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TAX OUTLOOK
2023**



An ATAF publication

**AFRICAN TAX
ADMINISTRATION FORUM**

**FORUM SUR
L'ADMINISTRATION
FISCALE AFRICAINE**



2023 African Tax Outlook (ATO)

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About ATAF

The African Tax Administration Forum (ATAF) is an organisation which was established by African revenue authorities in 2009, in order to improve the performance of tax administrations in Africa. The tax administrations of 42 countries in Africa are members of ATAF, i.e., 76 percent of tax administrations on the continent, making it the premier body on tax matters on the continent. ATAF believes that better tax administration will enhance economic growth, increase accountability of the state to its citizens, and more effectively mobilise domestic resources. This is evident in ATAF's impactful positioning since its 15 years of existence. Its presence is established through being Africa's voice on the continent on international tax matters, fostering homegrown solutions and advocating on the role of domestic resource mobilization in state-building.

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The data was collected throughout 2023 and compiled through the ATO Online Data Portal and has data covering the period of fiscal year 2010 to 2022. The portal enables ATO countries to input data into a systematic databank.

The 2023 edition of the ATO was made possible by the ATAF's management under the leadership of **Mr Logan Wort**- ATAF's Executive Secretary, **Ms Mary Baine**- the Deputy Executive Secretary, **Mr Anthony Munanda**- the Acting Head of Domestic Resource Mobilisation Department and **Dr Ezera Madzivanyika** - the Manager for the Applied Research and Statistics (ARS) Unit that is responsible for producing this publication.

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Mr. Logan Wort
Executive Secretary

African Tax Administration Forum

Foreword from the Executive Secretary

Unprecedented global shocks were experienced in the year 2022. These led to higher inflation rates and tighter monetary conditions. However, revenue performance in ATO countries remained resilient. The resilience can be maintained through data-driven decision making. Thus, the ATO plays a critical role to guide and give insights to enable tax administrations to achieve their goals of effective and efficient administration.

Since its first edition in 2016, the primary purpose of the ATO has been to depict comparative data on performance of participating countries. The publication's role has grown over the years to go beyond analysing data. To ensure and encourage exploration of new revenue streams by tax administrations to broaden the tax base, special thematic areas are introduced. In particular, in the 2023 ATO edition, the tobacco tax landscape on the continent will be explored. This again, shows the drive of ATAF to assist countries through data-driven insights regarding specialised tax areas.

The tax landscape is constantly evolving due to various aspects. Firstly, although the effects of the Covid-19 pandemic still linger, the Russia-Ukraine war has impacted African countries. In some instance, the war has required governments to relook their supply-chains and source of agricultural products such as wheat grain due to blockages caused by the conflict. Secondly, there were significant profits gained by oil companies due to increases in oil prices during the period. Both spectrums highlight an impact on revenue collection.

Other aspects which play a role in the tax landscape is the significant drive of the fourth industrial revolution. It requires tax administrations to digitise their processes at a fast pace. Thus, digital transformation is no longer an option but a key

to the strategic planning of both tax administration and policy. An enabling environment for digital transformation will transform revenue collection and management of processes.

In this 2023 ATO edition, the impact of the pandemic on revenue is still highlighted. Recovery from the negative effects of the COVID-19 pandemic was observed in 2021 for some of the ATO countries, while the rest of the countries have recorded strong rebounds in 2022. Thus, overall, an ATO-wide recovery is recorded for both GDP and tax revenue performance due to increased economic activity. Based on the trend in most previous years, total tax revenues continued to grow above the corresponding nominal GDP growth. In the year under review, ATO revenue collections rebounded to a significant growth of 20.95% in 2022 from 16.34% in 2021, exceeding the long-term average by 7.96 percentage points. Average ATO nominal GDP growth also recorded an improved growth of 13.13% in 2022 against 11.15% in 2021, which was also above the long-term average by 2.34 percentage points.

The average tax-to-GDP ratio was recorded at 15.43% in 2022 from 14.80% in 2021, and above the pre-COVID average by 0.56 percentage points. A total of 24 (69%) countries recorded an increase in their ratios when compared to 2021, with most benefitting from an increase in domestic taxes collections. On a regional analysis, the Southern African Development Community (SADC) countries continued to have the highest average ratio of 17.49% during the review period, followed by the East African Community (EAC) with an average ratio of 14.20%. In the Economic Community of West African States (ECOWAS) region, the average tax-to-GDP ratio was recorded at 13.83%, and the Economic Community of Central African States (ECCAS) region which has the lowest number of states (3 countries), also has the lowest ratio of 12.18% in the ATO in the review period.

In line with the objectives of the ATO to provide evidence-based recommendations for reforms in tax administration and policy, the 2023 ATO edition presents an insightful outlook for decision-makers. Secondly, the various indicators presented highlight recommended areas to broaden the tax base, narrow tax gaps, simplify and improve fairness in tax systems, and enhance overall voluntary compliance. Lastly, practical good practices from well-performing and trail-blazing tax administrations are spotlighted as means to foster peer-learning and benchmarking. Therefore, I urge you to sample these and choose a country's good practices which apply to your needs, to contact that country, or make use of the various ATAF ATO platforms to facilitate the engagement. Additionally, if your revenue administration agency has success stories to share, I invite you to please share them with ATAF for future editions of the ATO.

Lastly, allow me to appreciate the ATAF ATO team, and I hope that you will find the 2023 ATO edition as a comprehensive resource, and look forward to interesting and in-depth insights in 2024.

Mr. Logan Wort, ATAF Executive Secretary



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List of acronyms and abbreviations

ADB	Asian Development Bank
AI	Artificial Intelligence
ATAF	African Tax Administration Forum
ATO	African Tax Outlook
BEPS	Base Erosion and Profit Shifting
CIAT	Inter-America Centre of Tax Administration
CIT	Corporate Income Tax
COC	Cost of Collection
COSO	Committee of Sponsoring Organisations of the Treadway Commission
DRM	Domestic Resource Mobilisation
EAC	East African Community
ECCAS	Economic Community of Central African States
ECOWAS	Economic Community of West African States
ERM	Enterprise Risk Management
ERS	Eswatini Revenue Service
FAQs	Frequency Asked Questions
FIRS	Federal Inland Revenue Service
FTA	Forum on Tax Administration
GDP	Gross Domestic Product
GESIC	Gender Equality Seal Implementation Committee
GIFMIS	Government Integrated Financial Management System
GOLD	Governance and Local Development
GRA	Ghana Revenue Authority
HR	Human Resource

IFFs	Illicit Financial Flows
IT	Information Technology
KPIs	Key Performance Indicators
KRA	Kenya Revenue Authority
MRI	Monthly Revenue Income
OECD	Organisation for Economic Cooperation and Development
PAYE	Pay As You Earn
PhD	Doctorate of Philosophy
PIN	Personal Identification Number
POA1	Performance Outcome Area One
SADC	Southern African Development Community
SARS	South Africa Revenue Service
SDGs	Sustainable Development Goals
TADAT	Tax Administration Diagnostic Assessment Tool
TaRMS	Tax Revenue Management System
TA	Tax Administrations
TOT	Turnover Tax
UN	United Nations
UNDP	United Nations Development Programme
USAID	United States Agency for International Development
USD	United States Dollar
USSD	Unstructured Supplementary Service Data
VAT	Value Added Tax

ATO Countries' currencies and codes

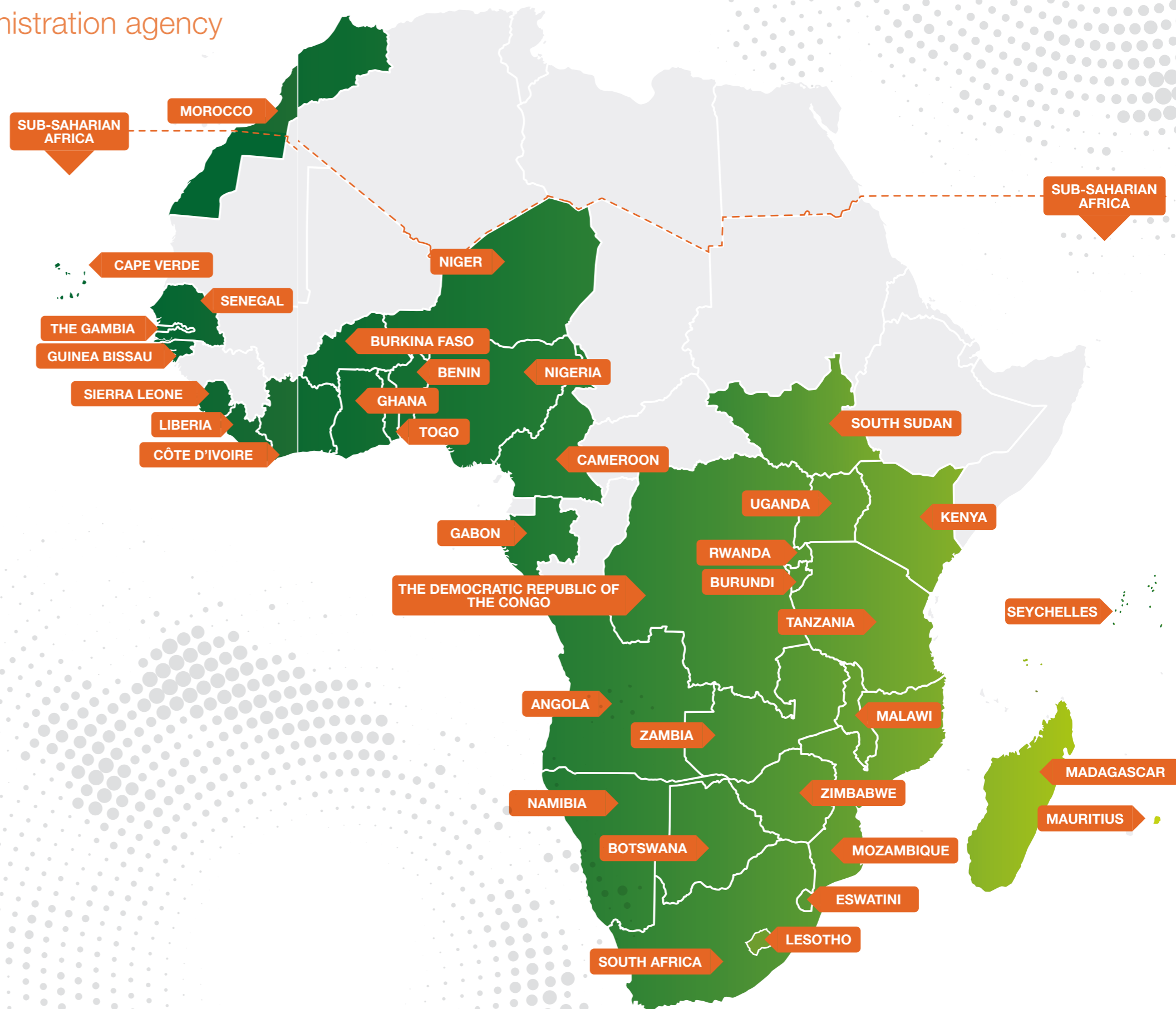
ATO COUNTRIES	CURRENCY	CURRENCY CODE
Angola	Angolan kwanza	AOA
Benin	CFA franc	XOF
Burkina Faso	CFA franc	XOF
Botswana	Botswana pula	BWP
Burundi	Burundi franc	BIF
Cabo Verde	Escudo	CVE
Cameroon	CFA franc	XAF
Cote d'Ivoire	CFA franc	XOF
DR Congo	Congolese franc	CDF
Eswatini	Lilangeni	SZL
The Gambia	Dalasi	GMD
Ghana	Ghana cedi	GHS
Kenya	Kenyan shilling	KES
Lesotho	Loti	LSL
Liberia	Liberian dollar	LRD
Madagascar	Malagasy ariary	MGA
Malawi	Malawian kwacha	MWK
Mauritius	Mauritius rupee	MUR
Morocco	Morocco Dirham	MAD
Mozambique	Mozambican metical	MZN
Namibia	Namibian dollar	NAD
Nigeria	Nigerian naira	NGN
Niger	CFA franc	XOF
Rwanda	Rwandan franc	RWF
Senegal	CFA	XOF
Seychelles	Seychellois rupee	SCR
Sierra Leone	Sierra Leonean Leone	SLL
South Africa	South African rand	ZAR
South Sudan	South Sudanese-pound	SSP
Tanzania	Tanzanian shilling	TZS
Togo	CFA franc	XOF
Uganda	Ugandan shilling	UGX
Zambia	Zambian kwacha	ZMW
Zimbabwe	Zimbabwe dollar	ZWD
	<u>Other adopted currency used:</u> United States dollar	USD



Chapter 1 Introduction

The 36 ATO countries which provided data for ATO 2023 and type of revenue administration agency

Angola (AGT)	SARA	Integrated
Benin (DGI)	Tax admin. dept.	Separate
Burkina Faso (DGI)	Tax admin. dept.	Separate
Botswana (BURS)	SARA	Integrated
Burundi (OBR)	SARA	Integrated
Cabo Verde (AFT)	Tax admin. dept.	Separate
Cameroon (DGI)	Tax admin. dept.	Separate
Cote d'Ivoire (DGI)	Tax admin. dept.	Separate
DR Congo (DGI)	Tax admin. dept.	Separate
Eswatini (SRA)	SARA	Integrated
Gabon (DGI)	Tax admin. dept.	Separate
Gambia GRA	SARA	Integrated
Ghana (GRA)	SARA	Integrated
Guinea-Bissau	Tax admin. department	Separate
Kenya (KRA)	SARA	Integrated
Lesotho (LRA)	SARA	Integrated
Liberia (LRA)	SARA	Integrated
Madagascar (DGI)	Tax admin. dept.	Separate
Malawi (MRA)	SARA	Integrated
Sudan (STC)	Tax admin. dept.	Separate
Mauritius (MRA)	SARA	Integrated
Morocco (DGI)	Tax admin. dept.	Separate
Mozambique (ATM)	SARA	Integrated
Namibia (NAMRA)	SARA	Integrated
Nigeria (FIRS)	SARA	Integrated
Niger (DGI)	Tax admin. dept.	Separate
Rwanda (RWA)	SARA	Integrated
Senegal (DGI)	Tax admin. dept.	Separate
Seychelles (SRC)	SARA	Integrated
Sierra Leone (NRA)	SARA	Integrated
South Africa (SARS)	SARA	Integrated
South Sudan	SARA	Separate
Tanzania (TRA)	SARA	Integrated
Togo (OTR)	SARA	Integrated
Uganda (URA)	SARA	Integrated
Zambia (ZRA)	SARA	Integrated
Zimbabwe (ZIMRA)	SARA	Integrated



Introduction

1.1. Overview

The African Tax Outlook (ATO) is a publication produced by the African Tax Administration Forum (ATAF). As an annual flagship publication, it provides a systematic overview of the country data of participating African Tax Administrations, examines the roles and institutional frameworks of tax administrations, and reviews the revenue collection performance by different tax types.

The ATO emerged from the need for peer-learning amongst African revenue administrations through a comparative analysis of their performance against each other and against other regional groupings. From the analysis and insights fostered through this edition, tax administrations and policymakers have an overview- particularly on how to implement, operate and administer effectively and efficiently the tax systems, and how to improve tax policy and administrative decision-making and, ultimately, to improve and maximise revenue collection for national development.

To achieve this vital outlook, ATAF collects tax administration data based on specified thematic indicators with agreed definitions among African countries. Participating countries collect information on indicators from the following seven themes: (1) tax rates, (2) tax bases, (3) tax revenue, (4) non-tax revenue, (5) tax administration- organisational profile, (6) tax administration – functions and (7) resources and taxpayer service.

This edition which has input from 36¹ ATO countries introduces a new perspective to tax buoyancy, with the analysis using Gross Value Added (GVA) and Sector revenue. Further, given the need to expand the tax base to increase domestic revenue mobilisation, a special feature on tobacco tax will be presented in order to explore the current landscape on the continent. The exploration through data and analysis will form the basis of tailoring tax administration and tax policy solutions for ATAF member countries through reports, suggested approaches, country programmes, and capacity building initiatives.

The ATO attempts to complement the African Development Bank's African Economic Outlook publication by focusing on key emerging tax performance and policy recommendations relevant to participating members. Specifically, the ATO covers the core assignments of tax administration which are centred on the execution and enforcement of tax legislation and regulations. These functions include: identification and registration of taxpayers, processing of tax returns and third-party information, assessment of tax obligations, (enforced) collection of taxes and provision of services to taxpayers.

1.2. Methodology

Data is collected annually through the ATAF online data portal and participating countries have designated focal points to complete the process between April and July of each year. The ATO data process includes a series of peer-learning activities namely, the ATO capacity building workshop; the ATO actual data collection and the ATO validation meeting.

Focal points from tax administrations have access to the entire data portal to allow them to seamlessly gain from the comparative data. However, aggregate data and some country-level data are publicly available and may be used to conduct any comparative analysis when considering tax policy changes or tax administration reforms. Figure 1.1 presents the 36 countries that are part of this ATAF flagship edition and have submitted data for the 2022 fiscal year, each sharing approximately 300 datapoints or indicators.



ATAF continues to strengthen its data collection techniques and coverage of the ATO year on year. Although the number of countries has reduced to 36² countries in the current edition from 37 countries in 2022, the additional year (2022) resulted in a rise in the number of data points, which enables credible time series analysis. The 2023 edition of the ATO draws on data covering the period 2010 to 2022 (13 years of datapoints).

Part of the analysis in the ATO publication involves comparing performance of the current year to the previous year and considering the average growths from 2010 to date. In most cases, this serves to illustrate the analytical point by comparing statistics between 2 years or a specific period while in the other cases we look at trends over a period

and even among the various African regional communities. Changes may be observed in the average or median for different years on different editions and these changes in data values may be induced by the following assumptions:

- Each participating member may change data from one edition to another due to reviews in the data provided in previous editions (e.g. the rebasing of their Gross Domestic Product (GDP)).
- In case of estimated figures that were provided, changes are allowed when final figures have been released.

1. The number of participating countries has dropped from 37 countries in the previous edition.

2. Chad and Sudan who were featured in the 2021 publication could not provide data for 2022.

Additionally, South Sudan (SSD) is featured in this publication, making the total number of countries to be 36. GDP for SSD is however not provided, and they are only included in indicators that do not relate to GDP.

1.3. Key findings of the 2023 ATO

There is an evident ATO wide recovery for both economic activity (as measured by GDP) and tax revenue performance in the year 2022, following the global economic slowdown caused by the COVID-19 pandemic in 2020 and extending into 2021 in some countries. Even though the year 2022 brought with it unexpected global shocks that led to higher inflation rates and tighter monetary conditions, revenue performance remained resilient.

In the year under review, both nominal tax revenue and nominal GDP recorded annual growth rates that are above pre-pandemic growth levels. Average ATO nominal GDP growth recorded an improved growth of 13.13% in 2022 against 11.15% in 2021, which was above the long-term average by 2.34 percentage points. Revenue collections rebounded to a significant growth of 20.95% in 2022 from 16.34% in 2021, also exceeding the long-term average by 7.96 percentage points. The majority of ATO countries recorded improved growths in the major tax heads which then strengthened their total revenue performance.

In line with the observed buoyant tax revenue collections, the average tax-to-GDP ratio was recorded at 15.43% in 2022 from 14.80% in 2021, and above the pre-COVID average by 0.56 percentage points. A total of 24 (69%) countries recorded an increase in their ratios when compared to 2021, with most benefitting from an increase in domestic taxes collections. On a regional analysis, the Southern African Development Community (SADC) countries continued to have the highest average ratio of 17.49% during the review period, followed by the East African Community (EAC) with an average ratio of 14.20%. In the Economic Community of West African States (ECOWAS) region, the average tax-to-GDP ratio was recorded at 13.83%, and the Economic Community of Central African States (ECCAS) region which has the lowest number of states (3 countries), also has the lowest ratio of 12.18% in the ATO in the review period.

Tax structures in the ATO countries have remained relatively stable over the years and on average, 60% of tax revenue in ATO countries is generated from indirect taxes. VAT is the single largest contributor to tax revenues over the years. However, revenue shares from CIT, as well as other domestic and customs taxes collections have also been on a slight increase., indicating a possible shift in tax policy or administration.

From a tobacco tax perspective, the African region has the least smoking prevalence when compared to other World Health Organisation (WHO) regions. However, there is a projected increase of the number of tobacco smokers which is expected to rise from 52 million in 2000 to 84 million in 2025. Further, the younger population are inducing a significant increase which might cause the region to have a higher prevalence in the future. Thus, it is important to understand the use of tobacco in this region in order to foster the necessary taxation mechanisms to curtail it. The main tobacco production hubs in Africa are in Algeria, Kenya, Nigeria, and South Africa and the five top tobacco growing countries are, Zimbabwe, Zambia, United Republic of Tanzania, Malawi, and Mozambique. However, in ATO countries the most excise revenue from tobacco was generated in South Africa, Mauritius, Nigeria, Kenya, and Côte d'Ivoire in 2022. Most of which are tobacco production hubs.

The analysis of data on the use digital tools in the tax administration reveals that ATO member countries are making gradual progress towards digital transformation. Most countries have established the groundwork for digital transformation, and as of 2022, a snapshot of the technological advancement across these revenue administrations indicates adoption rates ranging from 50% - 97% for electronic tax registers, online filing systems, electronic and mobile payments systems, provision of call centres, websites to manage statistics and enterprise-wide risk policy. The next step involves harnessing advanced technologies for big data analytics to ensure that the full benefits of digitalisation are realised especially as it relates to domestic resource mobilisation.

1.4. Conclusion

The systematic ATO process aims to capture data, and present statistics and analysis representing the current outlook of the African continent. With the addition of South Sudan as an ATO country, this shows the great potential for the publication to reach a wider audience and allow for an extension of peer-learning amongst ATO countries. Therefore, this edition will illustrate the performance of African tax administrations as they continue to strive for efficient and effective tax administration.



Chapter 2

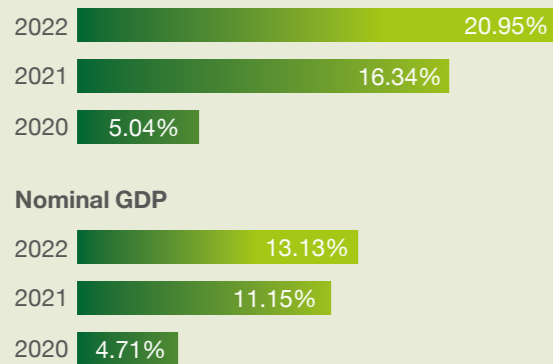
Overall Performance of Total Tax Revenues

Overall Performance of Total Tax Revenues

Rebound in ATO-wide economic growth and tax revenue:

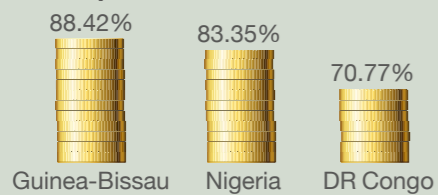


Highest nominal revenue growth over the 11-year period

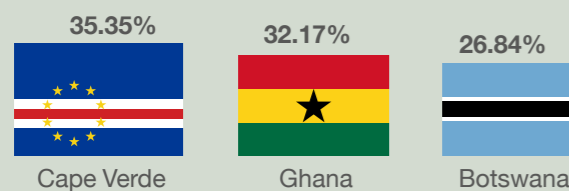


Top performing countries

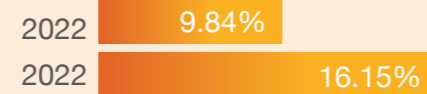
Top Nominal Revenue Growth



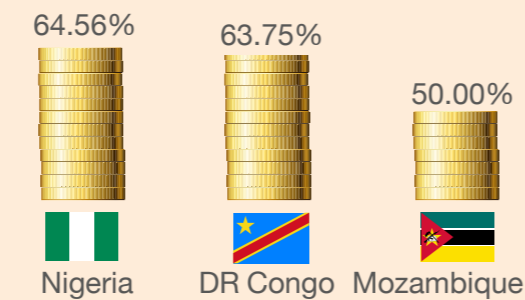
Top Nominal GDP



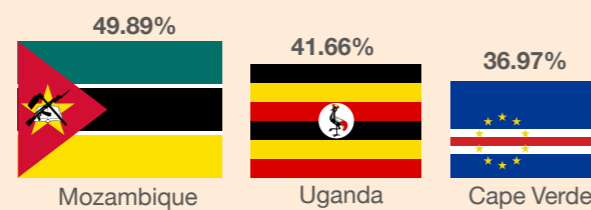
Real GDP Growth



Top Real Revenue Growth

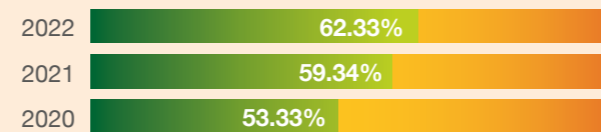


Top Real GDP Growth

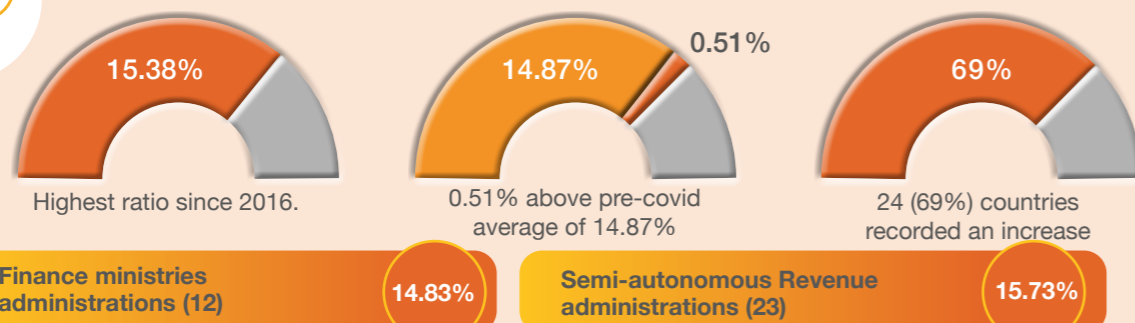


High prices experienced in 2022 results in lower real growth when compared to 2021.

Tax-to-budget



Tax-to-GDP ratios



Highest tax-to-GDP Ratios

Average of 14.83%

Average of 14.83%

Lowest tax-to-GDP Ratios

Average of 14.83%

Average of 14.83%

Average of 14.83%

Average of 14.83%

Average of 14.83%

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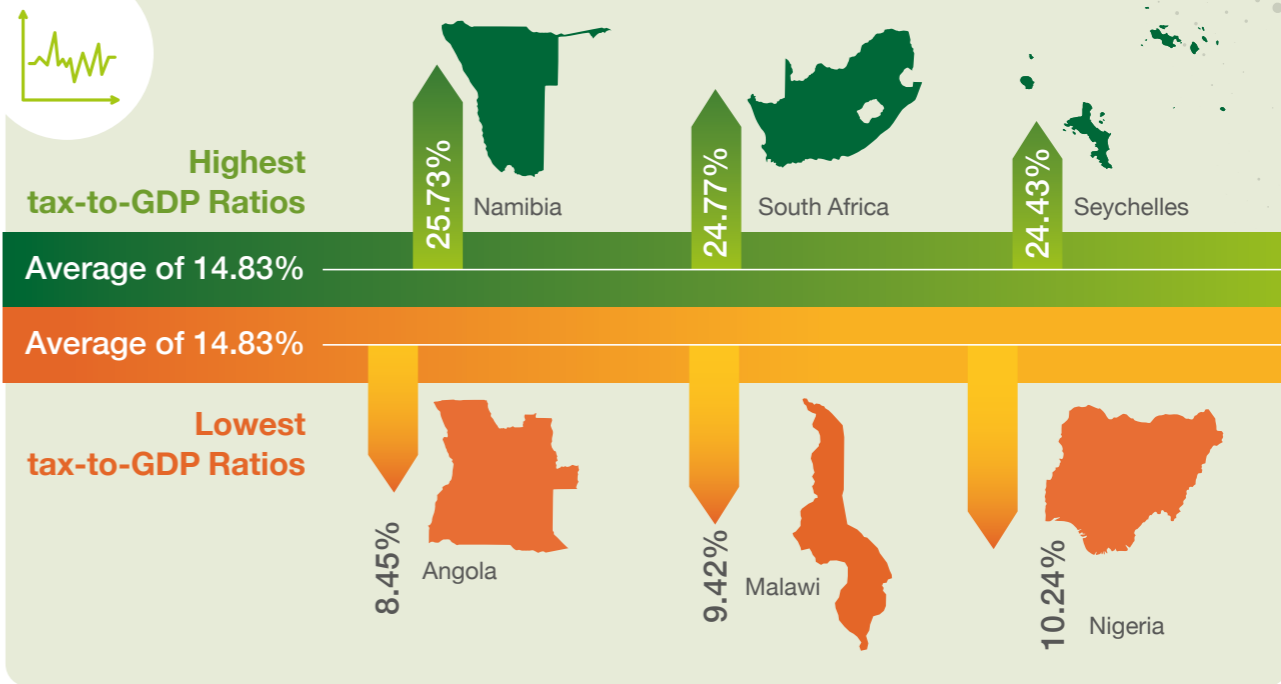
Average of 14.83%

Average of 14.83%

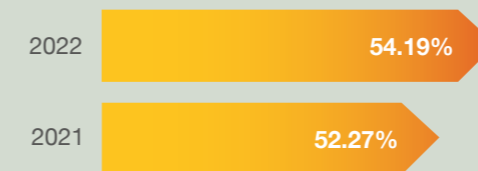
Average of 14.83%

Average of 14.83%

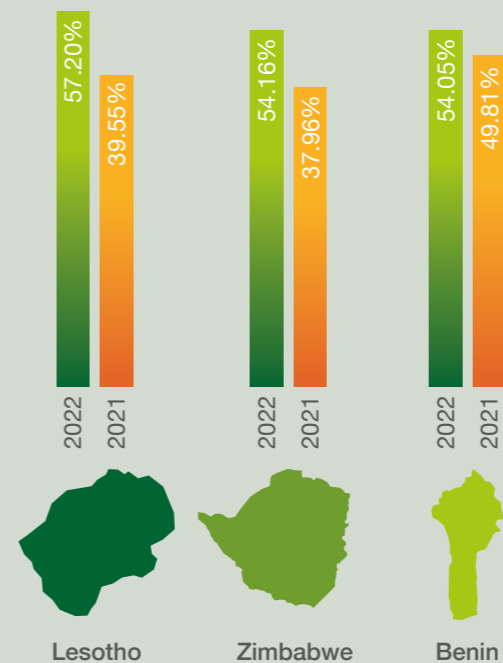
Average of 14.83%



National Debt-to-GDP ratio



Countries with highest increases:



Tax Structure

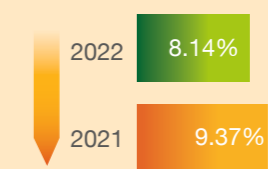
VAT Contribution



CIT Contribution



Excise Contribution



Introduction

Taxation is an important fiscal policy tool for economies, which enables governments to achieve economic development and social stability. This is particularly essential for developing countries where effective tax revenue collection is of critical importance as it enables them to own the development process of their economies rather than relying on foreign aid and borrowings that they receive from developed countries, including institutions such as, the World Bank and International Monetary Fund. Achieving sustainable development goals aligns with the key aspirations of African countries as outlined in the 2063 Africa’s agenda, which places domestic revenue mobilisation at the centre of this vision. According to the (The World Bank, 2012), collecting taxes and fees plays an important role in generating public revenues necessary to finance investments in human capital, infrastructure, and essential services for citizens and businesses.

There are a number of factors that influence tax revenues, including the economic climate, tax structures, policies, and taxpayer compliance behaviours. This chapter provides an analysis of the tax revenue performance trends of 36³ ATO countries, slightly down from the 37 covered in 2021. It explains how these tax revenues perform in relation to GDP, their contribution to total revenues, as well as how the tax structures have evolved over the years in the ATO countries.

2.1. Gross Domestic Product (GDP) and tax revenue

Generally used as a measure of economic activity, GDP measures the sum of all the final goods and services produced in a particular period in a given economy and as such, is a major determinant of tax revenue. Improvements in economic activity should normally lead to an increase in tax revenue, and lower levels of economic growth are associated with decreased tax revenue. For purposes of this publication, the performance of GDP and tax revenue is analysed in

both nominal and real terms. The use of real indicators⁴ not only provide a more accurate reflection of a country’s economic performance but also facilitate more reliable comparisons with past economic performances (see section 2.1.2). They are useful in shaping/defining policy making.

2.1.1. Nominal tax revenue and GDP growth above pre-pandemic levels.

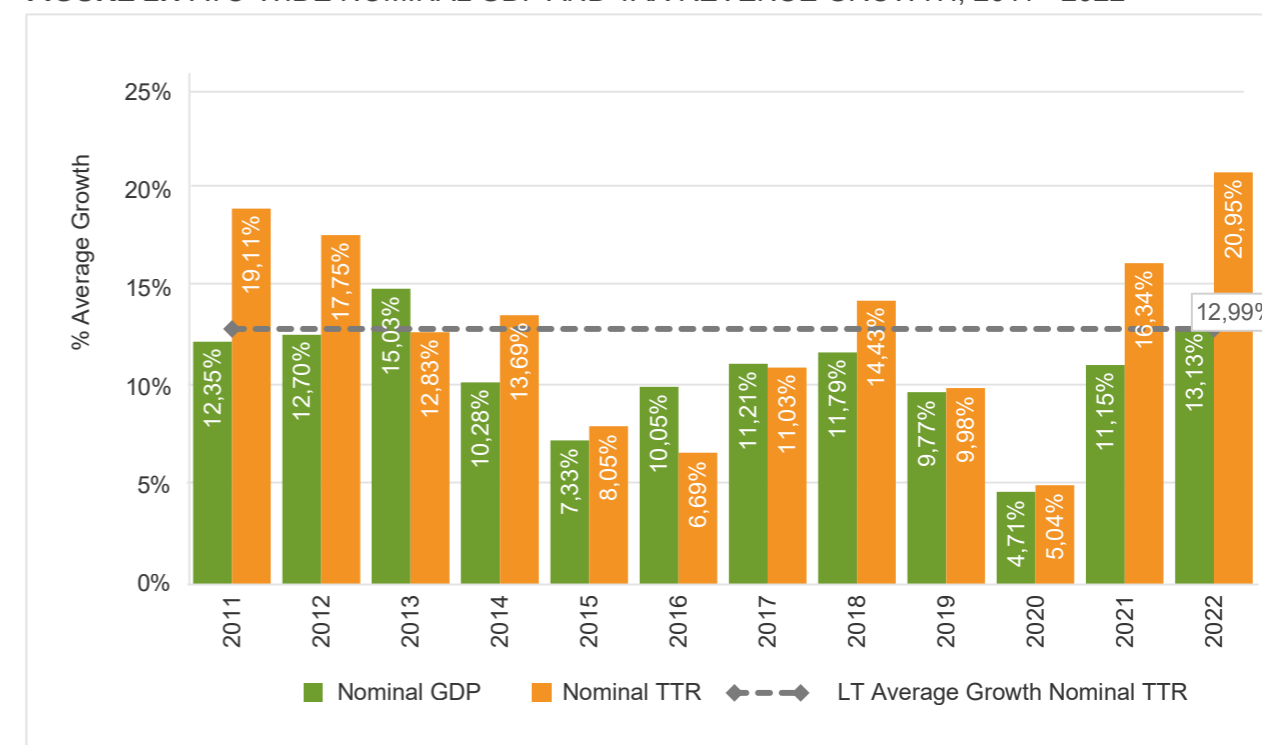
After a global slowdown in economic activity in the year 2020 due to the COVID-19 pandemic, extending to 2021 for some economies, ATO countries witnessed a notable rebound in economic activity in the year 2022. This recovery is despite a series of global shocks during the year which resulted in high increases in global inflation and tighter financial conditions from which the African region was not spared. According to the IMF (2022), these challenges have been especially hard for parts of the region already struggling with the fallout from the pandemic that has kept domestic economic activity relatively muted.

Due to variations in fiscal years among the ATO countries, the effects of negative events are recorded in different years for each of the countries. Recovery from the negative effects of the COVID-19 pandemic was observed in 2021 for some of the ATO countries, while the rest of the countries have recorded strong rebounds in 2022. In the same line, some countries have already felt the impact of the 2022 global challenges which included disruptions to global supply chains following the Russia-Ukraine conflict, leading to substantially high inflation rates, and difficult sociopolitical conditions. However, overall, an ATO wide recovery is recorded for both GDP and tax revenue performance in the year under review.

Figure 2.1 presents the performance of nominal GDP and tax revenue growth for the ATO countries since 2011. On average, both GDP and tax revenue indicate recovery from negative effects of COVID pandemic experienced in the years 2020, extending to 2021 for some countries. As per the trend in most⁵ previous years, total tax revenues continued to grow above the corresponding nominal GDP growth. In the year under review, ATO revenue collections rebounded to a significant growth of 20.95% in 2022 from 16.34% in

2021, exceeding the long-term average by 7.96 percentage points. Average ATO nominal GDP growth also recorded an improved growth of 13.13% in 2022 against 11.15% in 2021, which was also above the long-term average by 2.34 percentage points. The recovery which was mainly driven by improved economic activity after the COVID-19 pandemic also shows resilience by most ATO countries to the unexpected interruptions to global economic activity experienced in 2022.

FIGURE 2.1 ATO-WIDE NOMINAL GDP AND TAX REVENUE GROWTH, 2011 - 2022



The country level analysis covers 35 ATO countries who provided both GDP and tax revenue data for the year 2022. Among these countries, 66% (that is, 23 countries) recorded total tax revenue growths above their nominal GDP for the review period. Notably, nominal tax revenues increased in 32 countries, while nominal GDP increased in 33 countries in line with the overall positive performance of the ATO-wide growth.

This performance was supported by normalisation of economic activities in the ATO countries following the economic slowdown experienced in the previous two years.

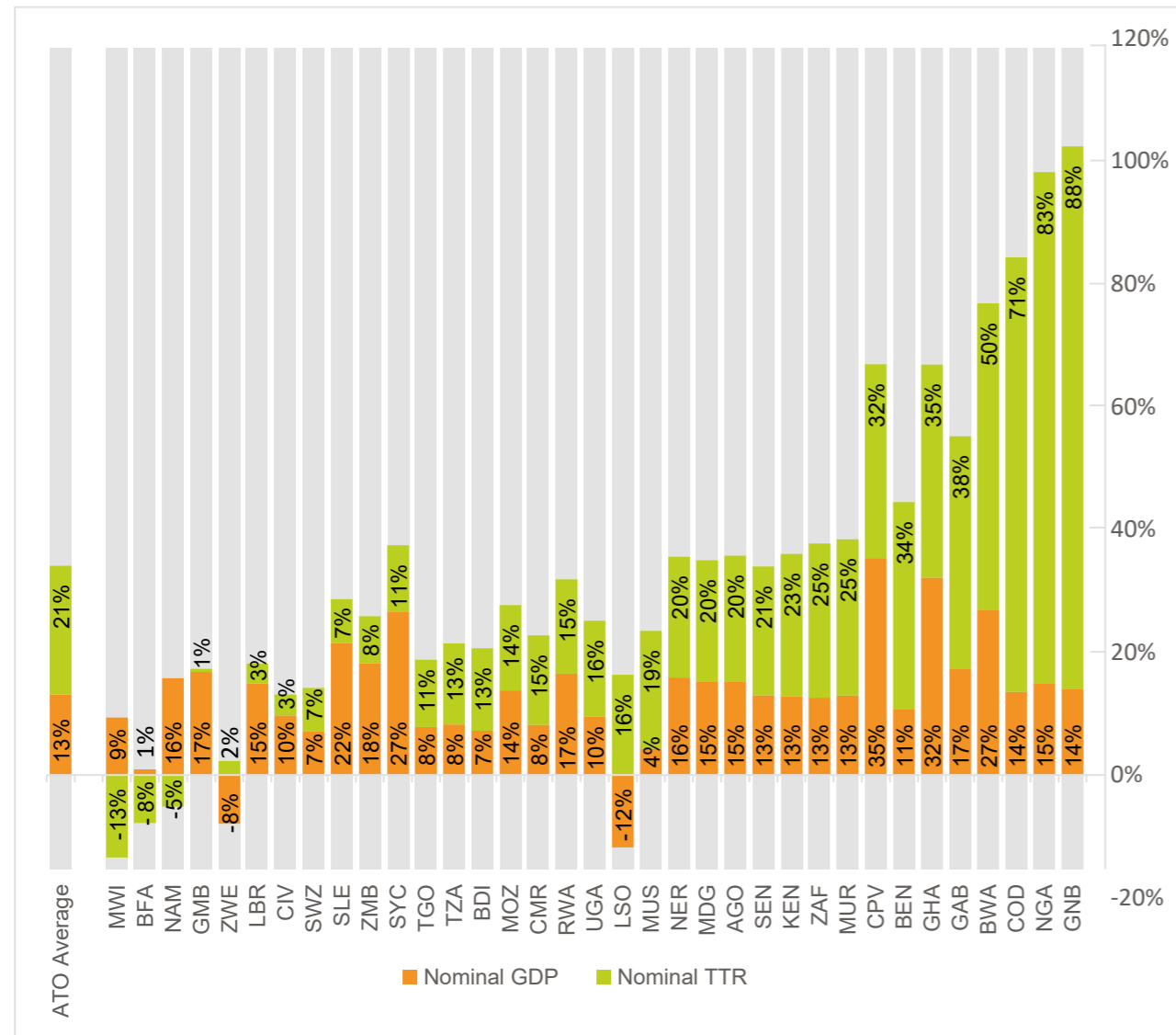
Despite this overall trend, Lesotho and Zimbabwe had nominal GDP declines in 2022, however both countries exhibited positive growth in their respective total tax revenues (Figure 2.2). Zimbabwe’s nominal GDP growth was challenged by exchange rate fluctuations as the local currency weakened against the USD, recording an average of ZWL372.20/USD in 2022, from ZWL88.24/USD in 2021. Cape Verde recorded the highest nominal GDP growth of 35% partly reflecting the high prices experienced in the country’s food and energy industries.

3. Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, DR Congo, Côte d’Ivoire, Eswatini, Gabon, The Gambia, Ghana, Guinea-Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mauritius, Morocco, Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, Seychelles, Sierra Leone, South Africa, South Sudan, Tanzania, Togo, Uganda, Zambia, Zimbabwe. Chad and Sudan who were featured in the 2021 publication could not provide data for 2022. Additionally, South Sudan (SSD) is featured in this publication, making the total number of countries to be 36. GDP for SSD is however not provided, and they are included only in indicators that do not relate to GDP.

4. Real GDP and real tax revenue.

5. Exceptions in 2013, 2016 and 2017.

FIGURE 2.2 NOMINAL GDP AND TAX REVENUE GROWTH BY COUNTRY, 2022



The highest growth in nominal tax revenue for 2022 was recorded in Guinea-Bissau, Nigeria, Democratic Republic of Congo (DR Congo) and Botswana. Guinea-Bissau’s growth was propelled by a significant increase in import duty collections. For the Nigerian economy, revenue collections from corporate income tax (CIT) increased significantly as companies began recording profits following the slow down observed during the two years of the COVID-19 pandemic. The Nigerian economy greatly benefitted from several reforms that have been introduced since 2020, which by the end of the 2022 had yielded significant fruits in efficient revenue administration and increased revenue collections (see more in Box 2.1).

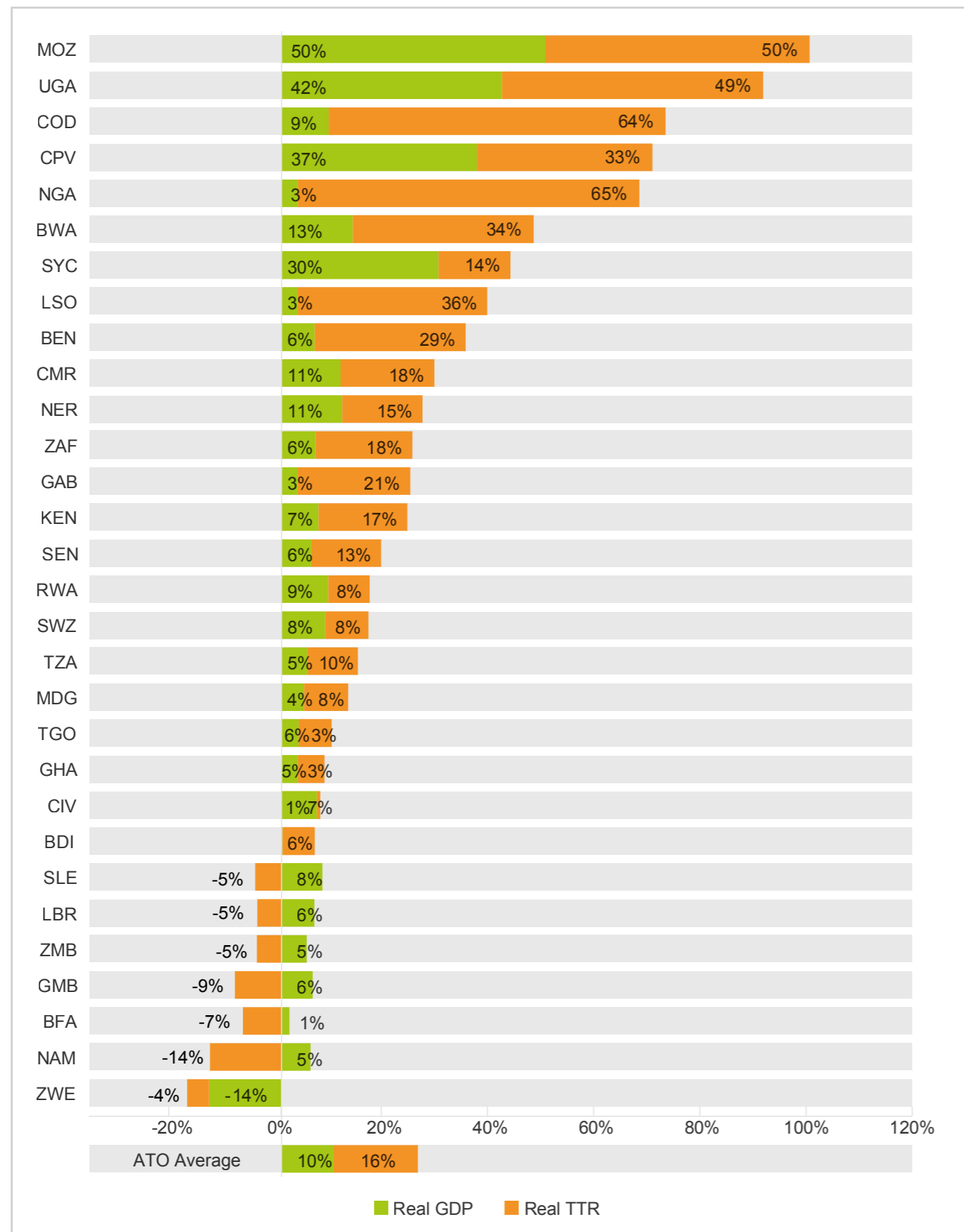
Botswana’s growth in 2022 was driven primarily by a diamond market rebound, and a nearly two-fold increase in company CIT collections compared to 2021. Notably, Botswana also implemented an increase in their standard value added tax (VAT) rate from 12% to 14% leading to higher VAT collections. Similarly, DR Congo’s growth also benefitted from an above 100% increase in their CIT collections as well as significant growth in import duties and personal income tax (PIT) collections as the economy recovered from the negative performances of the previous two years. On the other hand, Burkina Faso, Malawi, and Namibia had a contraction in total tax revenues, despite positive growths in nominal GDP. Burkina Faso and Namibia recorded significant declines in their respective “other customs collections”, while for Malawi, all major tax heads recorded declines during the period⁶.

2.1.2. Real tax revenue and GDP growth

Generally, because of the inflation adjustment on economic output, real GDP reveals the actual growth in an economy and is normally lower than nominal GDP. On average, ATO-wide real tax revenue growth was also lower than nominal tax revenue growth at 15.97%. This suggests that, while nominal revenues increased, partly due to high inflation experienced in most economies during the year, the actual growth in the revenue was a bit lower. Nevertheless, this growth was above the corresponding real GDP growth of 9.84% by 6.13 percentage points. In line with their significant growth in nominal tax revenues, Nigeria (64.56%) and DR Congo (63.75%) recorded the highest real tax revenue growth during the period. Other countries with higher real tax revenue growths include Mozambique (50.00%) and Uganda (49.39%).

6. Malawi’s revenue indicators for the FY 2021/22 covers a period of nine months following the change in their fiscal calendar which now runs from April to March (previously their FY was covering the period July to June).

FIGURE 2.3 REAL GDP AND TAX REVENUE GROWTH BY COUNTRY, 2022



Negative real GDP growth was only recorded by Zimbabwe (-13.71%) partly driven by contraction in agricultural output and overall macroeconomic instability (African Development Bank Group, 2023), with a negative growth for real tax

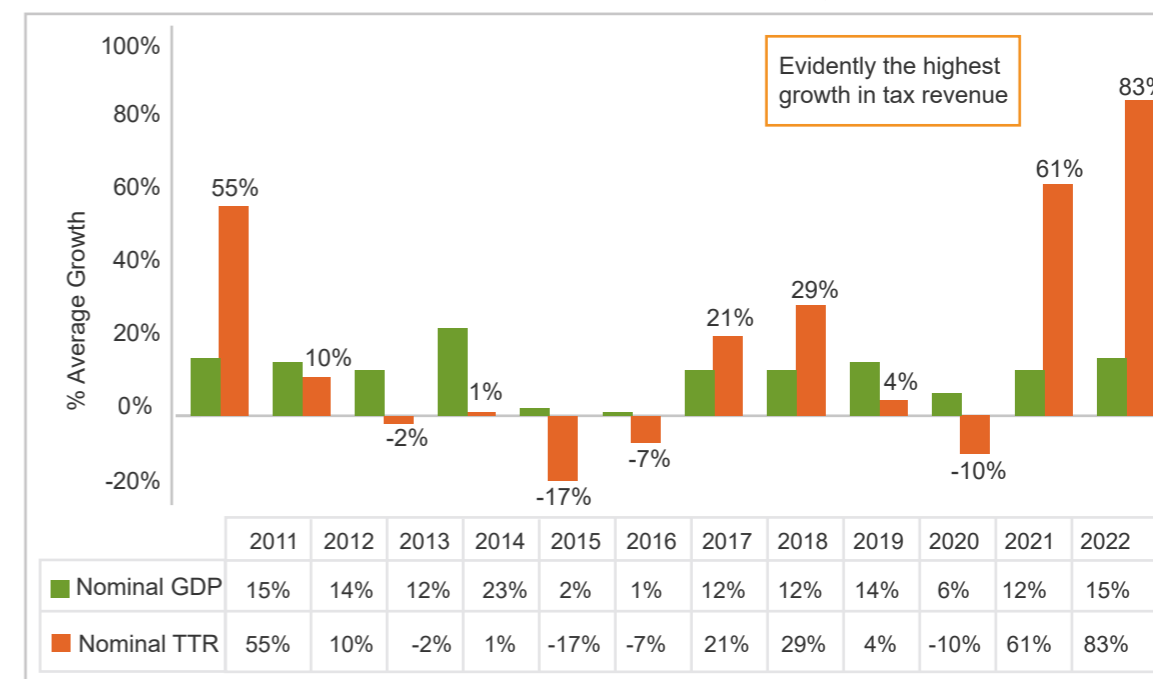
collections (-4.13%) as well. Seven⁷ (23%) ATO countries reported marginally higher real GDP growths than nominal GDP, indicating deflation, which could have been a result of lower consumer demand in these economies.

Box 2.1:
Nigeria implements measures towards a more efficient revenue administration, and expansion of revenue sources.

Amid the COVID-19 pandemic in 2020, the Federal Inland Revenue Service (FIRS) embarked on an initiative to identify and address statutory, environmental, operational, and administrative challenges hindering voluntary compliance and efficient revenue administration. Several reforms have been introduced since then, and by the end of the 2022 these are already yielding results. The reforms included; restructuring of the administration for maximum efficiency and internal cohesion, automation of most of the administration's processes (e.g. full deployment of TaxPro-Max), effective taxpayer education and engagements, and operationalisation of data mining and analysis to support data-driven operations. The FIRS adopted the use of technology to ease tax payments and block revenue leakages, use of data from in-house built tax portal, third party data (other government agencies and private sector) and analytics tools to improve desk reviews, tax audits and tax investigations, and enforcement activities.

As economic activity in the country picked-up from the 2020-21 economic shocks, tax revenues responded positively in the FIRS, and were further boosted by the positive impacts of the reforms implemented during the period. Nigeria's total tax revenues in 2022 grew by 83.35%, which is significantly higher than the nominal GDP growth of 14.87% recorded for the same period. This is indicative of a more robust tax administration, which performed far above economic performance of the country.

FIGURE 2.4 NIGERIA'S NOMINAL GDP AND TAX GROWTH, 2011 - 2022



7. Burkina Faso, Cameroon, Cape Verde, Lesotho, Mozambique, Eswatini, Seychelles and Uganda.

Box 2.1: (Continued)

Nigeria implements measures towards a more efficient revenue administration, and expansion of revenue sources.

- The inclusion of non-resident companies to the tax net through the significant economic presence legislation.
- The introduction of a 10% withholding tax on income or dividend paid out of after-tax petroleum profit by upstream operators.
- The VAT rate was increased by 50% from 5% to 7.5%.
- To reduce non-compliance, a Tax Identification Number was made mandatory for anyone who intended to open or run bank accounts.
- The introduction of excise on telecommunication services. Prior to this amendment, excise was limited to beer, manufactured spirit, methylated spirit, tobacco, and hydrocarbon.
- The Introduction of the Electronic Money Transfer Levy on electronic receipts or transfer of money deposited into any bank or financial institution.
- Sunset of tax breaks on corporate bonds, state government bonds and treasury bills in 2022.
- The introduction of Capital Gains Tax at a rate of 10% on the gains from the disposal of shares.

Sources: FIRS Annual Report 2022; Finance Acts (2019-2022).

2.2. Tax revenue relative to GDP vary significantly across countries

The tax-to-GDP ratio is defined as the ratio of the economy's tax revenue relative to its GDP; a measure of how much the economy is taxed. An improvement in the tax-to-GDP ratio indicates that revenue collections are growing at a faster rate than GDP. A higher tax-to-GDP ratio is desirable for every economy since it implies an increase in revenue per unit increase in GDP, and higher resource mobilization by the tax administration.

On the other hand, a lower tax-to-GDP indicates low tax collection in relation to the economic output, reflecting either inefficient tax administration or the existence of compliance and tax policy gaps. According to the (The World Bank, 2012), the tax-to-GDP ratio is reasonable to use if one attempts to establish trends or to compare tax revenue performance across countries, particularly with similar economic structure and the same level of income.

Figure 2.5 presents the tax-to-GDP ratios for ATO countries for the period 2011 to 2022. In line with the observed buoyant tax revenue collections, the average tax-to-GDP ratio was recorded at 15.43% in 2022 from 14.80% in 2021, and above the pre-COVID average by 0.56 percentage points. As observed in previous trends, this ratio is still considerably lower than that of the advanced economies of OECD countries who recorded the highest tax to GDP ratio of 34.0% in 2022 (OECD, 2023). Low tax-to-GDP ratios of the ATO are characteristic of developing countries, where the efficient collection of taxes is affected by economic and political structures, inefficient tax administration and low levels of tax compliance.

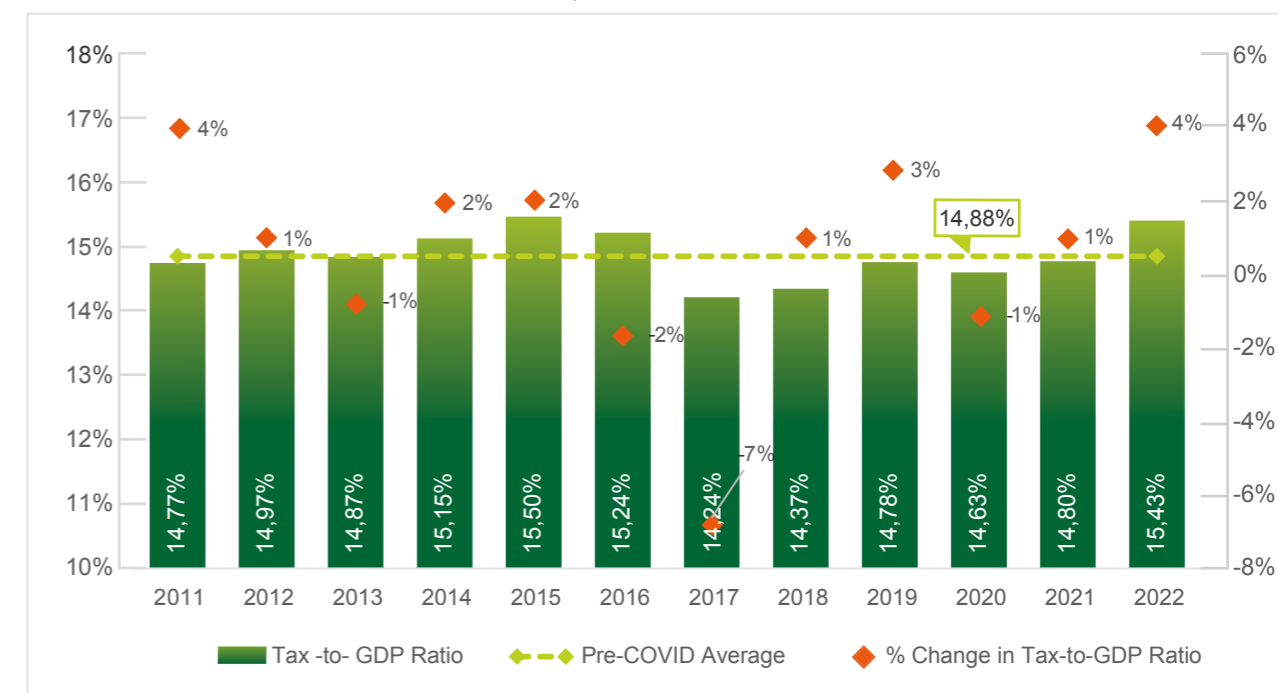
There are many challenges facing African tax administrations, such as narrow tax bases, limited institutional capacity, and large informal sectors that limit domestic tax revenue mobilization (Mackenzie, 2021). According to the African Union Development Agency (2022), the informal economic sector and independent businesses are rarely registered as companies and in tax revenue agencies, and as a result rarely contribute to their country's taxes and social security. Taxing

the informal sector more efficiently is necessary so that African revenue administrations can mobilize tax revenues in order to fulfil their legal responsibilities (ATAF, 2022).

The IMF (2022) also cites that tax systems across the region continue to be riddled with exemptions and incentives that

undermine revenue potential. Other areas that need to be addressed in tax administration in the African countries include among others addressing illicit financial flows through artificial profit shifting and tax avoidance schemes as well as the taxation of the digital economy.

FIGURE 2.5 ATO-WIDE TAX-TO-GDP RATIO, 2011 - 2022



Mixed performances were observed in the tax-to-GDP ratio developments of the ATO countries in 2022 indicating varying shifts in fiscal dynamics during the year. Sixteen countries (46%) recorded ratios above the ATO average for the period as shown in Figure 2.6. Figure 2.7 shows that 24 countries recorded an increase in their ratios when compared to 2021 with most benefitting from an increase in domestic taxes collections. Guinea-Bissau recorded the highest increase in the tax-to-GDP ratio, expanding by 7.76 percentage points to 19.65% from 11.89% in 2021, in line with the observed highest nominal revenue growth during the period. High increases in the ratio were also observed for Lesotho, DR Congo and Nigeria who increased by 5.02, 4.10 and 3.82 percentage points respectively.

Namibia, despite having the highest tax-to-GDP ratio in 2022 (similar to both 2020 and 2021), reflects a decline of 5.67 percentage points, due to a decline in customs tax revenues (particularly other customs revenue which is dominated by SACU revenue). Other notable declines in tax-to-GDP ratios are observed for Seychelles and Malawi who declined by 3.47 and 2.48 percentage points respectively. Angola had the lowest ratio of 8.5%, and notably relies significantly on non-tax revenue which constituted 67% of its total revenues in the review period. Seychelles' tax-to-GDP ratio was affected by a decrease in their CIT collections following a cut in their standard CIT rate from 25% to 15% during the year, while Malawi's ratio declined in line with the observed negative growth in their total revenue collections for the period.

FIGURE 2.6 TAX-TO-GDP RATIOS IN ATO COUNTRIES, 2022

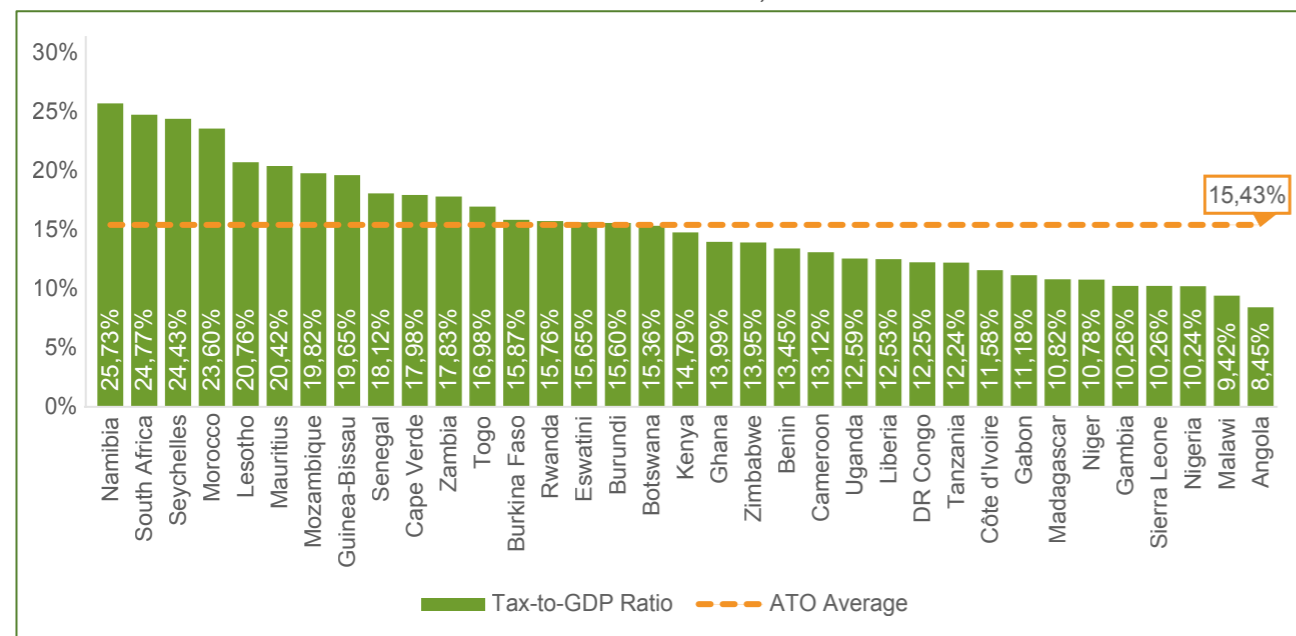
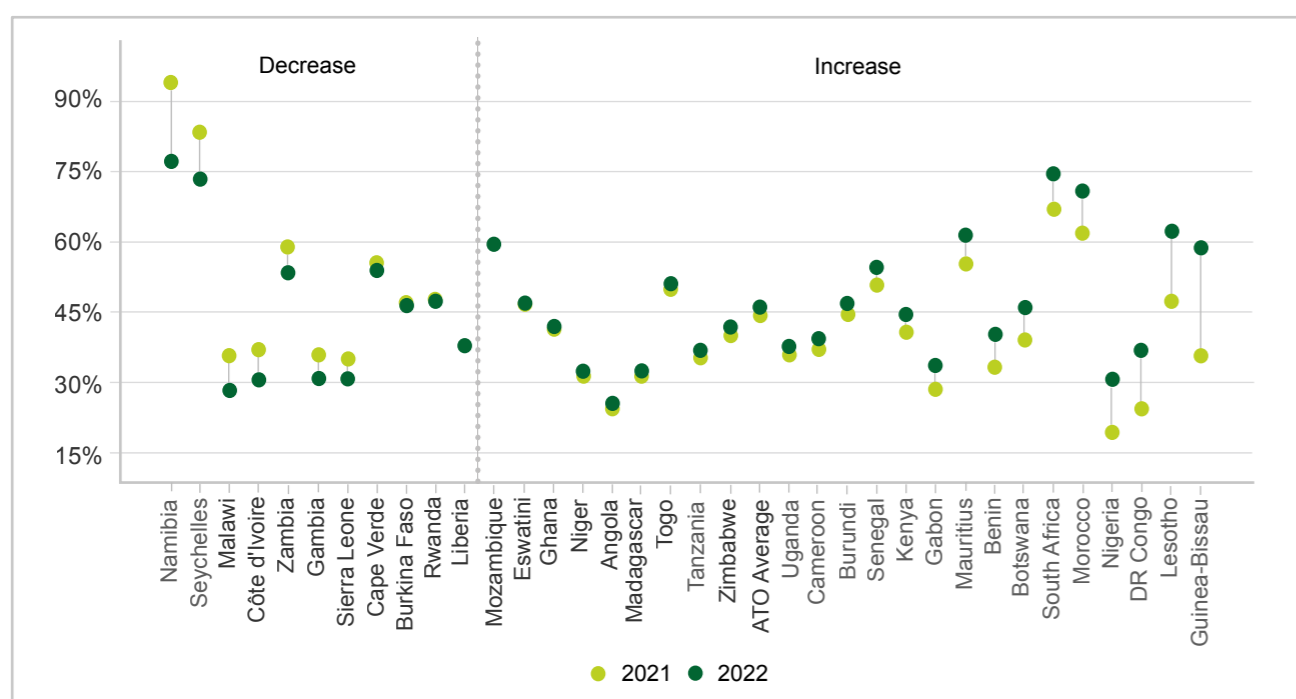


FIGURE 2.7 MOVEMENTS IN TAX-TO-GDP RATIOS IN ATO COUNTRIES, 2021 - 2022

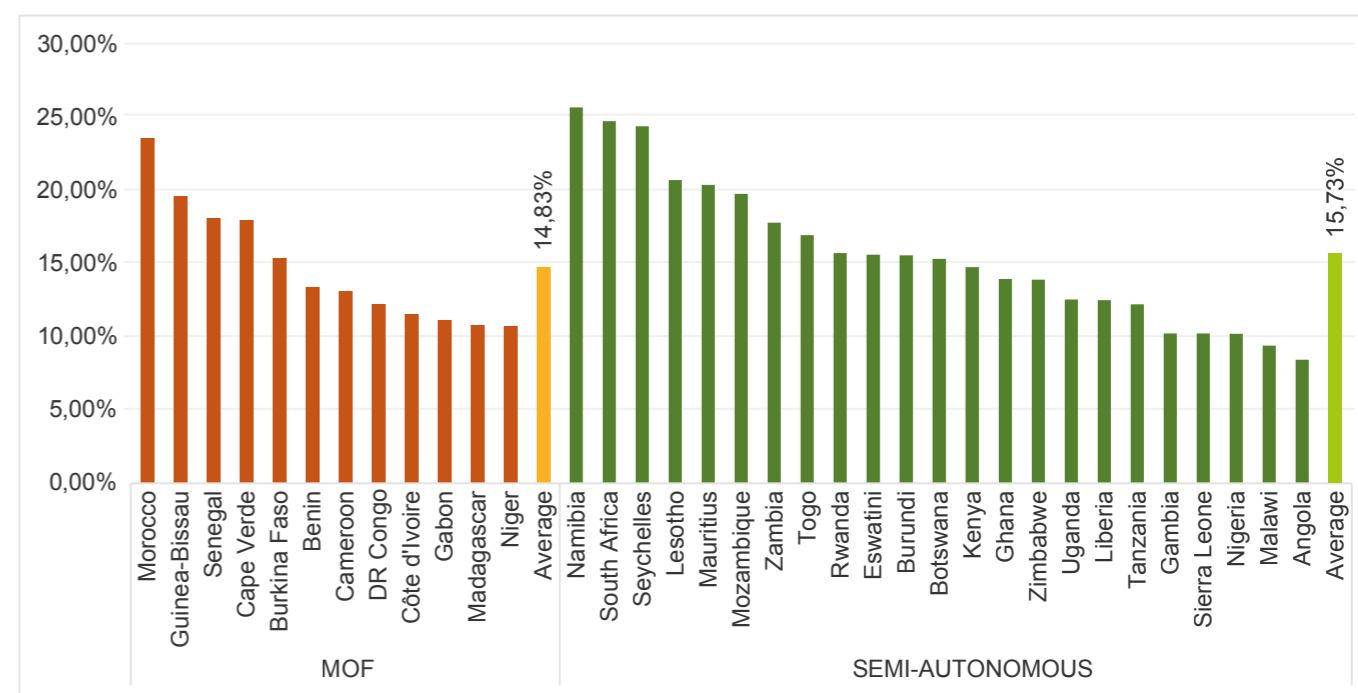


Autonomous versus government departments tax administration

The IMF (2010) defines autonomy in public sector administration as the degree to which a government department or agency operates independently from the government across various aspects such as legal form and status, funding and budgeting, and financial, human resources, and administrative practices. Further, for tax administrations such autonomy supports better

administration and management can become more effective, efficient, and transparent (IMF, 2010). Figure 2.8 shows the tax-to-GDP ratios by type of tax administration. Countries with semi-autonomous revenue authorities (SARAs) averaged a ratio of 15.73% in 2022, higher than the 14.83% ratio in countries where finance ministries handle tax administration. With the SARAs depicting a slightly higher average tax-to-GDP ratio in the case of ATO countries, increasing autonomy and decreasing government control may be recommended.

FIGURE 2.8 TAX-TO-GDP RATIOS BY TYPE OF TAX ADMINISTRATION, 2021 - 2022



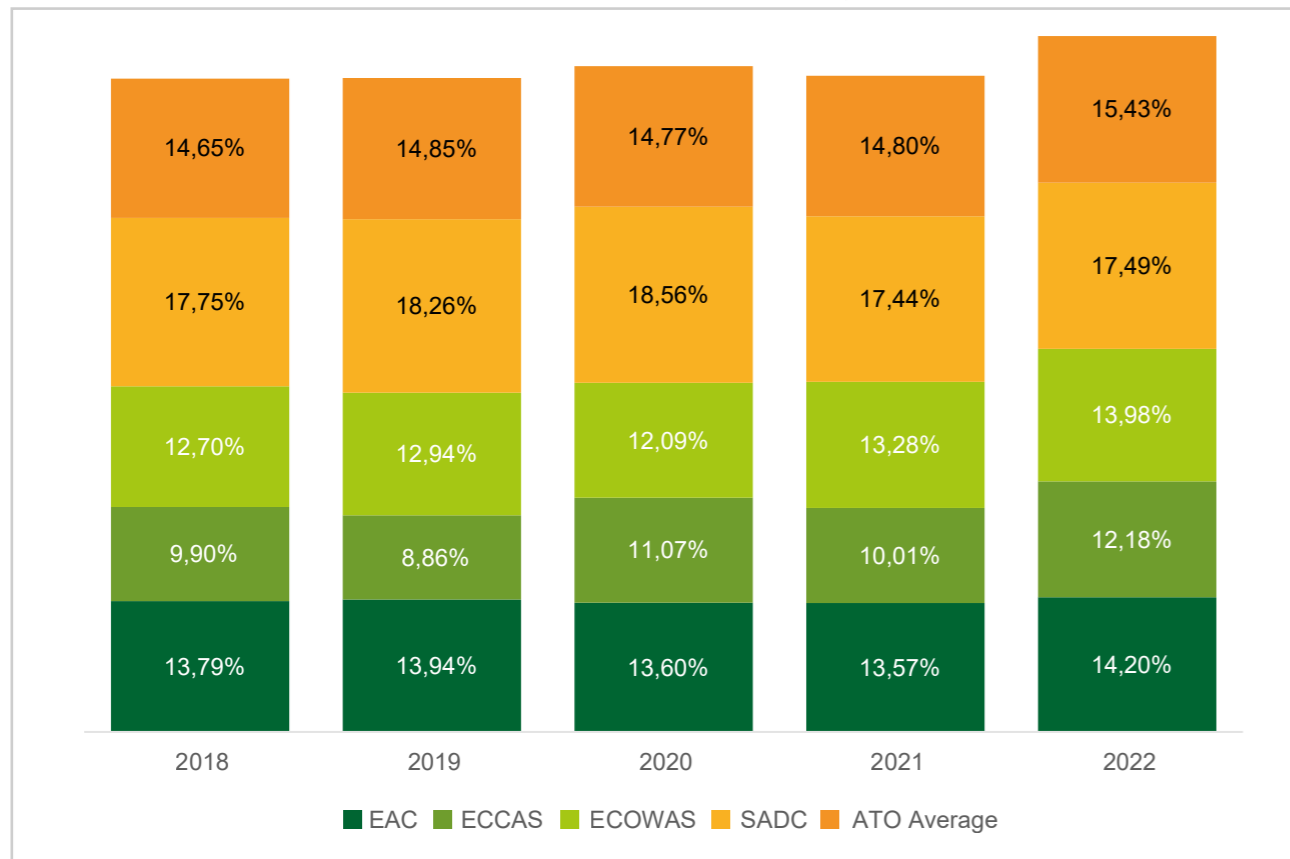
At a regional level, the Southern African Development Community (SADC) countries continue to have the highest average ratio during the review period (2018-2022), as shown in Figure 2.9. The SADC region recorded a ratio of 17.49%, slightly above the 17.44% recorded in 2021. Only four SADC members experienced a decline in the tax-to-GDP ratios (Malawi, Namibia, Seychelles, and Zambia), which was countered by the positive movements in the ratios of the other member states. Notably, the SADC is the only region whose ratio exceeds the ATO average of 15.43% as it constitutes of members with higher ratios such as Namibia (25.73%), Seychelles (24.43%) and South Africa (24.11%).

Following closely was the East African Community (EAC) with an average ratio of 14.20%, increasing by 0.62 percentage points from 2021. The main drivers for this increase were the economies of Kenya and Burundi.

The Economic Community of Central African States (ECCAS) region, comprising only 3 countries, recorded the lowest ratio in the ATO during the review period (2018-2022). The region however recorded the highest increase in their tax-to-GDP ratio to 12.18% from 10.01% in 2021, as all member countries recorded increases in their ratios during the period in line with higher increases in their total tax revenues.

Mixed performances were observed in the Economic Community of West African States (ECOWAS) region, with six (46%) of the member countries experiencing marginal declines in their tax-to-GDP ratios following lower growth in their total tax revenues in relation to their GDP growth. On average, the ratio for the region increased by 0.69 percentage points to 13.83% in 2022.

FIGURE 2.9 TAX-TO-GDP RATIOS BY REGIONAL GROUPING, 2012 - 2022

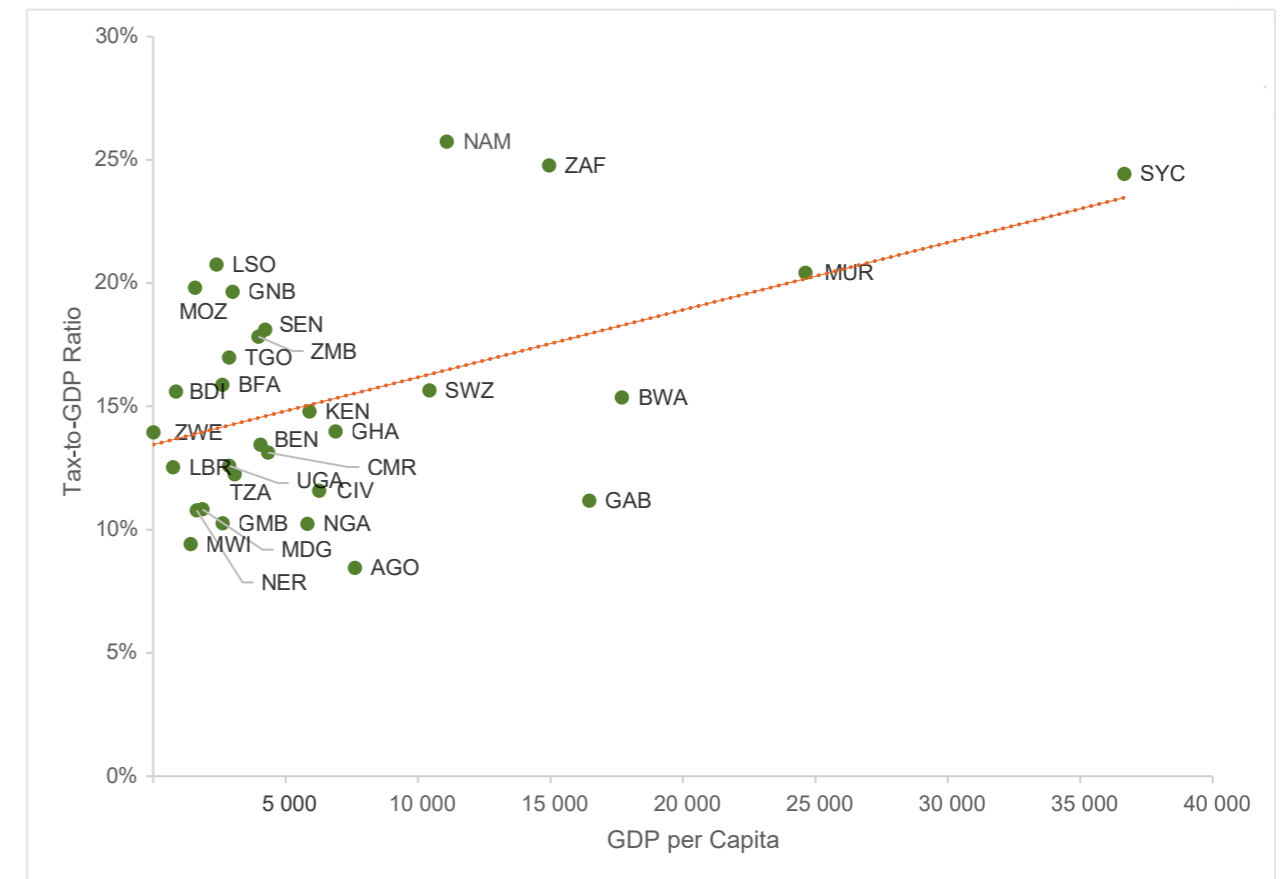


Low tax-to-GDP ratios and GDP per capita in most ATO countries

GDP per capita measures a country's economic output per individual and is often used to represent a country's level of economic development. It is calculated by dividing a country's GDP by the total population. The expectation is that GDP per capita has a positive relationship with tax revenue because the higher the country's level of development is, the government will have a greater capacity to collect taxes. As such, high GDP per capita is mostly observed in more developed countries and countries with a lower population rate. ATO countries are characterized by relatively low GDP per capita and low tax-to-GDP ratios as shown in Figure 2.10. While high-GDP per capita countries like Seychelles, South

Africa, and Mauritius also have higher tax-to-GDP ratios (above 20%) signifying tax collection capacities that are in line with the level of economic development, there are exceptions with higher GDP per capita levels but comparatively low tax-to-GDP ratios (for example, Botswana, Gabon). Gabon notably has a significant contribution of non-tax revenue to their total country revenues. Further, it has a prevalence of tax exemption schemes which significantly reduces government revenue as eligible taxpayers are relieved from tax obligations on specific transactions and a sizable informal economy which complicates tax collection efforts. Hence, the observed low-tax-to-GDP ratio. A majority of the ATO remain in the region of lower GDP per capita and lower tax revenues as a share of GDP.

FIGURE 2.10 TAX-TO-GDP RATIOS AND GDP PER CAPITA, 2022



2.3. Tax structure in ATO countries remains relatively stable

Tax structure, which measures the share of main taxes to total tax revenue, is closely linked to the level of economic development of a country. In certain economies however, there may be explanations why certain types of taxes account for higher revenue shares. Factors like the structure of the economy in terms of sectors, size of the informal sector, employment levels, the importance of international trade will have influence on the tax structure of a country.

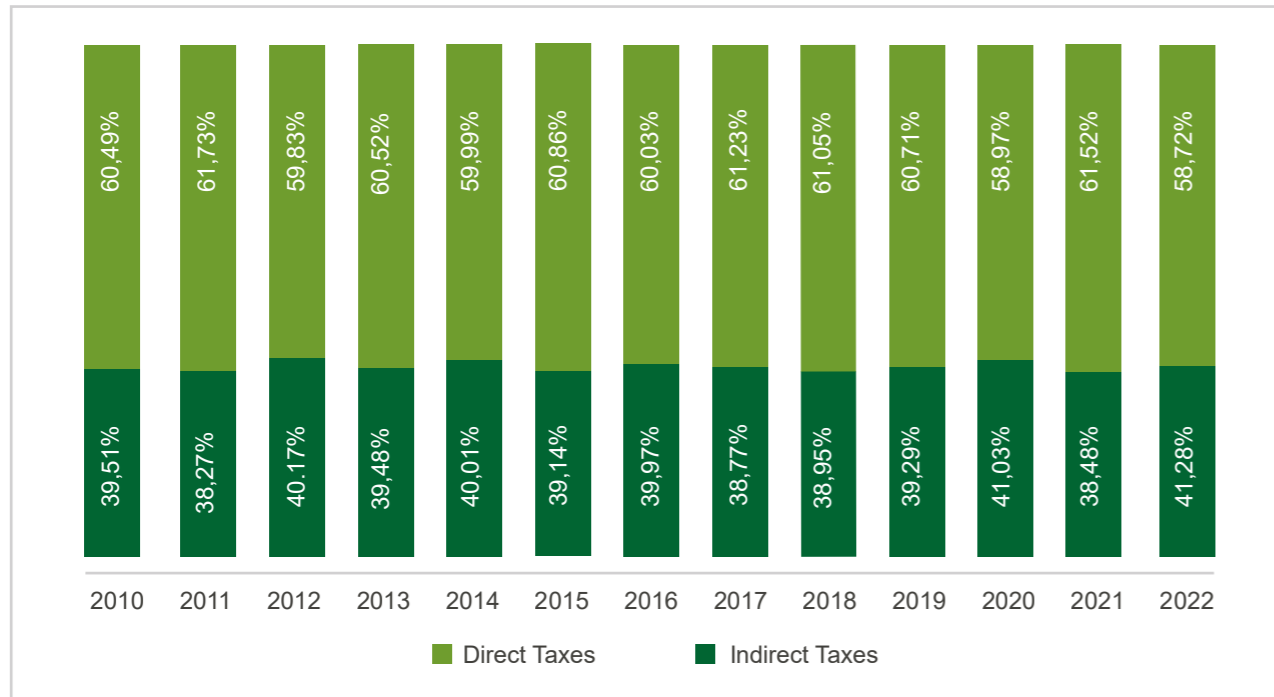
Taxes can be categorized into two main types: direct taxes levied on income and wealth, and indirect taxes that are levied on consumption and imports with consumers indirectly bearing the final tax burden. Industrial economies generally rely more on revenue from direct taxes which they use as an income redistribution tool, whereas less developed countries rely more on indirect taxes levied on domestic sales as well as foreign trade.

Considering that countries have different tax structures and other macroeconomic characteristics; they therefore cannot have the same optimal tax system structure. Each country's specific circumstances and aspects requires tailored tax system to address their specific needs and policy objectives.

2.3.1. Indirect taxes outweigh direct taxes' contribution

On average, 60% of tax revenue in ATO countries is generated from indirect taxes. In 2022, indirect tax revenue accounted for a higher share of total tax revenue ATO-wide at 58.72% (see Figure 2.11 below). This was however marginally lower than the 61.52% recorded in 2021, due to declining shares of Value Added Tax (VAT) and excise duties by 1.10 and 1.33 percentage points respectively.

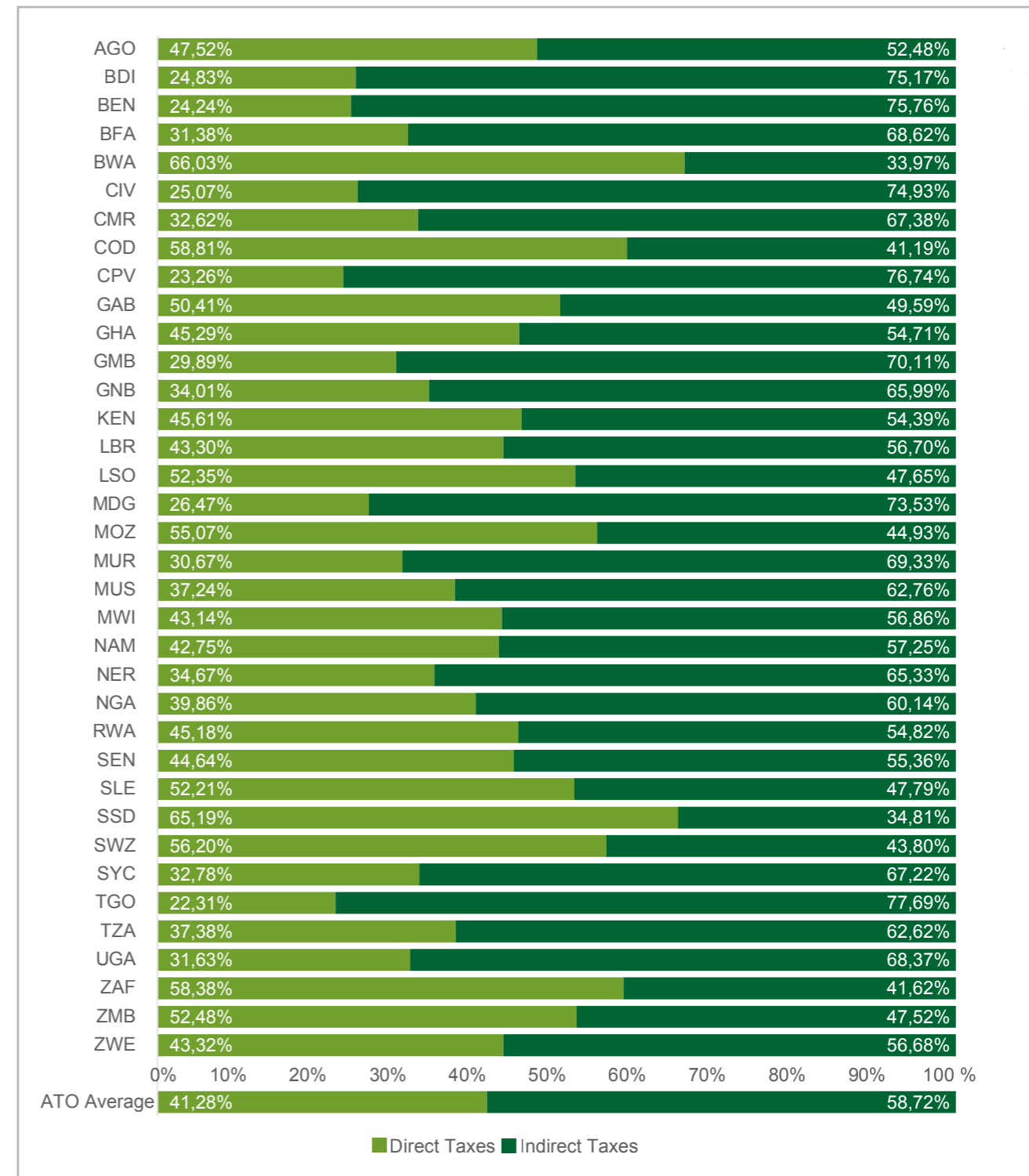
FIGURE 2.11 DIRECT AND INDIRECT TAXES AS PERCENTAGE OF TOTAL TAX REVENUE, 2010 -2022



Even though the ATO-wide average indicates a higher contribution to total revenue by indirect taxes, the mix of direct and indirect taxes varies from country to country. Countries like Botswana, Eswatini, Mozambique, South Africa, and Zambia had direct taxes accounting more than

50% of total tax revenue in 2022 (depicted in Figure 2.12), a trend observed in previous years as well. A shift is observed in the tax structures of DR Congo, South Sudan, and Sierra Leone as they had a higher share of direct taxes than was the case in 2021, due to increases in their shares of CIT and PIT.

FIGURE 2.12 DIRECT AND INDIRECT TAXES AS PERCENTAGE OF TOTAL TAX REVENUE, 2022



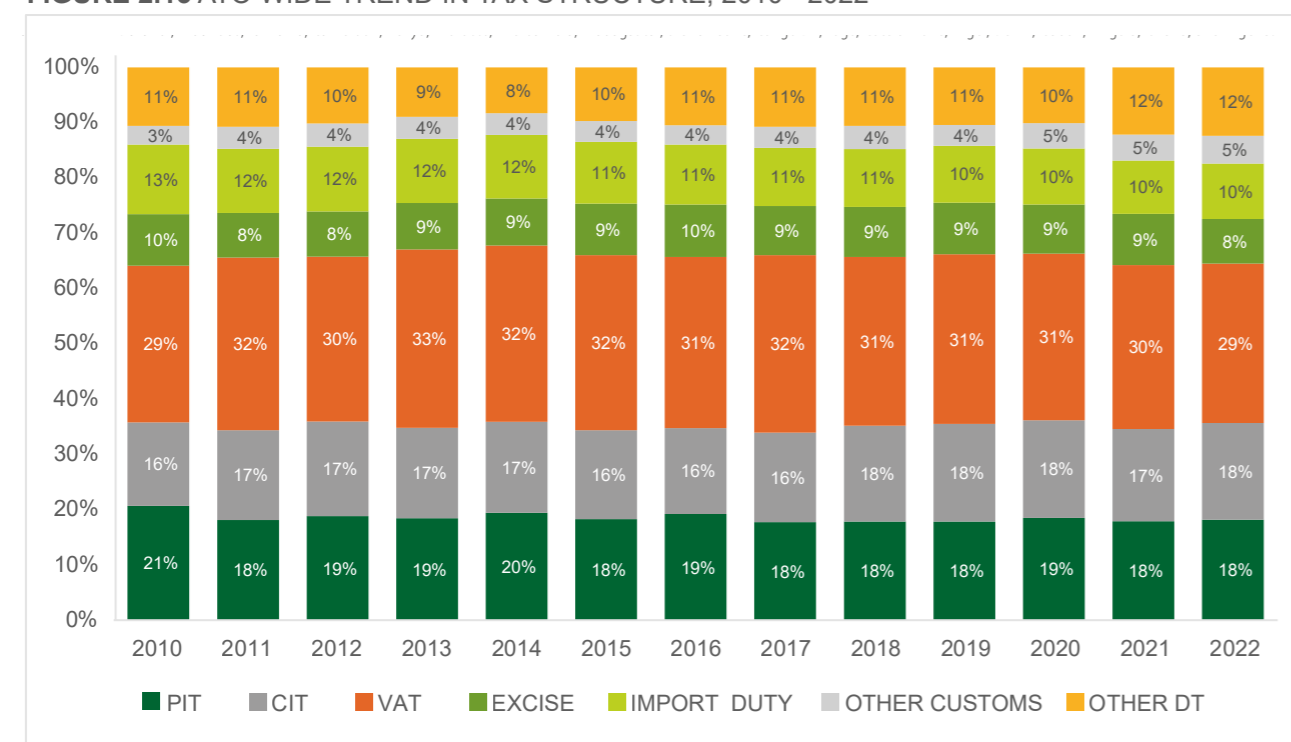
2.3.2. VAT accounts for the single largest share to total revenue

The composition of tax revenue across ATO countries has remained relatively stable from 2011 to 2022 as shown in Figure 2.13. With an average of 28.95% ATO-wide in 2022, VAT (net revenue) accounts for the largest share of tax revenue even though its contribution has been on a declining trend in the recent years (that is, 32% in 2017 to 29% in 2022). Revenue shares from CIT, as well as other domestic and customs taxes collections have on the other hand been on a slight increase, indicating a shift in tax policy or administration. Following a COVID pandemic induced

weak economic performance that saw the revenue share of CIT drop in 2021 (16.81%), the contribution of CIT to total revenue recovered to 17.57% in 2022, in line with observed overall improvement in economic activities during the period. The contribution of excise to tax revenue declined to 8.14% in 2022 from 9.37% in 2021, mainly due to 18⁸ countries recording declines in share of excise revenues to total revenues. A marginal increase of 0.27 percentage points is also observed in the shares of PIT when compared to 2021.

The contribution to total tax revenue by different tax lines in ATO countries remained broadly similar between 2021

FIGURE 2.13 ATO WIDE TREND IN TAX STRUCTURE, 2010 - 2022



and 2022, reflecting a consistent revenue composition. The country level analysis (illustrated in Figure 2.14) reveals that VAT accounted for the highest share of total revenue in 71% (23) of the ATO countries in 2022. Madagascar had the largest share of 49.30%, followed by Lesotho at 44.39% and Togo at 41.95%, a similar trend observed even the previous year. (Cnossen, 2019) argues that VAT has become the most preferred instrument by African economies to increase their tax revenues because it is less detrimental to economic growth than income taxes (see more in Chapter 3).

CIT had a significant revenue contribution in DR Congo, Gabon, Nigeria, and Mozambique, with shares that stood at 43.61%, 34.95%, 34.56% and 33.07% respectively. One crucial factor contributing to the initially low CIT collection for Gabon in 2021, was the government's decision to allow companies to deduct debts owed to them from the expected CIT⁹. In 2022, normal collection of CIT of Convention of Establishment (CEA) companies resumed, resulting in a surge in revenue in total CIT. This rebound in CIT collection indicates a return to regular tax administration practices,

where companies were required to pay CIT based on their actual profits without significant deductions for debts owed to them. In the case of Nigeria, the increase in CIT is attributed to leveraging on technology for filing and payment of taxes and the use of third-party data for intelligence, risk profiling and enforcement of compliance. Additionally, Nigeria simplified and amended tax laws via annual Finance Acts to remove loopholes, strengthen administration and streamlined incentives.

For South Sudan, South Africa, Eswatini, Lesotho and Sierra Leone, PIT accounted for the largest share of tax revenue at 63.20%, 35.52%, 34.60%, 33.35% and 32.20%, respectively. For Eswatini, PIT is currently their major source of domestic tax revenue with PAYE being the largest contributor¹⁰. Similarly, PIT is the primary source of tax revenue for South Africa¹¹. While for South Sudan, PIT constitutes PAYE of which a large portion emanates from employees of not-for-profit organisations who pay in hard currency which is then converted to their local currency.

9. The substantial contribution of CIT in Gabon is influenced by two key factors. Firstly, CIT comprises both standard CIT and CIT from specific oil companies operating under Convention of Establishment (CEA). They have two type oil companies on production sharing Contracts (PSC) and on convention of establishment agreements. The first type does not pay CIT as we know it but rather a profit while the second type pay CIT as per fiscal rules but with a slightly different tax rate.

In 2022, CIT revenues from CEA companies experienced a notable fluctuation, rising from 56 billion to 244 billion, in their local currency, in the subsequent period. One crucial factor contributing to the initially low CIT collection was the government's decision to allow companies to deduct debts owed to them from the expected CIT. By permitting such deductions, the government effectively reduced the amount of total CIT payable by these companies, resulting in a lower level of total CIT collected during that period.

In 2022, normal collection of CIT of CEA companies resumed, resulting in a surge in revenue in total CIT. This rebound in CIT collection indicates a return to regular tax administration practices, where companies were required to pay CIT based on their actual profits without significant deductions for debts owed to them.

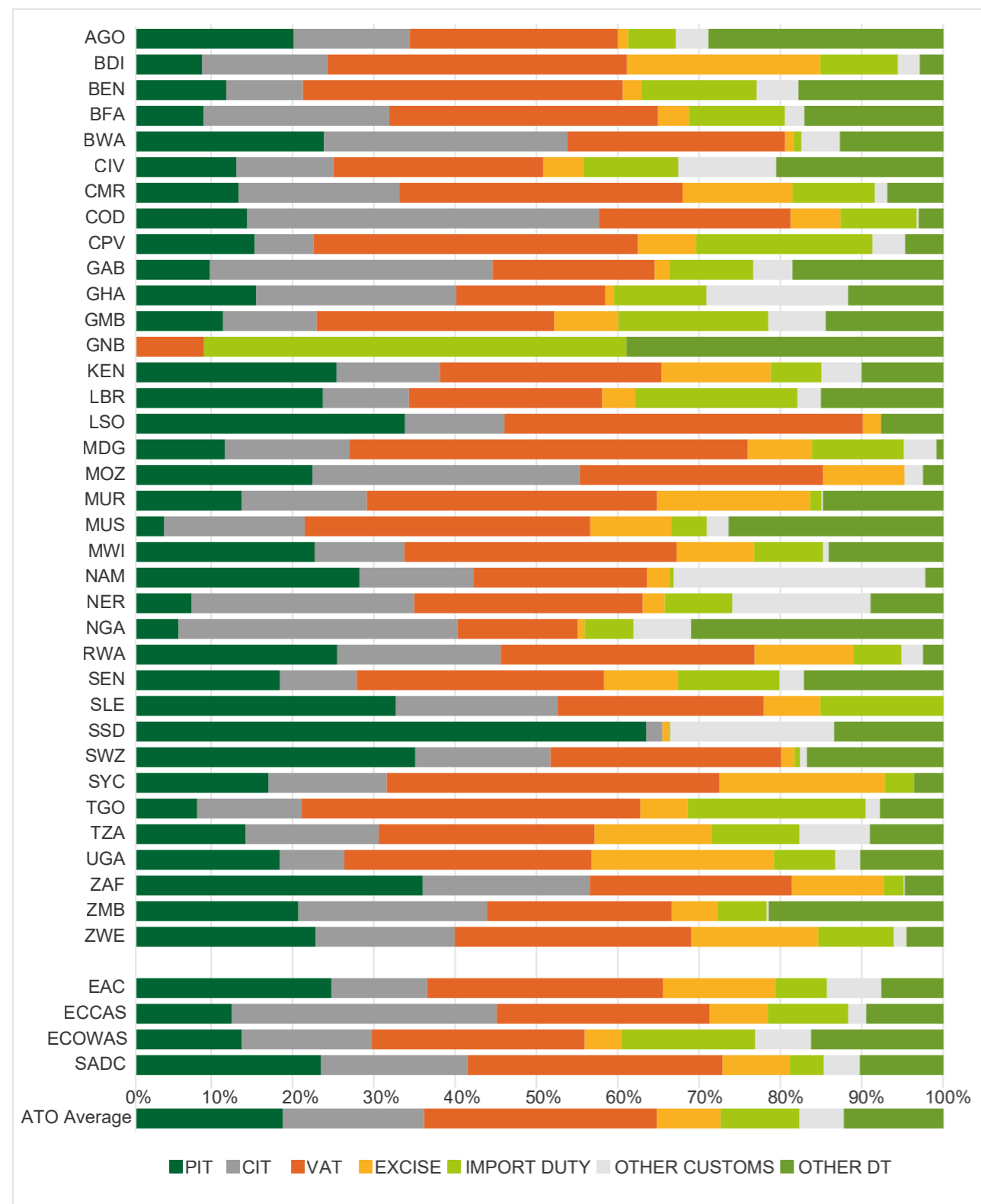
Secondly, part of the fiscal benefits on CIT comprises activities from the previous year. For example, CIT that is paid in 2021 includes part of sales/activities of 2020. Therefore, given that the economy performed poorly in 2020 due to COVID, it had a negative impact of the performance of CIT as a whole compared to 2022 where normal activity resumed.

10. This is due to the high number of civil servants.

11. This is primarily due to reforms that accompanied the reorganisation of the tax system, following the establishment of the new democratic government in 1994. Previously disadvantaged groups were able to participate in the formal labour market, contributing to growth in the PIT base. The PIT reforms entailed the reduction in marginal tax rates, and an expansion of the tax base. Furthermore, the elimination of all formal discrimination meant that under the new tax system individuals are subject to individual taxation irrespective of their marital status or gender thereby increasing the tax base. Moreover, the system is progressive in nature and offers limited exemptions and deductions. The outcome of the PIT contribution is impacted not only by the rates, income brackets, and taxable income base of the personal income tax system, but also by the concentration or distribution of income and taxpayers. The income distribution in South Africa is such that a substantial portion of tax revenue is contributed by high-income earners.

8. Burundi, Mauritius, Tanzania, Cameroon, Kenya, Morocco, The Gambia, Madagascar, Sierra Leone, Congo DR, Togo, Côte d'Ivoire, Niger, Benin, Gabon, Angola, Ghana, and Nigeria.

FIGURE 2.14 COMPOSITION OF TOTAL TAX REVENUE BY COUNTRY AND REGION, 2022



A similar observation is made at a regional level, where VAT is the highest contributor to tax revenues across the regions in 2022, except for the ECCAS region where CIT has the highest contribution of 32.81% to total tax revenue. The SADC region had the highest share of VAT at 31.89%, mainly because of high shares in Madagascar, Lesotho, and Seychelles.

PIT contributions are the highest in the EAC region than any other region because of high shares in South Sudan. In the ECOWAS region, import duties have the second largest share of 17.42% after VAT, making it the region with the highest contribution by import duties due to high shares in Guinea-Bissau, Liberia, and Cape Verde.

2.3.3. Domestic tax revenue more dominant than customs revenue

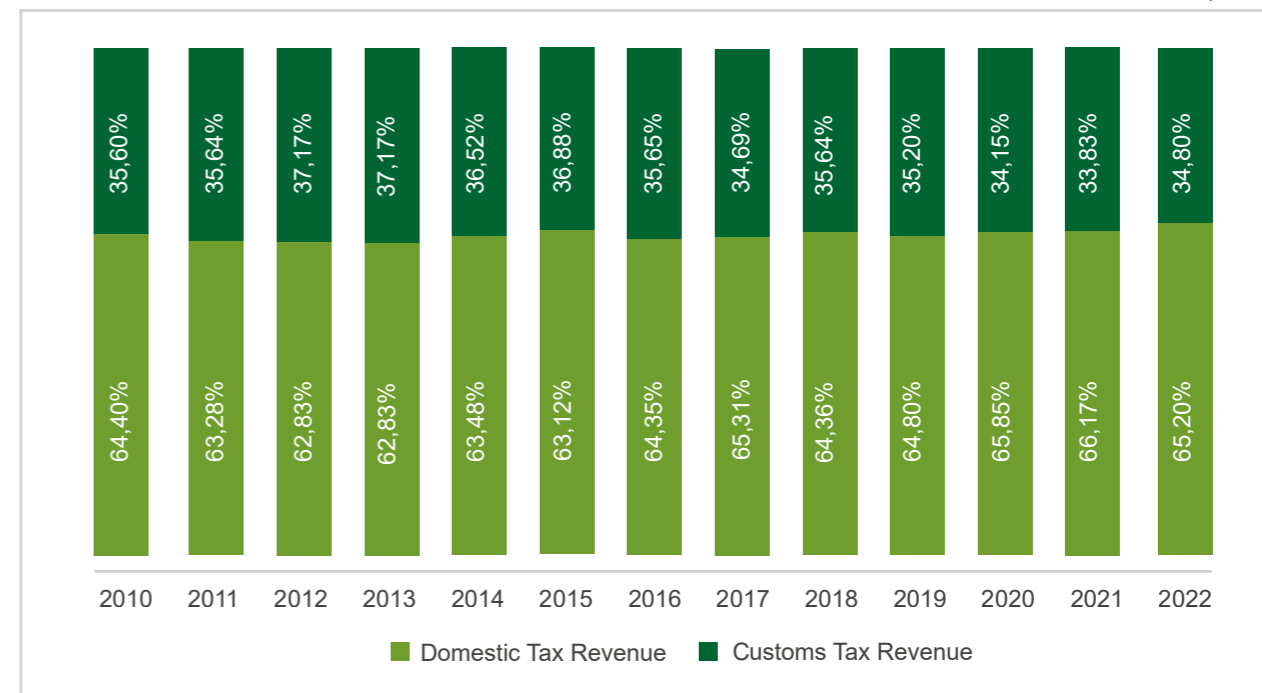
Generally, domestic tax revenues hold a significant share of government revenues in ATO countries and for 2022, they averaged 65.20% of total revenue. This is however 0.97 percentage points decline from the share of 66.17% recorded in 2021. Customs contribution to total revenue experienced a decline in their share in the years 2020 and 2021 due to the

COVID pandemic which led to the largest reductions in trade activity not just regionally, but globally. In those same years, the share of domestic revenues increased, before normalising in 2022 (see Figure 2.15).

(Desiderio Consultants Ltd, 2021) advocates for African economies mobilising more domestic revenues as substantial taxation of imports ends up with companies engaging in undervaluation practices of imported good. These practices reduce the duty and tax liabilities of companies, in an attempt to remain competitive, thus compromising revenues. The authors further argue that African countries need to reorganise their fiscal base towards internal direct and indirect taxation. This will compensate the loss of tariff revenues in the light of trade liberalisation policies in the region, (Desiderio Consultants Ltd, 2021).

Customs revenue is also often volatile as it is dependent on international trade and economic conditions of trading partners. Therefore, heavy reliance poses a risk to fiscal planning particularly during periods of economic crisis and other supply chain disruptions.

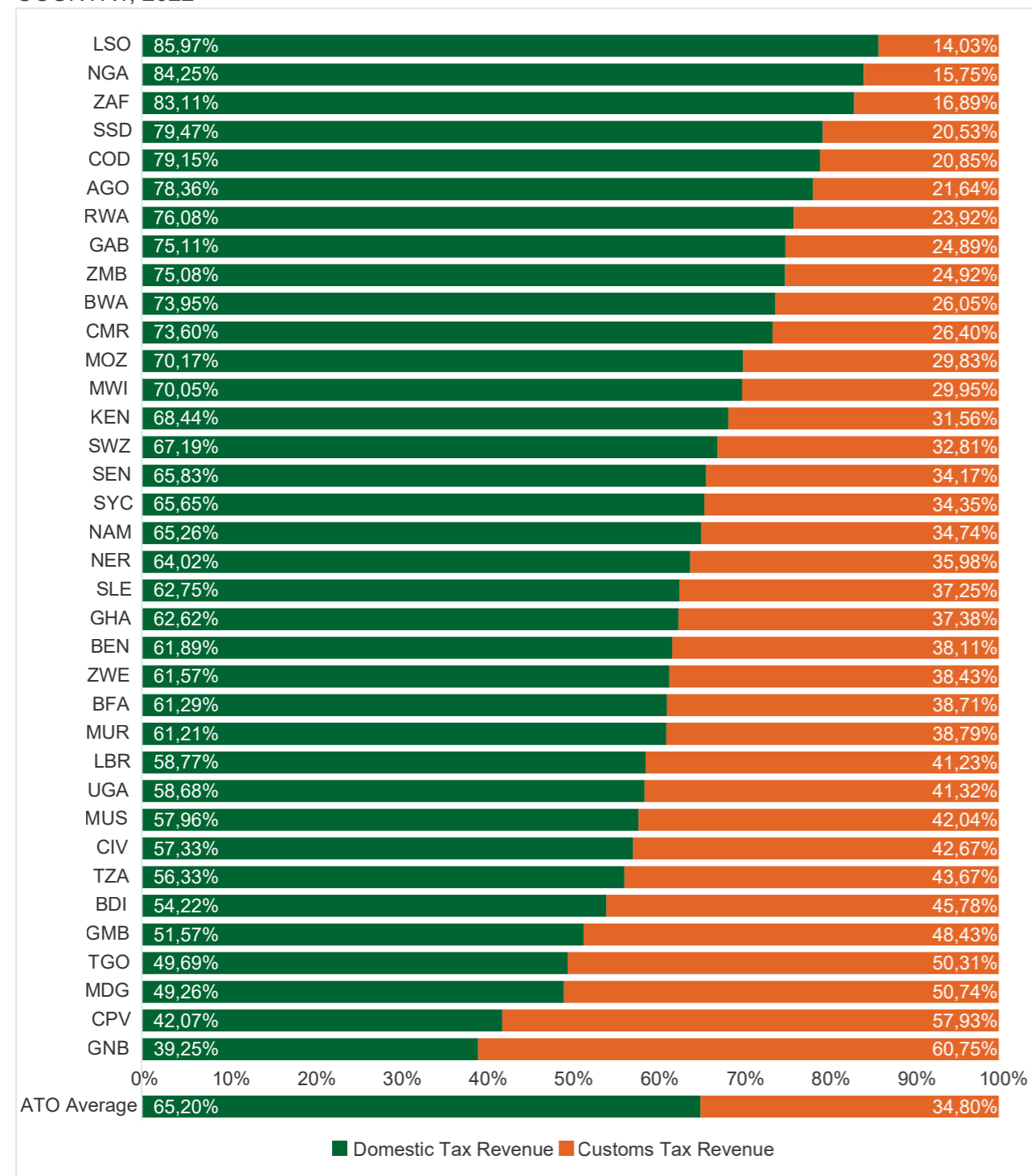
FIGURE 2.15 DOMESTIC AND CUSTOMS REVENUE AS SHARES OF TOTAL REVENUE, 2022



Across most ATO countries, domestic tax revenue outweighs customs revenue, a trend influenced by the unique economic structures of each country (sketched in Figure 2.16). The contribution of domestic revenue to total revenues in 2022 is the highest for Lesotho, Nigeria, and South Africa. The percentage contributions, however, vary based on their

economic characteristics. Notably, only four ATO countries had their share of customs revenue surpassing domestic revenue: Guinea-Bissau, Cape Verde, Madagascar, and Togo. This is correlated to these country's economic dynamics, trade dependencies, and internal revenue generation capabilities.

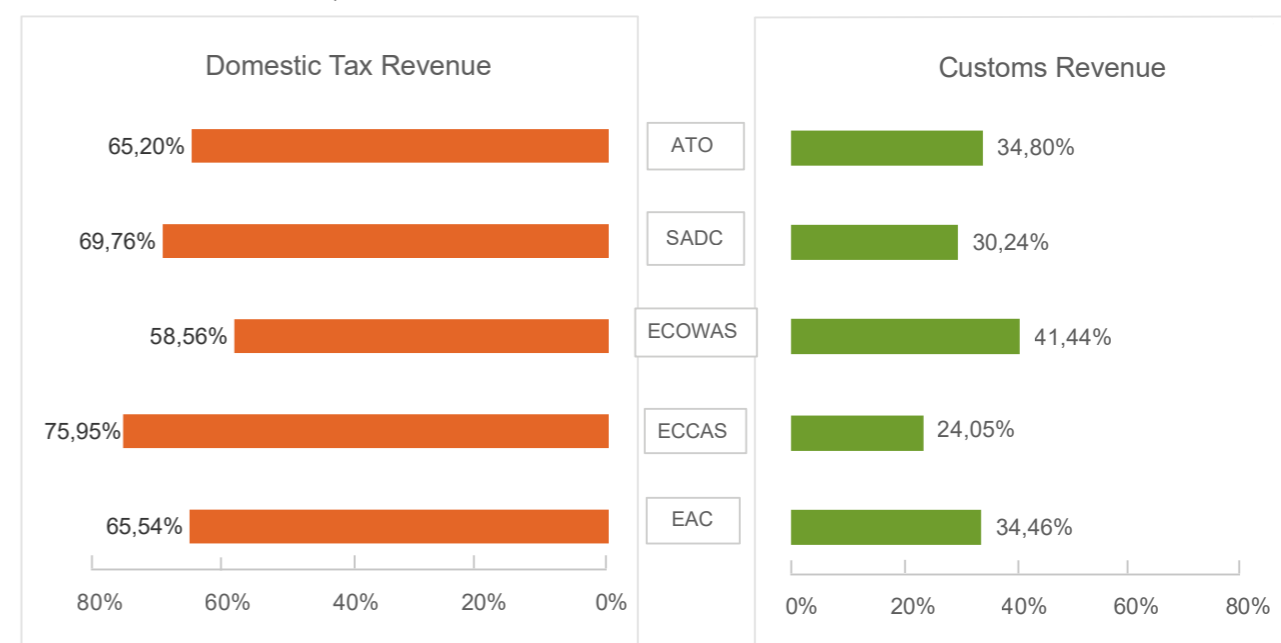
FIGURE 2.16 DOMESTIC AND CUSTOMS REVENUE AS SHARES OF TOTAL REVENUE BY COUNTRY, 2022



At a regional level, ECCAS has the highest contribution of domestic taxes to total revenues as shown in Figure 2.17, with all member countries shares above 70% during the period. SADC follows with an average of 69.76%. While all

regions have domestic taxes outweighing customs taxes, the ECOWAS has the highest share of customs taxes (41.44%) when compared to the other regions due to the highest contribution recorded in Guinea-Bissau and Cape Verde.

FIGURE 2.17 DOMESTIC AND CUSTOMS REVENUE AS SHARES OF TOTAL REVENUE BY REGIONAL GROUPING, 2022



2.3.4. Tertiary sector remains largest contributor to both GDP and tax revenue

As already indicated in the previous sections, both economic growth and revenue performance depicted positive trends in 2022. Establishing the relation between GDP and tax revenue collections helps in identifying productive and non-productive sectors in terms of their contribution to domestic revenue. Understanding how the different economic sectors generate revenue helps to identify those sectors that are performing either below or within potential. This informs areas that require attention and improvement.

In this analysis, 31¹² countries (down from the 33 in 2021) provided data relating to sector contributions to GDP, while only 15¹³ countries (down from the 18 in 2021) supplied comprehensive data for sector contribution to total tax revenue.

The tertiary sector maintained its position as the largest contributor to both economic activity (GDP) and tax revenue across most ATO countries as indicated by the ATO average, reflecting a consistent composition (see Figure 2.18). Industries like wholesale, retail, banking, communication, and tourism are reportedly among the fastest growing and revenue generating sectors in Africa (Kouam, 2023). The secondary sector was the second-largest contributor (22.31%) to GDP, and also demonstrated productivity, with an almost consistent contribution to tax revenue (21.92%).

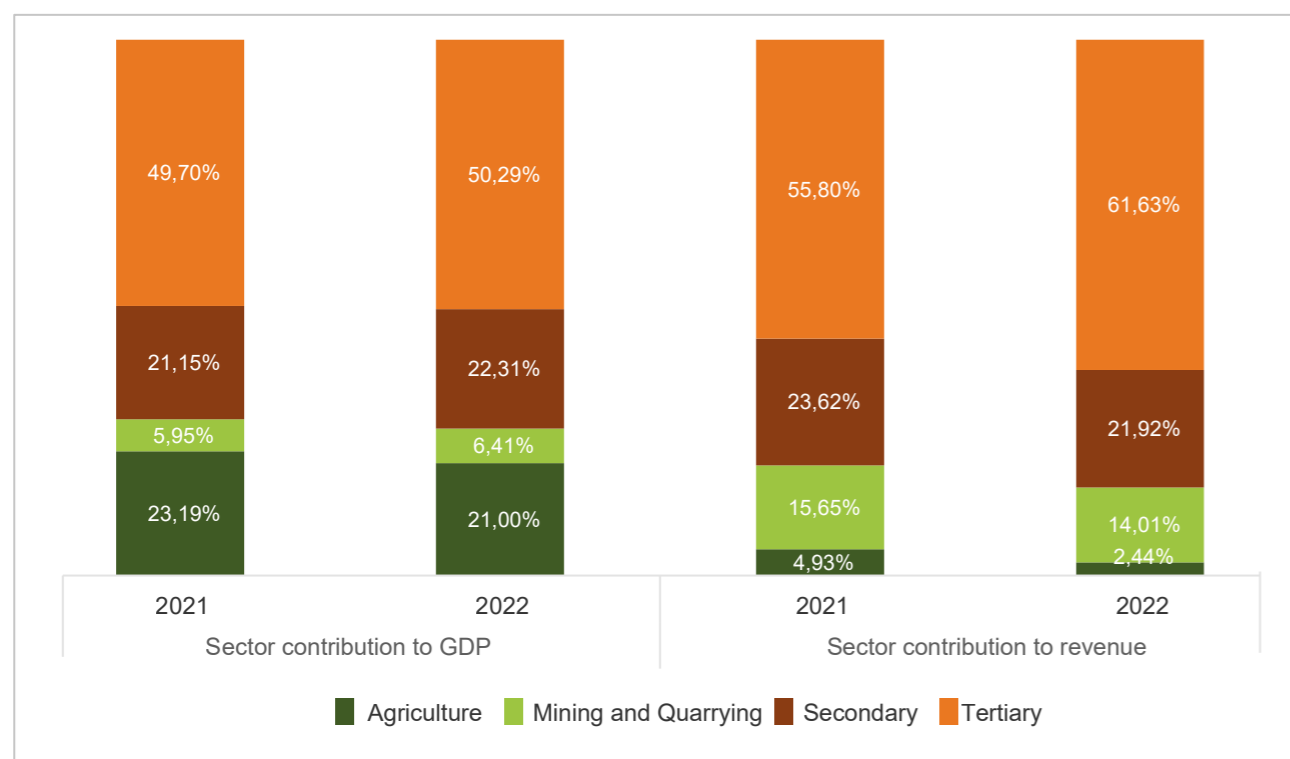
12. Benin, Burkina Faso, Burundi, Cameroon, Cape Verde, DR Congo, Côte d'Ivoire, Eswatini, The Gambia, Ghana, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mauritius, Morocco, Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, Seychelles, Sierra Leone, South Africa, Tanzania, Togo, Uganda, Zambia, Zimbabwe.

13. 15 countries included in the analysis: Angola, Cameroon, Eswatini, Ghana, Kenya, Lesotho, Madagascar, Mauritius, Mozambique, Nigeria, Rwanda, Sierra Leone, South Africa, Tanzania, Zimbabwe. Six countries provided incomplete sectoral data and were excluded from the main analysis: Burundi, Namibia, Niger, Zambia and Burkina Faso and South Sudan.

Notably, the Agriculture sector holds a larger share in GDP (21.00%) than it contributes to tax revenue (2.44%). This discrepancy is attributed to the sector's dominance by informal activities and tax exemptions. The mining sector's average contribution to GDP on the other hand is the lowest at 6.41% but has a higher contribution of 14.01% to revenue. The mining, secondary and tertiary sectors are more productive in the ATO and therefore generate more revenue in the different countries.

Country to country variations in the economic structures are shown in Figure 2.19 and remain largely similar to those observed in 2021. The tertiary sector is the highest contributor to economic activity in 16 (55%) of the ATO countries with Seychelles, Cape Verde, Mauritius, and South Africa leading at 83.27%, 76.31%, 75.52% and 69.83% respectively.

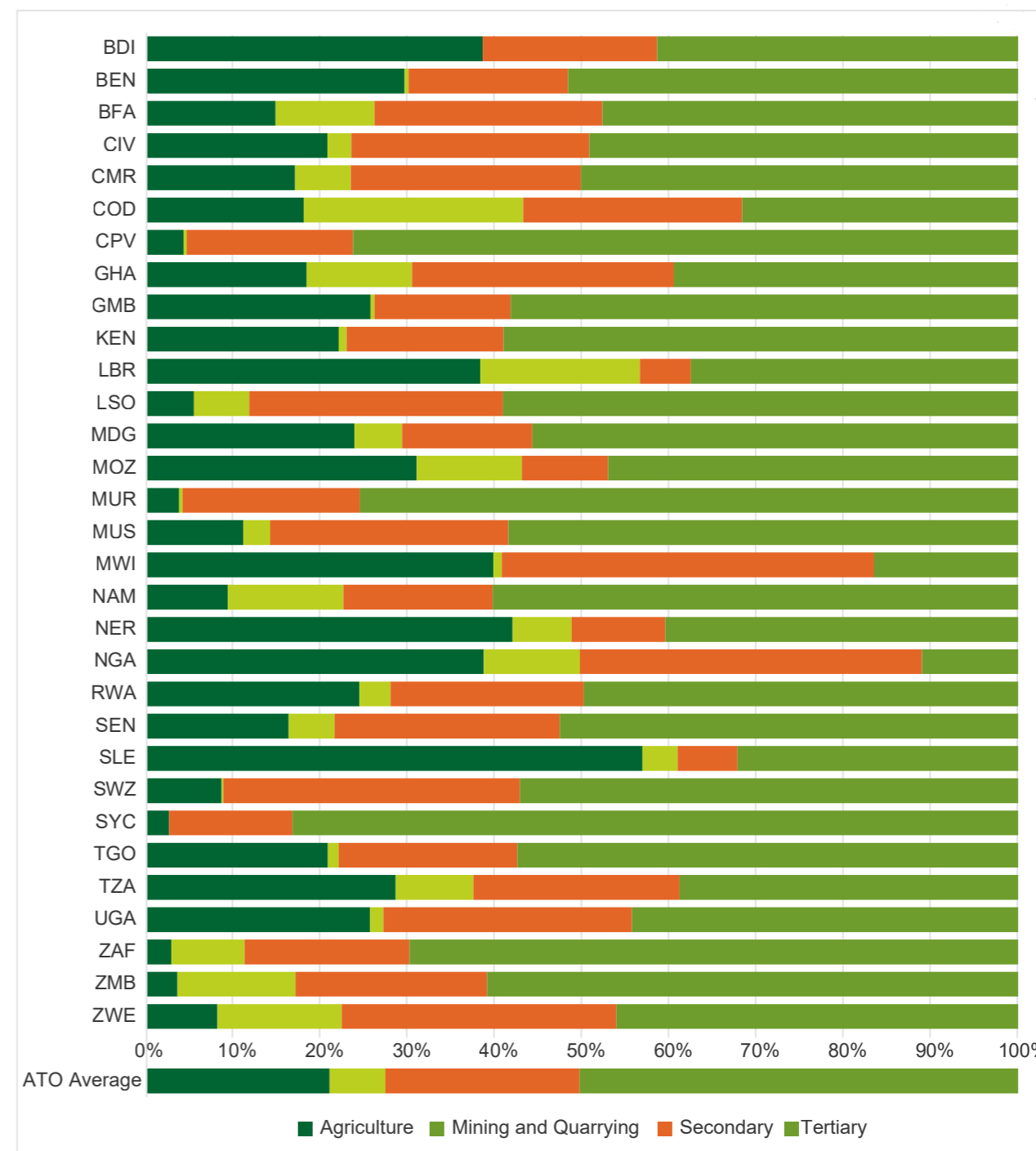
FIGURE 2.18 SECTOR CONTRIBUTION TO ATO COUNTRIES' GDP AND TAX REVENUE, 2022



Notably, these countries have vibrant tourism industries. Sierra Leone and Niger are the only countries where the agriculture sector has the highest contribution to economic activity when compared to the other sectors. For the secondary sector, only Malawi reflects a higher contribution than the rest of the sectors. Other countries with higher contributions from the secondary sector include Nigeria (39.26%), Eswatini (34.05%), and Ghana (30.06%).

The tertiary sector is the highest revenue-generating sector for 13 (out of the 15) ATO countries, accounting for 61.63% of tax revenue in 2022 from 55.80% in 2021. Significant increases in the sector's contribution to revenue are recorded in Ghana and Madagascar at 13.10 and 11.26 percentage points. This then lowered all the other sectors' contribution to revenue when compared to 2021.

FIGURE 2.19 SECTOR CONTRIBUTION TO GDP BY COUNTRY, 2022

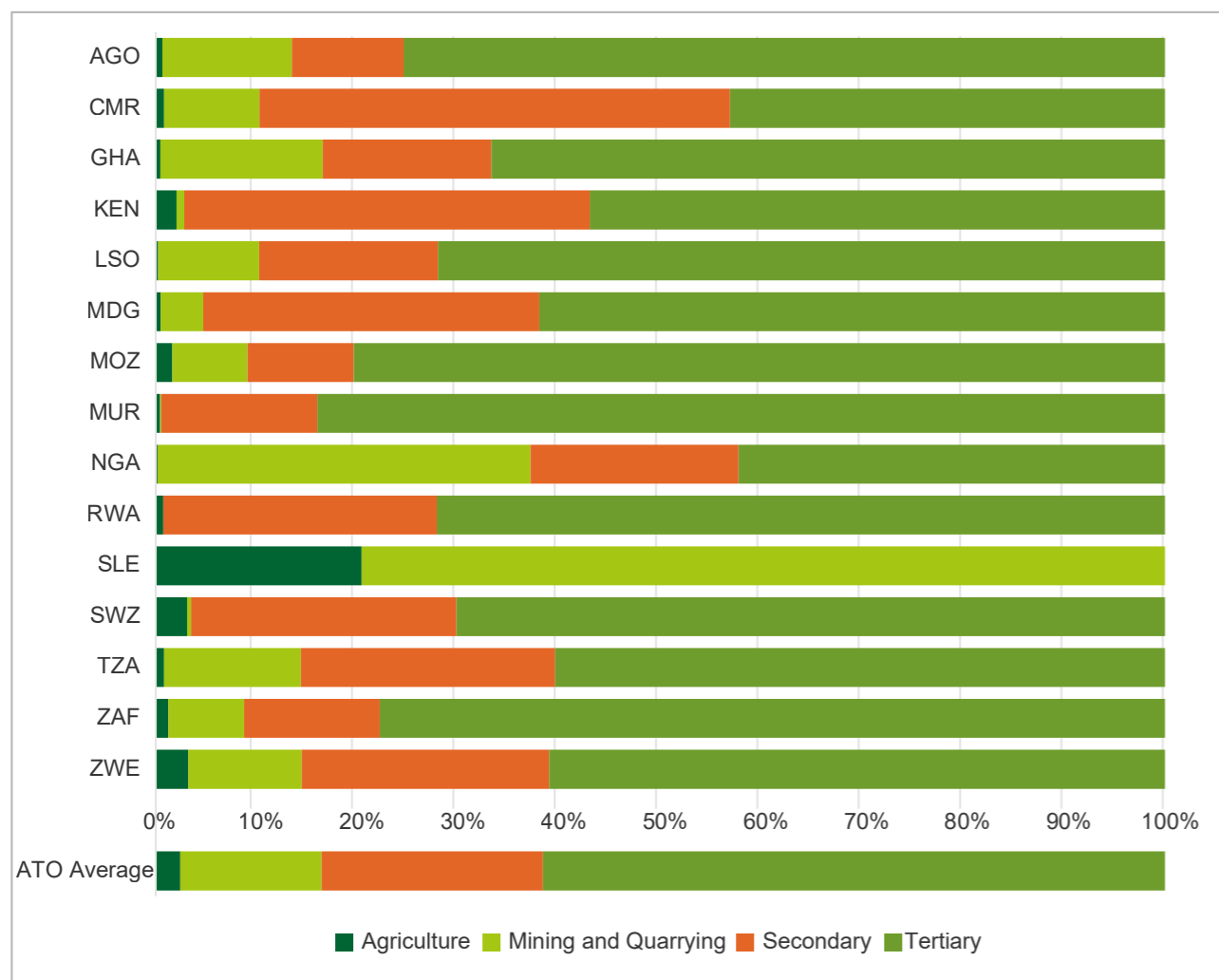


Cameroon, as observed in the previous year is the only country where the secondary sector accounts for the largest share of tax revenue at 46.64%. Worth noting is that five countries: Burundi, Namibia, Niger, Zambia, and Burkina Faso provided only revenue from the mining sector and South Sudan on the other hand provided only revenues from the tertiary sector. These countries were excluded from the analysis.

2.4. Tax revenue continues to fund a significant proportion of national budgets

The National Budget is a document stipulating government's revenue and expenditure needs for a given period and it is an important planning tool that must be prepared each

FIGURE 2.20 SECTOR CONTRIBUTION TO REVENUE BY COUNTRY, 2022



year. The government revenue includes all the revenue a government receives from both tax and non-tax sources. Non-tax revenue sources include fees, levies, royalties, loans, grants, and revenue from state owned entities as well as municipal governments.

The tax-to-budget ratio serves as a crucial measure of how much of a government's budget is funded through taxes. For the ATO countries, 62.33% of the national budgets were funded by tax revenues in 2022, slightly up from the 59.34% recorded in 2021 (see Figure 2.21). This is in line with the recovery in tax revenues discussed in the previous sections.

Zimbabwe had taxes funding about 99.36% of their national budget, followed by Zambia, South Africa, and Ghana at 89.94%, 89.33% and 88.30% respectively. Worth noting is that for Zambia and Zimbabwe, these ratios were significantly higher than those recorded in 2021 as the economies

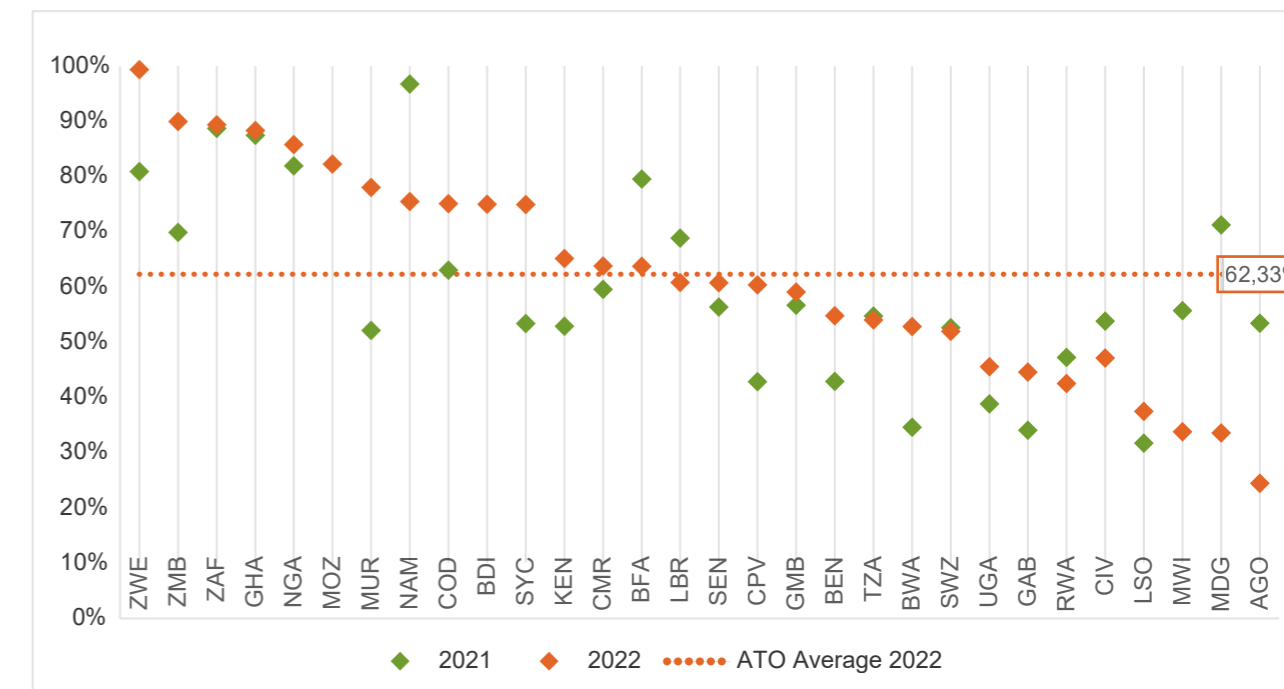
mobilised more tax revenues in line with recovery in their economic activities.

Conversely Angola, Madagascar, and Malawi had the lowest ratios, and notably among countries with the lowest tax-to-GDP ratios in the range of 8% to 11%. Overall, 73% (22) of the ATO countries have taxes funding over half of their national budgets indicating the need for these economies to continuously strengthen their revenue administration efficiencies and close existing tax gaps.

2.5. Debt-to-GDP ratios

The debt-to-GDP ratio serves as an important measure of government debt relative to the economy, reflecting a country's ability to repay its debts in relation to its economic output. According to (Soyres, Kawai, & Wang, 2022), an increase in national debt can be caused by an increase in

FIGURE 2.21 TAX-TO-BUDGET RATIOS, 2021 - 2022



government expenditures, an increase in public investment, and a reduction in tax revenues or other fiscal changes. This does not rule out the mismanagement of government funds and corrupt practises which can also lead to revenue shortages and trigger borrowing. During times of economic crisis or slow growth, governments often struggle with lowered revenues, increased expenditures, and widening deficits, which lead them to take on debt.

Following a pandemic-induced crisis that led to increased government borrowing to mitigate the economic impacts of the crisis on their economies, the average debt-to-GDP ratio in ATO countries declined to 54.19% in 2022 from 58.08% in 2021. All four countries that had the highest debt-to-GDP ratios in 2021, recorded significant declines in 2022. These are Cape Verde (155.32% to 120.94%), Mauritius

(89.53% to 83.53%) and The Gambia (84.74% to 80.98%), and Seychelles (82.93% to 63.74%). The number of ATO countries with debt-to-GDP ratios above the World Bank recommended level of 77% (The World Bank, 2010) as a result dropped from four to three¹⁴.

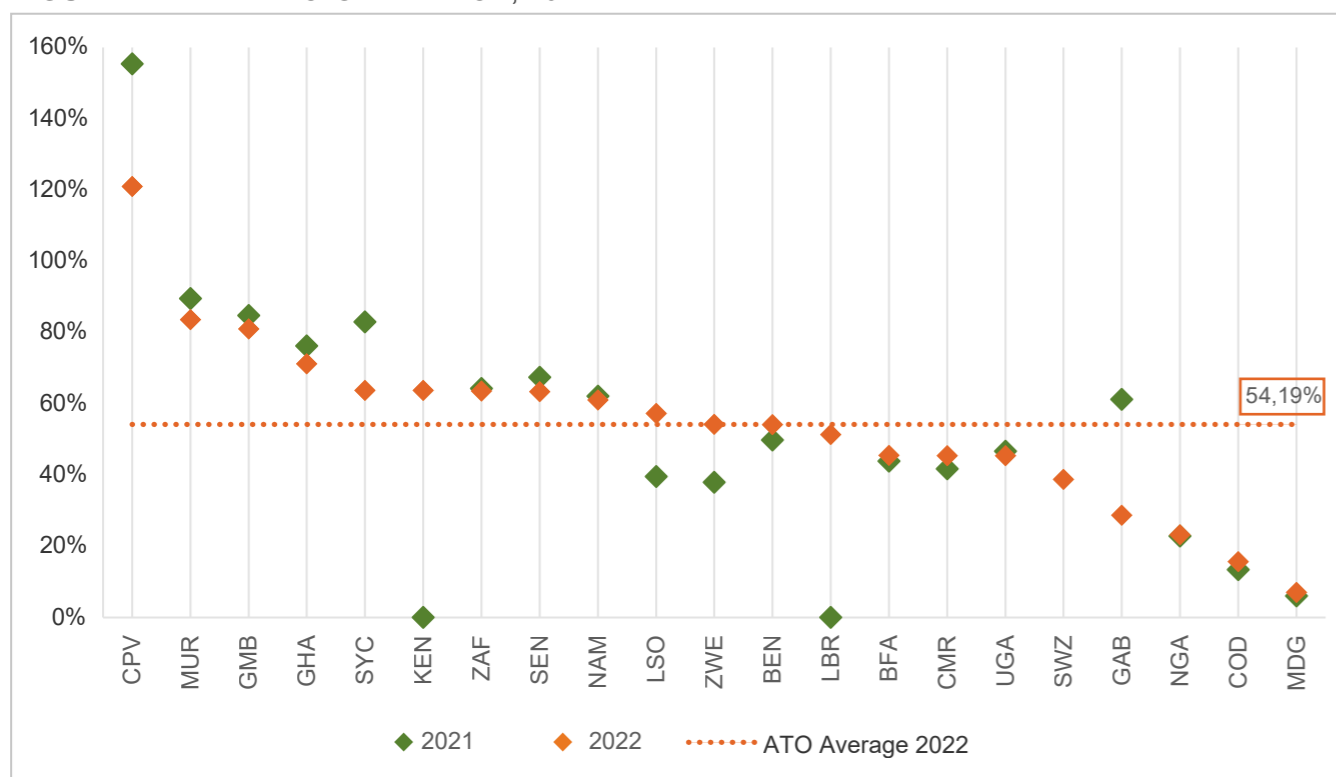
If governments are overindebted, it poses a significant challenge in their ability to finance essential public goods such as education or healthcare. This limitation can result in substandard human development outcomes and increased inequality (The World Bank, 2022). While there is a need for countries to exercise strong responsibility and prudence in public spending, it is also crucial for governments to use the foreign funds appropriately in investment projects that would increase the production capacity of their economies.

2.6. Conclusion

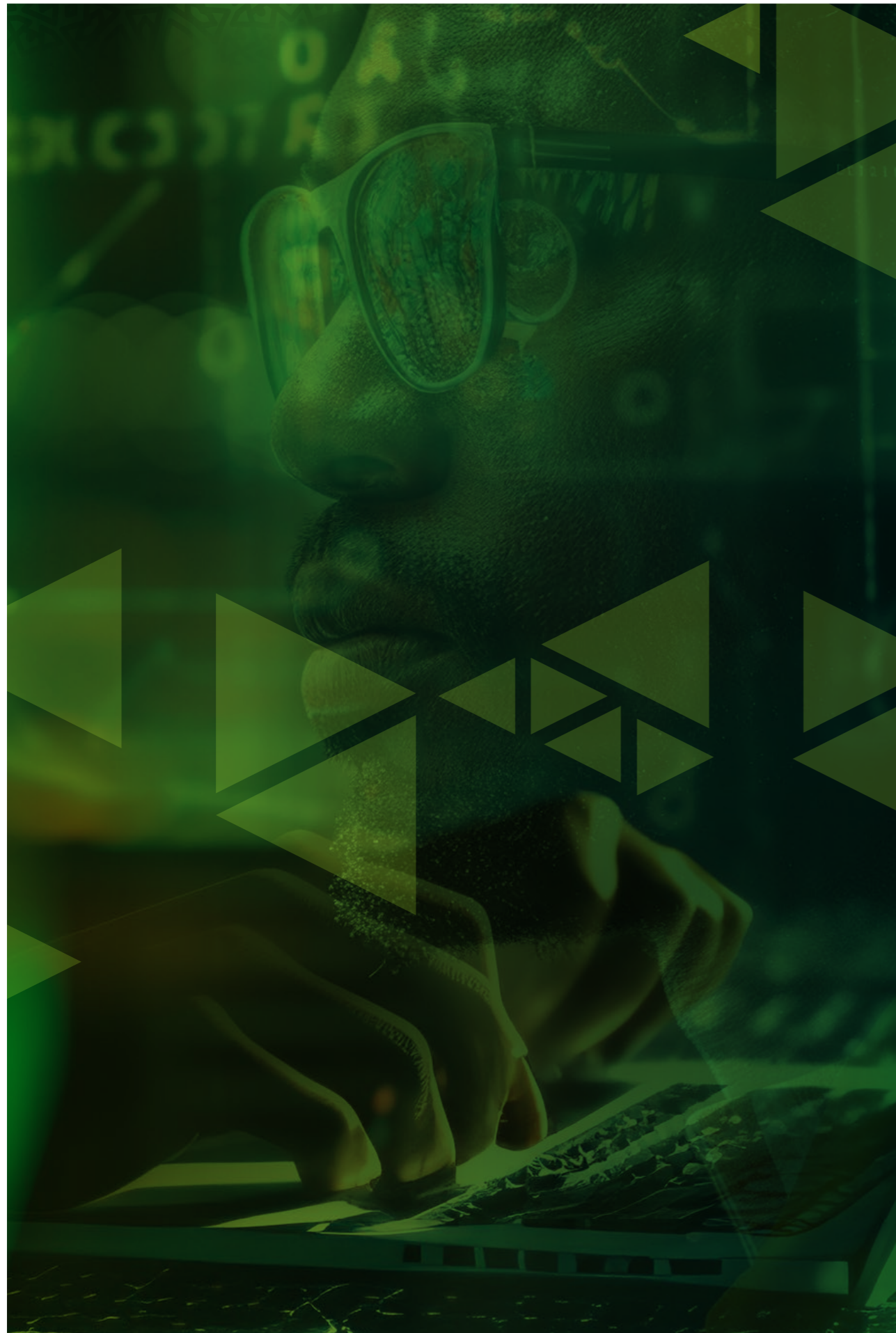
There is an evident rebound in economic activity in ATO countries in 2022, after the global economic slowdown that was experienced in 2020 due to the COVID-19 pandemic and extended to 2021 in some economies. While the year 2022 brought its own unexpected series of shocks which resulted in higher inflation rates and tighter monetary conditions, revenue performance became resilient. This indicates implementation of effective mechanisms and policies by ATO governments in the face of the crisis. It is no doubt that some countries were hit hard by the high food and energy prices, which resulted in reduced domestic demand thus slowing down economic growth.

Even though tax-to-GDP ratios improved in several countries, leading to an average that has not been reached since 2016, they remain relatively low. There is potential for more tax revenue collections in African countries which can be mobilised through strengthening compliance enforcement activities, closing the existing tax gaps, and leveraging on technology to transform and modernise tax administration processes which would in turn make it easy for taxpayers to comply. Taxes are important for economic development and for most ATO countries, they fund a higher proportion of national budgets which makes them a requirement for government expenditure which drives economic development in these countries. As the economies become more developed, then more revenue can be collected for further economic development.

FIGURE 2.22 DEBT-TO-GDP RATIOS, 2022



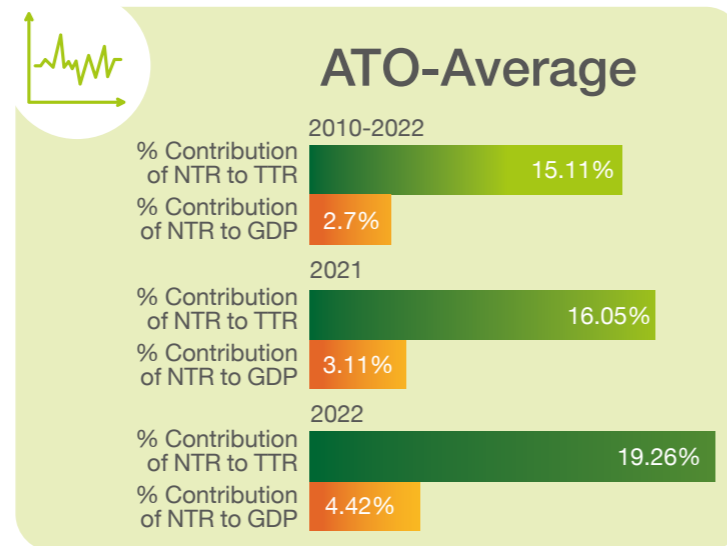
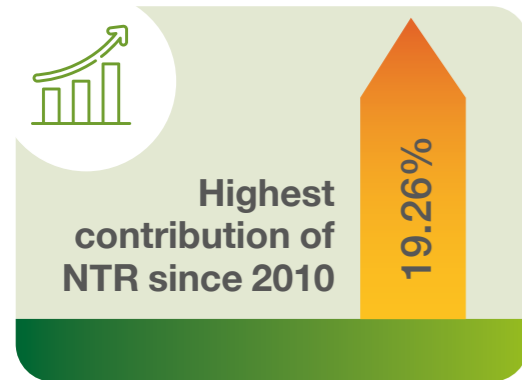
14. Cape Verde, Mauritius and The Gambia



Chapter 3

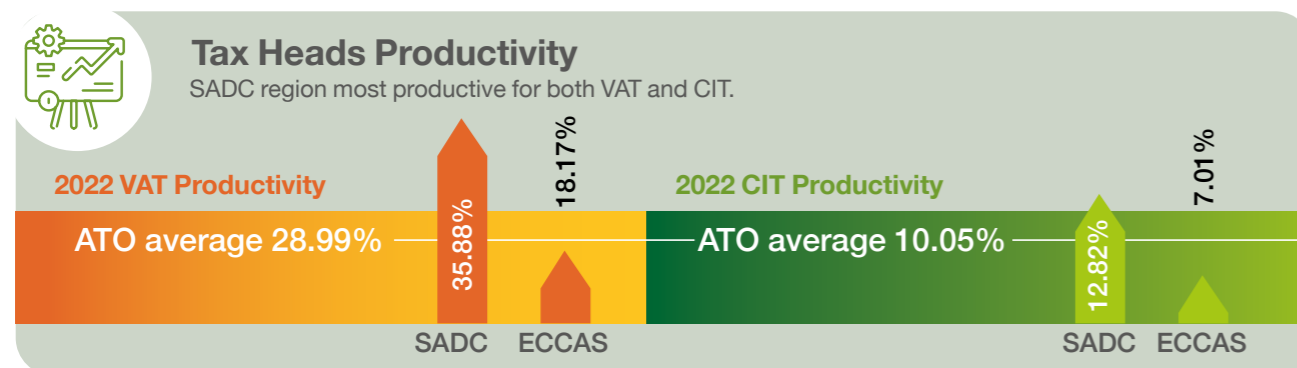
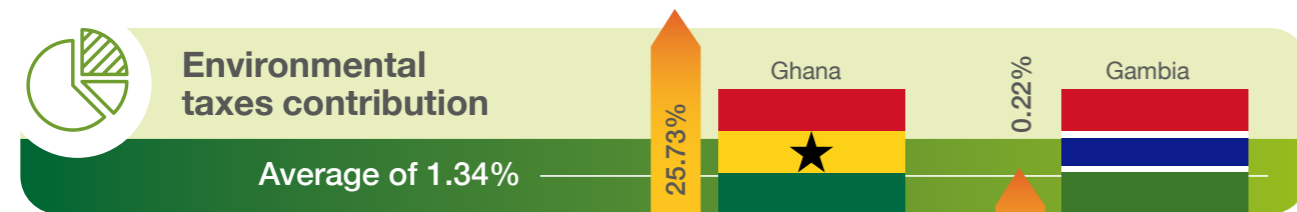
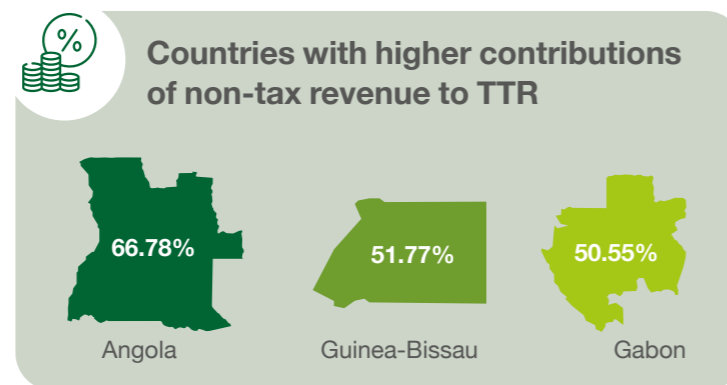
Performance of Main Tax and Non-Tax Revenues

Performance of Main Tax and Non-Tax Revenues



Major tax heads collections improve in 2022

Tax Head	2021	2022
CIT	11.78%	35.36%
EXCISE	13.66%	32.96%
VAT	12.96%	15.18%
IMPORT DUTY	13.51%	13.86%
PIT	9.44%	11.07%



Introduction

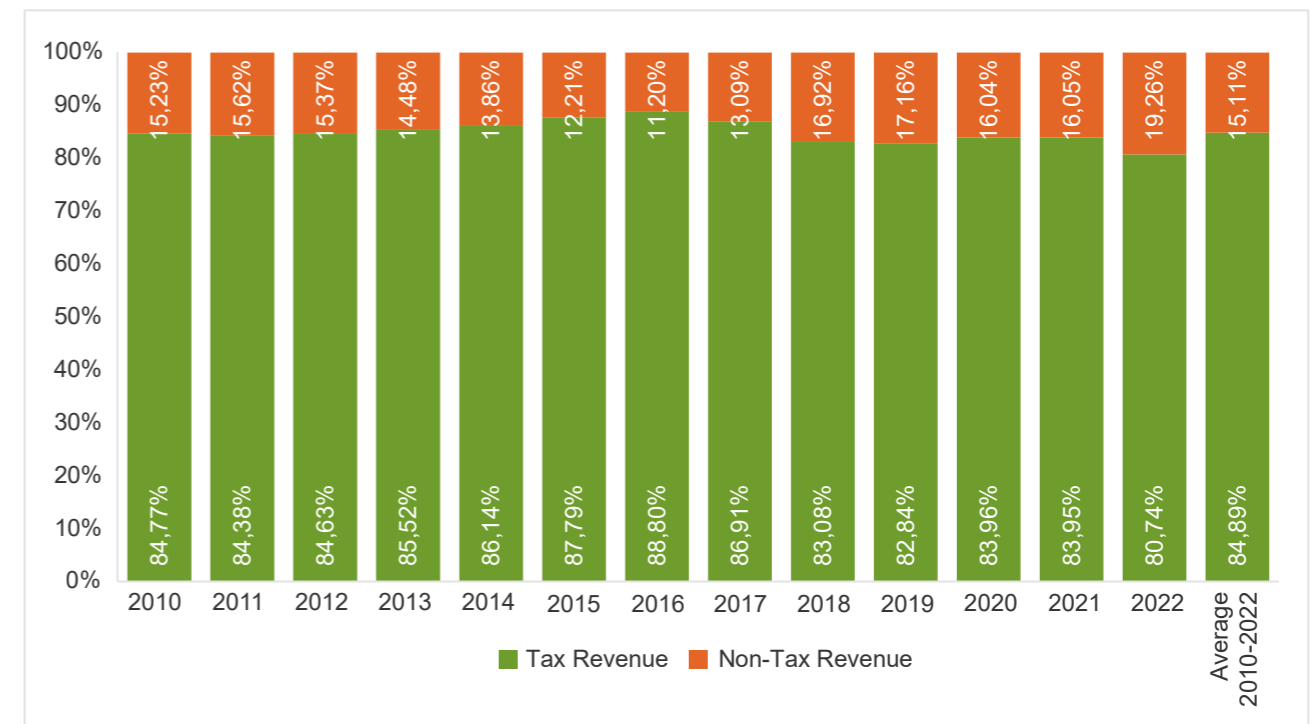
This chapter focuses on analysing the main tax and non-tax revenues of the ATO countries. The tax revenues analysis covers value-added tax (VAT), corporate income tax (CIT), personal income tax (PIT), import duties, excise duties, presumptive tax, and environmental taxes. Non-tax revenues are generally much more varied than tax heads but for this publication they are analysed at an aggregated level and consists mainly of revenues from oil, royalties, fees and licenses, other natural resources as well as other non-tax revenues. The aim is to present how these different revenues evolved in ATO countries and assessing their productivity.

3.1. Performance of Main Tax and Non-Tax Revenues

For the year 2022, 36¹⁵ countries provided revenue data, same as in 2021. Tax revenue is the primary source of revenue in ATO countries with an average of 80.74% in 2022 as shown in Figure 3.1. However, there has been a declining trend in tax revenue proportion over the years, reaching its lowest point in 2022 (80.74%) against the long-term average contribution of 84.89%.

Conversely, non-tax revenues on the other hand have been relatively picking up in the latter years, reaching the highest proportion of 19.26% of total revenues in 2022, against a long-term average of 15.11%. The improvement in the performance of non-tax revenues indicates progress in the mobilisation of domestic non-tax resources which according to the (United Nations Economic Commission for Africa, 2019), remained an under tapped source of public revenue that is increasingly important in Africa at the time of their reporting. They argued that diversifying revenue sources besides tax revenue is essential for African countries who are dealing with declining official development assistance, increasing debt burden, and limited capabilities to mobilize domestic resources.

FIGURE 3.1 COMPOSITION OF TOTAL REVENUES, 2010 - 2022

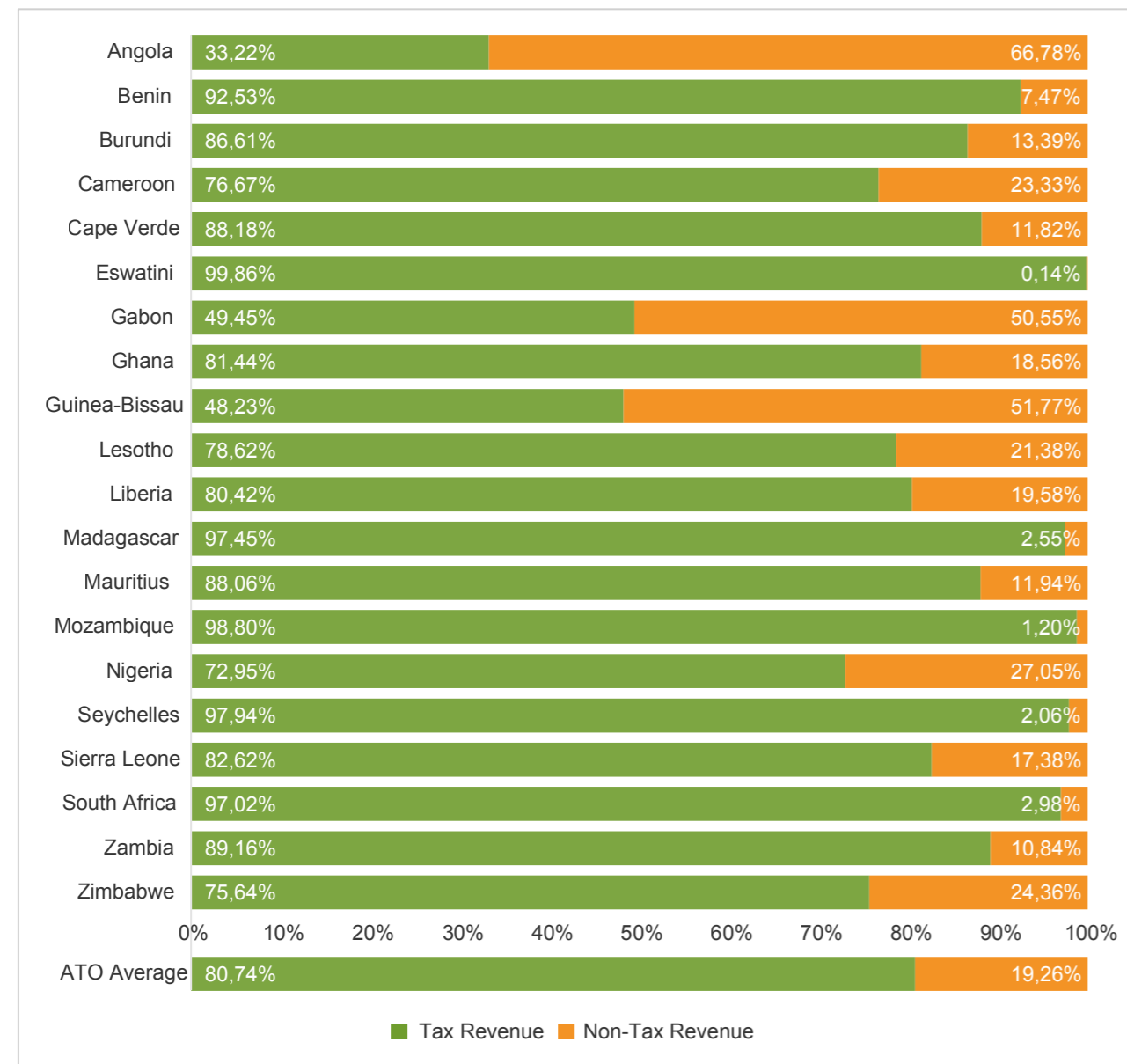


15. Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, DR Congo, Côte d'Ivoire, Eswatini, Gabon, The Gambia, Ghana, Guinea-Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mauritius, Morocco, Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, Seychelles, Sierra Leone, South Africa, South Sudan, Tanzania, Togo, Uganda, Zambia, Zimbabwe.

Out of the 36 countries covered in this analysis, 20 reported both tax and non-tax revenue while 16¹⁶ reported only tax revenue and were excluded in the analysis shown in Figure 3.2. Noteworthy is that the non-tax component consists of revenues that are not collected by most of the tax administrations and can sometimes be challenging to obtain. This analysis highlights the varying revenue compositions among the ATO countries, with some nations relying heavily on non-tax revenue streams to fund their budgets. Understanding these nuances is crucial for policymakers seeking to develop effective revenue generation strategies and ensure fiscal sustainability.

Only Angola and Guinea-Bissau have non-tax revenues contributing more than 50% to the total revenues at 66.78% and 51.77% respectively. Angola's significant non-tax revenue contribution stems largely from oil revenues, highlighting its dependence on this energy source (see Chapter 2). On the other hand, Guinea-Bissau's higher non-tax revenues are attributed to other natural resources, fees, and licenses, indicating a diversified revenue base beyond traditional tax sources.

FIGURE 3.2 SHARE OF TAX AND NON-TAX REVENUE IN ATO COUNTRIES, 2022



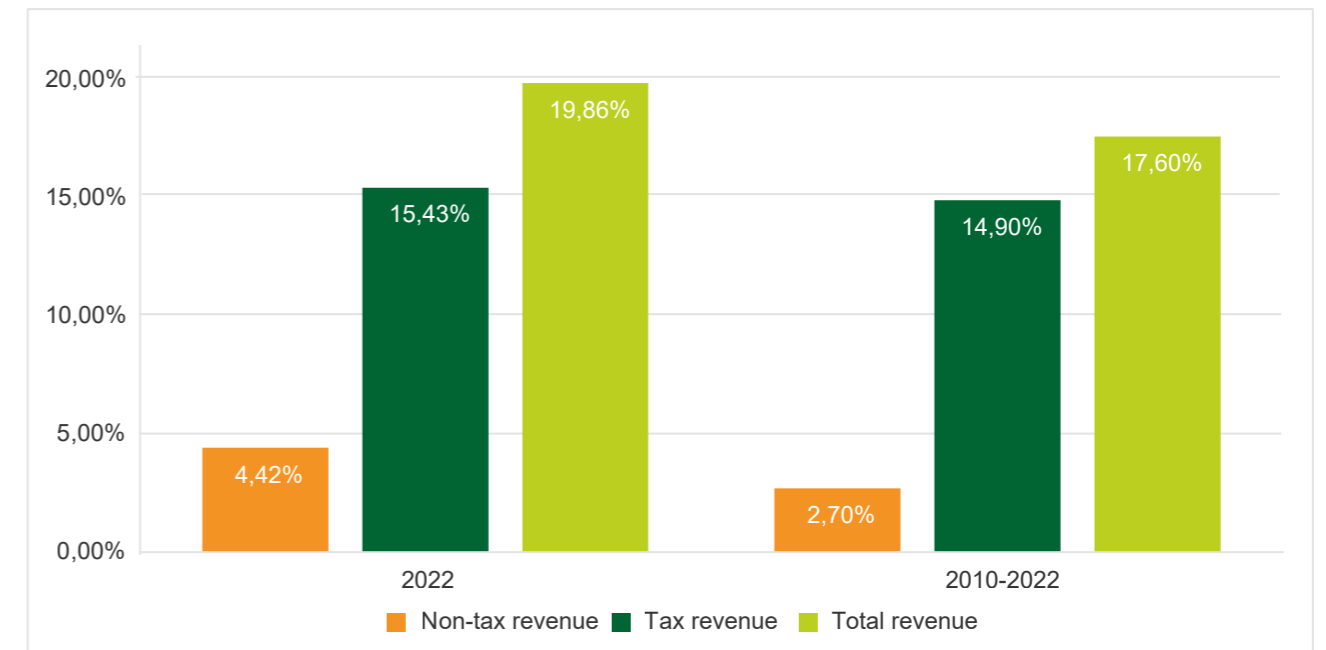
16. Burkina Faso, Côte d'Ivoire, Botswana, Congo, The Gambia, Kenya, Morocco, Malawi, Namibia, Niger, Rwanda, South Sudan, Togo, Tanzania, Uganda, and Madagascar.

Shares of tax and non-tax revenues to GDP

Figure 3.3 shows the performance of tax and non-tax revenues relative to GDP. As seen in their contribution to total revenues, there is considerable potential to boost the contribution of non-tax collections as they average 2.70% of GDP ATO-wide over the years. In 2022, the ratio increased to 4.42% from 3.11% in 2021, signalling a potential shift towards leveraging non-tax revenue sources.

The (United Nations Economic Commission for Africa, 2019) stated that non-tax revenue has the potential to become a much greater source of revenue and can be used to achieve other policy objectives. They further argued that leveraging non-tax revenue instruments provides a strategic opportunity to navigate some of the entrenched structural challenges associated with traditional tax collection methods.

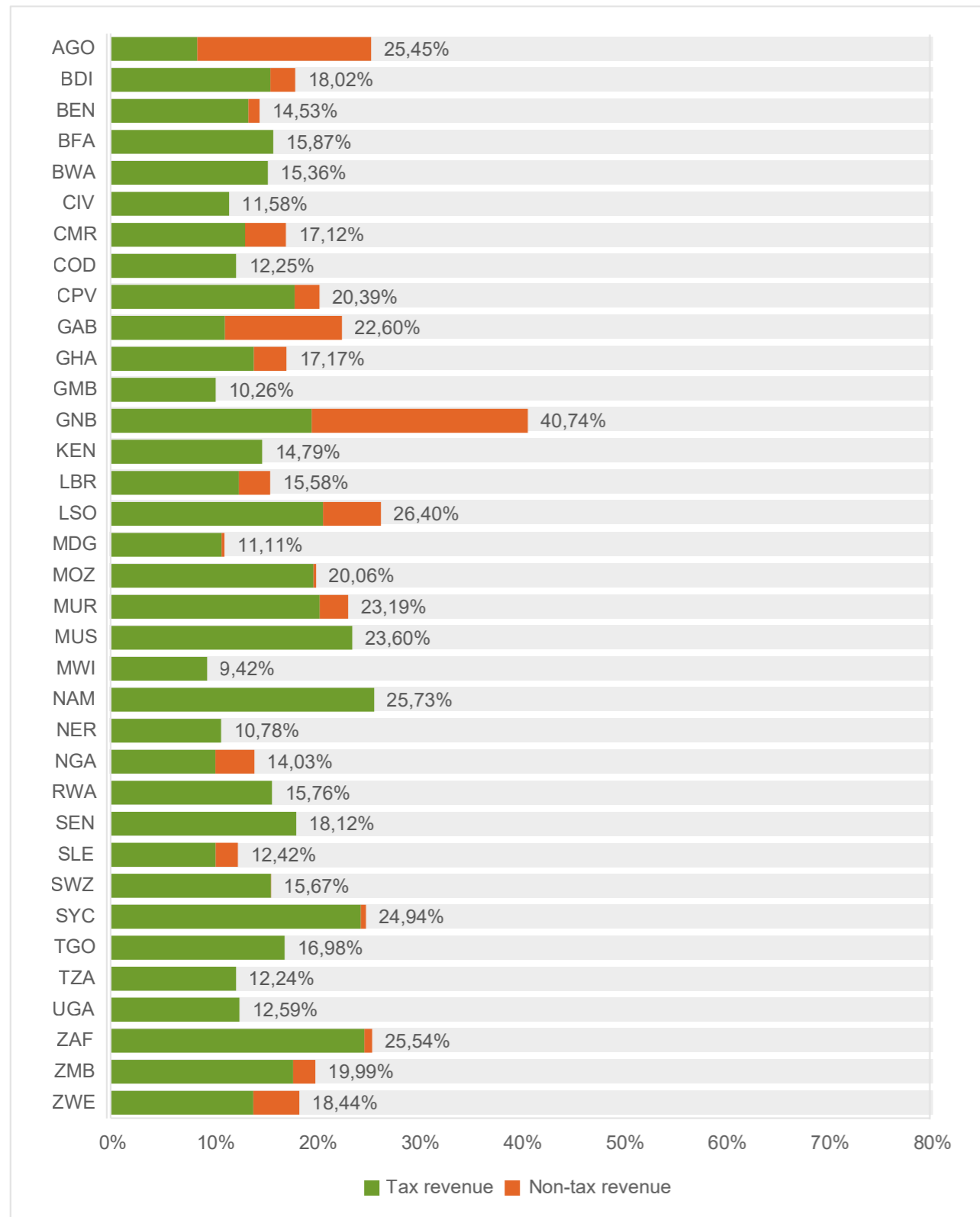
FIGURE 3.3 TOTAL REVENUES AS A PERCENTAGE OF GDP, 2022



The country level analysis also depicts the same picture as the ATO-wide performance in terms of the tax and non-tax revenues as a percentage of GDP (see Figure 3.4). Angola, Gabon, and Guinea-Bissau have the ratio of non-tax revenues

to GDP being higher than that of tax revenues-to-GDP at 16.99% versus 8.45%, 11.42% versus 11.18% and 21.09% versus 19.65% respectively.

FIGURE 3.4 TOTAL REVENUES AS A PERCENTAGE OF GDP BY COUNTRY, 2022



3.2. Tax revenue by tax heads in ATO countries

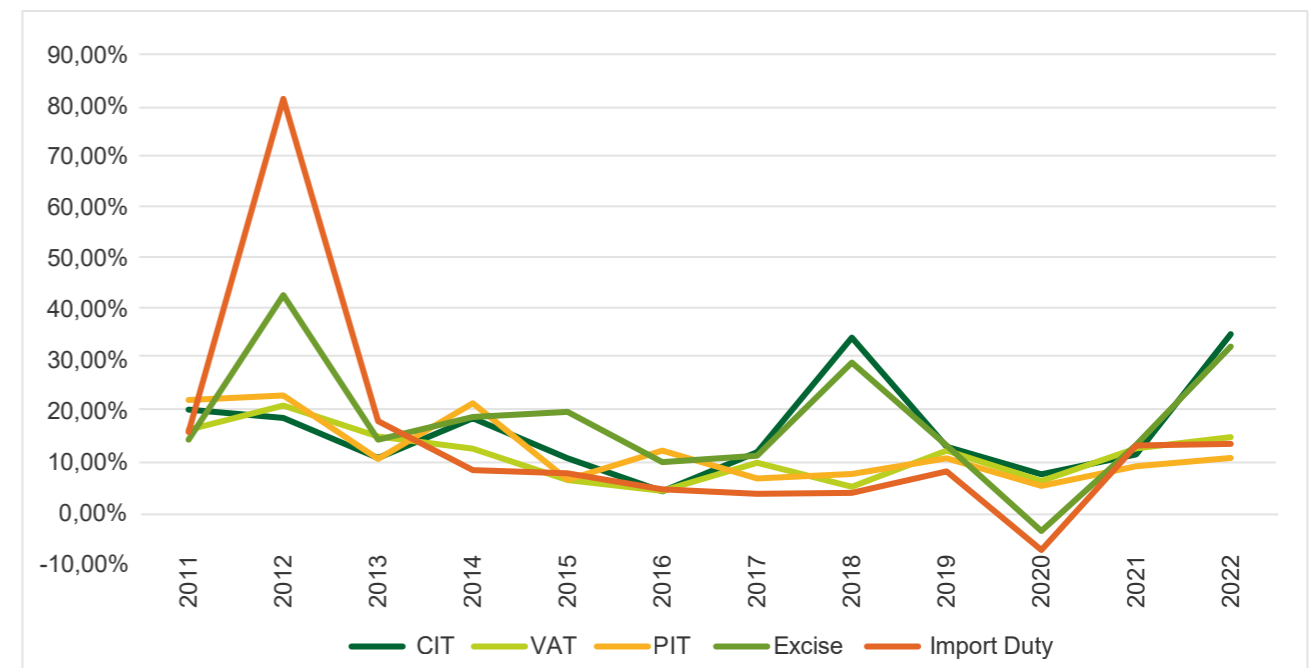
In 2022, all major tax heads recorded positive growth compared to the previous year, exhibiting a much robust rebound in tax collections post the COVID-19 pandemic effects. This significant rebound is evident in the overall revenue performance across ATO countries, as discussed in Chapter 2.

As shown in Figure 3.5, CIT recorded the highest growth rate of 35.36% in 2022, followed by excise duties at 32.96%, VAT at 15.18%, import duties (13.83%) and PIT at 11.07%. The stronger performance from CIT can be attributed to the

fact that as countries emerged from the COVID-19 crisis, many companies began reporting increased profits. This uptick in corporate benefits eventually translate into higher CIT collection as businesses resumed operating their normal activities. Furthermore, the high profits from higher prices that were experienced in most economies during the period under review boosted VAT collections.

Similarly, excise duties performed strongly in 2022 after a moderated growth of 13.66% in 2021 that followed a decline in 2020. The deteriorating trend observed in 2020 was mainly due to the restrictions imposed during the locked down in ATO countries. However, as business economic resumed, particularly in the manufacturing and retail sectors, excise duties experienced a rebound in 2022.

FIGURE 3.5 EVOLUTION OF YEAR-TO-YEAR GROWTH OF TAX HEADS, 2011 - 2022

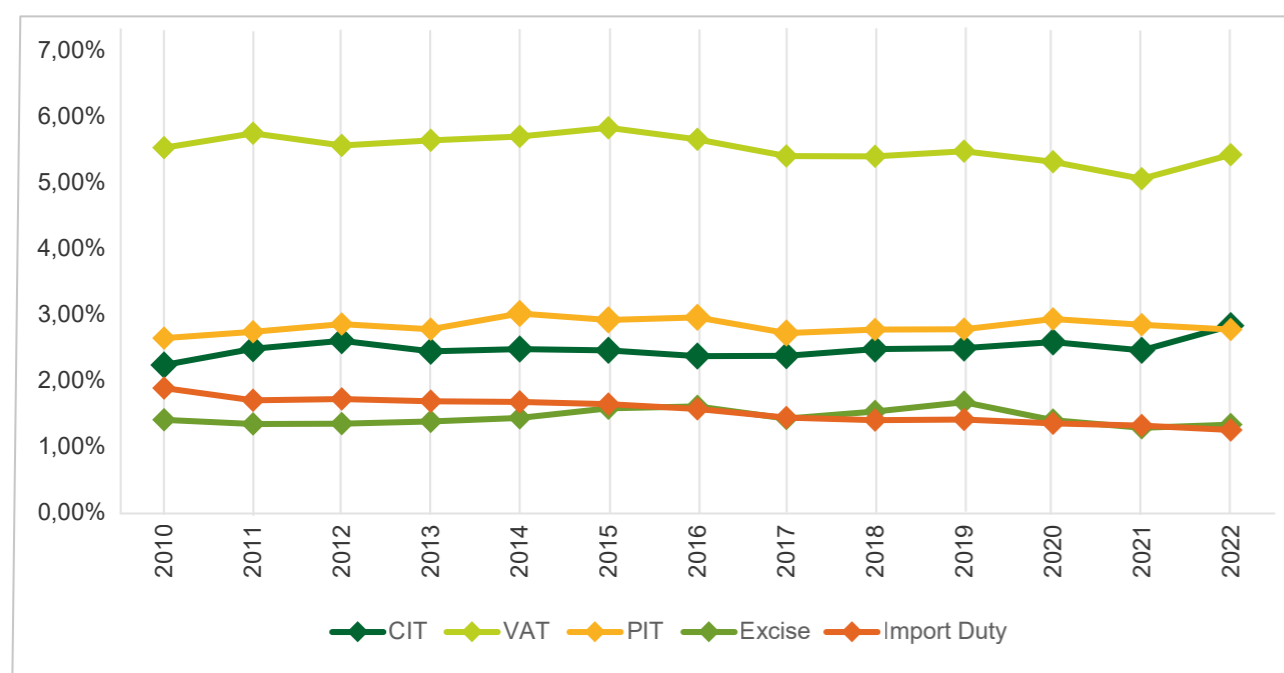


The performance in the shares of major tax heads relative to GDP remained broadly consistent over the years, with the exception of VAT which exhibits a declining rate of collection over the years, before picking up in 2022. In 2022, the contribution of VAT which has the highest share to GDP, increased its share to 5.43% from 5.06% in 2021 (see Figure 3.6). CIT's share to GDP also increased significantly from

2.47% in 2021 to 2.84% in 2022, in line with the substantial growth observed in CIT collections during the period.

The contribution of excise duties and import duties on the other hand declined slightly. Excise duties decreased by 0.05 percentage point while import duties saw a decline of 0.07 percentage points when compared to the previous period.

FIGURE 3.6 AVERAGE CONTRIBUTION OF TAX HEADS TO GDP, 2010 - 2022



3.2.1. Performance of Value-Added Tax as the main contributor to TTR

Value-added tax is an indirect tax on the consumption of goods and services. It is charged proportional to the prices of goods and services at each stage of production, or sale to retailers and consumers. In 2022, the standard VAT rate in the different ATO countries ranged from 7.5% (in Nigeria) to a maximum of 20% (in Madagascar and Morocco), giving an ATO average of 16.16%.

This average is slightly up from the 16.12% recorded in 2021 for the same 3⁵¹⁷ countries. This is mainly due to the upward revision of the standard VAT rate by Botswana from 12% to 14% and Zimbabwe from 14.5% to 15% during the year. While increasing the VAT can be beneficial in raising additional revenue for the government, the effect on households is negative through increased cost of living for all, especially the poor and low-income households (Njozela, 2018). Mozambique on the other hand implemented a downward revision to the VAT rate from 17% down to 16% (see Table 3.1).

TABLE 3.1 VAT THRESHOLDS AND RATES IN ATO COUNTRIES, 2022

Country	Standard VAT rate	VAT threshold (US\$ PPP)	Rate Change 2021-2022
Angola	14.00%	46 498.57	N
Benin	18.00%	249 484.65	N
Botswana	14.00%	191 452.24	Y (12% to 14%)
Burkina Faso	18.00%	245 020.91	N
Burundi	18.00%	146 912.48	N
Cameroon	19.25%	222 442.33	N
Cape Verde	15.00%	N/A	N
DR Congo	16.00%	84 664.21	N
Côte d'Ivoire	18.00%	858.48	N
Eswatini	15.00%	81 564.65	N
Gabon	18.00%	179 621.05	N
The Gambia	15.00%	112 349.58	N
Ghana	12.50%	176 787.83	N
Guinea-Bissau	19.00%	N/A	N
Kenya	16.00%	116 472.79	N
Lesotho	15.00%	126 436.89	N
Liberia	10.00%	N/A	N
Madagascar	20.00%	343 033.26	N
Malawi	16.50%	28 288.17	N
Mauritius	15.00%	357 645.42	N
Morocco	20.00%	531 085.65	N
Mozambique	16.00%	N/A	Y (17% to 16%)
Namibia	15.00%	69 748.84	N
Niger	19.00%	N/A	N
Nigeria	7.50%	158 218.51	N
Rwanda	18.00%	N/A	N
Senegal	18.00%	211 033.43	N
Seychelles	15.00%	310 960.75	N
Sierra Leone	15.00%	N/A	N
South Africa	15.00%	143 500.08	N
Tanzania	18.00%	112 768.77	N
Togo	18.00%	273 154.65	N
Uganda	18.00%	117 331.18	N
Zambia	16.00%	123 621.16	N
Zimbabwe	15.00%	40 000.00	Y (14.5% to 15%)
ATO Average	16.16%	171 982.37	

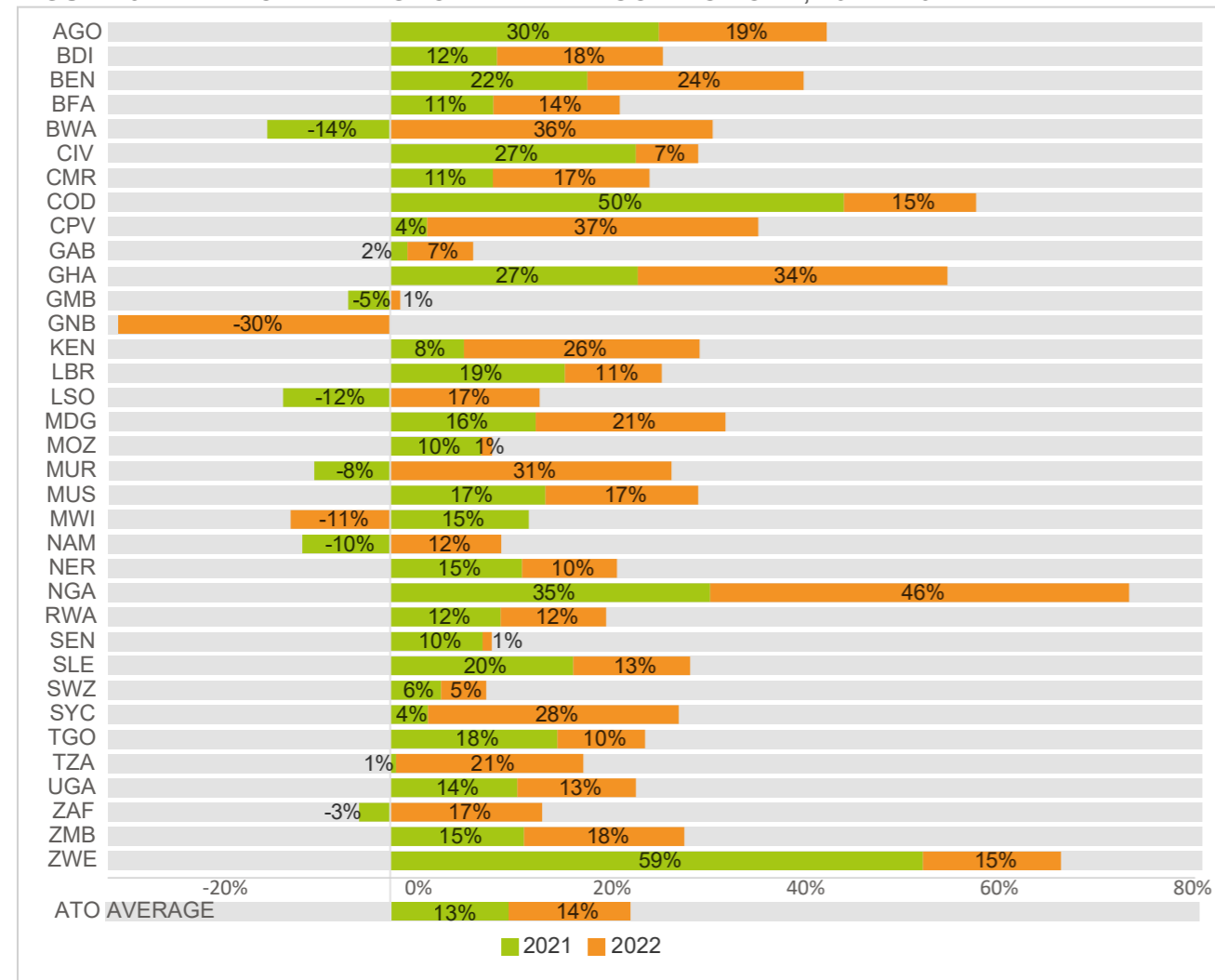
17. South Sudan excluded from the analysis since it does not have VAT (administers Sales tax).

The ATO-wide VAT collections growth improved to 15.18% in 2022 from 12.96% in 2021 in line with improved economic conditions in the ATO countries compared to the previous two years. Only Malawi and Guinea-Bissau recorded negative growths during the period compared to six¹⁸ countries in 2021.

Nigeria recorded the highest growth of 46.32% from 35.38% in 2021 as shown in Figure 3.7, followed by rebound growths from Cape Verde (4.09% to 36.62%) and Botswana (-13.59%

to 35.67%), with the latter benefitting from the increase in the VAT rate from 12% to 14%. Recovery in the key economic sectors in these economies, coupled with the high prices (from which VAT is levied) experienced in most economies during the year contributed to the increased VAT revenues during the period. The lowest positive growths were recorded by Senegal, The Gambia, and Mozambique whose growth rates stood at 1.04%, 1.10% and 1.22% respectively during the period.

FIGURE 3.7 YEAR-ON-YEAR GROWTH IN VAT COLLECTIONS, 2021 - 2022

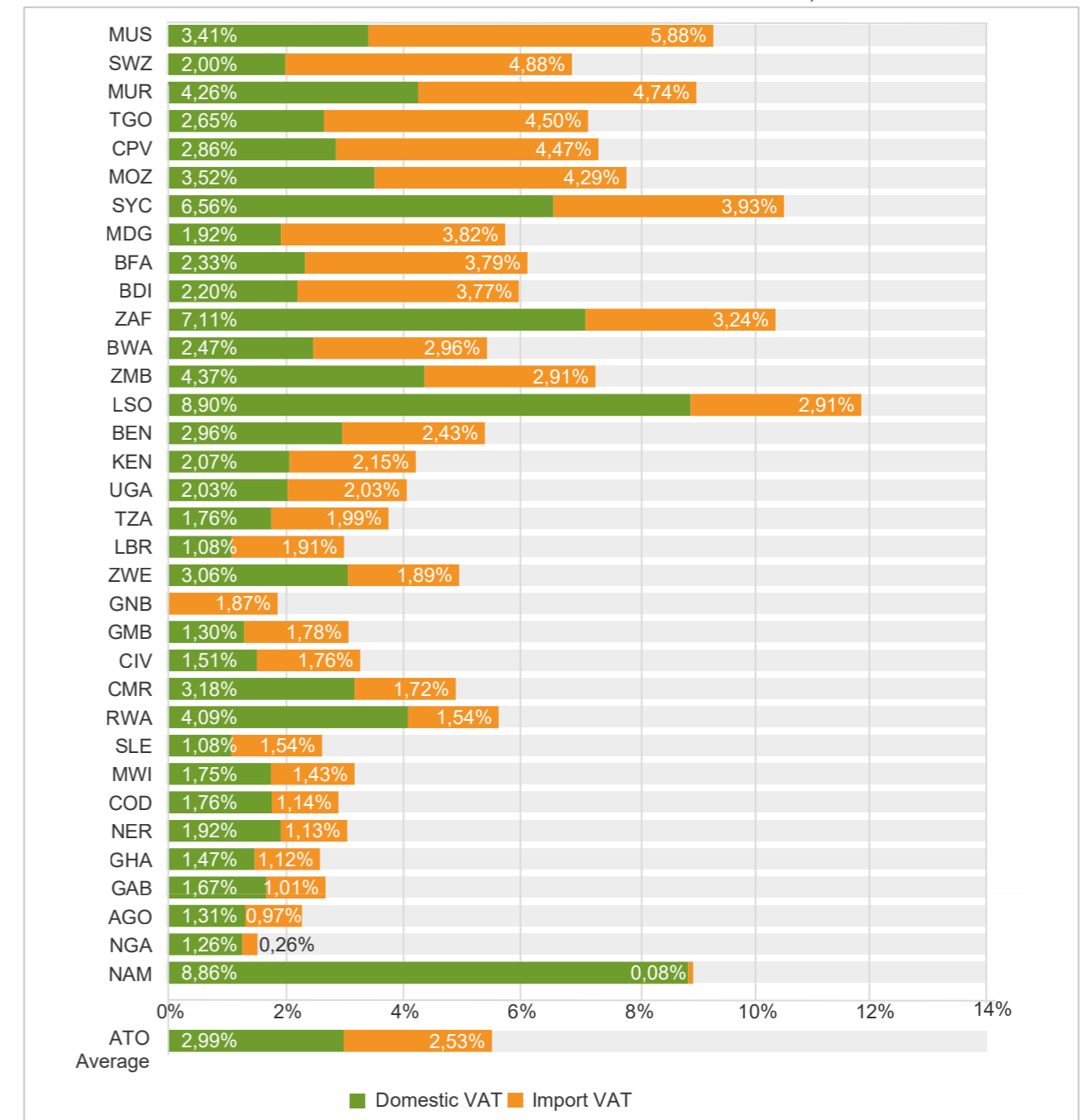


Shares of Domestic and Import VAT revenues to GDP.

The average contributions of domestic and import VAT revenues to GDP in ATO countries were recorded at 2.99% and 2.53% respectively (see Figure 3.8). Countries like Lesotho, Namibia, South Africa, and Seychelles had the highest contribution of domestic VAT to GDP during the year.

This may indicate robust domestic consumption features in these economies reflecting by the higher vat collection. On the hand, countries such as, Morocco, Eswatini, Mauritius and Togo had a largest contribution from import VAT collections. This may signal the importance of import activities within these countries.

FIGURE 3.8 SHARES OF VAT REVENUE TO GDP IN ATO COUNTRIES, 2022



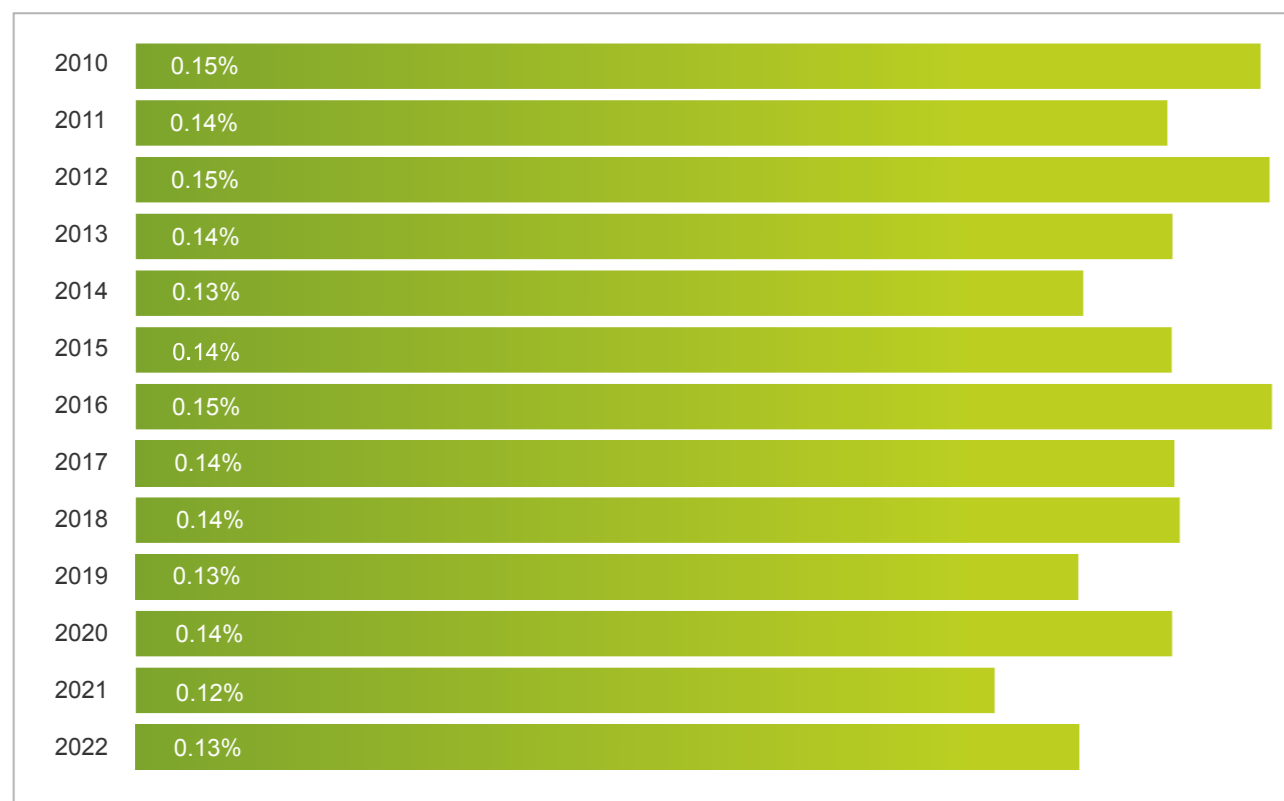
18. Botswana, Lesotho, Namibia, Mauritius, The Gambia, and South Africa.

VAT refunds' share to VAT revenue increases in 2022

The level of VAT refunds as a proportion of gross VAT collections varies amongst countries, with developing economies showing higher levels than advanced economies. There are several factors that influence VAT refund levels within an economy, such as the nature of the economy, the design of the VAT system, the compliance behaviour of taxpayers, the extent of VAT fraud, and the culture of the tax administration.

VAT refunds tend to be higher in countries with more open economies, as well as those with higher levels of investments, (IMF, 2021). Refund levels may also be influenced by tax administrations and governments' decisions to delay or deny refund claims to address cash flow challenges. The ATO-wide VAT refunds' share to VAT revenue depicts a fluctuating trend over the years, with an average of 13.88%. In 2022, the ratio stood at 13.27%, which was higher than the 12.34% recorded in 2021 (Figure 3.9).

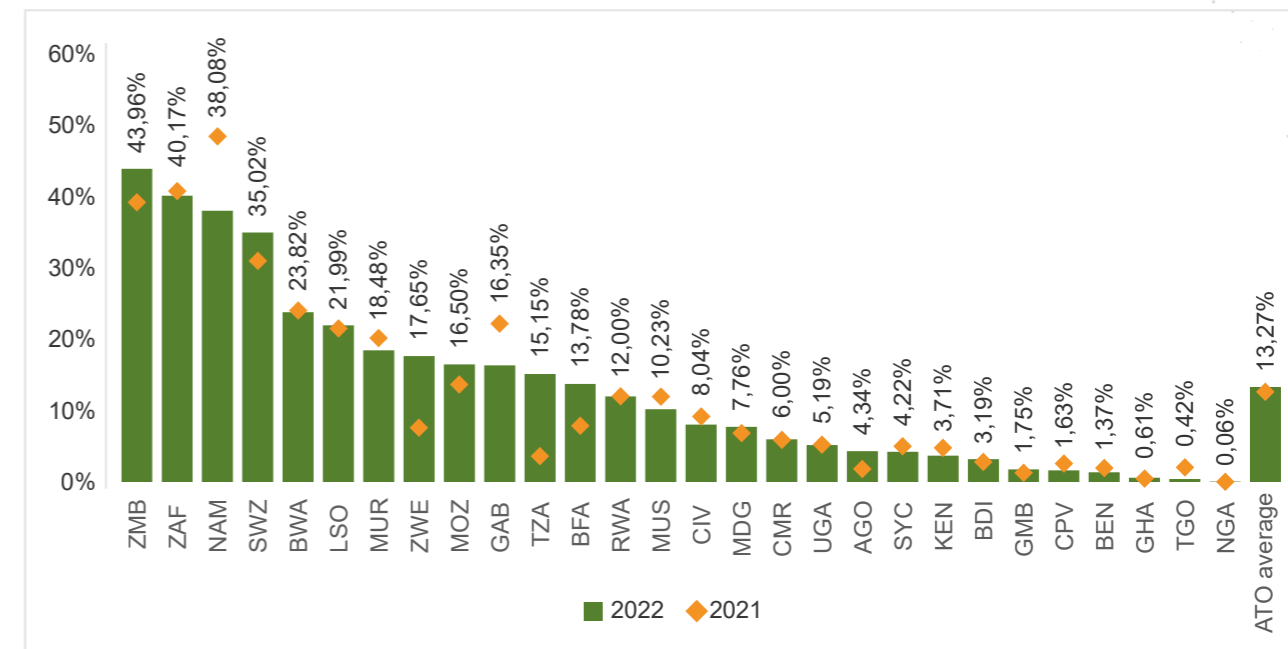
FIGURE 3.9 ATO-WIDE VAT REFUNDS TO VAT COLLECTIONS RATIO, 2010 - 2022



The highest share of VAT refunds in the ATO was paid out by Zambia at 43.96% from 39.23% in 2021. Five countries namely: Tanzania, Zimbabwe, Burkina Faso, Zambia and Eswatini recorded the highest increases in their respective VAT refunds to VAT collections ratios in the review period, possibly pointing out the extent of the challenges that countries face in managing refunds.

Only Namibia and Gabon managed to significantly minimise the level of VAT refunds paid out as a percentage of all VAT collections by 10.42 and 5.85 percentage points respectively. For Gabon, this decline was partly due to a return to normalcy of the level of VAT refunds, after a lot of refunds were paid out as part of mitigation measures during the COVID pandemic.

FIGURE 3.10 VAT REFUNDS TO VAT COLLECTIONS RATIO BY COUNTRY, 2021 - 2022



VAT Productivity and Efficiency in ATO countries, 2022

The VAT productivity ratio is the VAT revenue to GDP divided by the standard VAT tax rate (expressed as a percentage). It compares the VAT collected against a theoretical revenue from a perfectly enforced VAT levied at a uniform rate on net consumption expenditure, given that no VAT revenue is lost due to exemptions, reduced rates, and shortcomings in compliance. This publication uses the net VAT revenue after subtracting VAT refunds. Comparing this ratio over time or between countries can be used to gauge the relative revenue performance of the VAT.

VAT productivity measures how much each percentage point of the standard VAT rate collects in terms of GDP as given by the following ratio.

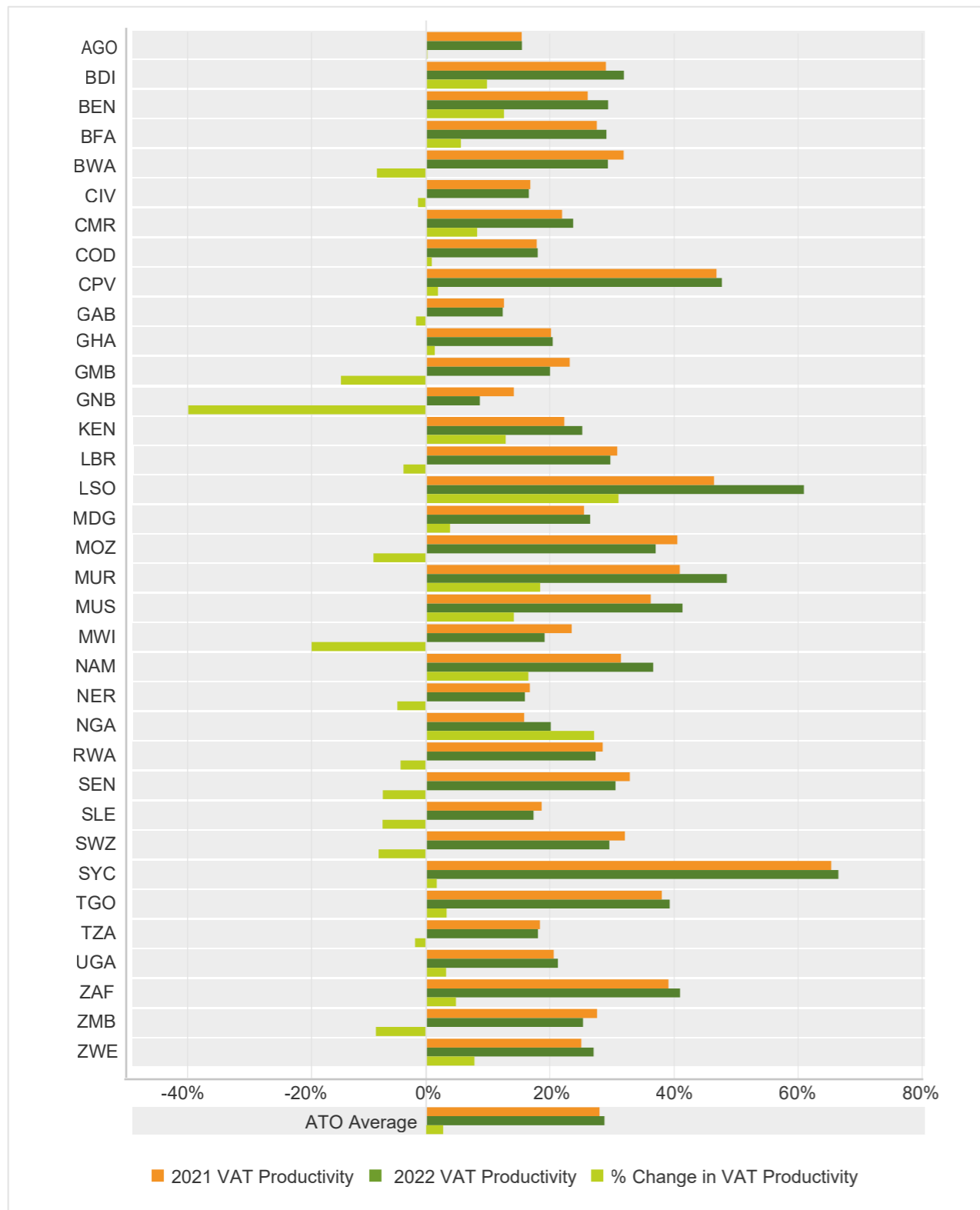
$$\text{VAT Productivity} = (\text{VAT Revenue}/\text{GDP}) / \text{Standard VAT rate}$$

In 2022, the ATO average VAT productivity ratio increased to 31.23%, up from the 27.80% recorded in 2021. While year-on-year performances were mixed for ATO countries, notable growth in VAT productivity ratios was observed in Lesotho, Nigeria, and Mauritius, increasing by 31.27, 27.30 and 18.53 percentage points respectively as shown in Figure 3.11. Seychelles recorded the highest VAT productivity ratio of 67.01% which is higher than the 65.89% in 2021.

In addition to Seychelles' performance, 19 countries recorded positive growths in their VAT productivity ratios, contributing to the overall positive movement observed at the ATO-wide level. This improvement aligns with enhanced revenue collection performances in ATO member countries.

Countries with low VAT productivity in 2022 include Guinea-Bissau, Gabon and Angola and they notably also have low tax-to-GDP ratios, implying that taxes contribute a lesser part to total revenues compared to their non-tax revenues. However, this is also an indication that for these economies, there is still potential to collect higher VAT revenue through other options which may include, the revision of tax bases and rates, including narrowing the prevalence of exemptions which ultimately erode the efficiency of the VAT system.

FIGURE 3.11 VAT PRODUCTIVITY IN ATO COUNTRIES, 2021 - 2022



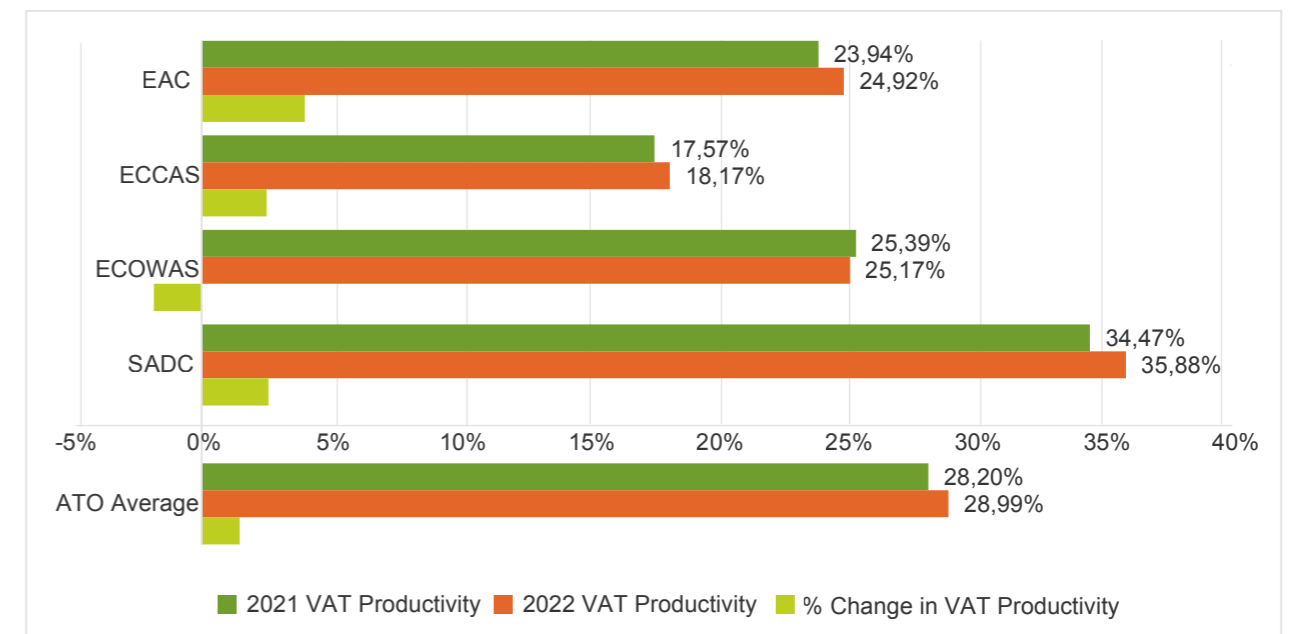
At a regional level, SADC maintained its position of recording the highest VAT productivity ratio (35.88%) in 2022 among the other regions. This high ratio is supported by the strong ratios for economies like Seychelles, Lesotho, Mauritius, and South Africa. In the case of Mauritius, the economy rebounded strongly from the pandemic with some sectors such as Tourism, Trading and Manufacturing performing better than the pre-pandemic period. For South Africa, the increased productivity ratio is the result of several factors. An improvement in VAT performance was attributable to the increase in final consumption expenditures and the expansion of the base resulting from a VAT register increase during the year. Furthermore, compliance revenue, which refers to the

effectiveness of SARS administrative efforts, increased revenue collections while minimising tax revenue leakages.

This region was followed by the ECOWAS at 25.17% even though it declined slightly from 25.39% in 2021, and then the EAC with an average of 24.92% (0.99 percentage points increase from 2021). The least average VAT productivity ratio was recorded by ECCAS at 18.17% but slightly improving from 17.57% in 2021 (see Figure 3.12).

Overall, the regional variation observed in VAT productivity ratios across ATO countries indicates discrepancies or disparities in the efficiency of VAT collection within the members.

FIGURE 3.12 VAT PRODUCTIVITY IN ATO COUNTRIES BY REGIONAL GROUPING, 2021 - 2022



Similar to the VAT productivity rate, the VAT C-efficiency ratio compares the VAT collected by the tax administration against a theoretical revenue from a perfectly enforced VAT. The efficiency ratio is given by VAT revenue yield to the approximated proxy (Final Consumption) divided by the VAT tax rate.

The VAT C-efficiency ratio which should be 100% if compliance is perfect is the most used indicator for evaluating the VAT revenue performance and overall efficiency of the VAT system in an economy. It is defined as:

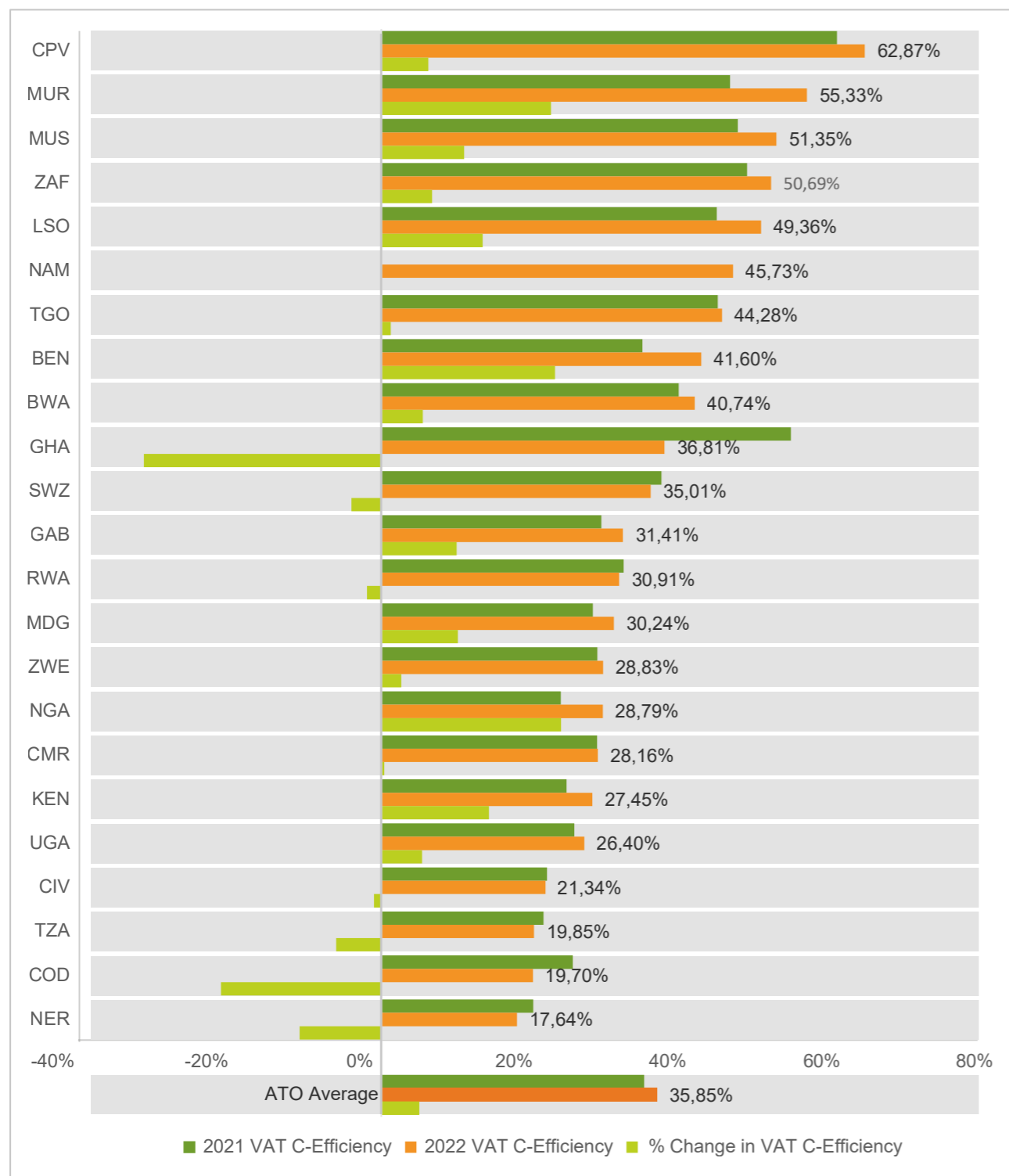
$$\text{VAT C-Efficiency} = \frac{\text{Actual VAT Revenue}}{\text{Final Consumption}} / \text{Standard VAT rate}$$

The average ATO VAT C-efficiency in 2022 was 35.85%, higher than the 34.17% recorded in 2021 (illustrated in Figure 3.13). Cape Verde, Mauritius, Morocco, and South Africa had the highest C-efficiency ratios of 62.87%, 55.33%, 51.35%, and 50.69% respectively. In terms of the year-on-year changes in the C-efficiency ratios, highest increases were observed in Nigeria, Benin, and Morocco whose ratios increased by 23.36, 22.58 and 22.05 percentage points during the review period. Countries with the highest ratios and significant increases on a year-on-year comparisons were notably boosted by the increases in their VAT revenues during the year.

On the other hand, Ghana, DR Congo, and Niger's ratios decreased by 16.45, 5.19 and 2.10 percentage points. In Ghana, the final consumption notably increased by a higher 59.86% against a lower 34.23% increase VAT revenues, hence resulting in the significant decline in the c-efficiency ratio for the period. Over 82.6% (19) of the ATO countries

recorded c-efficiency ratios below 50%, which indicates that there may be a number of factors that erode the taxable base in their economies. Strengthening compliance, managing exemptions, and implementing structural reforms are suggested to enhance tax efficiency across these economies.

FIGURE 3.13 VAT C-EFFICIENCY IN ATO COUNTRIES, 2022



Box 3.2: South Africa leverages on data driven insights in the management of VAT

The South African Revenue Service (SARS) introduced a data-driven risk detection approach that leverages the use of data, along with computer algorithms and machine learning models to propose what compliance intervention is required. The accuracy of risk detection is tracked through a formal feedback loop to ensure algorithms are continuously optimised. Using the data-driven approach to risk detection, SARS has been able to extend its ability to detect risk beyond its automated risk engines, which primarily examined historic and current tax returns or customs declarations. This approach has allowed SARS to analyse large data sets and improve turnaround times in dealing with data covering multi-year periods. The risk-detection is mostly focused on taxpayers who are intentionally noncompliant, such as those who aren't registered for tax, do not file their returns, or under-declare their income significantly.

In the year 2022, SARS processed 4.3 million VAT returns, of which 90% (3.9 million) were processed and assessed through the automated tax processor using the available data and machine learning algorithms.

- 90% of these returns are processed without verification.
- Only 10% of returns were selected for verification via risk engine detection capability with no human intervention.
- From the selected cases, 3 out of every 4 cases selected are completed within 21 days, and more than half of the cases selected by risk engine comes from habitual non-compliant taxpayers.
- The total revenue that was delivered from just this work during the year was over ZAR 41 billion (USD 2.16 billion)
- Resulted in 54 successful criminal prosecutions of VAT violations.

These achievements underscore the significance of data-driven processes and compliance initiatives combined with appropriate analytical tools for tax administrations. Data-driven insights play a crucial role in encouraging voluntary compliance, identifying, and addressing non-compliance, and ultimately enhancing tax revenue collections.

Source: SARS Annual Report 2022/23, and Commissioner of SARS, Mr Edward Kieswetter, speech during 2022 ATO launch.

3.2.2. Corporate income tax collections significantly pick-up in 2022

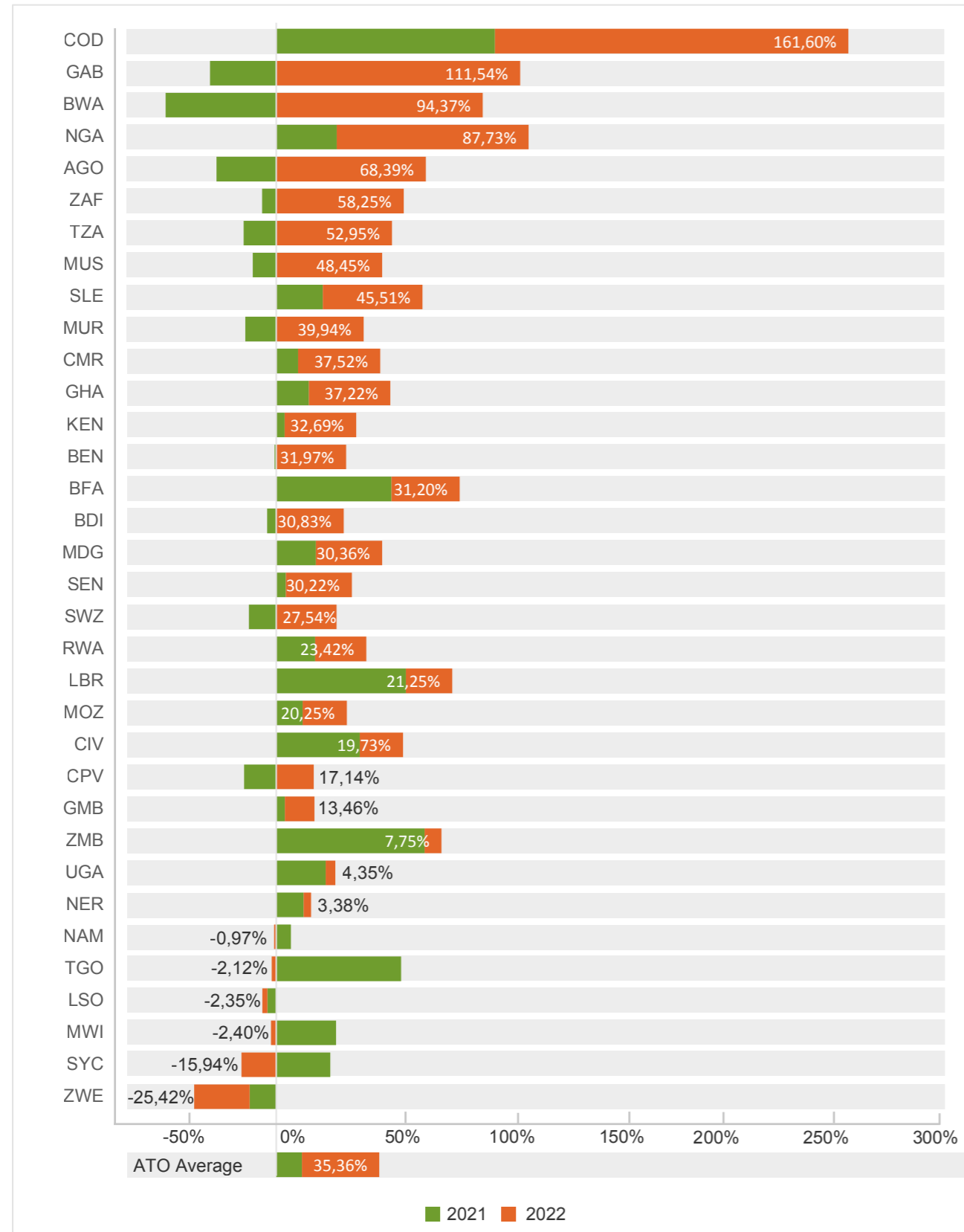
Corporate income tax is imposed on profits of a corporation and is one of the major taxes administered in ATO countries. The average ATO corporate income tax standard rate in 35 countries that provided data for 2022 stood at 27.29%, down from 27.71% in 2021. This is mainly because of downward revisions in the standard CIT rates for Seychelles and Zambia effective January 2022. Seychelles revised their standard CIT rate from 25% to 15%, and now hold the lowest rate in the region together with Mauritius. Zambia also revised the standard CIT rate from 35% to 30%. The main aim of the rate cuts was to promote investment that would in turn boost growth in the economies. Similar to 2021, the CIT rates in

the ATO range from 15% in Mauritius and Seychelles, to a maximum of 35% in DR Congo.

In 2022, CIT recorded the highest growth when compared to other major tax lines, benefitting from increased profits by companies which are attributed to the resurgence of economic activities observed in the majority of the ATO countries. The ATO-wide CIT growth rate was 35.36%, from the 2021 growth of 11.78%. Contributing to this significant increase were DR Congo (161.60%), Gabon (111.54%), Botswana (94.37%) and Nigeria (87.73%) as shown in Figure 3.14. These economies experienced increased company profits in the oil, diamond, and trade industries (as mentioned in Chapter 2).

Only six¹⁹ countries recorded declines in their CIT collections during the period, among which there is Seychelles whose revenues declined after a 10.00 percentage points cut in the CIT rate. While CIT tax rate cuts have a medium to long-

FIGURE 3.14 YEAR ON YEAR GROWTH IN CIT REVENUE IN ATO COUNTRIES, 2021 - 2022



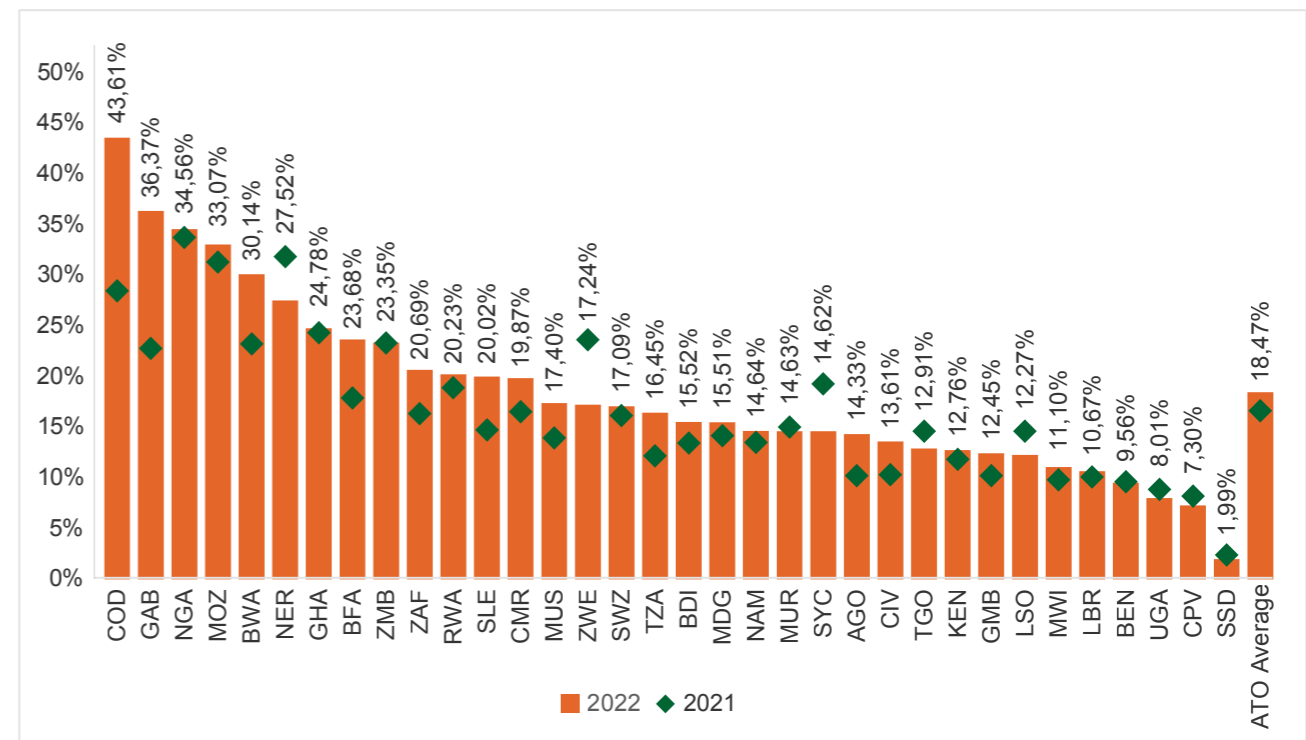
19. Namibia, Togo, Lesotho, Malawi, Seychelles, and Zimbabwe.

term objective of increasing after tax profits; a great incentive for investment, which in turn increases productivity and economic growth, the immediate impact is often negative on the revenues. Seychelles serves as an example of this phenomenon, although it is anticipated that revenues will recover in the subsequent years of assessment. Zimbabwe had the highest decline in the CIT collections despite the revenue administration's attempts to maximise CIT revenue through various revenue enhancing activities such as sector-based audits and door-to-door visits to harness revenue from various sectors (Zimbabwe Revenue Authority, 2022).

CIT as a share of total tax revenue, 2022

The share of CIT to total tax revenue in the ATO countries increased to 18.47% in 2022 compared to 16.65% in 2021, which represents averages for the 34 countries who provided data for both years. The increase is in line with the observed overall performance of the CIT collections in the review period. The highest CIT to total revenue ratios as shown in Figure 3.15 were recorded in DR Congo (43.61%), Gabon (36.37%), Nigeria (34.56%) and Mozambique (33.07%), supported by the significant increases in their CIT revenues for the year (see section 3.2.2). Zimbabwe, Seychelles, Niger, Togo, and

FIGURE 3.15 DISTRIBUTION OF CIT REVENUE SHARES TO TOTAL TAX REVENUE IN ATO, 2021-2022



Lesotho, recorded declines in their respective ratios, mostly influenced by the decline in their CIT collections during the period.

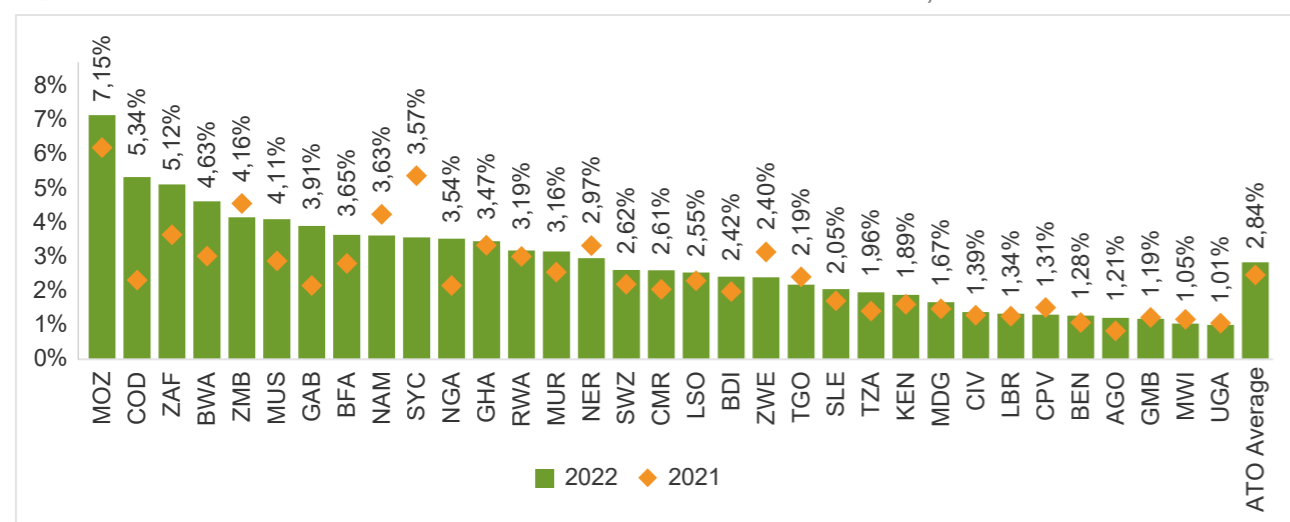
CIT as a proportion of GDP, 2022

The proportion of CIT collections to GDP performance was broadly similar to the CIT to total revenue performance for the period. The ATO average which now covers 33²⁰ countries was recorded at 2.84% in 2022, increasing from 2.47% in 2021. Mozambique had the highest ratio of 7.15% from 6.20% in the previous year.

The most improved CIT-to-GDP ratio was recorded by DR Congo who increased by 3.02 percentage points to 5.3% in 2022 and other countries with higher ratios included South Africa (5.12%), Botswana (4.63%) and Zambia (4.16%). Seychelles, Zimbabwe, and Namibia had the highest declines in their CIT-to-GDP ratios by 1.81, -0.74 and 0.61 percentage points in the year, in the same line as the reductions observed in their CIT-to-total revenue ratios.

20. South Sudan did not have GDP figures.

FIGURE 3.16 CONTRIBUTION OF CIT TO GDP IN ATO COUNTRIES, 2021 - 2022



CIT Productivity in ATO countries, 2022

The CIT revenue performance across countries is measured by two ratios namely; productivity and C-efficiency. The productivity ratio is the CIT revenue yield to GDP divided by the corporate income tax rate. The C-efficiency is given as a ratio of CIT revenue yield to the theoretical proxy Gross Operating Surplus (GOS) divided by the corporate income tax rate. Due to unavailability of data on this variable, the indicator is not covered in this publication.

The CIT productivity is given by the following ratio:

$$\text{CIT Productivity} = \frac{\text{Actual CIT Revenue/GDP}}{\text{Standard CIT rate}}$$

The average CIT productivity for ATO countries in 2022 as shown in Figure 3.17 was recorded at 10.05%, which was a 1.49 percentage points increase from the 8.56% recorded in 2021. Noteworthy is the consistency in the top-performing countries, with Seychelles (23.81%), Mauritius (21.06%), and Botswana (21.04%) maintaining their lead in CIT productivity, as seen in 2021.

When analysing the year-on-year changes, increases in the CIT productivity ratios was observed in 23 (74%) member countries for the year and decreases were observed in the economies of The Gambia, Uganda, Zambia, Togo, Malawi, Niger, Cape Verde, Namibia, and Zimbabwe. In terms of performance by the regional groups, all groups recorded increases in their CIT productivity with the SADC having the highest ratio of 12.82% followed by the ECCAS at 12.06%, ECOWAS at 8.03%, and EAC at 7.01% (see Figure 3.18). Notably, the ECCAS almost doubled its productivity ratio, benefitting from significant increases in the productivity of DR Congo and Gabon.

FIGURE 3.17 CIT PRODUCTIVITY BY COUNTRY, 2021 - 2022

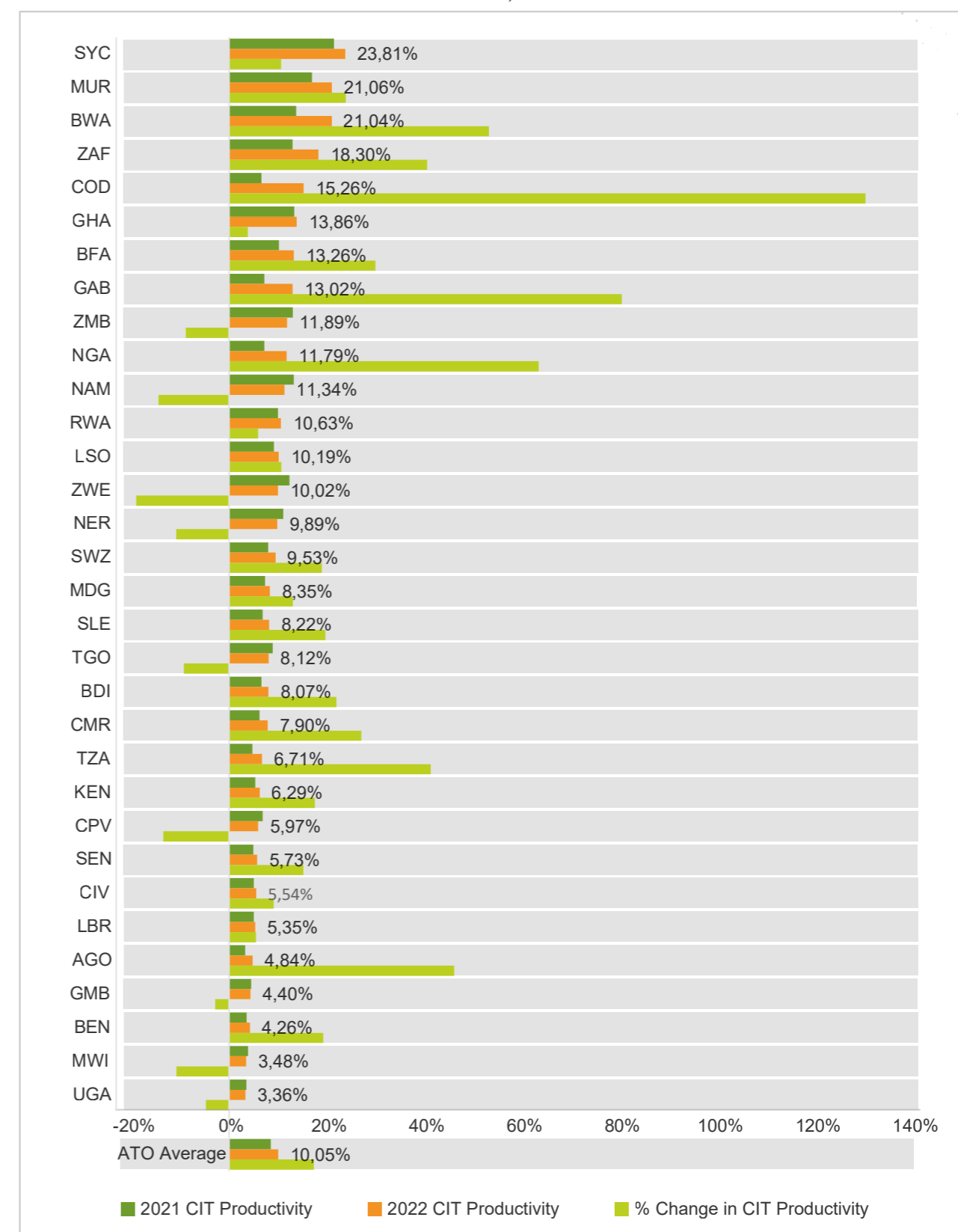
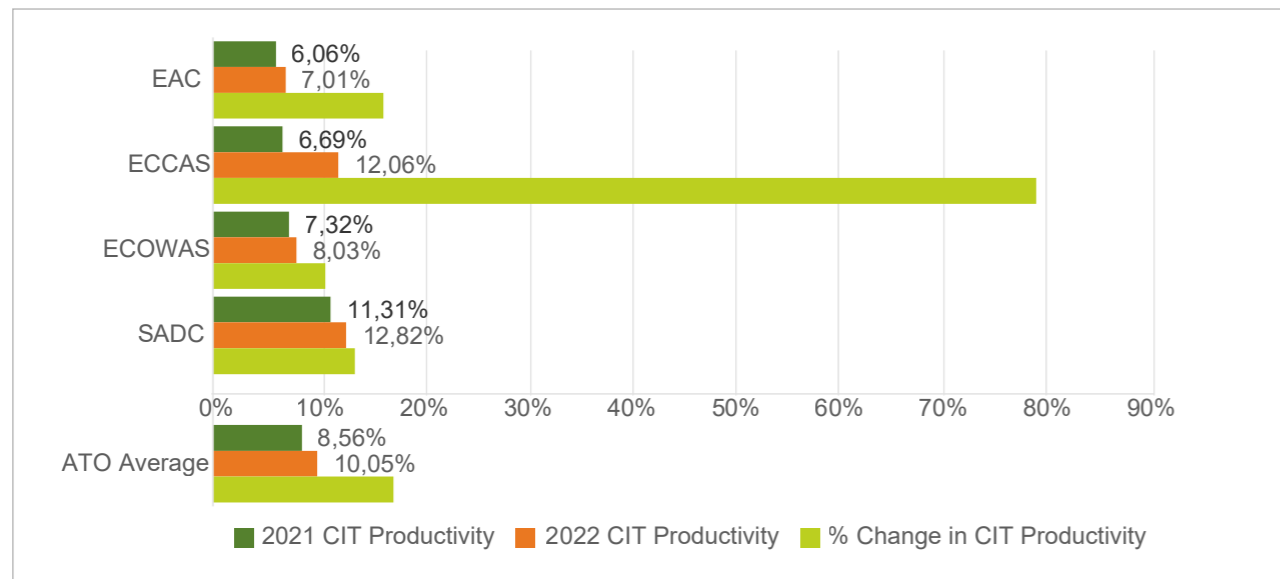


FIGURE 3.18 CIT PRODUCTIVITY BY REGIONAL GROUPING, 2021 - 2022

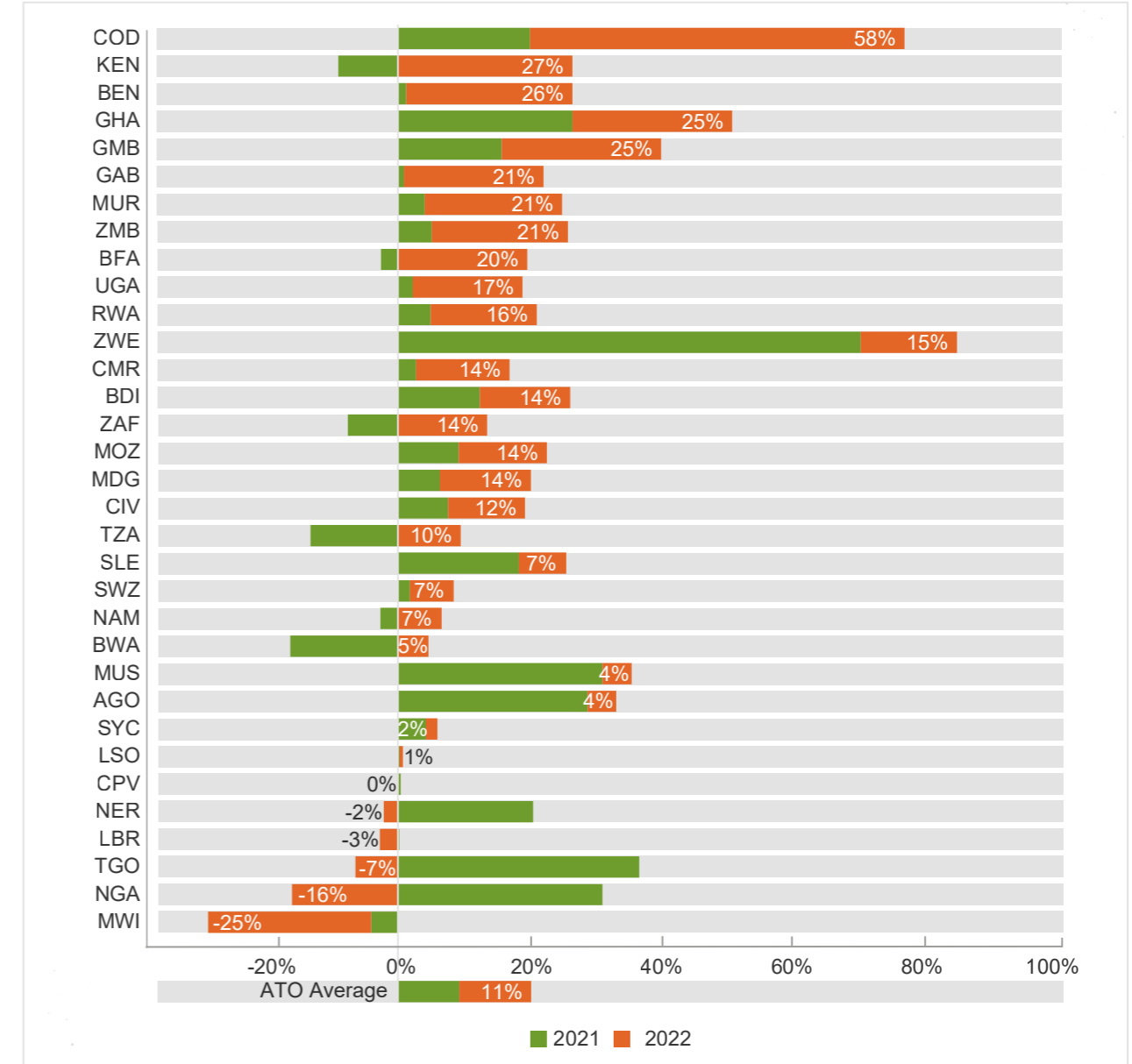


3.2.3. Performance of Personal Income Tax

Personal income tax is levied on individuals' wages, salaries, and other types²¹ of income and is among the major contributors to total tax revenue in ATO countries. This is despite the widely known fact that in most low- and middle-income countries (LMICs), a significant proportion of the workforce operates informally, outside the horizon of the PIT and social security nets (McNabb & Granger, 2023).

ATO countries are noted to be on a recovery path after the COVID-19 pandemic effects on employment and general economic activities, as indicated by the growth in PIT collections in 2022, standing at 11.07% from 9.44% in 2021 (see Figure 3.19). A total of 27 (82%) countries out of 33 recorded positive growth in PIT revenue while six countries experienced declines. These countries were Cape Verde, Niger, Liberia, Togo, Nigeria, and Malawi indicating that the pace of recovery in employment dynamics in ATO countries differs, depending on their policies and implemented recovery initiatives.

FIGURE 3.19 YEAR-ON-YEAR GROWTH OF PIT IN ATO COUNTRIES, 2021 - 2022



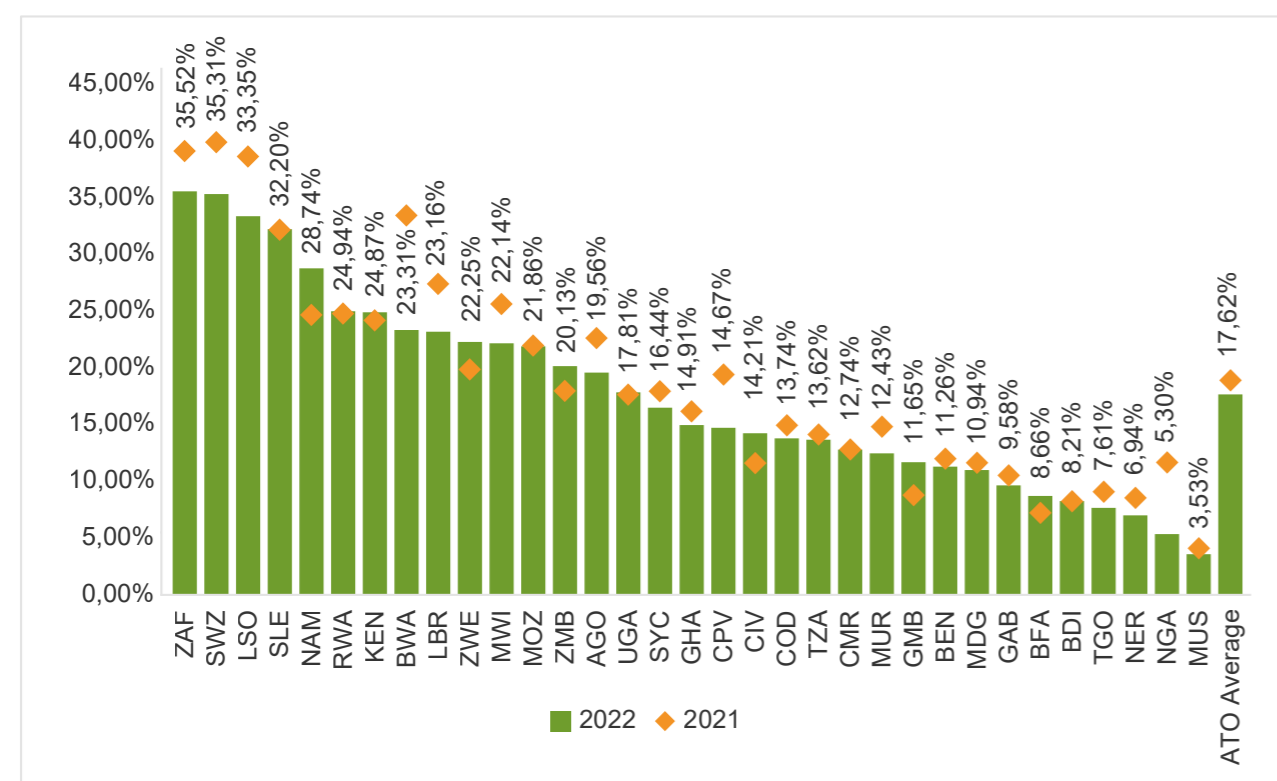
21. Includes dividends, interest, and other income a person earns in a given period.

PIT as a share of total tax revenue, 2022

The ATO-wide contribution of PIT revenue to total tax revenue in 33 countries was recorded at 17.62% in 2022, which was lower than the contribution of 18.85% in 2021 (see Figure 3.20). While most countries recorded increases in their respective PIT growths, its contribution to total revenue was somewhat countered by much higher increases in the other major tax heads (CIT and VAT), who in turn recorded major increases in their tax type-to-total revenue ratios. Botswana, Nigeria, and Lesotho recorded the highest reductions in their

PIT-to-TTR ratios by 10.09, 6.31 and 5.25 percentage points respectively. In these countries, PIT tax revenues grew at slower rates compared to other major tax heads, resulting in the decreased shares of PIT collections to total revenues. On the other hand, Namibia, The Gambia, and Côte d'Ivoire's ratios increased by 4.13, 2.91 and 2.66 percentage points respectively. The increase in Namibia can be attributed to the launch of the semi-autonomous revenue authority, in 2021. Furthermore, the revenue authority engaged in enforcement strategies to collect outstanding debt.

FIGURE 3.20 CONTRIBUTIONS OF PIT TO TOTAL TAX REVENUE, 2021 - 2022

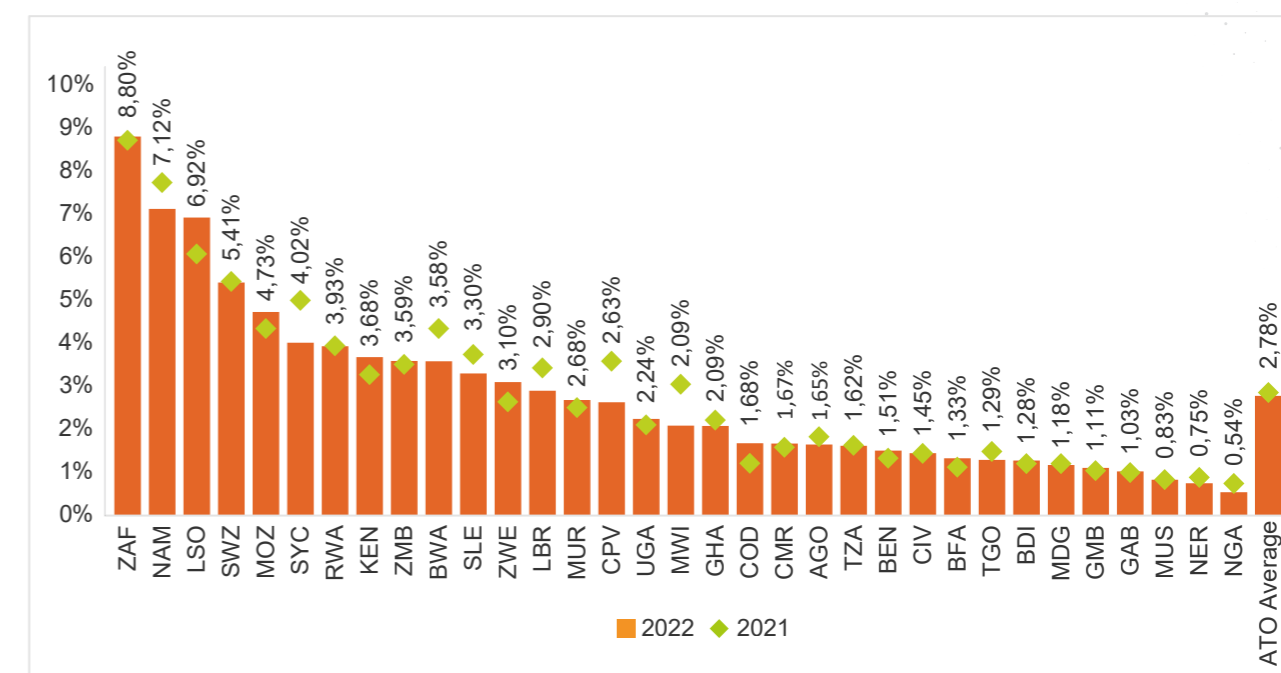


PIT contributions to GDP declined in 2022

Similar to the PIT-to-TTR ratio, the average contribution of PIT collections to GDP in the ATO countries marginally dropped to 2.78% from 2.85% in 2021 as illustrated in Figure 3.21. South Africa sustained its strong performance with the highest contribution at 8.80% of PIT revenue to GDP slightly improving from 8.71% in 2021. Nigeria, Niger, and Morocco had the lowest contribution of PIT revenue to GDP at 0.54%, 0.75% and 0.83% respectively during the review period.

Consistent with data from (UNU-WIDER, 2021) highlighting low PIT-to-GDP ratios in Low- and Middle-Income Countries (LMICs) at 2.55% in 2021, a similar trend can be observed among most ATO countries, with an average contribution of 2.78% for the year. It is noteworthy that 61% of member countries reported figures below this average.

FIGURE 3.21 CONTRIBUTIONS OF PIT TO GDP IN 2021 - 2022

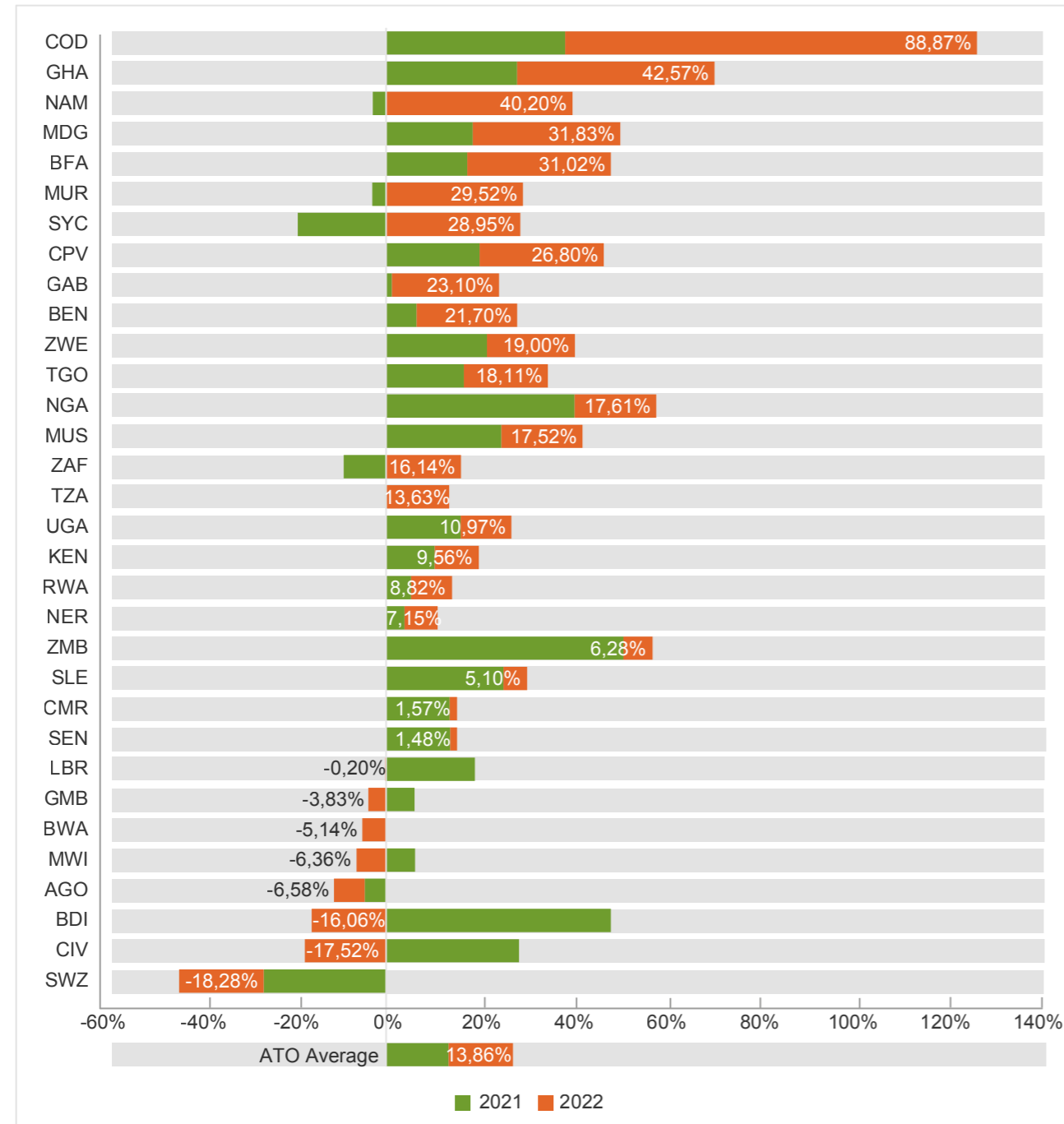


3.2.4. Import Duties

In 2022, the average growth of import duty revenues in the ATO countries was recorded at a slightly improved 13.86% when compared to 13.51% in 2021, as depicted Figure 3.22. There was a mixed performance across countries, with some experiencing robust growth while others faced declines. DR Congo (88.87%) had the highest growth in import duties, followed by Ghana (42.57%), Madagascar (31.83%) and Burkina Faso (31.02%). These positive performances were however countered by declines in Eswatini (18.28%), Côte d'Ivoire (17.52%) and Burundi (16.06%).

While trade facilitation has returned to normality in most countries after COVID-19 related restrictions, recovery in trade revenue for some ATO countries is slower, mainly due to the varying extents of the disruption to customs activities that occurred during the period. Some border processes still remain cumbersome and time-consuming in some economies thus affecting trade facilitation and all related revenues.

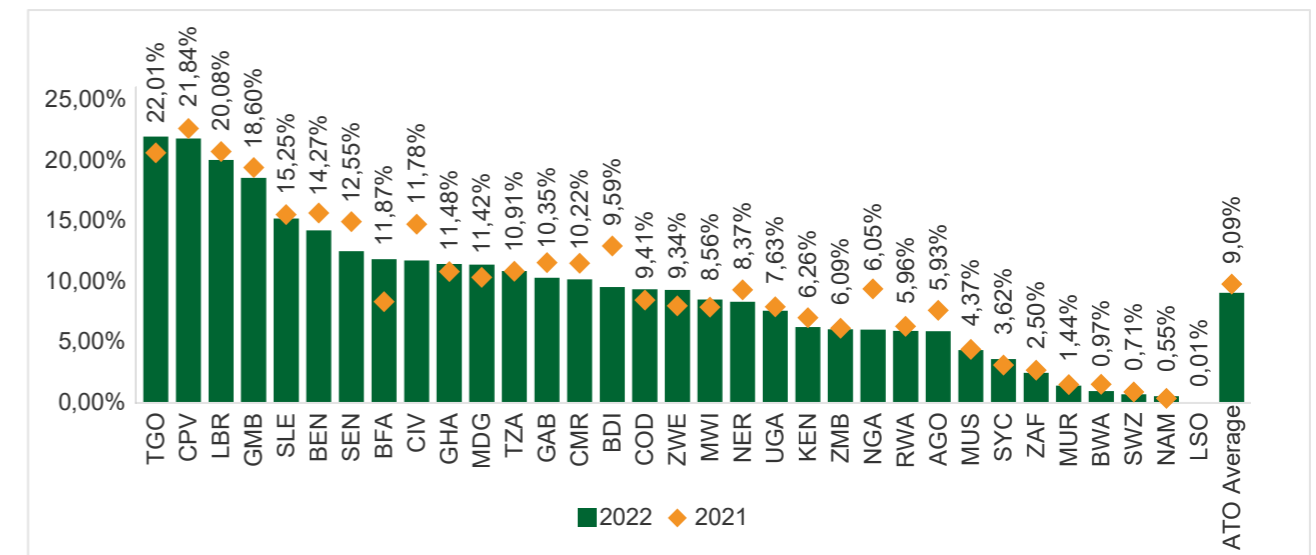
FIGURE 3.22 YEAR ON YEAR GROWTH RATES OF IMPORT DUTIES IN ATO COUNTRIES, 2011 - 2022



The import duties' contribution to total tax revenue ratio in ATO countries also shows a marginal decline to 9.09% in 2022, from 9.81% in 2021, depicted in Figure 3.23. Nigeria, Burundi, and Côte d'Ivoire had the largest declines in their import duties-to-total tax revenue ratios in the period of 3.38, 3.37 and 2.99 percentage points, while the top three increases in the ratios were recorded by Burkina Faso, Togo, and Zimbabwe with 3.52, 1.34, and 1.31 percentage points respectively. The increased contribution of import duties to

total tax revenue in Zimbabwe was enhanced by enforcement activities such as risk-based post-clearance audits and anti-smuggling initiatives that were carried out by ZIMRA. In the case of Burkina Faso, there has been a sharp increase in import duties-to-total tax revenue due to the two reasons, firstly, the increase in the price of fuel (35 FCFA/litre for super 91 and 30 FCFA/litre for diesel) and, secondly, the dismantling of a fuel smuggling network, all of which have propelled import revenues.

FIGURE 3.23 SHARES OF IMPORT DUTIES TO TOTAL TAX REVENUE, 2021 - 2022



The shares of import duties to GDP for ATO countries also declined in 2022 by 0.07 percentage points to 1.26% (illustrated in Figure 3.24). Countries with the highest proportions of import duties to GDP were Cape Verde (3.93%), Togo (3.74%) and Liberia (2.52%). Those with the lowest ratios were mostly SACU member states²² whose import duties-to-GDP ratios were all below 0.2%.

Under the SACU agreement, which provides for free trade in goods among member states and a common external

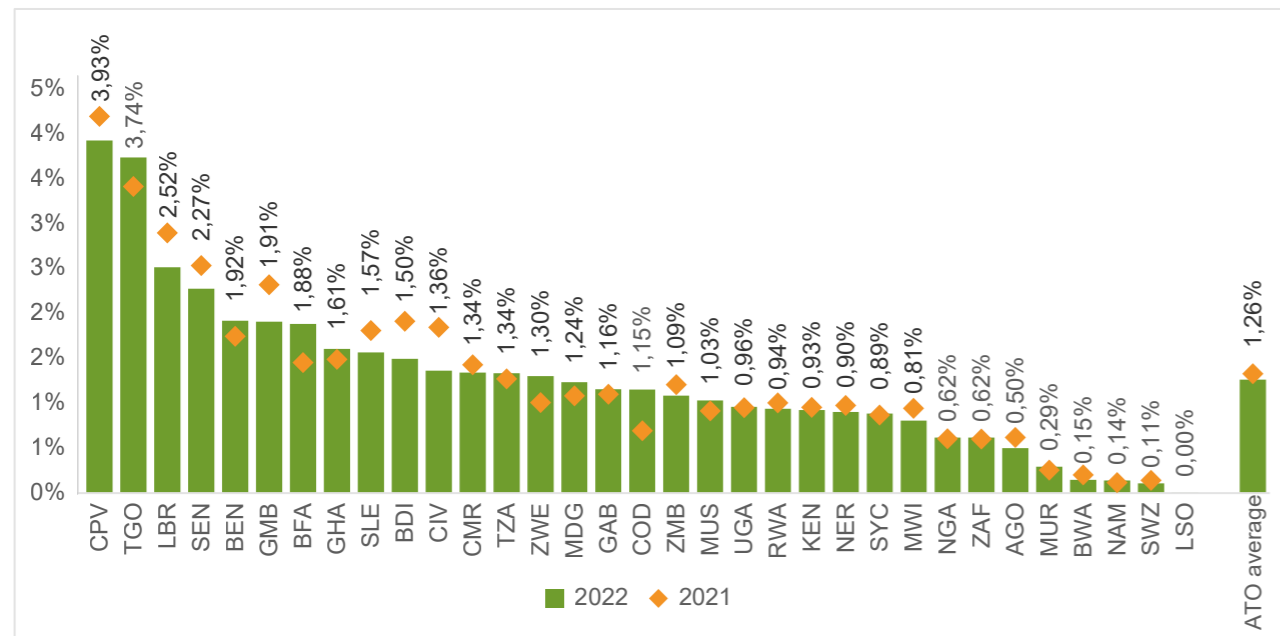
tariff, the countries collect the customs and excise duties and pay them into the Common Revenue Pool (CRP)²³. These customs and excise duties collected in the CRP are then shared amongst the member states every financial year with each country's share determined using the agreed SACU Revenue Sharing Formula²⁴. As such, the SACU countries, with the exception of Namibia are not accounting for most these duties under the tax lines.

22. Botswana, Lesotho, Eswatini, Namibia and South Africa.

23. Revenue pool of all customs, excise and additional duties collected in the SACU member states.

24. Formula used to calculate the revenue shares accruing to each Member State every financial year.

FIGURE 3.24 CONTRIBUTION OF IMPORT DUTIES TO GDP, 2021 - 2022

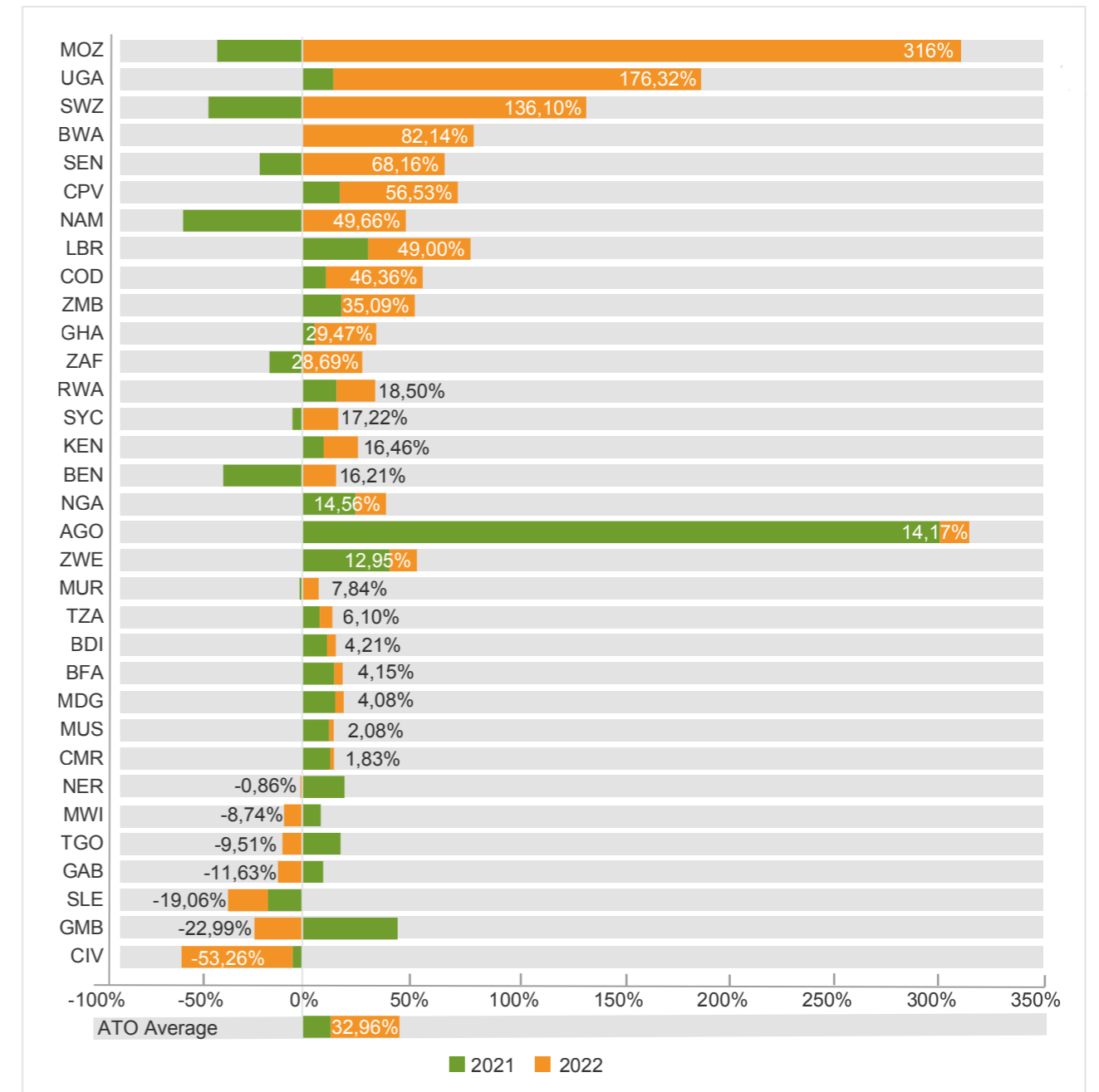


3.2.5. Excise Duties

Excise duties are important revenue instruments imposed on a selected goods, in order to raise revenue and to deter their consumption for health, environmental and other reasons. The goods subject to excise tax under this category are typically items with either externalities or are considered luxurious. Examples of such goods include among others: alcohol; fuel; tobacco; automobiles and cosmetics. The amount of revenues raised by excise duties and the economic impact of these taxes depends on their structure (OECD, 2020).

The year-on-year growth in excise duty collections in ATO countries recorded a strong rebound of 32.96% in 2022 compared to 13.66% in 2021 (see Figure 3.25). This growth came as a result of robust recovery in excise collections from Mozambique (315.68%), Uganda (176.32%) and Eswatini (136.10%), benefitting from the economic upswing these nations experienced, particularly the lifting of prohibitions on alcoholic beverages imposed during the height of the COVID-19 pandemic. Only seven (out of 33) countries had negative revenue growth for the year, slightly down from the nine reported in 2021.

FIGURE 3.25 YEAR ON YEAR GROWTH RATES OF EXCISE DUTIES, 2021 - 2022

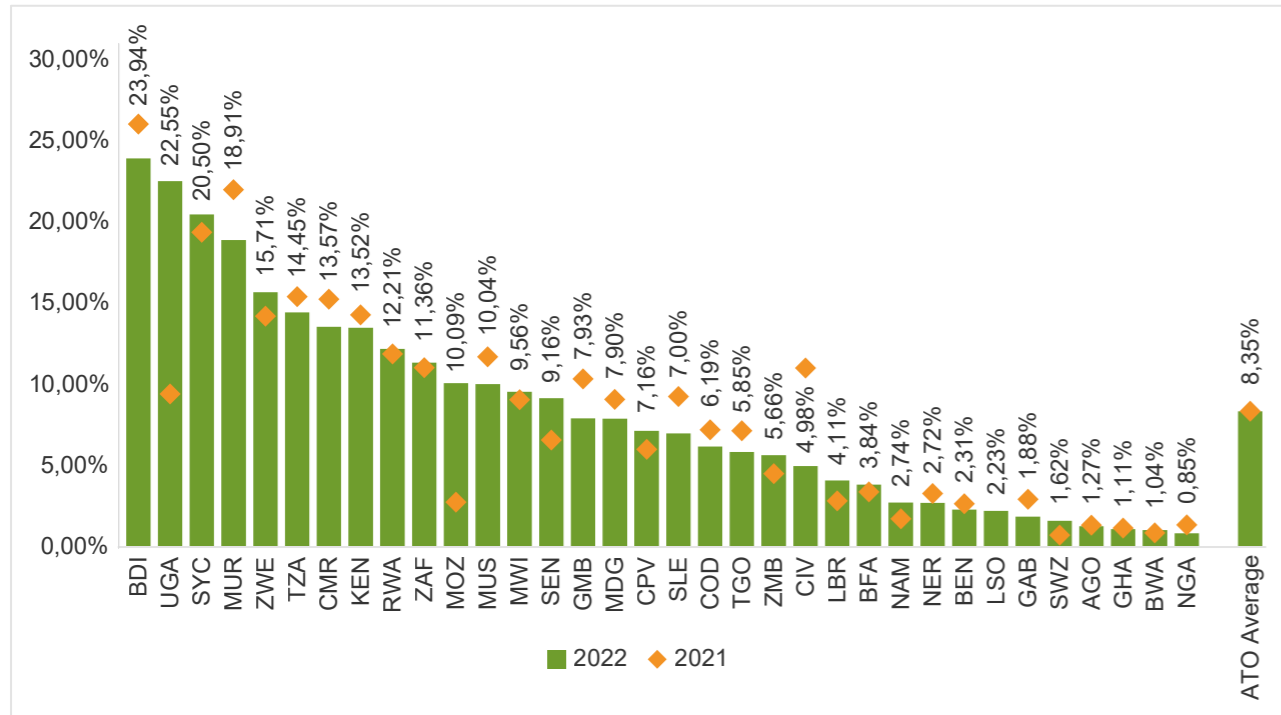


Excise duties' share to total revenue and GDP

The share of excise duty to total tax revenue has been declining since 2020 and has not recovered from the economic effects of the COVID pandemic in most ATO countries. On average, ATO countries experienced a slight decline in the shares of excise duties to total tax revenue to 8.35% in 2022 from 8.37% in the previous year (see Figure

3.26). A majority of the countries (53%) recorded a decline in their excised duties-to-TTR ratios, with Côte d'Ivoire, Mauritius and The Gambia recording the highest declines of 6.04, 3.09 and 2.42 percentage points respectively. There were however countries that recorded significant improvements in their excise duties-to-TTR ratios like Uganda and Mozambique whose ratios increased by 13.12 and 7.33 percentage points respectively.

FIGURE 3.26 EXCISE DUTIES' SHARES TO TOTAL TAX REVENUE, 2021 - 2022



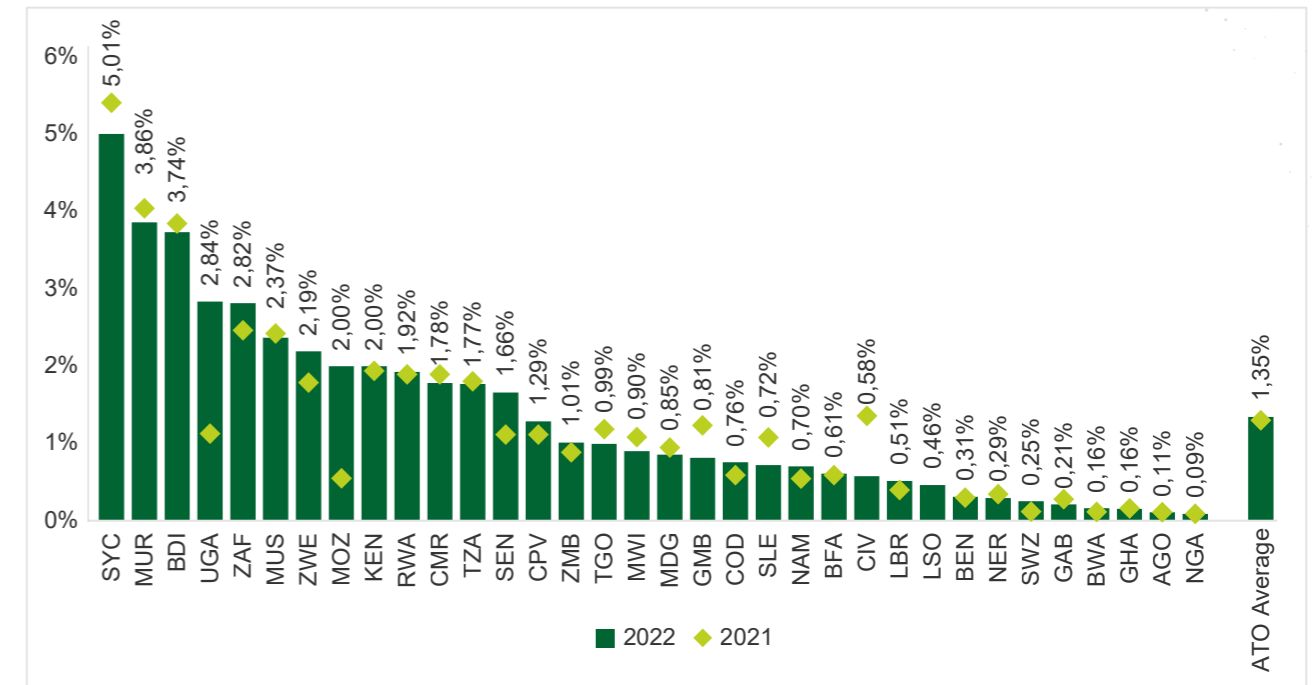
The contribution of excise duty revenues to GDP however increased marginally from 1.30% in 2021 to 1.35% in 2022 (illustrated in Figure 3.27). The largest share of excise duty to GDP were recorded by Seychelles (5.01%), Mauritius (3.86%), and Burundi (3.74%).

The average contribution of excise revenues to GDP in low-income countries falls in the region of 1 to 2%, which is rather low compared to that of advanced economies where a single product like tobacco raises about 8% of government

revenue (ActionAid, 2018). Therefore, the low ratio recorded by the ATO countries indicates that there is still potential for this revenue source to grow.

This can be done either by charging higher excise rates with caution, ensuring that it does not lead to excessively high prices on essential products or introduce more excisable products. A greater advantage of excise taxes is that they are easy to collect while having a significant revenue contribution.

FIGURE 3.27 EXCISE DUTIES' CONTRIBUTIONS TO GDP IN ATO COUNTRIES, 2021 - 2022

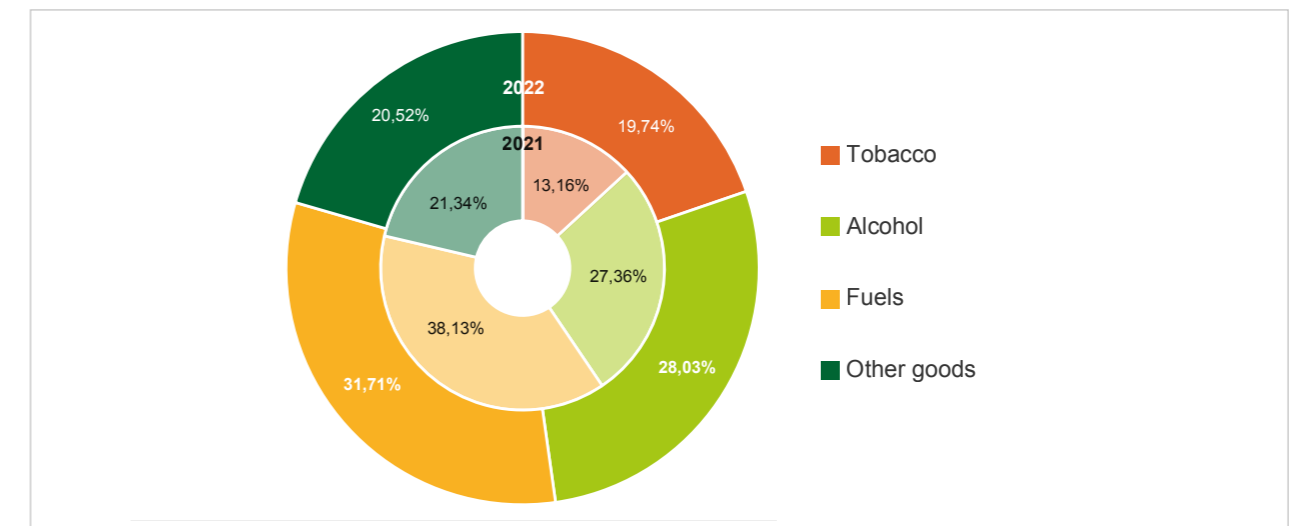


Fuel excise duties remain the highest contributor to total excise duties

The composition of excisable products varies from country to country, but at an overall ATO level, fuel revenues account for a significant portion of all excise revenues. Fuel excise duties accounted for 31.78% of total excise revenue ATO-wide in 2022, which however was a 6.43 percentage points decrease from the 38.13% recorded in 2021 (represented in Figure 3.28).

Alcohol excise duties have the second largest proportion to total excise revenues, and their contribution increased slightly by 0.67 percentage points in 2022. Tobacco's contribution increased significantly during the year to 19.74% in 2022 from 13.16% in 2021. Efforts to collect data on tobacco were deliberate in this edition as a new focus area on this excise line which is part of the ATAF project on tobacco excise. The "other goods" category includes among others: electrical energy, airtime, cosmetics, and plastic bags.

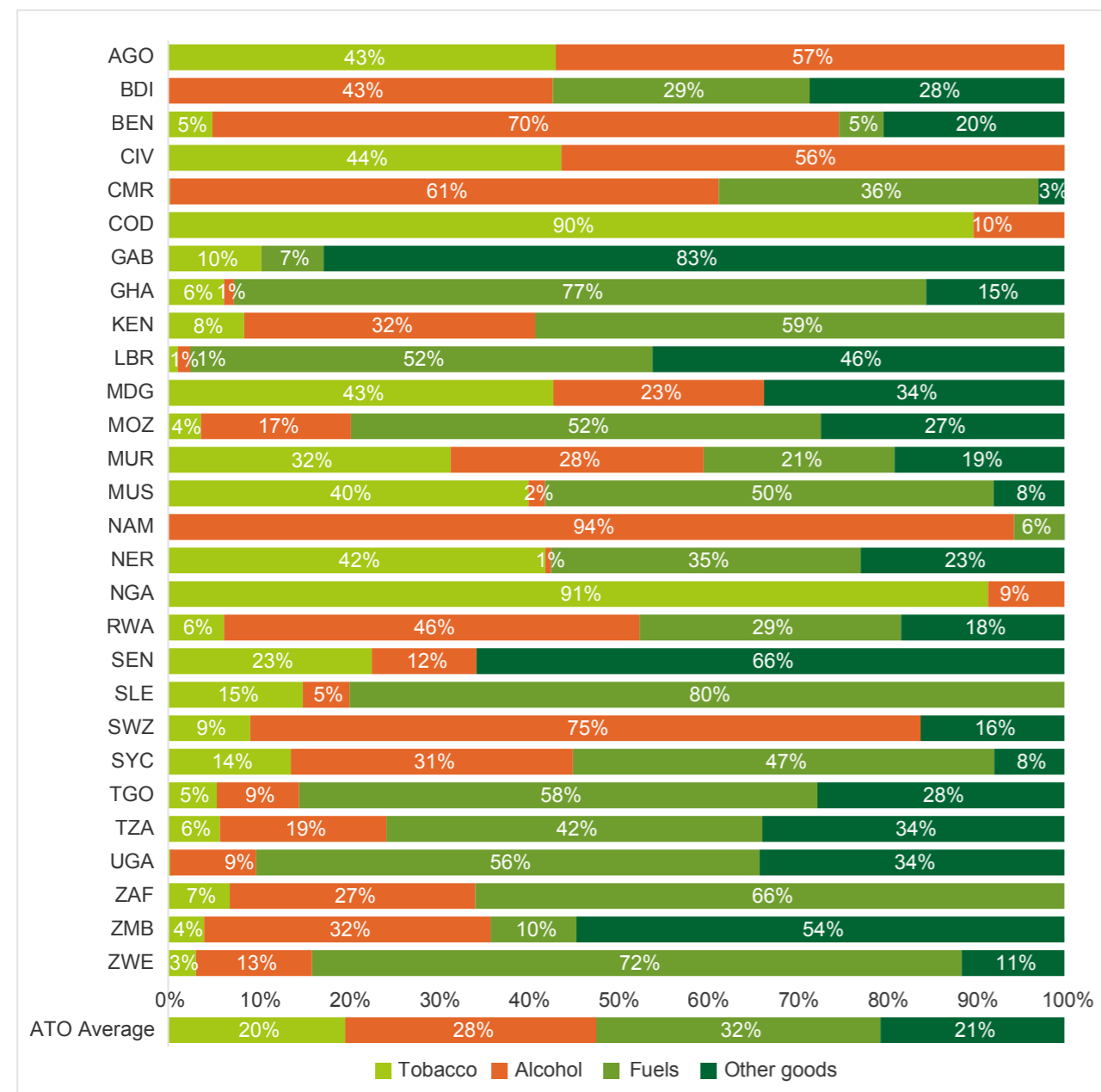
FIGURE 3.28 SHARES OF EXCISE DUTIES REVENUE BY PRODUCT IN ATO, 2021 - 2022



At a country level, some countries depict a more balanced distribution of the excise revenues from each of the main products whereas some only reported only one product as the source of their excise revenues. The top products as also depicted by the ATO averages are fuel, alcohol, and tobacco.

The Gambia and Guinea-Bissau reported only fuel excise duties, while Burkina Faso, Malawi and Cape Verde reported only tobacco excise duties (and are excluded from the graph). These countries do have excise on other products, but data for this reporting period was unavailable.

FIGURE 3.29 EXCISE DUTIES' CONTRIBUTION PER PRODUCT IN ATO COUNTRIES, 2022

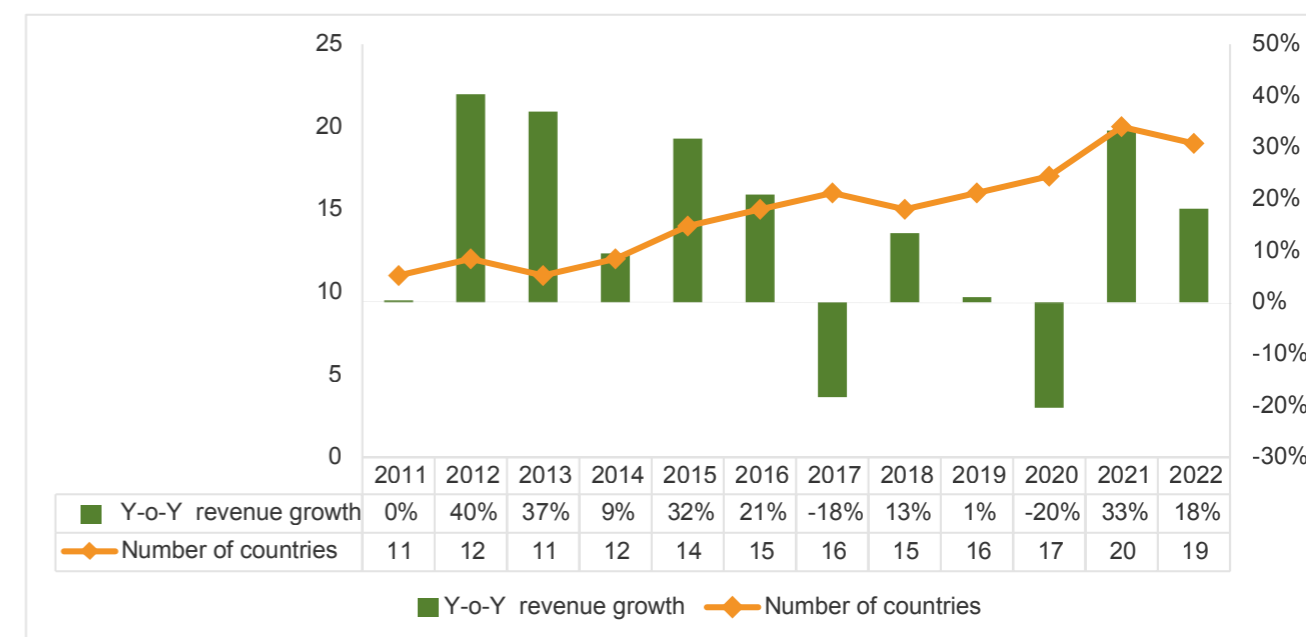


3.2.6. More countries adopting presumptive tax

According to the (OECD, 2023), presumptive tax regimes are simplified tax regimes designed or intended to simplify tax compliance process for micro and small businesses. Compared to the standard tax system, presumptive taxation regimes aim to encourage business formalisation and compliance, by reducing compliance costs and charging lower tax rates. It is widely perceived as the ultimate solution to the large dominant informal sector in ATO countries. For tax administrations, this regime is also easy to administer as it allows for easy determination of tax liabilities.

In the ATO region, even though not all countries that are reporting on the presumptive taxes, the number of countries has nearly doubled since 2011. Only 11 countries provided data in 2011, but by 2021, data was available in 20 member countries before dropping to 19 in 2022 (outlined in Figure 3.30). This shows that more African economies are adopting this regime as a means to ensure compliance on the small, hard to tax businesses while narrowing the informal sector. On average, revenues from presumptive taxes presents a rather unstable growth trend as country participation in this variable also varies year-on-year. However, in terms of absolute revenue figures, the revenues are increasing year-on-year as more countries provide data.

FIGURE 3.30 YEAR ON YEAR GROWTH RATES OF PRESUMPTIVE TAXES IN ATO COUNTRIES 2011 - 2022

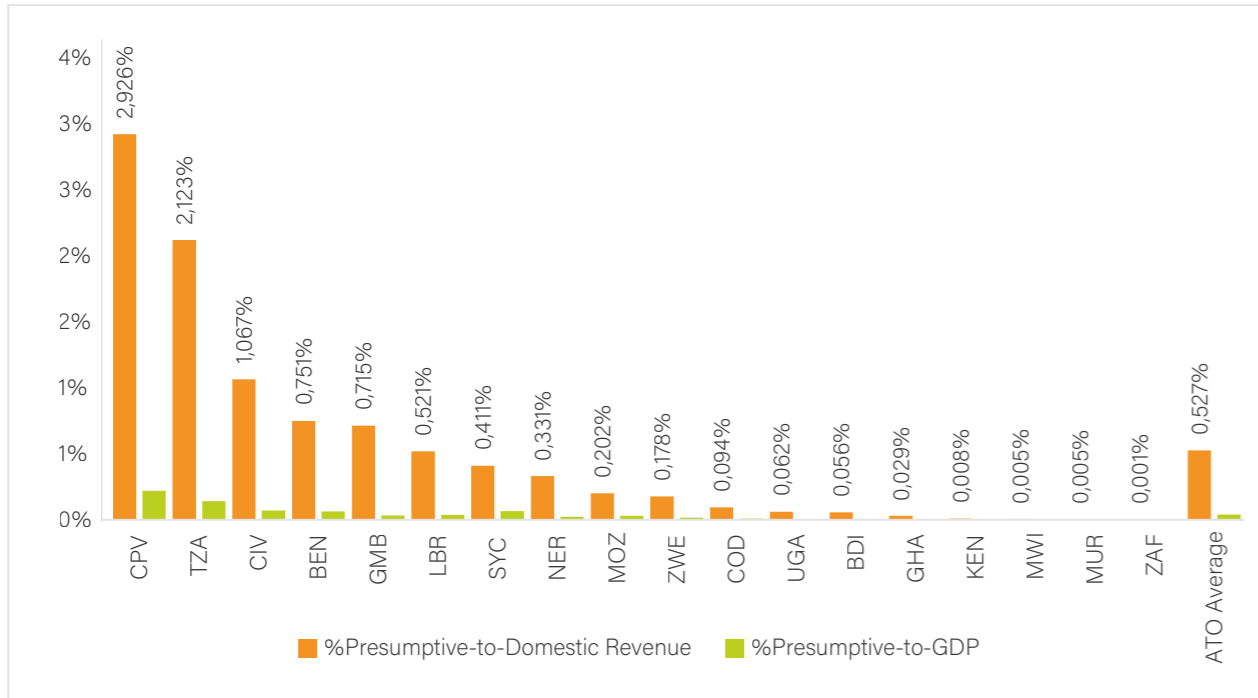


Cape Verde and Tanzania record higher shares of presumptive tax to total revenues

The relative contribution of presumptive taxes to total revenues is somehow low, also considering the characteristics of the taxpayers (smaller size taxpayers) under this regime. A

country level comparison however indicates that Cape Verde and Tanzania have the highest contribution of presumptive taxes to total revenues when compared to the other countries. The ATO average contribution ratio was recorded at 0.53% in 2022 (see Figure 3.31).

FIGURE 3.31 CONTRIBUTIONS OF PRESUMPTIVE TAX TO DOMESTIC TAX REVENUE AND GDP, 2022

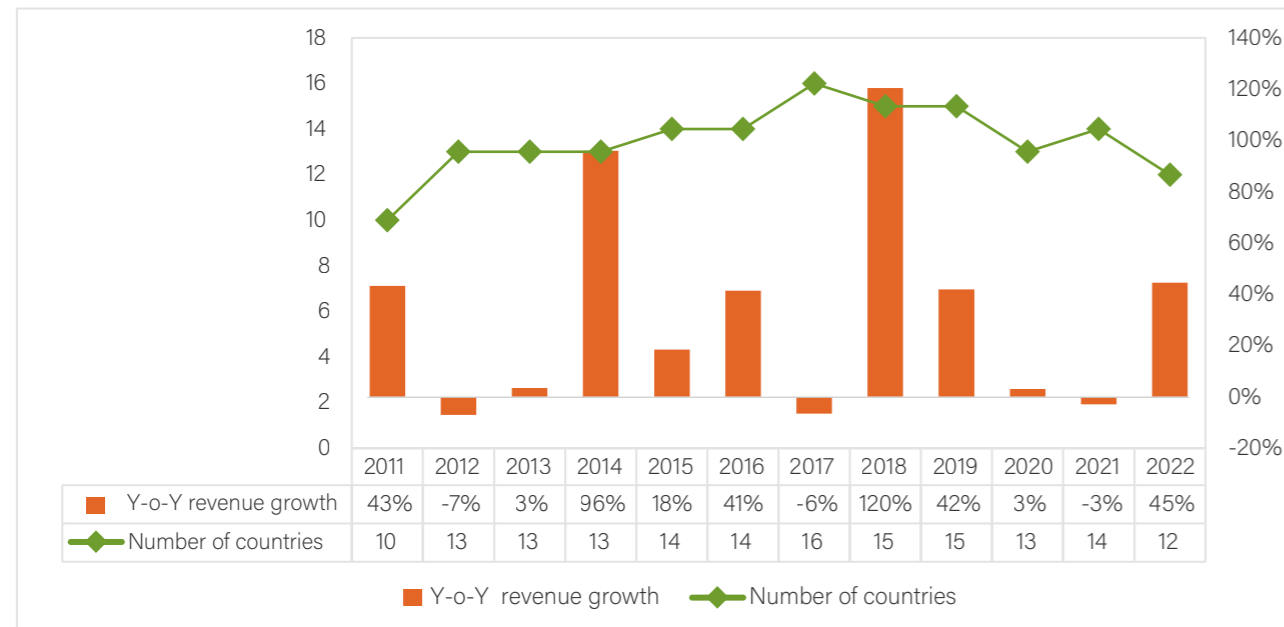


3.2.7. Environmental Taxes

Environmental taxes, also known as green taxes, are imposed on economic activities that cause negative externalities. According to Mpofu (2022), there is an increase in the use of environmental taxes as a productive economic instrument to encourage more environmentally friendly consumption and production patterns. Occhiali (2023) articulates that for a tax

to be defined as an environmental tax, it has to be imposed on a base with a proven negative impact on the environment. In the ATO countries, data on environmental taxes is still not adequately available, as shown in Figure 3.32 and the performance over the years remains somewhat inconclusive on whether reporting governments are efficiently realising revenues from this tax type.

FIGURE 3.32 EVOLUTION OF ENVIRONMENTAL TAXES IN ATO, 2011 - 2022

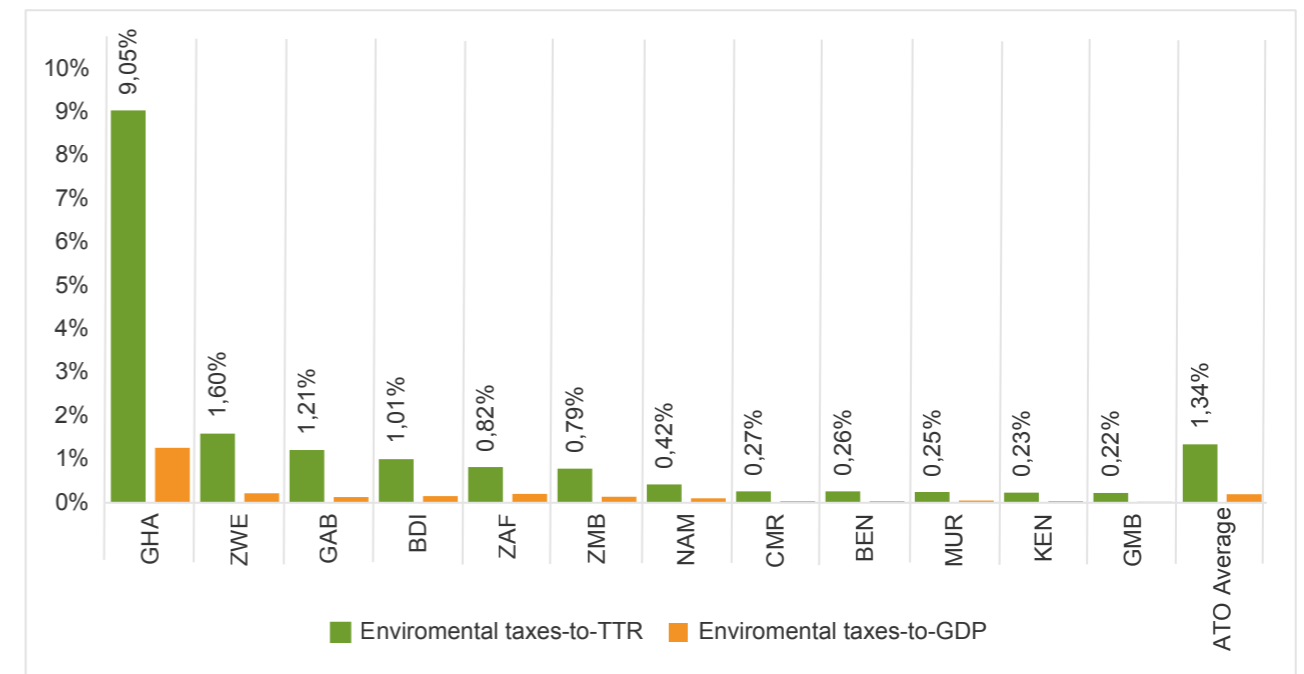


Environmental taxes' share to GDP improves in 2022

In 2022, 12 countries submitted data on environmental taxes, lower than the 14 recorded in 2021. The ATO average contribution of these taxes to total revenue stood at 1.34%, up from 0.22% in 2021 as shown in Figure 3.33. This

growth was mainly supported by a strong performance of environmental taxes in Ghana (9.05%) during the period. Zimbabwe, Gabon, and Burundi had environmental taxes contribute 1.60%, 1.21% and 1.01% respectively. The other eight countries all recorded ratios below 1.0% during the review period.

FIGURE 3.33 CONTRIBUTIONS OF ENVIRONMENTAL TAXES TO TOTAL REVENUE AND GDP, 2022



3.3. Non-tax revenue

Due to varying economic and tax structures in the different ATO countries, there are economies who have non-tax revenues as significant revenue streams for their governments. This analysis covers 21 ATO countries who provided data on the different types of non-tax revenues available in their respective economies. Similar to previous publications, these encompasses the following: mandatory contributions to the pension, public health, and unemployment insurance systems; sales of goods and services; and income from properties, fees, fines, penalties, royalties; and any other undefined non-tax revenues. In most ATO countries, data on non-tax revenues is typically collected by other government agencies which may be the reason some countries may experience difficulties in providing the information.

Social security systems in ATO countries

The OECD (2023) defines social security contributions as compulsory payments made to the government that confer entitlements to future social benefits. They generally include unemployment insurance benefits; accident, injury, and sickness benefits; old-age pension; disability and survivors' pensions; family allowances; reimbursements for health expenses or provision of health services. For ATO countries, social security systems are typically characterised by public health care, old age pension, and unemployment insurance systems. A summary of how these systems are administered in the different countries is presented in Annex 1.

3.3.1. Social security contributions

The composition of social sector contributions is shown in Figure 3.34. Public pension systems dominate in the ATO countries as the largest contributor to social security contributions, reaching an average of 64% in 2022. This

percentage saw a slight decrease from the 65% reported in 2021. They are followed by the unemployment systems at 18%, and public health systems at 10% in 2022. The least contribution came from other social security systems, though increasing from 5% in 2021 to 8% in 2022.

FIGURE 3.34 DECOMPOSITION OF SOCIAL SECTOR CONTRIBUTIONS IN ATO, 2022

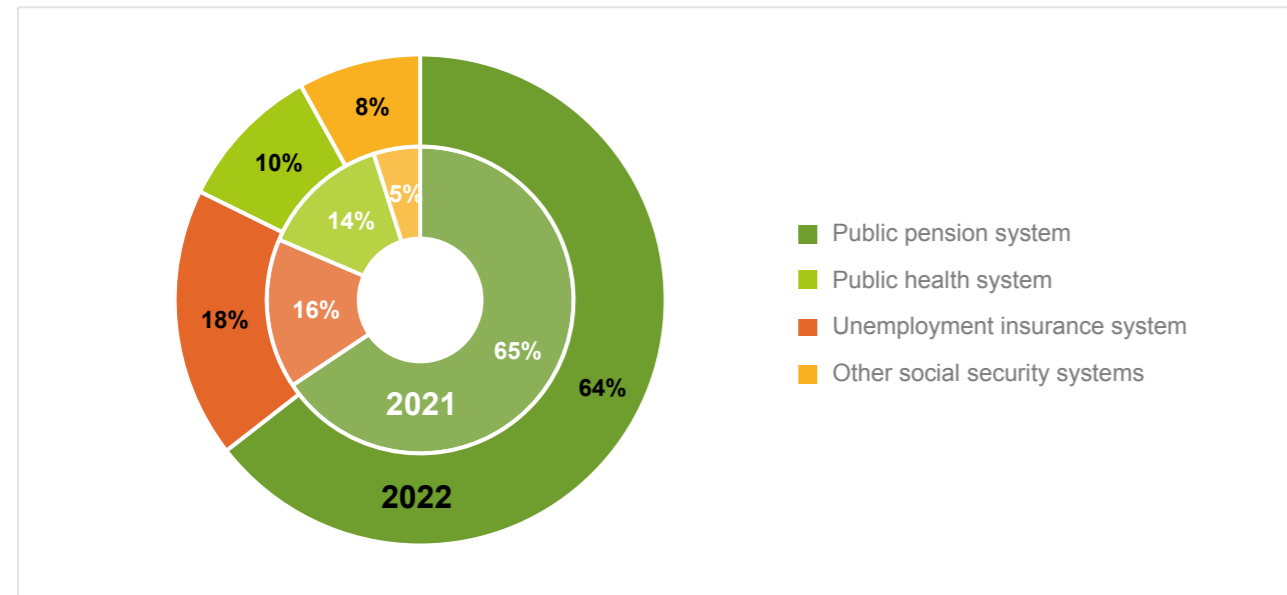
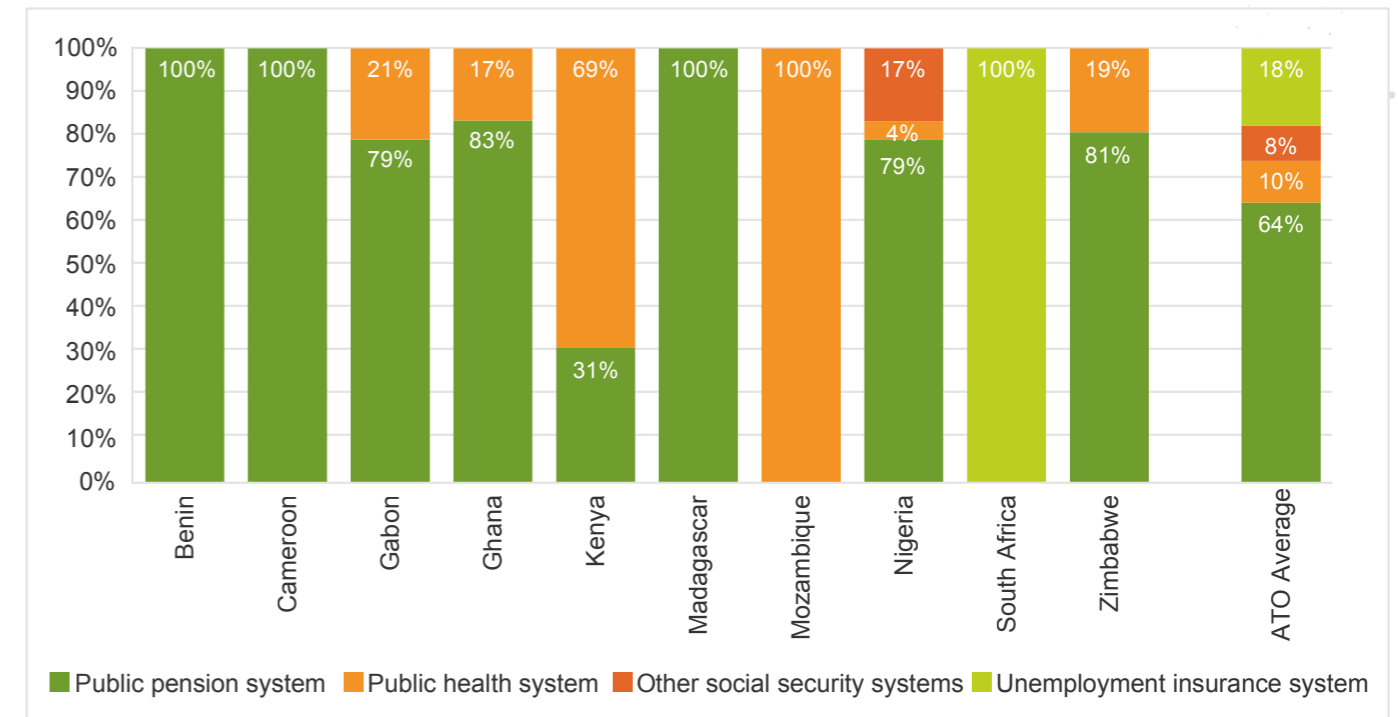


Figure 3.35 presents the contributions by each of the systems to social security contributions in the ATO countries. Worth noting is that all the countries²⁵ who provided data have contributions from public pension systems with the exception of South Africa and Mozambique. Benin, Cameroon, and Madagascar

recorded 100% contributions from the public pension system in 2022, while Mozambique only reported contributions from the public health system. Significant contributions also came from public health systems in Nigeria and Zimbabwe, while Kenya had higher contributions from its public health system.

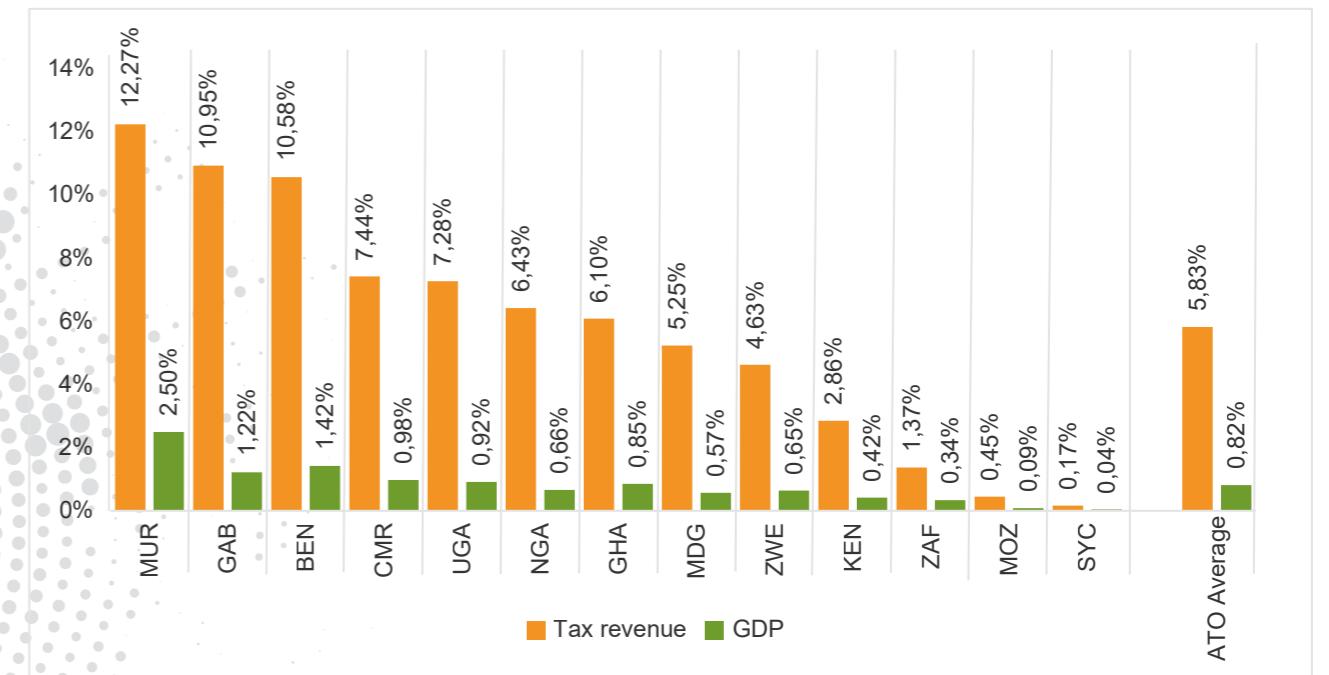
FIGURE 3.35 SHARES OF SOCIAL SECTOR CONTRIBUTIONS TO TOTAL SOCIAL AMOUNTS IN ATO COUNTRIES.



In 2022, the ATO average for social security contributions to TTR stood at 5.83% in 2022. Countries with the highest contribution were Mauritius, Gabon, Benin, and Cameroon who stood at 12.27%, 10.95%, 10.58% and 7.44% respectively. The lowest ratios were from Seychelles and

Mozambique where social security contributions accounted for 0.17% and 0.45% of total revenues respectively. An almost similar trend is observed even on the contribution of the social security revenues to GDP during the review period. The foregoing analysis is shown in Figure 3.36.

FIGURE 3.36 SHARES OF SOCIAL SECTOR CONTRIBUTIONS TO TOTAL TAX REVENUE AND GDP



25. Mauritius, Seychelles, and Uganda only provided total social security contributions, without disaggregation.

3.3.2. Other non-tax revenues

In addition to social security contributions, other non-tax receipts contribute a noticeable share to government revenues. In the ATO countries these are reported for revenues generated from oil, fees and licences, royalties and rent, and other non-assigned revenue. The level of non-tax revenues in each of the ATO countries is highly dependent on the specific countries' resource endowments and other government policies relating to fees charges on public goods and services. Data from 18²⁶

countries was available on the different categories of non-tax revenues for 2022. In a trend similar to previous years, "other non-tax revenue" accounted for a larger share (27.53%) as it encompasses the different categories of non-tax revenues available in ATO countries but are not directly specified in this analysis. This proportion was however down from the recorded in 36.38% in 2021) due to increased contributions from "fees and licences" and "other natural resources" by 5.34 and 4.39 percentage points respectively.

FIGURE 3.37 SHARES OF OTHER NON-TAX REVENUE STREAMS IN ATO, 2022

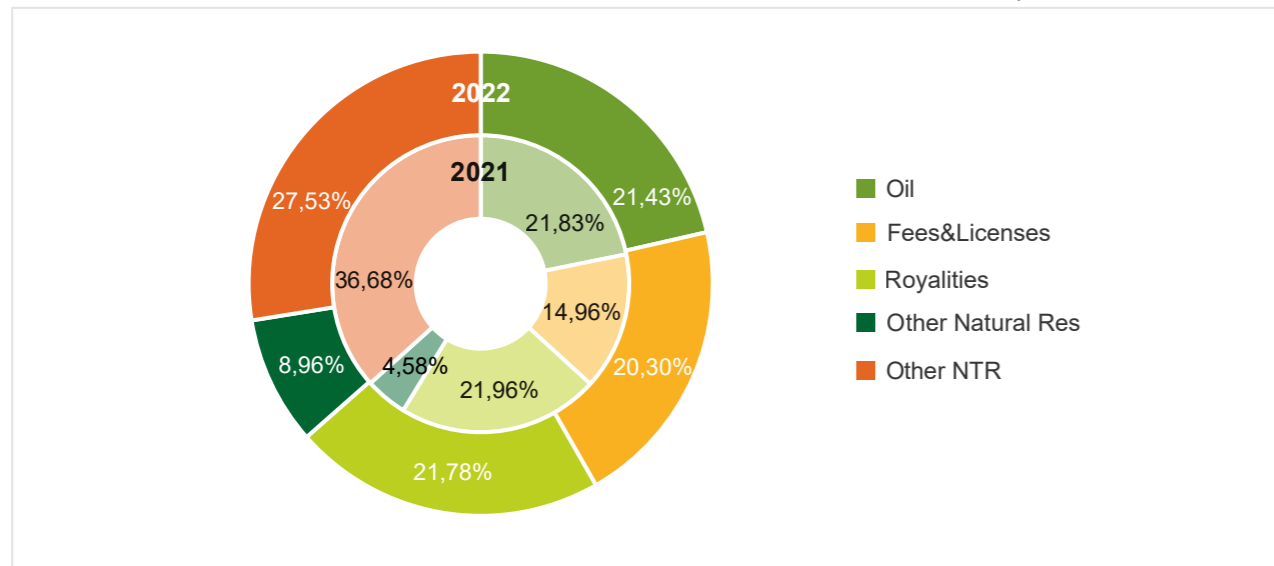
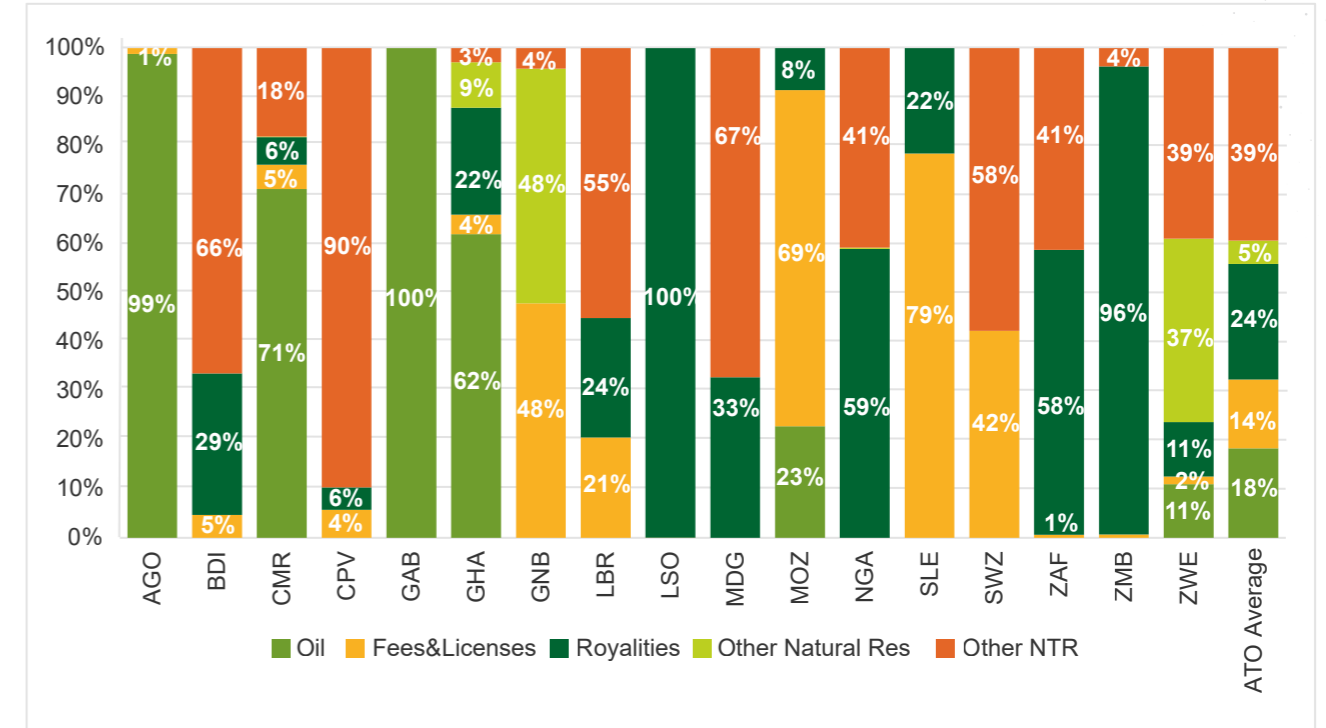


Figure 3.38 shows the composition of the other non-tax revenue category in 2022. As per the average ATO composition of these categories, even at country level they are mostly dominated by "other non-tax revenues", royalties

and oil. It is worth noting that countries like Benin, Mauritius, and Seychelles reported only revenues from "other non-tax revenues", while Gabon reported only oil revenues.

FIGURE 3.38 COMPOSITION OF OTHER NON-TAX REVENUE IN ATO COUNTRIES, 2022



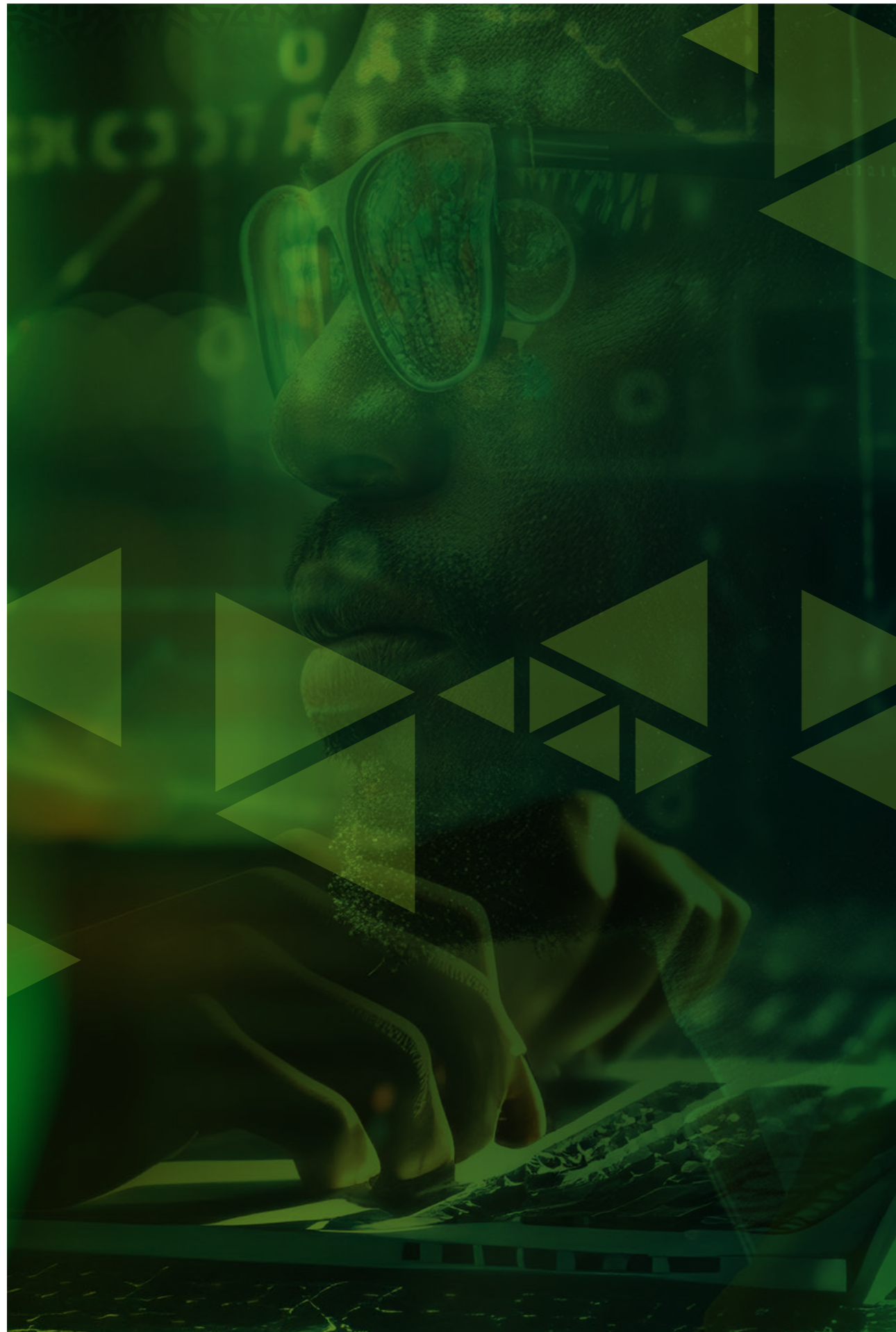
3.4. Conclusion and way forward

In 2022, most ATO countries experienced improved growth in the major tax heads, strengthening their overall revenue performance. This improvement reflects government efforts in implementing strategies to reduce the vulnerability of tax revenues to global shocks, especially considering the current uncertain global conditions.

VAT remains the highest contributor to tax revenue, however, exhibiting a declining trend over the years and low productivity which requires ATO member countries to address, to ensure sustained revenues from this tax line. CIT recorded the highest growth when compared to other major tax lines, benefitting from increased profits by companies which are attributed to the rebound in economic activities observed in a majority of the ATO countries.

While tax revenues are the primary source of government revenue, non-tax receipts also play a crucial role, accounting for an average of over 15% of total ATO revenues. It is essential for tax administrations to collaborate closely with relevant government agencies to ensure accurate reporting of non-tax revenues. These revenues have the potential to contribute significantly to government revenue in ATO countries.

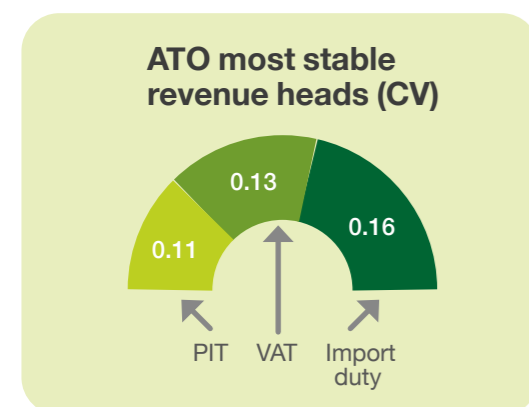
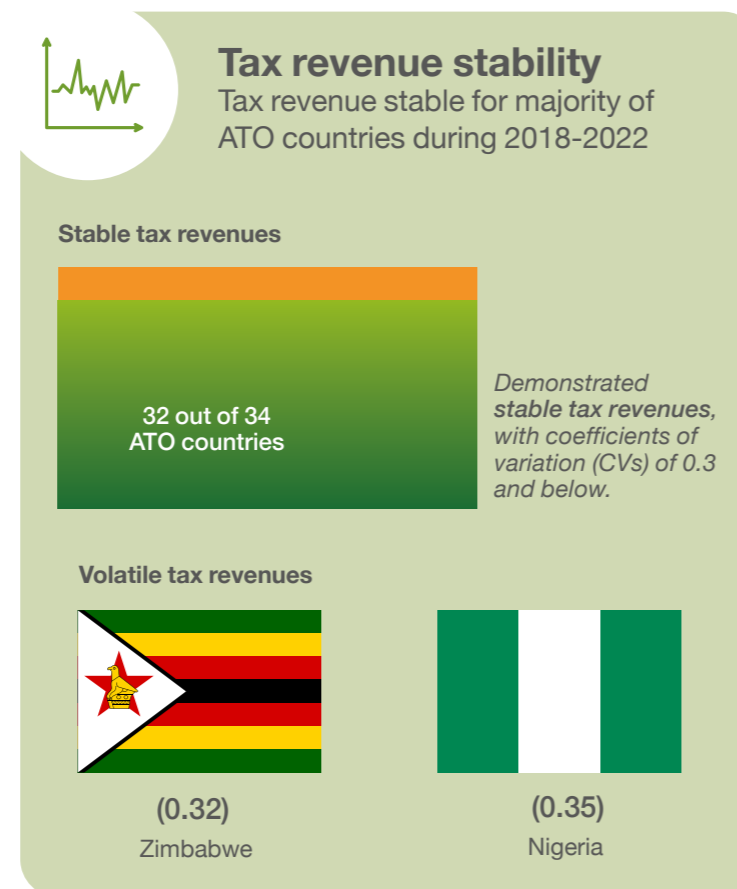
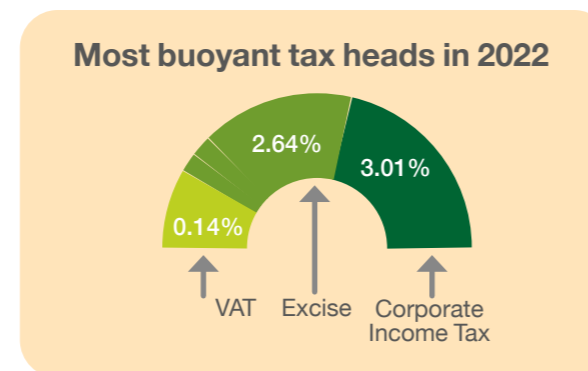
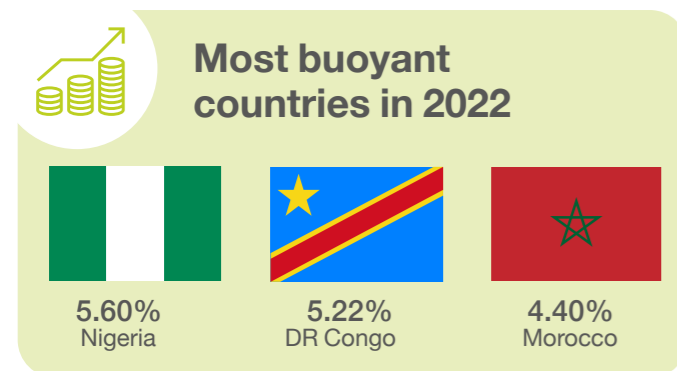
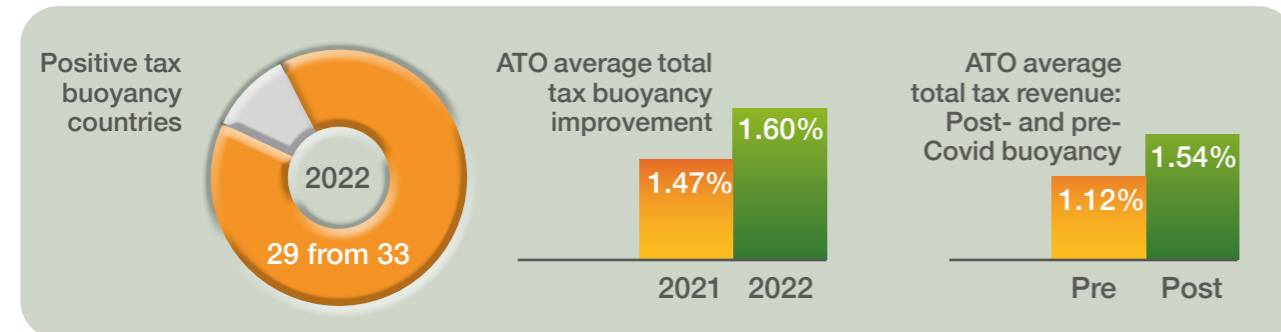
26. Angola, Burundi, Cameroon, Cape Verde, Congo, Eswatini, Gabon, Guinea-Bissau, Lesotho, Liberia, Madagascar, Mozambique, Nigeria, Sierra Leone, South Africa, Zambia, Zimbabwe. Benin, Mauritius, and Seychelles only provided revenue for the Other Non-tax category.



Chapter 4

Measuring Tax System Efficiency

Measuring Tax System Efficiency



Introduction

The main purpose of any tax system is to generate revenue for funding government expenditure and promoting economic stability. Tax systems that encourage voluntary compliance, reduce the cost of compliance and collection, at the same time ensuring that potential taxpayers are brought into the tax net, are considered efficient. Revenue collections respond to changes in the economic environment, with changes in GDP expected to affect revenue collections in one way or the other. An analysis of how taxes respond to economic trends is important as it allows revenue administrations to be proactive rather than reactive in their strategies. This chapter assesses the responsiveness of tax systems in ATO countries to economic changes using the tax buoyancy metric and the coefficient of variation for tax revenue stability.

4.1. Good governance for efficiency in tax administration

Good governance in tax administration refers to the principles and practices that ensure transparency, efficiency, accountability, and fairness in the collection and management of tax revenues by tax administrations and governments. It involves establishing effective systems, procedures, and policies that promote compliance, minimize corruption, and enhance public trust. Tax administrations lose revenue due to corruption and this negatively impacts on tax administration efficiency. According to the (IMF, 2019) there are several key features of good tax administration that reduce vulnerability to corruption and promote integrity.

FIGURE 4.1: KEY FEATURES OF GOOD TAX ADMINISTRATION

Institutionalized promotion of integrity	Sound policy and legislation	Extensive use of technology	Streamlined organization and management	Human resources management
<p>RAs should have policies that promote integrity among staff and measures that enable detection of unethical behaviour.</p> <p>Corruption undermines revenue mobilisation and public trust</p>	<p>Sound policy and legislation provides a balance between efficiency and equity in taxation.</p> <p>It creates a revenue system that is easily understood and harder to avoid or evade.</p>	<p>It minimizes personal discretion in decision making and handling of taxpayer issues.</p> <p>Enables predictable tax assessments and reduces revenue leakages from corrupt activities</p>	<p>RAs should be independent from political interference to enable the enforcement of tax laws in a fair and transparent manner.</p> <p>A clear separation of roles within RAs and, between RAs and the government, enhances individual accountability.</p>	<p>A motivated workforce contributes positively to the efficiency of RA operations and processes.</p> <p>RAs should have policies and processes that promote merit-based recruitment, fair and clear performance appraisals and promotion of staff.</p>

Box 4.1

ZIMRA commits to fight corruption to enhance tax system efficiency

- **Integrity committee**

The Zimbabwe Revenue Authority (ZIMRA) Integrity Committee (ZICO) has become the benchmark and point of reference for the establishment of Integrity Committees in other parastatals. ZIMRA in collaboration with the Zimbabwe Anti-Corruption Commission, assisted four parastatals to set up Integrity Committees (ZIMRA, 2023).

- **Integrity awareness campaigns**

The #IamForZero campaign was launched where ZIMRA took advantage of the business expos such as trade fairs and agricultural shows throughout the country to advance its zero tolerance to corruption stance. The campaigns were also broadcasted across multiple media channels such as radio, television, social media, and print media.

- **Whistle-blower facility**

ZIMRA launched the automated whistleblowing facility which seeks to make it convenient, simple, safe, and quick for citizens to file their reports online and from anywhere in the world.

- **Lifestyle audits**

Lifestyle audits were conducted on staff to determine whether employees were living within their means or not. Assets acquired from the proceeds of corruption valued at over USD500 000 were recovered in 2022.

- **Asset recovery and forfeiture**

ZIMRA successfully recovered and forfeited two houses, a motor vehicle and 2500 shares. ZIMRA also managed to get an Unexplained Wealth Order in which nine houses and 15 vehicles were to be interdicted.

Source: Zimbabwe Revenue Authority 2022 Annual Report

4.2. Measuring efficiency in tax administration

The efficiency of a tax administration can be measured using metrics such as tax buoyancy and the coefficient of variation which measures the stability of tax revenue collections. Tax buoyancy measures the relationship between tax revenue collections and economic growth (South African Treasury, 2021). It also includes the effects of policy changes on total tax revenue. A tax buoyancy value that is above 1 shows that tax revenues are growing faster than the economy, indicating a progressive tax system that captures a larger share of income or economic activities. On the other hand, a tax buoyancy value below 1 means tax revenue is growing slower than the rate of GDP growth, suggesting inefficiencies in the tax systems or potential tax base erosion.

According to Dudine and Jalles (2017), measuring tax buoyancy is important for the following reasons:

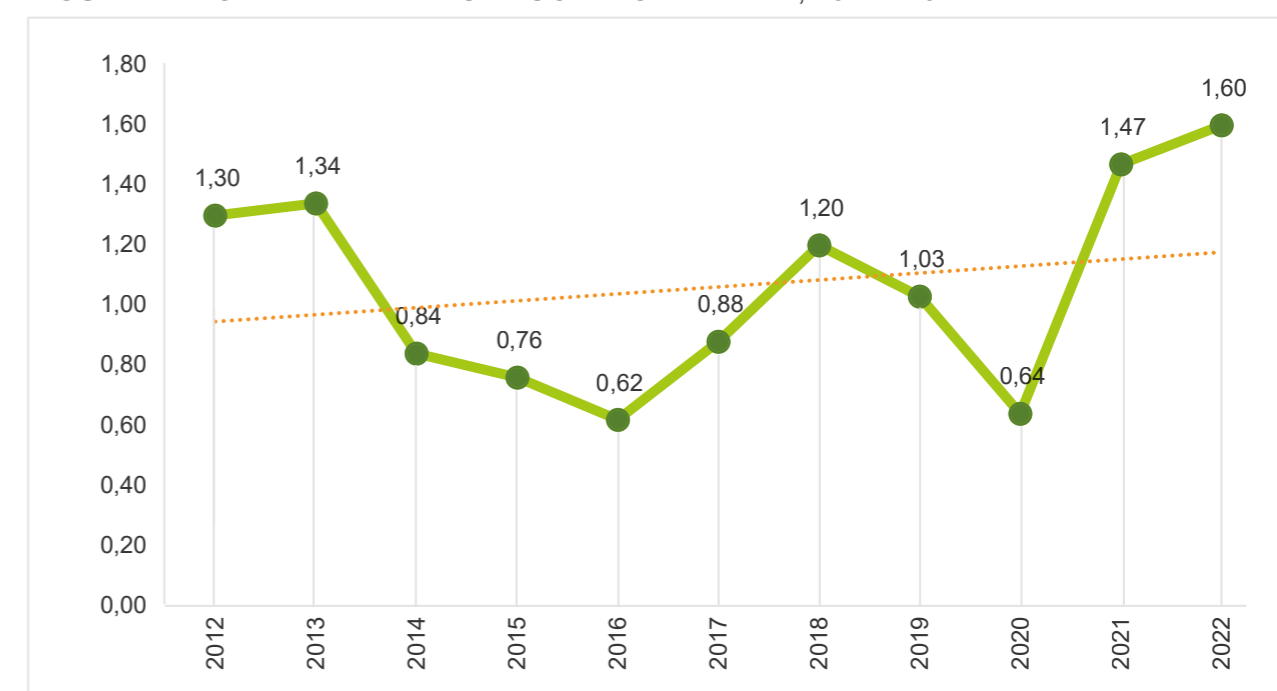
- *This phenomenon illustrates how revenue policy contributes to fiscal sustainability in the long run, and to economic stabilization in the short term. It is crucial that revenue collections have a positive relationship with GDP growth to ensure fiscal policy sustainability over the long run.*
- *Assessing country-specific tax buoyancy can help determine whether the government is mobilizing taxes in line with economic activity. It allows tax administrations to identify revenue heads that respond better to changes in GDP and economic policies and direct efforts toward these revenue heads in order to sustain revenue increases, and to identify the weak and strong points of the revenue system.*

4.2.1. Average tax buoyancy improves in 2022 in line with recovery in total tax revenue collections.

Total tax revenue buoyancy exhibits a fluctuating trend during the period 2012-2022 (Figure 4.2). The responsiveness of total tax revenue to economic changes increased from 2012 to 2013 before engaging in a downward trajectory from 2013 to 2016. The downward trend can be attributed to the 2015-2016 negative impacts of the El Nino which resulted in severe drought in countries such as Angola, Botswana, Eswatini, Lesotho, Madagascar, Malawi, Mozambique, Namibia, South Africa, Zambia, and Zimbabwe. Moreover,

the Ebola virus outbreak in 2014 negatively impacted on West African countries such as Guinea, Liberia, and Sierra Leone. The Ebola outbreak disrupted trade, tourism, and agricultural activities, leading to economic contraction in affected countries. Tax revenue demonstrated a consistent upward buoyancy trend from 2016 to 2018, as African economies rebounded from the adverse impacts of the El Nino phenomenon and the Ebola outbreak. However, this positive trajectory was disrupted in 2019 to 2020 with the onset of the COVID-19 pandemic, leading to a decline in tax revenue. In 2021 and 2022, total tax revenue buoyancy went up in response to post-COVID tax policies and reforms that were implemented across countries.

FIGURE 4.2 TOTAL TAX REVENUE BUOYANCY TRENDS, 2012 - 2022

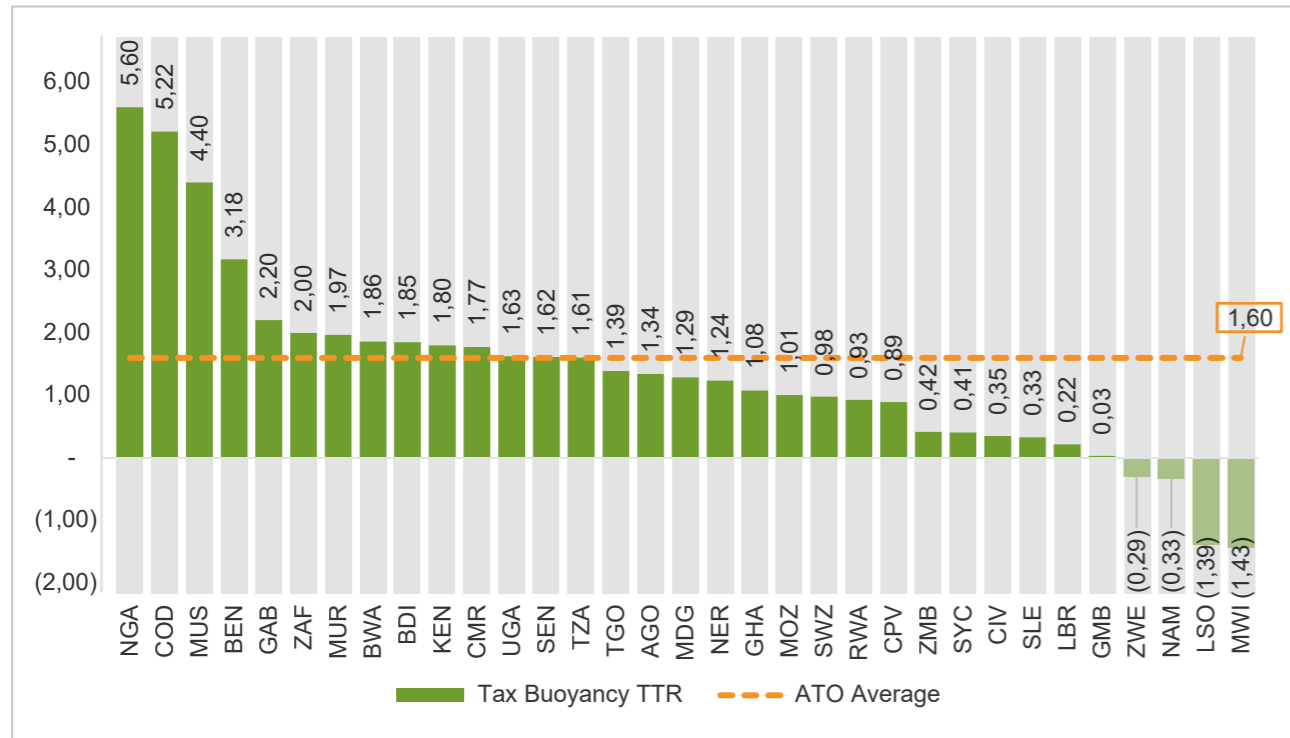


On a country level, the analysis covered 33²⁷ countries out of 35 that submitted data for both tax revenues and GDP. Tax buoyancy for ATO countries ranged between -1.43 and 5.60 in 2022, and 88% (29) countries recorded a positive tax buoyancy (Figure 4.3). The most buoyant countries were Nigeria (5.60), DR Congo (5.22) and Morocco (4.40). The performance of Nigeria was on account of the deliberate initiatives aimed at expansion of revenue sources (see chapter 2).

Only four countries exhibited negative tax buoyancy implying that their revenues grew at a slower pace than GDP growth during the year. These countries are Lesotho, Malawi, Namibia, and Zimbabwe. Malawi recorded the lowest tax buoyancy, of -1.43 despite a nominal GDP growth of 9.38. The performance of tax revenue in Malawi was on account of the change in fiscal year, resulting in a nine-month 2021/2022 fiscal year (see chapter 2).

27. Guinea Bissau and Burkina Faso were identified as outliers and were therefore excluded from the analysis.

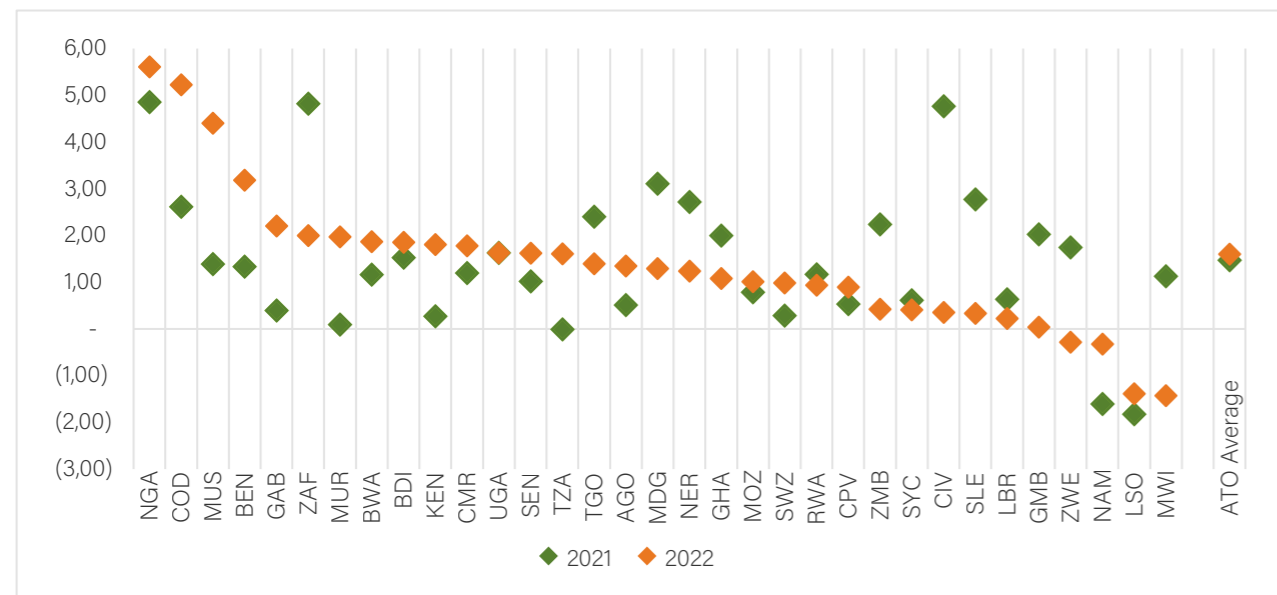
FIGURE 4.3 TAX BUOYANCY OF TOTAL TAX REVENUE, 2022



On a year-on-year comparison, total tax revenue for ATO countries was more buoyant in 2022 with an average buoyancy of 1.60 when compared to 1.47 in 2021, as economies rebounded from the COVID-19 pandemic effects (Figure 4.4). A total of 18 (55%) ATO countries recorded improved total tax revenue buoyancy from 2021 to 2022 while 15 (45%) countries were less buoyant in 2022 in comparison

to 2021. Morocco, DR Congo, Mauritius, and Benin recorded the highest improvements in their tax buoyancies, while Côte d'Ivoire, South Africa and Sierra Leone registered the highest declines. As seen from the varying total tax buoyancies in the ATO countries, this may be a possible indication of the countries' varied responses to the pandemic and diversity in their post-pandemic strategies and policies.

FIGURE 4.4 TAX BUOYANCY OF TOTAL TAX REVENUE 2021 - 2022

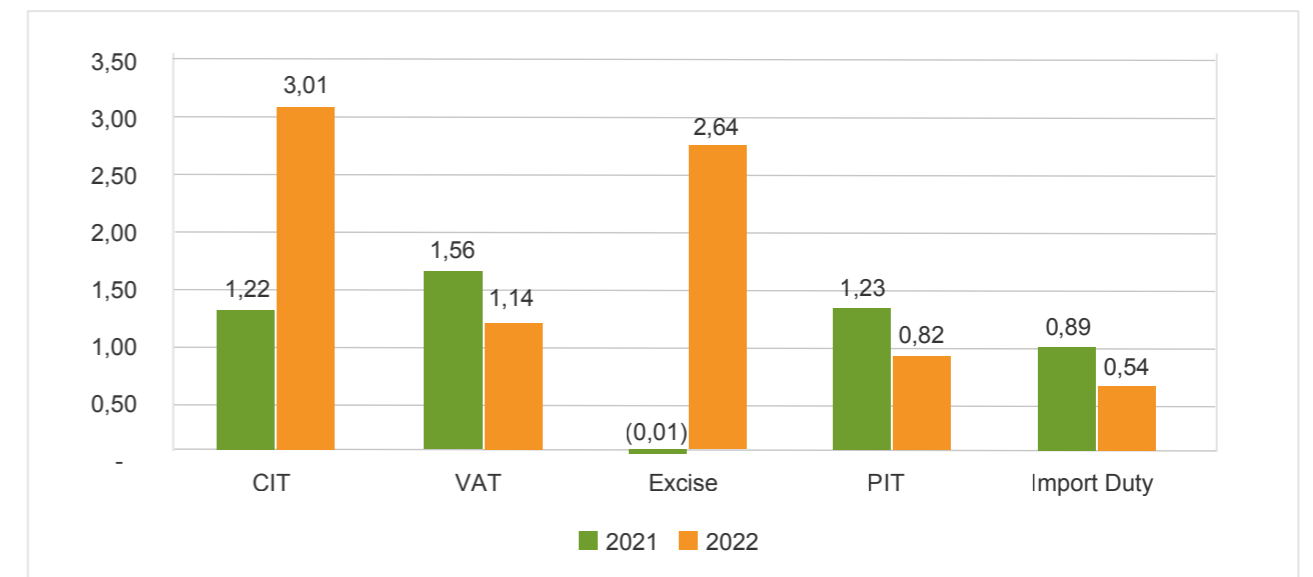


4.2.2. Average major tax head buoyancy improves in 2022

On average, CIT recorded the highest tax buoyancy of 3.01 in 2022, against 1.22 in 2021 in line with the rebound highlighted in chapter three. Excise tax also exhibited high tax buoyancy of 2.64 in 2022, up from -0.01 in 2021. This was on account of increased consumption of excisable goods such as tobacco and alcoholic beverages which were mostly under restriction during the COVID-19 pandemic period.

On the other hand, import duty recorded a decline from a tax buoyancy of 0.89 in 2021 to 0.54 in 2022. As borders opened in 2021, trade and travel increased across countries, leading to an upsurge in trade taxes from the low levels recorded in 2020 when trade and travel were restricted. This then normalised in 2022 leading to a tax buoyancy decline from 2021. Similarly, VAT and PIT exhibited lower responsiveness to economic changes in 2022 as compared to 2021.

FIGURE 4.5 MAJOR TAX HEAD BUOYANCY 2021 - 2022

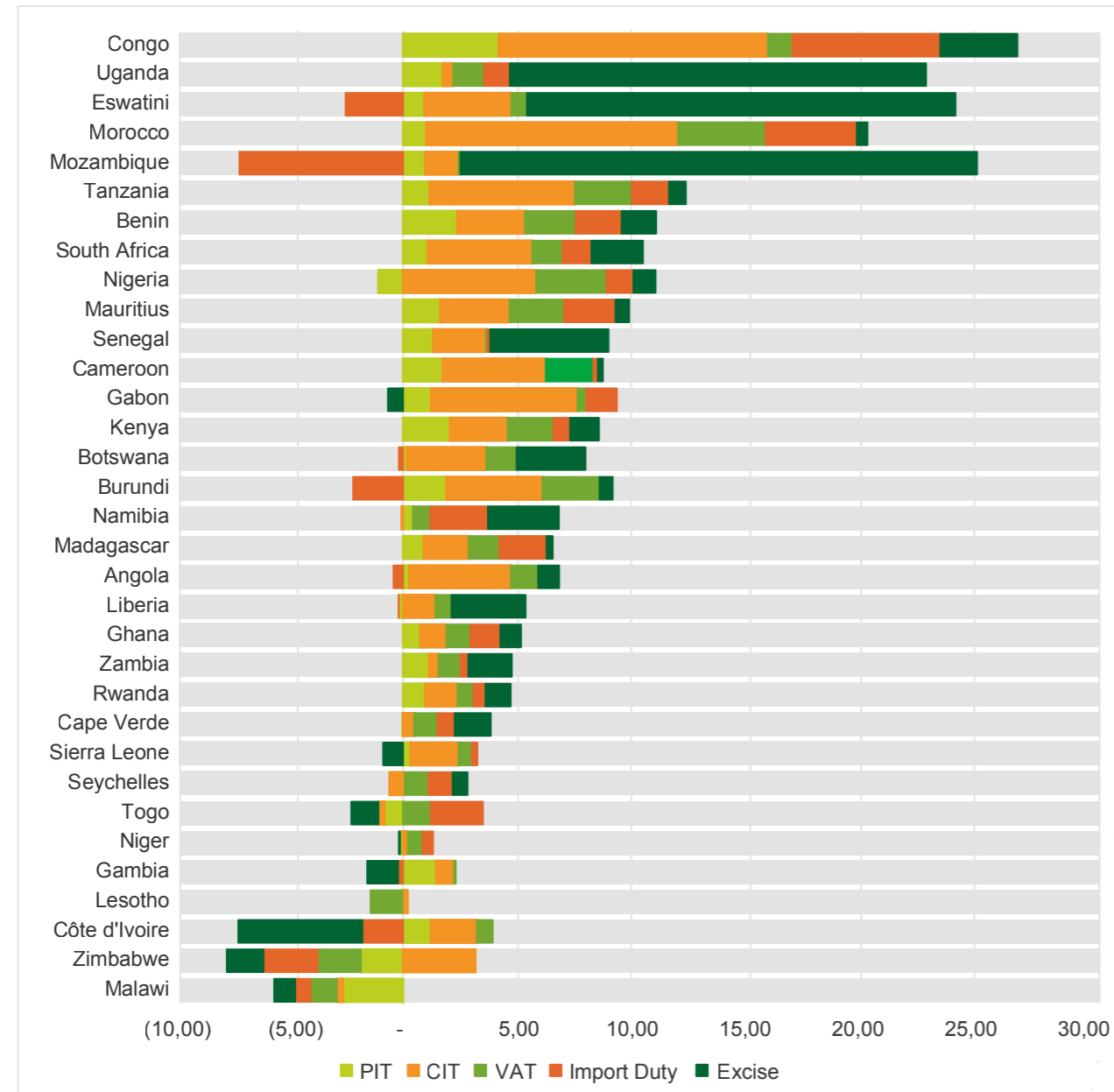


4.2.3. Tax head buoyancy across countries

Tax head buoyancies varied across countries in 2022 as presented in Figure 4.6. Eswatini recorded high buoyancy on excise while the Congo DR and Morocco depicted high CIT buoyancy. The performance of excise in Eswatini is attributed to the prolonged lockdown where there were nearly no sales of excisable products such as alcoholic beverages in 2020-

2021, and the subsequent sales in 2022 which then resulted in a significant growth in excise revenue. In contrast, Malawi exhibited negative tax buoyancy for all major tax heads in 2022, as revenue was reported for nine months. Import duty registered negative tax buoyancy in several countries which include Angola, Botswana, Burundi, Eswatini, Gambia, Mozambique, Malawi, and Zimbabwe, indicating a subdued recovery from the effects of the pandemic.

FIGURE 4.6 TAX BUOYANCY OF TAX HEADS BY COUNTRY, 2022



4.2.4. CIT and excise emerge as the most buoyant across regions in 2021-2022

The responsiveness of tax revenue in ATO countries to economic and policy changes varied across regions. The EAC and SADC regions exhibited high excise tax revenue buoyancy while the ECCAS and ECOWAS had higher tax buoyancy in CIT. All tax heads in the EAC recorded positive

tax buoyancies in 2021 and 2022 (Figure 4.7). Excise revenue was the most buoyant in 2022 with a percentage growth in GDP resulting in 5.35% in tax revenue growth. CIT followed with a tax buoyancy of 2.17, benefitting from Burundi and Kenya who demonstrated a significant responsiveness of CIT to changes in GDP, indicating a strong relationship between economic recovery and CIT revenue growth. In contrast, import duty in the EAC exhibited a subdued tax buoyancy in

2022 when compared to 2021. In 2021, Rwanda implemented a Manufacturing Build and Recovery Program, which granted approved projects exemptions from VAT and import duties on construction materials, leading to the weakening import duty buoyancy in 2022.

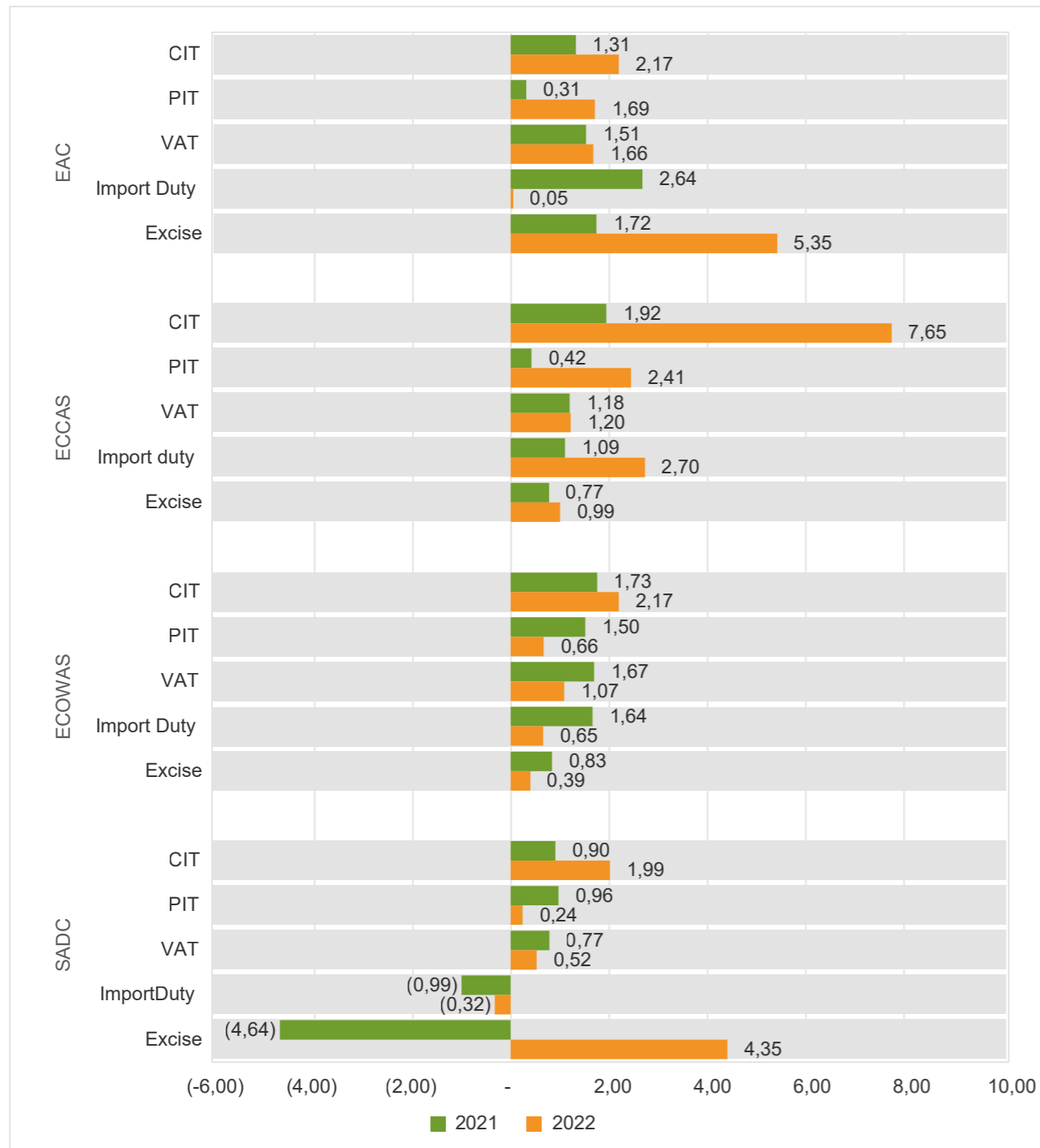
Similarly, in the ECCAS, all tax heads recorded higher tax buoyancies in 2022 than in 2021. CIT and import duty were the most buoyant tax heads in 2022, registering tax buoyancies of 7.65 and 2.70, respectively. According to the IMF (2022), the DR Congo experienced a positive performance in the mining and services sector, as well as a positive balance of trade, which impacted positively on the performance of CIT, PIT and import duty in the ECCAS. Additionally, excise improved from 2021 as the economy recovered from the pandemic, leading to increased consumption of excisable goods.

In the ECOWAS, all tax heads except for CIT, demonstrated lower responsiveness to economic and policy changes in 2022 than in 2021. The positive performance in 2021 is attributed to a sudden upturn in economies from a low base

economic activity in 2020 during the COVID-19 pandemic which then normalised in 2022. CIT was the most buoyant tax head in 2022, with a tax buoyancy of 2.17. The performance of CIT was on account of the positive performance by Gabon and Nigeria.

In an almost similar line, the SADC recorded mixed performances in their different tax heads. Excise revenue recorded the highest buoyancy in 2022, particularly in countries like Eswatini and Mozambique. CIT revenue also exhibited high tax buoyancy in 2022 on account of positive tax buoyancies which were above 3 in Angola, Botswana, Eswatini, Mauritius, South Africa, and Zimbabwe. In contrast, import duty displayed low responsiveness to economic changes in both 2021 and 2022 with tax buoyancies of -0.99 and -0.32 respectively. PIT was also less responsive to economic changes in 2022 as compared to 2021, owing to negative buoyancies in Lesotho and Zimbabwe. In Zimbabwe, wages and salaries were eroded by inflation in 2022, which was higher than the rate of most salary increments, negatively affecting the performance of PIT revenue in the period.

FIGURE 4.7 TAX BUOYANCY OF TAX HEADS BY REGIONAL GROUPING, 2021 - 2022



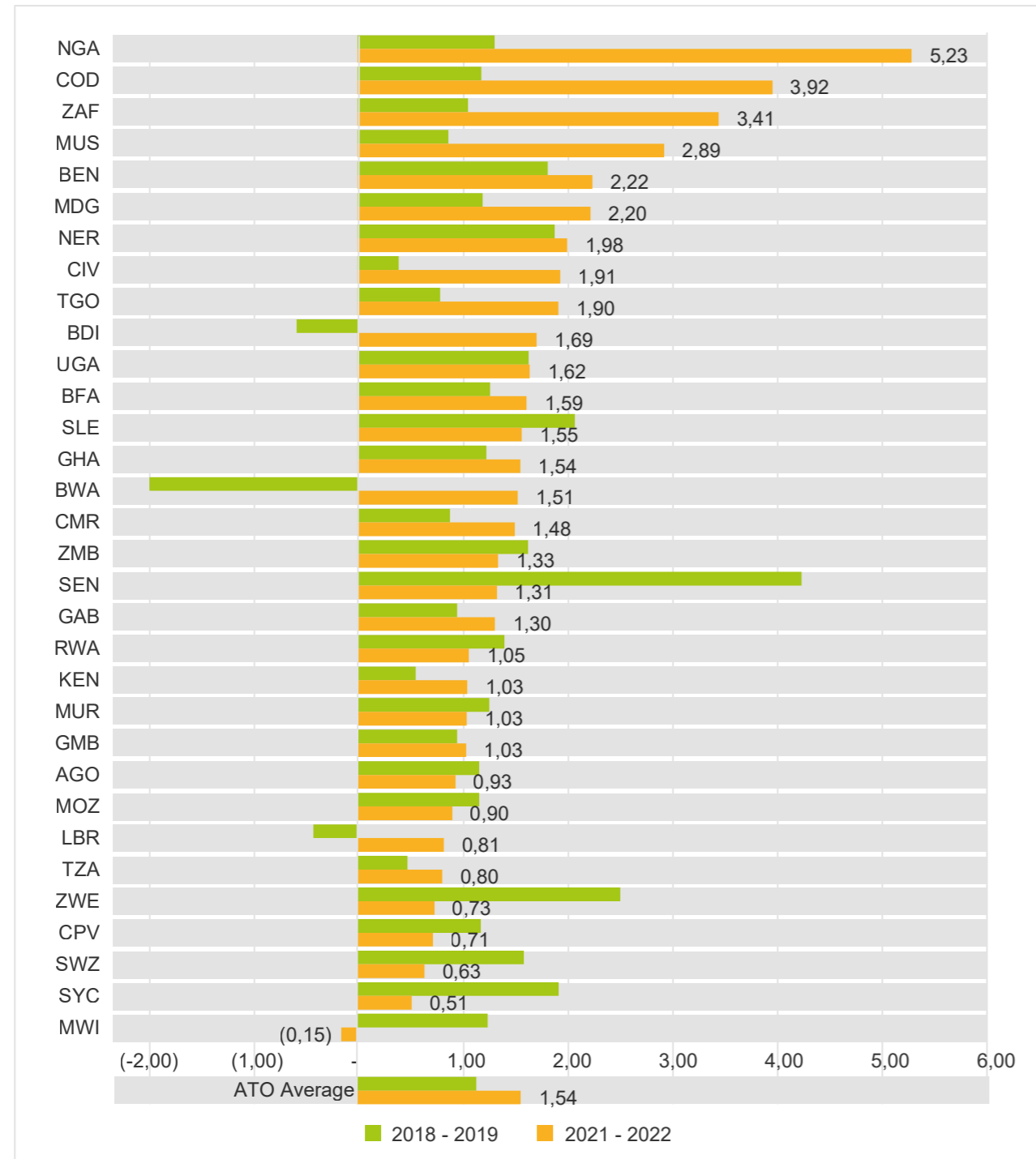
4.2.5. Tax buoyancy pre and post COVID-19 pandemic (2018-2019 vs 2021-2022)

Average total tax revenue buoyancy improved from 1.12 during the pre-pandemic period of 2018-2019 to 1.54 in 2021-2022, showing an overall positive responsiveness of ATO countries during the post-pandemic period. The positive performance during the post-pandemic period was driven by significant improvements from the pre-pandemic period by Nigeria, DR Congo, South Africa, Burundi, Morocco,

and Botswana. Nigeria exhibited the most significant improvement in the tax buoyancy, in line with their overall performance in tax revenues²⁸; 2018-2019 (1.29), 2021-2022 (5.23), and 2022 (5.60). Additionally, Eswatini experienced a tax revenue buoyancy of 1.57 before the emergence of the COVID-19 pandemic (2018-2019), indicating a robust fiscal environment. However, this resilience diminished, reaching 0.63 in 2021-2022, possibly reflecting slow recovery from the economic challenges posed by the pandemic. Malawi is the only country that recorded a negative tax buoyancy in the post-COVID period of -0.15. The foregoing analysis is illustrated in Figure 4.8.

27. Nigeria embarked on an automation drive of the tax system as well as fiscal reforms to expand the tax base, which was a game changer in closing revenue leakages and enhancing compliance levels as discussed in Chapter 2.

FIGURE 4.8 TOTAL TAX REVENUE BUOYANCY PRE AND POST COVID-19 PANDEMIC BY COUNTRY

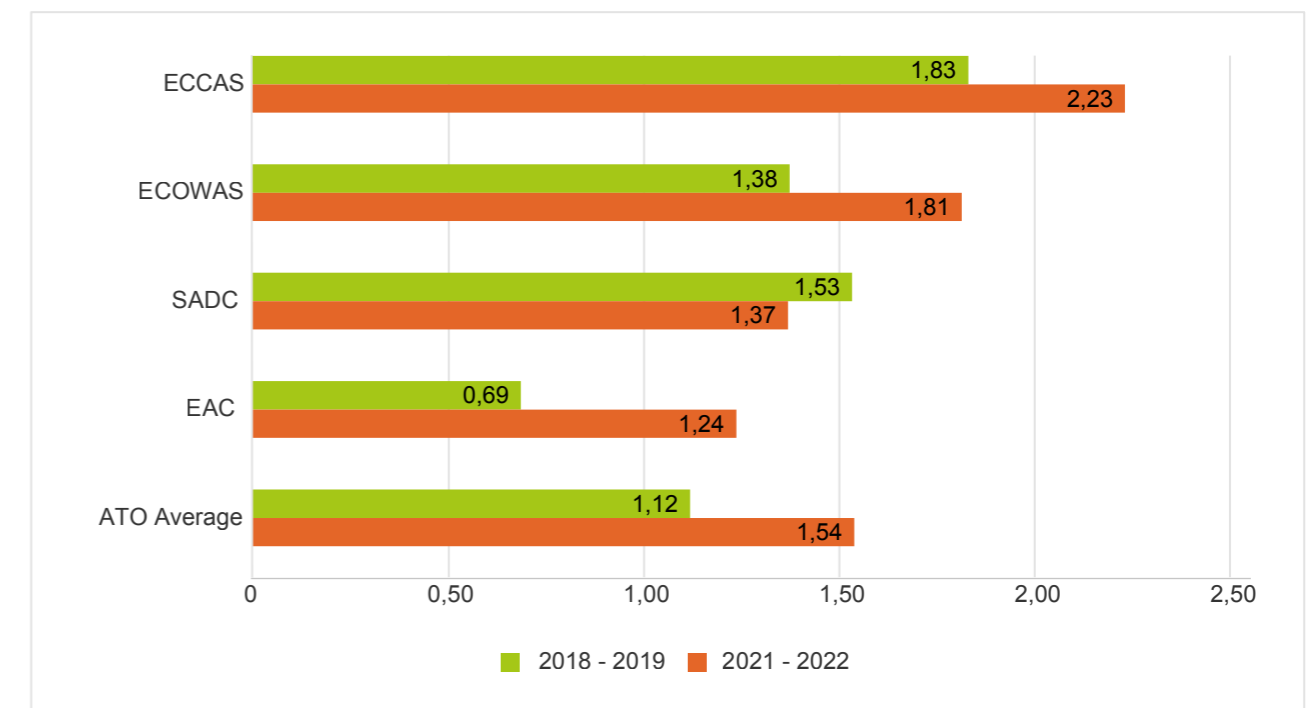


4.2.6. From resiliency to recovery: regional tax buoyancy pre and post COVID-19

All regions registered improved total tax revenue buoyancy from 2018-2019 to the post pandemic period of 2021-2022 except for SADC (Figure 4.9). Total tax revenue for ECCAS, ECOWAS and the EAC responded more positively to changes in GDP and tax policy during the post-COVID period as compared to 2018-2019. The positive performance for the

EAC was driven by improved tax buoyancy during the post-COVID period in Burundi while the improved performance of the ECCAS was boosted by enhanced responsiveness to economic and policy changes in the DR Congo. The SADC was more buoyant during the pre-COVID period as compared to the post-COVID period. The post-COVID tax buoyancy was affected by significant tax buoyancy decline in Eswatini, Seychelles, and Zimbabwe, indicating a prolonged negative impact of the pandemic on tax revenue performance.

FIGURE 4.9 TOTAL TAX REVENUE BUOYANCY PRE AND POST COVID-19 PANDEMIC BY REGIONAL GROUPING



4.3. Delving into sectoral tax buoyancy

Sectoral tax buoyancy refers to the responsiveness of tax revenues to changes in specific sectors of the economy. It measures how changes in the output or income of a particular sector affect tax revenue collections from that sector. An analysis of sectoral tax buoyancy enables policymakers and tax administrations to produce sector-specific policies and targeted revenue administration efforts. It also allows policymakers to draw meaningful insights on the implications of policy changes in specific sectors to tax revenue performance, and to identify sectors that contribute significantly to tax revenue growth. Through an analysis of sectoral tax buoyancy, policymakers can evaluate how tax rates, exemptions, and incentives affect various sectors.

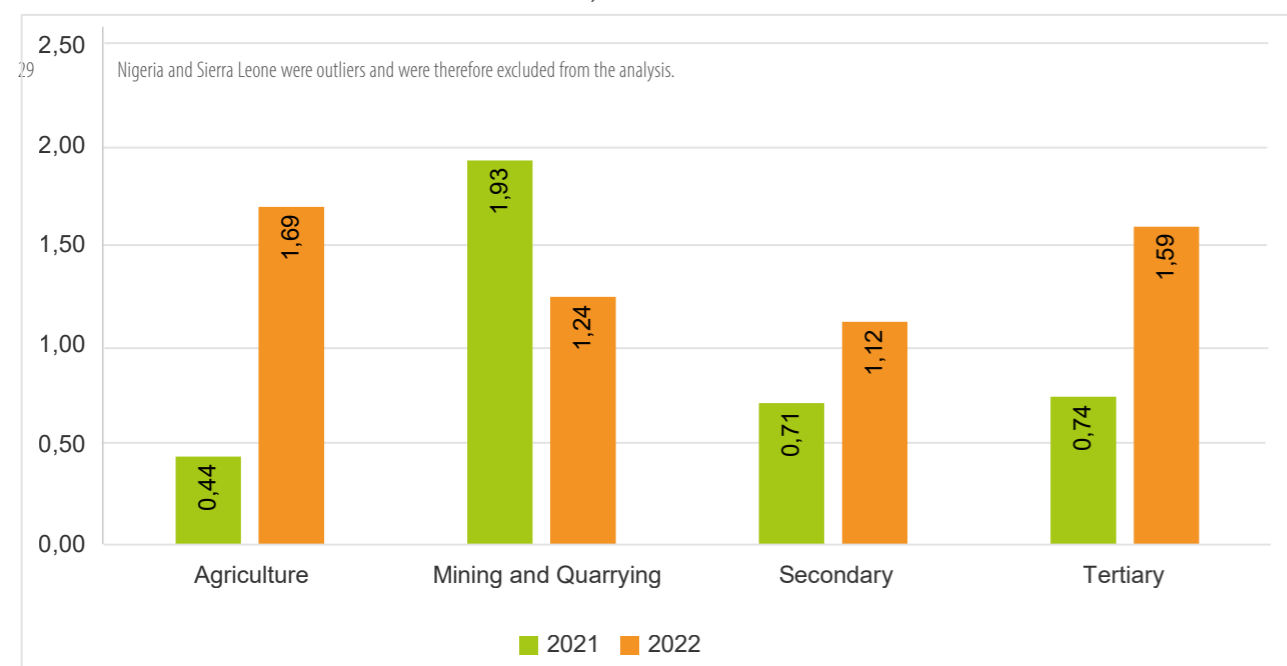
Sectoral performance can be affected by an array of factors, some of which are peculiar to specific sectors. For instance, a change in climatic conditions or the occurrence of natural phenomena such as cyclones, droughts and earthquakes can directly affect the performance of the agriculture sector while fluctuations in global metal prices can have an impact on the performance of the mining and quarrying sector. The COVID-19 pandemic strained food supply chains across the world which subsequently affected the performance of downstream food processing industries (FAO, 2021). In this regard, analysing sectoral buoyancy brings sector-specific insights for policymaking and focused revenue administration strategies.

4.3.1 How responsive were economic sectors in 2022?

The sectoral tax buoyancy analysis covered 15²⁹ ATO countries who provided sectoral data for both tax revenue and GDP. All sectors except for mining and quarrying recorded improved tax buoyancy in 2022 when compared to 2021, as presented in Figure 4.10. The mining and quarrying sector experienced significant impacts from fluctuating global metal

tertiary sector demonstrated high buoyancy of 1.88 and 1.59, respectively. Although the secondary sector exhibited the lowest tax buoyancy in 2022 of 1.12, the sector registered a notable improvement from 0.71 recorded in 2021, indicating positive adaptability to the post COVID-19 policies. It is important to note that the analysis covered different numbers of countries per sector as follows: agriculture (6), mining and quarrying (12), secondary (10), and services (9). This had an on the average sectoral buoyancy.

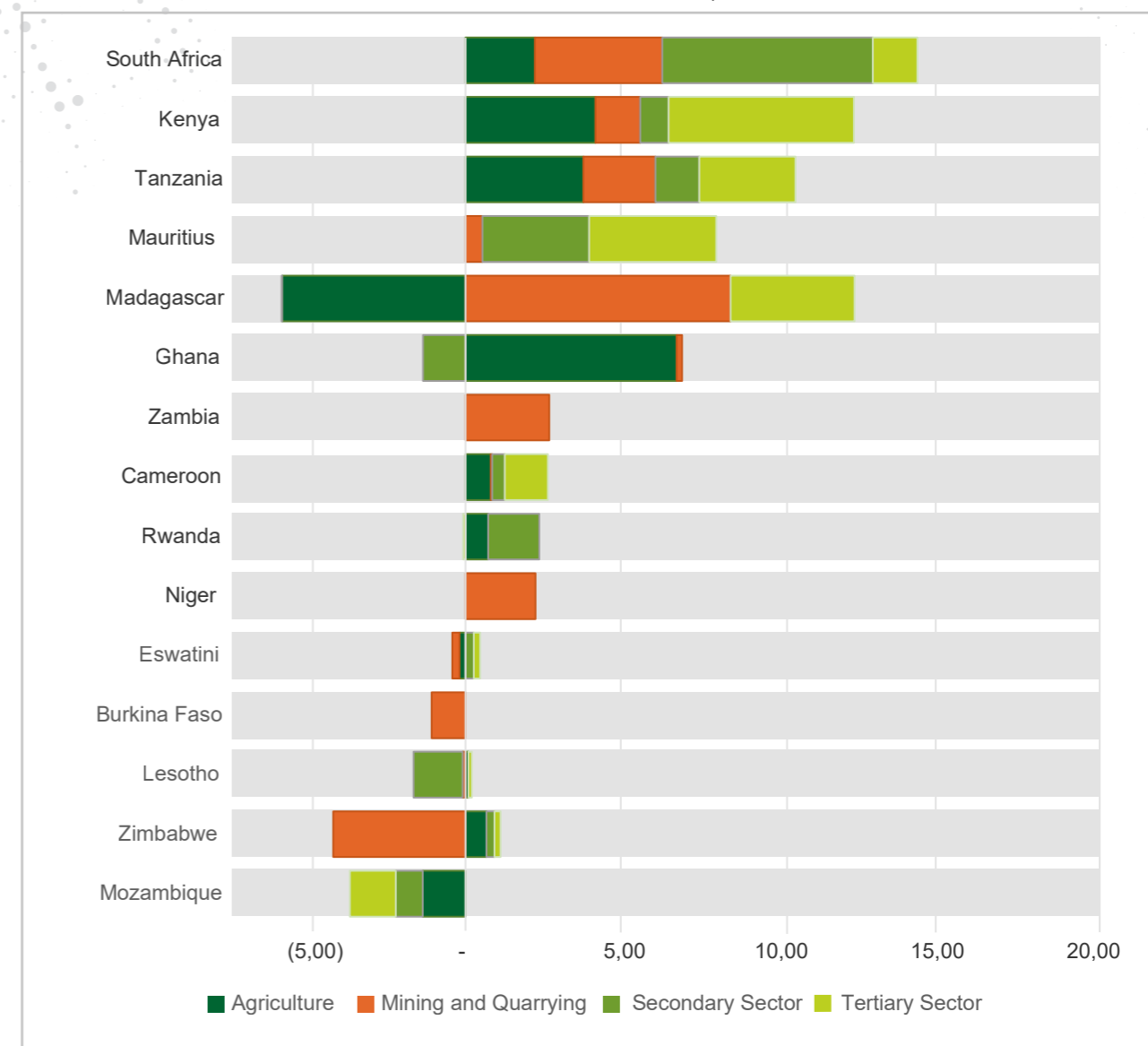
FIGURE 4.10 SECTORAL TAX BUOYANCY, 2021 - 2022



Among the ATO countries under study, South Africa, Tanzania, Cameroon, and Kenya emerged as the most buoyant countries, with all sectors recording positive tax buoyancy in 2022. On the other hand, the mining sector in Zimbabwe registered negative tax buoyancy while the rest of the sectors showed positive response to changes in GDP. This

is attributed to tax expenditures which negatively impacted on tax revenue collections as the sector resumed operations after the pandemic. Similarly, tax revenue from the mining and agriculture sectors in Eswatini recorded a constrained response to changes in GDP as shown by the negative tax buoyancy in 2022.

FIGURE 4.11 SECTORAL TAX BUOYANCY BY COUNTRY, 2022



Agriculture sector exhibits resilience post-pandemic period

Countries under study showed mixed responsiveness of the agriculture sector to economic changes. In 2022, Ghana, South Africa and Cameroon exhibited positive responsiveness to economic changes with tax buoyancies of 6.77, 3.78 and 2.23 respectively, as demand for agricultural products increased. During the period, South Africa's highest

food product exports were directed towards multiple destinations, including Namibia, Botswana, Mozambique, the United Kingdom, and the United States of America (WB, 2024) and contributed to the overall performance of the agricultural sector. Although Cameroon, Rwanda, Lesotho, and Zimbabwe demonstrated positive tax buoyancy for both periods, the responsiveness in all cases was below 1. The agriculture sector in most countries has tax concessions to ensure food security, hence low tax buoyancy levels.

29. Nigeria and Sierra Leone were outliers and were therefore excluded from the analysis.

FIGURE 4.12 AGRICULTURE SECTOR'S TAX BUOYNACY, 2022

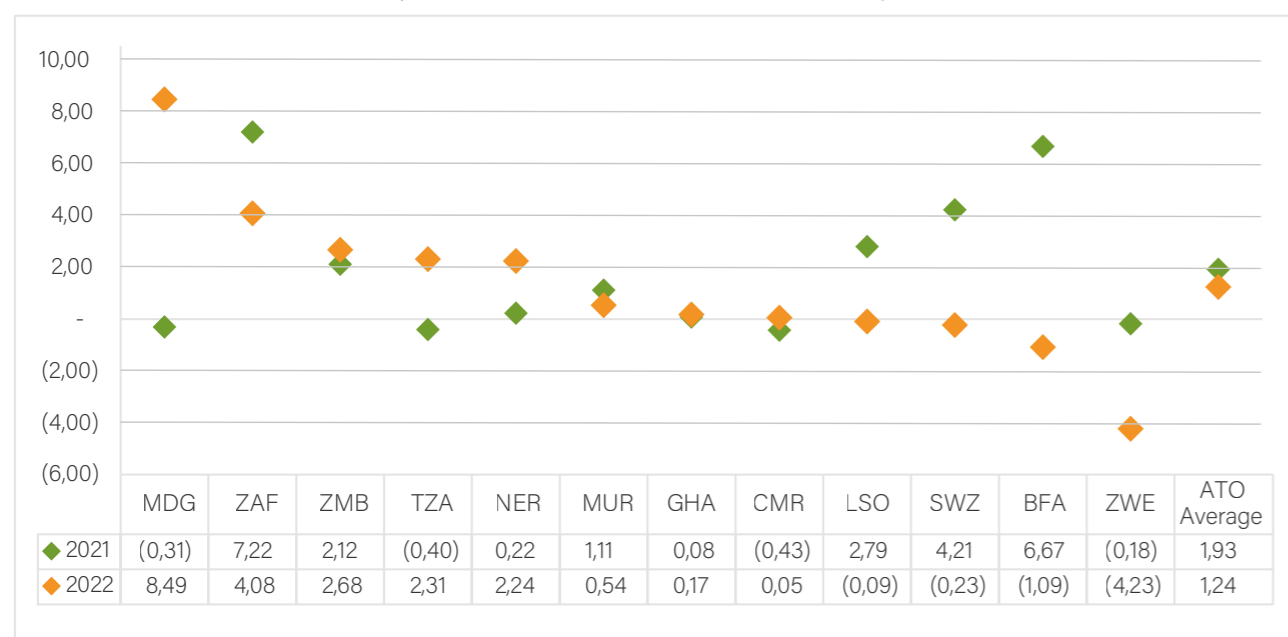


Performance of the mining and quarrying sector

In 2022, the mining and quarrying sector demonstrated lower buoyancy compared to 2021, with average tax buoyancies of 1.24 and 1.93, respectively. The lowest tax buoyancy was recorded by Zimbabwe, exhibiting negative tax buoyancy in both periods. This can be attributed to high tax expenditures in

the sector which negatively impact on tax revenue collections. On the other hand, Madagascar displayed the highest level of responsiveness to changes in both GDP and tax policies in 2022, as indicated by the mining sector's tax buoyancy of 8.49 from 0.31 in 2021. Tanzania also recorded a notable shift from a negative tax buoyancy of -0.40 in 2021 to a positive buoyancy of 2.31 during the subsequent year of 2022.

FIGURE 4.13 MINING AND QUARRYING SETOR'S TAX BUOYANCY, 2022



Box 4.2

Tax expenditures negatively impacts on revenue performance of the mining sector in Zimbabwe

The mining sector in Zimbabwe is diverse with an array of minerals such as gold, platinum, diamonds, coal, chrome, nickel, and lithium. The sector enjoys several tax expenditures which are aimed at promoting investment in that sector. The contribution of the mining sector to total exports increased significantly from 47% in 2009 to about 80% in 2021 while tax revenue contributions from the sector remained depressed (Tshuma, 2022). Tax expenditures have a negative impact on tax revenue collections. Despite the mining sector registering a growth in GDP from 2021 to 2022, tax revenue collections declined during that period.

The mining sector tax expenditures in Zimbabwe include the following:

- VAT zero- rating on mineral exports.
- Suspension of duty on the importation of capital goods and raw materials.
- Capital redemption allowances.
- Indefinite carryover of mining losses.
- Lower CIT rate of 15% on holders of special mining leases against a standard CIT rate of 24%.

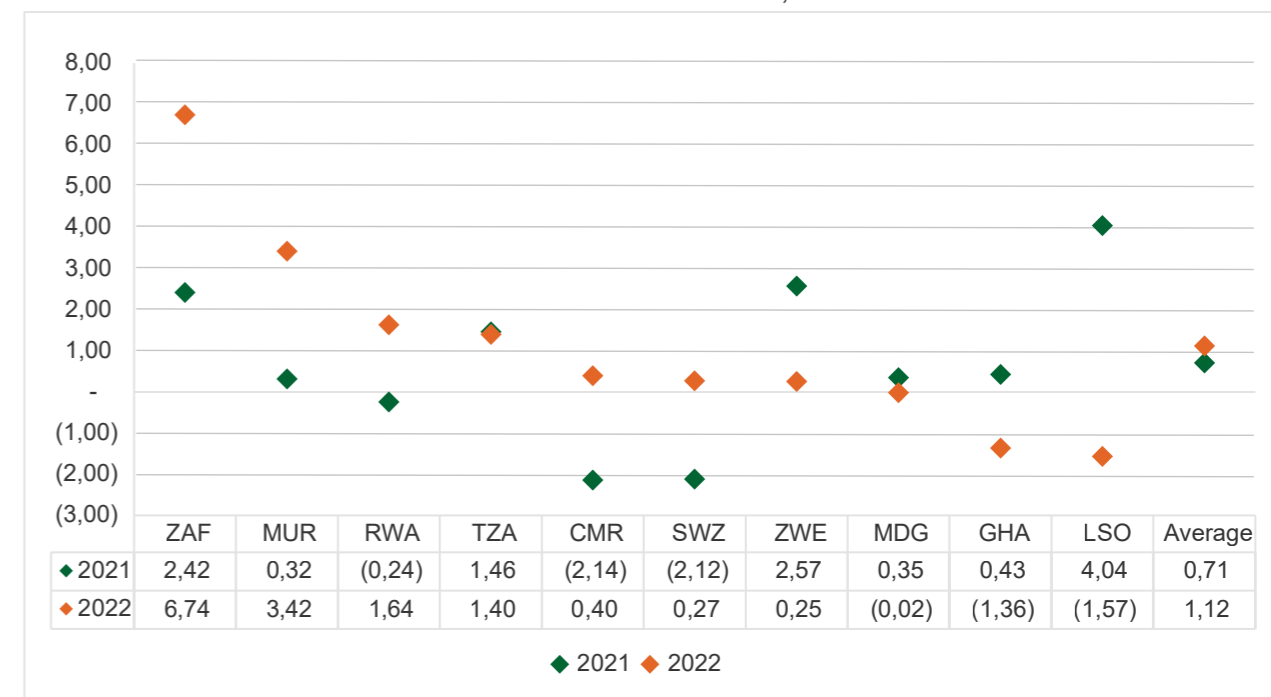
Source: Tshuma (2022)

Secondary sector bounces back from COVID-19 effects

The secondary sector depicted positive tax buoyancy for seven countries out of ten countries under study in 2022. The most buoyant country was South Africa, with a tax buoyancy of 6.74 in 2022 as illustrated in Figure 4.14. South Africa's manufacturing sector demonstrated resilience

and experienced increased demand for goods in the post-pandemic period, as reflected by a rise in production capacity utilization from 71.5% in 2020 to 78.6% in 2022 (Department of Statistics South Africa, 2024). Other countries with tax buoyancies above 1 in 2022 are Rwanda, Mauritius, and Tanzania.

FIGURE 4.14 SECONDARY SECTOR'S TAX BUOYANCY, 2022

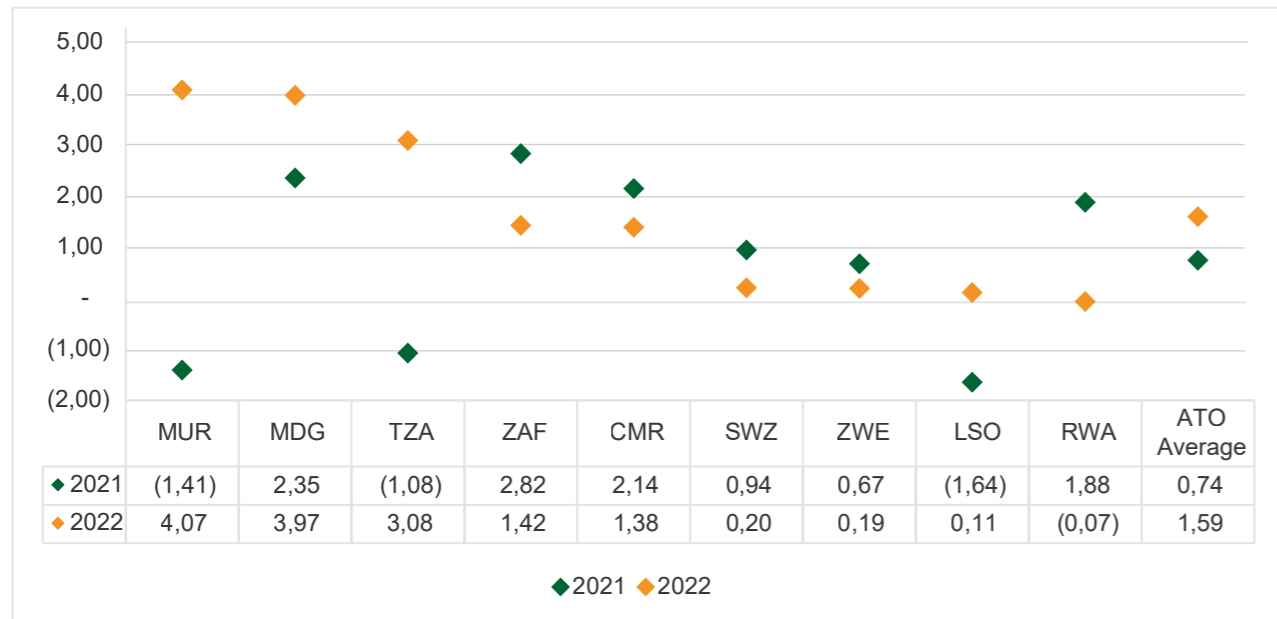


Tertiary sector on a positive recovery path

The tertiary sector showed an improved responsiveness to economic changes as shown by an average tax buoyancy of 1.59 in 2022 from the 0.74 registered in 2021 (Figure 4.15). Noteworthy is that countries that have strong services sectors such as Mauritius were affected by the negative effects of

COVID-19 where travel and social gatherings were restricted, exhibiting negative tax buoyancy even in 2021. However, as economies returned to normalcy in 2022, the services sector in Mauritius bounced back, recording a tax buoyancy of 4.07 from -1.41 in 2021. Tanzania and Madagascar also registered positive tax buoyancy in 2022 as compared to the negative buoyancies in 2021.

FIGURE 4.15 TERTIARY SECTOR'S TAX BUOYANCY, 2022



4.4. Measuring tax revenue stability

The stability of tax revenues can be measured using the Coefficient of Variation (CV), which is a statistical measure used to assess the relative variability or dispersion of a dataset in relation to its mean. This coefficient is computed as follows:

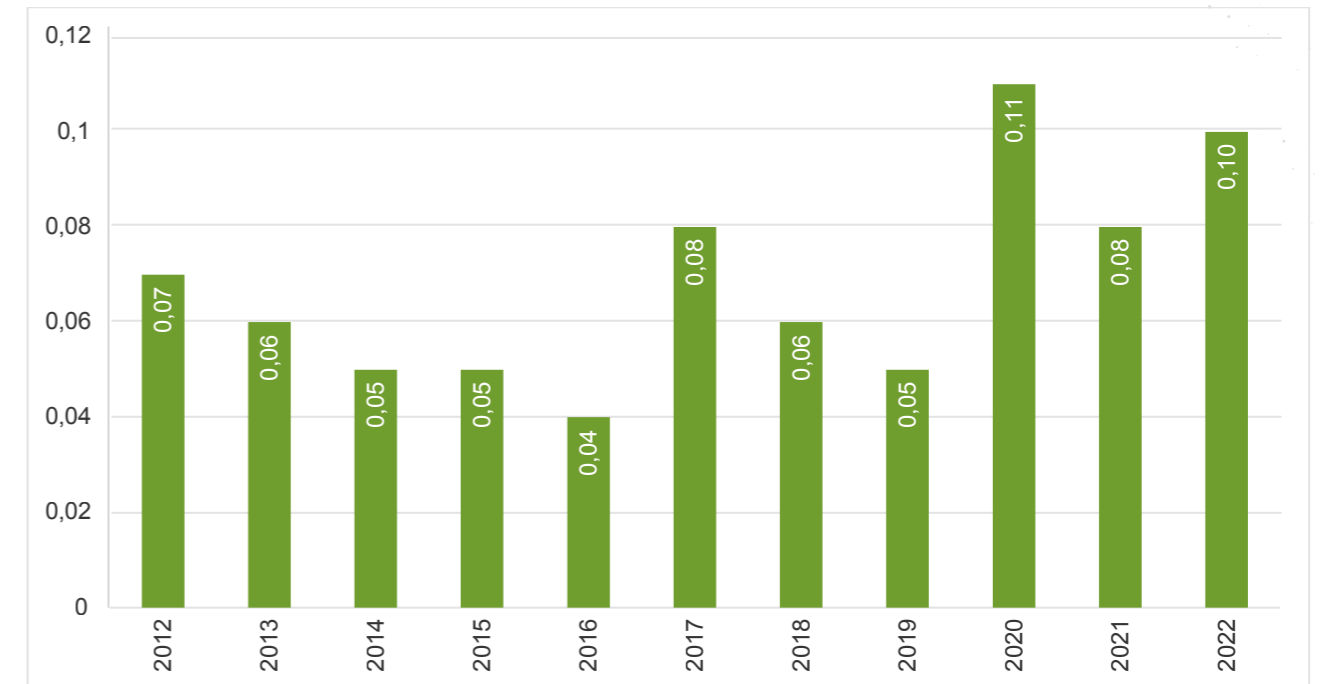
$$CV = (\text{Standard Deviation} / \text{Mean}) * 100$$

A CV value that is close to zero indicates more stable revenue. While acceptable levels of the coefficient of variation differ amongst various fields, a CV that is below 0.3 is generally acceptable.

4.4.1. Total tax revenue remains stable

Revenue in ATO countries displayed more stable revenues, with coefficients of variation which ranged between a low of 0.04 in 2016, to a peak of 0.11 in 2020, before slightly going down to 0.10 in 2022, as shown in Figure 4.16. Noteworthy is that since the COVID-19 induced volatility, the total revenues' stability has not yet reached the pre-COVID CV average of 0.06.

FIGURE 4.16 STABILITY TREND OF TOTAL TAX REVENUE, 2012



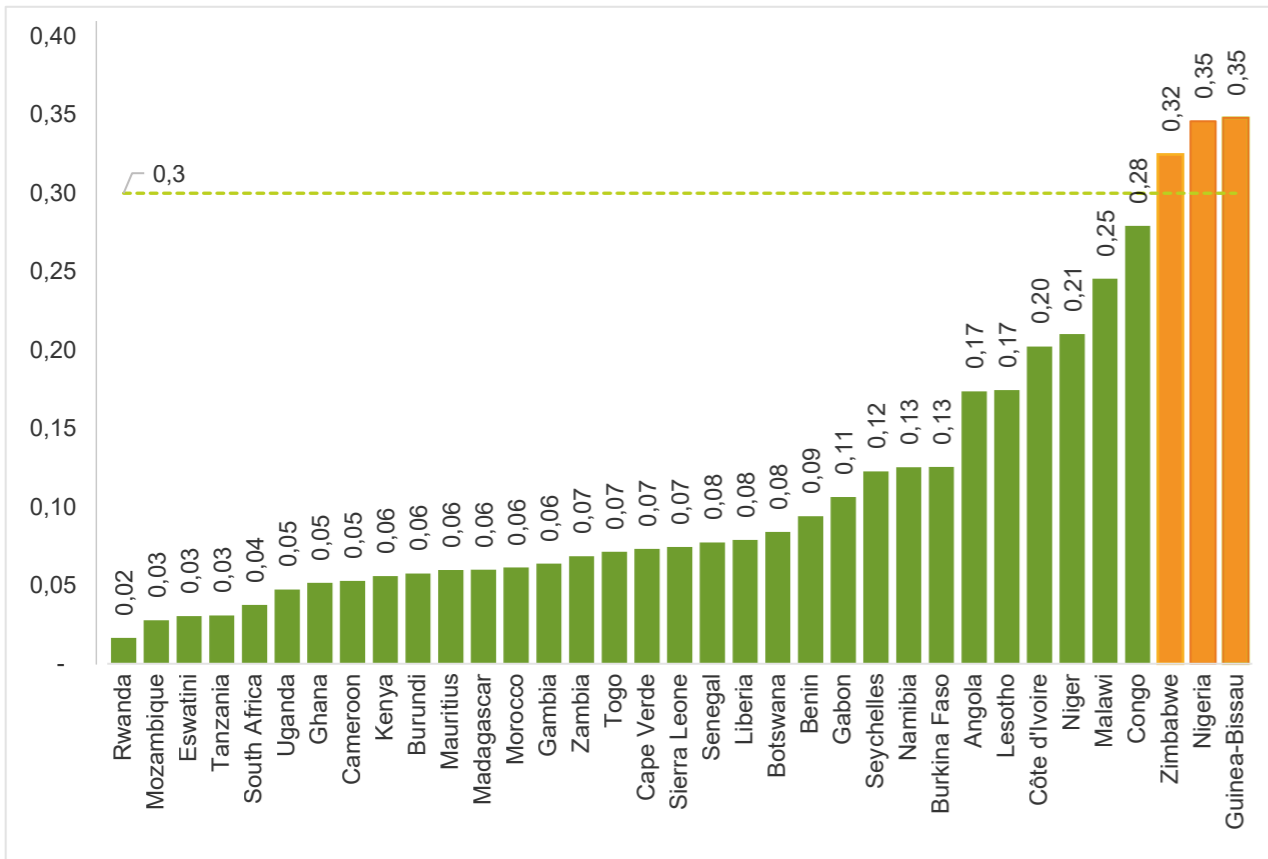
4.4.2. Total tax revenue stable for majority of ATO countries during 2018-2022

During the period 2018-2022, 32 out of 34³⁰ ATO countries demonstrated stable tax revenues, with CVs of 0.3 and below (Figure 4.17). Exceptions were noted in Nigeria and Zimbabwe where tax revenue displayed a degree of volatility. It is worth noting that over-reliance on a specific sector for

tax revenue can cause instability when there is a disruption in that sector. For instance, when global metal prices fluctuate, countries that rely on the mining sector can exhibit some level of instability. Furthermore, variability in tax revenue can translate into high instability in public expenditure and investment, which can hamper economic growth (Gnangnon, 2022).

30. Analysis excluded Guinea Bissau due to incomplete data on the stability of revenue heads.

FIGURE 4.17 STABILITY OF TOTAL TAX REVENUE, 2018 - 2022

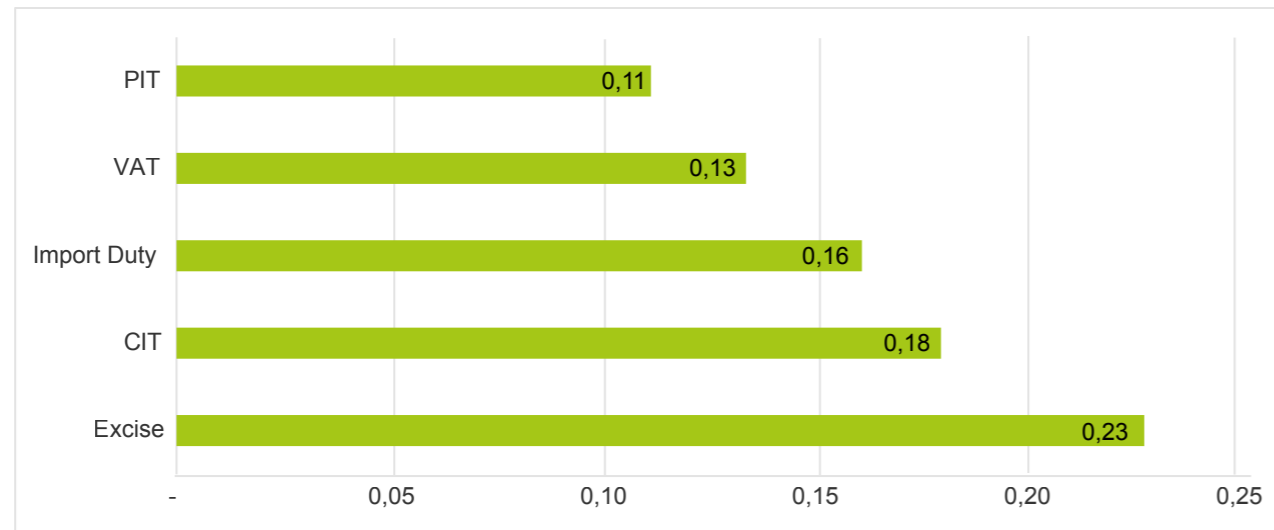


4.4.3. Major tax heads performance during the five-year period (2018 – 2022)

During the period 2018 to 2022, all major tax heads exhibited stability with coefficients of variation ranging between 0.11 and 0.23. PIT and VAT were the most stable tax heads

with a CVs of 0.11 and 0.13 respectively (Figure 4.18). Tax administrations and policymakers should be proactive in identifying disruptions to the economy such as increased technological developments which may lead to new tax revenue streams and disruptions on traditional tax revenue sources.

FIGURE 4.18 STABILITY OF DIFFERENT TAX HEADS, 2018 - 2022

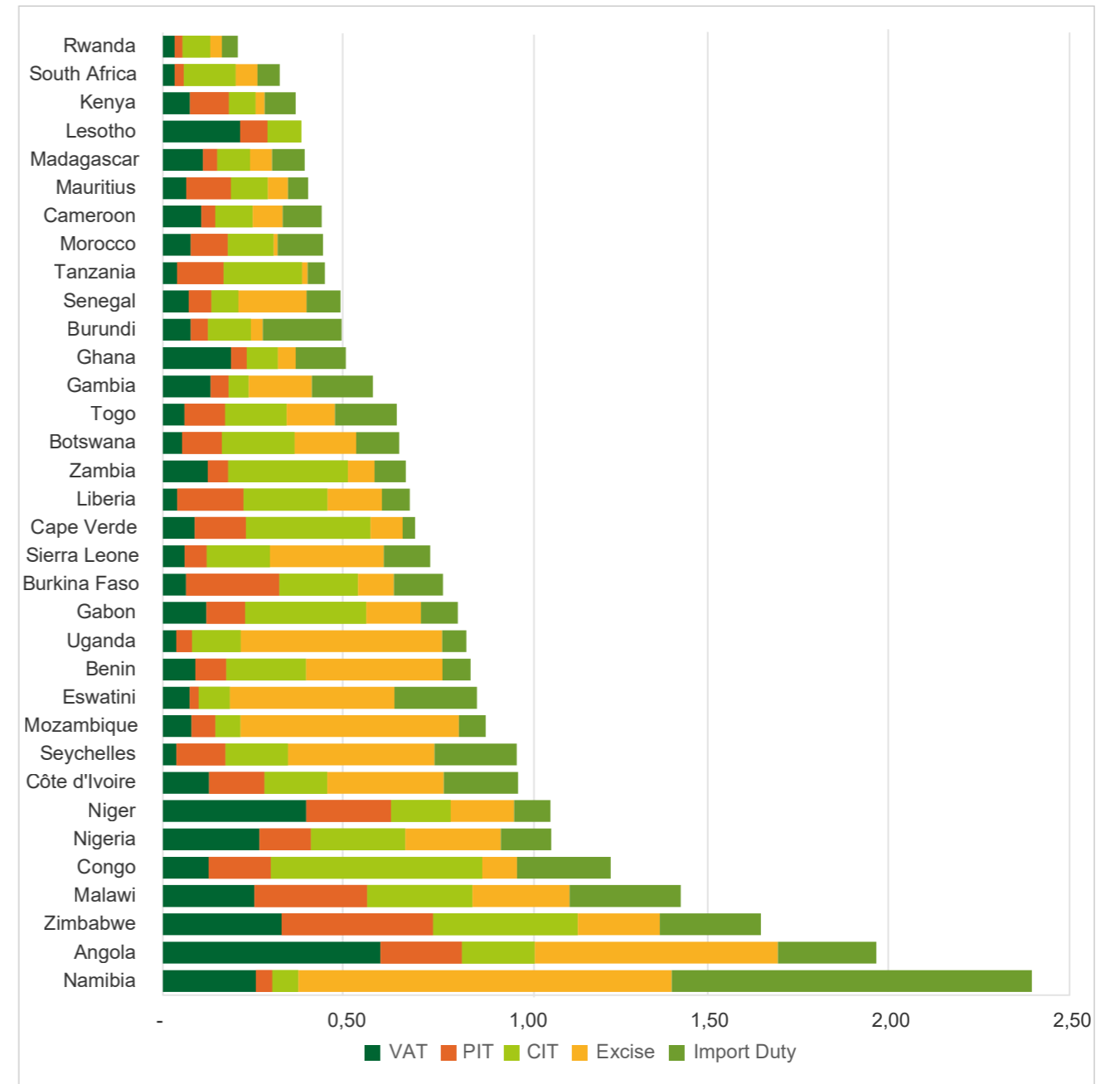


4.4.4. Countries show mixed tax head stability in 2018-2022

Figure 4.19 presents the stability of major tax heads for ATO countries during the period 2018-2022. A total of 19 out of 34 ATO countries recorded stability among all major tax heads during the period 2018-2022. However, some countries displayed mixed tax head stability. For instance, in Benin, Cote d'Ivoire, Eswatini, Mozambique, Seychelles, Sierra Leone and Uganda, all tax heads displayed elevated levels of stability except for excise which was volatile. Similarly, Zambia's CIT was unstable during the period under review while PIT,

Import Duty, Excise and VAT were stable. In Zimbabwe only excise and import duty were unstable. It is worth noting that in Namibia and Angola, some tax types were highly volatile with CV's above 0.5. Import duties and excise revenue volatility was mainly on account of the COVID-19 pandemic which led to restrictions on trade and travel, as well as lockdowns which led to low consumption on excisable goods such as fuel, alcoholic beverages, and tobacco products. As countries implemented various post-COVID policies and strategies, the response of tax revenue also varied across countries, with some countries experiencing volatility in import duty and excise revenue.

FIGURE 4.19 STABILITY OF MAJOR TAX HEADS PER COUNTRY, 2018 - 2022

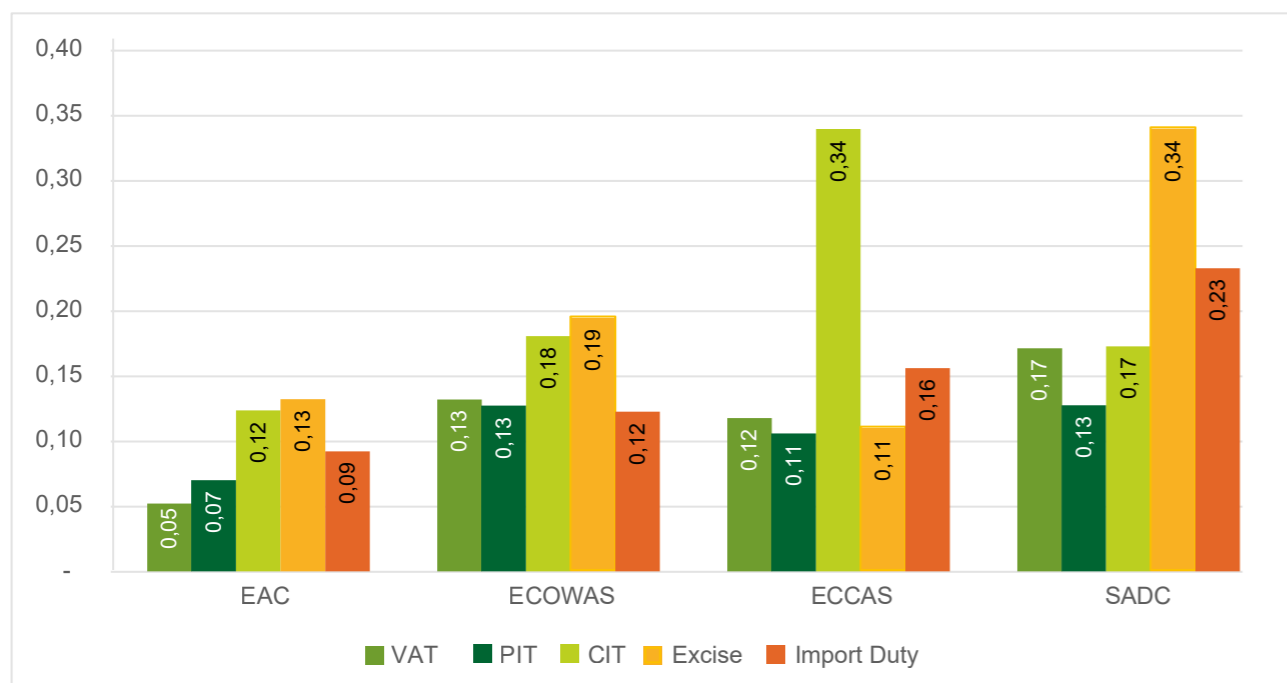


4.4.5. Regional tax head stability during 2018-2022

The EAC and ECOWAS exhibited high stability of all tax heads during the period, with the EAC having the most stable tax heads in comparison to other regions (see Figure 4.20). Import duty, PIT and VAT were the most stable tax heads in ECOWAS with coefficients of variation of 0.12 for import duty

and 0.13 for PIT and VAT. All tax heads for the ECCAS were stable during the period 2018-2022 except for CIT, which had a coefficient of variation of 0.34. In the SADC, tax heads were stable except for excise which depicted high volatility during the period under review. The volatility of excise in the SADC was driven by high excise instability in Namibia, Angola, Eswatini and Mozambique.

FIGURE 4.20 AVERAGE REGIONAL TAX HEAD STABILITY, 2018 - 2022



4.5. Looking ahead: anticipated future revenue collections

Revenue forecasting plays a significant role in planning government expenditure. It enables governments to be proactive in sourcing additional funding through borrowing, where revenue forecasts point to a deficit against expected expenditure. Performance Outcome Area 8 (POA8) of the Tax Administration Diagnostic Assessment Tool (TADAT) emphasizes on the involvement of tax administrations in the tax revenue forecasting process (TADAT, 2019). Tax revenue forecasting inherently involves uncertainties due to its reliance on assumptions and projections. Consequently, governments and tax administrations frequently revise their revenue forecasts to align with evolving economic conditions and policy decisions throughout the year.

4.5.1. Mixed revenue projections for 2023 and 2024

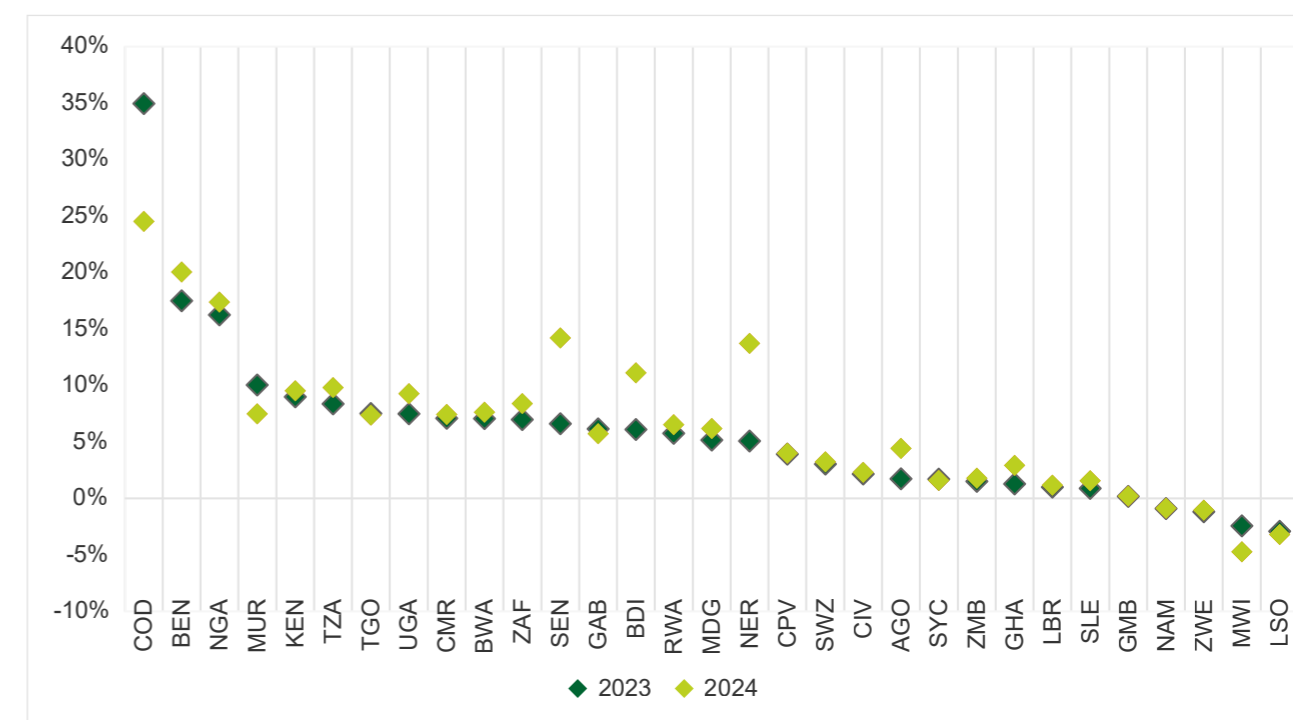
Anticipated revenue collections for 2023 and 2024 were forecasted using IMF GDP projections for 2023 and 2024, historical local currency revenue collections and tax buoyancy for 2022. Revenue forecasts were derived using the transformed tax buoyancy formula as shown below:

$$\text{Forecasted Tax Revenue} = \text{Historical Tax Revenue} * (1 + (\text{Estimated GDP Growth Rate} * \text{Historical Tax Buoyancy}))$$

Some countries are expected to register positive revenue growth that is above 5% in 2023 and 2024. These are Benin, Botswana, Burundi, Cameroon, DR Congo, Gabon, Kenya, Madagascar, Mauritius, Niger, Nigeria, Rwanda, Senegal, South Africa, Tanzania, Togo and Uganda. On the other hand, countries with negative tax buoyancies such as Namibia, Lesotho and Zimbabwe are not expected to register

significant revenue growth in 2023 and 2024. It is important to note that tax revenue performance is dependent on several factors such as compliance levels, the size and nature of the tax base as well as behavioural traits of taxpayers besides GDP and tax policies. Annexure 6 presents revenue forecasts for 2023 and 2024 while Figure 4.21 below summarizes projected total tax revenue growth for 2023 and 2024.

FIGURE 4.21 PROJECTED TOTAL TAX REVENUE GROWTH, 2023 -2024

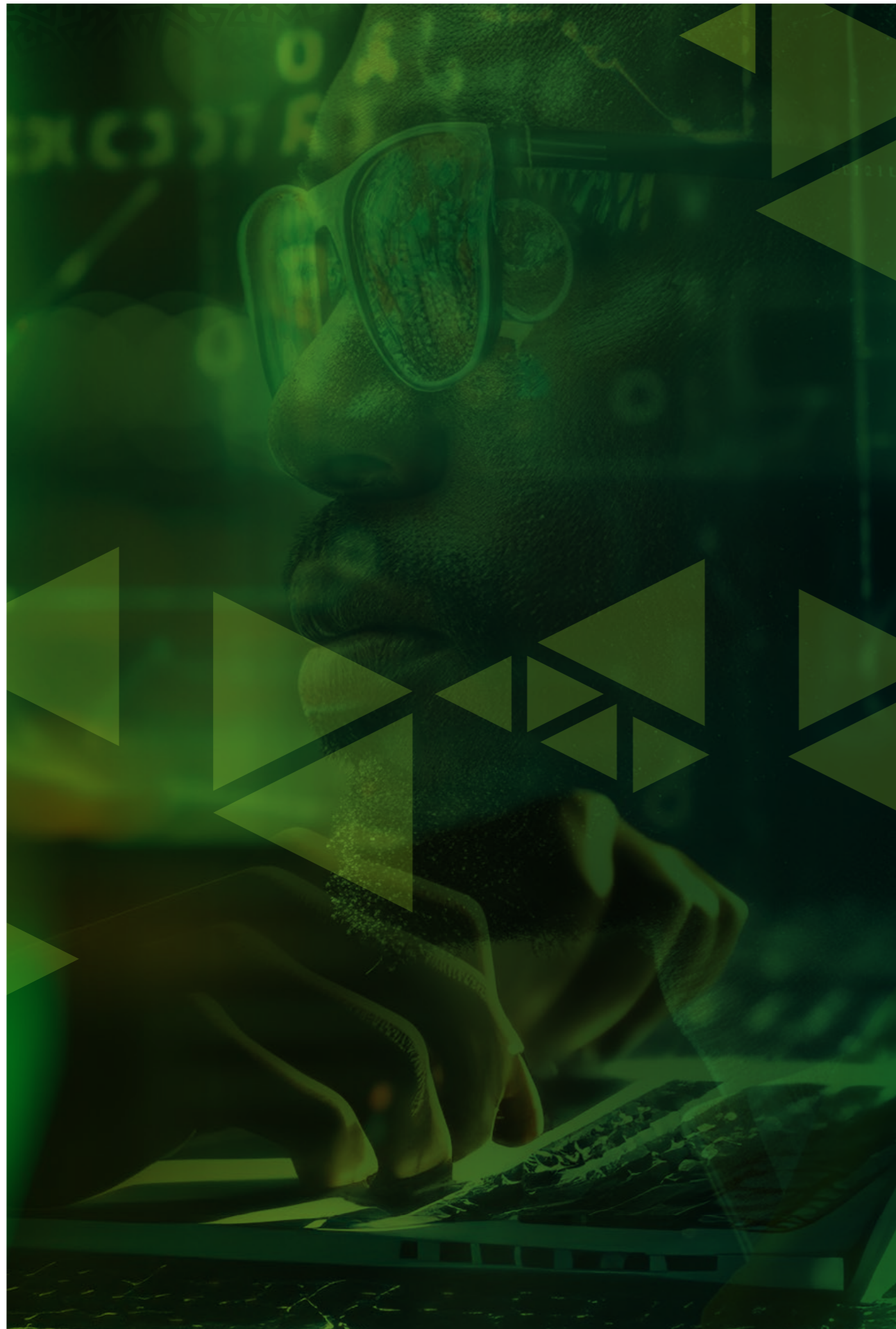


4.6 Conclusion

Revenue administration efficiency is critical to ensure that tax revenue collections are aligned to economic growth and policy changes. In 2022, the majority of ATO countries were responsive to changes in GDP, with tax revenue growing faster than GDP growth. On average, corporate income tax showed the highest tax buoyancy among ATO countries, with import duty recording the lowest tax buoyancy in 2022. All sectors recorded improved tax buoyancy from 2021 to 2022 except for the mining and quarrying sector. Since tax

structures, operating environments and policies differ across ATO countries, less buoyant sectors and less responsive tax heads should be analysed at tax administration level to ensure improved performance in future.

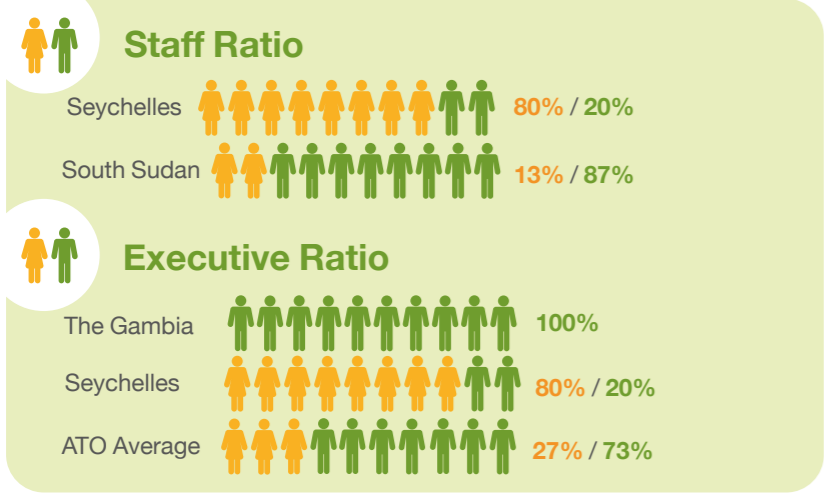
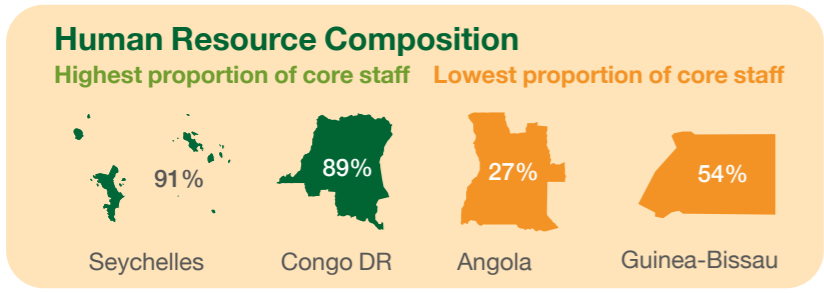
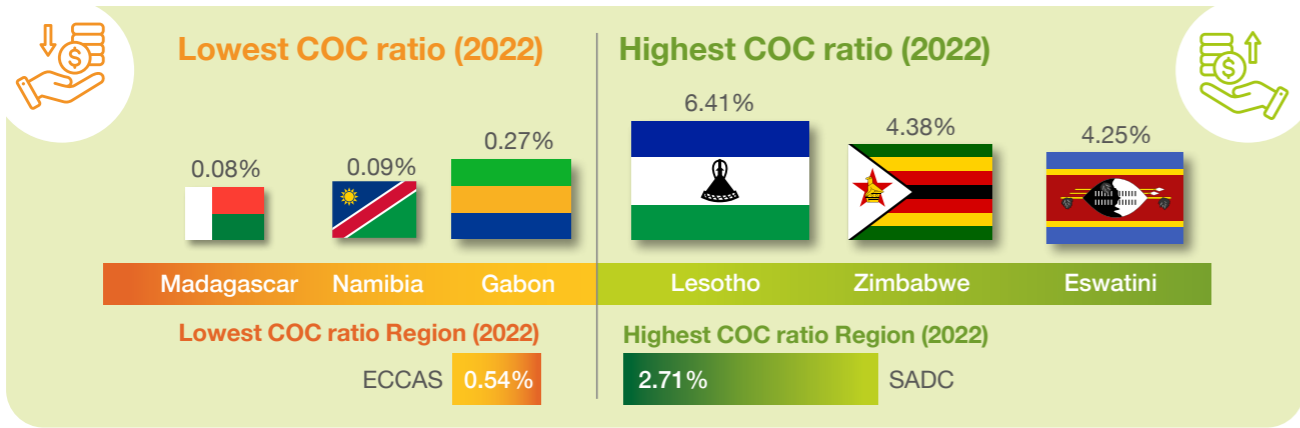
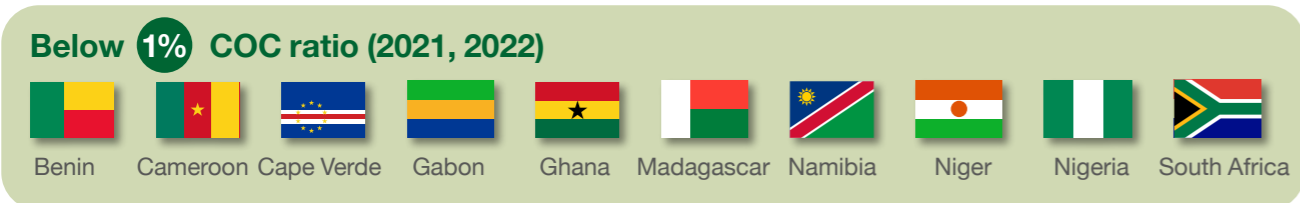
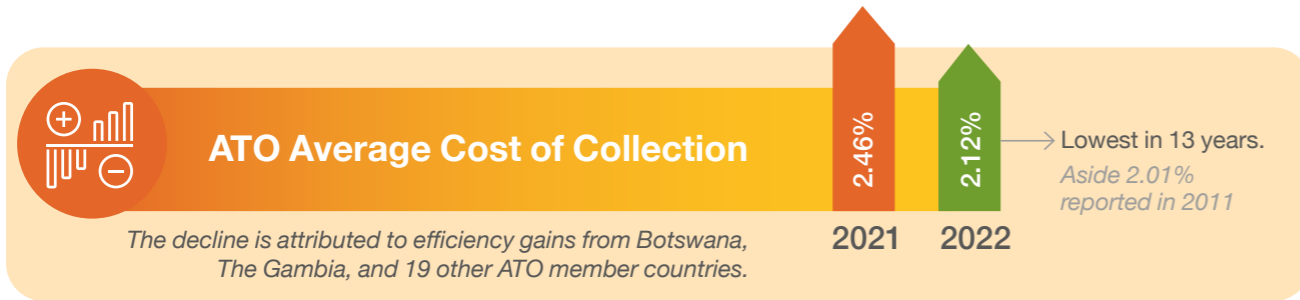
For the period 2018-2022, all ATO countries registered tax revenue stability except for Guinea Bissau, Nigeria, and Zimbabwe where tax revenue exhibited some volatility. On the other hand, the EAC emerged as the region with the most stable tax heads during the period 2018-2022 in comparison to other regions.



Chapter 5

Optimising the Resource Management of Tax Administrations

Optimising the Resource Management of Tax Administrations



Introduction

Effective resource management is key to achieving Domestic Resource Mobilisation (DRM) goals for tax administrations. This requires a comprehensive understanding of current resource allocation strategies, ensuring clear success metrics are aligned with organisational goals, and regular tracking of resource utilisation. This chapter examines two critical aspects of resource management efficiency in tax administrations: (i) cost efficiency, and (ii) human resource distribution/utilisation. It also explores best practices employed by countries for optimal resource management.

5.1. Cost efficiency of tax administrations

Tax administrations incur costs in their mandate to collect taxes mainly arising from various activities related to maximising revenue collection and ensuring compliance. Therefore, cost efficiency is crucial for tax administrations, as they need to ensure that they manage their human, financial and other resources better to effectively mobilise revenues.

Cost efficiency encompasses minimising costs through process optimisation, allocating resources efficiently to maximise revenue potential, targeting compliance and enforcement efforts towards high-risk areas and taxpayers, balancing revenue recovery with cost minimisation for low-risk cases, utilising performance metrics and Key Performance Indicators (KPIs) to assess efficiency and implementing initiatives aimed at cost optimisation and enhanced productivity.

5.1.1. Cost of collection as a ratio of revenue collections

The total cost of collection (COC) of a tax administration represents the sum of its recurrent expenditure (operational cost) and capital expenditure (capital cost). It is one of the key metrics used internationally to assess the efficiency and effectiveness of tax administrations in their efforts to mobilise tax revenue for government. It measures how much the tax administration spends for every dollar of tax revenue it collects. If the ratio is greater than one, it means the tax administration is spending more than what it is collecting. If the ratio is equal to one, it means that the tax administration break-even in its operation, and if the ratio is less than one, it posits that the tax administration is efficient and that tax collections are contributing to the financing costs of

providing basic services and other developmental projects of government (GOLD, 2001). When observed over time, a decreasing trend can constitute evidence of reduction in costs and points to improved efficiency or to some extent improved tax compliance.

It is important to note that while this indicator provides valuable insights into the overall tax collection costs, evaluating tax administrations' efficiency requires more comprehensive approaches that considers other factors which includes:

- i. **Legal frameworks:** Tax administrations' capabilities to collect taxes efficiently are shaped by legal limitations, like access to financial information, enforcement powers, and penalty structures. A situation where a tax administration is unable to leverage on the strength of legal provisions to enforce compliance, it becomes difficult to collect taxes, and this is capable of increasing cost.
- ii. **Tax policy complexities:** Broad tax bases, simple rates, and higher rates directly impacts collection efficiency and costs, but these policy choices are sometimes outside the control of tax administrations. For instance, a more complex tax system can lead to higher COC, as it requires more resources to administer and enforce.
- iii. **Economic context:** Tax revenue collection is influenced by economic factors and conditions such as growth in GDP, the size of the informal economy which can pose significant challenges for tax administrations due to difficulties in identifying and tracking taxable activities, and the macroeconomic policies that can indirectly impact tax administrations' efficiency by influencing the overall economic environment and taxpayer behaviour. Therefore, a tax administration with large informal taxpayer base that is dispersed can lead to increased COC, as it requires more effort to reach and collect taxes.
- iv. **Compliance levels:** Compliance levels differ across taxpayer groups. For high and medium taxpayer segments, their compliance levels are usually high in most jurisdictions, and tax administrations would need not spend many resources on ensuring compliance of this groups. Conversely, for micro and small taxpayer segment, it is characterised by low compliance which can lead to higher COC, as tax administrations must spend more resources

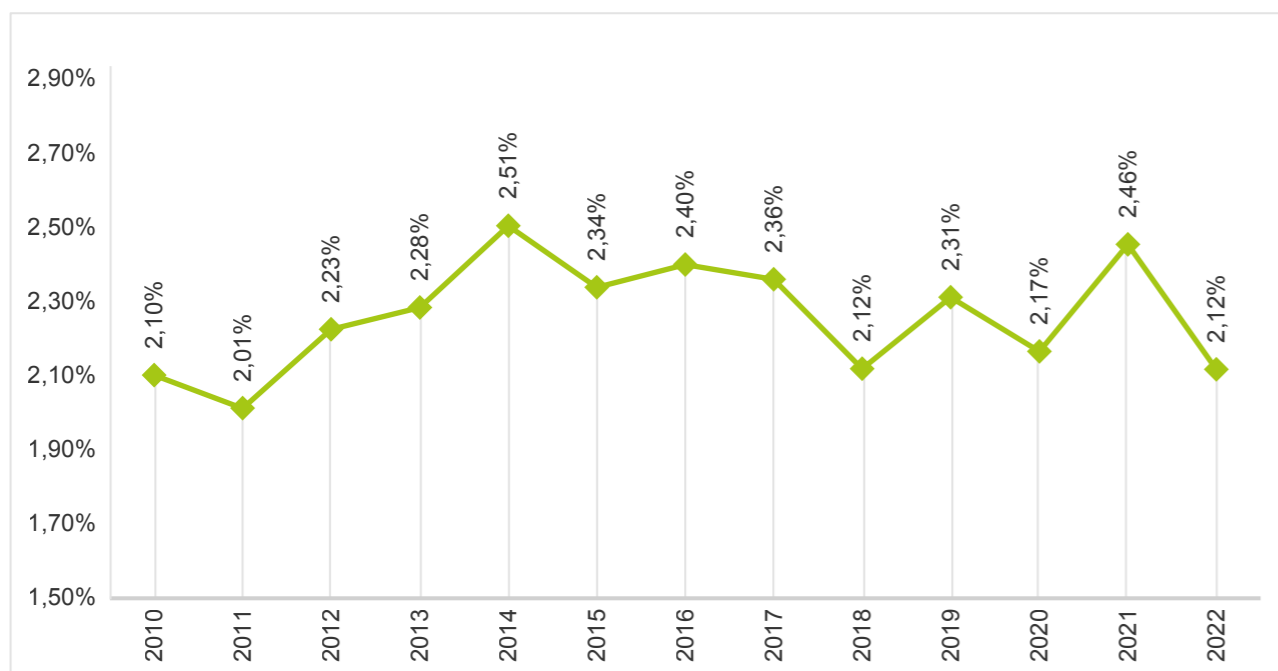
on enforcement activities. Therefore, measuring efficiency in tax collection requires multifaceted approach that considers not just cost but also take into accounts different segments. This is necessary so that the tax administration do not create a system that rewards non-compliance and undermine the overall fairness and effectiveness of the tax system (CIAT, 2018).

Despite the recognition of the limitations of this indicator, it is a useful starting point for deeper analysis of tax administrations. By considering the factors mentioned above, we can gain more understanding of their efficiency and identify potential areas for improvement. This can inform targeted efforts to: (a) adapt collection strategies to specific contexts: tailoring approaches to address informality, economic concentration, and other relevant factors; (b) advocate for changes in the legal framework: pushing for reforms that enhance the tax administrations' capacity and effectiveness; (c) develop fairer and more efficient tax policies: encouraging simpler tax structures, broad

bases, and appropriate rate settings; and (d) promote and incentivize voluntary compliance: implementing measures that foster taxpayer trust and understanding.

In 2022, there was slight decline in the number of countries that participated or provided data on COC to 29, from 31 in 2021³¹. The average COC ratio in 2022 was recorded at 2.12%, lower than the 2.46% recorded in 2021 (see Figure 5.1). Although the ATO average COC ratio for 2022 is above the internationally accepted benchmark of 1% for developing countries (National Treasury and SARS, 2023), the decline recorded suggests that tax administrations are increasingly adopting effective strategies to balance revenue collection with cost-effectiveness. Notably, investments in technology, improved compliance practices, and a focus on workforce development and taxpayer services appear to be yielding positive results and might have contributed to the overall improvement in cost efficiency observed in 2022. It is worth noting that the average COC across all ATO countries for the past 13 years is 2.26%.

FIGURE 5.1 TREND IN AVERAGE COST OF COLLECTION IN ATO COUNTRIES, 2010 - 2022



31. Sudan and Chad did not provide data for 2022.

Madagascar and Namibia had the lowest ratio in 2022, at 0.08% and 0.09%, respectively as shown in Figure 5.2. On the other hand, countries with the highest COC ratio in 2022 are Lesotho with 6.41%, down from 8.10% in 2021, Eswatini with 4.25%, down from 5.44% and Zimbabwe with 4.38%, up from 3.56%. The COC ratio for 21 ATO countries in 2022 reflects an improvement over the ratio established in 2021, suggesting enhanced efficiency in resource management (see Figure 5.3). 10 of these countries including Benin, Cameroon, Cape Verde, Gabon, Ghana, Madagascar, Namibia, Niger, Nigeria, and South Africa maintained very low COC ratio below 1% in both 2021 and 2022, indicating stability, optimisation of operations and adoption of technology and other cost-effective strategies to maximise DRM. For example, Nigeria had in the last three years embarked on

streamlining cost through strengthening of organisational framework and aggressive automation of tax processes. This has led to increased efficiency and improvement in DRM.

Six countries (Burundi, Cameroon, Ghana, Mauritius, Zambia, and Zimbabwe) recorded increases in COC ratio in 2022. It is noteworthy that Mauritius and Zimbabwe experienced significant percentage points increases in their 2022 COC ratios, with rises of 0.44 and 0.82 percentage points, respectively, when compared to 2021. These sharp increases may reflect implementation of tax administration reforms, underlying economic challenges or policy changes that impacted tax revenue collection and cost of tax administration.

FIGURE 5.2 COST OF COLLECTION RATIO BY COUNTRY, 2022

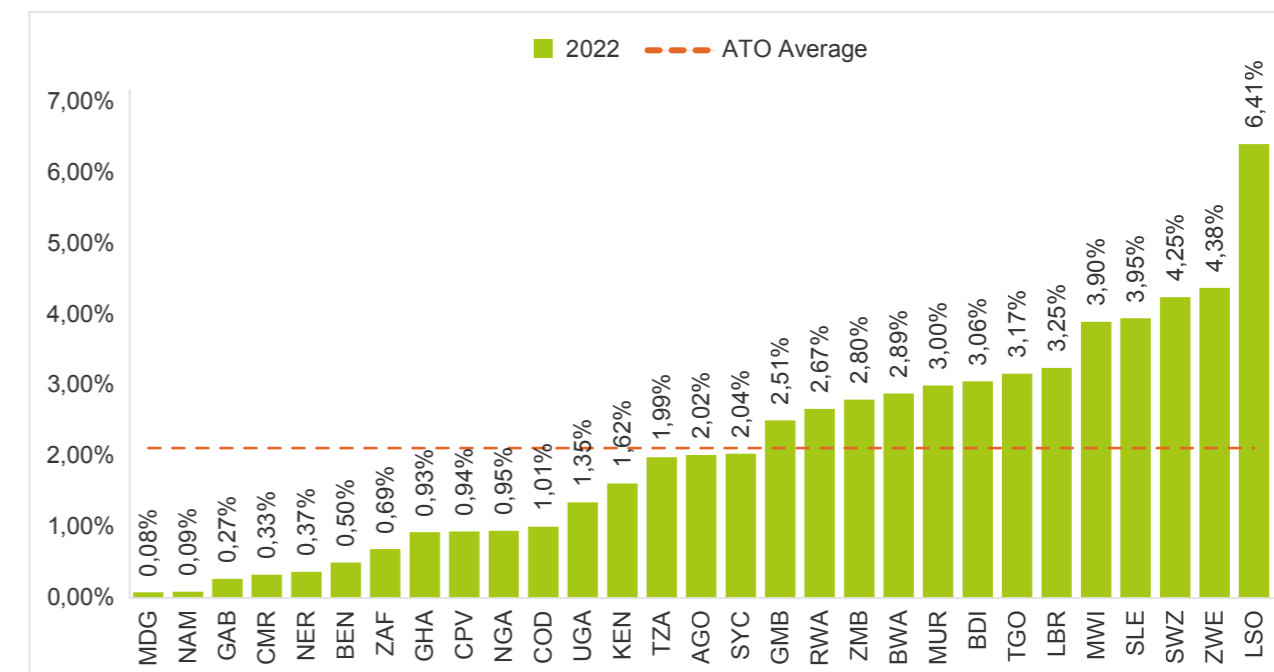


FIGURE 5.3 CHANGES IN COST OF COLLECTION RATIO BY COUNTRY, 2022

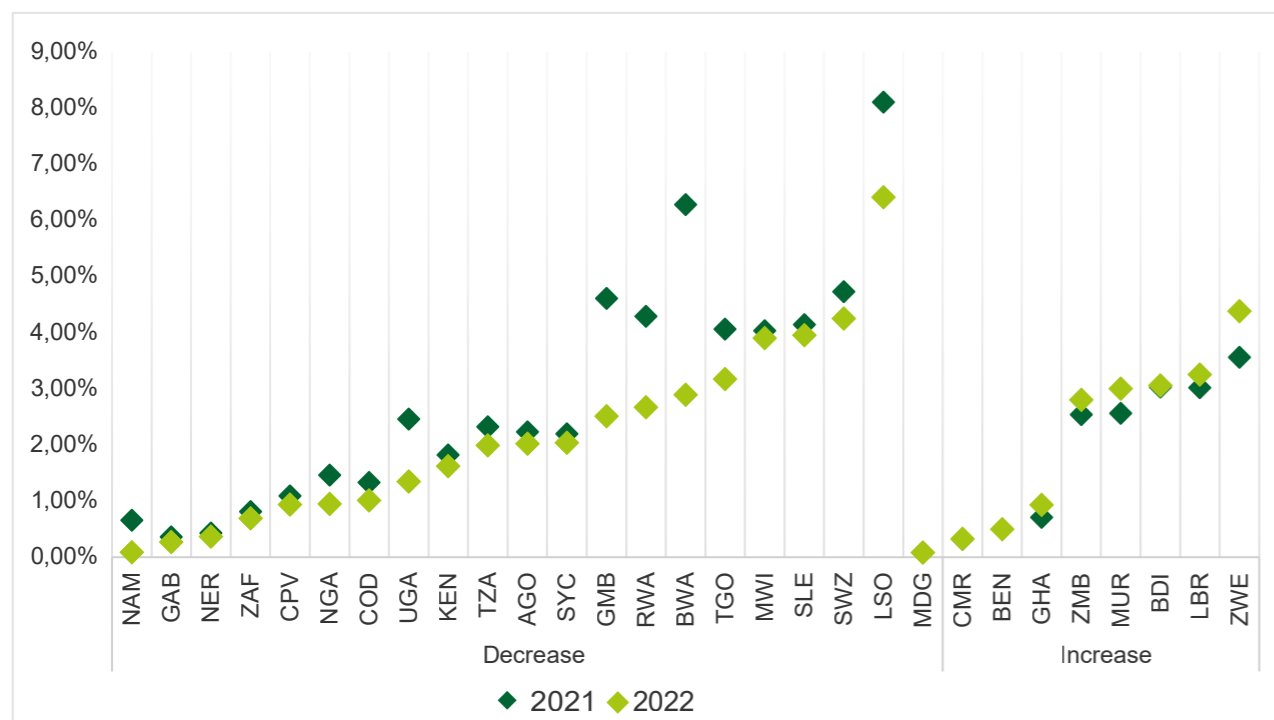
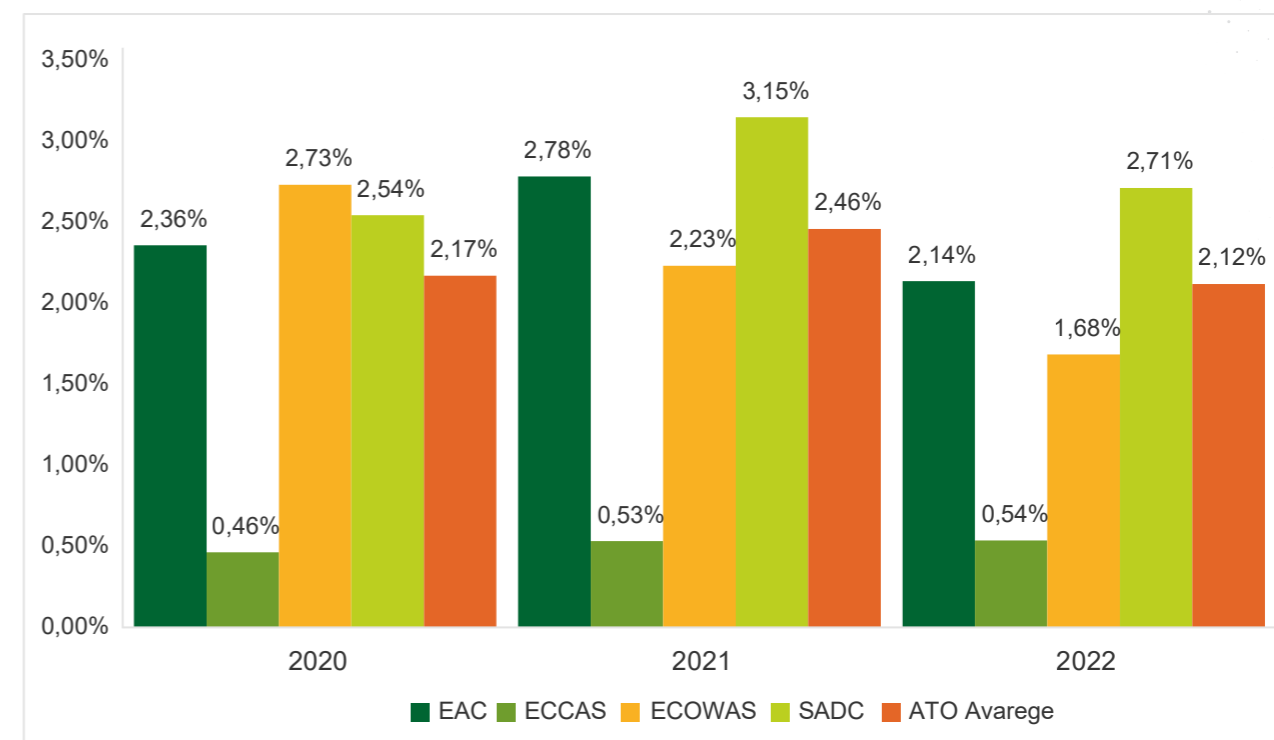


Figure 5.4 presents the regional comparison of the average COC ratio among the ATO countries for the past three years (2020 to 2022). The ECCAS boasted the record for the lowest COC ratio in the continent at 0.46% in 2020, 0.53% in 2021 and 0.54% in 2022. The EAC on the other hand showed fluctuations over the years with a peak in 2021. The ratio for ECOWAS region has been relatively stable, with slight year-on-year decreases to 1.68% in 2022, down from 2.73% and 2.23% in 2020 and 2021, respectively. The decrease

has been driven by improved cost efficiency ratios recorded in nine ECOWAS countries. SADC experienced an increase in ratio from 2.54% in 2020 to 3.15% in 2021, followed by a decrease to 2.71% in 2022. Furthermore, SADC ratio is the highest among the regional ATO groupings for 2021 and 2022, driven by high ratios in Lesotho and Eswatini as well as increased COC ratio in Zimbabwe, Zambia, and Mauritius. ECOWAS ratio of 2.73% was the highest in 2020.

FIGURE 5.4 COST OF COLLECTION RATIO BY REGIONAL GROUPINGS, 2020 - 2022



5.1.2. Operating and capital costs as a share of total tax administration costs

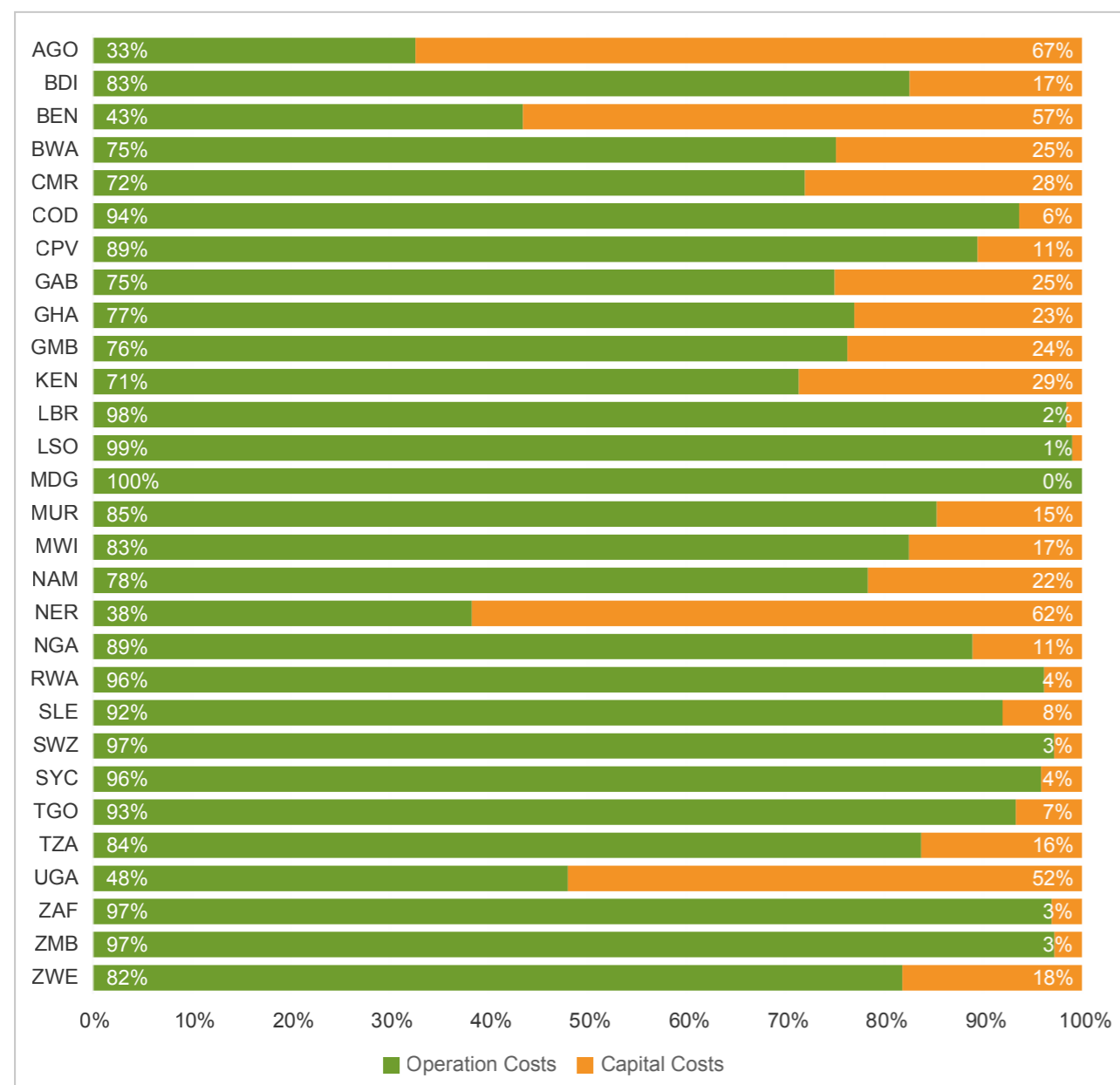
The share of average for operational costs in 2022 stood at 81% of total costs and capital costs stood at 19% (see Figure 5.5). This represents a decline of 3% for operational cost and an increase of 5% for capital cost from what obtained in 2021. The increase in capital cost could be attributed to the evolving nature of tax operations, the need for technological advancements, and the pursuit of more efficient and effective TA processes.

In 2022, Uganda experienced a significant surge in the share of capital cost, increasing by 50 percentage point from 2% in 2021 to a remarkable 52%. The spike was driven by increase in capital expenditure for the construction of offices and purchase of operational vehicles. However, Angola had the

highest share of capital cost among the ATO countries in 2022 which stood at 67%. This was followed by Niger (62%, down from 72%), Benin (57%), Uganda (52%, up from 2%) and Kenya (29%, up from 6%).

Similarly, Madagascar had the highest share of operational cost at 100%, unchanged from what was reported in 2021. The lack of capital cost in Madagascar can be explained by its status as a department within the Ministry of Finance. Consequently, any capital expenditure incurred would have been included in the ministry's budget and cannot be reported independently for the given period. The highest proportion of operational expenditure in Madagascar was followed by Lesotho (99%, up from 93%), Liberia (98%, up from 96%) and Zambia, Eswatini and South Africa with 97% each, up from 84%, 89% and 96%, respectively.

FIGURE 5.5 SHARE OF OPERATING AND CAPITAL COST BY ATO COUNTRIES, 2022



5.2. ATO human resource composition and management

One of the most critical assets of any organisation globally, is its human resource. It highlights the concept of human capital, in terms of the skills, knowledge, experience, and abilities possessed by employees within an organisation. Recognising employees as valuable assets and investing in their development is an acknowledgement of their unique contributions to the overall growth and development of the organisation. It fosters a culture of engagement and

innovation which is key to achieving tax administrations' goals and objectives. Therefore, human resources are at the core of a tax administration's ability to implement and enforce tax policies, provide quality taxpayer service, analyse data, develop effective policies, prevent fraud, and adapt to technological advancements. The expertise, skills, and dedication of the human capital within a tax administration are crucial for achieving its objectives and maintaining the integrity of the tax system. It is important to constantly keep track of human resource composition and develop strategies for periodic realignment of skills to ensure they are tailored towards meeting the desired objective of tax administration.

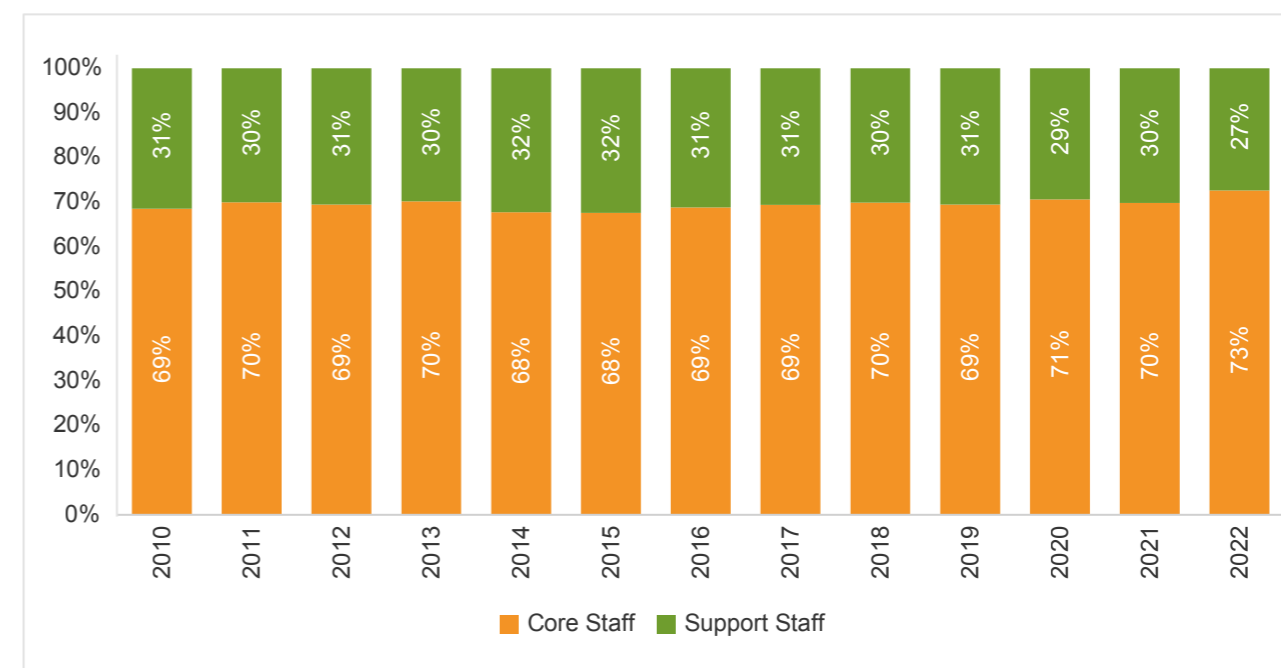
5.2.1. Share of core staff consistently higher than share of support staff

Figure 5.6 highlights the trend in the proportion of core and support staff in ATO countries from 2010 to 2022. Core staff in this case refers to employees directly involved in essential tax operation functions. This includes roles such as registration, returns and payment processing, taxpayer services, audit and investigation, enforcement of debt collection, and dispute resolution. On the other hand, support staff are members of staff who work collaboratively to support the overall functioning of the tax administration, ensuring that tax related processes are efficient, transparent and in compliance with relevant laws and regulations. They provide support in functions such as human resources personnel management, capacity building programmes, finance and account, legal and policy advisory, procurement, Information Technology (IT), facility management, project managers, general administrative support, among others.

In 2022, ATO countries experienced a slight increase in the average share of core staff reaching 73%. This marks a growth of three percentage point compared to the 2021 figure of 70% and represents the highest level from 2010 to 2022. This increase is likely attributable to the strategic allocation of more staff to core tax functions, particularly in response to the heightened demand from governments across the continent to broaden the fiscal space through DRM and combating of Illicit Financial Flows (IFFs).

Worth noting is that in the last 13 years, the average share of core staff has been consistently higher than the share of support staff. It highlights the strategic importance that tax administrations place on core staff to delivering on the goal of ensuring DRM. Additionally, aside from the 2022 increase, core staff in ATO countries has been relatively stable averaging 69% for core staff and 31% for support staff each year.

FIGURE 5.6 PERCENTAGE SHARE OF CORE AND SUPPORT STAFF IN ATO, 2010 - 2022



On a country level analysis, the 2022 proportion of core and support staff shows significant variation (Figure 5.7). Seychelles and DR Congo had the highest share of core staff at 91% and 89%, respectively. By implication, it means these countries had the least share of support staff in the ATO (9% for Seychelles and 11% for DR Congo). In contrast, Angola had the lowest proportion of core staff at 27%. This was followed by Guinea Bissau with 54% and The Gambia with 56%. Also, by implication, these countries had the largest share of support staff at 73% for Angola, 46% for Guinea

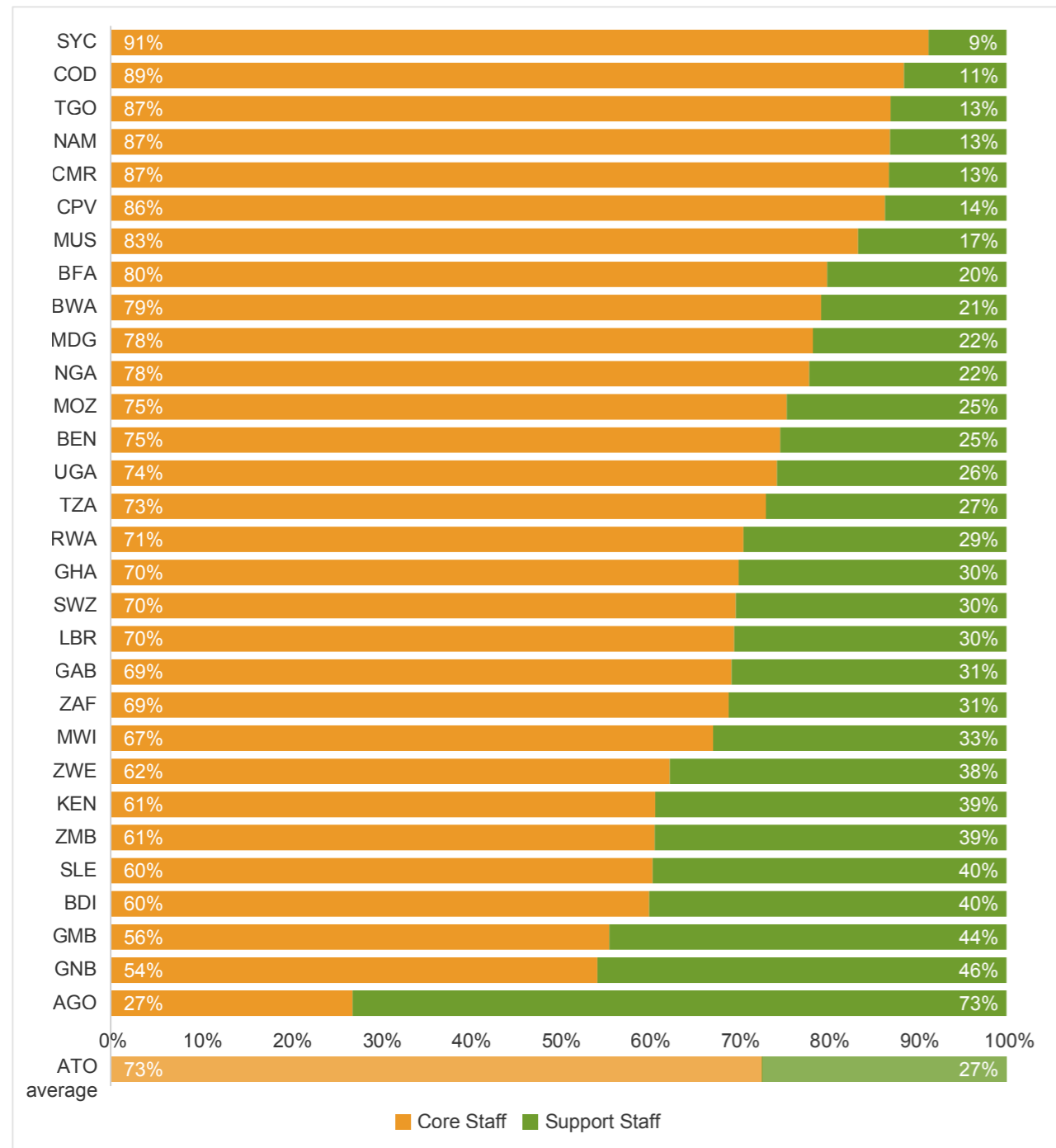
Bissau and 44% for The Gambia.

Noteworthy is that countries with higher percentages of core staff also experienced substantial growth in their tax revenue in 2022. For instance, Seychelles and DR Congo, which had the highest proportion of core staff, saw significant increases in their tax revenue at 11% and 71%, respectively. In contrast, Angola, and The Gambia with the lowest share of core staff, recorded modest revenue growth of approximately 5% and 1%, respectively (see Chapter 2).

On an overall, 19 ATO countries³² (63%) of the 30 countries that provided data on this indicator had 70% and more of their staff designated as core staff in 2022. This is consistent with the average core staff obtained in countries under CIAT (71%) and high-income countries (79%) (CIAT, 2021), and it

further emphasises the importance tax administrations place on DRM by designating most of their staff to core operations that includes return processing, audit, and compliance enforcement.

FIGURE 5.7 PROPORTION OF CORE STAFF AND SUPPORT STAFF IN ATO, 2022

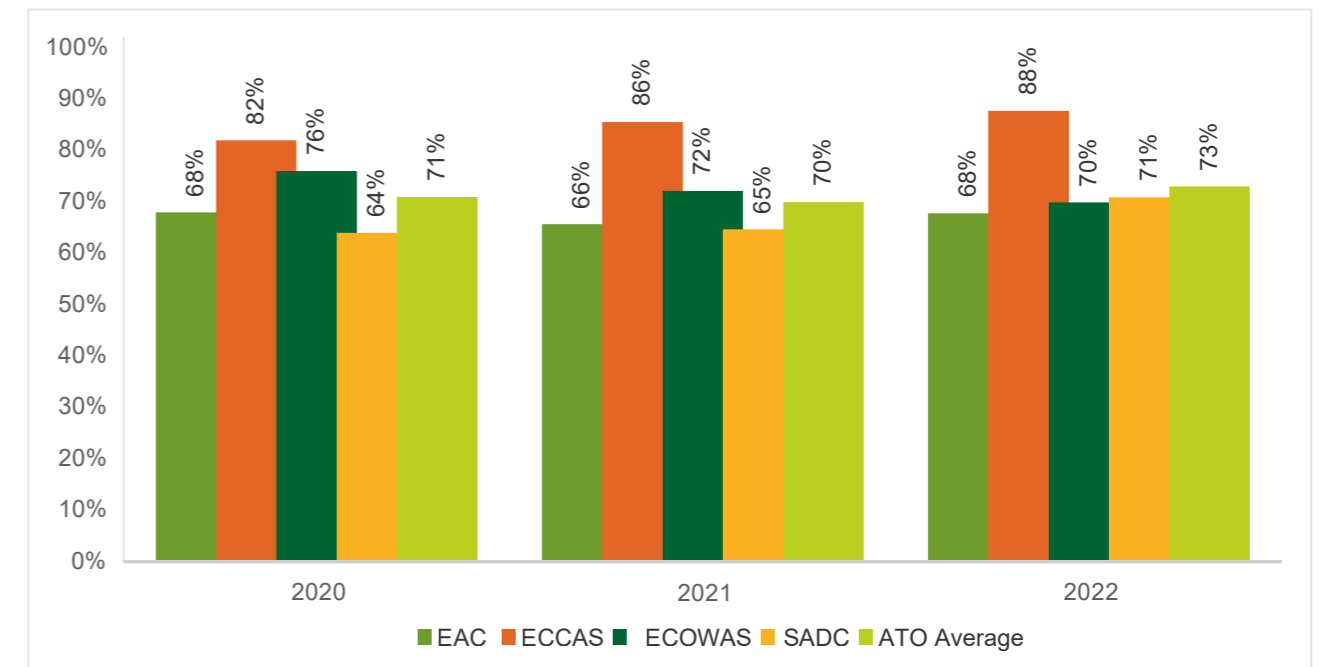


32. In no particular order, these countries are Seychelles, DR. Congo, Togo, Namibia, Cameroon, Cape Verde, Mauritius, Burkina Faso, Botswana, Madagascar, Nigeria, Mozambique, Benin, Uganda, Tanzania, Rwanda, Ghana, Eswatini and Liberia.

On a regional analysis, the ECCAS had 88% share of core staff in 2022. It is the highest in the continent, consistent with the previous two years. The share of core staff in the SADC was the lowest in the first two years (i.e. 64% in 2020 and 65% in 2021), it increased significantly to 71% in 2022, driven by human resource realignment in Mozambique and Namibia, which saw their share of core staff increase remarkably. The

proportion of core staff in the ECOWAS region declined slightly from 76% in 2020, down to 72% in 2021 and a further decline to 70%, suggesting potential challenges or changes in workforce dynamics. EAC remained relatively stable with slight variation between 2020 and 2022.

FIGURE 5.8 ATO REGIONAL COMPOSITION OF CORE STAFF, 2020 - 2022



5.2.2. Gender and workforce diversity composition

Inclusivity is key to promoting equity and fairness for all, irrespective of race, gender, colour, or physical disposition. Gender equality involves the dismantling of discriminatory practices and beliefs that limits or undermine the social, economic, political, and cultural rights of individuals based on their gender or physical appearance. In recognition of the gender gap and the need to have a more inclusive and gender balanced society, the United Nations (UN) adopted Gender Equality as one of its Sustainable Development Goals (SDGs) of the 2030 agenda for sustainable development. The goal aims to among others, end gender disparities in our societies and secure equal participation and opportunities for positions and leadership. It therefore regards "gender equality as a fundamental human right and a necessary foundation for a peaceful, prosperous and a sustainable world" (UN, 2015).

Embracing workplace diversity has several important benefits

for tax administrations including better understanding and connection with diverse taxpayer base that can lead to improved communication and stronger relationships. It fosters a variety of perspectives to decision making process, contributing to well-rounded and more thoughtful policy decisions. Additionally, it boosts creativity and facilitates innovative solutions to challenges. tax administrations gain improved access to a broader range of skills, knowledge, and insights, enhancing their ability to address complex problems. Lastly, inclusivity nurtures a sense of belonging and acceptance which can impact employees' morale, engagement, and overall productivity within tax administrations.

The data on human resource structure of the ATO countries aims to shed light on gender distribution and workforce diversity within tax administrations and propose strategies to address gaps in the workplace. Figure 5.9 provides information on the gender composition of male and female staff in countries within the ATO. On average, male

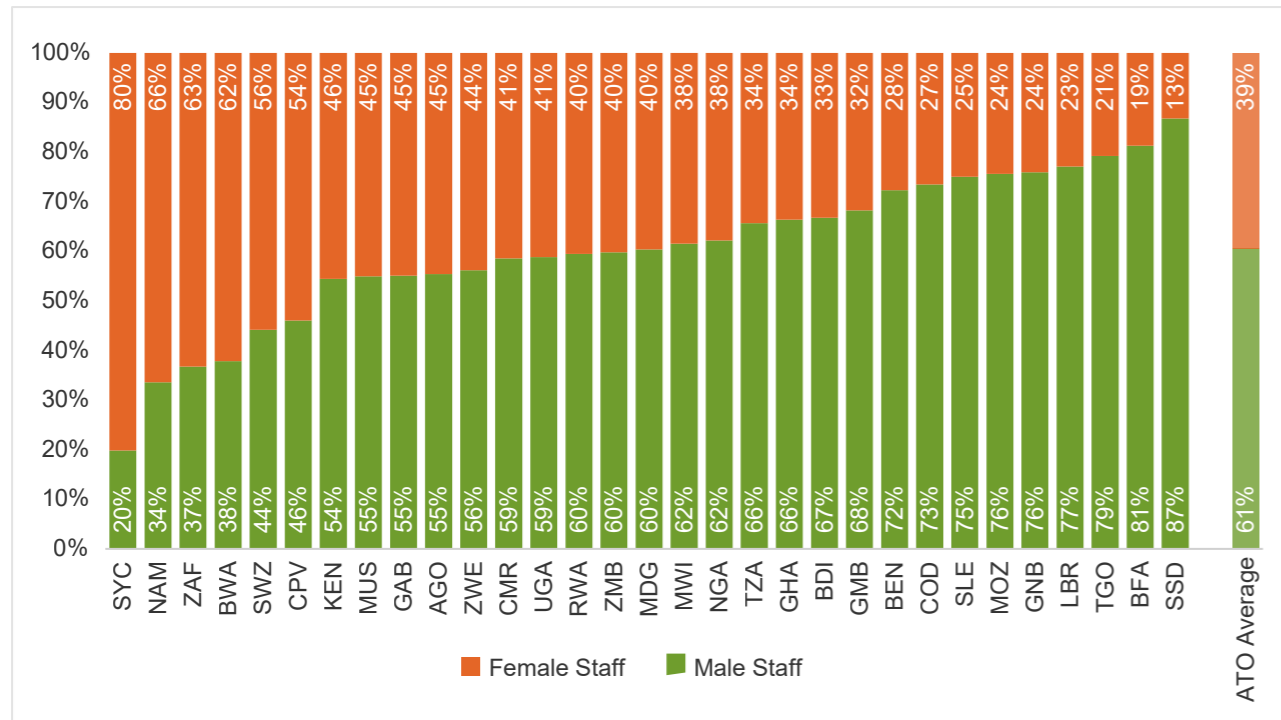
employees continued to dominate the workforce in the ATO by accounting for 62% of the total staff compared to female employees (38%) in 2022. The ratio represents a slight increase of 2 percentage points from the average share of male staff (60% in 2021) as well as a slight decrease of 2 percentage points for female staff (40% in 2021).

Gender distribution varies across ATO countries, ranging from a higher proportion of male staff in some countries to a higher proportion of female staff in others. The countries with higher percentage of female staff are Seychelles with 80%, Namibia with 66%, South Africa with 63%, and Botswana with 62%. Conversely, countries with higher percentage of male employees in 2022 includes South Sudan with 87%, Burkina Faso with 81% and Togo with 79%. About seven countries demonstrated a relatively gender balanced workforce. They are Kenya with 54% male and 46% female,

Zimbabwe with 56% male and 44% female, Eswatini with 44% male and 56% female, Cape Verde with 46% male and 54% female, and Mauritius, Gabon and Angola which all had 55% males and 45% females, each.

Furthermore, Figure 5.9 indicates a general trend where countries in the southern part of Africa tends to have a higher proportion of female workforce while those in the northern and western part of the continent have a higher proportion of male dominated workforce in their tax administrations. The variation in gender imbalances is likely due to factors such as level of educational exposure for a girl/boy child, culture and other believes that discourage women from working in certain sectors or levels of government. All these impacts recruitment process and contributes to gender disparity we see in tax administrations.

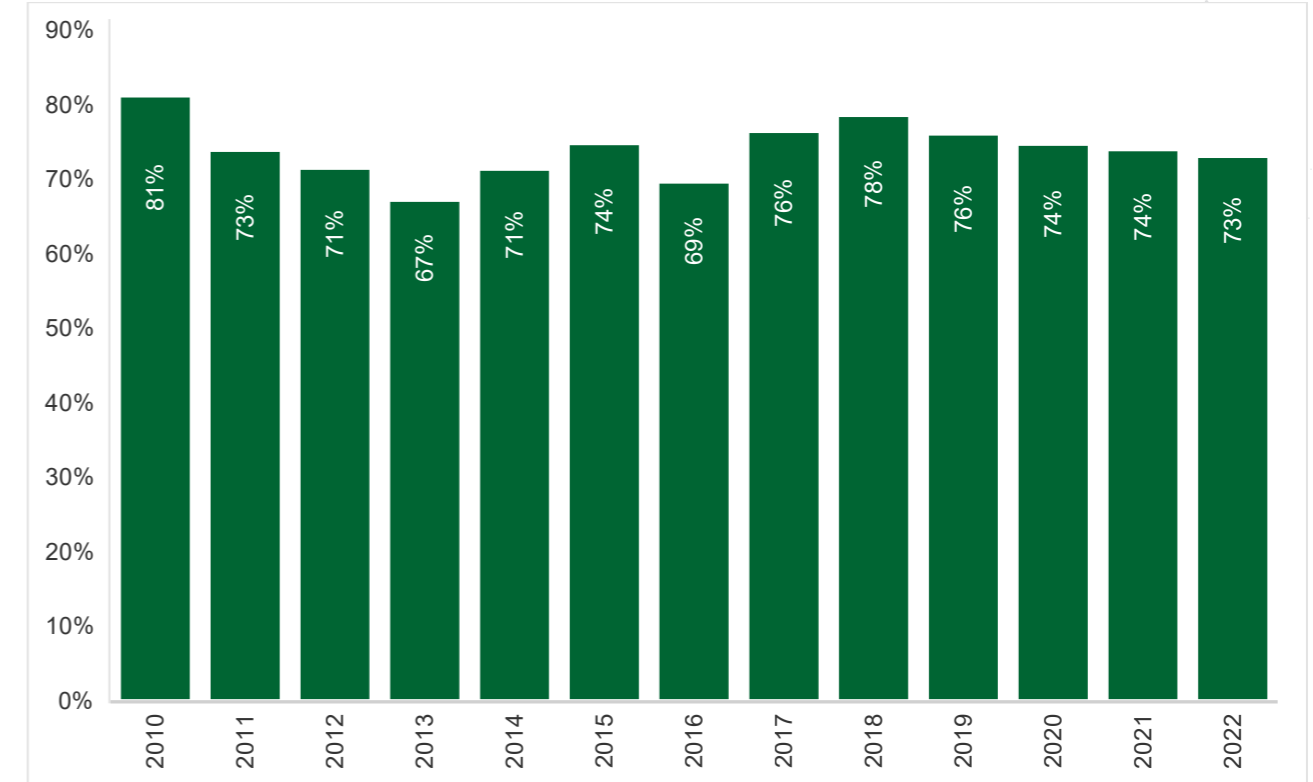
FIGURE 5.9 MALE AND FEMALE STAFF COMPOSITION IN ATO, 2022



The trend in the average share of males in executive position in ATO countries over the past decade has remained somewhat constant averaging 74% for the men and 26% for the women (see Figure 5.10). The ratio is an indication of continued dominance by men in leadership roles, even in countries where there is a significant representation of females in the workforce. At 26% in the last decade, the ratio of females in leadership position in the ATO countries

is a testament to gender gap and a reflection of lack of deliberate policies to address it. Considering the diversity in taxpayer base, it is important that tax administrations take the lead in championing gender mainstreaming programmes, beginning with having gender equity in both the workforce and leadership positions. This will help in relating better with taxpayers of all categories including designing compliance policies that better suite them.

FIGURE 5.10 TREND IN SHARE OF MALES IN EXECUTIVE POSITIONS, 2010 - 2022



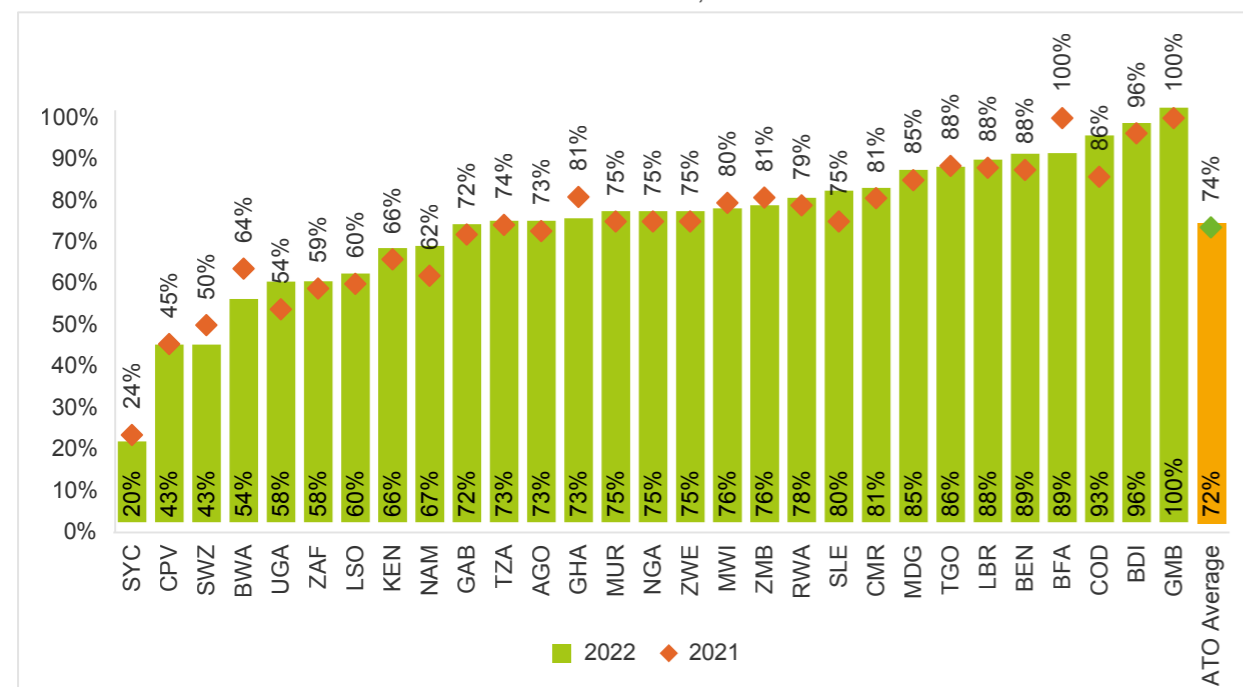
Executive roles within ATO countries exhibit a significant gender imbalance, with men occupying more than 73% of these positions (see Figure 5.11). The gender gap in executive leadership is particularly pronounced in The Gambia, where no women hold executive role. However, Cape Verde, Eswatini and Botswana achieved a degree of gender balance in 2022, while Seychelles boasts a remarkable 80% female executive representation.

It is interesting to note that some ATO countries with high female workforce participation (Namibia at 66%, South Africa at 63%) do not necessarily reflect similar proportions in executive roles. Only Cape Verde, Eswatini and Seychelles have a higher female executive representation exceeding 50%. This suggests that factors beyond gender composition

play a role in elevating men or women to leadership positions.

Also worthy to highlight, is the significant progress made by certain countries in promoting female gender inclusion in leadership roles in 2022. For instance, Burkina Faso achieved a shift from 100% male executives in 2021, to 89% men and 11% female in 2022. Similarly, Ghana experienced a decrease in male executives from 81% in 2021 to 73% in 2022, Botswana reduced from 64% male executives to 54%, and Zambia's dominated male executives decreased from 81% to 76% in 2022. The collective progress illustrated in Figure 5.10 contributed to a slight improvement in the average share of females in executive positions across ATO countries in 2022.

FIGURE 5.11 RATIO OF MEN IN EXECUTIVE POSITIONS, 2021 AND 2022



Box 5.1 (Continued)

Gender equality seal implementation in Federal Inland Revenue Service (FIRS), Nigeria

- Provide technical expertise: Analyse FIRS' current policies, procedures, and data to identify potential gender gaps and biases.
- Develop and implement gender mainstreaming strategies: Propose and implement strategies to address identified gender gaps and ensure equitable access to tax services and benefits for all genders.
- Develop a workplan: Produce an annual workplan to guide actions towards the fulfilment of gender equality initiatives in the organisation and report periodically.
- Monitor and evaluate progress: Develop mechanisms to track progress towards achieving the UNDP Gender Implementation Seal and make recommendations for improvement.
- Create a gender desk: Set-up a gender desk in FIRS to serve as technical secretariate responsible for deepening gender mainstreaming initiatives and doing all other activities that will ensure gender equality sustainability in the organisation.
- Raise awareness and build capacity: Conduct training and sensitization programs for FIRS personnel on gender equality and mainstreaming concepts.
- Liaise with external partners: Collaborate with the UNDP and other gender equality stakeholders to share best practices and leverage external resources.
- Research and evidence: Work with relevant functions to make the case for gender equality in tax and fiscal policy agenda

Source: FIRS Gender Equality Seal Implementation Committee

Box 5.1

Gender equality seal implementation in Federal Inland Revenue Service (FIRS), Nigeria

The Gender Equality Seal for Public Institutions is a United Nations Development Programme (UNDP) initiative that uses a common systematic process to support, accelerate and recognize the efforts of Public Institutions globally that commit to and improve on advancing gender equality and women's empowerment.

It aims to accelerate Gender Equality Mainstreaming throughout the implementation of the Sustainable Development Goals (SDGs). The Gender Equality Seal for Public Institutions celebrates institutions that make measurable progress against internationally recognized standards to address and incorporate, in all aspects of their work, the concerns of all the people they serve. Based on the level of adoption of the Gender Equality Seal framework, and the achieved outcomes, public institutions would attain a Bronze, Silver, or Gold Gender Equality Seal.

FIRS has committed to promoting gender equality and contributes to the ongoing efforts to ensure more equal conditions for women and men within its organisation and throughout its practices, thus improving its contribution to the 2030 SDGs agenda in Nigeria.

To achieve the desired outcome, FIRS has instituted a Gender Equality Seal Implementation Committee (GESIC) to guide and implement the gender mainstreaming initiatives throughout the organisation. The Committee has the following objectives:

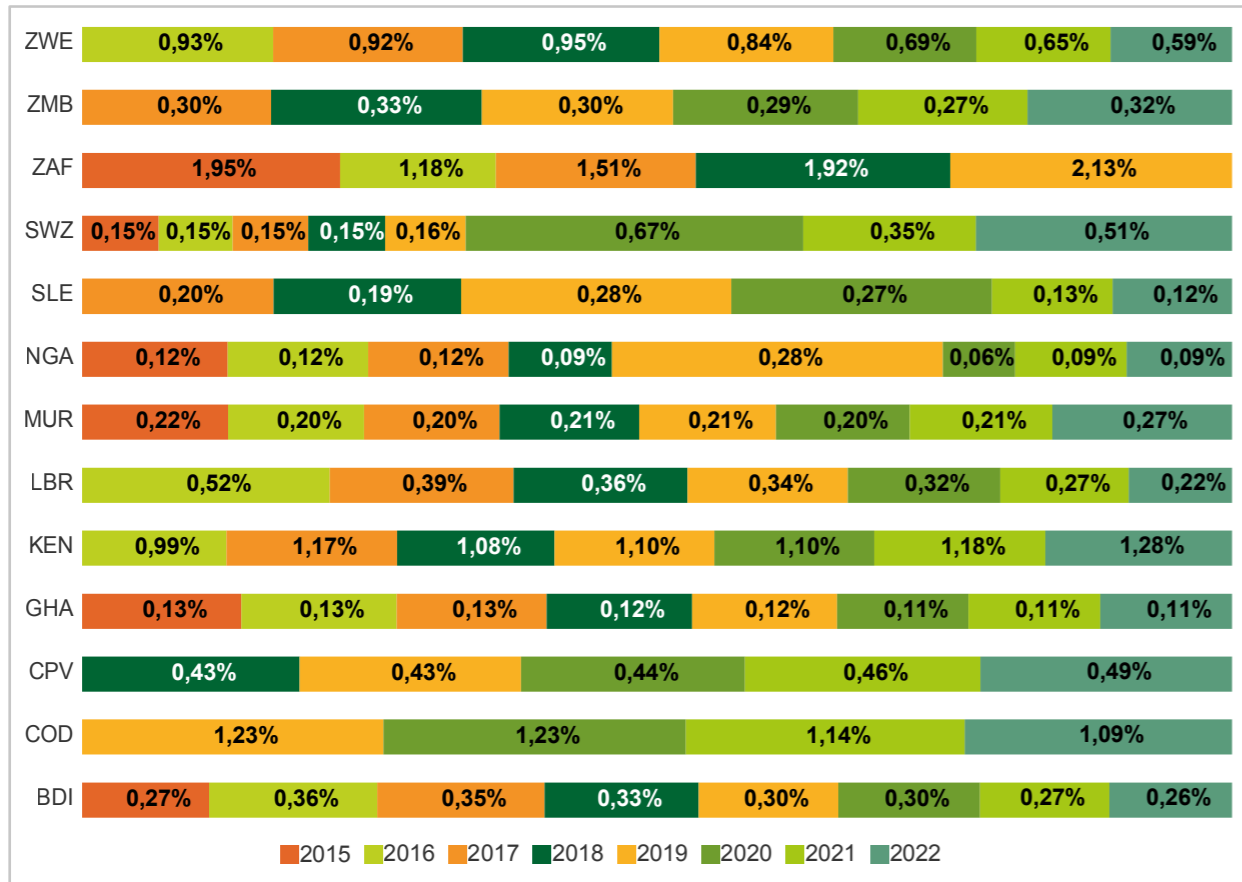
5.2.3. Inclusion of staff with disabilities in ATO countries

The data provided on staff with disabilities from 2015 to 2022 highlights both challenges and opportunities for ATO countries to enhance inclusivity, especially regarding the employment of staff under this category. Some countries such as Kenya, Zimbabwe, Nigeria, and South Africa (up to 2019) have demonstrated consistency in increasing the number of staff with disabilities over the years. Kenya, in particular, demonstrates a significant increase in the number of staff with disabilities rising from 49 in 2016 to 109 in 2022 (a remarkable 735% increase in six years). This suggests successful implementation of initiatives or policies promoting inclusivity. While some countries reported same number of staff with disabilities year-on-year for the period

under review (Burundi, Cape Verde, Mauritius, and Ghana), there are obvious gaps in the years and data provided by others including Tanzania, Gabon, and DR Congo. These inconsistencies prevent comprehensive analysis of workforce diversity in ATO countries (Figure 5.12).

To promote workforce diversity that supports staff with disabilities, it is imperative for ATO countries to have a disability action plan which outlines the commitment of tax administrations to creating an accessible and inclusive workplace for people with disabilities. Additionally, the adoption of a recruitment adjustment policy is crucial to ensure that staff with disabilities can actively participate in all aspects of recruitment process in tax administrations. Lastly, the establishment of a disability network is essential to provide support and advise to staff with such conditions.

FIGURE 5.12 PERCENTAGE OF STAFF WITH DISABILITY, 2015 - 2022



5.2.4. Age distribution in tax administrations

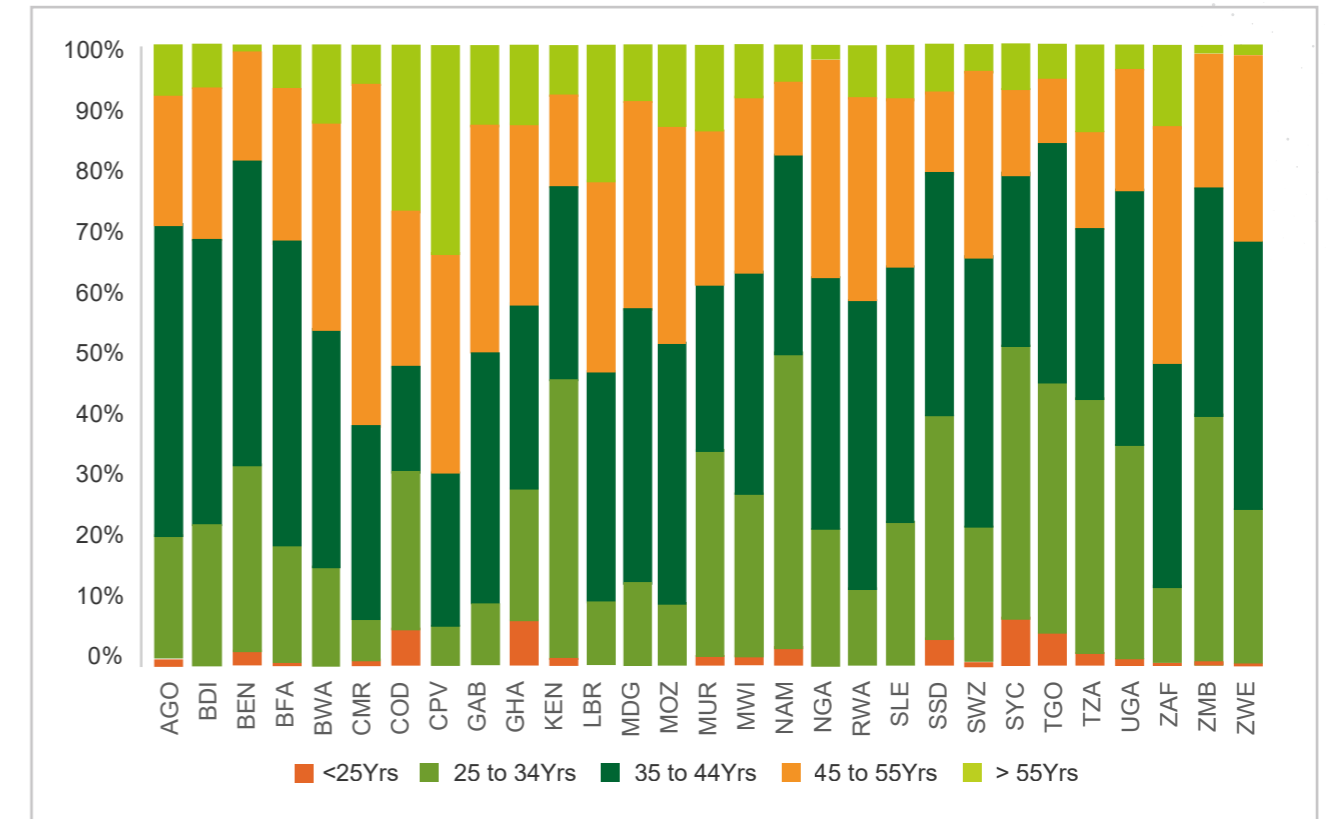
Age diversity is the presence of individuals from different age groups within the workforce in an organisation. Organisations with age diversity recognise the value of having employees with varying levels of experience, perspectives and skills related to their ages. Some of the benefits of age diversity in the context of tax administration includes:

- *adaptability and technological proficiency* - younger employees are more attuned to technological proficiency and have more understanding of new tools and systems which is crucial for ATO countries as they begin to deepen their digitalisation efforts and embrace advanced technologies. Older employees, on the other hand, will provide a wealth of experience and institutional knowledge to aid seamless transition.

varied perspective and experience – different age groups bring diverse life experiences and perspectives. This diversity can be valuable in addressing complex tax issues and can encourage out of the box thinking in finding innovative solutions to challenging issues.

- *mentorship and knowledge transfer* – older employees can serve as mentors to younger colleagues, passing on their knowledge and expertise. This facilitates knowledge transfer and help build a more competent and resilient workforce.
- *taxpayer service and communication* – involve interactions with a diverse range of taxpayers. An age diverse workforce can enhance communication skills and improve the ability to relate to a broad spectrum of taxpayers.

FIGURE 5.13 AGE DISTRIBUTION OF TAX ADMINISTRATION WORKFORCE BY COUNTRY, 2022



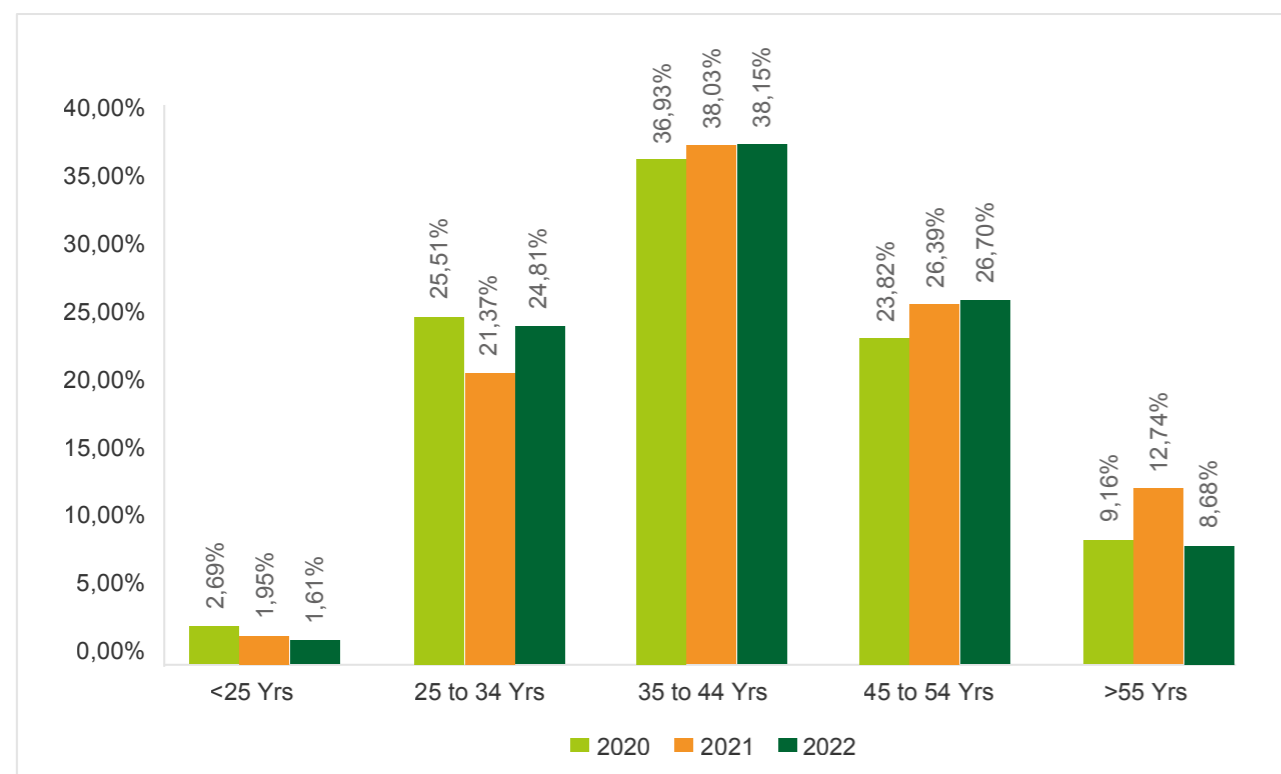
- *succession planning – age diversity ensures a steady pipeline of talent, with younger employees being groomed to take on leadership roles as older employees retire.* The 2022 staff distribution by age in the ATO countries as depicted in Figure 5.13, indicates that for employees below the age of 25 years, Ghana and Seychelles had the largest proportion at 7% each. This was followed by DR. Congo and Togo with 6% and 5%, respectively.

For employees within the age bracket of 25 to 34 years, Namibia had the largest share at 48%, followed by Kenya and Seychelles with 45% each. The lowest was recorded by Cape Verde at 6%. For staff in the ages of 35 to 44 years, Angola with 52% represents the highest among the ATO countries. This was closely followed by Benin and Burkina Faso with 50% each, Rwanda, and Burundi with 48% each, Eswatini and Madagascar with 45% each, Zimbabwe with 44%, and Mozambique, Nigeria and Uganda which had 42% each. For ages 45 to 54 years, Cameroon with 56% accounts for the highest in the continent, followed by South Africa

and Cape Verde with 39% and 36%, respectively. Lastly, for employees in the age bracket of 55 years and above, Cape Verde had the largest share at 33% followed by DR Congo (26%) and Liberia (21%).

ATO countries' staff data for 2020, 2021 and 2022 (see Figure 5.14) reveals that the 35-44 age bracket maintained the highest percentage share, at 36.93%, 38.03% and 38.15%, respectively. There was a notable increase in the share of workers between the age group of 25-34 years, rising from 21.37% in 2021 to 24.81% in 2022. Staff in the 45-54 age bracket also increased slightly from 23.82% in 2020 to 26.39% in 2021 and 26.70% in 2022. Conversely, staff under age 25 bracket declined consistently from 2.69% in 2020 to 1.95% in 2021 and 1.61% in 2022. This trend could be attributed to the movement of younger staff to the next age group. Similarly, staff above age 55 declined significantly, from 12.74% in 2021 to 8.68% in 2022. This is likely due to staff exiting the workforce after attaining the retirement age. As older employees retire, it is important that ATO countries develop policies and programmes that ensures knowledge and experiences gathered over the years is passed down to the younger generation.

FIGURE 5.14 AVERAGE AGE DISTRIBUTION IN ATO COUNTRIES, 2020 - 2022



Promoting age diversity in ATO countries would require implementing inclusive hiring policies, developing mentoring programmes to pass down knowledge and experiences acquired over the years, offering flexible work arrangements, and creating a culture that values the contributions of employees across different life stages. Embracing age diversity should be a strategic approach to enhancing the overall success and sustainability of tax administrations.

5.2.5. Educational diversity in tax administration

Educational diversity is the composition of a variety of educational backgrounds and qualifications among the workforce in tax administration. It comprises of employees with different levels of educations, degrees, certifications, and areas of expertise. Tax administrations with educational diversity are:

- *better equipped with workforce that brings insight and ideas that can foster innovation in developing and implementing tax policies and ensuring they are adaptive to changing economic*

conditions and legislative requirements.

- *it enhances capacity for research and analysis that can contribute to robust and evidence-based decision making and policy formulation,*
- *it improves communication with taxpayers and other stakeholders which is key to building trust and confidence in tax administration,*
- *it enriches tax administrations' with diverse range of skills and expertise required to handle complex tax issues, develop tools and solutions to ease compliance for taxpayers and promote other activities that will enhance DRM.*

An analysis of educational qualifications among staff in ATO countries reveals that Cape Verde stands out in 2022, with more than half of its staff possessing a master's degree or higher. Gabon comes in second with 41%, followed by Malawi with 40% and Burkina Faso with 37%. Additionally, DR Congo, Ghana, Nigeria, Sierra Leone, Tanzania, and Zimbabwe all have significant percentages of highly qualified

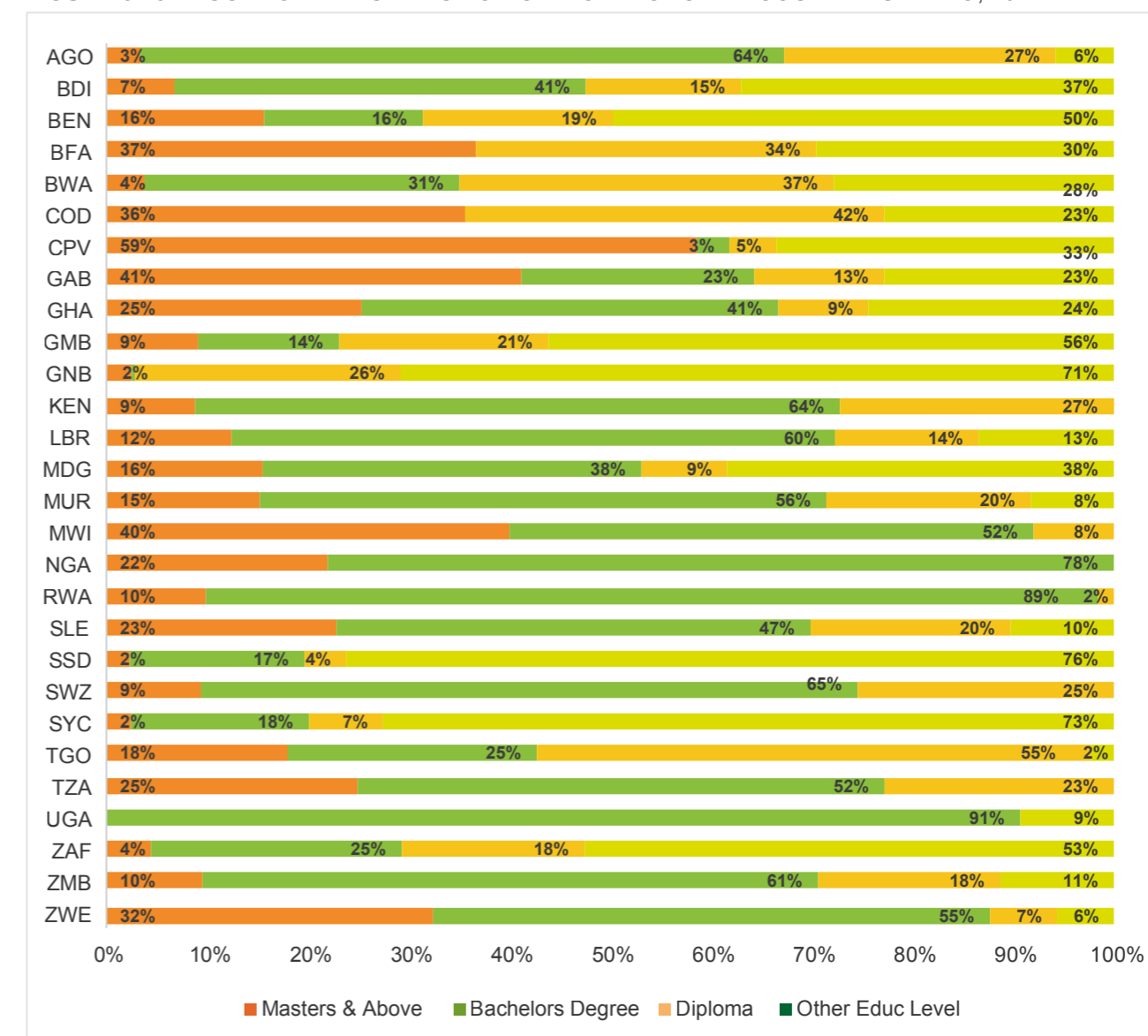
staff, exceeding 20% each. In contrast, the staff composition in South Sudan consists of 76% individuals with other educational qualifications or levels³³, followed by Seychelles with 73% and Guinea Bissau with 71%.

Uganda leads in the percentage of staff with bachelor's degrees, at 91%, followed by Rwanda and Nigeria with 89%

and 78%, respectively³⁴. For staff composition with Diploma, Togo and DR Congo have the highest share at 55% and 42%, respectively. On this indicator, 28 ATO countries provided data in 2022³⁵ (Figure 5.15).

The trend of the average educational diversity from 2010 to 2022 reveals a changing dynamic of the educational

FIGURE 5.15 EDUCATIONAL DISTRIBUTION OF WORKFORCE BY COUNTRIES IN ATO, 2022



33. Other Educational Qualifications or levels refers to those who have obtained some other forms of Educational Certifications that is neither Diploma, Bachelor's Degree, Masters or PhD.

34. The educational breakdown examined in this study relies on data on employees upon entry into tax administration and those whose additional qualifications acquired during service have been updated with Human Resources (HR). However, it is noted that certain personnel have attained higher qualifications while serving but have not maintained updated records with HR. Additionally, some tax administrations within ATO member countries lack systems to effectively track these internal changes.

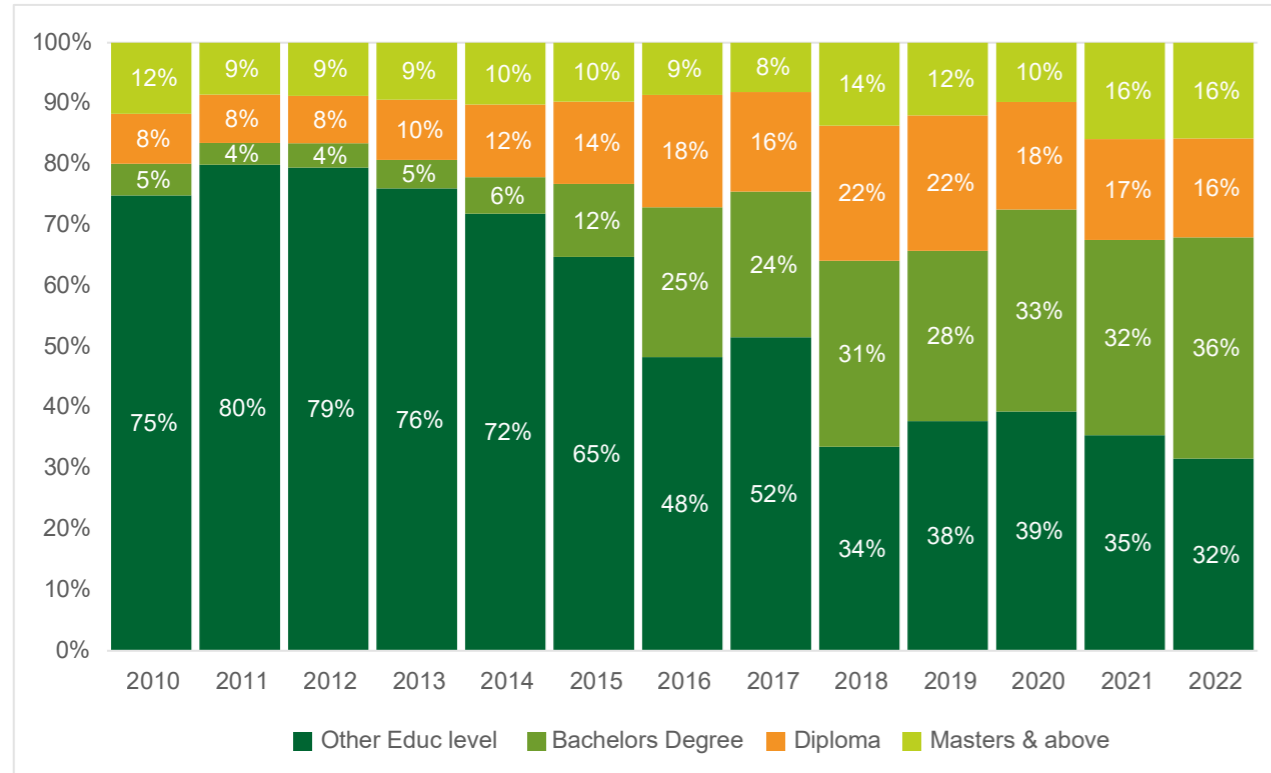
35. List of ATO countries that provided data on educational distribution of workforce in 2022 are Angola, Burundi, Benin, Burkina Faso, Botswana, DR Congo, Cape Verde, Gabon, Ghana, Gambia, Guinea Bissau, Kenya, Liberia, Madagascar, Mauritius, Malawi, Nigeria, Rwanda, Sierra Leone, South Sudan, Eswatini, Seychelles, Togo, Tanzania, Uganda, South Africa, Zambia, and Zimbabwe

qualifications in tax administrations in ATO countries. There is a growing emphasis on knowledge and skills for optimal performance. This is evident by the consistent year-on-year increase in the proportion of staff with bachelor's degree and above (Figure 5.16). Staff with masters and bachelor's degrees has increased from 9% and 4% in 2011 to 16% and 36% in 2022, respectively. This upward trend is significant and demonstrates a clear recognition of the values of education and skills for driving efficiency and implementing innovations introduced by tax administrations. The growing demand for staff with higher degrees means that tax administrations are now less reliant on individuals that do not possess any of the higher qualifications and skills. This is

also indicated in the declining percentage of staff with other qualifications from 80% in 2011 to 32% in 2022.

Considering the evolving global tax landscape, especially with the introduction of the OECD Pillar 1 and 2 solutions to address the digitalisation of the economy, it is imperative to sustain the recruitment of skilled workforce or to improve the capabilities of the existing ones through capacity building programmes and continuous training. This approach is essential for effectively navigating and implementing the new rules regarding maximising tax revenue collection in a digitalised economy.

FIGURE 5.16 TREND IN AVERAGE EDUCATIONAL DIVERSITY OF WORKFORCE IN ATO COUNTRIES, 2010 - 2022



5.2.6. Length of service of staff in tax administration

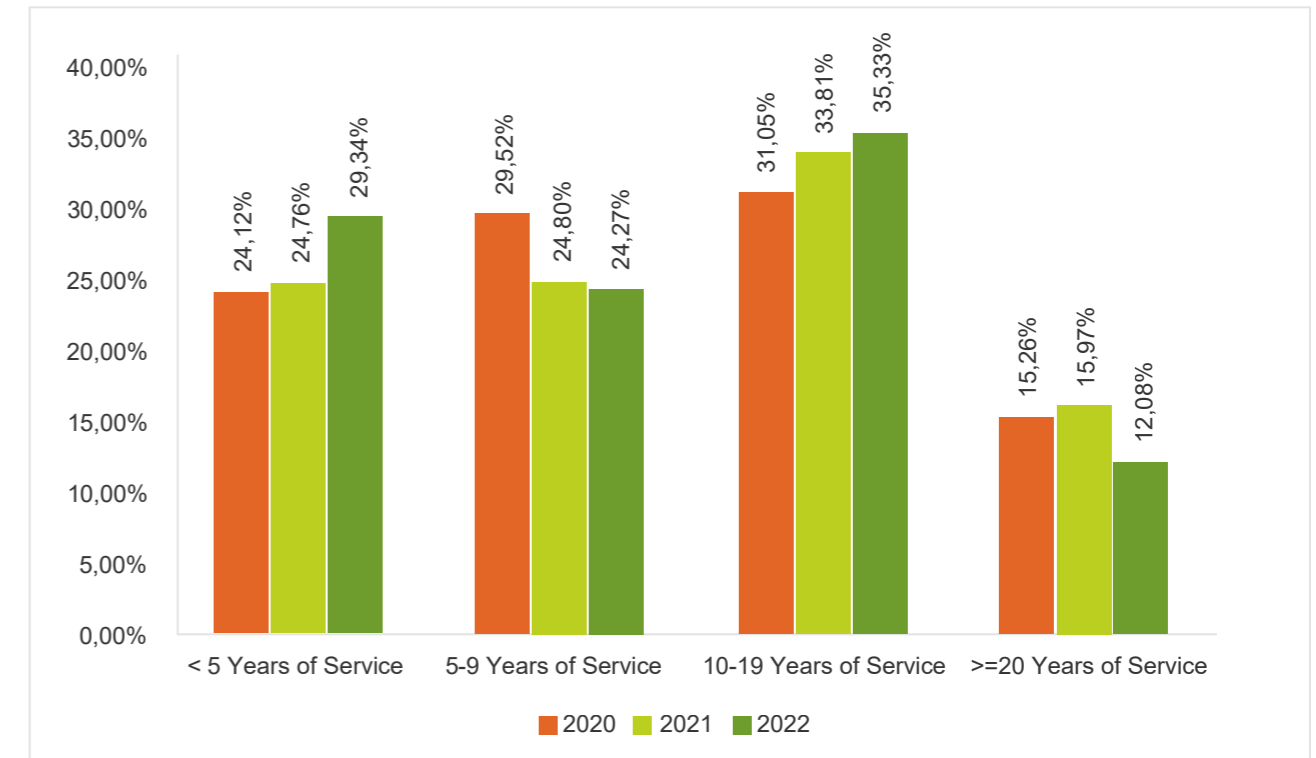
Another key indicator used to measure the human resource structure in an organisation is the length of service of staff. It entails the number of years an employee has spent in an organisation. Understanding length of service of staff is important for workforce management because it provides

insights into the relationship between employees and the organisation. It is a means of keeping track of the skills and experiences garnered by staff over the years, and how these skills can be harnessed and transferred from older employees to the new ones. Periodic analysis of length of service of staff can also help top management make informed decision about employee engagement, retention strategies and succession planning.

The percentage of employees with less than five years of service has increased steadily over the three years, from 24.12% in 2020 to 29.34% in 2022. This is likely attributed to the increase in the number of new employees in tax administrations. Conversely, the percentage of staff with five to nine years of service decreased from 29.52% in 2020 to 24.27% in 2022. This could indicate staff exiting the service and taking-up jobs that offers better employee benefits or possible changes in recruitment strategies of tax administrations or it could be that large percentage of

workforce in this category have transited to next category of staff cohort. The proportion of staff with 10 to 19 years of service increased slightly from 31.05% in 2020 to 35.33% in 2022. The trend could be attributed to the growing cohort of employees in the mid to senior-level range, due to career progression or retention efforts of tax administrations. The average share of employees with 20 or more years of service decreased from 15.26% in 2020 to 12.08% in 2022. The decline is likely a reflection of retirement, attrition, or changes in the organisational structure (Figure 5.17).

FIGURE 5.17 AVERAGE LENGTH OF SERVICE OF STAFF IN ATO COUNTRIES, 2020 - 2022

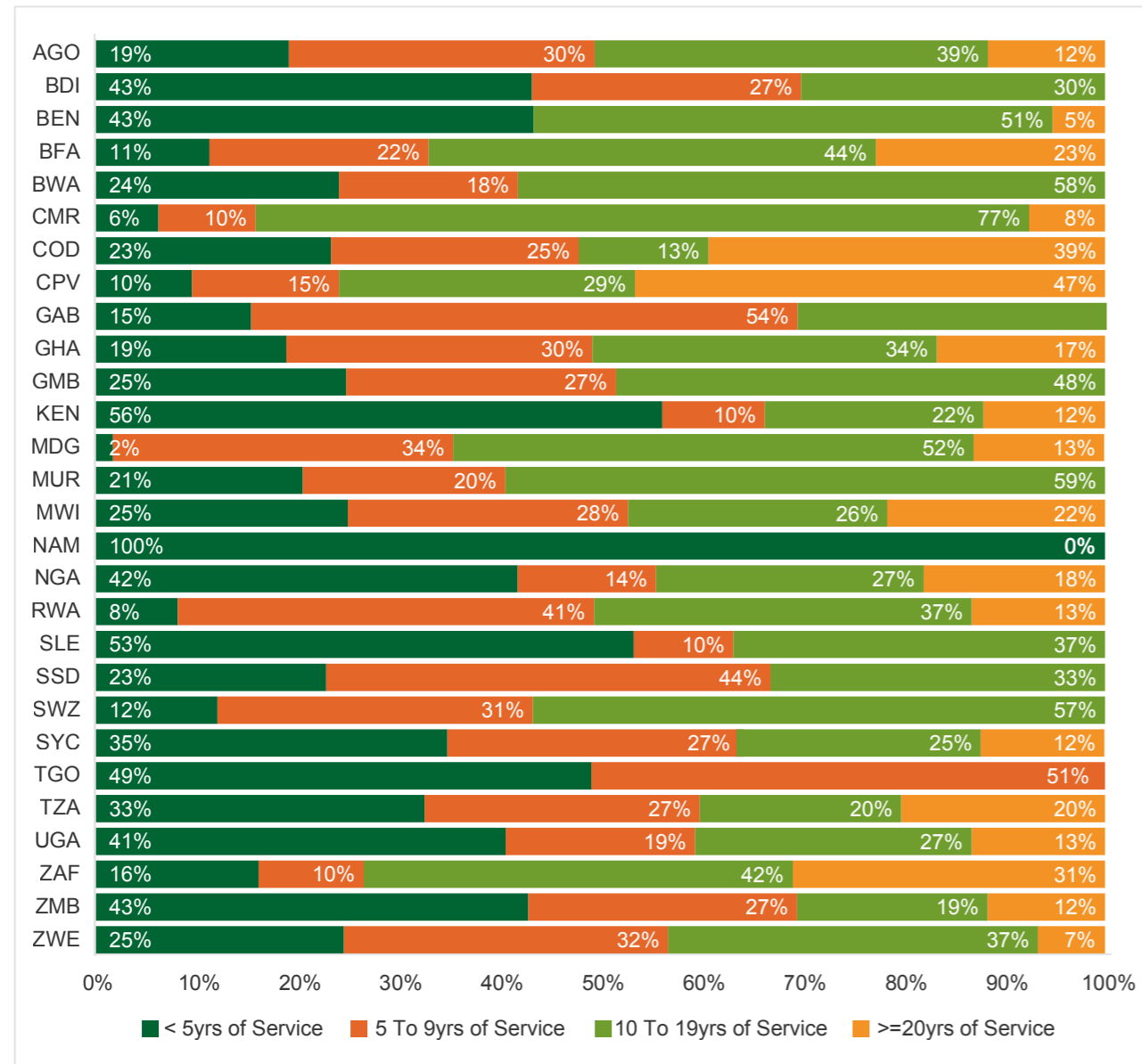


In 2022, the ATO workforce demographics depicted that Namibia stood out having 100% of its workforce consisting of staff which have spent less than five years in service³⁶. The next set of countries with more than 50% of staff under five years are Kenya and Sierra Leone. Other countries such as Burundi, Benin, Nigeria, Togo, Uganda, and Zambia had a share above 40%.

In the five to nine years' service length category, Gabon had the largest share at 54%, while Togo, Rwanda and Angola had 51%, 41% and 39%, respectively. Similarly, for the 10 to 19 years' service length category, Cameroon had the highest share at 77%, followed by Mauritius (59%), Botswana (58%), Eswatini (57%) and Benin (51%), while Cape Verde's share of staff with 20 or more years of service is the highest at 47% among the ATO countries (Figure 5.18).

³⁶ The workforce demographics in Namibia mirror the recent transformations within their tax administration. With the revenue authority recently attaining semi-autonomous status in 2021/2022, the entirety of their workforce, including transitioning staff, now corresponds to the duration of the new administration's existence.

FIGURE 5.18 YEARS OF SERVICE OF TAX ADMINISTRATION STAFF BY COUNTRY, 2022



It is imperative for ATO countries to focus strategies on attraction and retention of talent in early stages, develop and implement a succession plan to address gaps especially at mid-level roles and tailor capacity building programmes that will ensure knowledge transfer, especially from employees with 10 years or more in the service.

5.3. Best practices in resource management

Having analysed the resource management in ATO countries, this section seeks to explore the optimal resource

management practices. These practices will serve as a benchmark for evaluating the effectiveness of resource optimisation efforts in ATO countries and offer a framework for alignment where needed.

In the light of the above, best practice in resource management deals with making strategic, informed decisions to optimise the use of available resources to enhance organizational performance and achieve set goals and objectives. It involves efficient utilisation of human, financial, technological, and other resources to carry out the functions of tax collection, compliance and enforcement, and general administration of taxes. Effective resource management is premised on key components including:

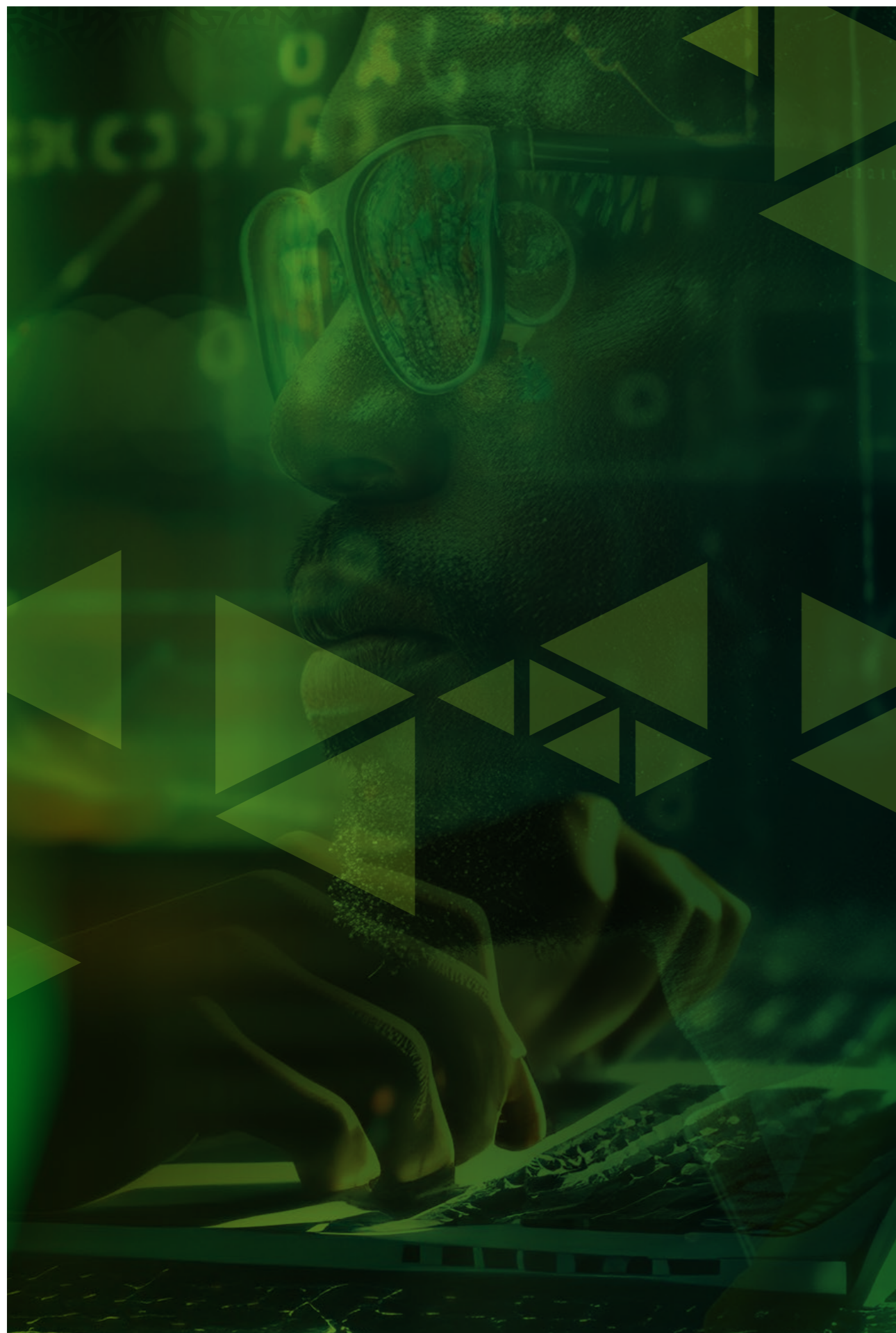
- the development of a clear and comprehensive strategy that aligns with organisation's mission and goals. It involves setting priorities, defining objectives, and establishing a roadmap for achieving success.
- it involves assigning resources including personnel, budget, technology in a manner that maximise their impact on achieving the goal of DRM.
- regular assessment of compliance, operational, resource allocation and other operational risks, and implement risk management strategies to mitigate potential risks that could impact the tax administration's ability to achieve objectives.
- It entails establishing KPIs to measure the effectiveness and efficiency of resources management efforts. Regular monitoring and evaluation to identify areas for improvement and track progress towards set benchmarks.
- It deals with leveraging technology to enhance operational efficiency and effectiveness. This includes adopting tools and systems for tax administration, data management, analysis, and communication to support decision making.
- foster collaboration with relevant stakeholders both domestic and international, to exchange information, ideas and expertise on areas that can enhance compliance, combat evasion and fraud, eliminate IFFs, increase DRM and improve general tax administration.
- focus on providing excellent service to taxpayers, including clear communication, accessibility and user-friendly interfaces and implement a taxpayer education programmes to enhance voluntary compliance.
- establish mechanism for obtaining feedback from taxpayers, staff and external stakeholders and make adjustment where necessary. Lastly, establish and promote high ethical standards (by implement robust integrity measures to prevent corruption and misconduct) within the tax administration to build trust and confidence among the taxpayers and stakeholders.

5.4. Conclusion

It is apparent from the foregoing that ATO countries have made some significant strides in their efforts towards resource optimisation, albeit with varying levels of progress among them. For instance, while some countries such as Ghana, Kenya, Uganda, Rwanda, Tanzania, Siera Leon, South Africa, and Nigeria have developed robust strategies for resource optimisation with established frameworks to track utilisation, there are obvious gaps in other countries such as Guinea Bissau, and Burundi. Hence, it remains crucial for ATO countries to foster collaboration, enabling mutual learning while also benchmarking against the outlined best practices.

By implementing these best practices, tax administrations in ATO countries can enhance their efficiency, effectiveness, and overall performance in resource management to achieve the goal of DRM to finance critical infrastructures and other government expenditures.

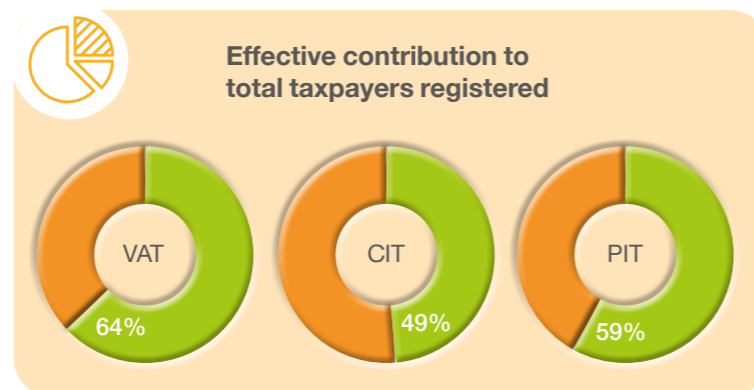
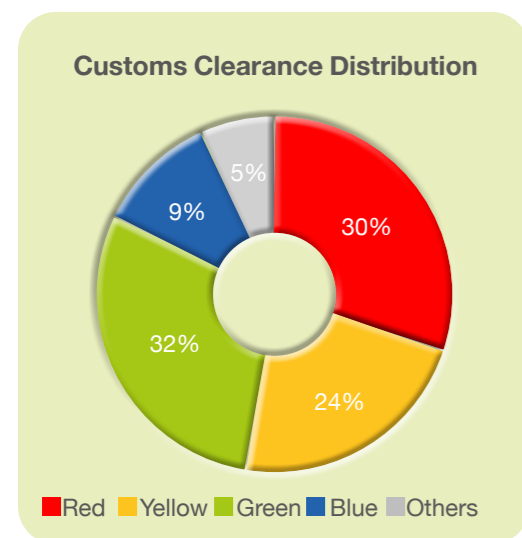
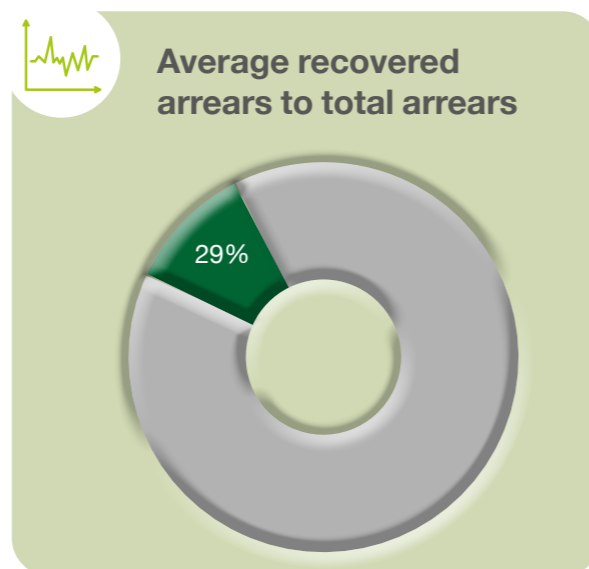
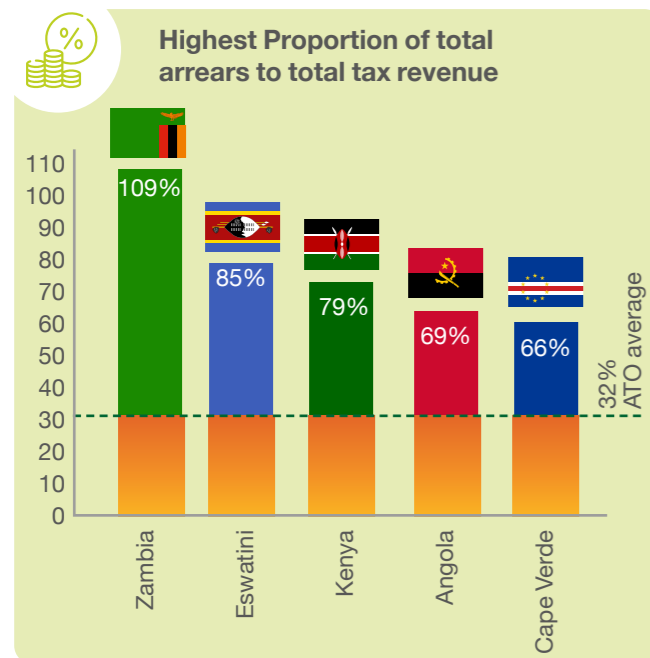
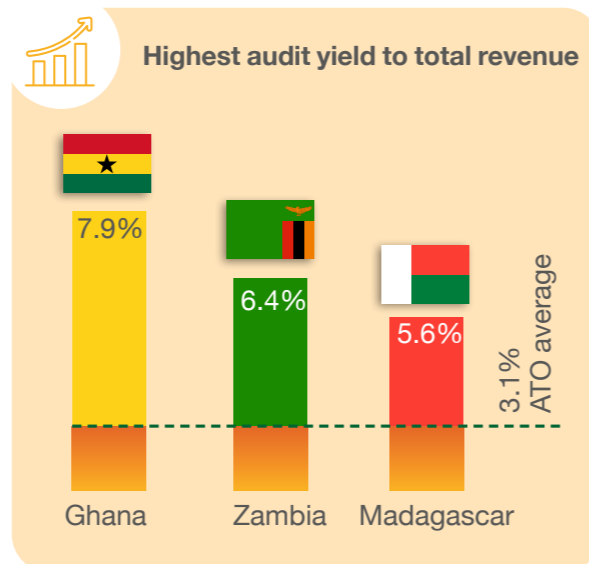
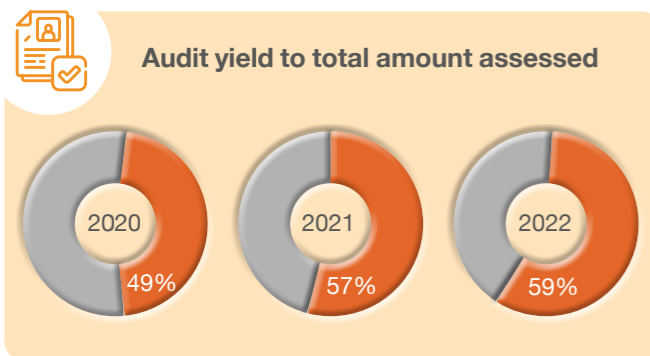
Effective resource management is essential for tax administrations to thrive in today's dynamic business environment. By optimising how they utilise resources, tax administrations can improve efficiency, achieve their objectives, and ultimately enhance DRM. ATO countries can achieve this by implementing financial management practices that adhere to transparency, accountability and compliance with relevant laws and regulations, have a human resource management structure for recruitment, training and retaining of skilled workforce while also developing career advancement opportunities and succession planning for sustainability. ATO countries must maintain a diverse and skilled workforce, modernise operations for efficiency, deliver excellent taxpayer service and collect taxes effectively. Regular reviews and adjustments are essential to keep everyone aligned, ensure optimal resource use that guarantees sustainable success.



Chapter 6

Assessing the Efficiency
of Key Administrative Functions
in Tax Administrations

Assessing the Efficiency of Key Administrative Functions in Tax Administrations



Introduction

With the aim of maximizing tax revenues, tax administrations are entrusted with crucial functions such as tax audits, managing arrears, combating tax evasion, and overseeing customs clearance processes. These functions are crucial as they play a pivotal role in tax collection, ensuring that taxpayers fulfil their tax obligations. These functions contribute to the overall fiscal health of a nation by establishing a fair and effective system for tax compliance, ultimately supporting the provision of essential public services and the development of necessary infrastructure.

6.1. Audit performance

Tax audit serves as a crucial mechanism for tax authorities to examine the accuracy and compliance of taxpayers' declarations, aiming to identify any potential errors, omissions, or fraudulent activities. The effectiveness of tax audits is paramount to ensuring tax equity, as they aim to ensure that all taxpayers fulfil their tax obligations accurately and pay the right amount of tax. In essence, a well-executed tax audit system contributes to maintaining a level playing field, where individuals and businesses are held accountable for their fair share of taxes. The allocation of resources and efforts toward effective tax audits varies among countries, each tailoring its approach to achieve distinct outcomes. Audit performance in this section is analysed through various indicators calculated for the 23³⁷ ATO countries that provided the data.

6.1.1 Proportion of auditors to total staff rose in most countries

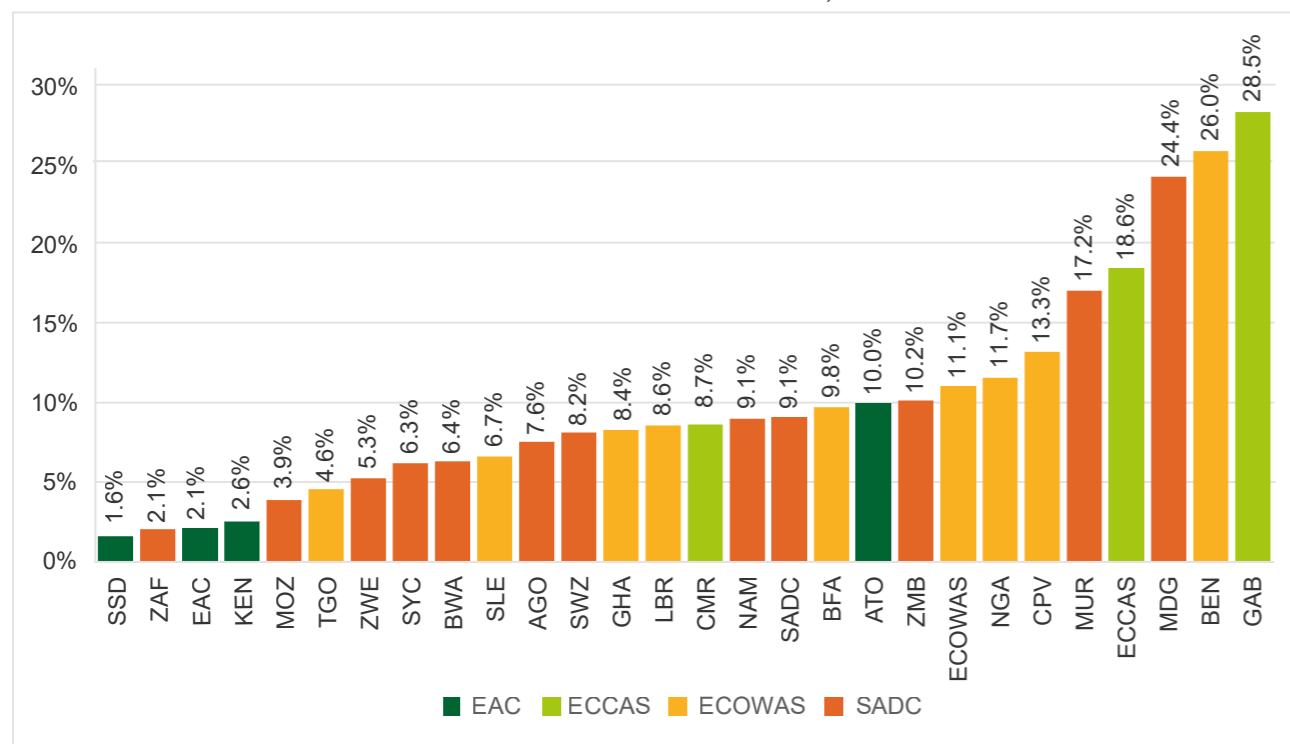
The allocation of staff to audit in tax administration involves the assignment of personnel to various audit activities within the tax authority. During the year 2022, among ATO countries, only three countries allocated around a quarter or more of their staff to tax audit functions. Gabon was the lead with the highest proportion at 28.5% (depicted in Figure 6.1). Benin and Madagascar follow closely, with tax auditors representing respectively 26.0% and 24.4% of the total tax administration staff. Conversely, apart from Mauritius for which the ratio is 17.2%, the remaining ATO countries exhibited ratios of auditors to total staff below 15%. Notably, South Africa and South Sudan recorded the lowest proportions at 2.1% and 1.6%, respectively.

One potential explanation for these low percentages could be the adoption of information and communication technology (ICT) in audit functions. Especially, the SARS implemented a robust data analytics capability in 2022, serving as a collaborative space for data engineers, data stewards, data scientists, and business analysts, thereby facilitating the preparation of data for artificial intelligence applications used for several purposes including audits.

On average, the staff dedicated to audit represents 10.0% of total staff in ATO countries. Considering the economic zones to which these countries belong, ECCAS countries emerged with the highest average ratio with auditors representing 18.6% of the total staff. On the other hand, East African countries exhibited the lowest average proportion at 2.1%. ECOWAS and SADC countries reported ratios close to the ATO average with respectively 11.1% and 9.1%.

37. Angola, Benin, Burkina Faso, Botswana, Cameroon, Cape Verde, Gabon, Ghana, Kenya, Liberia, Madagascar, Mozambique, Mauritius, Namibia, Nigeria, Sierra Leone, South Sudan, Eswatini, Seychelles, Togo, South Africa, Zambia, Zimbabwe

FIGURE 6.1 PROPORTION OF AUDITORS TO TOTAL STAFF, 2022



Looking at the annual evolution, the proportion of staff dedicated to tax audits in ATO countries is still growing since the low point of 7.7% noticed in 2020. There was a 1.5 percentage point increase in this ratio firstly between 2020 and 2021, resulting in an overall average of 9.2% in 2021 and then increased to 10.0% 2022. It is worth noting that this ratio still remains significantly lower than that observed in advanced economies, where the percentage of staff allocated to audit exceeds 30% (IMF 2023).

Trends observed in individual nations contribute to the overall increase in ATO countries. For instance, the ratio of Benin has been multiplied by 6 between 2020 and 2022 and the proportion in Kenya in 2022 is four times the one observed in 2020. Mozambique more than doubled the ratio over this period. The substantial increase in Benin was attributed to the strengthening of tax audit capacities through the recruitment of additional staff in recent years leading to quicker and more accurate assessments.

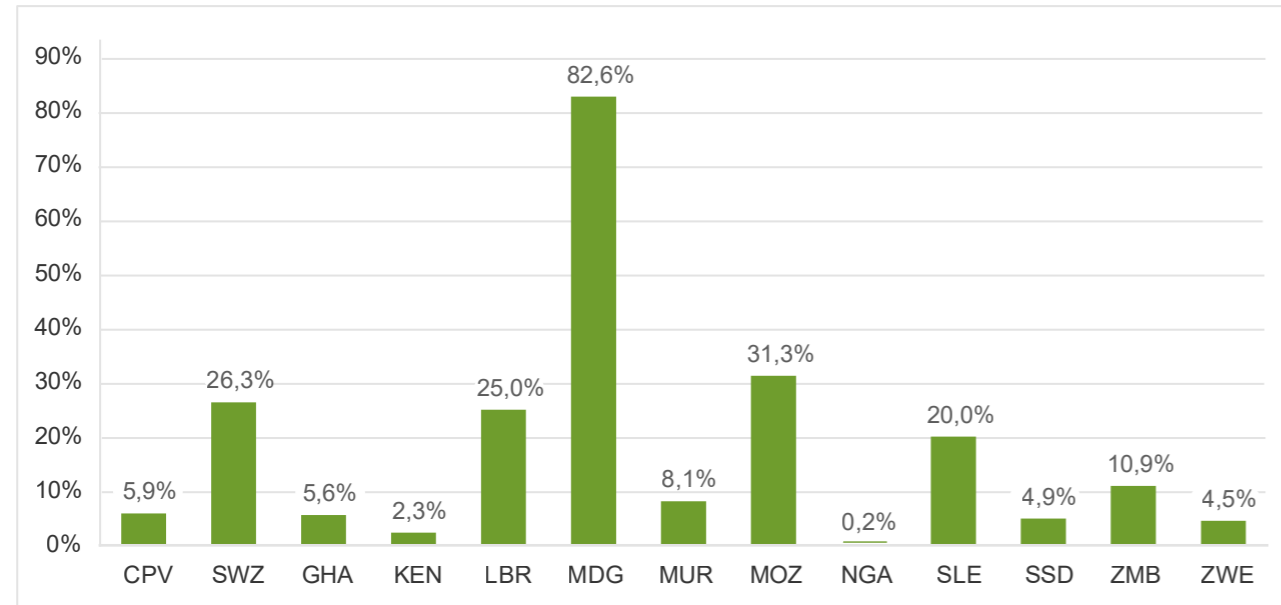
TABLE 6.1 EVOLUTION OF AUDITORS TO TOTAL STAFF RATIO, 2020 – 2022X

Countries	Ratio per year			Multiplication factor between 2020 and 2022	
	2020	2021	2022		
Angola	5.7%	7.0%	7.6%	1.3	↗
Benin	4.2%	8.2%	26.0%	6.1	↕
Cape Verde	12.1%	12.4%	13.3%	1.1	↗
Eswatini	8.3%	13.8%	8.2%	1.0	↘
Ghana	8.3%	9.8%	8.4%	1.0	↗
Kenya	0.7%	1.9%	2.6%	3.8	↕
Madagascar	29.3%		24.4%	0.8	↘
Mauritius	18.6%	19.4%	17.2%	0.9	↘
Mozambique	1.6%		3.9%	2.4	↕
Nigeria	9.1%	12.4%	11.7%	1.3	↗
Seychelles	7.3%	7.9%	6.3%	0.9	↘
South Africa	2.5%	2.2%	2.1%	0.8	↘
Togo	4.4%	3.5%	4.6%	1.0	↗
Zambia	8.2%	10.4%	10.2%	1.2	↗
Zimbabwe	7.2%	7.0%	5.3%	0.7	↘
ATO average	7.7%	9.2%	10.0%	1.3	↗

While the fundamental principles of tax audit are similar, the specificities of customs and domestic tax audit lie in the types of transactions, applicable regulations, required documents, and assessment methods. In customs, the limited number of tax types and the pre-clearance control before the circulation of goods constitute a relative advantage. On the other hand, in domestic taxation, audits typically occur retrospectively

and may involve a significant number of taxes. Consequently, the number of auditors at the customs border tends to be low compared to domestic taxation within tax administrations. In ATO countries, apart from Madagascar, as diagrammed in Figure 6.2, customs auditors represent less than the third of domestic auditors.

FIGURE 6.2 PROPORTION OF CUSTOM AUDITORS TO DOMESTIC AUDITORS IN 2022



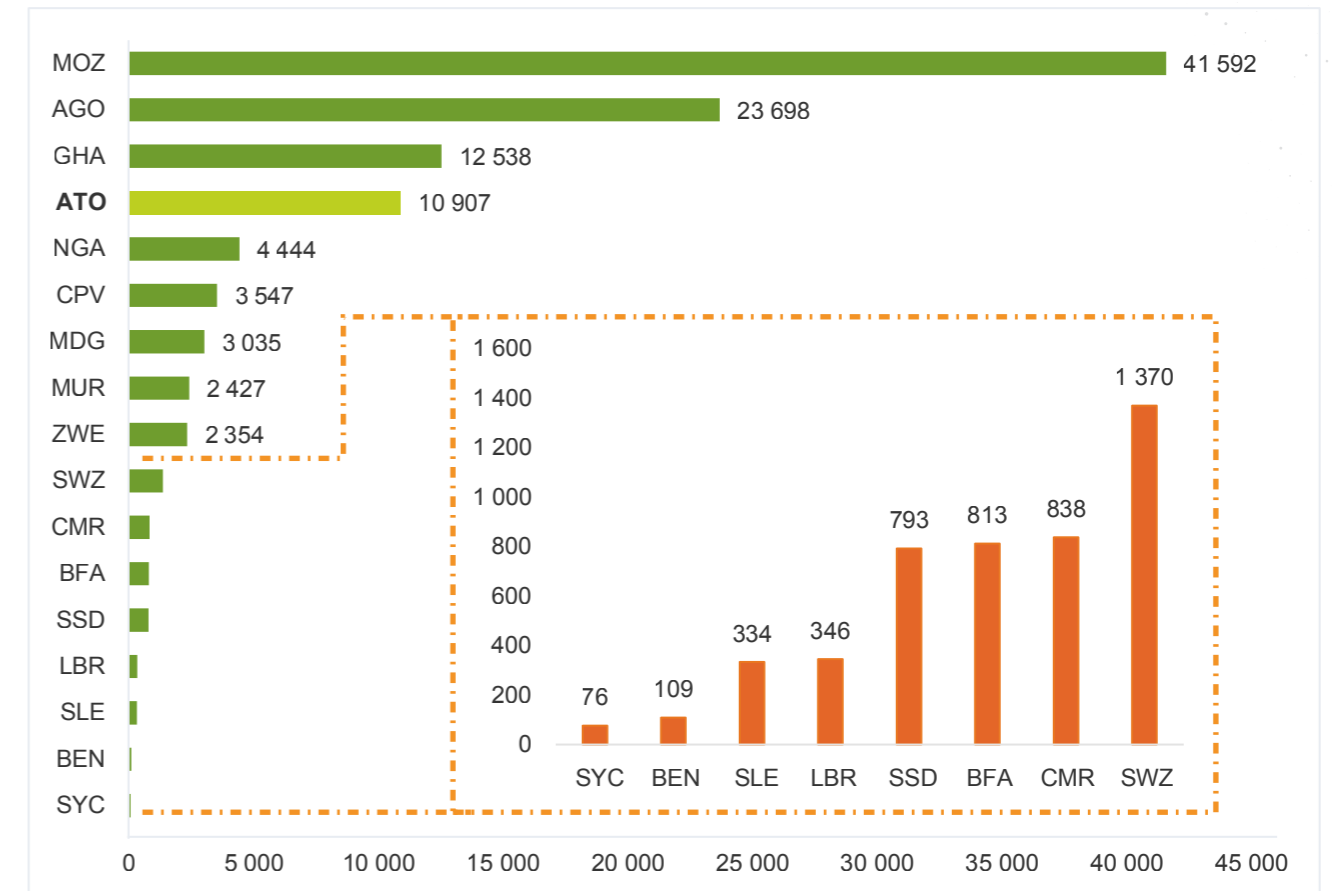
6.1.2. Workload of auditors remains high in a few countries

The measurement of the workload of officers dedicated to tax audit is essential for effective resource management and process optimization. It contributes to ensuring that tax audit activities are conducted in a balanced and efficient manner, and in line with the strategic objectives of tax administrations. The assessment of auditors' workload in this publication relies on two key indicators, namely the average number of taxpayers per auditor and the average number of audits per auditor.

Taxpayers per auditor

The average ratio in ATO countries is 10,907 taxpayers per auditor in 2022, as illustrated in Figure 6.3. That remains a relatively high ratio driven by high values observed in some countries. Notably, Mozambique recorded the highest value with 41,592 taxpayers for one auditor. The ratio is more than 10,000 taxpayers also in Angola and Ghana with estimated ratios of 23,698 and 12,538 taxpayers per auditor, respectively. Except for these three countries, there is less than 5,000 taxpayers per auditor in the rest of then ATO countries. Seychelles reported the lowest ratio with 76 taxpayers per auditor in 2022 followed closely by Benin where on average, an auditor is in charge of 109 taxpayers.

FIGURE 6.3 REGISTERED TAXPAYERS PER AUDITOR, 2022



Looking back at previous years, it is worth noting that the average number of taxpayers per auditor in ATO countries increased between 2021 and 2022, from around 4,000 to 11,000 taxpayers. This growth in the ATO average is primarily attributed to a substantial increase in the number of registered taxpayers while the growth of auditors' number is limited. In some countries such as Angola, Eswatini and Ghana, tax authorities implement various policies to identify new taxpayers. These policies aim to broaden the taxpayer base, enhance tax compliance, and improve revenue collection. For example, Eswatini Revenue Service (ERS) engaged various stakeholders to help them comply with tax and customs obligations. Platforms for engagement included radio, print media, digital and social media. These efforts likely helped in informing and encouraging new taxpayers to register.

Audits per auditors

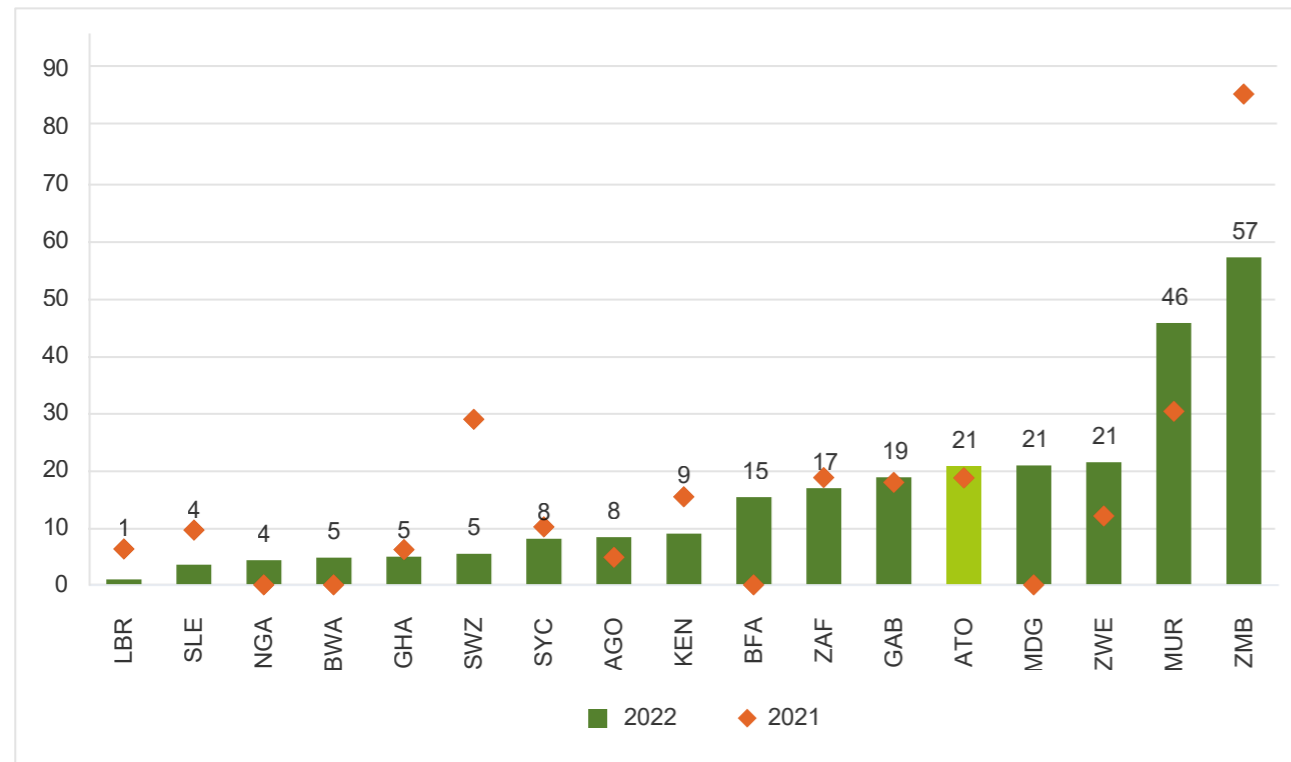
The average number of audits conducted by an auditor in 2022 varies from one country to another in ATO countries due to differences in tax structures, available resources, and government priorities.

The analysis of recent developments reveals minimal movement in the number of audits per auditor between

2021 and 2022. While the suspension of audits during the COVID-19 crisis led to a lower level of the indicator in 2020, with an average of 16 audits per auditor, in 2021 the progressive return to normalcy was reflected by a slight growth such that each auditor conducted an average of 19 audits. In 2022 however, most countries recorded a decline resulting in an overall decrease for ATO countries with the ratio standing at 15 audits per auditor.

Taken individually, the number of audits per auditor remains relatively low in the sixteen ATO countries that provided data. Zambia displays the highest ratio with approximately 57 audits per auditor, as shown in Figure 6.4. This translates to about one audit conducted within a week in Zambia in 2022. Mauritius registered similar result with a ratio of 46 audits per auditor. The other countries can be divided into two groups. The five countries, namely Burkina Faso, South Africa, Gabon, Madagascar, and Zimbabwe, have ratios ranging from 15 to 21 audits per auditor, while the other ATO countries have less than 10 audits per agent. In Liberia, where the lowest value is observed, each auditor was in charge of only one audit in the year 2022. However, it is important to interpret these numbers with caution as the effective workload will depend on the type of audit being conducted.

FIGURE 6.4 PROPORTION OF AUDITS PER AUDITOR, 2022



6.1.3. Comprehensive and desk audits each represent a third of audits

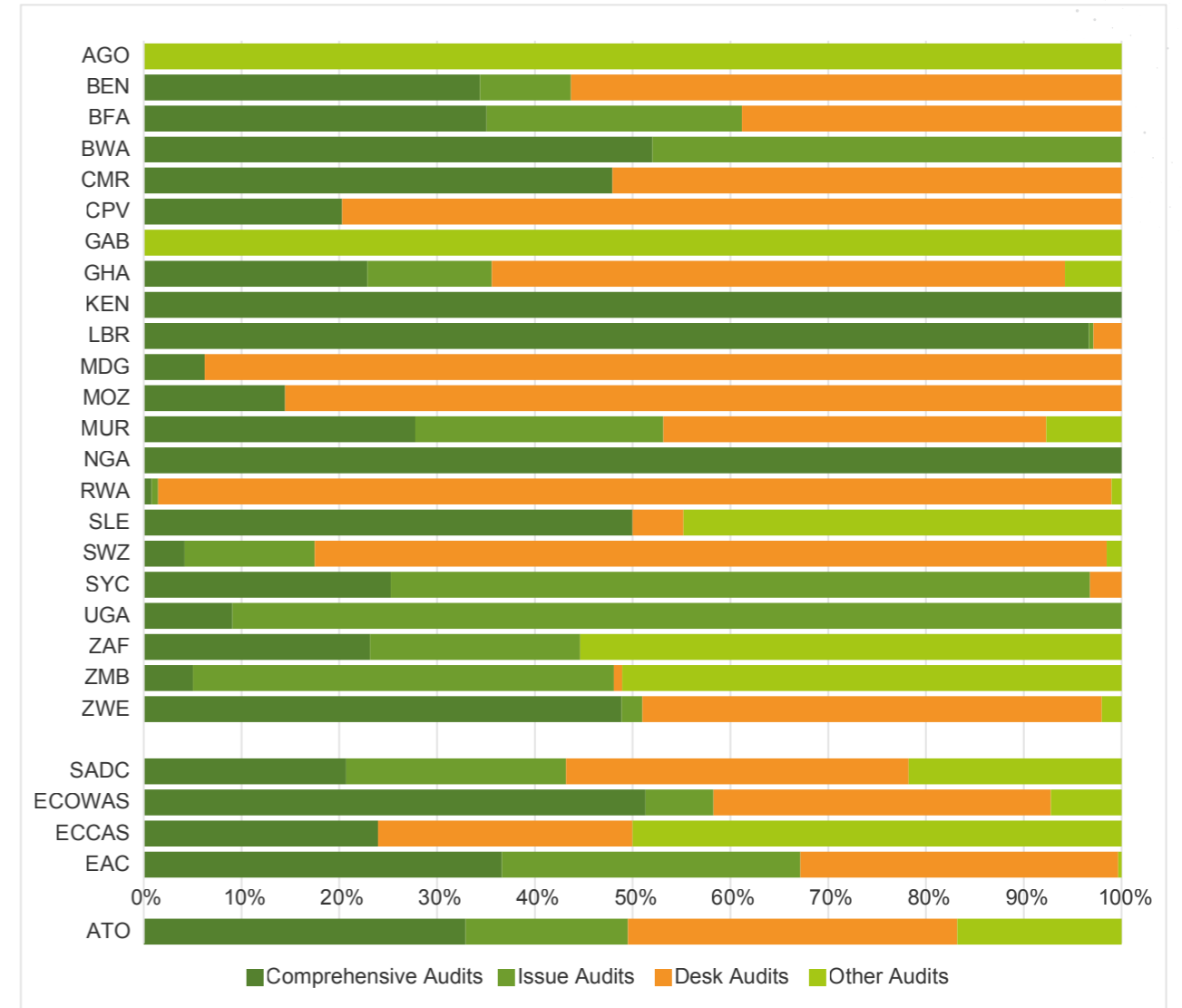
Each type of audit serves a specific purpose and addresses different aspects of tax compliance. The combination of these audit approaches enhances the overall effectiveness of revenue mobilization efforts. However, according to the strategy adopted, the distribution of audit types exhibited in 2022 have notable variations from one country to another.

Certain countries predominantly conducted a single type of audit. A clear illustration of this pattern, in Figure 6.5, is observed in Nigeria, Kenya, and Liberia, where all audits conducted were of the comprehensive type as registered in the previous years. A comprehensive audit involves a thorough examination of all aspects of a taxpayer’s financial records, transactions, and compliance with tax laws which translates to a lot of work for the auditors. As a result of the nature of comprehensive audits, Nigeria and Liberia experienced low ratios of audits per auditor. Similarly,

Rwanda and Madagascar reported desk audits, which allow tax authorities to handle a large volume of cases with limited resources, and they represent 98% and 94% of their total audits, respectively. In Uganda, most of audits targeted particular aspects, such as specific types of transactions or industries. These issue audits account for 91% of total number of audits in 2022. Angola and Gabon have reported exclusively to conduct other audits.

In the remaining countries, the spectrum of audit types exhibited a more diversified distribution, albeit sometimes with the prevalence of a single type of audit surpassing 50%. For instance, comprehensive audits accounted for a substantial portion, representing 52%, 50% and 49% of all audits in Botswana, Sierra Leone, and Zimbabwe, respectively. Issue audits predominated in Seychelles, constituting 72% of their audit activities. Several other countries, namely Mozambique (86%), Eswatini (81%) and Cape Verde (80%) presented a dominance of desk audits in 2022.

FIGURE 6.5 AUDIT TYPES PER COUNTRY AND REGION, 2022



In an overarching analysis encompassing the ATO countries, the average distribution reveals relatively minor discrepancies among audit types. Notably, desk and comprehensive audits emerged as the most prevalent type in 2022, constituting respectively 34% and 33% of the total audits conducted. Issue audits followed, representing 17% of the distribution, while other audits accounted also for 17%. This distribution pattern is different from that observed when considering regional groupings. The SADC countries present an average distribution where desk audits, comprehensive audits, and issue audits represented 35%, 21%, and 22% of the overall audits, respectively. In ECOWAS, half of total audits (51%) in 2022 were comprehensive. The three main types of audits each account for a third in EAC.

6.1.4. Audit yield is rising, but remains low

Assessing the level of audit yield involves considering various indicators that provide insights into the effectiveness of audit activities in generating additional revenue for the tax administration. This section focuses on the comprehensive analysis of two key indicators, namely audit yield to the total amount assessed, and audit yield to the total tax revenue.

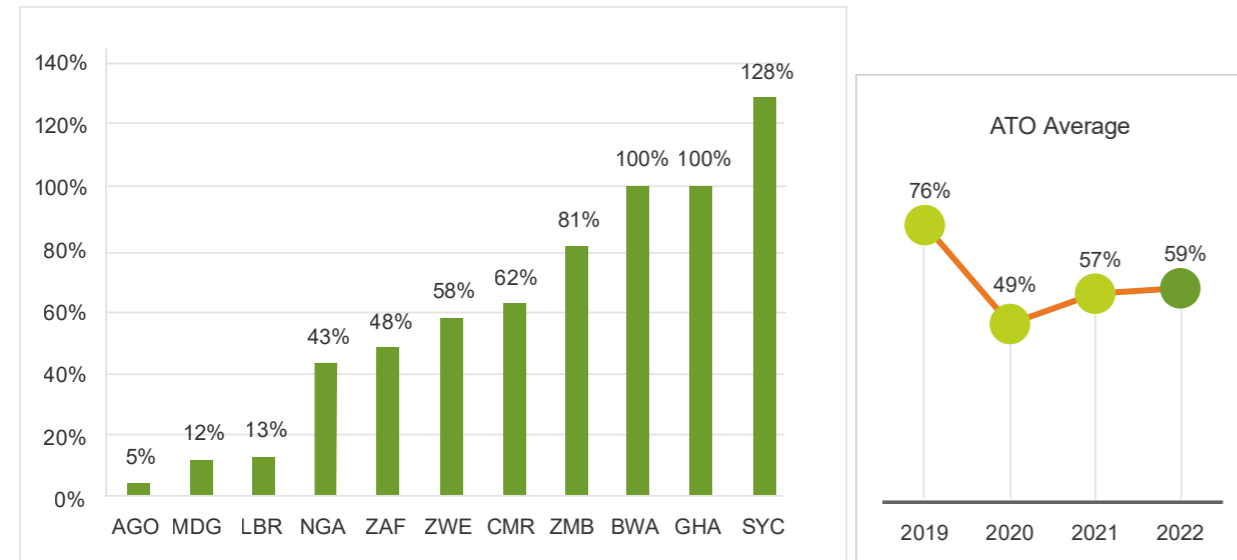
Audit yield to total amount assessed

A detailed analysis of the 2022 data shows noteworthy variations in tax recovery rates among ATO countries. In countries such as Seychelles (128%), Ghana (100%) and Botswana (100%), audit yield was equal or more than the

assessed amount in 2022 (see Figure 6.6). This result indicates that some amounts having been assessed in previous years were able to be recovered the reporting year. In Zambia, the recovery rate was estimated to 81% of total amount

assessed. Conversely, certain countries faced challenges in achieving high tax recovery rates. Audit yield represents only 5% of the amount assessed in Angola in 2022.

FIGURE 6.6 AUDIT YIELD TO TOTAL AMOUNT ASSESSED IN 2022

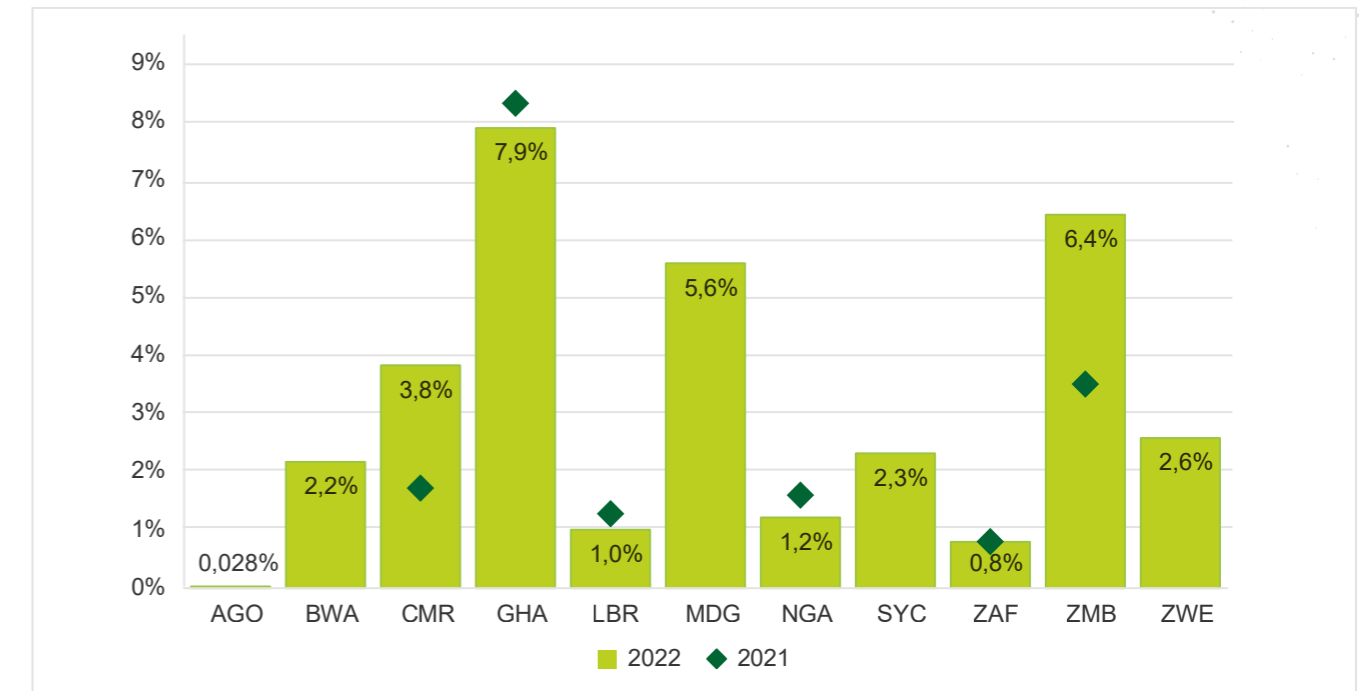


The examination of the average level of audit yield to the total amount assessed in ATO countries presents a dynamic impacted by the socio-economic context. The economic downturn caused by the pandemic led to financial hardships for businesses and individuals. Tax authorities, recognizing these challenges, may have adjusted their enforcement strategies, resulting in a decrease in audit yield between 2019 and 2020. As countries entered the recovery phase, there might have been efforts to resume and ramp up audit activities. The lifting of audit suspensions and the adaptation to the new economic landscape could influence the recent increase in audit yield. The average audit yield to total amount assessed reached 59% in 2022, marking a gradual growth since 2020 where the ratio was estimated at 49%.

Audit Yield to total tax revenue

Ghana stood out as the best performing country with the highest audit yield to total tax revenue ratio estimated at 7.9% in 2022, as shown in Figure 6.7. With a ratio of 6.4%, Zambia followed in the second position, followed by Madagascar where audit yield represented 5.6% of tax revenue. Apart from these three countries, audit yield to total tax revenue ratio is less than 4%. At the lowest is Angola, with an audit yield representing less than 1% of total revenue. Moreover, for most countries, the ratio observed in 2022 is down compared to 2021. For example, the ratio declined from 8.3% to 7.9% in Ghana and from 1.6% to 1.2% in Nigeria. However, Zambia and Cameroon almost doubled their ratio from 3.5% to 6.4% and from 1.7% to 3.8% respectively. The improved ratio of audit yield to total tax revenue in Zambia was primarily due to the implementation of the Tax Amnesty Programme, which included waivers of interest and penalties from late 2021 to early 2023.

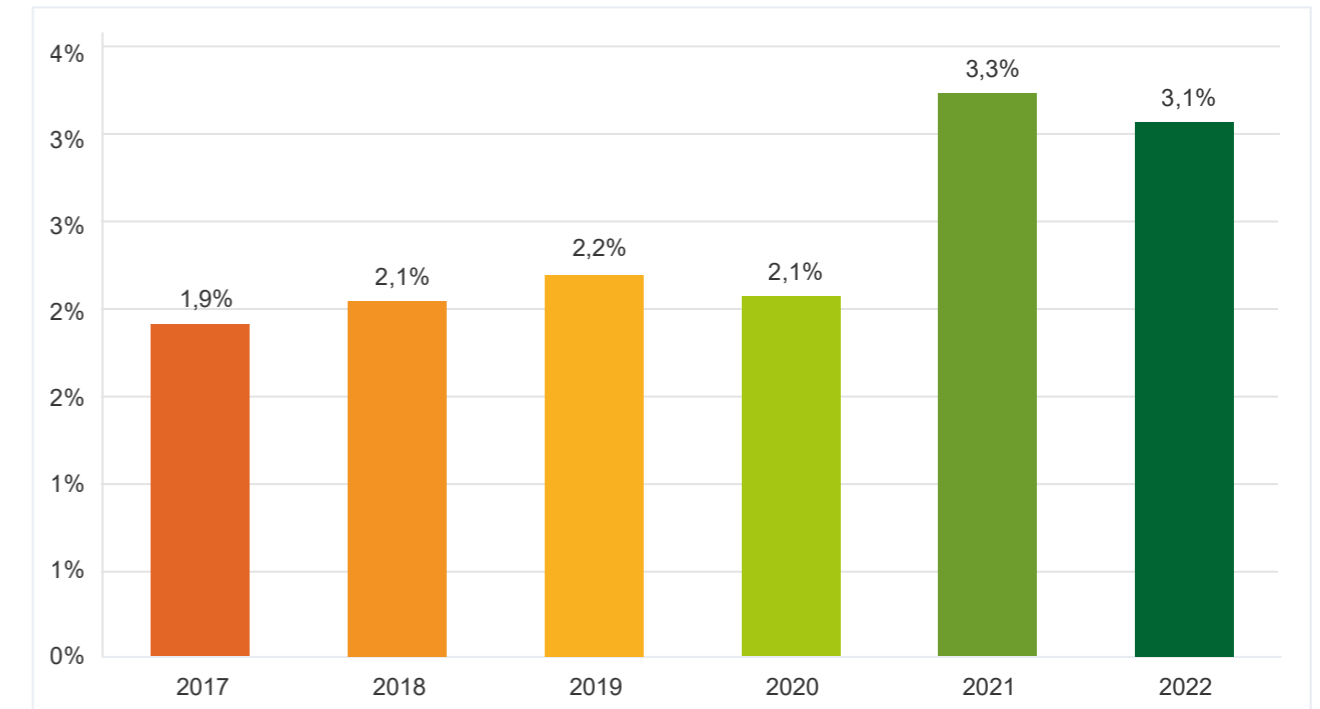
FIGURE 6.7 PROPORTION OF AUDIT YIELD TO TOTAL TAX REVENUE, 2022



The diversity in audit yield between countries significantly influences the ATO average, which was estimated at 3.1% in 2022, (see Figure 6.8). It can be noted that this ATO average is less than what was registered in 2021, even though a general upward trend is exhibited since 2017.

Comparing this average with the corresponding figures from OECD countries highlights an apparent gap. In 2020, OECD countries reported an average audit contribution to tax revenues of 5.2%, significantly higher than the ATO average.

FIGURE 6.8 EVOLUTION OF AVERAGE AUDIT YIELD TO TOTAL TAX REVENUE, 2017 - 2022



6.2. Arrears management

Effective arrears management is essential for maximizing revenue collection. Unpaid taxes and outstanding debts represent potential revenue that, if recovered, can contribute significantly to the funding of public services and government activities. A robust arrears management system acts as a deterrent to non-compliance. Knowing that there are consequences for failing to meet tax obligations encourages taxpayers to fulfil their responsibilities in a timely manner, reducing the likelihood of arrears accumulating. Several key indicators and metrics can be used to gauge the extent of arrears in tax administration. This section analyses the arrears ratio (arrears stock divided by total tax revenue) and the share of arrears recovered for the 20³⁸ countries for which data is available.

6.2.1. Arrears stock increases in 2022

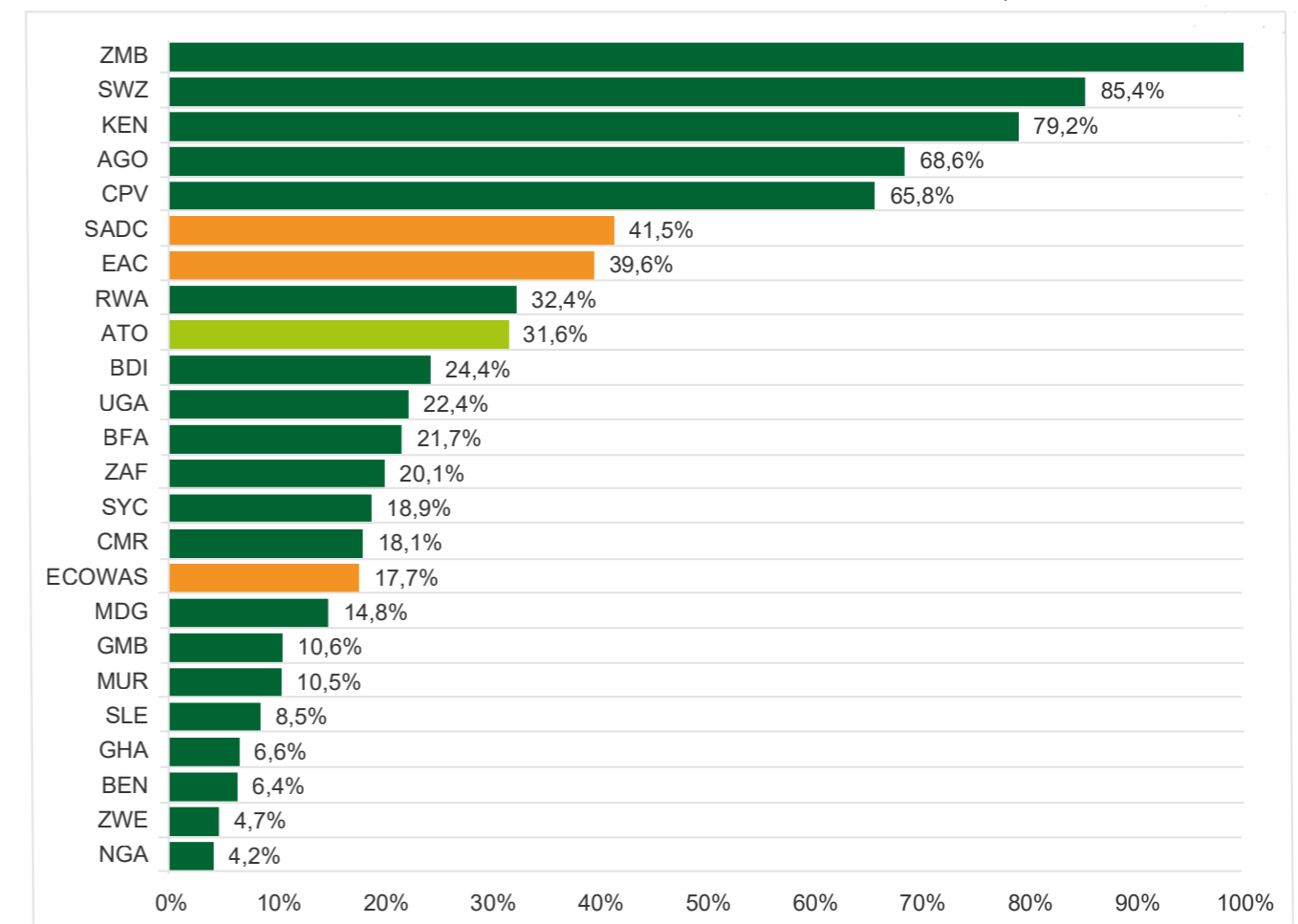
The evaluation of the arrears stock within African tax administrations is essential for understanding the financial health of these entities and their ability to collect revenue. One commonly used metric to measure the size of the arrears stock is its relation to the total revenue generated. This provides insights into the financial challenges faced by tax administrations.

In examining specific ATO countries, variations in the size of arrears become apparent. Zambia, for instance, faced a notable challenge in 2022, where the stock of arrears surpassed the total revenue level, reaching 108.8% (see Figure 6.9). The arrears stock in Zambia has been increasing since 2013 due to accumulation of debt in VAT, PAYE, and Mineral Royalty. Similarly, Eswatini and Kenya registered substantial arrears stock, representing 85% and 79% of their respective revenues in 2022. Contrastingly, some countries demonstrated low level of arrears stock. Nigeria, for example, reported arrears constituting only 4% of its total revenue.

Zimbabwe followed closely with 5%, while Benin, Ghana and Sierra Leone reported figures ranging from 6% to 9%. These countries displayed a more effective management of arrears, indicating more resilience in the face of economic challenges. For instance, Nigeria has a well-established structure for debt management and enforcement. The function has officers in all state coordination offices across the country to ensure better monitoring and enforcement drive.

Regarding the economic zones, SADC and EAC experienced almost similar situation in arrears management in 2022 and displayed an average proportion of total arrears to total tax revenue at 42% and 40% respectively. These figures are more than double the ratios observed in other economic regions, such as ECOWAS where the ratio stands at around 18%. This discrepancy underscores the diverse economic challenges and recovery rates across different regions of the continent. The average level of the stock of arrears in all the ATO countries in 2022 stands at 32% of total tax revenue. This indicates a notable increase compared to the previous year, where the stock of arrears to total revenue was at 28%.

FIGURE 6.9 PROPORTION OF TOTAL ARREARS TO TOTAL TAX REVENUE, 2022

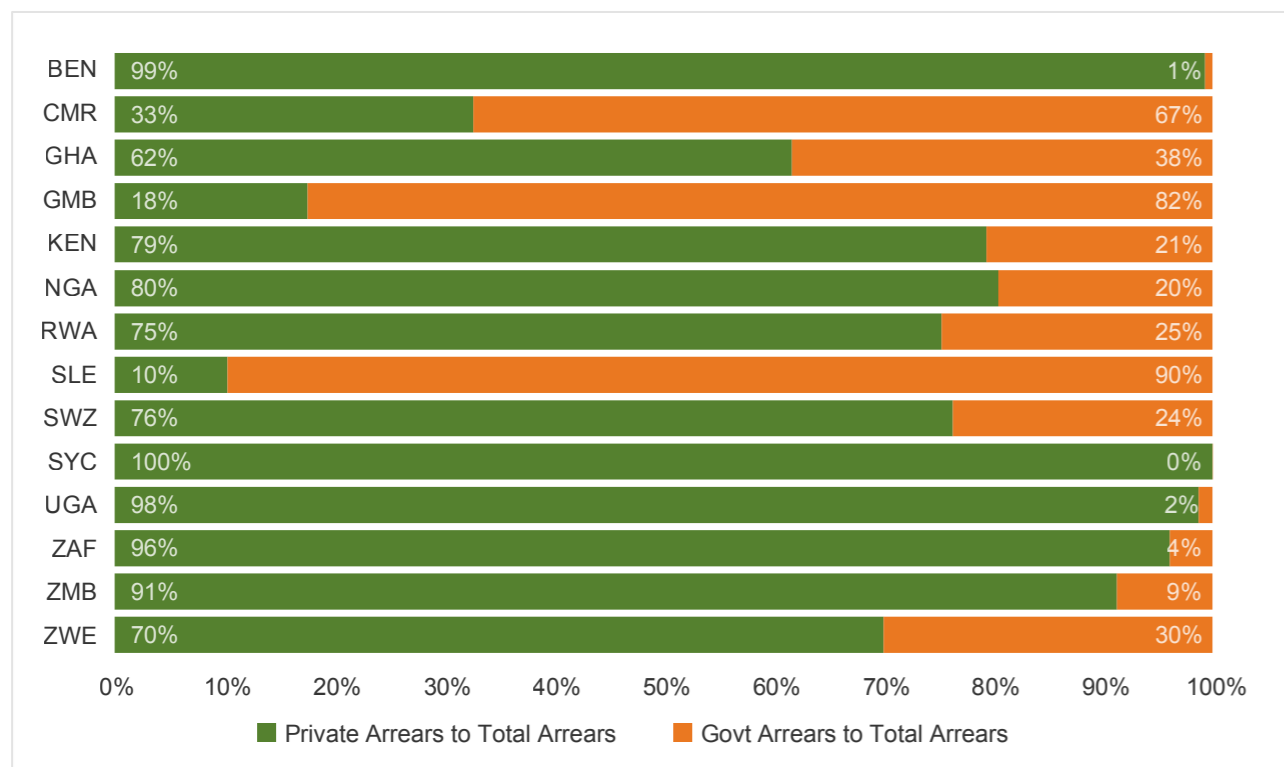


The origin of arrears provides valuable insights into the economic dynamics within the ATO countries. In most instances, arrears arise predominantly from private sector companies as shown in Figure 6.10. Seychelles, Benin, Uganda, South Africa, and Zambia registered more than 90% of their arrears stemming from the private sector. In

contrast, only four countries have a distribution where the public sector contributes more than 50% of the arrears stock. These countries include Cameroon, Gambia and Sierra Leone where public companies contribute to 67%, 82% and 90% of total arrears respectively.

38. Angola, Burundi, Benin, Burkina Faso, Cameroon, Cape Verde, Ghana, The Gambia, Kenya, Madagascar, Mauritius, Nigeria, Rwanda, Sierra Leone, Eswatini, Seychelles, Uganda, South Africa, Zambia, Zimbabwe

FIGURE 6.10 DISTRIBUTION OF TOTAL ARREARS PER COUNTRY, 2022

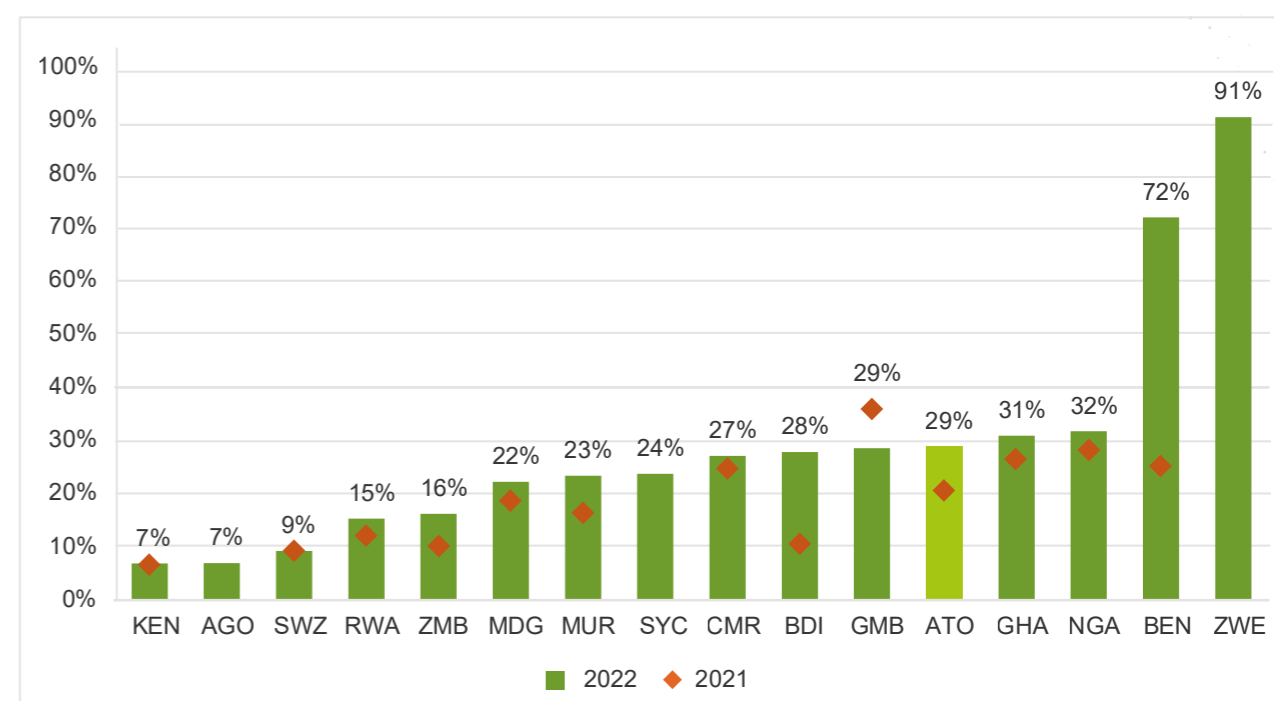


6.2.2. Recovery of arrears improves in 2022

In the year 2022, only two countries recorded an arrears recovery rate above 50%. Zimbabwe emerged as a standout performer, recovering nearly 91% of its arrears stock (see Figure 6.11). Strategies implemented in Zimbabwe to recover debt included constant follow-up of debtors, debt prioritisation, negotiated payment plans, garnish orders and

set-off arrangements. Following Zimbabwe, commendable performance was noted in Benin where arrears recovered accounted for 72% of the arrears stock. Conversely, Kenya and Angola faced significant challenges, recording the lowest recovery rates with only 7% of their arrears stock. Eswatini also registered a low recovery rate which stood at 9% in 2022. Apart from these countries mentioned above, the recovery rate ranged from 15% to 32% in ATO countries.

FIGURE 6.11 RECOVERED ARREARS TO TOTAL ARREARS, 2021 - 2022



Comparing the data to the preceding year, many countries experienced a growth in their recovery rates. Notable improvements in the recovery rate include 25% to 72% in Benin, from 11% to 28% in Burundi, and from 10% to 16% in Zambia. For several of these countries, the robust performance was propelled by aggressive enforcement measures. Moreover, the escalating debt stock risk was mitigated by the use of various debt collection initiatives such as Time to Pay Agreements (TPAs), garnishes, debt swaps, and the Tax Amnesty Programme implemented for example in Zambia. Conversely, Gambia demonstrated a decline in its recovery rates between 2021 and 2022, decreasing from 36% to 29%.

These fluctuations in recovery rates underscore the evolving nature of tax enforcement policies. As tax administrations navigate the complex terrain of arrears management, the lessons picked-up from both successful and challenging scenarios in 2022 will be pivotal. Strategic adjustments in enforcement approaches, coupled with a keen awareness of economic dynamics, will be imperative for fostering more robust and resilient arrears recovery mechanisms.

6.3. Effective contribution and tax burden

Measuring taxpayer contributions aids in monitoring compliance levels. Identifying non-compliance or areas with low contribution rates enables tax authorities to implement targeted enforcement strategies, such as audits or educational campaigns. This activity involves among others assessing the impact of individuals or entities who either do not file tax returns (non-filers) or file returns with zero taxable income (nil-filers). The analysis of available data relating to 16³⁹ ATO countries presents different situations.

6.3.1. CIT registered the highest proportion of non-filers

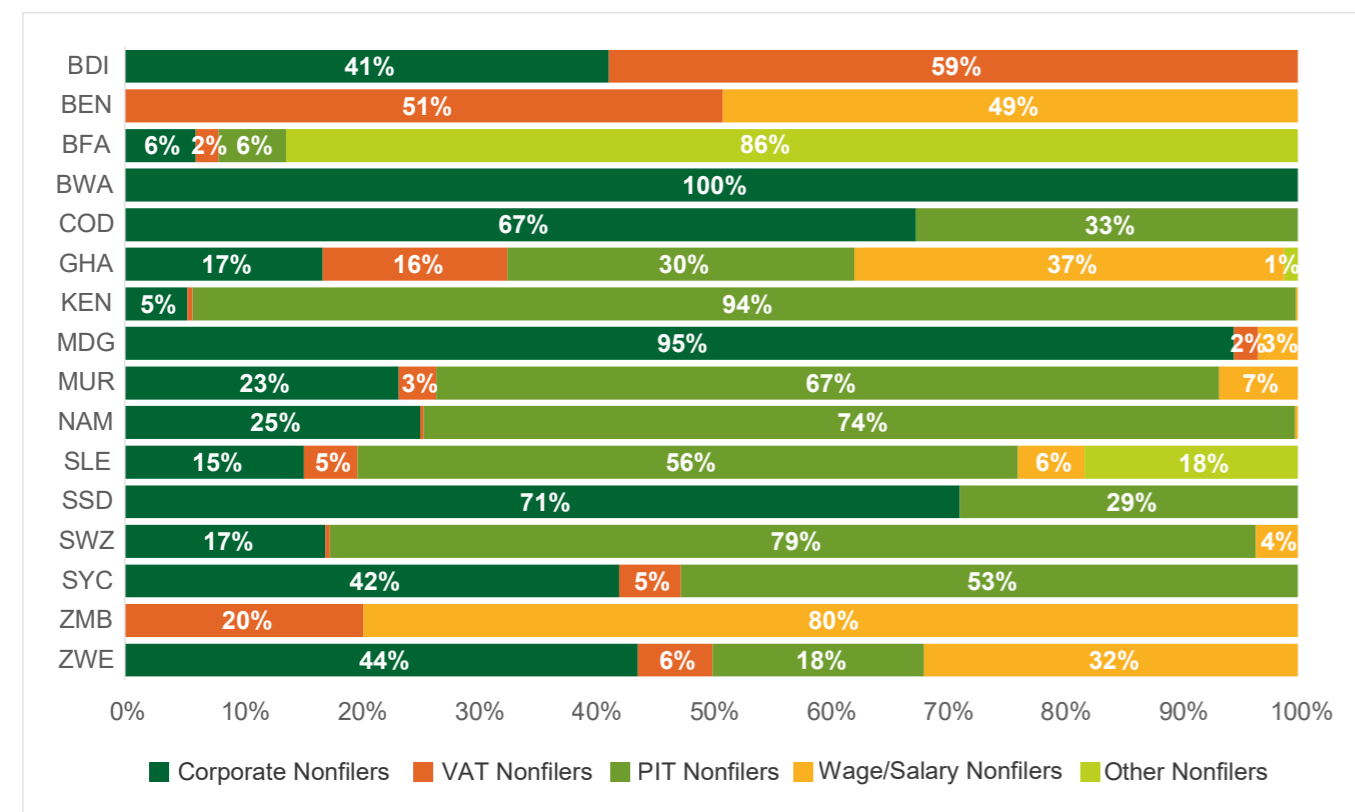
The distribution of non-filers highlights the diverse tax compliance landscape existing from one country to another, as illustrated in Figure 6.12. In certain nations, a significant majority of non-filers are associated with a specific tax head. For instance, in Togo, all non-filers in 2022 are linked to corporate income tax. Similarly, 95% of non-filers in Madagascar were registered in CIT while PIT accounts for 94% of the non-filers in Kenya. PIT also took precedence

39. Burundi, Benin, Burkina Faso, Botswana, DRC, Eswatini, Ghana, Kenya, Madagascar, Mauritius, Namibia, Sierra Leone, South Sudan, Seychelles, Zambia, Zimbabwe.

in Eswatini, Namibia and Mauritius, constituting the largest proportion of non-filers with percentages of 79%, 74%, and 67%, respectively. These figures shows the need for addressing non-compliance issues about personal income

tax, especially in a context where the effective taxation of high-net-worth individuals constitutes a major centre of interest.

FIGURE 6.12 SHARE OF NON-FILERS BY TAX HEAD TO TOTAL NON-FILERS, 2022



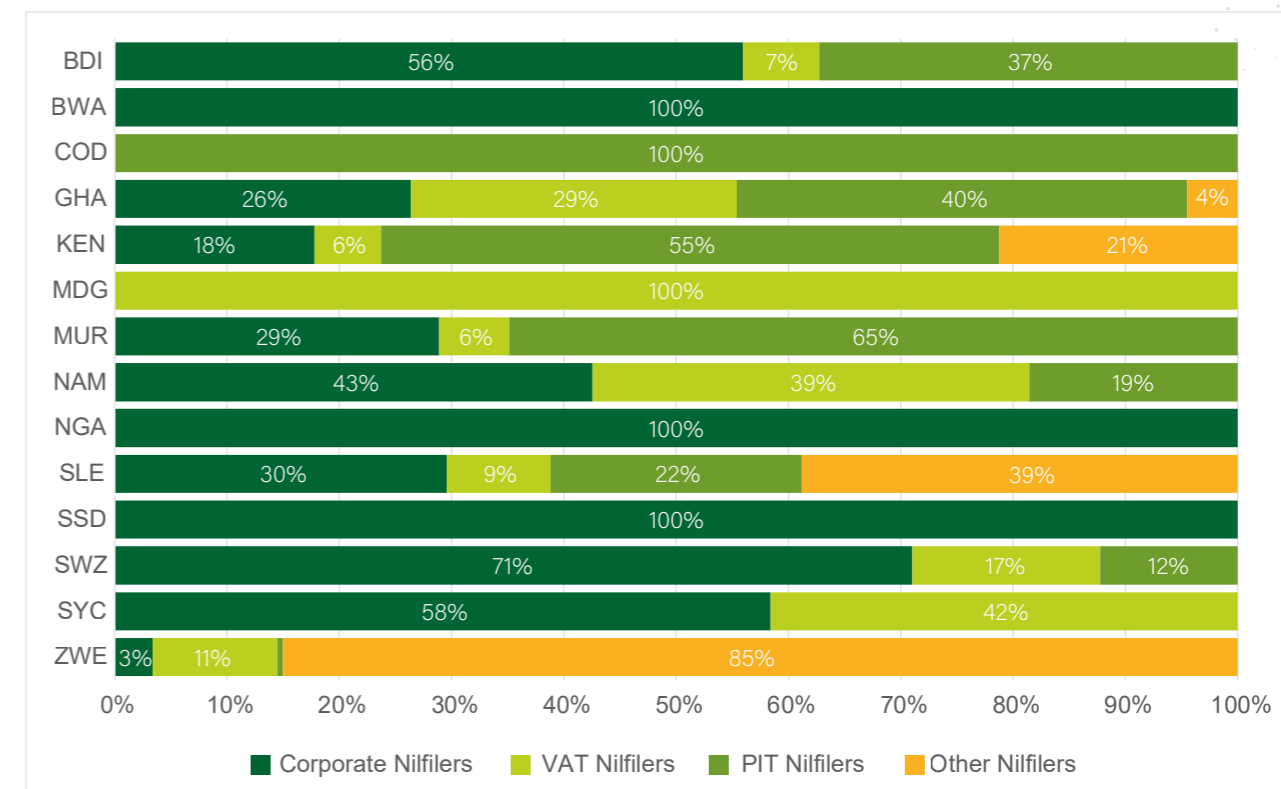
In contrast to the high concentration observed in certain nations, some countries registered significant number of non-filers in two or more tax heads. Non-filers in Burundi are distributed between CIT (41%) and VAT (59%). The same situation is observed in Benin where VAT accounts for 51% and wage/salary non-filers represents 49%. Ghana displays a more balanced distribution of non-filers across multiple tax heads in 2022. Notably, non-filers related to wage/salary tax make up 37%, while PIT, CIT and VAT contribute around 30%, 17% and 16%, respectively.

6.3.2. Nil-filers predominate in CIT

Nil-filers, referring to taxpayers whose filed returns indicate a zero amount of tax, exhibit distinct patterns in ATO countries in 2022. In some countries, the entirety of nil-filers pertains to one tax type. Botswana, Nigeria, and South Sudan registered nil-filers only for CIT while in DR Congo, PIT is the only source of nil filers. Considering the average distribution across ATO countries, CIT constituted the largest proportion of nil-filers,

accounting for 45%, as depicted in Figure 6.13. PIT and VAT contribute 25% and 19%, respectively, to the overall distribution of nil-filers. Comparing the data to the previous year, there is a noticeable increase in the share of CIT, while the proportion of nil-filers for VAT and PIT has decreased. These results suggest that the full tax impacts of the pandemic may not have been immediately evident in the early stages but could manifest in later fiscal periods like 2022, due to delayed financial effects and tax assessments. In Eswatini for example, because of the COVID-19 pandemic coupled with political unrests experienced during the year, the number of returns filed on time decreased by an average 4% from 2020/21. Moreover, Income tax recorded the lowest compliance level and a deterioration compared to the previous year while there was an improvement in the value of on-time payments for VAT and PAYE. In the case of South Sudan, CIT nil filers are high due to the way in which the country's economy is structured, as such, they mainly have institutional taxpayers in the form of not-for-profit organisations who do not pay CIT.

FIGURE 6.13 SHARE OF NIL FILERS BY TAX HEAD TO TOTAL NIL FILERS IN 2022

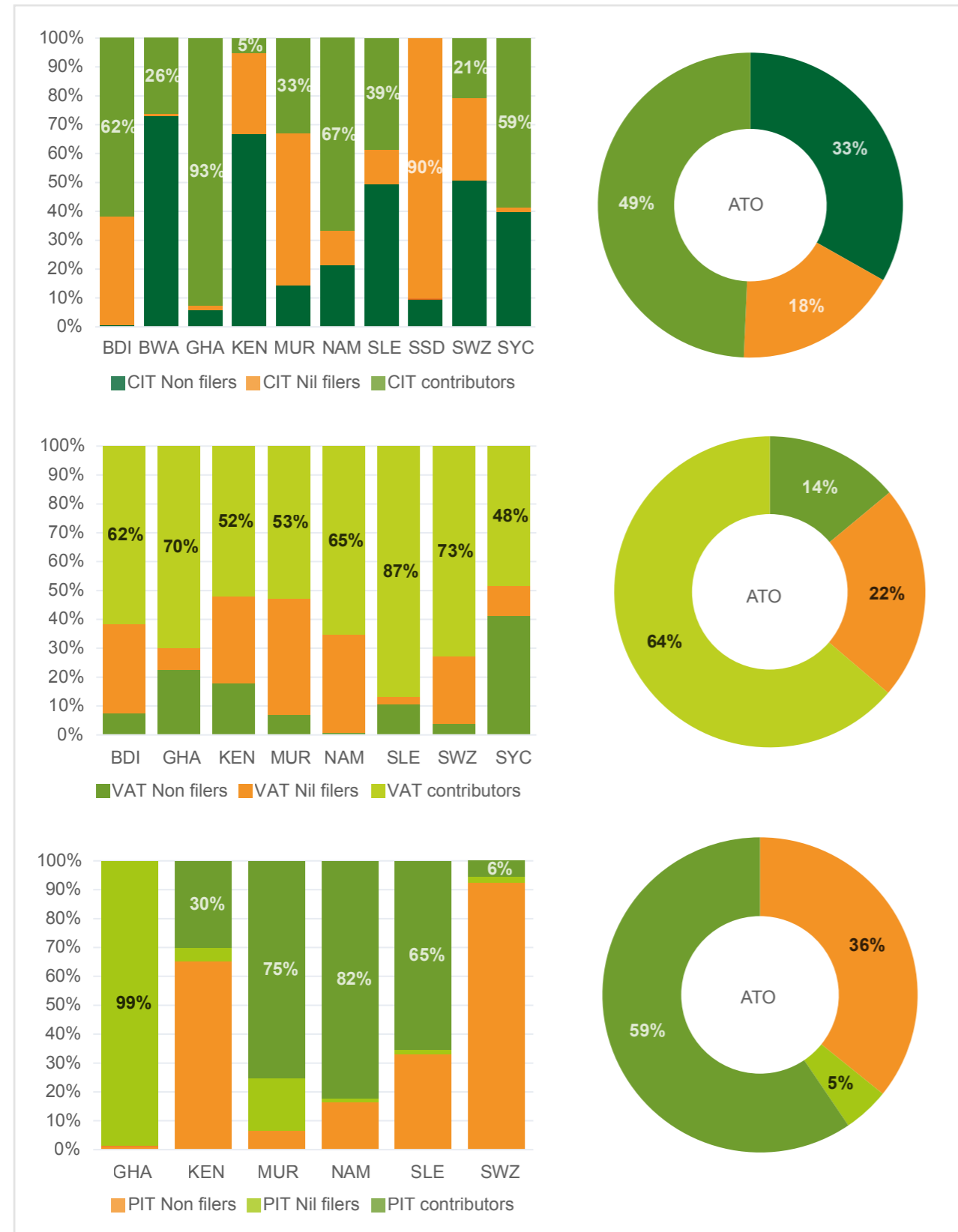


6.3.3. A large portion of taxpayers effectively contribute to revenues

In the context of tax administration, an effective contributor refers to a taxpayer or entity that consistently and reliably fulfils their tax obligations, including timely and accurately reporting income, complying with tax laws, and meeting payment obligations. Effective contributors play a crucial

role in sustaining government revenue, promoting fairness in the tax system, and supporting public services. Measuring the effectiveness of contributors involves assessing various aspects of their compliance and engagement with the tax system. This section considers that all registered taxpayers for a tax type can be distributed between non-filers, nil-filers, and effective contributors even if there is no confirmation of effective payment.

FIGURE 6.14 EFFECTIVE CONTRIBUTION TO CIT, VAT AND PIT, 2022



Considering the ATO average, the effective contribution in 2022 is denoted by 64% of total taxpayers registered for VAT, while 59% and 49% of taxpayers are supposed to have contributed to tax revenue in terms of PIT and CIT, respectively (see Figure 6.14). Individually, some countries display very high rates. For instance, almost all taxpayers (99%) subject to PIT and 93% of CIT taxpayers in Ghana declared a significant amount in 2022. A similar result is observed in South Sudan, where effective contributors to CIT represent 90% of the taxpayers. In such countries, the tax burden seems to be distributed among all taxpayers, which is not the case for a few countries.

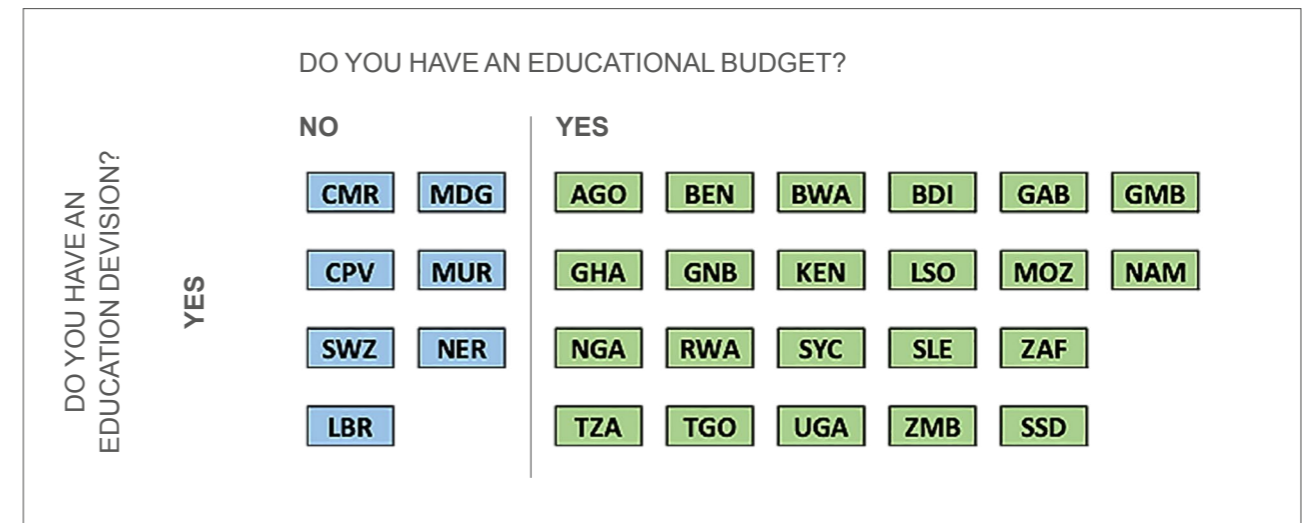
Only 6% of taxpayers are considered to have contributed to PIT revenue in Eswatini. Similarly, the effective contribution to CIT in Kenya is estimated to 5%. This concentration might rise challenges in terms of revenue stability, and changes in the financial situations of these taxpayers could have a notable impact on the government's income. Additionally,

policy-makers might consider the need for a more diversified and sustainable tax base to ensure stability and fairness in the taxation system.

6.4. Taxpayer education

Taxpayer education stands as a cornerstone in the efforts of African tax administrations to cultivate tax compliance. This strategic initiative serves as a vital bridge between tax authorities and taxpayers, aiming not only to elucidate the societal importance of taxation but also to simplify intricate tax laws, strengthen tax compliance, and ultimately elevate revenue collection. The ramifications of inadequate knowledge of the tax system are substantial, potentially leading to errors on the part of taxpayers in fulfilling their tax obligations and asserting their tax rights. Such oversights may expose them to tax penalties, thereby indicating the critical role of comprehensive taxpayer education efforts.

FIGURE 6.15 TAXPAYER EDUCATION INDICATORS, 2022



Across African tax administrations, a diverse array of initiatives is deployed to educate taxpayers, employing various approaches to reach different segments of the population. These encompass innovative strategies such as the establishment of tax clubs in schools, the deployment of mobile tax units in rural areas, the use of media platforms including radio, TV programs, songs, social media videos, and even tax dramas. This multifaceted approach ensures that taxpayer education initiatives are inclusive and resonate with diverse audiences. Regarding the management of education programs within ATO countries, data reveals that tax administrations in 29 countries have established dedicated departments for taxpayer education, as diagrammed in Figure 6.15 and 23 of them allocated specific budgets for taxpayer education.

In tandem with traditional approaches, the integration of Information and Communication Technologies (ICT) has emerged as a transformative force in taxpayer education. Leveraging the power of digital platforms, tax authorities can enhance outreach and engagement with taxpayers. Interactive websites, mobile applications, and online learning modules provide convenient channels for disseminating educational content. Moreover, the use of data analytics can enable tax authorities to tailor educational initiatives based on taxpayer profiles, ensuring personalized and targeted communication. The incorporation of ICT not only facilitates broader dissemination of tax-related information but also enables real-time interaction, allowing taxpayers to seek clarification and guidance conveniently. Embracing these technological advancements can amplify the impact of taxpayer education efforts, fostering a culture of compliance. As tax administrations operate in a constantly changing environment, the strategic use of ICT could play a significant role in advancing taxpayer education and, by extension, enhancing overall tax compliance across African jurisdictions.

6.5. Customs administration functions

By levying customs duties, taxes, and fees on international trade transactions, customs become a significant contributor to a government's fiscal resources. Among its core functions, customs administrations are responsible for verifying and authorizing the entry

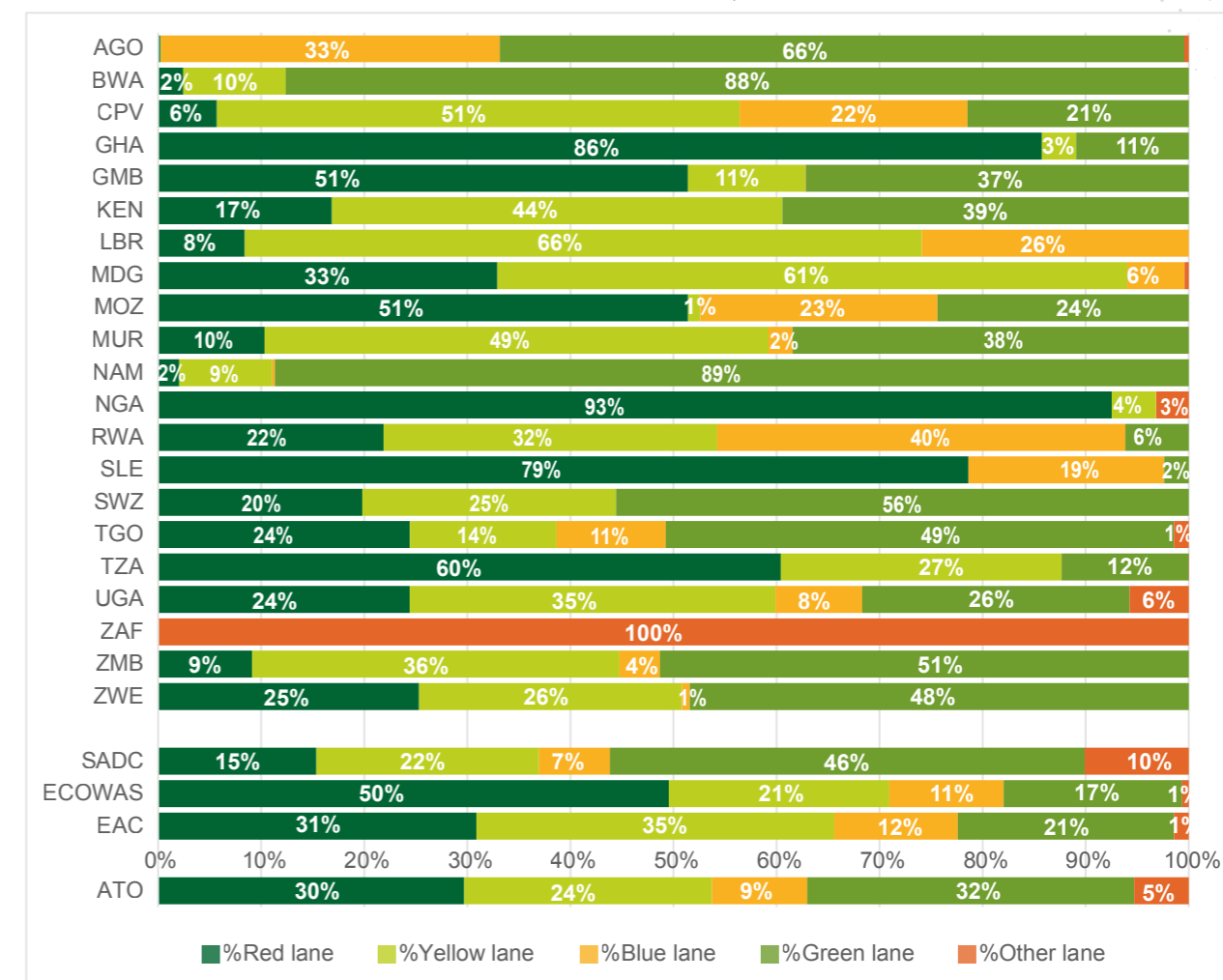
or exit of goods, ensuring compliance with regulatory requirements, and calculating and collecting applicable duties and taxes. Efficient and transparent customs clearance procedures are essential for facilitating trade, attracting investments, and promoting economic growth. In addition to clearance activities, customs are in charge of the enforcement of trade regulations, the prevention of smuggling and fraud, and the monitoring of compliance with international trade agreements. Customs officers employ risk management strategies to identify high-risk shipments, contributing to the prevention of revenue leakage and maintaining the integrity of the taxation system. This risk management activity can be apprehended through the analysis of customs clearance lanes and seizures.

6.5.1. Use of red and yellow lanes has decreased

The clearance lanes, namely “red,” “yellow,” “green,” and “blue,” refer to specific categories of goods processing by customs authorities. These colours denote varying levels of control and verification applied to goods during the customs clearance process. The allocation of goods to a specific circuit depends on several factors, such as the nature of the goods, the compliance history of the importer or exporter, prevailing trade agreements, and risk assessments conducted by customs authorities. The objective of this classification into lanes is to optimize customs resources by focusing control efforts on goods with a higher risk level, while facilitating the expedited clearance of low-risk goods to promote international trade.

In examining the distribution of customs clearance lanes across ATO countries in 2022, a distinct pattern emerges for each country, shedding light on the predominant methods employed for customs procedures. Notably, the utilization of specific lanes for more than 50% of customs clearances is a common trend across many countries as depicted in Figure 6.16. In particular, countries such as Namibia, Botswana and Angola stand out, as they cleared a significant majority of imports through the green lane, representing 89%, 88% and 66%, respectively. This trend suggests that a substantial portion of imports in these nations is deemed low risk, warranting minimal scrutiny during the customs clearance process.

FIGURE 6.16 CUSTOMS CLEARANCE LANE DISTRIBUTION, 2022



On the other side, some countries rely heavily on the yellow lane, where imports undergo at least documentary control. Liberia, Madagascar, and Cape Verde show this pattern, with percentages ranging from 51% to 66%. Other countries like Nigeria, Ghana, Sierra Leone, and Tanzania presented high proportions of the red lane which involves both documentary and physical checks. Nigeria stands out with a remarkable 93% of goods passing through the red lane. The blue lane, reserved for priority or trusted shipments, is the least utilized in ATO countries, constituting less than 30% of customs clearances in all instances. Rwanda and Angola, however, bucks this trend, with the blue lane accounting for 40% and 33% of customs clearances, respectively.

On average, the distribution of customs clearance lanes in ATO countries in 2022 remains relatively balanced, with the green lane leading at 32%, closely followed by the red lane at 30%. The yellow lane comes in third position with 24%. This analysis indicates that nearly two-thirds of imports in ATO countries undergo at least documentary checks, given the prevalence of the red and yellow lanes. However, compared to last year, the use of the red and yellow lanes is down in favour of the green lane. This could reflect a strengthening of capacities to better identify high-risk imports for more goods to be cleared through the green lane.

Variations exist within regional economic communities, with ECOWAS presenting a higher reliance on physical checks – the red lane accounting for 50% of clearances. By adding the 21% of the yellow lane, it comes that 71% of clearances implied at least documentary check in ECOWAS in 2022. The situation is similar in EAC where the red and yellow lanes

together account for 66% of customs clearances. But that comes only to 37% in SADC, the green lane being used in 46% of cases.

This understanding of customs clearance lane utilization provides valuable insights into the risk assessments and inspection strategies employed by diverse African customs administrations. It is also essential to recognize that checks conducted through these lanes are crucial for ensuring compliance with customs regulations, and violations may result in seizures.

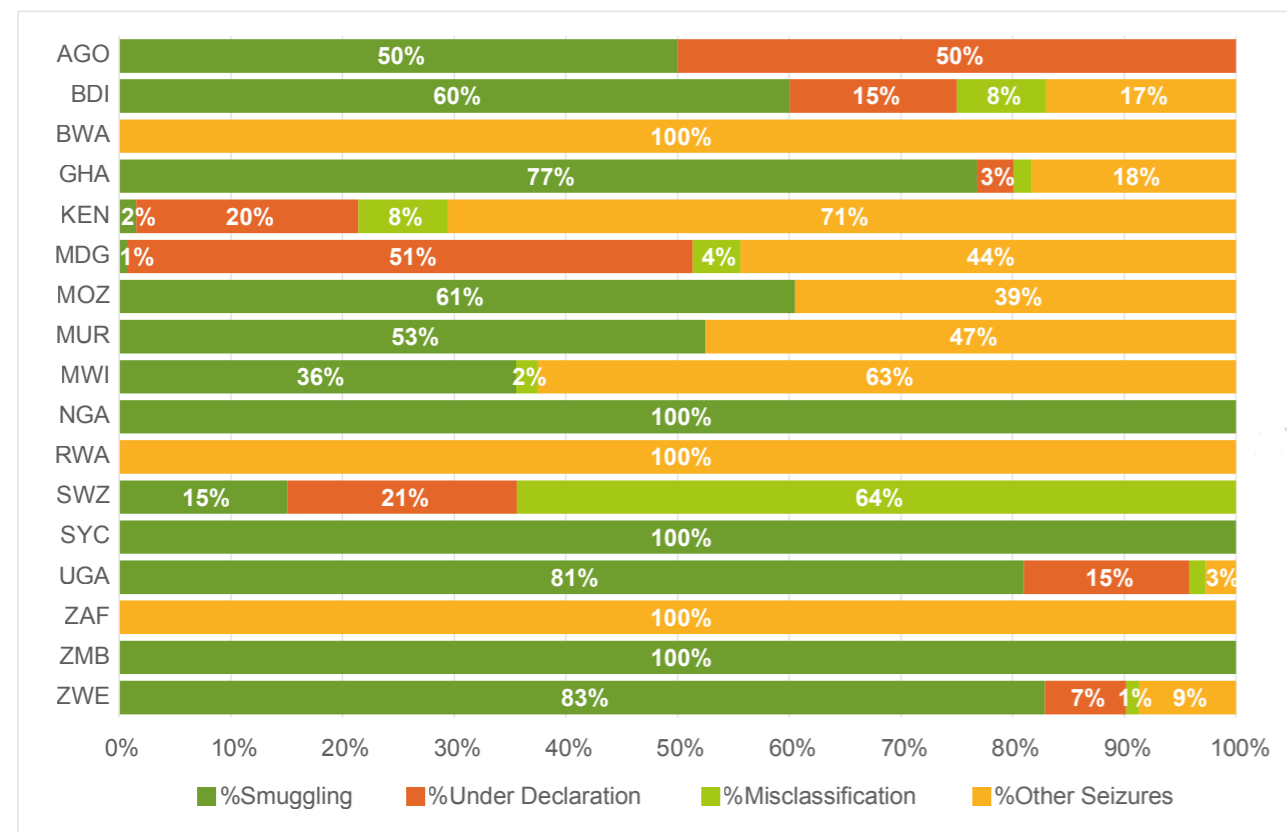
6.5.2. Seizures comes mainly from smuggling

Smuggling emerges as the most prevalent violation, constituting approximately half of all customs seizures in ATO countries in 2022. This clandestine activity involves the illegal movement of goods across borders, often evading customs duties, and taxes. As illustrated in Figure 6.17, individual countries exhibit distinct patterns in the types of seizures reported. For instance, Nigeria, Seychelles, and Zambia exclusively recorded smuggling as the cause of all reported seizures, underlining the persistent challenge of illicit cross-

border trade in these regions. In other instances, smuggling remains a dominant factor, with Zimbabwe reporting a striking 83% of all seizures attributed to this illicit activity. Similar trends are observed in Uganda (81%) and Ghana (77%). The high prevalence of smuggling in these countries underscores the need for robust measures to combat these illegal practices, including enhanced border surveillance, intelligence-sharing, and collaboration between customs authorities.

Angola and Madagascar registered a distribution where half of customs seizures are attributed to under-declarations. This specific violation involves the intentional misrepresentation of the value or quantity of goods to customs authorities, leading to potential revenue losses. This result highlights the importance of targeted strategies to address this specific type of fraudulent activity. Furthermore, a noteworthy observation is the prevalence of misclassifications in Eswatini, constituting 64% of seizures in 2022. Misclassification involves incorrectly identifying goods to benefit from more favourable duty rates, adding another layer of complexity to customs enforcement efforts.

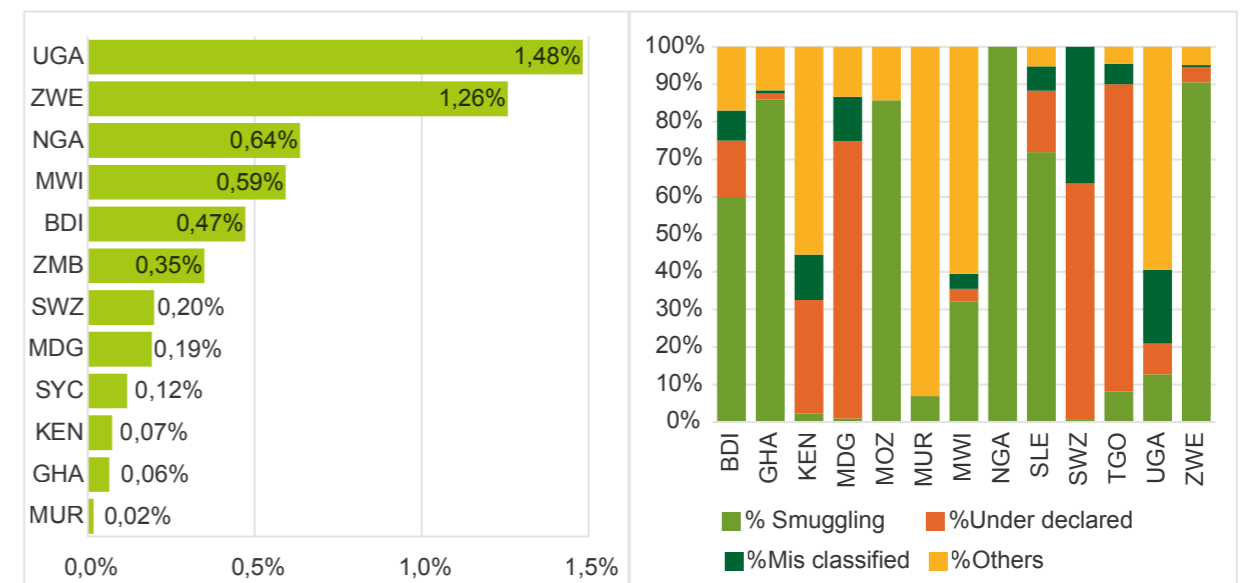
FIGURE 6.17 NUMBER OF CUSTOMS SEIZURES, 2022



When assessing the financial impact of seizures, it becomes evident that the revenue generated from these actions varies across countries. In 2022, the revenue from seizures, considering the 12 reporting countries, as diagrammed in Figure 6.18, stood at no more than 1.5% of customs tax revenues. Uganda presented the highest seizure-to-total-

customs-revenues ratio with 1.48%, followed by Zimbabwe at 1.26%. In accordance with the distribution of the number of seizures, these amounts mainly come from smuggling in several countries. This underscores the potential contribution of effective seizure strategies to strengthen customs tax revenues even if these amounts seem relatively low.

FIGURE 6.18 SEIZURES AMOUNT TO CUSTOMS TAX REVENUE, 2022



6.6. Conclusion

The assessment of key administrative functions within tax administrations sheds light on critical aspects that influence optimal revenue mobilization. This analysis has focused on key areas such as audit performance, arrears management, effective contribution, taxpayer education, and customs administration functions within the context of ATO countries.

The number of auditors in total staff is a crucial factor in determining the effectiveness of tax audits. While the average ratio of auditors to total staff in ATO countries increased slightly in 2022, it remains low. The workload of auditors, measured by the number of taxpayers per auditor and audits per auditor, is relatively high in some countries. The evolving trends in these ratios suggest a need for ongoing adjustments to enhance audit efficiency.

Effective arrears management is vital for reducing non-compliance and preserving government resources. The analysis reveals an increase in the arrears stock to total revenue ratio in ATO countries in 2022, signifying the need for intensified efforts to recover outstanding payments. The recovery rate of arrears remains a challenge, with many countries recovering less than 50% of the arrears stock. The distribution of arrears across countries varies, emphasizing the need for targeted strategies to address specific challenges in each nation.

The identification and management of risks, particularly for non-filers and nil filers, are crucial for tax administrations. The analysis shows variations in non-filer ratios among countries, with some facing higher proportions, potentially due to challenges in compliance management for small taxpayers. Nil filers highlight the need for enhanced scrutiny to ensure accurate reporting and prevent potential tax evasion. That is why taxpayer education emerges as a key enabler for

compliance, as evidenced by initiatives in ATO countries. The impact of education initiatives on tax compliance and morale underscores the importance of adequately funded and well-designed educational programs.

In the field of customs administration, the distribution of clearance lanes plays a crucial role in risk assessment. The prevalence of the red and yellow lanes, indicating high-risk and documentary checks, respectively, reflects the cautious approach adopted by ATO countries. Seizures resulting from customs violations, particularly smuggling, constitute a notable concern.

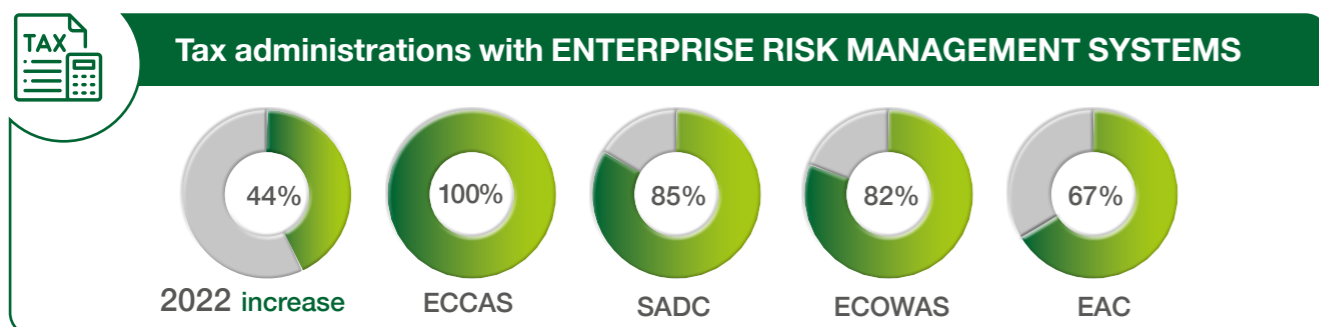
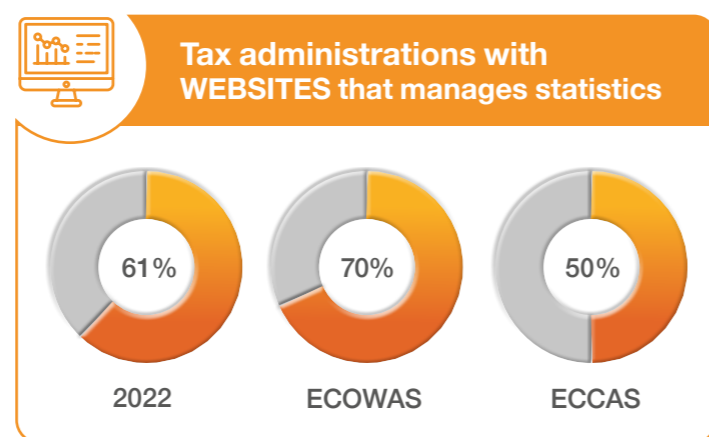
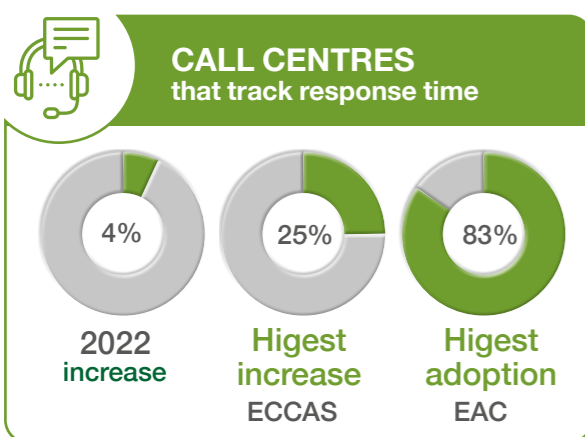
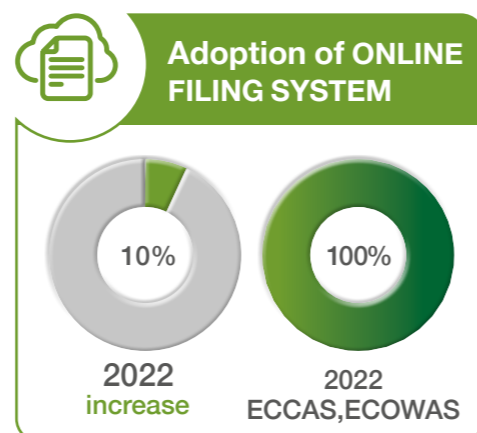
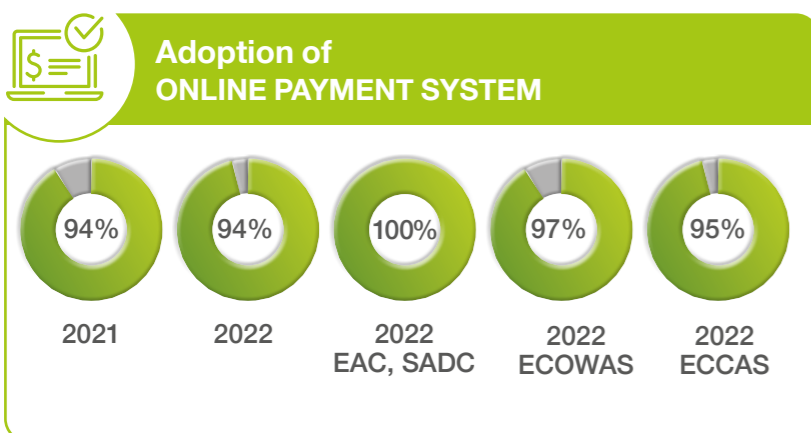
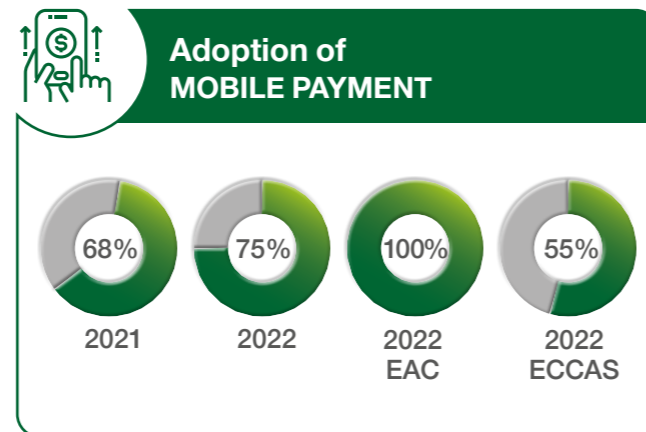
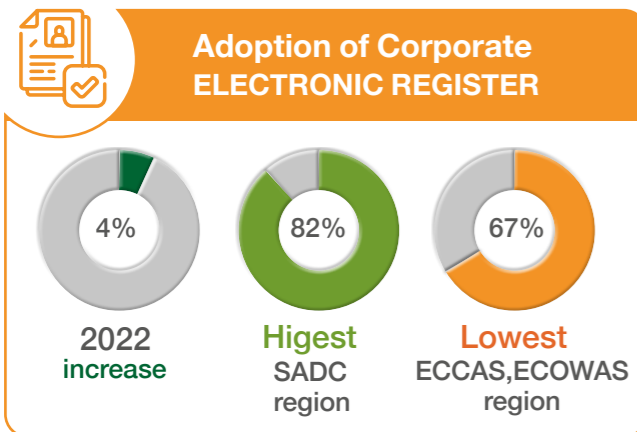
Addressing the challenges highlighted in audit performance, arrears management, risk management, taxpayer education, and customs administration functions is essential for enhancing the efficiency of tax administrations in ATO countries. Strategic reforms, increased investment in taxpayer education, and targeted measures to improve audit performance and arrears recovery are recommended to foster sustainable revenue mobilization and ensure the fairness and effectiveness of the tax system in these nations.



Chapter 7

Navigating the Digital Transition in Tax Administrations

Navigating the Digital Transition in Tax Administrations



Introduction

In an era defined by rapid technological advancements, tax administrations worldwide are undergoing a profound transformation – a digital transformation that transcends traditional paradigms and reshapes the landscape of fiscal governance. The pace of change has been accelerated through information technology, data analytics and artificial intelligence, prompting tax administrations to reevaluate and overhaul their operational frameworks.

Traditional revenue collection methodologies have proven to be inadequate in addressing the complexities of the contemporary business environment. The assertion is reinforced by the OECD, which recognises that traditional tax administration methods are becoming increasingly outdated in today's digital era. Hence, tax administrations are encouraged to adjust to the swiftly changing digital environment in order to successfully enforce tax regulations, guarantee adherence, and tackle tax evasion and avoidance (OECD, 2021). The expansion of global trade, the emergence of online commerce, and the widespread adoption of digital business models have made traditional tax approaches outdated. In order to tackle these difficulties, tax administrations are obliged to embrace digital transformation utilising cutting-edge technologies to simplify procedures, adapt to evolving business environments, and strengthen revenue collection methods.

The foundation of success for tax administrations towards digital transformation should be anchored on collaboration, innovation, and flexibility to change. By embracing digital transformation, tax administration's position themselves as proactive stewards of fiscal governance, ready to navigate the complexities of the digital age and build a more resilient and responsive tax system.

This chapter delves into the pivotal role of digital transformation in modernising tax administrations in ATO countries, enhancing efficiency, transparency, compliance and fostering a resilient tax system that guarantees efficient domestic resource mobilisation (DRM).

7.1. Concept of digitisation, digitalisation, and digital transformation

The concept of digitisation, digitalisation and digital transformation are often used in the context of transforming physical processes into digital ones, they all have separate meanings.

Digitisation involves the process of converting analog information into digital formats. This typically involved scanning physical documents such as taxpayers' records and converting them into digital files. The goal is to create a digital version or replica of the original information. Digitalisation on the other hand, extend beyond creating digital copies of the analog data. It deals with using digital technologies to transform processes, systems, and business operations, aiming to improve efficiency, innovation, and effectiveness within tax administrations. Unlike digitisation, which focuses on improvement and transition, digitalisation is about optimisation and transformation. In contrast to digitisation and digitalisation, digital transformation, however, involves culture change, new business, and operational models, as well as new revenue streams, products, and services (Savic, 2019).

In essence, digitisation is the initial step in the digital transformation journey of tax administrations. Once achieved, tax administrations progress to digitalisation, where technological innovations are leveraged to optimise operational efficiency. Lastly, the digital transformation stage entails harnessing digital tools to drive change, improve processes and unlock new opportunities.

A review of the data on digital transformation of tax administrations in ATO member countries shows that, they are at various level of implementation. About 30 tax administrations have digitised some form of their operations. Two third of this number have transitioned to digitalisation phase, and very few have started to harness the power of advanced technologies and digital data to obtain optimal benefits such as new revenue streams or improved DRM.

7.2. ATO countries tax tech revolution

The evolution of digital transformation in tax administrations in ATO countries has been a dynamic journey marked by significant milestones and ongoing advancement. The pace has varied across ATO countries depending on factors such as infrastructures, resources, and political will. In the initial phase, tax administrations transitioned from manual, paper-based processes to basic automation focusing on developing taxpayer registration, filing and payment processes. This also included setting-up simple databases and creating data warehouses that can be used with more sophisticated digital systems. Most ATO countries have moved a step further by introducing online filing systems that allow taxpayers to submit their returns electronically. This marked a shift towards more accessible and user-friendly platforms, reducing reliance on paperwork and enhancing convenience for taxpayers.

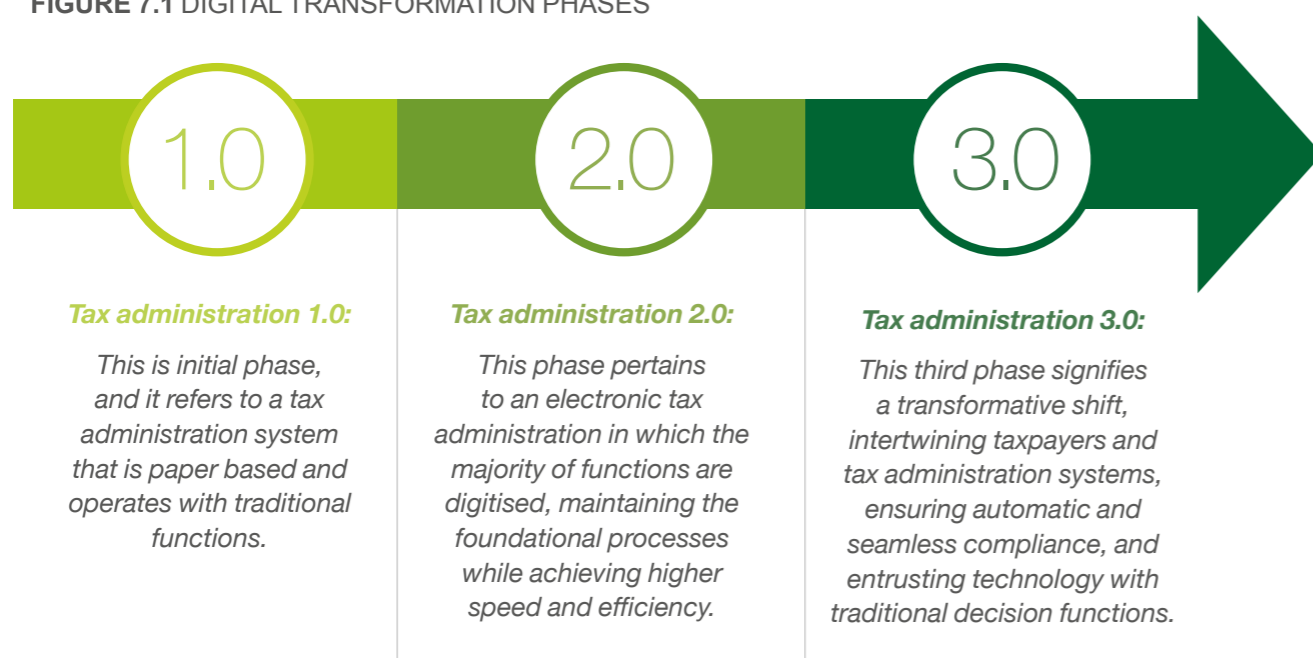
Some ATO countries have expanded their digital footprint by integrating electronic services. They have developed online portals to provide taxpayers with a centralised platform for accessing information, make payments and conduct other tax related transactions. In addition, the adoption of

data warehousing and analytics has gained prominence in some jurisdictions. They have begun to leverage big data technologies and analytical tools to process and analyse vast amount of data. Examples are SARS, FIRS, Nigeria, Uganda Revenue Authority, Kenya Revenue Authority, Rwanda Revenue Authority, and many more, who have been leveraging third party data for risk profiling and compliance improvement (see Box 7.1). This has enabled more effective risk assessment, fraud detection and decision making.

Digital transformation is an ongoing process and crucial for modern tax administrations to handle the growing complexity of data and taxpayer activity. There is no single path that currently exists to a digitalised tax future. Countries are at different stages on this transformative journey, learning from each other and adopting best practices. By sharing experiences and insights, ATO countries can all accelerate the journey towards a more effective and efficient tax system for everyone.

As documented in the 2022 edition of the ATO, the Forum on Tax Administration (FTA) within the OECD delineated the digital transformation trajectory of tax administrations. This conceptualisation outlined the initial phase, intermediate milestones, and the desired endpoint as summarised below:

FIGURE 7.1 DIGITAL TRANSFORMATION PHASES



Source: FTA/OECD framework (OECD, 2020)

The endpoint as envisioned, is a fully digitised, automated tax administration that is powered by data seamlessly streamed from the taxpayers. This data is subsequently captured, cleaned, filtered, matched, and stored in a warehouse, utilised in analytics to facilitate risk assessment, tax investigations, audits, disputes resolutions and other processes.

While the overarching goal, functions, processes, and technological emphasis of the future tax administration may be universally shared, the specific path in terms of scope, timing, phasing, and choice of instruments is distinctive to each administration. The trajectory is contingent upon several

factors including priority, financing, absorptive capacity, strategic vision, political buy-in and the level of maturity in digitalisation development (ADB, 2022).

ATO countries are at different stages in their digital transformation journey, with most at the second phase of the FTA framework (ATAF, 2023). The level of implementation has depended on the factors outlined above plus others such as infrastructures, network availability and macroeconomic conditions. Below is the summary of digital tools in use in the ATO countries:

TABLE 7.1 SUMMARY OF DIGITAL TOOLS IN USE IN TAX ADMINISTRATIONS IN ATO COUNTRIES, 2020-2022

Digital tools in use	2020		2021		2022	
	No. of ATO_TAs that responded	%_ATO_TAs with digital tool in Use	No. of ATO_TAs that responded	%_ATO_TAs with digital tool in use	No. of ATO_TAs that responded	%_ATO_TAs with digital tool in use
Corporate electronic tax register	24	68%	31	70%	31	74%
Online filing of returns	29	76%	31	84%	31	94%
Online payment systems	29	90%	31	94%	32	97%
Mobile payment	29	62%	31	68%	32	75%
Call centres that track response times	24	58%	32	53%	28	57%
Websites that manage statistics	23	65%	31	58%	28	61%
Enterprise risk management	31	77%	34	79%	32	81%

Box 7.1

Leveraging third-party data for risk profiling and compliance improvement in Nigeria and South Africa

FIRS, Nigeria

As part of the measures to broaden and enhance tax revenue sources, FIRS established the Intelligence, Strategic, Data Mining and Analysis Department to serve as a bridge between the digital world and the core tax operations of the Service. It has the mandate to increase compliance through the utilisation of cutting-edge technology and data processing software, including Online Analytical Processing, Decision Support System Application, machine learning and more, to analyse taxpayers' data comprehensively, offering a 360-degree visibility into their financial transactions.

Its responsibilities includes collaboration with various stakeholders (Banks, Nigeria Inter-Bank Settlement System, Nigeria Customs Service, Automatic Exchange of Information, Nigeria Stock Exchange or Securities and Exchange Commission, National Identity Management Commission, Corporate Affairs Commission, Federal Ministry of Industry, Trade and Investment, Bureau of Public Procurement, etc) to secure access to payment, marketing, switching, invoices platforms to extract relevant data for tax purposes.

The third-party data acquired is warehoused, refined, and analysed using the aforementioned tools to establish connection with existing taxpayers, identifying unreported transactions, income, or payment, and identify taxable persons not registered and bring them to tax net. This initiative has significantly fortified audit procedures, investigation, and compliance enforcement.

In the year 2023, the analysis of third-party data analysis contributed approximately 293 billion naira to the taxes collected by FIRS.

SARS, South Africa

As part of its strategic objectives aimed at enhancing the integrity of outcomes and bolstering its capacity to identify instances of non-compliance, the South African Revenue Service (SARS) is actively increasing and diversifying its utilization of data.

Domestic third-party sources tapped into by SARS encompass banks, retirement funds, medical insurance providers, property deeds offices, company registers, the national register of motor vehicles, the National Treasury central supplier database, and the national population register. On an international scale, data sources include automatic exchange of information agreements with approximately 100 foreign jurisdictions regarding South Africans with offshore financial assets, along with numerous mutual administrative agreements with counterpart organizations.

By harnessing data from various domestic and international sources, SARS is employing it as input for machine learning models, risk profiling, and case selection. This approach has yielded several positive outcomes, including more than 96% of compliance risk detected, yielding more than 70 billion rand in impermissible refunds. In general, SARS compliance efforts contributed about 13.7% to the 1.68 trillion rand of net revenue collected in 2022/2023 fiscal years

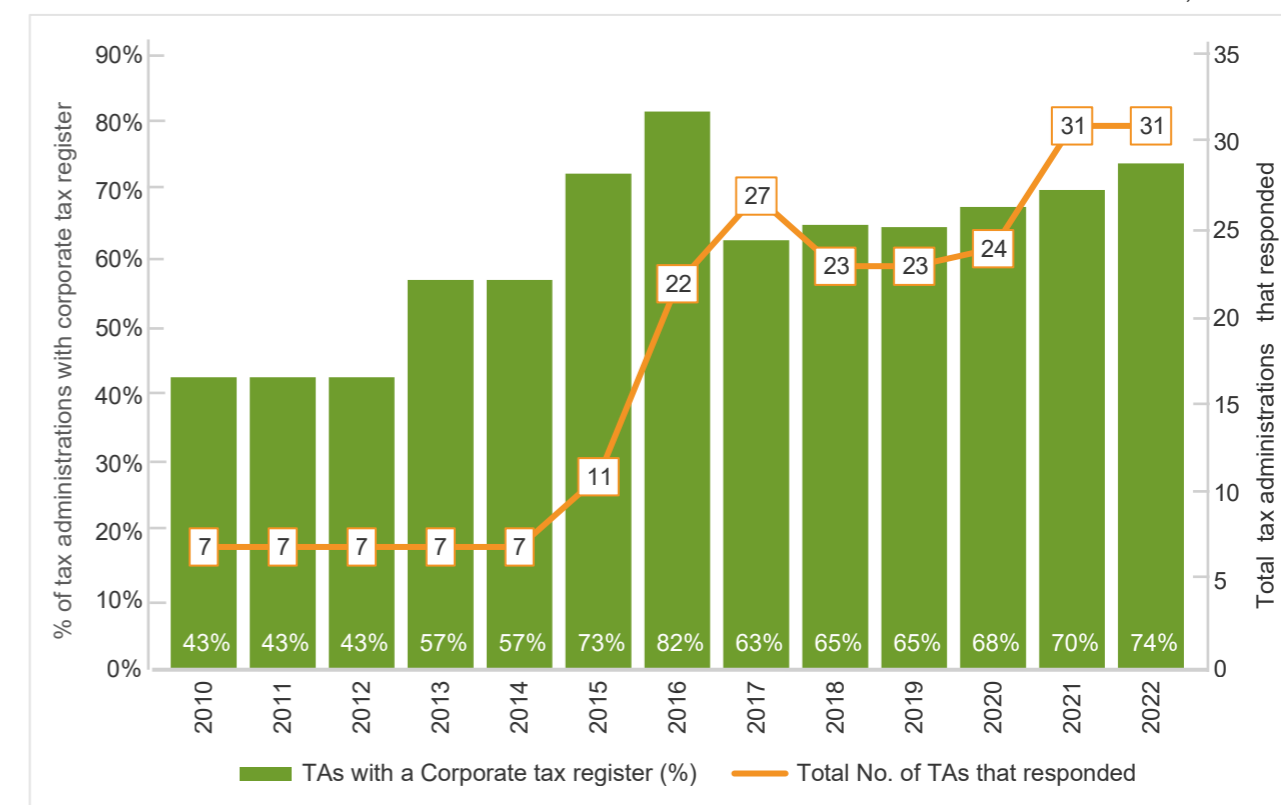
Source: FIRS Annual Report 2022 and SARS Annual Report, 2022/2023

7.2.1. Corporate tax register

A corporate electronic tax register is a technological advanced system used by tax administrations to manage taxpayers' records. The transition to electronic register provides for faster data processing, error minimisation, improved accessibility, and ability to generate reports and match taxpayers' data easily. In 2022, 74% of ATO countries had electronic corporate registers out of 31 countries that responded. This translates to a 4% increase from 70% recorded in 2021

(Figure 7.2). The desire by ATO countries to move towards digitising their tax registration process comes clear and aligns with the requirements of Performance Outcome Area One (POA 1) of the Tax Administration Diagnostic Assessment Tool (TADAT). Electronic registers serve as a foundational data source for analytics by providing structured, detailed, and historical data which tax administrations can leverage to make informed decisions, ensure taxpayer compliance, and optimise revenue collection.

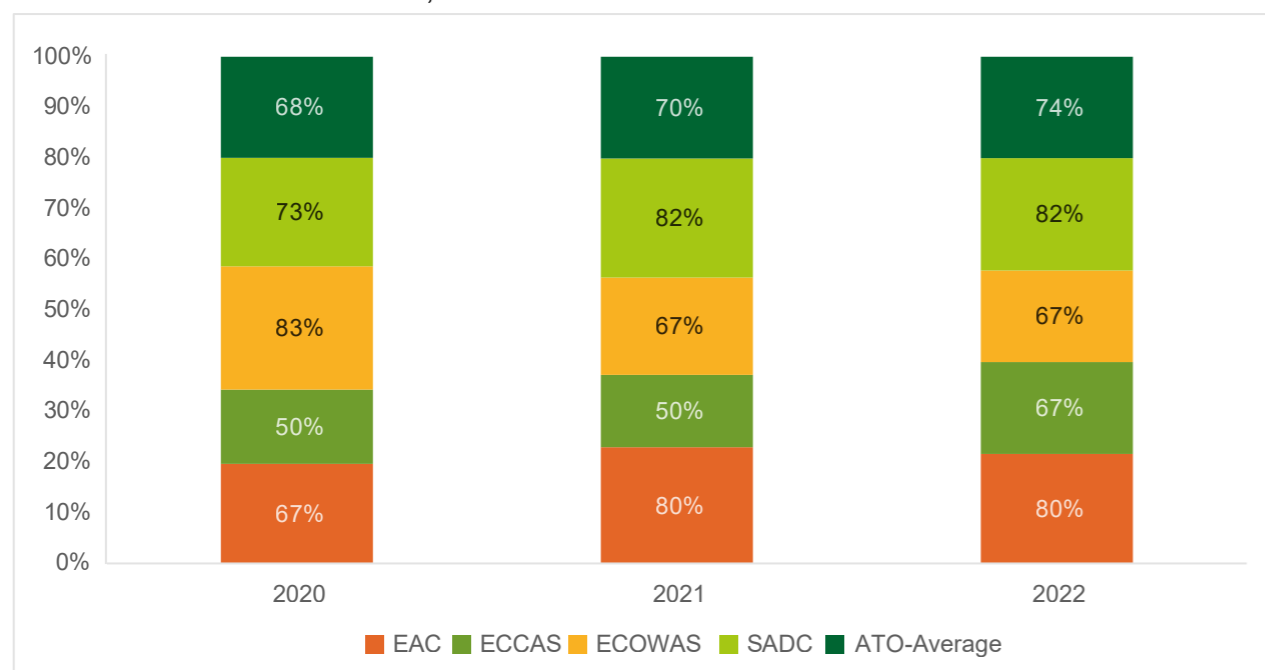
FIGURE 7.2 PERCENTAGE OF ATO COUNTRIES WITH CORPORATE TAX REGISTER, 2010



Regionally, the adoption of corporate electronic tax registers in tax administrations reflects an upward trend in most regions from 2020 to 2022. The ATO average increased to 74% in 2022 from 70% in 2021. EAC had a notable improvement from 67% in 2020 to 80% in both 2021 and 2022. ECCAS maintained a 50% adoption rate in 2020 and 2021 but grew to 67% in 2022. Similarly, SADC with 73% adoption rate in

2020 increased to 82% in both 2021 and 2022. ECOWAS maintained a 67% adoption rate in both 2021 and 2022. The annual fluctuations in the ratios reflect changes in the number of countries reporting on this indicator and those affirming the presence of an electronic tax register within their respective tax administrations (see Figure 7.3).

FIGURE 7.3 REGIONAL COMPARISON OF TAX ADMINISTRATIONS WITH CORPORATE ELECTRONIC TAX REGISTER, 2020



7.2.2. Digital submission of tax returns

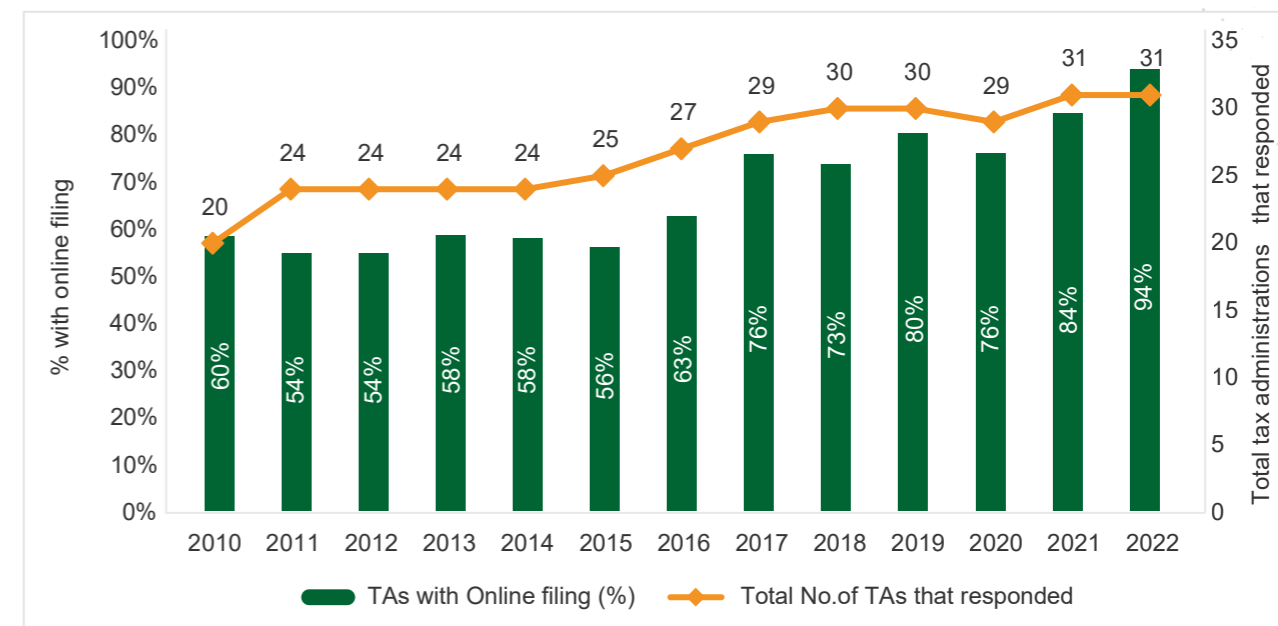
In recognition of the need to modernise their processes and keep pace with technological advancement, tax administrations in ATO countries have embraced technology for digital submission of tax returns. It involves electronic filing of tax information and documentation, replacing the traditional paper-based methods. Eswatini Revenue Service (ERS), Ghana Revenue Authority (GRA) and 29 other ATO member countries have developed an e-Filing systems that enables taxpayers to complete and submit their annual income tax returns on electronic devices of choice. This shift represents great strides towards simplifying tax filing process for taxpayers and tax administrations.

Electronic filing extends convenience to stakeholders, through enhancing tax return processing efficiency, promotes accuracy and reduction of errors through data validation capabilities of the systems. In addition, electronic filing offers cost savings for both taxpayers and tax administrations which can be channelled to other strategic initiatives such

as capacity building for staff, compliance enforcement or pursuing reforms that could bring about transformation of tax administrations. The shift to digital submission of returns improves overall taxpayer experience. User-friendly interfaces, interactive guides and real time feedback contribute to a more accessible and transparent tax filing process. It facilitates communication between taxpayers and tax administrations, enabling timely update, notifications, and support services.

In 2022, 94% of the ATO countries had electronic filing of tax returns systems in place (31 countries provided data on this indicator, unchanged from the number of respondents in 2021). This represents an increase of 10 percentage point from 84% recorded in 2021. The series from 2010 to 2022 indicates an upward trend, reflecting a yearly average growth rate of 4%. The increase is more rapid in the last two years, which signifies that tax administrations have been necessitated by the need to quickly modernise their tax operations to meet with the rapid changing business environment (Figure 7.4).

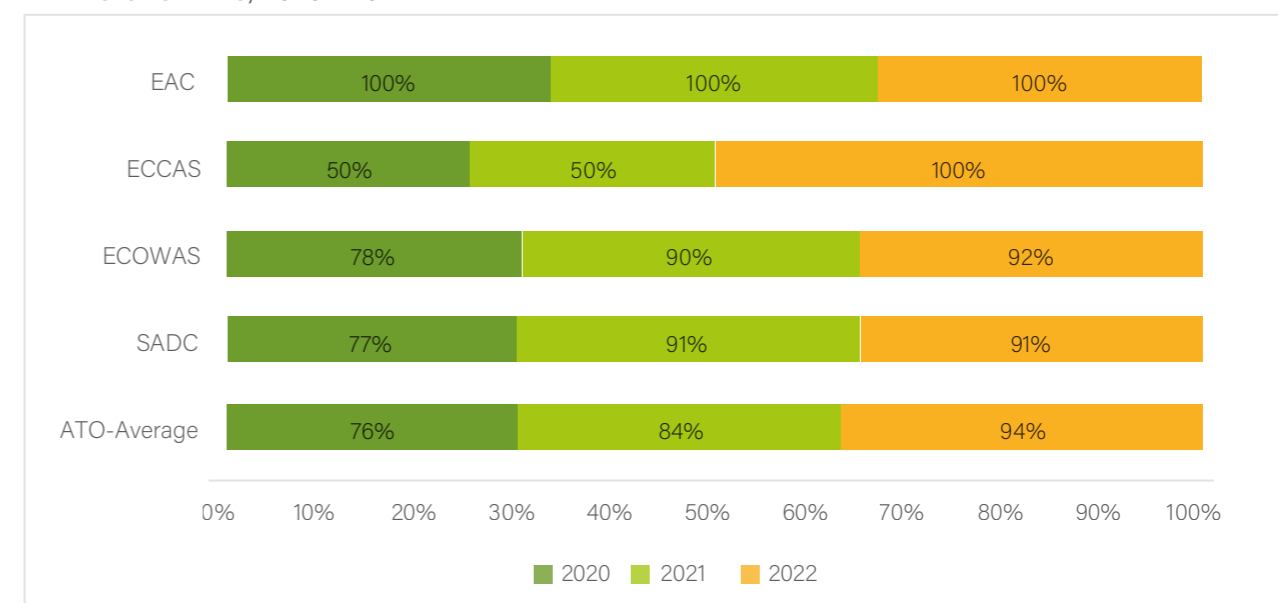
FIGURE 7.4 TAX ADMINISTRATIONS IN ATO WITH ONLINE FILING



Regionally, EAC achieved full adoption (100%) of online filing systems all through 2020 to 2022. Conversely, ECCAS exhibited a consistent 50% adoption across 2020 and 2021, marking it as the region with the least adoption rate for those years. However, in 2022, the adoption filing systems of online in the region increased significantly to 100%. This notable improvement in 2022 is likely attributed to the tax administrations' desire to invest in electronic filing systems, aiming to enhance efficiency, accessibility, and better service provision to taxpayers amidst a rapidly evolving technological

landscape. ECOWAS demonstrated noteworthy increase in the adoption of online filing systems, rising from 78% in 2020 to 92% in 2022. This reflects strategic focus of tax administrations within the region to advance the digital transformation of their operations. Similarly, SADC also witnessed an uptick in e-filing systems, rising from 77% in 2020 to 91% in 2022. This trend aligns with the global shift towards increased reliance on digital platforms for tax administrations (see Figure 7.5).

FIGURE 7.5 REGIONAL COMPARISON OF TAX ADMINISTRATIONS IN ATO WITH ONLINE FILING SYSTEMS, 2020 - 2022



As tax administrations continue to embrace technological innovations, the digitisation of tax processes has become the new standard, fostering a more compliant, transparent, and user-friendly tax system.

Box 7.2
Electronic Tax (e-Tax) filing system in Eswatini Revenue Service (ERS)

Part of the changes brought about by the outbreak of COVID-19 pandemic was the way in which tax administrations interact with taxpayers. The pandemic served as a springboard for accelerated digital transformation of tax administrations in the world. For ERS, it brought about the need to speed up or expand e-Tax filing system to cover all segment of taxpayers and major taxes – Corporate Income Tax (CIT), Value Added Tax (VAT) and Pay-As-You-Earn (PAYE). The roll-out was fast-tracked to reduce in-person contact



because of imposed restrictions that existed during COVID and secondly, to drive efficiency in TA and harnessed the advantages of e-filing which includes improve accuracy and compliance, reduction in cost of compliance for both the ERS and taxpayers and minimisation of corruption and unfairness in the tax system.

Furthermore, the capability of e-Tax system goes beyond the ability to register and file returns online, it also includes services such as access to information about taxpayers’ account, tracking filing history, making enquiries, and requesting support. The system also has an added feature of reminding taxpayers of their due dates for filing of returns and payments, and taxpayers have the flexibility of accessing the e-Tax platform on any device of their choice including computers, tablets, and smartphones.

Source: Eswatini Revenue Service <https://etax.ers.org.sz/>

7.2.3. e-Payment of taxes

With technology reshaping the landscape of financial transactions globally, tax administrations likewise have turned to electronic payment systems for tax collection. This revenue mobilisation strategy aims to facilitate seamless transaction of tax businesses via channels established by tax administrations for taxpayers. These channels encompass a variety of tools such as mobile applications, internet banking, electronic fund transfer, e-wallet, card transactions and more. For example, Nigeria has Remita and e-Tranzact payment solutions which regular taxpayers can use to pay their taxes, government agencies on the other hand are required to use Government Integrated Financial Management and Information System (GIFMIS) to pay their taxes. Africa’s electronic payment market is projected register a 150% growth from 2020 to 2025, reaching USD 40 billion in revenues and a transaction volume of approximately USD 188 billion (McKinsey & Company, 2022).

Capitalising on the rise in e-payments across the continent, ATO countries have implemented electronic tax payments facilities, aiming to simplify compliance for taxpayers. As of 2022, 97% of the 32 ATO member countries that reported on this indicator now offer electronic tax payment options, reflecting a 3% increase from 94% reported in 2021.

Furthermore, over the past five years (2018-2022), there has been an extraordinary surge in electronic payment adoption in ATO countries. With an average growth rate of 91% during this period, this trend underscores the significance of streamlining tax operations for DRM. The number of countries that provided data on electronic payment in 2022 is one country more than the number of respondents in 2021 (Figure 7.6).

FIGURE 7.6 TAX ADMINISTRATIONS WITH ONLINE PAYMENT SYSTEM

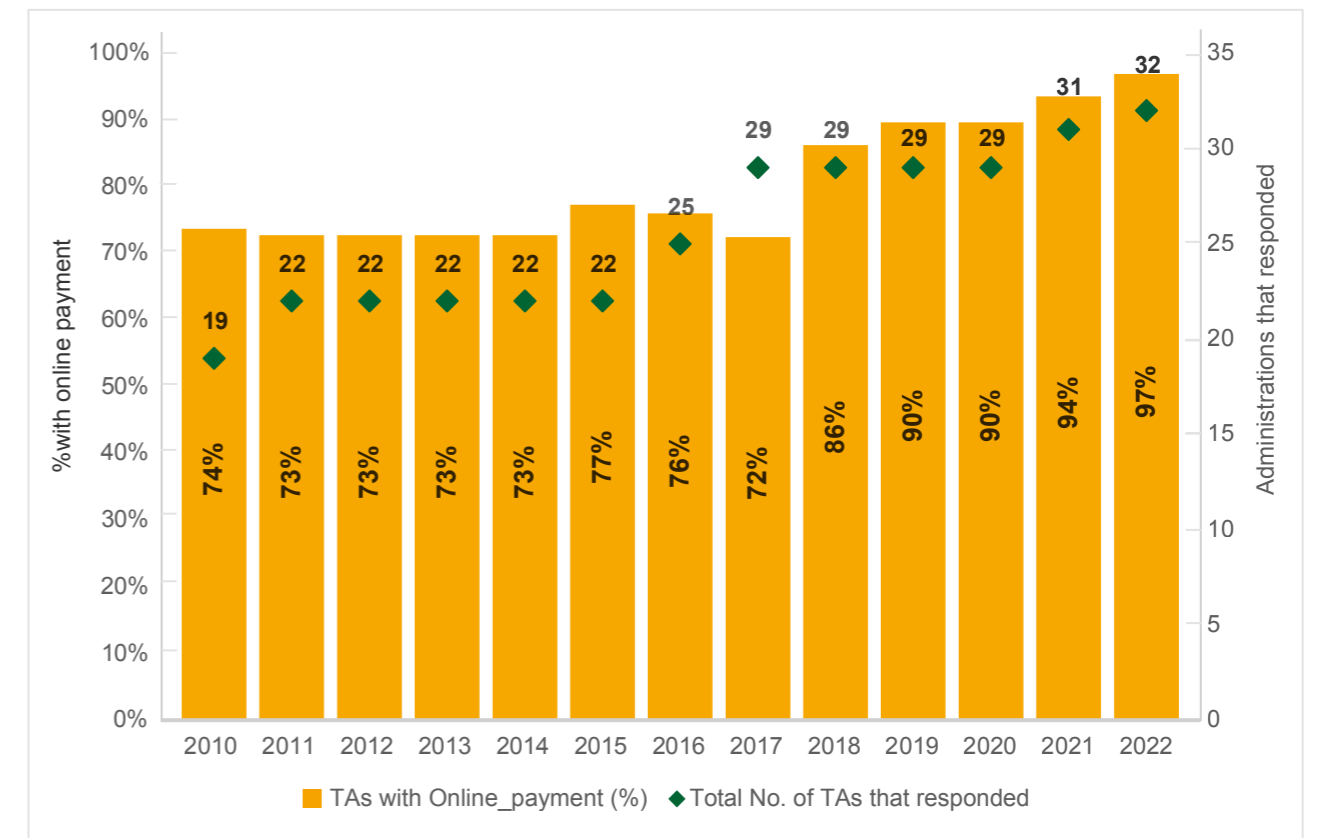
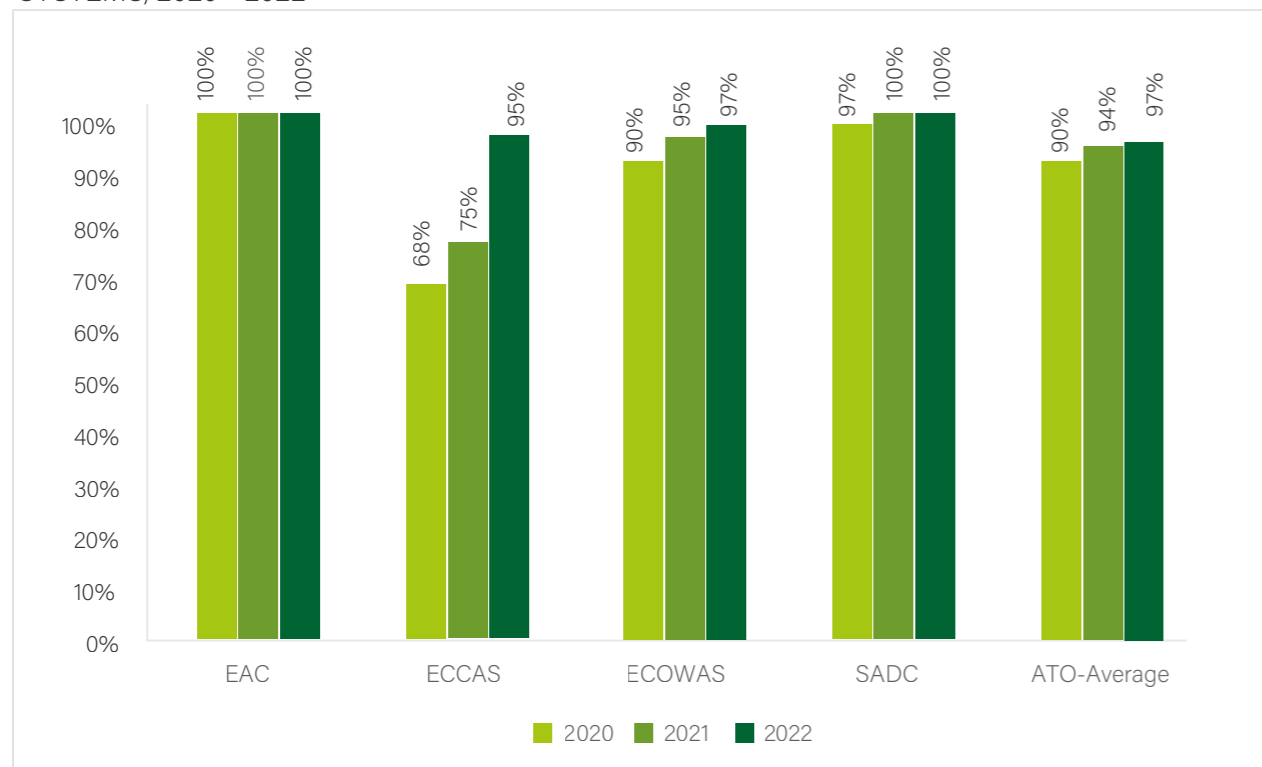


Figure 7.7 provides a comparative overview of the electronic payment of tax systems' adoption across different regional economic groupings in ATO countries for the years 2020, 2021 and 2022. EAC maintained a 100% adoption rate for online payment of tax system throughout the three years. It is indicative of the high-level commitment in implementing and sustaining electronic tax payment infrastructure in the region. ECCAS countries started at 68% adoption rate in 2020, which increased to 95% in 2022. It reflects a positive trend to reduce compliance burden via simplification of tax

payment processes for taxpayers. ECOWAS countries had 90% adoption rate in 2020, which increased slightly to 95% in 2021, and a further upward rise to 97% in 2022. Despite the slight year on year increases, it is important to note that electronic tax systems remain widely utilised in the region. SADC countries began with 97% in 2020, which increased to 100% in 2021 and remained at 100% in 2022. It signals a robust and sustained integration of electronic online payment systems across the tax administrations in the region.

FIGURE 7.7 REGIONAL COMPARISON OF TAX ADMINISTRATIONS WITH ONLINE PAYMENT SYSTEMS, 2020 - 2022



In general, the high adoption rate across the regions is indicative of the commitment of governments to modernise tax system and it shows that ATO countries are increasingly recognising the benefits of electronic payment systems, which includes efficiency, transparency, cost saving and increased revenue collection.

7.2.4. Mobile payments

The advent of mobile technology has revolutionised operational processes in tax administrations ensuring revenue maximisation and taking advantage of opportunities thereof. As tax administrations seek to improve their DRM processes, mobile payment of taxes presents a convenient and efficient solution, offering the benefits of increased compliance, reduced administrative and compliance costs and enhanced transparency.

Mobile payment platforms enable taxpayers to settle their tax liabilities conveniently using electronic gadgets. Furthermore, considering the peculiarity of our taxpayer base and digital divide in the continent, some tax jurisdictions have gone

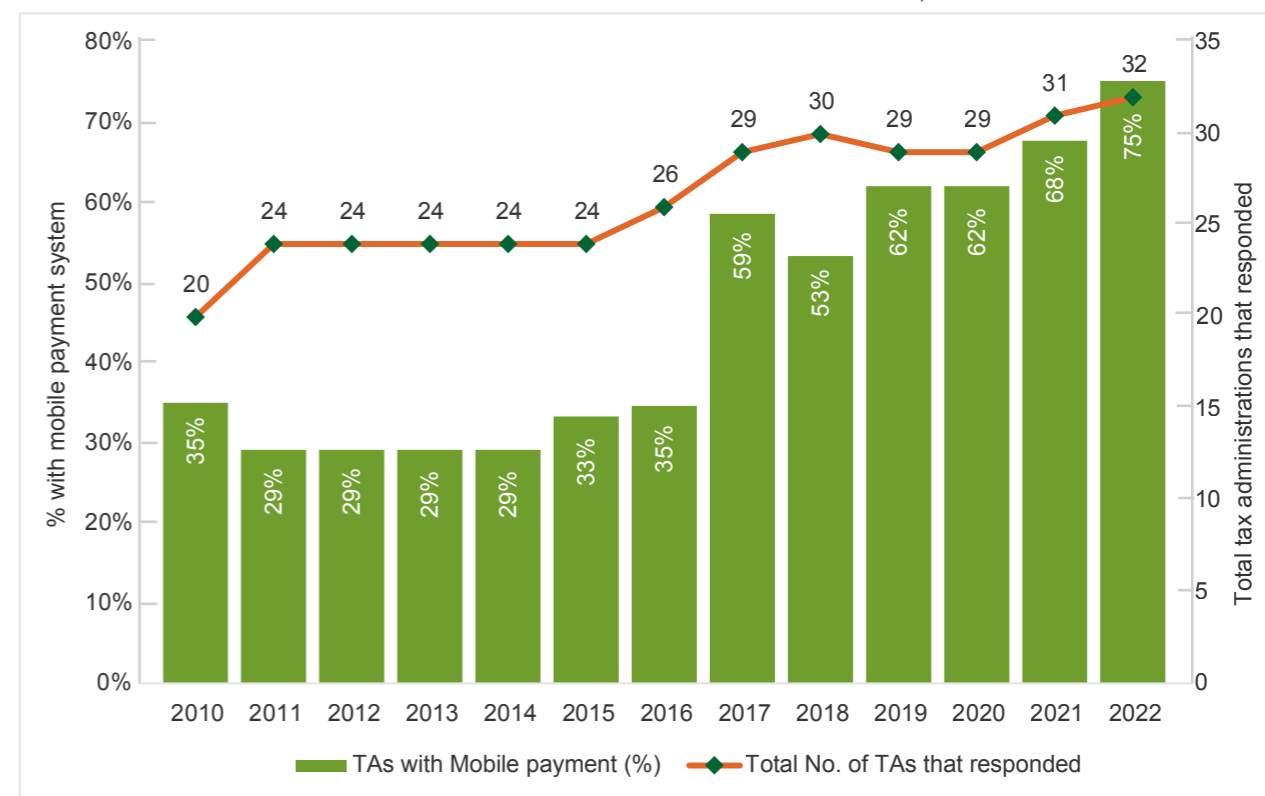
a step further by providing Unstructured Supplementary Service Data (USSD) for taxpayers to process their payments. Tanzania and Kenya have developed mobile money services known as GePG and M-Pesa to aid financial transactions and tax payment. This mobile payment platform minimises the need for physical presence, reducing burden on taxpayers and tax administrations.

Aside the benefit of convenience, mobile payment systems often come with build in tracking and reporting features, providing tax administrations with real-time data on tax collection. The heightened influx of data to tax administrations

is pivotal in fortifying risk profiling, thereby improving compliance levels, closing loopholes, and ultimately boosting revenue collection.

The statistics reveals that 75% of the ATO countries have put in place mobile payment system in 2022, up from 68% recorded in 2021. The growth has been especially evident in the last 6 years. The growth moved from 35% in 2010 to 75% in 2022. We believe the trend would be sustained, as mobile payment serves as a one of the easiest means through which tax administrations can simplify payment processes for taxpayers.

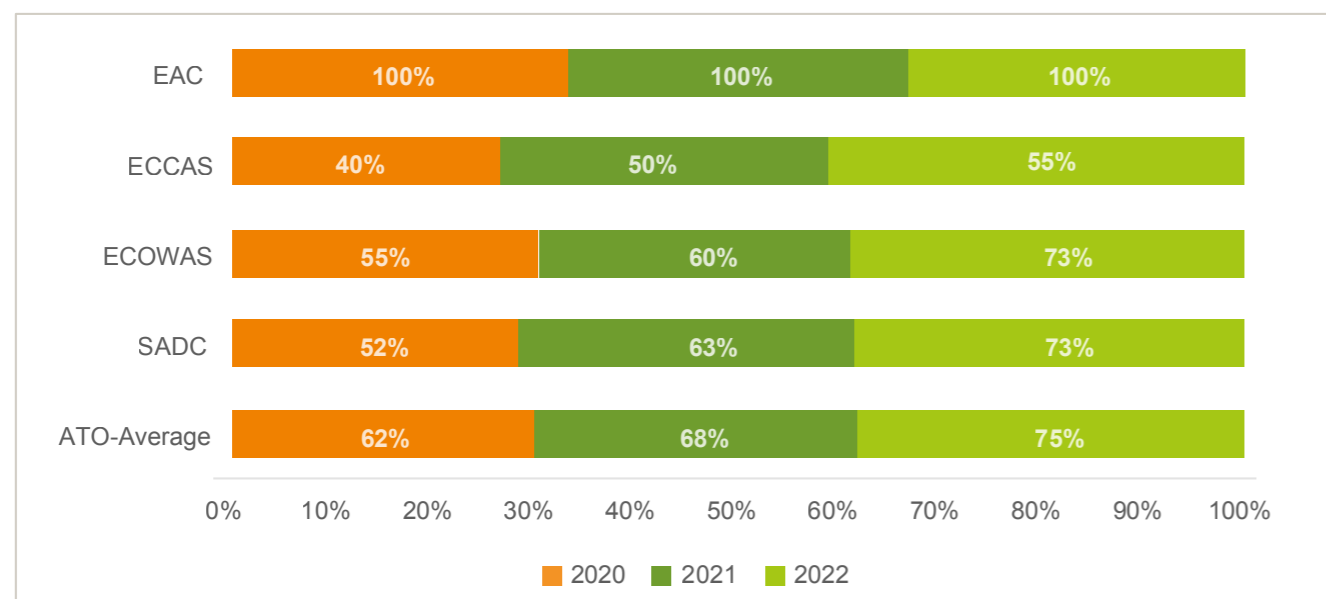
FIGURE 7.8 TAX ADMINISTRATIONS WITH MOBILE PAYMENT SYSTEMS, 2010 - 2022



The trend of the tax administrations with mobile payment systems to facilitate payment of taxes by regions in the last three years had shown EAC consistently maintaining 100% mobile payment facilities from 2020 to 2022. This indicates a robust commitment to leveraging mobile technology for tax payment. ECCAS started with 40% mobile payment facilities in 2020, it improved to 50% and 55% in 2021 and 2022, respectively. The yearly growth suggests proactive effort to enhance the accessibility of mobile payment options within

the region. Similarly, ECOWAS has shown steady increase from 55% in 2020 to 73% in 2022. This progressive growth indicates a positive trend in adopting mobile technology for tax payments, reflecting the regions commitment to modernising tax administration by making it convenient for taxpayers to pay. SADC also experienced an increase in mobile payment, rising from 52% in 2020 to 73% in 2022 (see Figure 7.9).

FIGURE 7.9 REGIONAL COMPARISON OF TAX ADMINISTRATIONS WITH MOBILE PAYMENT SYSTEMS. 2010 - 2022



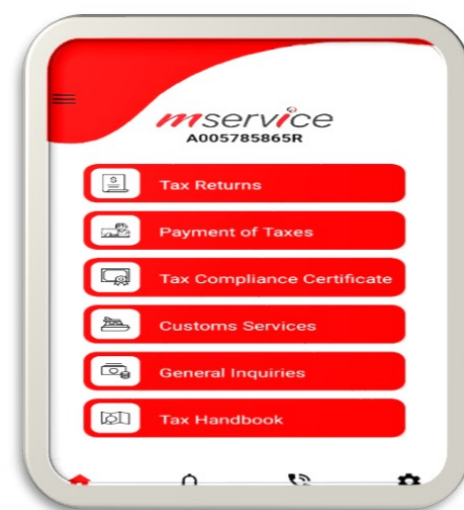
The overall trend indicates a positive inclination towards adopting mobile payment facilities by ATO countries across the regions. This aligns with the global trend of leveraging technology for efficient tax revenue collection.

Box 7.3

Mobile application deployment in Kenya Revenue Authority (KRA)

Leveraging technology for a taxpayer friendly experience, Kenya Revenue Authority (KRA) has continuously modernised its processes through various digital initiatives. Key programmes have focused on integrating systems and offering convenient online tools to ease compliance.

In 2020, KRA deployed a mobile application known as M-Service Mobile App that serves as one-stop shop for all KRA tax services. The App enables taxpayers to generate Personal Identification Number (PIN), file Turnover Tax (TOT), Monthly Revenue Income (MRI) and Nil returns, apply for Tax Compliance Certificate (TCC) and check PIN, TCC and other e-receipts.



The digital transformation undertaken by KRA has transformed the way taxpayers engage with the agency. Through the implementation of user-friendly solutions, KRA has notably enhanced the taxpayer experience and increased tax revenue collection. Over the past four years, KRA's tax revenue has experienced an average growth rate of 11%, resulting in a cumulative total of KShs. 7.47 trillion for the period

Source: Kenya Revenue Administration website

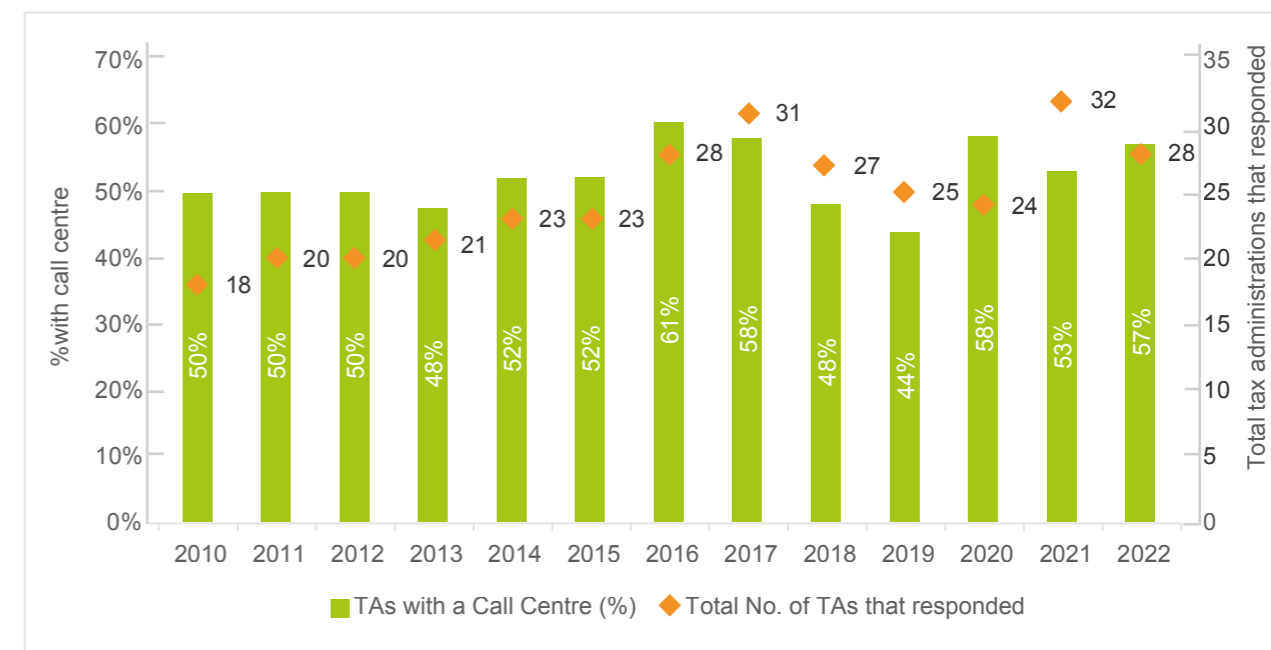
7.2.5. ATO countries with call centres

One of the innovative solutions implemented by tax administrations is the establishment of call centres, which enable tax administrations to provide better services to taxpayers. Call centres taxpayers with convenient channel to seek assistance, make enquiries and resolve concerns without the need for physical visit to tax office. By offering a more accessible platform to seek clarification on tax matters, call centres contribute to increased compliance as taxpayers are better informed about their tax obligations. In addition, call centres generate valuable data that tax administrations can analyse to identify common taxpayer concerns, assess the effectiveness of communication strategies, and make informed decisions for improvement.

In promoting voluntary compliance and confidence in the tax system, tax administrations have taken the initiative of adopting service-oriented attitude towards their taxpayers through ensuring that taxpayers have access to accurate information needed to improve compliance.

Figure 7.10 assesses the implementation progress of the initiative to introduce call centres for tracking response time in ATO countries spanning from 2010 to 2022. The data reveals that, in 2022, 57% of ATO countries have established call centres for tracking response time, indicating an increase from 52% in 2021. Despite this, the implementation of call centres in tax administrations across ATO countries has remained relatively stagnant over the 13-year period, averaging 53%.

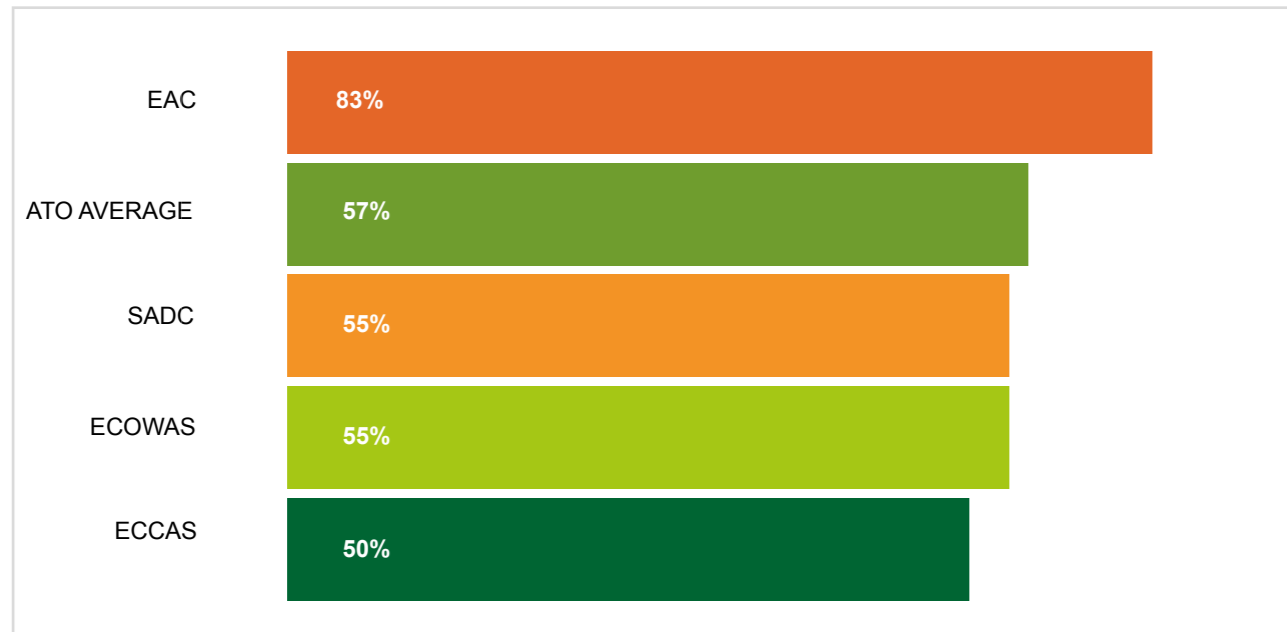
FIGURE 7.10 TAX ADMINISTRATION WITH CALL CENTRES THAT TRACK RESPONSE TIMES, 2010 - 2022



The regional comparison of tax administrations with call centres that track response times had EAC increasing from 80% in 2021 to 83% in 2022. ECCAS exhibited significant increase in the provision of call centres, rising to 50% in 2022 from 25% recorded in 2021. This suggests increased

efforts to enhance responsiveness of tax administrations to taxpayers' queries or the implementation of measures to streamline communication. ECOWAS and SADC maintained their 2021 percentages of 55% each in 2022 (illustrated in Figure 7.11).

FIGURE 7.11 REGIONAL COMPARISON OF TAX ADMINISTRATIONS WITH CENTRES THAT TRACK RESPONSE TIME, 2022



Finally, the implementation of call centres in tax administrations represents a significant step towards modernising and enhancing taxpayer services. By leveraging its benefits, tax administrations can create a more transparent, efficient, and user-friendly tax system, ultimately fostering greater compliance and public trust. In addition, tax administrations should explore best practices and lessons from regions or other tax jurisdictions with successful adoption of call centres to inform strategies for those with low adoption rates.

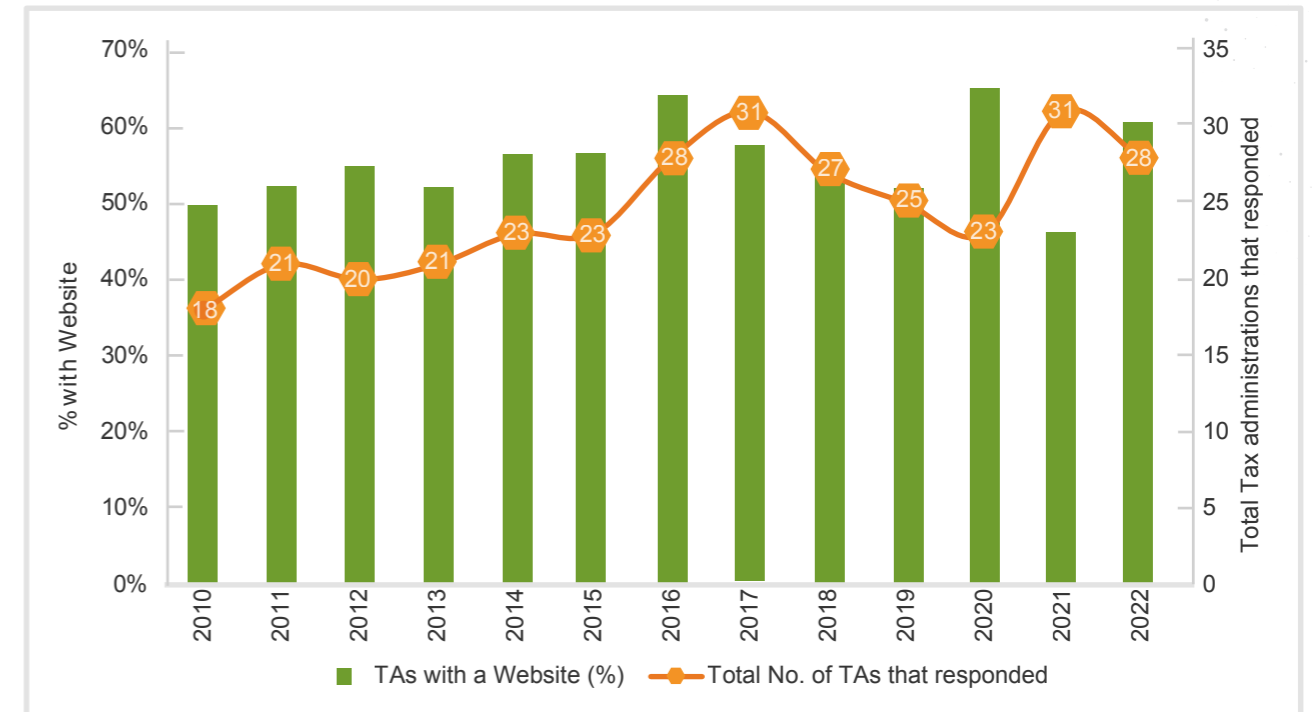
7.2.6. Tax administrations with websites that manage taxpayer data

Tax administrations are constantly innovating and developing solutions to address taxpayers' needs. The goal is to make it as easy as possible for taxpayers to comply with the law through the provision of simplified information and making it available via channels that can easily be accessed by taxpayers. A website is one of such tool tax administrations have embraced in the digitalisation journey in Africa. Aside from making the information available, website can be a tool to gather statistics of taxpayers which tax administrations can leverage for intelligence. Some tax administrations use their websites as a platform for integrating various tools, such as chatbots for real-time interaction with taxpayers, tax calculators to facilitate easy computation of tax liabilities, and other forms of supports, including publication of research papers, strategic plans, annual reports and accounts, public circulars and guidelines, frequently asked questions and more.

In 2022, 61% of ATO countries had websites that manage taxpayer statistics, up from 58% in 2021. The average for 13 years is 57%. Data input for this indicator decreased to 28 from 31 countries that responded in 2021.⁴⁰

40. The decrease is probably due to the inability of three ATO countries - Sudan, Niger, and Chad - to furnish data on this indicator in 2022, likely stemming from the internal crises affecting these nations.

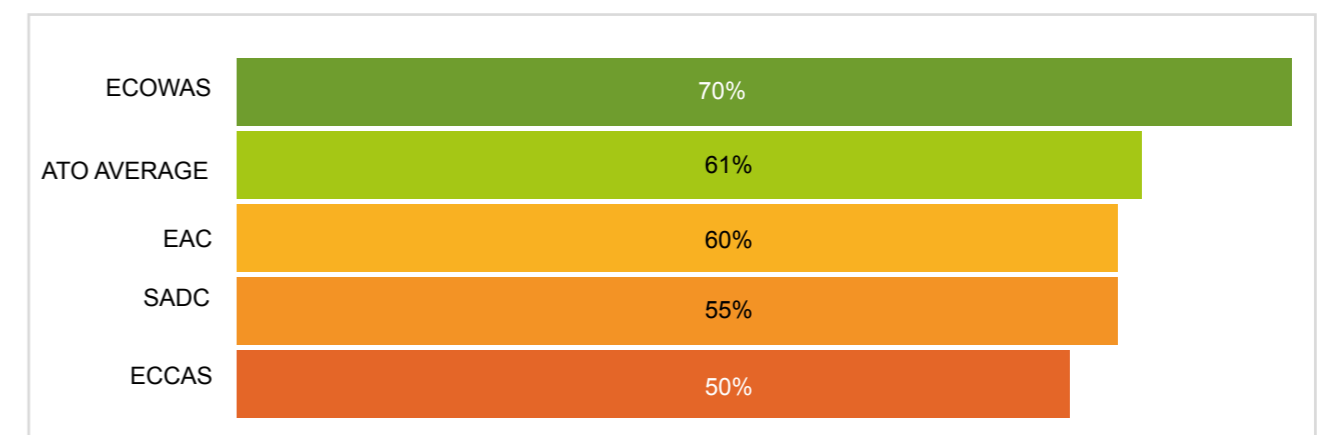
FIGURE 7.12 ATO COUNTRIES WITH WEBSITE THAT MANAGES STATISTICS



The comparative analysis of ATO countries, focusing on websites managing statistics, reveals that ECOWAS leads with the highest percentage of tax administrations utilising websites at 70%. This underscores significant advancements in ECOWAS tax administrations embracing online platforms for the management and analysis of taxpayer statistics, marking an increase from 63% in 2020 to 70% in 2022. Following closely is the EAC region at 60%, maintaining the same percentage as in 2021. In the regional hierarchy, SADC stands at 55%, indicating a comparatively lower position. This

suggests potential challenges or disparities in the adoption and effectiveness of online platforms for tax administrations within SADC member states. ECCAS ranks lowest among the regions, with tax administrations employing websites at 50%. Despite their relatively lower ratings, both SADC and ECCAS have demonstrated significant improvement, with SADC recording a notable 10% increase and ECCAS showcasing a remarkable 25% improvement over their previous year's statistics (see Figure 7.13).

FIGURE 7.13 REGIONAL COMPARISON OF TAX ADMINISTRATIONS WITH WEBSITE THAT MANAGES STATISTICS, 2022



7.2.7. Enterprise risk management

Enterprise Risk Management (ERM) has become increasingly crucial for organisations worldwide, including tax administrations, as they navigate a dynamic and complex landscape. Because of their strategic function, inherent risks (both internal and external) can significantly impact their ability to effectively discharge their mandate of DRM. By integrating ERM frameworks, tax administrations can enhance their ability to identify, assess and manage risk more effectively, thus ensuring efficient and transparent functioning of tax systems.

The Committee of Sponsoring Organisations of the Treadway Commission (COSO) provides a widely accepted framework for ERM, consisting of eight interrelated components: internal environment, objective setting, event identification, risk assessment, risk response, control activities, information and communication and monitoring (COSO, 2013). In the context of tax administrations, these principles can be tailored to address specific challenges, such as changes to tax regulations, technological advancements, and evolving taxpayer behaviours.

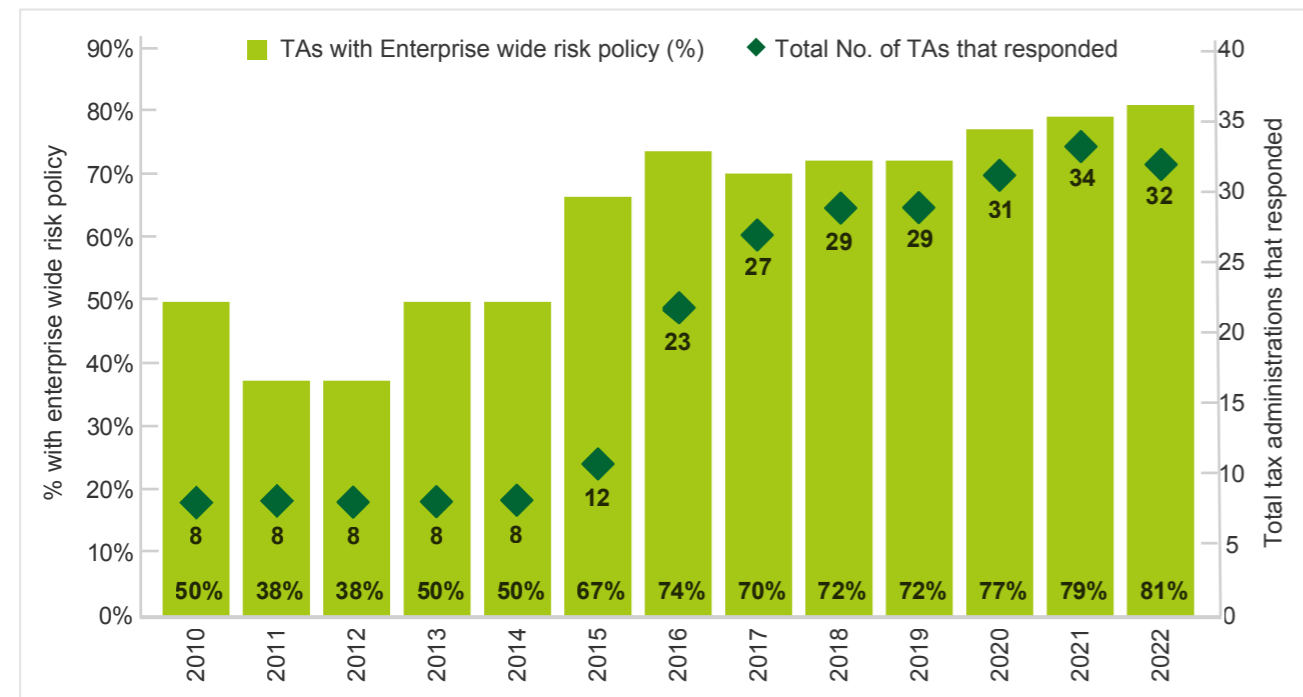
By identifying and mitigating risks proactively, revenue authorities reduce the likelihood of disruptions in their processes, leading to improved operational efficiency. This was the case during COVID-19, when some tax administrations were caught off guard, because they did not have business continuity plans or a functional ERM

frameworks in place. With the technology changing the way businesses operate and the way humans interact and conduct their daily activities, it is important that tax administrations adopt ERM principles so that they can conduct their affairs of tax collection with less disruptions.

Other benefits of ERM are facilitation of comprehensive understanding of risks, thereby enabling tax administrations to make informed decisions that align with their objectives. Effective risk management instil confidence among taxpayers and other stakeholders, showcasing tax administrations' commitment to transparency and accountability. Also, it helps tax administrations comply with international standards and regulatory requirements, fostering a culture of compliance within the organisation.

The trend in statistics provided by ATO countries from 2010 to 2022 reveals a growing adoption of enterprise-wide risk policies, increasing from 38% in 2011 to 81% in 2022. The growth has accelerated over the past three years (2020 to 2022), highlighting the increasing recognition of the vital role ERM plays in DRM. This trend also signifies a renewed commitment among more tax administrations in the ATO countries to establish ERM frameworks as a precautionary measure, particularly in the light of the lessons learned from the COVID-19 pandemic. In addition, ERM will help tax administrations to overcome some of the challenges brought about by the twin effects of IFFs and global technological disruptions impacting revenue collection.

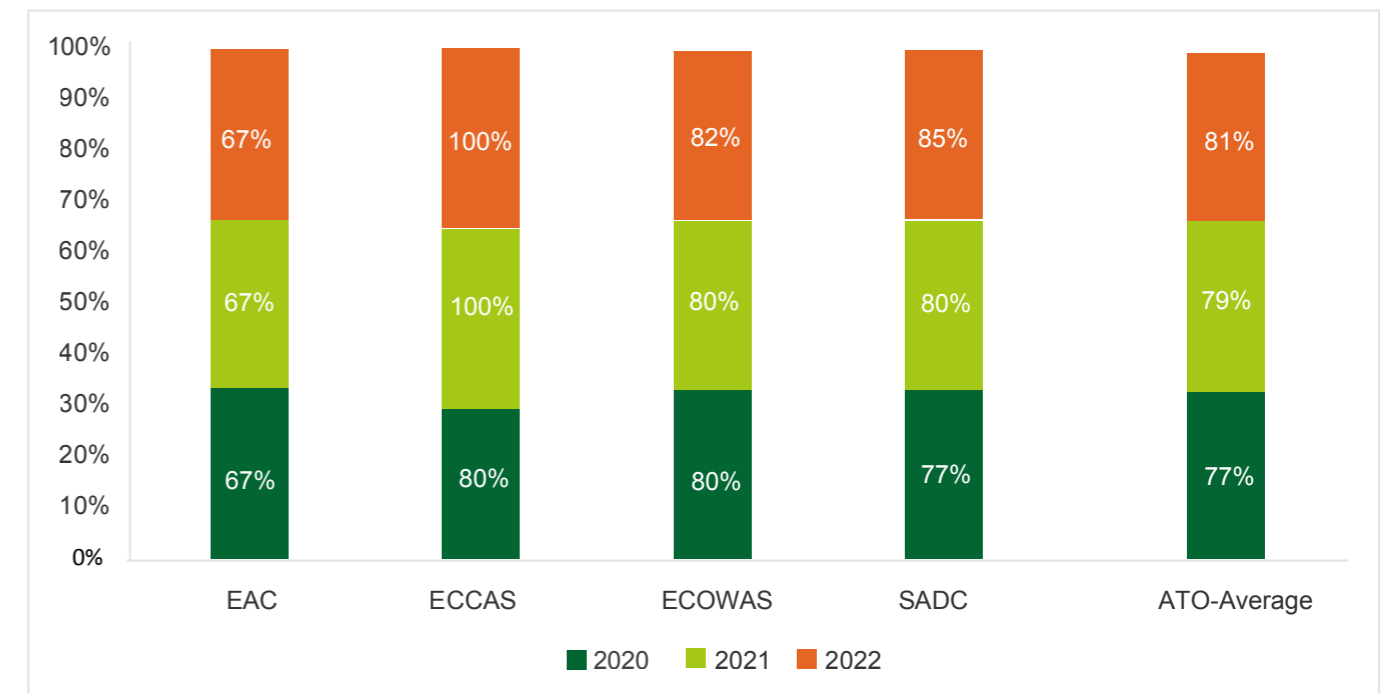
FIGURE 7.14 TAX ADMINISTRATIONS IN ATO COUNTRIES WITH ENTERPROSE-WIDE RISK POLICY, 2010 - 2022



Regionally, ECCAS recorded a significant growth, increasing from 80% adoption rate in 2020 to full adoption (100%) in 2021 and 2022. EAC maintained a consistent ERM adoption rate of 67% across three years. It remains the region with the least adoption rate during the period under review. ECOWAS region maintained a steady adoption rate, with slight increase from 80% in 2020 to 82% in 2022. The SADC demonstrate consistent growth in adoption, rising from 77% in 2020 to 85% in 2022.

Overall, the analysis suggests varying degrees of adoption across different regional blocs within the ATO countries. While some regions show consistent adoption rates, others exhibited notable growth over the three-year period. These trends indicate a positive trajectory towards embracing ERM practices within tax administrations across the ATO countries (Figure 7.15).

FIGURE 7.15 REGIONAL COMPARISON OF TAX ADMINISTRATIONS WITH ENTERPRISE RISK MANAGEMENT, 2020 - 2022



ERM is indispensable for tax administrations seeking to navigate an increasingly complex environment. By embracing ERM principles, tax administrations can enhance their ability to identify, assess and manage risks effectively, ensuring the

stability and success of their operations in the long term. In addition, tax administrations must continuously adapt their ERM strategies to keep pace with evolving tax laws, technological advancements, and geopolitical changes.

7.3. Conclusion

Analysis of data on digital tools reveals progression of digital transformation within tax administrations in ATO member countries. As of 2022, a snapshot of the technological advancement across these tax administrations indicates 74% adoption rate for electronic tax registers, 94% now have online filing system in place which are being utilised by taxpayers to file their returns. In addition, electronic and mobile payments systems is at 97% and 75%, respectively. Accessibility to tax administrations has been further enhanced through the increased provision of call centres which now stands at 57%, up from 53% in 2021, websites to manage statistics has also improved to 61%, and lastly, enterprise-wide risk policy has expanded to 81%.

As tax administrations continue to adapt to the evolving technological landscape, the focus remains on improving efficiency, transparency, and compliance while addressing new challenges and opportunities presented by the digital era. Some of the challenges can be mitigated through ERM. Robust ERM is significant to aid the twin effects of IFFs and global technological disruptions impacting revenue collection.

Amidst the above-mentioned technological landscape and disruptive changes, ATO member countries are making gradual progress, although at a measured pace. Nevertheless, most countries have established the groundwork for digital transformation. The next step involves harnessing advanced technologies for big data analytics to ensure that the full benefits of digitalisation are realised especially as it relates to DRM.



Chapter 8

Tobacco Taxation in Africa

Introduction

Driven by a clear understanding of the dual role of tobacco taxation, ATAF and her strategic partners have embarked on a project that aims to harness the power of tobacco tax policy. The aim of tobacco tax policy is to drive revenue generation without imposing undue burdens on taxpayers while addressing tobacco related health risks. Thus, the primary objective of the project is to increase revenue generation and reduce tobacco consumption in African countries through the implementation of effective tobacco tax policies and administration initiatives.

With the tax to GDP ratio in African countries trailing the global benchmarks, there is no doubt that African countries need to mobilise additional resources to be able to fund their budgets and ensure the provision of public goods and services. As shown in Chapter 2 of this edition of the ATO, the average tax-to-GDP ratio was recorded at 15.43% in 2022 which in line with previous trends, remains considerably lower than that of the advanced economies of OECD countries who recorded the highest average tax to GDP ratio of 34.0% in 2022 (OECD, 2023). This therefore indicates a need for African countries to look for opportunities that can increase domestic resource mobilisation.

African countries, through the African Union's Abuja Declaration (2001), target to allocate at least 15% of their budget to health. Most countries in Africa have been unable to meet that target in any given year with data showing that in 2021 only South Africa and Cabo Verde met the target (Parikh, 2024). One of the major reasons why African countries are struggling to meet this target is because of low GDP and low tax collection efficiency among African countries. The same data shows that health spending in Africa reached US\$ 136.7 billion in 2021 which was an increase of 6.1% from 2020, accounting for an average of 5% of African countries' GDP. African countries therefore need to raise more domestic resources to finance the rising needs of the people in the continent. Health taxes provide a good opportunity for African countries to mobilise additional resources that can be used to support financing for the health sector among other priorities for the countries.

Health taxes are generally levied on products that generate health related negative externalities and internalities. These include products such as tobacco, alcohol, and sugar-sweetened beverages (SSBs). Health taxes serve two main purposes. First, to generate additional revenue and secondly, to improve health by influencing consumer behaviour.

According to WHO (2024) these taxes are considered win-win policies because they also advance health equity and mobilise revenue for the general budget that can also be used for specific priorities such as financing universal health coverage.

In view of these key issues, this chapter focuses on tobacco taxation and how tobacco tax can be used by African countries to improve their domestic resource mobilisation efforts. The chapter looks at how different ATO countries are implementing tobacco taxes while also highlighting the opportunities available for African countries to improve their domestic resources using tobacco taxes. Other health taxes will be covered in future as ATAF continues to support African countries to improve their domestic resource mobilisation.

Tobacco is the leading preventable cause of death in the world. Globally, on an annual basis tobacco is responsible for 8 million deaths of which 80% of these are from low to middle income countries (Egbe, et al., 2021; WHO, 2023). Even though the prevalence of tobacco use in Sub-Saharan Africa is the lowest in the world, its younger population are inducing a significant increase which might cause the region to have a higher prevalence in the future (Egbe, et al., 2021). Thus, it is important to understand the use of tobacco in this region and the entire of Africa in order to tax it effectively and also foster the necessary mechanisms to curtail it.

The UNDP SDG Taxation Framework Handbook recognises that taxes can play a significant role in ensuring healthy lives and promoting well-being for all (UNDP, 2023). The Handbook states that, "*The first way tax policy is used to achieve health goals is through the imposition of taxes on, health harming goods, namely alcoholic beverages, tobacco products, and sugar-sweetened beverages (SSBs), as well as carbon tax among others*". The Handbook acknowledges that these 'health taxes' can help accelerate progress towards SDGs by providing price incentives to change people's behaviour to achieve better health outcomes as well as raise revenues to finance health.

The 2023 WHO report on the global tobacco epidemic, recognises that although the health benefits are evident, imposing taxes alone is not adequate. Tobacco tax policies must be accompanied by strong tax administration. For this reason, the ATAF tobacco tax project is not solely looking into tax policy issues, but also tax administration issues especially since lack of capacity has been underscored as one of the

impediments for the development of tax policy and its execution (Egbe, et al., 2021). Additionally, it is investigating how to build stronger tax systems for implementing tobacco taxes while addressing serious challenges that face the continent, such as illicit trade.

This tobacco tax segment highlights the current outlook of tobacco tax in Africa. Secondly, it delves into the key issues that ATO countries have highlighted as being the main challenges impacting effective implementation of tobacco tax. Thirdly, it highlights the key initiatives being undertaken by ATAF under the tobacco tax project to assist countries address these challenges and ensure that African tax administrations can effectively mobilise revenue in this sector.

It is important to note that the recommendations that will emanate from the tobacco tax project may be used to improve tax compliance on the other excisable goods. This is due to several shared challenges between tobacco products and other excisable goods.

8.1 Types of tobacco products

There are many types of tobacco and tobacco related products. These include, cigarettes, cigars, electronic cigarettes (also called, electronic nicotine delivery systems (ENDS) and electronic non-nicotine delivery systems (ENNDS), heated tobacco products (HTPs), nicotine pouches, nicotine gums, smokeless tobacco and water pipes or *shisha*, among others.

Box 8.1 provides a list of tobacco products as classified in the World Customs Organisation's Harmonized System Nomenclature (2022).

Box 8.1 HS Classification of Tobacco Products

Tobacco products are classified under Chapter 24 of the Harmonized System and the specific Headings are listed below.

- 2401- Unmanufactured tobacco; tobacco refuse
- 2402- Cigars, cheroots, cigarillos, and cigarettes, of tobacco or tobacco substitutes
- 2403- other manufactures tobacco and manufactured tobacco substitutes; "homogenized" or "reconstituted" tobacco; tobacco extracts and essences.
- 2404 – products containing tobacco, reconstituted tobacco, nicotine, or tobacco or nicotine substitutes, intended for inhalation without combustion; other nicotine containing products intended for the intake of nicotine into the human body.
- Electronic Cigarettes and other vaporizing devices are classified under Chapter 84 of the Harmonized System and the specific Headings are listed below.
- 8543.40- Electronic cigarettes and similar personal electric vaporising devices

Source: Kenya Revenue Administration website

The Harmonised system is used for, among other purposes, classify goods for trade and tax purposes and as such becomes a useful tool for purposes of identifying various tobacco and tobacco related products.

8.2 Tobacco taxation and excise structures

In most countries, tobacco products are subject to several indirect taxes which include, excise duties, value added taxes, import duties and other levies/taxes. However, excise taxes usually constitute the largest share of the taxes in tobacco products. Excise duties are used by countries not only to raise revenue but to also influence customer behaviour where consumption of certain products is considered harmful to health or to the environment. As such, Excise taxes can be used to raise additional revenue while at the same time improving the health outcomes of populations by reducing the demand for tobacco. This section therefore delves into details on how the continent is performing regarding tobacco

tax policies and specifically focuses on how excise taxes are being implemented on tobacco products in the continent.

Best practices in tobacco tax policies are articulated in several documents which include, *Guidelines for Implementation of Article 6 of the WHO FCTC*⁴¹, the World Bank *Tobacco Tax Reform*, *WHO Technical Manual on Tobacco Tax Policy* among others. As already stated, significant attention is given to excise taxes.

There are different excise tax structures implemented globally and in Africa. Generally, there are three types which are explained below:

- i. Specific excise tax** – this may be tiered or a uniform specific rate.⁴²
- ii. Ad valorem excise tax** – this may also be tiered or one uniform rate.
- iii. A mixed system**- this combines both specific and ad valorem systems and may also be tiered or uniform.

Box 8.2 Definitions of types of excise tax structures

- **Specific Excise Tax:** This type of tax is a fixed amount applied per unit of the product, typically per pack of cigarettes or per gram/ounce of tobacco. The tax does not change based on the price of the product. This makes the tax easy to calculate and predict, but it does not account for inflation or changes in product prices over time.
- **Ad Valorem Excise Tax:** This type of tax is a percentage of the value (price) of the product. This means that as the price of the product increases, so does the amount of tax. Ad valorem taxes account for inflation and changes in product prices, but they can be more complex to calculate and enforce, as they require accurate tracking of product prices.
- **Mixed Excise Tax:** This type of structure combines both specific excise tax and ad valorem. In most cases, countries that have a mixed rate have a minimum specific excise tax that ensures that at least a certain minimum amount of tax is paid, irrespective of price level.

Source: Kenya Revenue Administration website

41. Article 6 Guidelines (2014) were adopted by the Conference of Parties to the FCTC and are evidence based and contain tested and widely accepted best practices and experiences of the many countries that have successfully implemented tobacco taxes.

42. Tiered excise structures usually have rates that vary based on characteristics of the tobacco products which include cigarette length, presence of a filter, price, packaging etc. Generally tiered systems are less effective since they provide easier opportunities for tax avoidance and evasion and are also more difficult to administer.

WHO (2021) notes that there are many factors that influence the design of excise structures which include, the market structure of the tobacco industry in a country (typically a monopoly or oligopoly for most products in most countries). In this case, different excises (specific or ad valorem taxes) may have different effects on government revenue, manufacturer profit, consumer price, perceived product quality and variety and tax administration.

In determining the appropriate tax structure and tax rates, countries should consider issues such as tax base, administrative requirements, undervaluation concerns, impact on price and inflation. The recommended optimal excise tax structure for cigarettes based on evidence, research and experience in many countries is described in Box 8.3.

Box 8.3 Optimal excise tax structure for tobacco products

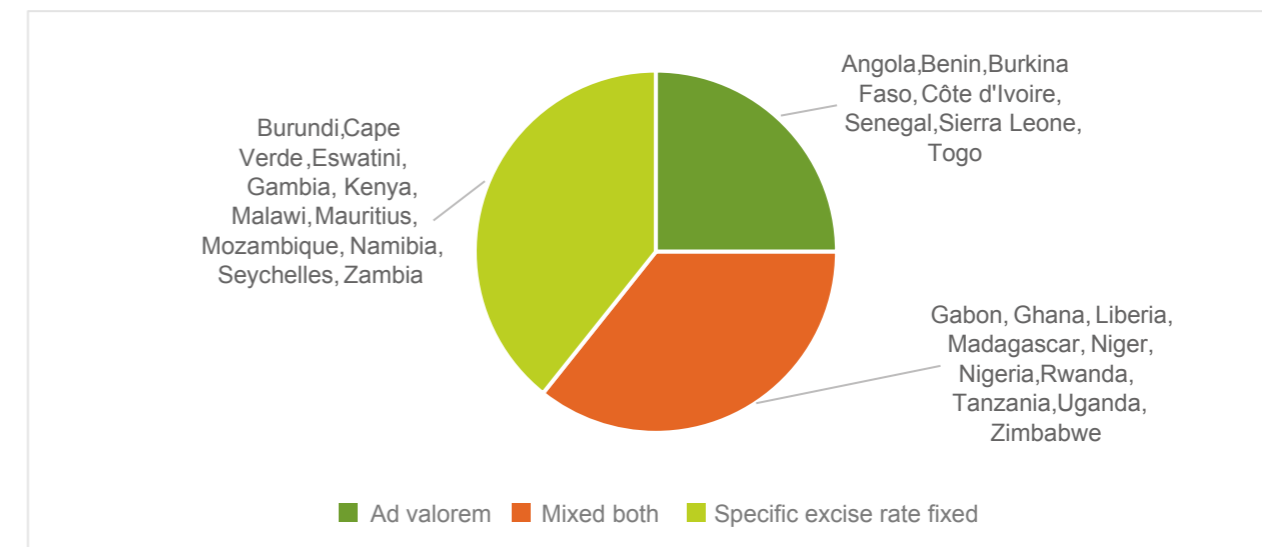
- a) a uniform specific tax with an automatic inflation or other adjustment; or
- b) a uniform mixed system with greater tax share for the specific component in addition to a minimum tax, an automatic adjustment to the specific tax component, and the use of retail price as the base for the ad valorem tax component.
- These structures are recommended as they can raise significant revenues and are easier to administer compared to purely ad valorem systems and multiple tiered systems.

Source: (Drope, 2024)

One of the key advantages of a uniform specific excise as compared to ad valorem excise and other tax structures is that uniform specific excise taxes are relatively easier to administer as only the volume of the products needs to be

ascertained. In the case of ad valorem excise, administrative burden can be high because they require strong tax administration with significant technical capacity.

FIGURE 8.1 EXCISE STRUCTURES IN ATO COUNTRIES



From the 28 ATO countries⁴³ that provided the data on excise structures, in 2022, 11 have specific excise tax structures, 7 have ad valorem while 10 have mixed structures (see Figure 8.1).

The 3rd Edition of the Cigarette Tax Scorecard (Drope, 2024) shows that countries have made insufficient progress towards effective taxation of tobacco products. The Score Card notes that many governments are still failing to effectively employ tobacco taxes as a public health instrument. This score card uses four grading components.

- **Cigarette Price** - This component of the score measures the price of the most-sold brand in international dollars (Intl\$), adjusted for purchasing power parity (PPP). The highest score of 5 points is awarded to countries where the cigarette price is at least 10 Intl\$ PPP
- **Change in Cigarette Affordability** - This component of the score measures the trend in cigarette affordability, using the average annual percentage change (AAPC) in the affordability index over a six-year period. The highest score of 5 points is awarded to countries with an average annual reduction of at least 7.5%.
- **Tax Share** - This component of the score measures the total tax share and the excise tax share of the price of the most-sold brand of cigarettes. The highest score of 5 points is awarded to countries where the total tax share is at least 75%, and the excise tax share is at least 70%.⁴⁴

- **Tax Structure** - The highest score of 5 points is awarded to countries that either have a uniform specific tax with automatic adjustment or a mixed system with greater share of specific tax, with an automatic adjustment for the specific component, the retail price as the base for the ad valorem component, and a minimum tax to lift the prices of economy brands.

According to the 2023 score card, the African region continues to rank lower at 1.53 (out of 5) with the global average being 1.99 (overall score). The top scoring African Countries (overall) are Mauritius (4.13), Seychelles (3.13), Eswatini (3.0), Gambia (2.88), Botswana and Mozambique (both 2.75). It is important to note that the Score Card only covers cigarette products and as such does not include the new and emerging tobacco products such as ENDS, ENNDS, HTPs and others in the analysis.

From the ATO data and the above score card, it is evident that many African countries need to review their tobacco excise tax structures and rates. This will ensure that countries effectively and efficiently improve their domestic resource mobilisation. It is also important to note that cigarettes are relatively price inelastic implying that an increase in price will result in a less proportionate decline in consumption hence increasing tobacco taxes generally increases government revenues, as the increase in tax normally outweighs the decline in consumption of tobacco products. However, in order to realise these benefits, review of tax policy has to be accompanied by strong tax administration.

43. Angola, Benin, Burkina Faso, Burundi, Cape Verde, Côte d'Ivoire, Eswatini, Gabon, Ghana, The Gambia, Kenya, Liberia, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, Seychelles, Sierra Leone, Tanzania, Togo, Uganda, Zimbabwe, and Zambia.

44. Tax Share denotes the percentage of retail price that is taxed. This is significant because if the prices of tobacco products increase driven by industry price increases, the new revenues go only to the tobacco industry.

Box 8.4 Showcasing a good tax structure: Mauritius

The total tax share as a proportion of the retail price of the most sold brand in Mauritius stood at 78.2% in 2022.

Mauritius applies a uniform specific excise tax on cigarettes. The excise rate amounted to 6188 Mauritian rupees per 1000 pieces in 2022. When compared with 2008, the first year with relevant data in the WHO Report on the global tobacco epidemic, excise tax doubled in real terms over a period of 12 years.

Source: (World Health Organisation, 2023)

8.3 General tobacco outlook: tobacco growing and manufacturing in Africa

This section highlights evidence from various studies which depict the increased use of tobacco in Africa. Firstly, from a global perspective, the WHO (2023) estimates that tobacco use is responsible for causing 8 million deaths every year and causes more disability and ill health than any behavioural risk factor. A wide variety of tobacco products—both smoked products (these include, cigarettes, cigars, kreteks, bidis, and waterpipe) and a diverse group of smokeless tobacco products (these include, snuff, loose-leaf chewing tobacco, dissolvable products, and snus) are in use worldwide. Additionally, the United States National Cancer Institute (2016) estimates that manufactured cigarettes, account for about 92.3% of tobacco sales worldwide; thus, they are responsible for the vast majority of tobacco-caused disease and death. However, these patterns are changing because of the new and emerging tobacco and nicotine products which have become increasingly popular particularly among youth and nonsmokers.

Secondly, from an African perspective, as previously mentioned, the African region has the least smoking prevalence when compared to other WHO regions. However, there is a projected increase of the number of tobacco smokers in Africa. There were about 52 million smokers on the continent in the year 2000, this increased to 66 million smokers in 2015 and this number is projected to increase to 84 million in 2025. In other words, compared to the year 2000, by 2025 there will be a 61.5% increase. Another region which will experience a similar increase is the Eastern Mediterranean region (Egbe, et al., 2022).

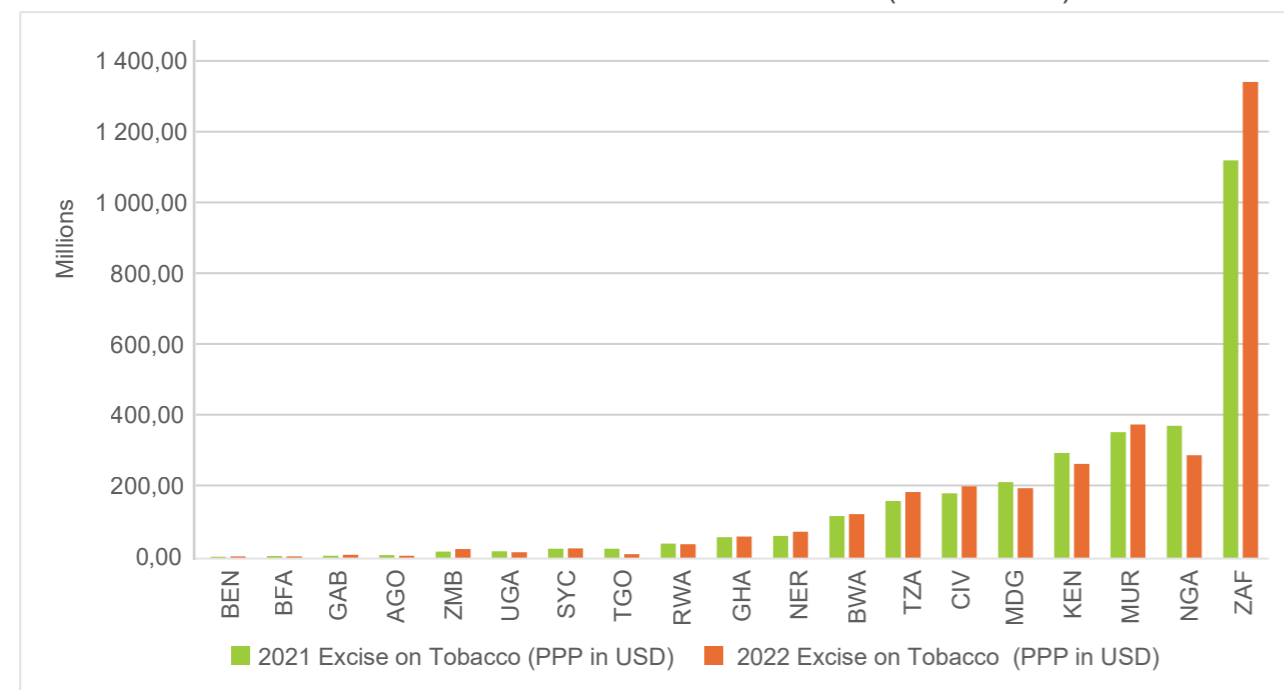
Similarly, Statista (2024) projects that the demand for tobacco products in Africa is steadily increasing, with Nigeria being one of the largest consumers in the region. Furthermore, tobacco products market in Africa is projected to generate a revenue of about USD 45.1bn in 2024 and the market is expected to experience a compound annual growth rate of 7.46% (Statista, 2024). However, Tobacco Atlas (2024) notes that this trend can be reversed if governments, among other policies, raise taxes that lead to increase in the prices of tobacco products.

The main tobacco production hubs in Africa are in Algeria, Kenya, Nigeria, and South Africa while the five top tobacco growing countries are, Zimbabwe, Zambia, United Republic of Tanzania, Malawi, and Mozambique (WHO, 2021). Given the trends in the use of tobacco on the continent, below we spotlight on where tobacco is grown and manufactured.

Figure 8.2 shows data from 19 ATO countries⁴⁵ on the excise revenues generated from tobacco. The data shows that in 2022 the total excise revenues generated from tobacco products by these countries is about USD 3.3 billion increasing from USD 3.1 billion in 2021. In these ATO countries, the highest revenue from tobacco was generated in South Africa, Mauritius, Nigeria, Kenya, and Côte d'Ivoire in 2022, most of which are tobacco production hubs.

45. Angola, Benin, Burkina Faso, Burundi, Côte d'Ivoire, Gabon, Ghana, Kenya, Madagascar, Mauritius, Niger, Nigeria, Rwanda, Seychelles, South Africa, Tanzania, Togo, Uganda, and Zambia.

FIGURE 8.2: EXCISE REVENUES FROM TOBACCO 2021-2022 (PPP IN USD)



Although there is a relative increase in revenue collected from excise on tobacco between 2021 and 2022 in ATO countries, this can be significantly increased to improve domestic resource mobilisation. Tobacco taxes are widely underutilised, particularly across Africa, where cigarettes have become more affordable in the last four years (ICTD, 2024). This therefore presents an opportunity for African countries to review and implement effective tax measures that effectively mobilises the much-needed tax revenues while also contributing towards reducing tobacco use.

8.4 Regional initiatives to improve taxation of tobacco taxation in Africa

There are various organised initiatives undertaken by countries to curb the use of tobacco on the continent. The aim of these initiatives is to ensure harmonisation of such efforts and their success has been gained only through proper implementation.

Firstly, in December 2017, the 15-member ECOWAS and the 8-member West African Economic and Monetary Union (WAEMU), a subset of ECOWAS, passed new Tobacco Tax Directives. Both Directives increased the minimum ad valorem excise tax rate to 50%. In addition, the ECOWAS

Directive introduced a minimum specific tax (USD 0.02/stick). It is estimated that if the 15 ECOWAS members implement the ECOWAS Directive it would substantially increase the retail price of cigarettes (unweighted average 51%, range: 12% to 108%), decrease sales volumes (22%, range: -8% to -39%) and increase tax revenue (373%, range: 10% to 1243%). The impact of the WAEMU Directive on WAEMU countries' cigarette prices (unweighted average +2%), sales volumes (-1%) and revenue (+17%) is likely to be minimal (Tesche J, 2020).

Overall, all member states of the ECOWAS are noted to have made relatively strong efforts to increase basic excise taxes in the hopes of reducing smoking prevalence and increasing tax revenues in the long run. However, most ECOWAS countries rely on a tax system based solely on an *ad valorem* rate which makes it difficult to achieve economic and public health objectives (Ane, 2021). The paper further notes that ECOWAS will still need to think about an optimal tax system that would increase tax revenues in the long run.

Secondly, the EAC is in the process of harmonizing the excise rates for excisable goods in the region which include tobacco products. This process is ongoing and is yet to be completed. This is being done in line with Article 32 of the Common Market protocol that provides that the Partner States undertake to progressively harmonize their tax policies

and laws on domestic taxes with a view to removing tax distortions to facilitate the free movement of goods, services, and capital, and the promotion of investments within the Community.

Harmonisation of excise rates is expected to also reduce illicit trade significantly in excisable goods (including tobacco products). Especially, cross boarder smuggling that is motivated by the differentials in tax rates and tax structures in the region.

Thirdly, from an international perspective, 44 African countries⁴⁶ are parties to the World Health Organisation (WHO) Framework Convention on Tobacco Control (FCTC) and 20 countries have ratified the Protocol to Eliminate Illicit Trade in Tobacco Products (ITP). Article 6 of the FCTC recognises the need for countries to use price and tax measures to raise revenue and to contribute to the health objectives aimed at reducing tobacco consumption.

WHO (2023) shows that of all the measures that countries are taking to deal with the tobacco epidemic, tobacco tax is the least adopted. This is despite the overwhelming evidence that taxation that leads to price increase in tobacco product is the most effective way of reducing tobacco consumption.

Despite these regional and international efforts, it is evident that there is still more that needs to be done in Africa to improve taxation of tobacco products in a way that optimises revenue mobilisation efforts. At the same time, the aim is to reduce tobacco consumption in Africa and tax administrations play a pivotal role in this area.

8.5 Contribution of excise sector and excise from tobacco in ATO Countries

As illustrated in Chapter 3 in Figure 3.26, the average relative share of excise duties to total tax revenue stood at 8.35% in 2022. The highest share was from Burundi and Uganda at 24% and 23% respectively and the lowest being from Botswana and Nigeria at 1.04% and 0.85% respectively.

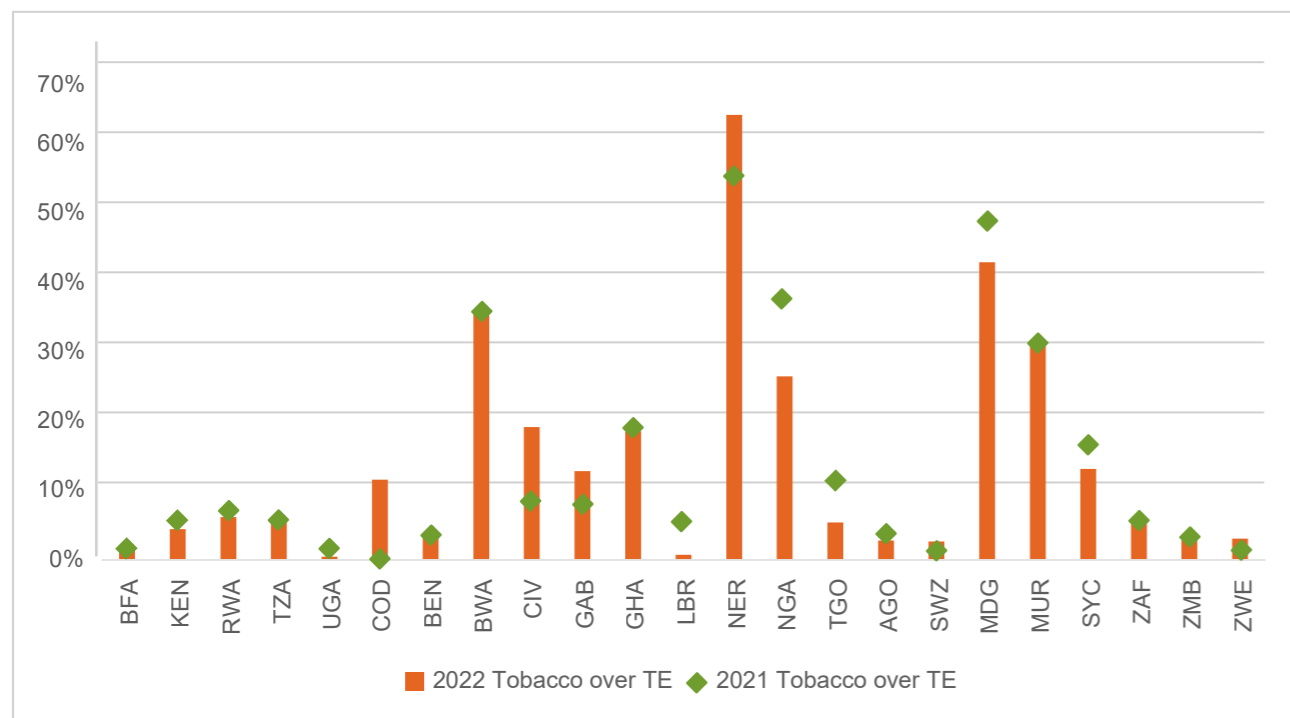
Figure 8.3 shows the relative share of excise duties on tobacco to total excise revenue for ATO countries in 2021 and 2022⁴⁷. The relative share of excise duties on tobacco to total excise revenue⁴⁸ collected in the ATO countries was lower in 2022 at an average of 13.5% compared to 13.9% in 2021. The drop can be attributed to the drop in collections from Nigeria and Madagascar. The highest share of excise on tobacco to total excise revenue in 2022 was from Niger, Madagascar, and Burkina Faso at 64.28%, 42.98% and 35.69% respectively and the lowest being Burundi at less than 0.05%.

46. The 44 African countries are Algeria, Angola, Benin, Botswana, Burkina Faso, Burundi, Cape Verde, Cameroon, Central African Republic, Chad, Comoros, Congo, DR Congo, Côte d'Ivoire, Equatorial Guinea, Eswatini, Ethiopia, Gabon, The Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Madagascar, Mali, Mauritania, Mauritius, Mozambique, Namibia, Niger, Nigeria, Rwanda, Sao Tomé & Principe, Senegal, Seychelles, Sierra Leone, South Africa, Tanzania, Togo, Uganda, Zambia, and Zimbabwe.

47. Data was available from the following countries: Angola, Benin, Burkina Faso, Burundi, Côte d'Ivoire, Eswatini, Gabon, Ghana, Kenya, Liberia, Madagascar, Mauritius, Namibia, Niger, Nigeria, Rwanda, Seychelles, South Africa, Tanzania, Togo, Uganda, Zambia, and Zimbabwe.

48. Total excise revenue equals to excises on imports plus excise tax revenue. This total excise revenue is not similar to the one computed in Chapter 3.

FIGURE 8.3 SHARE OF EXCISE DUTIES ON TOBACCO TO TOTAL EXCISE REVENUE 2021-2022

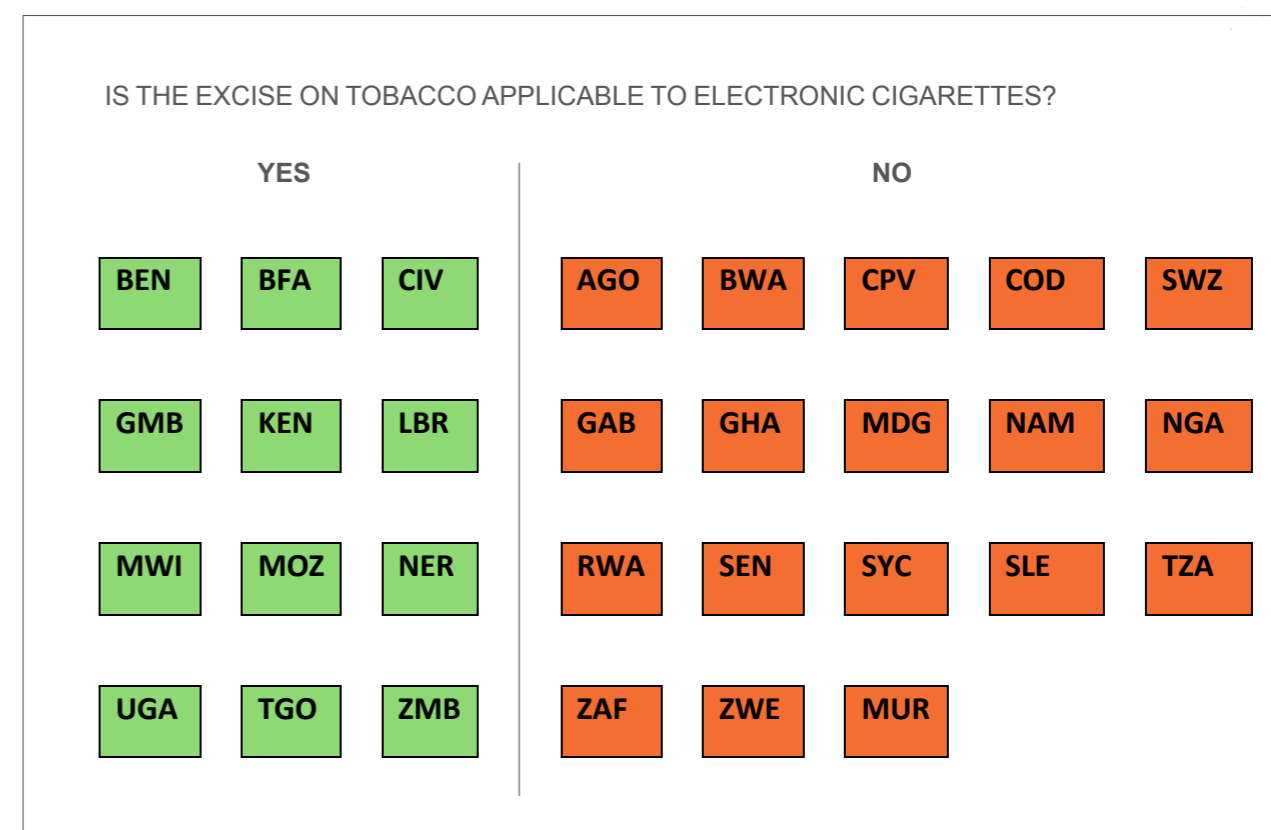


Excise duties on tobacco products is one of the main contributors to total excise duties collected in most countries. Excise duty on tobacco products account on average of about 13.5% in 2022 of the total excise collected in the ATO countries. The other products that contribute significantly to the total excise collections include, alcoholic and non-alcoholic beverages, motor fuel and excisable services.

8.6 Taxation of novel and emerging tobacco and nicotine products in ATO countries

One of the major challenges facing many countries today in tobacco taxation is the new and emerging nicotine and tobacco products. These include electronic cigarettes (also called, electronic nicotine delivery systems (ENDS) and electronic non-nicotine delivery systems (ENNDS)), heated tobacco products (HTP), nicotine pouches, nicotine gums, smokeless tobacco ad water pipes or *shisha*, among others. As noted in Box 8.1, electronic cigarettes are classified under HS Code 854340. However, cartridges (e-liquids) for ENDS and disposable electronic cigarettes are classified under Heading 2404. Most of the above-mentioned products are neither taxed nor effectively regulated in many countries. For example, more than half of the ATO countries have not implemented any form of excise duty on electronic cigarettes. In 2022, 60% of the ATO countries did not have excise on electronic cigarettes as illustrated in Figure 8.4.

FIGURE 8.4 APPLICABILITY OF EXCISE ON TOBACCO ON ELECTRONIC CIGARETTES



The emerging products tend to be very attractive to the youth as well as other non-tobacco users. As such, with Africa having the youngest population in the world, failure to effectively tax these products means that, firstly, African countries are losing the much-needed revenue. Secondly, these products are being availed to the market without proper regulatory frameworks that would ordinarily apply to other tobacco products and other goods subject to excise duties. Which means that the health risks imposed by these products are not being curtailed. In some instances, (such as the case of Mauritius effective from 31 July 2023), countries have opted to prohibit the importation, distribution, manufacturing and selling of e-cigarettes.

Introducing excise duty on these products presents opportunities for African countries to increase their revenue collections as well as effectively regulate manufacturing and importation of these products. ATAF is working on a toolkit to assist African countries in designing an effective excise tax on these products noting that gap in this area.

8.7 Challenges affecting effective implementation of tobacco tax in ATO countries.

Tobacco taxation has not been optimal in most countries due to various reasons which include inefficient tax policies, tax administration capacity and other tax administration challenges, emergence of new tobacco products and tobacco alternatives, illicit trade among others. ATO countries highlighted some of the key challenges that hampers the effective implementation of tobacco taxes. These challenges are discussed below.

1. New and emerging tobacco Products

In the last decade, there has been many new and emerging tobacco and nicotine products. These include electronic cigarettes (ENDS and ENNDS)), HTP, nicotine pouches and nicotine gums, among others. Most of these products are neither taxed nor effectively regulated in many countries. For example, in ATO countries, 60% of countries do not

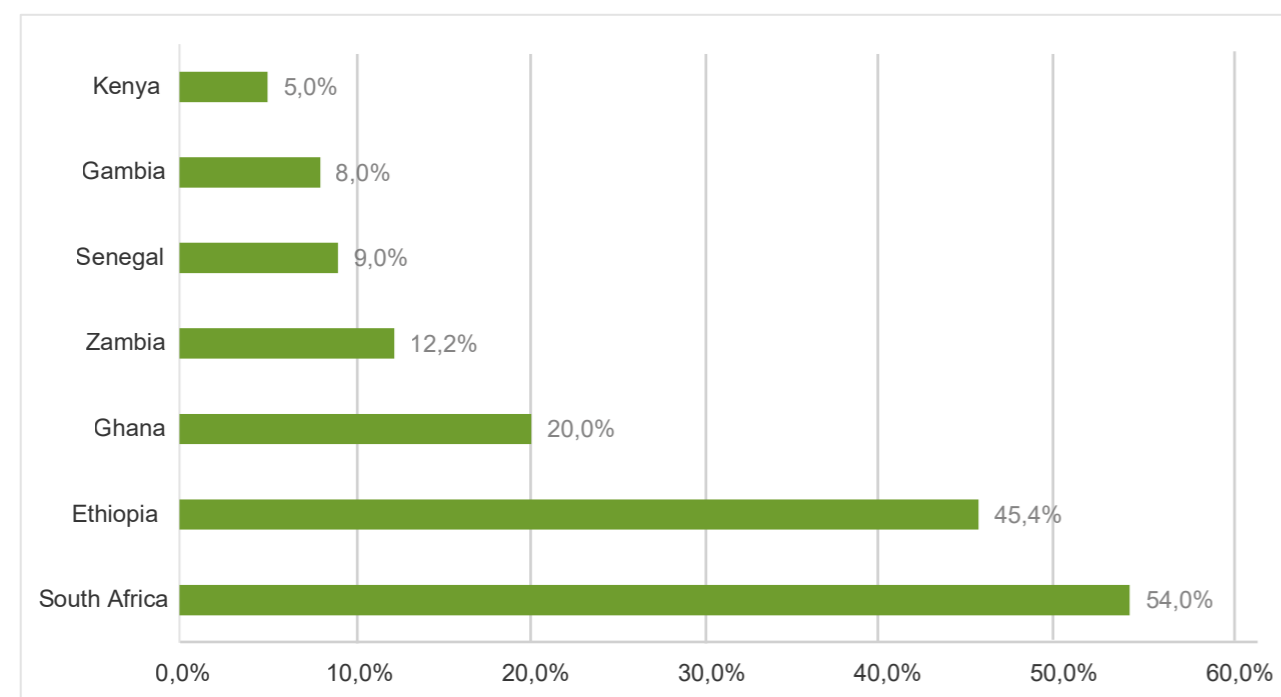
have an excise on electronic cigarettes (illustrated in Figure 8.4). Introducing excise duty on these products presents opportunities for African countries to increase their revenue collections and also effectively regulate these products.

2. Illicit Trade

Illicit trade in tobacco products is a big challenge. U.S. National Cancer Institute and World Health Organization (2016) noted that “control of illicit trade in tobacco products, now the subject of its own international treaty, is the key supply-side policy to reduce tobacco use and its health and economic consequences.”

World Health Organization (2016) estimates that on an annual basis, governments lose USD 40.5 billion in revenue from the illicit trade of tobacco products. In some countries, illicit trade can reach as high as 40–50% of the overall tobacco market. The report further notes that illicit tobacco trade is more prominent in low- and middle-income countries than in high-income countries. Illicit trade not only robs governments of the much-needed revenue but also denies legitimate businesses of the much-needed revenue and also exposes citizens to goods that may not be safe for consumption. The extent of the prevalence of illicit trade in African countries is depicted in the Tobacco (Tobacco Control Data Initiative, 2021). Figure 8.5 shows illicit trade prevalence in selected African countries in 2021.

FIGURE 8.5 PREVALENCE OF ILLICIT CIGARETTE TRADE ACROSS SELECTED COUNTRIES IN THE REGION



Source: Tobacco Control Data Initiative (2021)

It is evident that the prevalence varies across these countries, with South Africa and Ethiopia bearing the highest prevalence at 54% and 45.4%, respectively. Countries bearing the least prevalence were The Gambia and Kenya at a low, 8% and 5%, respectively.

Given the challenges with illicit trade cited above, there are specific considerations that need to be made by African countries. Firstly, illicit trade has been used by tobacco industry to fight increases in tobacco tax and the data

provided by the industry over states the levels of illicit trade in a particular country. It is therefore important that countries have mechanisms of measuring illicit trade independently.

Secondly, forgoing revenue based on the illicit trade argument is not a solution. Countries should implement comprehensive strategies to fight illicit trade. Otherwise, forgoing revenue and failing to comprehensively address illicit trade becomes a loss for domestic taxes mobilisation as well as for public health.

3. Designing an effective Excise Tax structure

One of the other challenges mentioned by the ATO countries is designing an effective excise tax structure. It is important to note that the structure of an excise tax has huge impact on the effectiveness of the tax itself and whether the tax will achieve the intended purposes. Section 8.2 above highlighted best practices in designing effective tax structures and from the analysis of the ATO data, many countries need to review their excise existing tax structures in order to improve their revenue mobilisation efforts.

4. Production Monitoring and Digital Marking systems (Track and Trace systems)

Production monitoring and tracking and tracing of excisable goods is a concern. The main concerns by tax authorities are how to ensure that they have full visibility of the production of tobacco products (and other excisable goods). In addition, how do countries implement effective production monitoring systems and track and trace systems.

Some countries like Kenya, Ghana and Morocco have implemented robust production monitoring systems, and track and trace systems that monitor production of excisable goods in the licensed factories. This ensures that they have visibility over production of tobacco products (and other excisable goods) which are produced in their countries.

Box 8.5

Kenya's gains from its production monitoring system, and track and trace systems

In Kenya, the implementation of the Excisable Goods Management system reduced illicit cigarette market from 15% in 2003 to 5% in 2016. This was achieved through a comprehensive strategy that included sticking tax stamps on cigarettes for domestic consumption, the licensing and registration of cigarette producers and importers, improved coordination between implementing agencies, the implementation of a track-and-trace system, the introduction of scanners at points of entry, increased enforcement, and heavier penalties for those involved in the illicit tobacco trade.

Source: (World Bank, 2018)

5. Low education of the tobacco tax reforms and illicit tobacco trade

Most tax authorities do not have adequate training on tobacco tax developments, new and emerging tobacco products, global developments on tobacco taxation and regulation, implementation of global instruments such as the Framework Convention on Tobacco Control and its Protocol to eliminate Illicit trade in tobacco products, among others.

6. Tax Administration Challenges

Another key challenge that was highlighted by ATO countries is non-compliance by the tobacco industry players and the capacity of tax administrations to address these challenges. Imposition of taxes alone without efficient tax administration systems cannot achieve the intended objectives. WHO (2023) highlights some key interventions to improve tax administration which include:

- ensuring compliance (through licensing, detailed tax declaration requirements and advanced information technology)
- ensuring control and enforcement on the supply chain (through, for example, the use of risk-based approaches for enforcement targets, tax stamps, track, and trace systems, implementing anti-forestalling methods)
- following clearly defined procedures after detecting illicit trade of tobacco (including high penalties).

7. Compliance with the FCTC and ITP

Another challenge cited by the ATO countries is implementation of the WHO- Framework Convention on Tobacco Control (FCTC) in respect of tobacco taxation related areas and implementation of the Protocol to Eliminate Illicit Trade in Tobacco Products (ITP). 44 African countries are parties to the FCTC while 20 countries have ratified the ITP. Implementation of these international treaties remains a challenge for most African countries. ATAF's tobacco tax project will provide an opportunity for African countries to strengthen implementation of these treaties.

8.8 Conclusion

Analysis of data on tobacco taxation reveals that countries have made little progress on tobacco taxes. A lot needs to be done to mobilise domestic resources effectively and efficiently in this area. This includes review of tax policy especially tax structures and tax rates, introducing taxes (including excise) on the new and emerging tobacco and tobacco related products, strengthening tax administration, and reinforcing measures to curb illicit trade.

In order to support countries in building effective tax systems in order to improve their domestic resource mobilisation, ATAF through the Tobacco Tax project, is supporting countries through the following ways-

- Providing technical assistance to countries in development of effective tax policy as well as strengthening tax administration.
- Providing training through the ATAF Training Academy to member countries on tobacco taxation which will cover among other things, tobacco tax policy, tax administration, implementation of technologies such as track and trace, combating illicit trade in tobacco products, among others.
- ATAF developing tax policy and administration solutions including Toolkits, Suggested Approaches and Guidelines for addressing the identified challenges which include-
 - A toolkit to assist African countries in modelling the optimal tax rates for tobacco products in their countries which can then be used for reviewing the excise tax systems as well as the tax rates. The tool kit will also focus on the new and emerging tobacco and nicotine products.
 - A toolkit on practical measures that countries need to take to combat illicit trade in tobacco products. It is important to note that the strategies adopted to combat illicit trade into tobacco products can be applied to other excisable goods as well therefore protecting the larger excise tax base.
 - A toolkit to be used by African countries seeking to build/procure their own production monitoring and track and trace systems. This will include development of IT Infrastructure Design documents.
 - Toolkits on other critical areas that are required to strengthen tax administration systems.



Chapter 9

Recommendations

Recommendations

Efficient and effective tax administration can be reached through ensuring that the right systems and mechanisms are in place. These need to be supported and guided by sound and simple tax policy to ensure increased domestic resource mobilisation. In this 2023 ATO edition, it was evident that there were various global shocks faced by African economies which resulted in significant alterations in their revenue collections. This chapter will derive from the analysis and performance of the ATO countries recommendations to support the resilience of countries as they thrive to improve their performance.

9.1. Tax administration recommendations

Leverage on data driven insights

Tax administrations should explore other technologies beyond E-filing and payment systems, such as big data, artificial intelligence, and biometrics. The revenue potential of tax administrations can be significantly increased through leveraging on data. This big data analytics is supported by computer algorithms and machine learning models which are run on data from multiple periods. Specifically, in order to accurately identify gaps and gain more insights in revenue administration, innovations like data-driven risk detection approach are necessary to strengthen compliance levels. Automating risk engines further results in reduced turnaround times and human error. The gains will be automatically processed and assessed tax returns resulting in efficient revenue collection, identification of the non-compliant taxpayers, and algorithms which are continuously learning the behaviour of various taxpayers and possible linkages with other taxpayers.

Provide digital skills training

Tax administrations should provide training programs to staff to enhance their digital skills and capabilities in managing digital systems, data analytics, cybersecurity, and emerging technologies. ATO member countries can leverage resources and technical assistance provided by ATAF to build capacity or bridge the skill gap of their officers in the field of tech skills and big data analytics.

Building trust amongst taxpayers and tax administrations

Providing better services to taxpayers and monitoring their compliance are key to ensuring sustained revenue collections. However, the perceptions that taxpayers have regarding tax administrations and government in general, have a significant role in determining their levels of compliance. Therefore, building trust between the taxpayers and the tax administration through transparency, and accountability will reduce the need for enforcement activities. Additionally, tax administrations need to advocate for seamless coordination with other government agencies and relevant regulatory entities in order to enhance compliance amongst taxpayers. For improved customer services, tax administrations should offer online services and self-help tools to taxpayers, such as online tax calculators, FAQs, and personalised taxpayer portals. Providing easily accessible information and assistance can encourage voluntary compliance.

Review less buoyant sectors and less responsive tax heads

Although most sectors and tax heads improved their buoyancy in the last year of review, PIT and the mining and quarrying sector recorded the lowest buoyancy. Therefore, an analysis of PIT and the mining and quarrying sector needs to be made to ensure improved performance.

Address audit capacity constraints

The effectiveness of the tax administration in identifying the compliant and non-complaint lies in their ability to reach its taxpayers even at the point of audit. The audit function's capability gaps should be identified and addressed. With a high workload and very few auditors, the audit efficiency is bound to be low. Thus, the average ratio to total staff needs to improve through concerted efforts to recruit auditors at least on an annual basis.

Enhance audit efficiency

To enhance audit efficiency, it's essential to balance the distribution of auditors more equitably, concentrating on sectors where compliance gaps are notable. Furthermore, integrating advanced technologies like data analytics and artificial intelligence can help identify potential cases of non-

compliance more accurately and efficiently. This tech-driven approach allows auditors to focus on high-risk cases, thus maximizing the impact of their efforts. Regular evaluations of audit strategies based on economic changes and taxpayer behaviour can ensure that audit practices remain relevant and effective.

Effective arrears management

Tax administrations need to effectively manage arrears. Through effective arrears management non-compliance will decrease and government resources will be utilised efficiently. Implementing automated systems for tracking and managing tax debts can provide real-time insights into the status of arrears, helping tax authorities to act promptly. Proactive measures like early intervention strategies could identify taxpayers at risk of falling into arrears and provide them with information or assistance to prevent debt accumulation. Flexible payment plans and options for settling arrears, such as instalment agreements, can encourage taxpayers to fulfil their obligations without causing financial hardship. Public awareness campaigns about the importance of tax compliance and the consequences of arrears, as well as the availability of support for struggling taxpayers, can promote a culture of voluntary compliance.

Optimize customs administration functions

The varied approaches to customs administration within ATO countries suggest the need for optimization and modernization. Implementing risk assessment tools and technologies, such as electronic cargo tracking systems and non-intrusive inspection methods, can streamline the customs clearance process, enhancing both efficiency and compliance. Training customs officials regularly on new regulations, technologies, and best practices, and fostering international cooperation for intelligence sharing and joint operations against cross-border tax evasion can significantly improve performance. A balanced approach to customs inspections, using a risk-based selection of shipments for scrutiny, can prevent revenue leakage while facilitating trade.

9.2. Tax policy recommendations

Addressing tax incentives

Although many countries on the continent are not members of the Inclusive Framework (IF), countries may be impacted by the Two-Pillar solution. In particular the Global Anti-Base Erosion (GloBE) rules aim to ensure that all of the global profits of the largest multinational enterprises (MNEs) are taxed at a minimum effective tax rate of 15% regardless of

where those profits are reported. ATAF has released a Policy Brief on Responding to the implementation of GloBE rules which contains useful guidance on the necessary policy and technical analysis for its members. Additionally, ATAF offers advice on the policy choices as well as guidance on impact assessment.

Sufficiently tax the wealthy

Taxing high-net worth individuals (HNWI) is a tax base which tax administrations need to consider. This segment of taxpayers is not well captured in the net since most of the PIT is acquired from formal employment. Thus, specialised efforts are necessary through targeted wealth taxes and specific units in tax administrations to prioritize compliance of these taxpayers.

Widen the tax base

The AfCFTA is expected to result in customs revenue loss, particularly in countries that rely more on tariff revenue than domestic taxes. As a result, such countries can diversify their domestic taxes through leveraging on revenue streams such as digital and informal economies, wealth tax, property tax and natural resource taxes among others.

Optimise excise revenue and tobacco taxes

Advanced economies benefit from excise revenue on products such as tobacco. They raise approximately 8% of excise revenue from tobacco compared to between 1 and 2% excise revenue to GDP in Africa. Increasing the revenue potential in this area can be done either by charging higher excise rates with caution, ensuring that it does not lead to excessively high prices on essential products or introduce more excisable products in the mix. A greater advantage of excise taxes is that they are easy to collect while having a significant revenue contribution.

From the analysis of tobacco taxation in this edition of the ATO, countries have made little progress on tobacco and other health taxes. A lot needs to be done to mobilise domestic resources effectively and efficiently in this area. This includes review of tax policy especially tax structures and tax rates, introducing taxes (including excise) on the new and emerging tobacco and tobacco related products, strengthening tax administration, and reinforcing measures to curb illicit trade.

Annexes

ANNEX 1: FINANCING OF SOCIAL SECURITY SYSTEMS IN ATO COUNTRIES, 2022

Country	Public health			Old age pensions			
	Completely tax financed	Partly tax financed	Partly compulsory contributions	Completely tax financed	Partly tax financed	Partly compulsory contributions	Completely compulsory contributions
Angola		•	•			•	•
Benin		•	•		•	•	
Botswana	•			•			
Burkina Faso					•		•
Burundi		•	•		•	•	•
Cape Verde		•	•		•		
Cameroon	•				•		•
Côte d'Ivoire							
Congo DR							
Eswatini							
Gabon		•	•		•	•	•
The Gambia						•	
Ghana		•	•		•	•	•
Guinea-Bissau		•	•	•	•	•	
Kenya		•	•		•	•	
Lesotho		•			•	•	
Liberia	•					•	•
Madagascar		•			•	•	
Malawi							
Mauritius	•			•			
Morocco							
Mozambique		•	•	•	•	•	•
Namibia	•			•			
Niger		•	•		•	•	
Nigeria		•	•			•	•
Rwanda		•	•		•	•	•
Senegal							
Seychelles	•			•			•
Sierra Leone	•		•				•
South Africa	•			•			
South Sudan							
Tanzania							
Togo		•			•	•	
Uganda		•		•			
Zambia		•	•		•	•	
Zimbabwe		•					•

ANNEX 2: MAJOR TAX TYPES' ANNUAL GROWTHS IN ATO COUNTRIES, 2021-2022

Country	VAT			CIT			PIT			Import Duties			Excise Duties		
	2021	2022	High/Low	2021	2022	High/Low	2021	2022	High/Low	2021	2022	High/Low	2021	2022	High/Low
AGO	30%	19%	↓	-3%	68%	↑	29%	4%	↓	-5%	-7%	↓	306%	14%	↓
BDI	12%	18%	↑	-0%	31%	↑	13%	14%	↑	48%	-16%	↓	12%	4%	↓
BEN	22%	24%	↑	-4%	32%	↑	1%	26%	↑	7%	22%	↑	-38%	16%	↑
BFA	11%	14%	↑	45%	31%	↓	-3%	20%	↑	17%	31%	↑	15%	4%	↓
BWA	-14%	36%	↑	-49%	94%	↑	-17%	5%	↑		-5%	↓		82%	↑
CIV	27%	7%	↓	36%	20%	↓	8%	12%	↑	29%	-18%	↓	-5%	-53%	↓
CMR	11%	17%	↑	9%	38%	↑	3%	14%	↑	14%	2%	↓	13%	2%	↓
COD	50%	15%	↓	120%	162%	↑	20%	58%	↑	39%	89%	↑	11%	46%	↑
CPV	4%	37%	↑	-18%	17%	↑	0%	-0%	↓	20%	27%	↑	18%	57%	↑
GAB	2%	7%	↑	-16%	112%	↑	1%	21%	↑	1%	23%	↑	10%	-12%	↓
GHA	27%	34%	↑	22%	37%	↑	27%	25%	↓	28%	43%	↑	6%	29%	↑
GMB	-5%	1%	↑	7%	13%	↑	16%	25%	↑	6%	-4%	↓	46%	-23%	↓
GNB		-30%	↓												
KEN	8%	26%	↑	4%	33%	↑	-9%	27%	↑	10%	10%	↓	10%	16%	↑
LBR	19%	11%	↓	59%	21%	↓	0%	-3%	↓	19%	-0%	↓	32%	49%	↑
LSO	-12%	17%	↑	-6%	-2%	↑	0%	1%	↑						
MDG	16%	21%	↑	18%	30%	↑	6%	12%	↑	19%	32%	↑	16%	4%	↓
MOZ	10%	1%	↓	10%	20%	↑	9%	14%	↑				-41%	316%	↑
MUR	-8%	31%	↑	-15%	40%	↑	4%	21%	↑	-3%	30%	↑	-1%	8%	↑
MUS	17%	17%	↓	-12%	48%	↑	31%	4%	↓	25%	18%	↓	13%	2%	↓
MWI	15%	-11%	↓	33%	-2%	↓	-4%	-25%	↓	6%	-6%	↓	9%	-9%	↓
NAM	-10%	12%	↑	4%	-1%	↓	-3%	7%	↑	-3%	-89%	↓	-57%	27%	↑
NER	15%	10%	↓	11%	3%	↓	21%	-2%	↓	4%	7%	↑	20%	-1%	↓
NGA	35%	46%	↑	35%	88%	↑	31%	-16%	↓	41%	18%	↓	26%	15%	↓
RWA	12%	12%	↓	16%	23%	↑	5%	16%	↑	5%	9%	↑	16%	18%	↑
SEN	10%	1%	↓												
SLE	20%	13%	↓	31%	46%	↑	19%	7%	↓	25%	5%	↓	-17%	-19%	↓
SWZ	6%	5%	↓	-17%	28%	↑	2%	7%	↑	-26%	-95%	↓	-45%	136%	↑
SYC	4%	28%	↑	18%	-16%	↓	4%	2%	↓	-19%	-18%	↑	-5%	17%	↑
TGO	18%	10%	↓	54%	-2%	↓	37%	-7%	↓	17%	18%	↑	18%	-10%	↓
TZA	1%	21%	↑	-16%	53%	↑	-13%	10%	↑	-0%	14%	↑	-1%	13%	↑
UGA	14%	13%	↓	20%	4%	↓	2%	17%	↑	16%	11%	↓	17%	11%	↓
ZAF	-3%	17%	↑	-5%	58%	↑	-8%	14%	↑	-9%	16%	↑	-16%	29%	↑
ZMB	15%	18%	↑	105%	8%	↓	5%	21%	↑	51%	6%	↓	18%	29%	↑
ZWE	59%	15%	↓	79%	-25%	↓	71%	15%	↓	22%	19%	↓	138%	-22%	↓
ATO Average	13%	15%	↑	17%	34%	↑	9%	11%	↑	14%	6%	↓	18%	25%	↑

ANNEX 3: CONTRIBUTION OF MAJOR TAXES TO TOTAL REVENUE IN ATO COUNTRIES, 2021-2022

Country	VAT			CIT			PIT			Import Duties			Excise Duties		
	2021	2022	High/Low	2021	2022	High/Low	2021	2022	High/Low	2021	2022	High/Low	2021	2022	High/Low
AGO	27%	26%	↓	10%	14%	↑	23%	20%	↓	8%	6%	↓	1%	1%	↓
BDI	36%	37%	↑	13%	16%	↑	8%	8%	↑	13%	10%	↓	26%	24%	↓
BEN	43%	40%	↓	10%	10%	↓	12%	11%	↓	16%	14%	↓	3%	2%	↓
BFA	32%	34%	↑	18%	24%	↑	7%	9%	↑	9%	12%	↑	4%	4%	↑
BWA	30%	27%	↓	23%	30%	↑	33%	23%	↓	2%	1%	↓	1%	1%	↑
CIV	25%	30%	↑	10%	14%	↑	12%	14%	↑	15%	13%	↓	11%	6%	↓
CMR	34%	35%	↑	17%	20%	↑	13%	13%	↓	12%	10%	↓	15%	14%	↓
COD	35%	24%	↓	28%	44%	↑	15%	14%	↓	9%	9%	↑	7%	6%	↓
CPV	38%	40%	↑	8%	7%	↓	19%	15%	↓	23%	22%	↓	6%	7%	↑
GAB	24%	20%	↓	23%	36%	↑	10%	10%	↓	12%	11%	↓	3%	2%	↓
GHA	18%	18%	↓	24%	25%	↑	16%	15%	↓	11%	11%	↑	1%	1%	↓
GMB	29%	29%	↑	10%	12%	↑	9%	12%	↑	19%	20%	↑	10%	9%	↓
GNB	23%	8%	↓			↓			↓			↓			↓
KEN	27%	27%	↑	12%	13%	↑	24%	25%	↑	7%	6%	↓	14%	14%	↓
␣BR	25%	24%	↓	10%	11%	↑	27%	23%	↓	23%	20%	↓	3%	4%	↑
␣SO	45%	44%	↓	15%	12%	↓	39%	33%	↓		0%	↑		2%	↑
MDG	49%	49%	↑	14%	16%	↑	12%	11%	↓	10%	11%	↑	9%	8%	↓
MOZ	35%	30%	↓	31%	33%	↑	22%	22%	↓			↓	3%	10%	↑
MUR	34%	36%	↑	15%	15%	↓	15%	12%	↓	2%	1%	↓	24%	18%	↓
MUS	35%	35%	↑	14%	17%	↑	4%	4%	↓	4%	4%	↓	12%	10%	↓
MWI	33%	34%	↑	10%	11%	↑	26%	22%	↓	8%	9%	↑	9%	10%	↑
NAM	15%	22%	↑	14%	15%	↑	25%	29%	↑	0%	0%	↓	2%	2%	↑
NER	31%	28%	↓	32%	28%	↓	8%	7%	↓	9%	8%	↓	3%	3%	↓
NGA	19%	15%	↓	34%	35%	↑	12%	5%	↓	9%	6%	↓	1%	1%	↓
RWA	32%	31%	↓	19%	20%	↑	25%	25%	↑	6%	6%	↓	12%	12%	↑
SEN	35%	31%	↓			↓			↓			↓			↓
S␣E	24%	26%	↑	15%	20%	↑	32%	32%	↑	16%	15%	↓	9%	7%	↓
SWZ	31%	29%	↓	16%	17%	↑	40%	35%	↓	1%	1%	↓	1%	2%	↑
SYC	35%	41%	↑	19%	15%	↓	18%	16%	↓	3%	4%	↑	19%	21%	↑
TGO	42%	42%	↑	15%	13%	↓	9%	8%	↓	21%	22%	↑	7%	6%	↓
TZA	28%	27%	↓	12%	16%	↑	14%	14%	↓	11%	11%	↑	15%	14%	↓
UGA	31%	31%	↓	9%	8%	↓	18%	18%	↑	8%	8%	↓	9%	23%	↑
ZAF	27%	25%	↓	16%	21%	↑	39%	36%	↓	3%	2%	↓	11%	11%	↑
ZMB	23%	23%	↑	23%	23%	↑	18%	20%	↑	6%	6%	↓	5%	6%	↑
ZWE	29%	29%	↑	24%	17%	↓	20%	22%	↑	8%	9%	↑	14%	16%	↑
ATO Average	31%	30%	↓	17%	19%	↑	19%	18%	↓	10%	9%	↓	9%	8%	↓

ANNEX 4: PROPORTION OF MAJOR TAXES TO GDP IN ATO COUNTRIES, 2021-2022

Country	VAT			CIT			PIT			Import Duties			Excise Duties		
	2021	2022	High/Low	2021	2022	High/Low	2021	2022	High/Low	2021	2022	High/Low	2021	2022	High/Low
AGO	2,2%	2,3%	↑	0,8%	1,2%	↑	1,8%	1,7%	↓	0,6%	0,5%	↓	0,1%	0,1%	L
BDI	5,4%	6,0%	↑	2,0%	2,4%	↑	1,2%	1,3%	↑	1,9%	1,5%	↓	3,8%	3,7%	L
BEN	4,8%	5,4%	↑	1,1%	1,3%	↑	1,3%	1,5%	↑	1,7%	1,9%	↑	0,3%	0,3%	H
BFA	5,4%	6,1%	↑	2,8%	3,6%	↑	1,1%	1,3%	↑	1,5%	1,9%	↑	0,6%	0,6%	H
BWA	5,1%	5,4%	↑	3,0%	4,6%	↑	4,3%	3,6%	↓	0,2%	0,1%	↓	0,1%	0,2%	H
CIV	3,4%	3,3%	↓	1,3%	1,4%	↑	1,4%	1,4%	↑	1,8%	1,4%	↓	1,4%	0,6%	L
CMR	4,5%	4,9%	↑	2,1%	2,6%	↑	1,6%	1,7%	↑	1,4%	1,3%	↓	1,9%	1,8%	L
COD	2,9%	2,9%	↑	2,3%	5,3%	↑	1,2%	1,7%	↑	0,7%	1,2%	↑	0,6%	0,8%	H
CPV	7,3%	7,3%	↑	1,5%	1,3%	↓	3,6%	2,6%	↓	4,2%	3,9%	↓	1,1%	1,3%	H
GAB	2,9%	2,7%	↓	2,2%	3,9%	↑	1,0%	1,0%	↑	1,1%	1,2%	↑	0,3%	0,2%	L
GHA	2,5%	2,6%	↑	3,3%	3,5%	↑	2,2%	2,1%	↓	1,5%	1,6%	↑	0,2%	0,2%	L
GMB	3,5%	3,1%	↓	1,2%	1,2%	↓	1,0%	1,1%	↑	2,3%	1,9%	↓	1,2%	0,8%	L
GNB	2,7%	1,9%	↓												
KEN	3,8%	4,2%	↑	1,6%	1,9%	↑	3,3%	3,7%	↑	1,0%	0,9%	↓	1,9%	2,0%	H
LBR	3,1%	3,0%	↓	1,3%	1,3%	↑	3,4%	2,9%	↓	2,9%	2,5%	↓	0,4%	0,5%	H
LSO	8,9%	11,8%	↑	2,3%	2,5%	↑	6,1%	6,9%	↑		0,0%	↑		0,5%	H
MDG	5,5%	5,7%	↑	1,5%	1,7%	↑	1,2%	1,2%	↓	1,1%	1,2%	↑	0,9%	0,9%	L
MOZ	8,0%	7,8%	↓	6,2%	7,2%	↑	4,3%	4,7%	↑			↓	0,5%	2,2%	H
MUR	7,8%	9,0%	↑	2,5%	3,2%	↑	2,5%	2,7%	↑	0,3%	0,3%	↑	4,0%	3,9%	L
MUS	8,3%	9,3%	↑	2,9%	4,1%	↑	0,8%	0,8%	↑	0,9%	1,0%	↑	2,4%	2,4%	L
MWI	3,9%	3,2%	↓	1,2%	1,0%	↓	3,0%	2,1%	↓	0,9%	0,8%	↓	1,1%	0,9%	L
NAM	9,2%	8,9%	↓	4,2%	3,6%	↓	7,7%	7,1%	↓	0,1%	0,0%	↓	0,5%	0,6%	H
NER	3,2%	3,1%	↓	3,3%	3,0%	↓	0,9%	0,7%	↓	1,0%	0,9%	↓	0,3%	0,3%	L
NGA	1,2%	1,5%	↑	2,2%	3,5%	↑	0,7%	0,5%	↓	0,6%	0,6%	↑	0,1%	0,1%	L
RWA	5,9%	5,6%	↓	3,0%	3,2%	↑	3,9%	3,9%	↓	1,0%	0,9%	↓	1,9%	1,9%	H
SEN	6,2%		↓			↓			↓			↓			L
SLE	2,8%	2,6%	↓	1,7%	2,1%	↑	3,7%	3,3%	↓	1,8%	1,6%	↓	1,1%	0,7%	L
SWZ	7,0%	6,9%	↓	2,2%	2,6%	↑	5,4%	5,4%	↓	0,1%	0,1%	↓	0,1%	0,3%	H
SYC	10,4%	10,5%	↑	5,4%	3,6%	↓	5,0%	4,0%	↓	0,9%	0,9%	↑	5,4%	5,0%	L
TGO	7,0%	7,2%	↑	2,4%	2,2%	↓	1,5%	1,3%	↓	3,4%	3,7%	↑	1,2%	1,0%	L
TZA	3,4%	3,8%	↑	1,4%	2,0%	↑	1,6%	1,6%	↓	1,3%	1,3%	↑	1,8%	1,7%	L
UGA	3,9%	4,1%	↑	1,1%	1,0%	↓	2,1%	2,2%	↑	0,9%	1,0%	↑	1,1%	2,8%	H
ZAF	10,0%	10,4%	↑	3,6%	5,1%	↑	8,7%	8,8%	↑	0,6%	0,6%	↑	2,5%	2,8%	H
ZMB	7,3%	7,3%	↓	4,6%	4,2%	↓	3,5%	3,6%	↑	1,2%	1,1%	↓	0,9%	1,0%	H
ZWE	4,2%	5,0%	↑	3,1%	2,4%	↓	2,6%	3,1%	↑	1,1%	1,3%	↑	1,9%	2,2%	H
ATO Average	5,3%	5,4%	↑	2,5%	2,8%	↑	2,9%	2,8%	↓	1,3%	1,2%	↓	1,3%	1,3%	H

ANNEX 5: ESTIMATING THE APPROPRIATE LEVEL OF VAT REFUNDS

Estimating the appropriate level of VAT refunds

VAT is one of the most important taxes in the world, both in terms of its global adoption and revenue-generating potential, (IMF, 2021). However, like any tax, VAT is vulnerable to tax evasion and fraud. VAT refunds account for a large proportion of gross VAT revenue collected in some ATO countries as seen in Figure 3.11, which could be an indication of possible tax fraud. Common VAT fraud risks include non-registration, under-reported sales, misclassification of commodities, non-remittance of collected VAT, and fraudulent VAT refunds. VAT refunds, which are distinctive to VAT, are a major challenge for many tax administrations and can easily weaken VAT operations.

There are several economic transactions that normally result in an increase in VAT claims, and these are:

- Exports and zero-rated products
- Investment, and inventory buildup which results in input VAT being higher than output VAT.
- The use of withholding and reverse charge mechanisms
- The implementation of lower VAT rates alongside the normal rates.

These achievements underscore the significance of data-driven processes and compliance initiatives combined with appropriate analytical tools for tax administrations. Data-driven insights play a crucial role in encouraging voluntary compliance, identifying, and addressing non-compliance, and ultimately enhancing tax revenue collections.

Tax administrations need to have an estimated level of refunds that they anticipate paying for better resource planning and budgetary purposes, and to be able to detect fraudulent activities by taxpayers. The IMF provides a methodology which estimates a reasonable level of refunds, assuming a simply designed and perfectly administered VAT.

In a simple economy where the tax administration pays VAT refund claims promptly, refunds as a proportion of gross VAT revenue under a fully functioning, single-rate, VAT would be:

$$\text{VAT refunds level} = (\alpha I + \beta(1-\lambda) Z) / e$$

Where:

I: denote the shares of investment in GDP

Z: denote the shares of zero-rated items (including exports) in GDP

α: is the proportion of investment that generates excess VAT credits (a quantity that one would expect to be higher in faster-growing economies)

β: is the proportion of zero-rated sales that generates excess VAT credits (and would be larger to the extent that sellers of zero-rated goods do not also supply taxable goods.

λ is the ratio of value added to sales in the zero-rated sector

e: is the gross efficiency ratio (gross VAT collections as a percent of GDP per percentage point of tax).

From the refunds function above it is evident that VAT refunds would be higher when the level of investment increases and for more open economies. Tax administrations need to ensure that they are equipped with strategies to identify VAT refund fraud, while refunding authentic taxpayers promptly.

Source: (IMF, 2021)

ANNEXURE 6: TAX REVENUE PROJECTIONS FOR 2023 AND 2024

S/No.	Country	Total Tax Revenue		TTR Buoyancy	GDP Growth Rates		Projected Total Tax Revenue	
		2021	2022		2023	2024	2023	2024
1	Angola	3,161,928,961,015.48	3,805,552,724,994.00	1.34	1.30%	4,664,441,672,495.64	4,870,918,712,335.73	
2	Benin	975,526,572,267.00	1,090,619,311,303.00	3.18	5.50%	1,715,004,054,541.70	2,058,587,966,828.59	
3	Botswana	26,398,401,000.00	22,329,587,705.00	1.86	3.80%	35,864,754,504.62	38,603,700,478.17	
4	Burundi	921,475,068,151.00	1,032,714,719,559.00	1.85	3.30%	1,242,824,686,129.02	1,380,881,658,116.45	
5	Cameron	2,807,122,991,969.00	3,118,712,609,925.00	1.77	4.00%	3,826,250,936,324.37	4,111,232,391,544.86	
6	Cabo Verde	31,782,679,312.00	33,377,530,471.00	0.89	4.40%	45,633,751,436.46	47,461,383,181.49	
7	Congo, DR	5,681,686,877,032.05	8,974,331,123,446.15	5.22	6.70%	20,684,456,622,860.90	25,758,174,639,012.00	
8	Cote d'Ivoire	2,992,516,335,567.00	4,891,107,715,697.00	0.35	6.20%	5,168,297,441,344.28	5,287,685,112,239.33	
9	Eswatini	10,216,215,758.59	10,253,044,825.00	0.98	3.10%	11,304,998,255.70	11,670,601,899.29	
10	Gabon	962,558,459,523.00	1,064,725,052,275.00	2.20	2.80%	1,559,657,875,545.47	1,648,977,015,206.23	
11	The Gambia	9,998,151,132.05	12,510,731,290.63	0.03	5.60%	12,602,282,383.71	12,627,787,706.76	
12	Ghana	49,489,157,994.20	63,343,170,000.00	1.08	1.20%	86,447,862,961.15	88,967,696,392.66	
13	Kenya	1,509,751,191,791.00	1,539,584,043,836.93	1.80	5.00%	2,066,787,485,782.91	2,264,020,604,081.30	
14	Lesotho	7,738,534,144.32	5,908,205,252.70	-1.39	2.10%	6,674,031,198.62	6,460,807,237.09	
15	Liberia	389,858,186.00	477,813,317.00	0.22	4.60%	498,329,141.14	504,139,658.92	
16	Madagascar	4,706,291,796,158.00	5,705,179,542,426.00	1.29	4.00%	7,182,216,439,251.54	7,626,661,223,146.95	
17	Malawi	1,003,484,659,175.84	1,108,603,591,889.00	-1.43	1.70%	936,244,567,454.92	891,979,626,528.33	
18	Mauritius	84,281,941,479.44	84,881,348,515.63	1.97	5.10%	117,194,943,474.06	125,962,485,563.85	
19	Namibia	58,381,286,666.63	55,936,839,976.35	-0.33	2.80%	52,581,735,714.56	52,119,489,376.11	
20	Niger	786,015,936,924.00	862,111,252,587.00	1.24	4.10%	1,084,105,743,712.84	1,232,956,746,238.39	
21	Nigeria	6,928,901,064,457.34	11,129,206,701,017.40	5.60	2.90%	23,721,515,605,255.60	27,842,598,129,219.80	
22	Rwanda	1,474,420,230,211.00	1,635,751,555,380.00	0.93	6.20%	1,996,120,060,009.16	2,126,213,556,386.52	
23	Senegal	2,366,859,345,720.00	2,585,329,197,282.00	1.62	4.10%	3,335,582,538,256.27	3,809,680,635,124.29	
24	Seychelles	6,023,716,089.40	6,230,346,238.43	0.41	4.20%	7,024,278,430.44	7,136,029,775.39	
25	Sierra Leone	4,259,101,348,329.75	5,193,372,821,122.81	0.33	2.70%	5,612,825,100,602.36	5,700,101,466,149.49	
26	South Africa	1,355,766,257,945.47	1,249,711,234,819.01	2.00	3.50%	1,673,084,265,465.38	1,813,452,872,269.82	
27	Tanzania	17,674,081,287,293.5	17,658,557,346,321.00	1.61	5.20%	21,666,701,531,278.20	23,794,588,288,665.00	
28	Togo	651,675,604,581.00	779,575,719,138.00	1.39	5.40%	929,649,098,141.32	998,136,347,201.39	
29	Uganda	15,962,623,493,458.70	17,662,900,684,798.60	1.63	4.60%	21,940,557,857,916.80	23,979,055,088,495.90	
30	Zambia	57,422,588,702.88	83,572,482,468.79	0.42	3.60%	91,297,236,349.03	92,946,064,437.49	
31	Zimbabwe	2,826,882,866.78	4,538,124,938.79	-0.29	4.10%	4,586,773,403.36	4,538,887,489.03	

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