	5.96	0.43	0.39	7.80	9.21
Togo	6.43	0.43	0.39	8.55	9.92
<i>Average WAEMU member States</i>	4.76	0.33	0.30	9.86	10.83

1: the tax base (1) is final consumption by households and general government.

2: the tax base (2) is the same as above less VAT.

Sources: authors.

1. Guinea-Bissau had no VAT for the period covered and data was unavailable for Benin.

to each economic sector. Sectoral formality levels are determined based on assumptions about the distribution of VAT-liable businesses across sectors. In WAEMU, firms with annual turnover exceeding CFAF 50 million are subject to VAT. For instance, the agricultural sector is generally assumed to be largely informal, while telecommunication is considered formal. VAT application varies according to each country's interpretation of VAT law. For example, agriculture, banking, and education are typically exempt from VAT, while manufacturing and telecommunication are subject to the standard rate. This method assumes uniform tax treatment for all production within a sector—a simplifying assumption that could be refined with microeconomic surveys tailored to each sector.

The assessment of the theoretical VAT base and revenue includes the following components:¹³

- 1. Household Final Consumption Expenditure:** Expenditure by households on goods and services sold by VAT-liable formal businesses, categorized by economic sector. Additionally, government or non-governmental

organization expenditures on goods and services from formal firms may also be included in the theoretical VAT base.

- 2. Imports by Informal Firms and Input Purchases from Formal Businesses:** VAT collected at customs is definitive revenue only when collected on informal importers—non-VAT liable firms—who cannot deduct VAT paid on their imports since they do not charge VAT on sales. Similarly, informal firms purchasing inputs from formal businesses bear VAT on these purchases, as they are ineligible to deduct VAT.
- 3. Trade Balance Impact:** Formal exporters may generate VAT credits that are refundable, reducing theoretical VAT revenue. Informal firms, however, are ineligible for VAT refunds and are thus treated as final consumers.

This approach reveals two critical aspects of VAT in developing countries: First, VAT applies to informal firms, as their intermediate consumption and imports represent definitive tax revenue. Second, VAT exemptions granted to certain businesses or sectors create a cascading effect, as exempt firms cannot deduct VAT paid on their inputs, inadvertently benefiting informal firms by reinforcing this cascade effect.

13. FERDI is currently drafting a detailed methodological note for the evaluation of tax gaps based on IOTs.

Table 4. VAT Tax Gaps Based on Input-Output Tables (IOTs) as a Percentage of GDP

		Theoretical VAT revenue	Revenue without Tax Expenditures	Revenue without Informality	Policy Gap	Compliance Gap	Total Tax Gap
Benin	2016	3.73	8.71	3.93	4.98	0.20	5.19
Burkina Faso	2019	4.04	7.90	1.86	3.86	-	2.18
Côte d'Ivoire	2017	7.11	9.55	7.41	2.44	0.30	2.74
Mali	2017	4.19	5.34	3.82	3.51	-	0.38
Senegal	2022	5.00	11.16	1.88	6.17	-	3.12
Togo	2017	8.40	10.01	9.39	1.61	0.99	2.60
Average		5.41	8.78	4.71	3.76	-	0.70

Sources: authors.

The second step distinguishes between the policy gap and the compliance gap. The policy gap reflects the difference between theoretical VAT revenue and the revenue that would arise if the standard VAT rate were applied uniformly across all sectors. The compliance gap, on the other hand, is the difference between theoretical VAT revenue and the revenue achievable if all firms were formal. The former measure captures tax policy decisions, such as exemptions or reduced rates, while the latter reflects the impact of informality.

The resulting VAT gap ranges from 1.68 percent of GDP in Burkina Faso to 5.19 percent in Benin (see **Table 4** on the previous page). In some cases, the compliance gap appears negative, a result of including VAT collected on input purchases and imports by informal firms in our approach. If all businesses were formal and subject to VAT, this revenue would disappear. However, a limitation of this analysis is the assumption that household final consumption remains unchanged regardless of the formalization of economic sectors.

The IOT methodology enables a more granular analysis of tax gaps at the sectoral level (see

Table 5 below). In Benin, Burkina Faso, Mali, and Senegal, food products (encompassing agriculture, livestock, and fishing) account for over 50 percent of the tax gaps, with shares of 66 percent, 67 percent, 88 percent, and 63 percent, respectively. Both the agricultural sector and food products are VAT-exempt to reduce prices and improve affordability for lower-income households. However, this policy assumes a high level of VAT incidence. Evidence is limited regarding the policy's effectiveness in reaching the poorest households, as they typically reside in rural areas and often buy from informal (non-VAT-liable) vendors who do not apply VAT. Additionally, accommodation and restaurant services contribute notably to tax gaps in Benin and Mali. In Côte d'Ivoire, transport services represent nearly 40 percent of the total VAT gap, largely due to the high level of informality within the sector.

► Conclusion

The evaluation of tax gaps represents a critical preliminary step towards enhanced DRM. The tax effort methodology develops an empirical approach in estimating potential tax revenue and deducing tax gaps, which ranged from

Table 5. Distribution of VAT Gaps by Sector¹

	Benin	Burkina Faso (1)	Côte d'Ivoire	Mali (1)	Senegal (1)	Togo
Food products incl. Agriculture, cattering, fishing	66.41	67.12	34.09	88.20	63.26	40.97
Manufacturing	3.54	2.72	0.13	1.48	9.24	28.38
Transport	14.32	0.11	39.47	4.88	8.31	1.42
Accommodation and food service activities	17.63	0.70	13.66	17.59	-	-0.67

1: Policy Gap only

Sources: authors.

1. We present only policy gaps for Burkina Faso, Mali, and Senegal, since their respective compliance gaps are negative given our assumptions.

4.4 percent of GDP in Guinea-Bissau to 8.17 percent in Senegal over the 2018-2022 period. These gaps are particularly substantial given the current tax revenue to GDP ratio of WAEMU Member States. These gaps possess a dual nature, encompassing both a political dimension related to tax expenditure and an administrative dimension known as the compliance gap, which arises from tax evasion and a significant informal sector. The ratio of tax expenditures to total tax gap varies significantly from 16 percent in Burkina Faso and Côte d'Ivoire to 75 percent in Senegal. Conversely, the compliance gap constituted 83 percent of the tax gap in Burkina Faso and 24 percent in Senegal. Additionally, the tax gaps for major revenue sources such as VAT and CIT were notable, with an average VAT gap of 2.26 percent of GDP, ranging from 1.60 percent in Côte d'Ivoire to 3.03 percent in Senegal. The overall average tax gap in the WAEMU region was recorded at 2.1 percent of GDP.

Two complementary approaches are proposed to assess VAT gaps. The C-efficiency concept indicates more substantial VAT gaps, ranging from 7.8 percent of GDP in Senegal to 12.03 percent in Niger. This approach assumes ideal VAT application on final household and government consumption, disregarding exemptions, reduced rates, and the existence of an informal sector. A third approach for estimating the VAT gap utilizes IOTs, with VAT gaps ranging from 1.68 percent of GDP in Burkina Faso to 5.2 percent in Niger. This gap is relatively balanced between political and administrative dimensions.

Several key policy recommendations can be derived from this comprehensive assessment of tax gaps. First, the WAEMU Commission's adoption of the tax effort analytical concept will enhance its capacity to rigorously monitor DRM across Member States. Additionally, the Commission could develop comprehensive guidelines to standardize the assessment of tax expenditures by individual member countries.

This would improve the comparability and reliability of tax gap analyses. Second, a thorough review of the double taxation treaties ratified by WAEMU Member States would facilitate a more robust evaluation of their impact on foreign direct investment flows and CIT revenues. Third, broadening the VAT base - particularly by reducing exemptions or zero-rating on agricultural products - would help to significantly reduce the prevalent VAT tax gap and bolster overall tax collections. Collectively, these policy actions informed by the tax gap analysis would strengthen the tax capacity of WAEMU Member States.

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n° ISSN: 2275-5055

Publication director: Patrick Guillaumont

