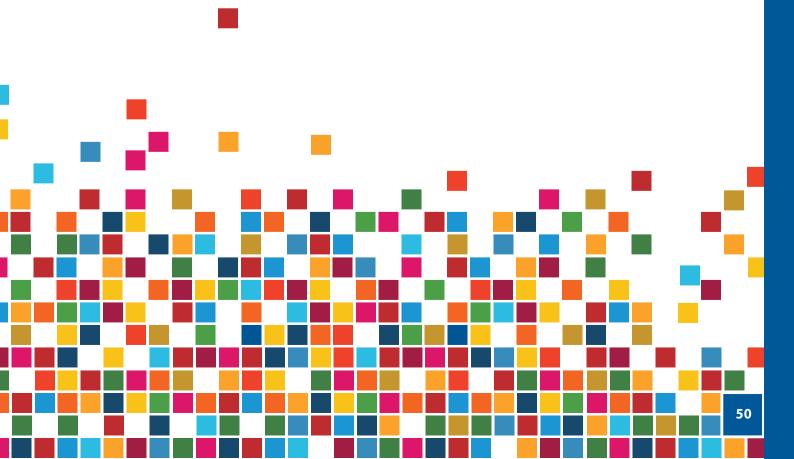
TAX POLICY AND PERFORMANCE IN AFRICA



frica has a low tax capacity (ability to collect taxes) of about 20 per cent of GDP and a lower tax revenue to GDP ratio (17 per cent) than other regions, largely because of inefficiencies in tax policy and revenue collection. Thus, addressing tax capacity constraints and collection inefficiencies could boost tax revenue in Africa by 3 per cent of GDP (the difference between the current tax ratio and tax capacity).

Collection efficiency for the value-added tax (VAT) in many African countries is less than 50 per cent, and property and wealth taxation are still un-tapped sources of revenue.

Improving tax governance by combating corruption and bolstering accountability could reduce inefficiencies and, on average, mobilize up to \$72 billion a year—about a third of the estimated average investment financing gap of \$230 billion for achieving the Sustainable Development Goals (SDGs) and Agenda 2063 in Africa.

Africa's weighted average ratio of taxes to GDP was 17 per cent over 2000–2018.

INTRODUCTION

Tax policy—the instruments governments use to raise revenue by taxing economic activities—is an important revenue component of fiscal policy. It is also sensitive to microeconomic aspects of fairness (who to tax and how much) and allocative efficiency (which taxes will minimize the distortions in economic activity) to support higher economic growth. Tax policy in Africa focuses on scaling up domestic revenue mobilization to enable countries to implement development strategies to achieve the SDGs and the aspirations of Agenda 2063.

This chapter explores how to leverage tax policy to raise more revenue for financing sustainable development in Africa. It takes stock of tax policy since 2000, draws lessons from tax policy reforms in Africa and best practices around the world and examines the tax system and the performance of different taxes. It also identifies what needs to be done to increase tax revenue to finance sustainable development.

TRENDS IN TAX POLICY AND PERFORMANCE

Africa's weighted average tax to GDP ratio was 17 per cent over 2000–2018.¹ It improved from 17.9 per cent in 2000 to 19.9 per cent in 2005, the period high, but has since trended downwards, reaching its lowest level of 12.9 per cent in 2016 and was 14.6 per cent in 2018 (figure 3.1). This trend was reflected in both direct taxes and indirect taxes, which peaked at 5.5 per cent and 12.6 per cent, respectively, in 2004. Resource

¹ The analysis in this chapter is based on data from the Government Revenue Dataset, compiled by the International Centre for Tax and Development and United Nations University World Institute for Development Economics Research from multiple sources and last accessed in November 2018 (ICTD and UNU-WIDER, 2018). As of November 2018, the data set covered up to 2016, so data for 2017 and 2018 are forecast. Not all countries had a full set of data, and therefore data on some variable are averages of the available data.

Direct Indirect Resource taxes 20% 17.9% 18.0% 17.5% 17.1% 16.8% 17.0% 16.5% 15.4% 15.3% 15.0% 15% PER CENT OF GDP 12.9% 10% 5% 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018

YEARS

FIGURE 3.1. TRENDS IN TAX REVENUE AND IT COMPONENTS IN AFRICA, 2000-2018

Note: Data are estimated for 2017 and 2018.

Source: Based on data from ICTD and UNU-WIDER (2018), accessed in November 2018

taxes followed the same general trend, rising from 1.5 per cent in 2000 and peaking at 3.2 per cent in 2006, before gradually falling to 0.35 per cent in 2016, with a slight recovery to 1.9 per cent in 2017 and 2018.

Tax revenue declined over this period, with the continental weighted tax ratio averaging 17 per cent of GDP, well below the 20 per cent ratio needed to help countries fast track achievement of the SDGs.

The overall decline in the weighted average tax revenue to GDP ratio for Africa between 2000 and 2018 reflected drops in 29 of 51 countries with data, including major economies such as Angola, Ethiopia, Kenya, Morocco and Nigeria. However, in a subgroup of 19 countries, the number of countries with a tax revenue to GDP ratio of at

least 10 per cent increased from 9 in 2000 to 16 in 2018 (table 3.1). Between 2000 and 2018, four countries (Democratic Republic of the Congo, Eswatini, Malawi and Mozambique) increased their ratio by at least 10 percentage points, and seven countries (Congo, Gambia, Guinea, Namibia, Rwanda, Tanzania and Togo) increased it by 5–9 per cent. Twelve countries had an average tax revenue to GDP ratio of at least 10 per cent over 2000–2008, compared with 16 over 2009–2018, with Mozambique (9.6 per cent), Malawi (6 per cent) and Namibia (5.5 per cent) recording the largest increases between the two periods.

Furthermore, whereas only 3 of the 19 countries (Eswatini, 18 per cent; Namibia, 26 per cent; and Senegal, 16 per cent) had a tax to GDP ratio of at least 15 per cent in 2000, 12 of them did so by 2018 suggesting potential for many African countries

TABLE 3.1. IMPROVEMENTS IN AVERAGE WEIGHTED RATIOS OF TAX REVENUE TO GDP IN 22 AFRICAN COUNTRIES BETWEEN 2000–2004 AND 2014–2018

COUNTRY	WEIGHTED TAX TO GDP RATIOS (%)		2000 - 2018 INCREASE	AVERAGE W TO GDP R	INTER-PERIOD INCREASE	
	2000	2018	(PERCENTAGE POINT)	2000 - 2008 Fast growth	2009 - 2018 Post crisis	(PERCENTAGE POINT)
Burkina Faso	11	15	4	12	14	2.0
Cameroon	11	13	2	11	12	0.9
Chad	6	6	0	5	6	0.8
Congo, Dem. Rep.	1	12	11	5	10	4.6
Congo	6	11	5	8	10	2.7
Côte d'Ivoire	14	15	1	14	15	0.7
Eswatini	18	31	13	22	26	4.2
Gambia	11	17	6	12	15	3.1
Guinea	8	16	8	9	14	4.7
Guinea-Bissau	7	9	3	5	8	2.9
Malawi	8	18	10	10	16	6.0
Mozambique	9	23	14	10	20	9.6
Namibia	26	34	8	25	31	5.5
Niger	8	13	4	10	12	1.5
Rwanda	10	15	5	11	14	2.5
Senegal	16	20	4	18	19	1.6
Sudan	5	7	2	6	7	0.2
Tanzania	7	13	6	8	11	3.1
Togo	11	20	9	14	18	3.8

Note: Data are estimated for 2017 and 2018.

Source: Based on data from ICTD and UNU-WIDER (2018), accessed in November 2018.

to make progress towards the goal of 20 per cent (Coulibaly and Gandhi, 2018).

While the number of countries with an average tax revenue to GDP ratio of more than 20 per cent remained stable at 9 between 2000–2008 and 2009–2018 (figure 3.2), some countries increased their tax revenue collection despite the declining growth trend from 2009 onwards. The number of countries with a tax revenue to GDP ratio of 0–10 per cent decreased from 15 over 2000–2008 to 9 over 2009–2018, while the number with a ratio of 10–20 per cent increased from 26 to 33 over the same periods.

STRUCTURE OF THE TAX SYSTEM AND PERFORMANCE OF TAX TYPES

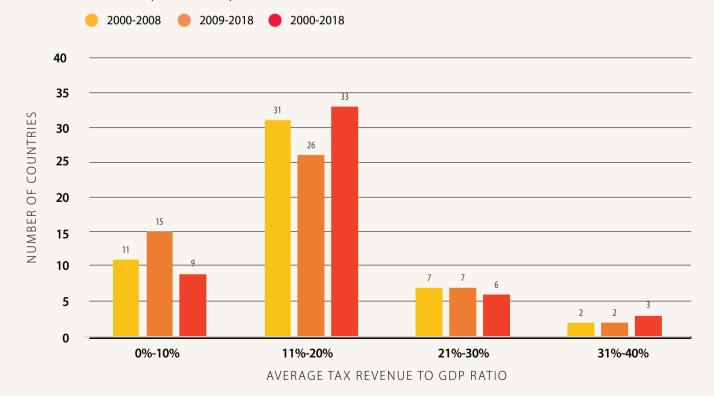
The primary function of the tax system is to generate revenue for the government while ensuring economic efficiency and easing the tax burden on the poorest segments of society through tax structures with some progressivity. Tax structures influence the incidence of each type of tax. Having an efficient tax system is a key consideration in achieving Agenda 2063 and the SDGs.

Taxes include direct taxes and indirect taxes. The main components of direct taxes are taxes on individual and corporate income, payroll and workforce taxes, and property taxes. The main components of indirect taxes are taxes on goods and services (sales taxes, VAT, turnover taxes and taxes on financial and capital transactions), excise duties and international trade taxes. How various tax components perform over time can inform the tax policy debate by revealing the evolution of tax structures and the contribution of each tax type to government revenue.

Emerging from a prolonged period of stagnant economic growth in the 1980s and early 1990s, and encouraged by signs of positive growth in the late 1990s, African countries entered the 21st century determined to improve their tax revenue collection by introducing tax reforms.

Tax revenue rose over 2000–2004 (table 3.2). Revenue from direct taxes as a share of GDP barely rose from 5.0 per cent in 2000 to peak at 5.5 per cent in 2004 before gradually declining to 3.5 per cent in 2016; it is estimated to have increased to 3.9 per cent in 2017 and 3.7 per cent in 2018. Revenue from indirect taxes as a share of GDP followed the same pattern, rising from 11.4 per cent in 2000 to peak at 12.6 per cent in 2004, then dropping gradually to 9.0 per cent in 2016, with modest improvement to 9.3 per cent in 2017. Revenue from resource taxes as a share of GDP began at 1.5 per cent in 2000, peaking later than other tax types at 3.2 per cent in 2006 and falling gradually at first, to 2.3 per cent in 2013, then rapidly to 0.3 per cent in 2016, before recovering to 1.9 per cent in 2017 and 2018, reflecting the impact of the slump in commodity prices that began in 2014. The performance of individual components of each tax type varied, however.

FIGURE 3.2. DISTRIBUTION OF AFRICAN COUNTRIES BY AVERAGE TAX REVENUE TO GDP RATIO, 2000–2008, 2009–2018 AND 2000–2018



Note: Data are estimated for 2017 and 2018.

Source: Based on data from ICTD and UNU-WIDER (2018), accessed in November 2018

TABLE 3.2. TRENDS IN TAX REVENUE BY TAX TYPE AND COMPONENT, 2000-2018 (PER CENT OF GDP)

		DIRECT	INDIRECT TAXES							
	Personal income	Corporate income	Payroll and workforce	Property taxes	Goods and services	VAT	Excise duties	International trade	Other taxes	RESOURCE TAXES
2000	3.01%	1.64%	0.05%	0.30%	5.13%	1.98%	1.23%	2.52%	0.50%	1.52%
2001	2.85%	1.81%	0.07%	0.22%	5.17%	2.07%	1.19%	2.52%	0.53%	1.55%
2002	2.67%	1.82%	0.07%	0.22%	5.26%	2.39%	1.28%	2.13%	0.38%	1.25%
2003	2.96%	2.03%	0.10%	0.31%	5.66%	2.76%	1.36%	2.03%	0.38%	1.36%
2004	3.05%	2.08%	0.10%	0.28%	5.79%	3.01%	1.35%	2.00%	0.40%	1.72%
2005	2.87%	2.24%	0.09%	0.27%	5.56%	2.93%	1.23%	1.83%	0.41%	2.43%
2006	2.61%	2.34%	0.08%	0.23%	5.18%	2.79%	1.12%	1.70%	0.33%	3.17%
2007	2.53%	2.32%	0.07%	0.23%	5.20%	2.72%	1.02%	1.59%	0.26%	2.93%
2008	2.15%	2.20%	0.06%	0.18%	4.86%	2.45%	0.90%	1.47%	0.25%	2.82%
2009	2.31%	2.10%	0.07%	0.27%	5.10%	2.44%	1.08%	1.44%	0.28%	1.74%
2010	2.31%	1.90%	0.07%	0.25%	5.29%	2.62%	0.98%	1.31%	0.22%	2.02%
2011	2.33%	1.98%	0.08%	0.28%	5.21%	2.58%	1.01%	1.31%	0.22%	2.66%
2012	2.21%	1.77%	0.08%	0.26%	5.00%	2.50%	0.98%	1.42%	0.25%	2.65%
2013	2.15%	1.74%	0.07%	0.24%	4.96%	2.46%	0.95%	1.36%	0.30%	2.28%
2014	2.14%	1.47%	0.07%	0.24%	4.75%	2.31%	0.87%	1.33%	0.29%	1.95%
2015	2.25%	1.47%	0.08%	0.25%	5.05%	2.31%	1.02%	1.33%	0.29%	1.22%
2016	1.98%	1.24%	0.06%	0.22%	4.74%	2.02%	0.98%	1.05%	0.24%	0.35%
2017f	1.93%	1.62%	0.07%	0.24%	4.85%	2.41%	0.87%	0.94%	0.19%	1.93%
2018f	1.87%	1.53%	0.07%	0.24%	4.77%	2.32%	0.84%	0.86%	0.18%	1.86%

Note: Data are estimated for 2017 and 2018.

Source: Based on data from ICTD and UNU-WIDER (2018), accessed in November 2018.

Among direct taxes, revenue from personal income taxes as a share of GDP declined almost continuously, from 3.0 per cent in 2000 to 1.9 per cent in 2018, indicating low personal income tax responsiveness to the robust economic growth on the continent. Revenue from corporate income taxes as a share of GDP rose initially, from 1.6 per cent in 2000 to 2.3 per cent in 2006, before gradually declining to 1.5 per cent in 2018. Revenue from payroll and workforce taxes (about 0.1 per cent of GDP over 2000–2018) and property taxes (about 0.2–0.3 per cent) has been largely inconsequential. If properly harnessed by expanding the tax base, these last two components could increase tax revenue.

Nearly all indirect taxes followed the same pattern: a brief rise until 2003 or 2004 and then a gradual decline. Revenue from taxes on goods and services as a share of GDP rose slightly, from 5.1 per cent in 2000 to 5.8 per cent in 2004, and then gradually declined to its lowest level in 2016, at 4.7 per cent. Similarly, VAT revenue as a share of GDP rose from 2.0 per cent in 2000 to 3.0 per cent in 2004, before drifting down to 2.0 per cent in 2016. Revenue from excise duties as a share of GDP rose from 1.2 per cent in 2000 to a high of 1.4 in 2003 and declined thereafter, dwindling to 1 per cent in 2016. For revenue from international trade taxes and other taxes, the decline began earlier. Trade tax revenue as a share of GDP dropped from a high of 2.5 per cent in 2000 to 1 per cent in 2016, while other tax revenue as a share of GDP dropped from a high of 0.5 per cent in 2000 to 0.2 per cent in 2016.

Resource tax revenues marginally declined from 1.5 per cent of GDP in 2000 to 1.2 per cent in 2002, and gradually rose to 3.2 per cent by 2006, before falling

to 1.7 per cent in 2009. They improved to 2.7 per cent of GDP in 2011 and 2012 and fluctuated widely before stabilizing at 1.9 per cent of GDP in 2017 and 2018 thanks to improvement in commodity prices.

Tax structures varied across countries over 2000–2018. In a sample of 12 African countries, taxes on goods and services were the principal source of tax revenue in 9 countries (Benin, Egypt, Mauritius, Morocco, Rwanda, Senegal, Seychelles, Tunisia and Zimbabwe), while trade taxes dominated in two (Eswatini and Namibia) (figure 3.3). Revenue from taxes on goods and services as a share of GDP was at least 5.0 per cent in all countries except Eswatini (3.0 per cent) and Sierra Leone (3.0 per cent). Revenue from personal income taxes as a share of GDP was at least 4 per cent in five countries but was only 1 per cent in Egypt and Seychelles. Revenue from

corporate taxes as a share of GDP was 2 per cent or less in most countries except Seychelles (6 per cent), Morocco (4 per cent) and Namibia (3 per cent).

These variations in tax structure underscore the importance of tailoring tax reforms and tax structures to country conditions when the aim is to improve tax mobilization.

TAX POLICY REFORMS AND IMPACTS

Since 2000 several African countries have reformed their tax policy and tax administration to mobilize additional revenue for development. Tax policy reforms included adjusting tax rates and broadening the tax base. Key reforms in the administration

FIGURE 3.3. AVERAGE TAX STRUCTURES IN SELECTED AFRICAN COUNTRIES, 2000–2018 Personal income tax Corporate tax Goods and services taxes Trade taxes 30 25 PER CENT OF GDP (%) 20 15 10 Benin Côte d'Ivoire Ethiopia Morocco Nigeria Rwanda Mauritius Vamibia ierra Leone Tunisia Eswatini Seychelles South Africa Senegal Zimbabwe

Note: Data are estimated for 2017 and 2018.

of taxes included integrating revenue collection responsibilities within a single agency, often a semi-autonomous revenue authority (Moore, 2013), and promoting compliance among taxpayers (discussed in chapter 5).

ADJUSTING TAX RATES

A number of African countries reduced tax rates, in line with the warnings in the Laffer curve literature about the detrimental revenue effect of excessively high tax rates (see, for instance, Laffer, 2004; Khaldun, 1967; Wanniski, 1978).² Countries made other adjustments as well.

To encourage investment, some African countries reduced or simplified the corporate income tax rate. In 2006 Lesotho reduced the standard corporate income tax rate from 35 per cent to 25 per cent and the rate for manufacturers from 15 per cent to 10 per cent to encourage private sector growth ATAF, 2017). Revenue from corporate income taxes rose from 1.7 per cent of GDP in 2006 to 2.1 per cent in 2007 and to 4 per cent in 2009.

system with a single tax of 22 per cent (ATAF, 2017)³. Tanzania began modernizing its tax system and tax administration in 2004, which has improved tax revenue collection and increased e-filing (see box 3.1). And in 2017, Tanzania reduced the corporate income tax rate for assemblers of vehicles, tractors and fishing boats from 30 per cent to 10 per cent for the first five years of operations to encourage manufacturing growth. In 2018 Kenya reduced the corporate income tax rate for property developers who construct more than 400 housing units and for vehicle assemblers from 30 per cent to 15 per cent (ATAF, 2017). It is too early to determine the impact of these reforms.

In 2015, Egypt replaced its two-tier corporate tax

Countries have also reformed personal income taxes. In 2017, South Africa increased the marginal income tax rate for individuals from 41 per cent to 45 per cent. To cushion taxes against the effects of inflation, South Africa regularly reviews personal income tax brackets and tax relief measures; recent reviews were conducted in 2013 and 2016 (National Treasury and SARS, 2016). A 2013 reform resulted in revenue from personal income taxes as a share of GDP increasing from 8.9 per cent in 2013 to 9.8 per cent in 2016. Other countries have lowered rates. To

3 In 2018, the average statutory corporate tax rates ranged from 18.4 per cent in Europe, 21.6 in EU countries, 23.7 in OECD countries, 23 per cent across all 208 jurisdictions, to 28.8 per cent in Africa (Tax Foundation, 2018) (see annex 3.2).

BOX 3.1. LESSONS FROM TANZANIA ON INTEGRATED TAX REFORM

Tanzania's debt was increasing while tax revenue collection remained low, at 10.8 per cent of GDP in 2005 (World Bank, 2017). With the support of the World Bank, Tanzania embarked on the Tax Modernization Project to improve the efficiency and effectiveness of tax administration by the Tanzania Revenue Authority by (IEG, 2012):

Building the capacity of tax administrators.

- Educating taxpayers on how to file and pay taxes.
- Training staff to avoid corruption.
- Automating systems for registering, documenting and collecting taxes.
- Introducing an e-filing system.
- Creating stronger infrastructure for monitoring and evaluation (using two digital forensics laboratories to enhance the capacity of the tax investigation unit; World Bank, 2017).

As a result of these measures:

- Revenue collection improved on average by 21 per cent over 2007—2011.
- E-filing of value-added taxes increased from less than 500 in 2009 to over 4,000 in 2011.
- A new mobile tax payment system for property taxes registered 376,666 taxpayers in 2011.

² The Laffer curve expresses the relationship between tax rates and tax revenue as a trade-off between higher tax rates and higher revenue, showing that there is a point on the curve at which raising the tax rate lowers rather than increases overall revenue; if the tax rate is higher than that rate, cutting it would increase revenue collection (Laffer, 2004).



Tanzania embarked on the Tax Modernization Project to improve the efficiency and effectiveness of tax administration.



make personal income tax rates more progressive, Kenya reviewed and increased the number of bands and increased the personal relief rates (thresholds for tax liability) by 10 per cent in 2016 and 2017 (Government of Kenya, 2016). In 2018 Mauritius reduced the personal income tax rate from 15 per cent to 10 per cent for income below \$18,840 a year (Government of Mauritius, 2018). It is too short to assess the impact of the reforms in Kenya and Mauritius.

BROADENING THE TAX BASE

To increase domestic revenue mobilization, several African countries have implemented measures to broaden the tax base by introducing or adjusting capital gains taxes or consumption taxes.

Many African countries have some form of capital gains tax. Some countries exempt capital gains from listed securities and apply a reduced rate to gains on unlisted shares. For example, South Africa introduced a capital gains tax in 2001, while Kenya, following many unsuccessful attempts, reintroduced the tax in 2015 after a 30-year suspension (Government of Kenya, 2014).

Goods and services (sales) taxes, the principal source of tax revenue in many countries, have undergone many reforms since 2000, ranging from introducing the VAT to replace those taxes to adjusting VAT rates. Botswana introduced a 10 per cent VAT in April 2002 and then raised it to 12 per cent in April 2010 following the financial crisis (Bakwena, 2012). Rwanda and Egypt replaced sales taxes with a VAT. Rwanda replaced the 15 per cent sales tax in 2001 with a 15 per cent VAT and then raised it to 18 per cent in 2002 (Government of Rwanda, 2001); VAT revenue rose from 3.2 per cent of GDP in 2001 to 4.7 per cent in 2016. Egypt replaced its 10 per cent goods and services tax with a 13 per cent VAT in 2016 and raised it to 14 per cent in 2017 (Rahman, 2017).

VAT revenue as a share of continental GDP barely increased between 2000 and 2018, from 2 per cent to 2.3 per cent, and increased by at least a percentage point in 11 of the 30 African countries with available data (table 3.3). It increased the most in Mauritania (7.3 percentage points), Benin (3.8 per cent), Guinea (3.3 per cent), Burkina Faso (3.4 per cent) and Ghana (2.6 per cent).

TABLE 3.3. REVENUE FROM VALUE ADDED TAXES AS A SHARE OF GDP, 2000–2018 (%)

COUNTRY	2000	2008	2018F
Benin	3.8	6.8	7.6
Burkina Faso	3.3	4.8	6.7
Cameroon	4.4	5.3	6.0
Cabo Verde		8.7	4.7
Central African Republic		2.4	
Côte d'Ivoire	3.8		0.6
Dem. Rep. of the Congo			4.2
Gabon	1.9	1.2	1.9
Ghana	2.9	4.3	5.5
Guinea	1.6		4.9
Kenya	3.8	4.6	3.2
Lesotho		6.2	7.3
Madagascar		2.2	6.3
Malawi	2.9		4.6
Mali	3.9	4.4	5.3
Mauritania	2.8		10.1
Morocco		8.5	9.3
Mozambique	4.0		5.2
Nigeria	0.8	1.0	0.9
Rwanda		4.4	5.0
Senegal	6.6	7.3	7.6
Seychelles		10.3	9.3
South Africa	5.8	6.5	7.0
Sudan	0.5		2.7
Tanzania	2.7	3.2	2.9
Togo		6.4	9.6
Tunisia	6.1	6.0	6.0
Uganda	3.2	3.5	3.6
Zambia		3.3	3.3
Zimbabwe		0.5	8.7
Africa	2.0	2.4	2.3

Note: Data are estimated for 2017 and 2018.

Source: Based on data from ICTD and UNU-WIDER (2018), accessed in November 2018.



Tax avoidance and evasion—by taking advantage of loopholes or exceptions, liberally interpreting tax codes or even falsifying invoices—results in large losses in tax revenue in Africa.

Lesotho replaced the sales tax with the VAT in 2003 to stop the abuse of tax exemption certificates and close loopholes used by suppliers to evade sales taxes (Koatsa and Nchake, 2017). VAT revenue rose from 5.9 per cent of GDP in 2003 to 7.5 per cent in 2014 before drifting down to 6.7 per cent in 2016. Other countries focused on adjusting VAT rates and the list of exemptions or zero-rated products. Kenya reduced VAT rates from 18 per cent to 16 per cent in 2003, and in 2013 it overhauled the VAT, greatly reducing the list of zero-rated goods and thus the amount of VAT refunds (Government of Kenya, 2013). VAT revenue edged up from 4.3 per cent of GDP in 2002 to 4.4 per cent in 2003 and stayed above the initial level before dropping to 4.3 per cent of GDP in 2012 and then to 3.9 per cent in 2013, prompting a second review of VAT policy that year.

In fiscal year 2018/19, South Africa increased its VAT rate from 14 per cent to 15 per cent, estimating that the resulting additional revenue would finance the newly introduced fee-free tertiary education and training for students from low-income households, among other development policy objectives (SARS, 2018).

TACKLING TAX AVOIDANCE

Tax avoidance and evasion—by taking advantage of loopholes or exceptions, liberally interpreting tax codes or even falsifying invoices—results in large losses in tax revenue in Africa. African countries have been reforming their tax policies to address these issues. For example, to counter tax evasion through invoice mispricing and tax avoidance through profit shifting, several African countries have introduced transfer pricing rules

to ensure the fairness and accuracy of transaction pricing within and between enterprises under common ownership or control.⁴

PERFORMANCE OF TAX REFORMS

While the weighted average tax revenue to GDP ratio for Africa did not change much following these reforms, the number of countries with a ratio below 15 per cent fell by more than half (from 31 countries to 14) between 2000 and 2016. In addition, the number of countries with a ratio above 20 per cent rose from 8 to 11.

Income tax, which increased between 2000 and 2015 by 6.6 percentage points in South Africa, 6.5 percentage points in Rwanda, 5.9 percentage points in Tunisia, 2.6 percentage points in Morocco and 0.6 percentage point in Mauritius, was a key driver of growth in tax revenue (OECD, 2016). This growth was attributed to higher taxes on income and profits, particularly corporate income tax rates.

Box 3.2 illustrates the extensive benefits of tax reforms, particularly simplification of the excise tax structure, in the Philippines. The reforms not only raised additional revenue, but they also contributed to the achievement of several SDGs. African countries could consider similar measures as a vehicle for increasing revenue generation.

⁴ Tax avoidance and tax evasion are discussed in detail in chapter 6.

BOX 3.2 TOBACCO TAXATION AS WIN-WIN: THE CASE OF THE PHILIPPINES

The 2012 Sin Tax Reform Law in the Philippines substantially increased excise taxes and simplified the tax structure for tobacco. The reform resulted in a huge increase in excise revenue, which enabled large increases in the health budget (see box figures 1 and 2). Tobacco excise revenues doubled as a share of GDP after 2012. The higher tax also reduced tobacco use by close to 20 per cent according to the 2015 Global Adult Tobacco Survey. The increased fiscal

Amount of tobacco tax revenue

space allowed the Philippines to provide fully subsidized health insurance to the poorest 40 per cent of the population, moving the country closer to its declared goal of universal health coverage.

As recognized by the Addis Ababa Action Agenda on Financing for Development,

the same time generating more revenue to finance development. This win-win reform for public health and domestic resource mobilization did not require a massive amount of resources to achieve. Indeed, tobacco taxation has been highlighted as one of the "Best Buy" interventions by the World Health Organization, recognizing it as a highly cost-effective measure for tobacco control

this example shows how countries can use price and tax measures to reduce tobacco and a revenue source for governments to fund consumption and health care costs, while at their country's development priorities. **BOX FIGURE 1** Tobacco excise tax revenues in the Philippines before and after the tax reform of 2012, 2007–2017 160 PHILIPPINE PESOS (BILLIONS) 0.8 120 OF 80 40 0.2 2008 2007 2009 2010 2011 2012 2013 2014 2015 2016 2017 Amount of tobacco tax revenue Tobacco tax revenue as percent of GDP BOX FIGURE 2 Philippine Department of Health budget before and after the tax reform of 2012, 2007–2017 160 250 PHILIPPINE PESOS (BILLIONS) PHILIPPINE PESOS (BILLIONS) 120 80 40 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017

Source: Adapted from Kaiser, Bredenkamp and Iglesias (2016), with updated data from the Philippines Department of Finance and Department of Health.

Department of Health Budget

MEASURING AFRICA'S TAX GAP: SELECTED EXAMPLES

Measuring the tax gap—the difference between the amount of taxes paid and the amount that should have been paid during a given year—is challenging. Analysis must contend with the multitude of tax types and national tax systems and the dearth of relevant data (Raczkowski and Mróz, 2016).

THE EXAMPLE OF THE VALUE-ADDED TAX

The VAT, a consumption tax, is used here to illustrate these challenges. The estimates highlight the potential for further resource mobilization in Africa.

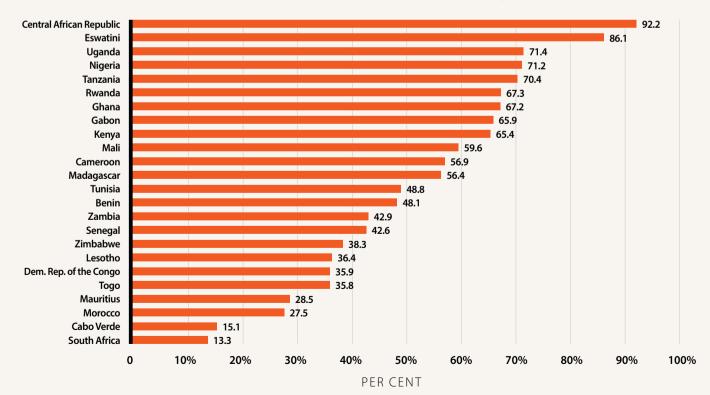
The tax gap for the VAT (the shortfall between potential and actual VAT collections) captures both policy and compliance shortcomings (Cnossen,

2015). Policy gaps arise from provisions in VAT policy or law relating to exemptions and zero and other reduced rates. Compliance gaps arise from inadequacies in administering the VAT, which result in lower than expected revenue, including operational inefficiency, limited capacity, fraud and unreliable consumption data. Despite these and other limitations, the compliance efficiency measure⁵ yields a useful estimate of a country's VAT performance (Keen, 2013).

Of 24 countries with adequate data, 12 had a VAT gap of 50 per cent or more in 2018, while 12 had a gap of less than 50 per cent, indicating considerable

5 Keen (2013) also identified technical shortcomings, such as lack of uniformity across countries in defining consumption, including public sector consumption, and in treatment of purchases by non-residents, all of which lead to potentially overestimating the VAT.

FIGURE 3.4. VALUE-ADDED TAX GAP FOR 24 AFRICAN COUNTRIES WITH DATA, 2018



Note: Data on VAT performance were available for 24 African countries. The analysis assumes that all final private consumption should have been subjected to the VAT (see the annex for the calculation of VAT collection efficiency, where the VAT gap is calculated as 1 minus this ratio). The results may overestimate the VAT gap because the private consumption data used in calculating the gap were obtained residually and because a share of final private consumption that might have been zero-rated could have been erroneously considered subject to the VAT. Thus, the results are indicative of the trend and potential.

Source: Forecast based on VAT data from ICTD and UNU-WIDER (2018), accessed November 2018, and private consumption data from World Bank (2018b).

BOX 3 3 INSIGHTS FROM CHAD ON TAX GAPS

Chad is a low-income, fragile country with development challenges that have intensified as a result of oil price declines and security shocks (IMF, 2018a, 2018c). Between 2014 and 2016 Chad responded to a contraction in oil revenue and a mounting burden of external commercial debt by cutting spending. An overreliance on oil revenues has depressed tax revenues, so the potential for improvement is high. Revenues from non-resource sectors in Chad are at 5 per cent of GDP, and Chad's tax gap of 9 per cent of GDP is much higher than the average of 4.6 per cent for Africa excluding North Africa (Coulibaly and Gandhi, 2018).

To respond to budgetary and debt obligations and increase revenue, Chad introduced several reforms to its non-oil tax system:

- Strengthened core tax administration functions such as tax registration and identification of new taxpayers.
 As part of this reform an automated tax administration system was rolled out in 2014
- Modernized and simplified tax filing payment procedures.
- Increased and improved collection of excise tax revenues

 Suspended tax exemptions, which is estimated to yield an additional \$174 million (ECA n.d.).

The average tax ratio in Chad improved from 6 per cent of GDP over 2000–2004 to 11 per cent over 2011–2015 (see table 3.1 in the text), suggesting a large impact from the reforms.

scope for increasing VAT collections (figure 3.4). The most efficient VAT collections were in South Africa (13.3 per cent gap) and Cabo Verde (15.1 per cent gap), and the least efficient were in Central African Republic (92.2 per cent gap) and Eswatini (86.1 per cent gap).

Nigeria had the fourth largest VAT gap (71.2 per cent) in 2018 and one of the lowest VAT rates in Africa, at 5 per cent. Doubling the VAT rate could double VAT collections from 0.8 per cent of GDP, and improving collection efficiency could boost VAT collection to more than 1.6 per cent of GDP. Further revenue could be obtained by addressing policy gaps.

While increasing the VAT rate could substantially improve resource mobilization in some countries, countries also need to address the gaps rooted in policy and compliance deficiencies. For example, despite having a high VAT rate of 20 per cent, Madagascar has a VAT gap of 56.4 per cent. Similarly, Cameroon's VAT tax rate is 19.25 per cent, yet its VAT gap is 56.9 per cent.

AFRICA'S TAX GAP

Each country has an optimum tax revenue as a share of GDP—referred to as its tax capacity—that it can raise according to its underlying macroeconomic, demographic and institutional characteristics (Coulibaly and Gandhi, 2018). Sub-Saharan Africa



Of 24 countries with adequate data, 12 had VAT gaps greater than 50 per cent in 2016, while nine had gaps under 50 per cent, indicating considerable scope for increasing VAT collections.

has the lowest tax capacity in the world, estimated at 20 per cent of GDP. The low tax capacity is attributable to low level of economic development and a large informal sector (Coulibaly and Gandhi, 2018).

Taking 20 per cent as the conservative tax capacity in Africa and Africa's average tax revenue to GDP ratio of 17 per cent for 2000–2018 yields an estimated tax gap of 3 per cent of GDP, or approximately \$72 billion in forgone revenue.

At the country level the tax gap ranges from 3 per cent of GDP to 9 per cent, with the largest gaps estimated for natural resource–rich countries (see box 3.3 on Chad's experience; Coulibaly and Gandhi, 2018). The large gaps are attributable to inadequate fiscal policy and low tax capacity, leakages in revenue collection and weak enforcement (Coulibaly and Gandhi, 2018).

Addressing these challenges could mobilize additional revenue to finance sustainable development and Agenda 2063 aspirations.

KEY CHALLENGES TO TAX POLICY: COUNTRY CASE STUDIES

Tax policy challenges in Africa include hard to reach sectors (informal economy and agriculture) and the digital economy, curbing corruption, managing growing debt levels and debt-service obligations and resisting pressures to use excessive tax incentives

BOX 3.4. CHALLENGES IN TAXING THE INFORMAL ECONOMY IN KENYA

Between 2010 and 2017, the government of Kenya attempted to bring the small and micro enterprises and traders in the informal sector into the tax system by introducing the turnover tax. The 3 per cent turnover tax applied to any resident persons, excluding limited liability companies, rental income and professional or management fees, whose annual turnover from business does not exceed \$50,000. The Kenya Revenue Authority also made administrative changes to increase compliance by simplifying their systems and creating easy access to information for taxpayers through the iTax platform introduced in 2015. Despite these

changes, however, there was little success in taxing the sector.

In 2018 the National Treasury overhauled the turnover tax and replaced it with a presumptive tax. The presumptive tax is applicable to the same resident persons with the same annual turnover limit of \$50,000 as the predecessor turnover tax, but it is chargeable at the rate of 15 per cent of the single business permit fee issued by a county government. The revenue collected may not be very substantial, but the presumptive tax is an important step towards bringing the informal sector into the tax system.

to attract investment.⁶ Countries' experiences with these challenges also reveal some successes from which other countries could learn.

SECTORS THAT ARE HARD TO TAX

Across Africa there are economic agents whose activities are beyond the reach of the tax authorities, for reasons ranging from administrative weaknesses to policy shortcomings (see box 3.4). These economic agents range from small, informal enterprises to medium and large firms that avoid or evade taxes in multiple ways (Bird and Wallace, 2003). Firms may fail to register for taxes or may register but then fail to comply, sometimes by keeping incomplete or falsified records, which make it difficult for tax authorities to police their activities (Terkper, 2003). While these leakages from the tax system are a challenge to tax administration, they also represent an opportunity to mobilize additional resources to finance sustainable development (see chapter 5 for more details).

Informal sector

Informality in Africa spans a wide range, from 20–25 per cent of GDP in South Africa and Mauritius to 50–65 per cent in Benin, Tanzania and Nigeria (Medina, Jonelis and Cangul, 2017).

Monitoring informal activity is difficult because of the lack of data and the large number of informal firms. When monitoring is possible, the cost of bringing these activities within the tax net may outweigh any potential revenue gains in the short term (see box 3.4 for Kenya's experience; Joshi, Pritchard and Heady, 2014; Kundt, 2017).

Achieving formalization requires better record keeping at the national and subnational levels. Subnational governments can begin by requiring businesses to register for local permits or access to markets; that information can then be digitized

⁶ Chapter 6 deals with the issues in the natural resources sector, but tax incentives are mentioned here to underscore the relevance to raising more tax revenue.

BOX 3.5. TAXING THE TRANSPORT SECTOR IN GHANA

Ghana has implemented a series of presumptive taxes in an effort to tax the informal economy. The first, introduced in 1963, required businesses to make lump-sum tax payments, in accordance with specific occupational groupings, and to display a certificate on their premises as evidence of complying (Adeyiga, 2013). Though registrations increased, many complained that the tax was too high and administratively burdensome. The tax also faced challenges of corruption, rampant evasion and limited administrative capacity on the part of the revenue authority (Adeyiga, 2013). These challenges prevented the tax from meeting its revenue goals.

The turnover tax was replaced in 1987 by the Identifiable Group Tax (IGT), a form of association tax. The tax made use of the business associations formed in various sectors to collect taxes from their members (Joshi and Ayee, 2002). The tax was collected daily at first, then weekly and eventually monthly. The associations received a small commission as compensation for their efforts. The IGT increased revenue collection from 0.97 per cent of total revenue in 1988 under the presumptive tax to 1.6 per cent in 1991 (Ayee, 2007; Dube and Casale, 2016). However, the new tax faced the same challenges as the presumptive tax, including lack of capacity and continuing corruption—some associations kept the money collected instead of remitting it to the tax authorities—and revenue declined (Dube and Casale, 2016).

The IGT was abolished in 2003 and replaced by the Vehicle Income Tax, which is payable quarterly; stickers placed on the windshield are evidence of having paid the tax (Adeyiga, 2013). Compliance rates in the transport sector were at 85.5 per cent in 2010 (ATAF, 2014).

Ghana's experience reveals the need for an integrated approach that not only creates a simple tax system for hard-to-tax sectors but also uses existing social structures, such as business associations, and focuses on increasing capacity in tax administration and tackling corruption at all levels (Dube and Casale, 2016).

and made available to revenue authorities. Governments can then consider implementing a simplified revenue accounting system for taxation (see box 3.5 on Ghana's experience). The system should be freely available and easy to access so that it supports the growth and administration of the businesses it is designed to include. Formalization can then be progressively strengthened through improved record keeping.

Governments can also provide incentives for firms to formalize, such as offering access to credit, training programmes and government tenders. Since taxation of the informal sector could be regressive for small firms and microenterprises, governments should establish a minimum tax threshold with a graduated scale to protect small businesses and entrepreneurship and promote compliance.

The agriculture sector

The agriculture sector accounted for about 16 per cent of GDP in Africa in 2017 and employs the largest number of active workers on the continent (World Bank, 2018a). But agriculture is hard to tax because

the large number of unregistered, widely dispersed small-scale farmers makes it difficult for revenue authorities to verify incomes and tax liability.

Land taxes, which are indirect taxes levied on the value of land, are viewed as simple to apply and progressive since they increase with the value of the land held (IBFD, 2018). However, performance of the tax has been poor because of inadequate data and valuation practices, incomplete property coverage and political interference (Franzsen and McCluskey, 2017). Property taxes have contributed

...agriculture is hard to tax because the large number of unregistered, widely dispersed small-scale farmers make it difficult for revenue authorities to verify incomes and tax liability.

between 0.2 to 0.3 per cent of GDP between 2000 and 2018 (see Table 3.2).

THE DIGITAL ECONOMY

Advances in information technology and the digital economy have revolutionized the business world, from the types of goods and services produced to how they are produced, delivered and paid for. That has created opportunities for better harnessing economic activities for development—including through taxation of profitable activities.

The digital economy—whose key factors of production are digitized information knowledge (ADB, 2018)—also presents challenges to tax policy because of the difficulty of capturing where value is created and of measuring it (Jakurti, 2017). This is made more complicated with crossborder transactions. Current tax rules relating to cross-border income do not effectively address digital activities, which may not have a fixed physical location, making it easier for such income to remain untaxed (OECD, 2018). Historically, the factors of production were relatively immobile and required extensive use of labour and tangible resources, and cross-border income was allocated on the basis of the permanent establishment or physical presence of a business (CIAT, 2018).

The development of the digital economy has enabled businesses to use digital assets such as

intellectual property to shift profits from where they are generated to jurisdictions where taxes are lower, thus eroding the tax base in the originating jurisdiction. These changes necessitate a review of tax laws to ensure that they are appropriate to the current business environment.

The multijurisdictional nature of the digital economy demands a global solution. The Organisation for Economic Co-operation and Development (OECD) has been at the forefront on this issue through its Base Erosion and Profit Shifting project, which makes the following recommendations for taxing the digital economy:

- For the VAT, the suppliers of digital services should be responsible for remitting the tax to the jurisdiction in which the service is consumed.
- The reduced need for a physical presence for digital services means that taxing rights can be established by using rules to determine the characterization of income and a threshold for data exchange.

Though a global solution has yet to be found, some countries (such as South Africa and India) have introduced interim measures to reduce the tax losses resulting from shifting profits through the digital economy (see box 3.6 for South Africa's experience).

BOX 3.6. SOUTH AFRICAN E-COMMERCE TAX LAWS

A review of taxation of the digital economy in South Africa concluded that tax laws enabled foreign e-commerce suppliers to avoid taxation, not only denying the country tax revenue but also competing unfairly with resident suppliers who had to pay taxes (Davis Tax Committee, 2014).

Following the recommendations of the review, South Africa amended its value-added tax in 2014 to capture the digital

economy and to level the playing field for local suppliers and foreign suppliers in the digital economy. Foreign suppliers of e-commerce services (such as music, electronic books, internet games, electronic betting and software) are now required to register as VAT vendors; those whose turnover in South Africa meets the threshold of 50,000 rand (about US\$3,500) are required to pay an output tax. The services are considered to have been supplied in South Africa—and

therefore subject to the tax—if the payment was made from a South African bank or if the supply was sold to a resident of South Africa.

Between June 2014 and September 2017, more than 200 foreign entities producing digital services registered in South Africa and paid taxes of almost 2 billion rand (about US\$140 million) (National Treasury, 2018).

TABLE 3.4. CORRUPTION PERCEPTIONS INDEX IN SELECTED COUNTRIES, 2012-2017

COUNTRY	2017 RANK	2017 SCORE	2016 SCORE	2015 SCORE	2014 SCORE	2013 SCORE	2013 SCORE
Angola	167	19	18	15	19	23	22
Benin	85	39	36	37	39	36	36
Botswana	34	61	60	63	63	64	65
Burkina Faso	74	42	42	38	38	38	38
Burundi	157	22	20	21	20	21	19
Cameroon	153	25	26	27	27	25	26
Cabo Verde	48	55	59	55	57	58	60
Central African Republic	156	23	20	24	24	25	26
Chad	165	20	20	22	22	19	19
Comoros	148	27	24	26	26	28	28
Congo	161	21	20	23	23	22	26
Dem. Rep. of the Congo	161	21	21	22	22	22	21
Côte d'Ivoire	103	36	34	32	32	27	29
Djibouti	122	31	30	34	34	36	36
Equatorial Guinea	171	17	N/A	N/A	N/A	N/A	N/A
Eritrea	165	20	18	18	18	20	25
Eswatini	85	39	N/A	N/A	N/A	N/A	N/A
Ethiopia	107	35	34	33	33	33	33
Gabon	117	32	35	34	37	34	35
Gambia	130	30	26	28	29	28	34
Ghana	81	40	43	47	48	46	45
Guinea	148	27	27	25	25	24	24
Guinea-Bissau	171	17	16	17	19	19	25
Kenya	143	28	26	25	25	27	27
Lesotho	74		39	44	49		
Liberia	122	42 31	37	37	37	49 38	45 41
			14				
Libya	171	17	26	16	18	15	21
Madagascar	155	24		28	28	28	32
Malawi	122	31	31	31	33	37	37
Mali	122	31	32	35	32	28	34
Mauritius	54	50	54	53	54	52	57
Mozambique	153	25	27	31	31	30	31
Namibia	53	51	52	53	49	48	48
Niger	112	33	35	34	35	34	33
Nigeria	148	27	28	26	27	25	27
Rwanda	48	55	54	54	49	53	53
Sao Tome and Principe	64	46	46	42	42	42	42
Senegal	66	45	45	44	43	41	36
Seychelles	36	60	N/A	N/A	N/A	N/A	N/A
Sierra Leone	130	30	30	29	31	30	31
Somalia	180	9	10	8	8	8	8
South Africa	71	43	45	44	44	42	43
South Sudan	179	12	11	15	15	14	N/A
Sudan	175	16	14	12	11	11	13
Tanzania	103	36	32	30	31	33	35
Togo	117	32	32	32	29	29	30
Uganda	151	26	25	25	26	26	29
Zambia	96	37	38	38	38	38	37
Zimbabwe	157	22	22	21	21	21	20

Note: (1) name change from Swaziland to Eswatini to reflect current political realities (2) the scale is 0 to 1000, where 0 is perceived to be highly corrupt and 100 is not corrupt at all Source: Transparency International available at https://www.transparency.org/news/feature/corruption_perceptions_index_2017#table

CORRUPTION

Corruption, a symptom of weak economic governance, is a challenge for most African countries and undermines tax collection (Imam and Jacobs, 2007). In a sample of 49 African countries, the Corruption Perceptions Index has broadly improved in 16 countries, hardly changed

in eight countries, and deteriorated in 22 countries (see table 3.4) (Transparency, 2017). Only five countries (Botswana, Cabo Verde, Mauritius, Namibia, Rwanda and Seychelles) have indices above 50 in 2017.

When perceptions of corruption are high, residents are less willing to pay taxes, fearing that their taxes

will be misused or misappropriated (Barone and Mocetti, 2011; Baum et al., 2017). Strengthening public financial management and enhancing the efficiency and equity of public spending will build trust in the system and improve compliance and revenue collection.

Africa, where the gap between average tax revenue and tax capacity is 3 per cent of GDP, has the lowest average scores globally on indicators of both corruption and democratic accountability. Improving the region's corruption and democratic accountability scores to the global median could reduce this gap considerably (see box 3.7; Coulibaly and Gandhi (2018).

PRESSURE TO ATTRACT INVESTMENT

Countries the world over offer tax incentives to attract foreign investors, thereby forgoing the tax revenue that would have accrued to the country. Yet evidence indicates that tax incentives and tax treaties are of questionable efficacy in attracting investments, especially when the primary motivation to invest is access to natural resources or to a specific market (Tanzi and Zee, 2001). Tax incentives are subject to abuse and rank low in determining the investment location (Tanzi and Zee, 2001), while tax treaties that cede taxing rights to other countries often result in loss of tax revenue that far exceeds the gains from foreign investment (Van de Poel, 2016; see also chapter 6).

Tax holidays and preferential tax rates are the most prevalent types of tax incentives in Africa. These incentives seem to be mostly ineffective (see chapter 2).

African countries, most of which are capital importers, have been slowly ceding taxing rights over income earned within their jurisdiction through residence-based treaties, which have few provisions allocating taxing rights to the country where the income is earned (Hearson, 2016).

While tax allowances are recommended as a more effective form of tax incentives—because the benefit depends on the cost of the investment and not on its profits—some African countries grant tax allowances that are greater than the investment cost incurred.

BALANCING REVENUE NEEDS AND TAX EQUITY

Along with revenue sufficiency, equity is an important goal of taxation – adjusting revenue collection to meet development needs (Musgrave and Musgrave 1976). Equity calls for people with the same income or wealth to pay the same amount of taxes (horizontal equity) and for people with greater income or wealth to pay more taxes (vertical equity; Black, Calitz and Steenkamp, 2015).

BOX 3.7. LEVERAGING GOVERNANCE FOR TAX REVENUE MOBILIZATION

Average tax capacity in Sub-Saharan Africa is the lowest in the world, at 20 per cent of GDP, according to an assessment of prospects for mobilizing additional tax revenue for financing sustainable development in Africa (Coulibaly and Gandhi, 2018). Using data up to 2015, the study found that non-resource tax revenue had increased as a share of GDP but not by enough. To bridge the gap, the study recommended that African countries improve both tax capacity and tax efficiency.

The study estimated that improving efficiency to 100 per cent could raise tax revenue by 3.9 per cent of GDP, bringing revenue collection close to the average tax capacity of 20 per cent. The study also estimated that reaching a higher tax to GDP ratio of 24 per cent of GDP to fast track achievement of the Sustainable Development Goals would require increasing tax capacity by a further 4 percentage points of GDP. Improving governance (measured by corruption and

accountability in the International Country Risk Guide) would reduce inefficiencies and help raise about additional \$110 billion a year, or almost half of the average \$230 billion investment financing gap over 2015–2020. The study illustrates the potential for African countries to raise additional tax revenue by strengthening economic governance, including by combating corruption and promoting accountability and transparency in public financial management.



...evidence indicates that tax incentives and tax treaties are of questionable efficacy in attracting investments, especially when the primary motivation to invest is access to natural resources or to a specific market

Given the levels of poverty and inequality and the large informal sector, an important concern for taxationin Africa is equity. Failure to address inequality undermines economic growth and development and in some cases is an underlying cause of social tensions and violent conflict (Langer and Stewart, 2015).

Equity in taxation is determined by who bears the final burden of a tax. The design of the tax system thus plays a key role since a poorly designed system may make the poor even poorer (Bird and Zolt, 2005). To promote equity, tax policies need to be informed by studies of tax incidence. Government policies need to respond to the challenges of equity without unduly compromising the tax revenue needed to finance policies to reduce poverty and inequality, which are at the core of the SDGs.

When assessing equity, it is important to consider the equity of the entire tax system, not just of individual tax components. "Making the system as a whole progressive does not require every individual tax to be progressive" (Mirrlees et al., 2011: 26). An individual tax cannot fulfil all the principles of a good tax—revenue sufficiency, equity, economic efficiency and administrative efficiency. Broad-based taxes such as the VAT may be economically and revenue efficient, but their

impact may be regressive. Progressive tax systems have the potential to reduce inequality, but to achieve sustainable development they must be accompanied by effective public spending and a responsive welfare system. Personal and corporate income taxes may be designed to be progressive, but their impact on economic activity may reduce tax revenue, especially in countries with a very large informal sector.

Assessing equity also requires examining public spending measures that reduce inequality through income redistribution. Evaluating whether a tax system is progressive or regressive thus needs to take into account the effect of all taxes in the system on different individuals or households, along with the effects of cash transfers and other public benefits (Varela, 2016).

Progressive taxation, if well designed, could reduce inequality by enabling low-income workers to allocate a greater portion of income to savings and investment, thus improving their economic situation. Furthermore, by boosting revenue, progressive taxation enables governments to fund key services, such as education and health, that favour low-income households and to invest in growth-enabling infrastructure that can increase social equity.

CONCLUSIONS AND POLICY RECOMMENDATIONS

The overall weighted tax revenue to GDP ratio for the continent has been declining since 2004, underscoring the slower pace of tax growth than income growth. The overall decline in the ratio between 2000 and 2018 reflects declines in the ratio in 29 African countries, including major economies such as Angola, Ethiopia, Kenya, Morocco and Nigeria. At the same time, however, 9 countries had a ratio of at least 10 per cent in 2000, while 16 did in 2018. Four countries increased their ratio by at least 10 percentage points between 2000 and 2018, and 7 increased it by 5–9 percentage points.

Indirect taxes dominate income taxes, raising the possibility that tax systems are regressive but also implying space for collecting additional revenue from income taxes. Low overall tax capacity and large tax gaps signal the potential for raising additional tax revenue by closing these gaps. With comprehensive tax reforms, Africa could raise additional tax revenue of 3 per cent of GDP (\$72 billion) a year.

To achieve the SDGs and the aspirations of Agenda 2063, African countries need to increase revenue generation in ways that are equitable and sustainable:

1. To ensure that the tax system is progressive, neutral, fair and efficient, African governments should address the system as a whole, rather than each tax separately. In this way, governments may find additional opportunities to expand the tax base, create more certainty for taxpayers and contextualize any global standards.



- 2. To broaden the tax base, African countries need to include more and more diverse payers in the tax net.
 - The low contribution of payroll and workforce taxes and property taxes (taxing income from properties) signals areas that need particular attention to increase revenue by broadening the tax base.
 - Governments should formulate policies to bring the informal economy and agriculture into the tax system, taking care to avoid harming low-income workers.
- 3. To deepen the tax base, African countries need to review their VAT regulations to reduce the policy gaps (excess use of exemptions and zero or reduced rates). Many African countries' VAT collection efficiency is well below 50 per cent, indicating that improving VAT collection could increase overall tax revenue collection. (Compliance gaps are covered in chapter 5 on tax administration.)

- African governments should leverage information and communication technology to improve revenue generation. African governments could promote the spread of information technology by using tax policy to support the dissemination of information technology. Information technology facilitates digitization of economic information and makes it easier to tax economic activity. Information technology could be used to bring more economic agents within the tax system (for example, by registering informal workers, using e-tax filing to make it easier to file taxes and simplifying payment processes) and make it easier for them to comply with fair taxation policies.
- 5. African governments should support development of the digital economy to expand the type of economic activities that

- could generate additional revenue. In doing this, governments need to set up infrastructure and legal frameworks to prepare for the complex economic operations of the digital economy, which are susceptible to tax evasion and avoidance.
- 6. African governments should improve governance in revenue collection by combating corruption and bolstering accountability to reduce inefficiencies in tax collection, which could help realize an extra 3 per cent of GDP in tax revenues.

The most widely used measure of VAT performance in the tax literature is the VAT Collection Efficiency (C-efficiency) indicator proposed by Ebrill et al.

To achieve the SDGs and the aspirations of Agenda 2063, African countries need to increase revenue generation in ways that are equitable and sustainable.

ANNEX 3.1 MEASURING VALUE ADDED TAX PERFORMANCE IN AFRICA

(2001), which measures the actual VAT revenue as a proportion of potential VAT revenue (assuming perfect enforcement of a uniform VAT on all consumption, which would be a C-efficiency ratio of 1 or 100 per cent).

It is computed as:

Departures from a C-efficiency ratio of 1 or 100 per cent (the benchmark VAT) signal a VAT collection inefficiency, which can result from either policy gaps or compliance gaps (Cnossen, 2015). Policy gaps arise from provisions in VAT policy or laws relating to exemptions or zero and other reduced rates for some categories of consumption. Compliance gaps arise from shortcomings in VAT administration that result in lower revenue than would be expected from VAT policy or law, including operational inefficiency, limited capacity and fraud. While the C-efficiency measure has

limitations⁷ (see Keen, 2013), it is a useful indicator of a country's VAT performance.

The C-efficiency ratio by itself does not indicate the extent to which policy gaps or compliance gaps account for the departure of VAT collections from the benchmark VAT; examination of VAT laws and the efficiency of tax administration in various countries helps to contextualize the gaps that undermine VAT revenue collection. Chapter 5 examines issues in tax administration in Africa, shedding light on shortcomings in government policy and actions that cause compliance gaps in VAT collection.

7 Limitations include unreliability of consumption data, especially in Africa. Keen (2013) also raised technical shortcomings—including non-uniformity in defining consumption across countries, the treatment of purchases by non-residents and public sector consumption—which potentially lead to overestimating the VAT and could undermine cross-country comparisons.

ANNEX 3.2 AVERAGE CORPORATE TAX RATE BY REGION OR GROUP, 2018

REGION OR GROUP	AVERAGE RATE	WEIGHTED AVERAGE RATE	NUMBER OF COUNTRIES
Africa	28.81%	28.39%	50
Asia	20.65%	26.42%	46
Europe	18.38%	25.43%	49
North America	23.01%	26.22%	33
Oceania	22.00%	27.04%	17
South America	28.08%	32.20%	13
BRICS	28.40%	27.33%	5
EU	21.86%	26.03%	28
G20	27.37%	27.18%	19
G7	27.63%	27.21%	7
OECD	23.93%	26.58%	36
World	23.03%	26.47%	208

Source: Tax Foundation 2018, Corporate Tax Rates Around the World 2018

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