

Impact of Value-Added Tax in revenue stability in some African countries – Policy and compliance gaps using the C-efficiency

As the Covid-19 crisis hits, African countries have put in place several tax-relief measures to mitigate against and ameliorate the economic impact of the pandemic on the economy. These measures, to name just a few, include the following:

- i. The fast-tracking of VAT refunds, with specific treatment for smaller VAT taxpayers.*
- ii. A case-by-case application for a waiver of penalties by large taxpayers that can show they are incapable of making tax payments due to the COVID-19 disaster.*
- iii. The suspending of mineral import duty.*
- iv. Extending the filing and payment deadlines for tax returns, and*
- v. Cutting taxes on medical products, among others.*

Through these measures, tax administrations aim to make the situation more manageable for their taxpayers. Overall, as in other areas of the world, the COVID-19 pandemic has had an adverse effect on African economies, resulting in their forecasts for economic growth being revised downwards.

Many corporate sectors have sacrificed financial resilience for shareholder value. In accounting and auditing practice, company viability is tested by looking at both liquidity and balance sheet solvency. Companies require cash for liquidity to cover everyday business expenses; but with the crisis, many of them are likely to declare losses at the end of their financial reporting periods. This will drastically reduce the expected revenues from corporate income tax.

This makes it even more important for tax administrations to closely monitor the performance of VAT revenue and ensure that compliance does not slip too steeply. Given the VAT's revenue raising importance, improving the effectiveness of VAT collection to the extent possible and cementing voluntary compliance will be vital during this COVID-19 pandemic and during the recovery period.

In general, the performance of tax administrations in collecting VAT is largely influenced by two components, namely the policy gap and the compliance gap. The policy gap relates to aspects of policy choices on VAT rates, tax expenditures, changes in the VAT threshold, exemptions etc., whereas the compliance gap gauges the extent to which taxpayers comply with all their legislative and administrative obligations.

One way to improve the overall efficiency and effectiveness of the VAT system would be to increase its collection efficiency and/or remove policy gaps that may affect its efficiency. In this article, we use the C-Efficiency ratio (CFE).^[1] The CFE ratio as shown in the table below is the most used indicator for evaluating the revenue performance and overall VAT efficiency.

This ratio compares the actual VAT revenues to theoretical revenues^[2] from a perfectly enforced tax levied at a uniform rate on all consumption. The closer this ratio is to zero, the lower the VAT collection efficiency, while ratios closer to one denote a higher efficiency.

[1] C-efficiency ratio = (Actual VAT revenue) / (Final Consumption Expenditure × Standard VAT rate)

The 2019 African Tax Outlook (ATO) publication (ATAF, 2019)[3] analyses the C-efficiency ratio in 15 selected African countries. Since 2012, the standard rate on domestically consumed products in ATO countries has remained constant, with exception of three countries. In Ghana in 2017 it moved from 12 percent to 17.5 percent, in Botswana it increased from 10 percent to 12 percent in 2013 and in South Africa from 14 percent to 15 percent in 2018. Madagascar has the highest VAT rate of 20 percent within the selected ATO countries, and the lowest rate of 12 percent is found in Botswana.

In the countries shown in the table below, the average standard VAT rate is more than 15 percent with an average C-efficiency ratio of 45%. This demonstrates that in 2018, the efficiency of the VAT systems in these countries was low and is expected to be further affected by the various tax and non-tax policies measures put in place to curb the impacts of COVID-19. Only a few selected economies with available data had a C-efficiency ratio greater than 50%, such as Botswana, Mauritius, Eswatini, Cape Verde, South Africa, and Zambia. (for more information, access the full analysis in the [2019 ATO publication here](#)).

C-efficiency ratio of VAT in selected ATO countries, 2018

Country	VAT/FCE*, Year 2018	Standard VAT rate, 2018	VAT - CFE *	
DR Congo	2,23%	16%	13,96%	(0,139)
Ghana	4,81%	17.5%	27,50%	(0,275)
Cote d'Ivoire	5,03%	18%	27,96%	(0,279)
Niger	5,30%	19%	28,16%	(0,281)
Rwanda	5,35%	18%	32,99%	(0,329)
Malawi	5,94%	17%	35,41%	(0,354)
Madagascar	6,02%	20%	36,90%	(0,369)
Eswatini	6,13%	14%	37,86%	(0,378)
Senegal	6,92%	18%	39,17%	(0,391)
Zimbabwe	7,05%	15%	40,84%	(0,408)
Botswana	7,38%	12%	57,63%	(0,576)
Mauritius	9,53%	15%	63,56%	(0,635)
Eswatini	9,47%	14%	67,67%	(0,676)
Cape Verde	10,26%	15%	68,43%	(0,684)
South Africa	12,64%	15%	84,26%	(0,842)
Zambia	13,68%	16%	85,49%	(0,854)
Average		16.37%	47,33%	(0,473)

[2] Theoretical revenues: the revenues theoretically raised if VAT was applied at the standard rate to the entire potential tax base.

[3] ATAF (2009), ATAF's African Tax Outlook 2019, African Tax Administration Forum, Publishing, Pretoria, https://events.ataftax.org/index.php?page=documents&func=view&document_id=49

* FCE (Final Consumption Expenditure), CFE (C-Efficiency ratio)

The COVID-19 pandemic will certainly deepen the policy gap component of the C-efficiency because of unavoidable and necessary exemption measures introduced specifically in response to the pandemic which will have the impact of reducing VAT revenue. However, the widening of the policy gap may be mitigated, by opting for targeted, not blanket, interventions. For example, through limiting the application of VAT exemptions to only the importation of goods used to support the health system and combat the effects of the COVID-19; the temporary increase of the turnover threshold for the application of the simplified VAT regime mainly for small businesses; or the temporary reduction of the VAT standard rate only for services and food supplied by entities providing hotel and restaurant services

On the other hand, a rise in the extent of the compliance gap, which can originate from imperfections in the implementation of the existing VAT system in an economy or from excess credit returns and refund claims, may exacerbate the size of the shadow economy. In this instance, approaches to curb the compliance gap during COVID-19 may include accelerating VAT refunds mainly for small and medium size businesses classified as "reliable taxpayers" (i.e. who have a good compliance record) to preserve their liquidity and cash flow; or by the deferral of VAT payments for all companies with sales below a certain threshold.

In general, while these measures will not significantly improve revenue collection in the short-term, countries should be careful that the emergency measures they put in place do not have a negative long-term effect on VAT collections. More importantly, as the table shows, there is plenty of room for improvements in the efficiency of VAT collection. It is imperative that tax administrations continue to implement measures which will increase tax revenue in the long term.

These include the modernisation and automation of the VAT registration, filing, returns, and payment processes and the adoption of more robust assurances processes. Other things that may be considered – expansion of tax base e.g. cross border e-Commerce, drive to bring non-registered taxable persons into the tax net, review of exemptions. Also, taxpayers' engagement and enlightenment will be important. These processes will enable tax administrations to improve their C-efficiency ratios and provide the foundation for tax systems that are able to adapt quickly to future crises such as the current COVID-19 pandemic.