

GHANA VALUE ADDED TAX (VAT) GAP ESTIMATION

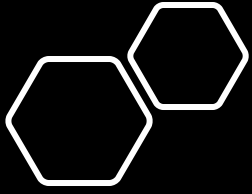
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OUTLINE

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- **Challenges to Tax Gap Estimation in Ghana**
- **Key Tax Gap Results: VAT Gap Estimation (Ghana)**
- **Application of Results: Tax Policy and Administration Implications**



Background: Tax Gap Estimation in Ghana



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Background: Tax Gap Estimation in Ghana

- **Tax Gap Estimation as a Strategic Fiscal Goal for The Ministry of Finance and the Ghana Revenue Authority.**
- **Re-basing of Ghana's GDP in 2010 and 2018, resulted in a lower Tax to GDP compared to other Lower-Middle-Income economies.**
- **Ghana's Tax to GDP has been below 15% over this period.**
- **The evidence that the country's overall tax effort is low.**



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Background: Tax Gap Estimation in Ghana (Cont.)

- The question was, what is accounting for the low tax Effort in Ghana?
- To address this question a Tax Gap Estimation Committee was created in 2015 with participation from key state agencies including – the Ministry of Finance, Ghana Revenue Authority and the Ghana Statistical Service.
- The Committee's initial work was supported technically by HMRC and later by experts from the World Bank and the IMF.
- The committee was to look at key tax types and set up the modalities for annual Tax Gap estimation.



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Background: Tax Gap Estimation in Ghana (Cont.)

- **Priority focal areas altogether contribute about 81.3% of total revenue:**
 - **Personal Income (Self Employed)**
 - **Corporate Taxes**
 - **VAT**
 - **Import Duties and Levies**
 - **PAYE**



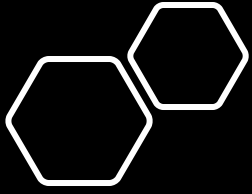
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Background: Tax Gap Estimation in Ghana (Cont.)

- **Some Key Lessons from the Ghana:**
- **If using the Top-Down approach, a joint approach of working with The Revenue Authority, Ministry of Finance and the National Statistical Service is useful. The following are some potential benefits:**
 - **Household Income Data can be better explained by the National Statistical Service**
 - **Adjustments can be proposed to the questionnaire for Household surveys to help capture the right Data**
 - **The Ministry can fully Appreciate the Tax Gap situation relative to the country's Fiscal Strategy, especially what needs to be done on the Policy Gap side of things**



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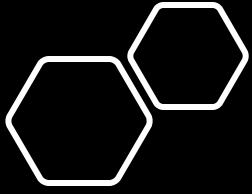
Challenges to Tax Gap Estimation in Ghana



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Challenges to Tax Gap Estimation in Ghana

- Data Challenges – Poor Digitisation of Domestic Tax Data, Customs Data in Ghana is however more digitalised and easily accessible for analysis.
- Data is generally recorded in hard-copy tax files – The committee had to digitalise and code data for analysis (PIT, CIT and VAT data).
- A lack of disaggregated domestic tax data restricts Analytical ability, where data is recorded as was the case on TRIPS, the various fields are not completed and data is aggregated.
- Opposition from Tax Offices and Political Realities – Fear of uncovering any tax infractions, companies unwilling to provide disaggregated data for PAYE analysis etc.



Key Tax Gap Results: VAT Gap Estimation (Ghana)



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Ghana's Approach – VAT Gap Estimation: TOP-BOTTOM APPROACH

- The VAT Gap is the difference between the Net VAT Total Theoretical Liability (NVTTL) on total consumption expenditure in the country and the VAT that is actually collected.

Ghana's Approach – VAT Gap Estimation: TOP-BOTTOM APPROACH (cont.)

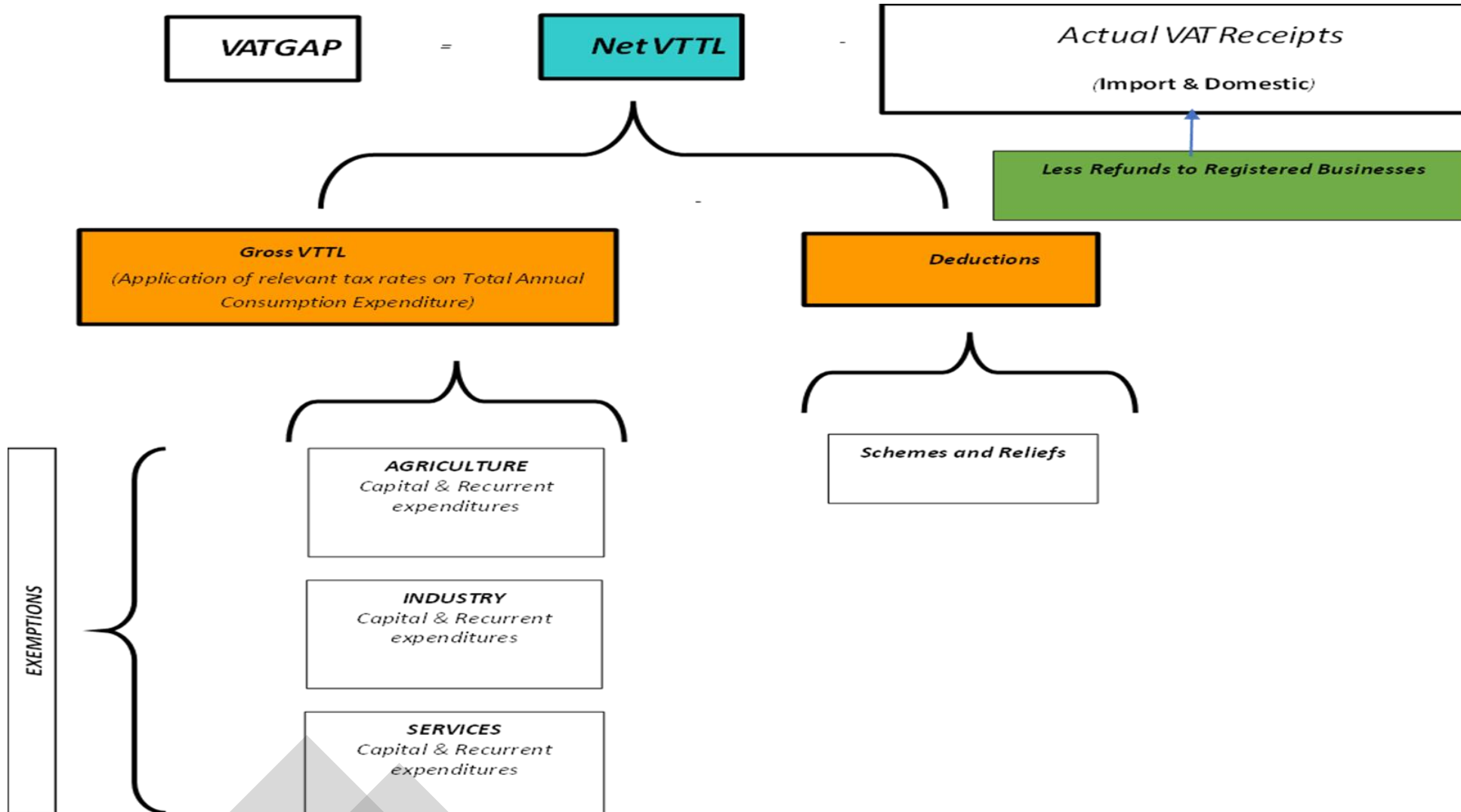
There are five main stages:

- Stage 1:** In a given year, assess the total amount of expenditure in the country.
- Stage 2:** Estimate the VAT liability on that expenditure (gross VTTL).
- Stage 3:** Deduct any legitimate reductions - schemes and reliefs (net VTTL).
- Stage 4:** Subtract actual VAT receipts.
- Stage 5:** Residual element = Total VAT loss (assumption) = VAT gap



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Ghana's Approach – VAT Gap Estimation: TOP-BOTTOM APPROACH (cont.)



Ghana's Approach – VAT Gap Estimation: TOP-BOTTOM APPROACH (cont.)

The Top-down methodology was adopted to estimate the VAT Gap and this involves:

- **Stage one: Total expenditure**

The total expenditure for a given year was sourced from the Ghana Statistical Service which applies the expenditure on consumption approach to estimate the Gross Domestic Product.

- **Stage two: Gross VAT liability (VAT Total Theoretical Liability on expenditure)**

The applicable VAT/ NHIL rate pertaining to a fiscal year was charged on the gross domestic expenditure to arrive at the gross VAT liability.

- **Stage three: Net VAT liability**

Pursuant to the Value Added Tax Act 2016 (Act 870) Sections 33 to 38, legitimate deductions were netted out of the gross VAT liability to arrive at the Net VTTL. The expenditure on exempts goods and services as captured in Sections 33 - 38 are as follows:



Ghana's Approach – VAT Gap Estimation: TOP-BOTTOM APPROACH (cont.)

Agriculture Sector

A supply of agricultural and aquatic food products in a raw state produced in the country (Paragraph 3 of the first schedule) which includes Crops, Cocoa and Fishing;

A supply of live animals bred or raised in this country (Paragraph 5 of the first schedule) Livestock.

Industry

A supply of water, excluding water commonly supplied in bottles or other packaging suitable for supply to consumers. (Paragraph 8 of the first schedule);

A supply to a dwelling of electricity up to a maximum consumption level specified for block charges for lifeline units (Paragraph 9 of the first schedule);

A supply of the following crude oil and hydrocarbon products (Paragraph 17 of the first schedule).

Service

A supply of education services (Paragraph 11 of the first schedule);

A supply of medical services and medical supplies (Paragraph 13 of the first schedule);

A supply of domestic transportation of passengers by road, rail and water (Paragraph 15 of the first schedule).



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Ghana's Approach – VAT Gap Estimation: TOP-BOTTOM APPROACH (cont.)

Stage Four: Actual VAT receipts

The annual VAT/NHIL collection for Domestic and Import VAT and Domestic and Import NHIL was summed up and the VAT refunds (as supplied by the Revenue Unit of Domestic Indirect Tax) deducted from the respective annual collections (assuming all refunds were related to that same year). This gives the estimates for the actual annual VAT receipts.

Stage Five: Vat Gap = Total VAT loss (assumption)

The VAT Gap equals the difference between the Net VAT Total Theoretical Liability and the Actual VAT receipt annually.

$$\begin{array}{|c|} \hline \text{Net VAT Total} \\ \text{Theoretical Liability} \\ \text{(VTTL)} \\ \hline \end{array} \quad \text{—} \quad \begin{array}{|c|} \hline \text{Actual VAT} \\ \text{Receipts} \\ \hline \end{array} \quad \text{=} \quad \begin{array}{|c|} \hline \text{VAT} \\ \text{Gap} \\ \hline \end{array}$$

From this method the VAT Gap for Ghana, which is the difference between potential collection and the actual collection given the current policy framework was estimated for each year.

Key Findings (VAT Gap - Compliance)

- The average VAT tax gap over the period of study (2013 – 2022) was **59.2%**; ranging between 55.3% and 65.9%.
- **Service sector share as a driver of the tax gap increased consistently over period of the study averaging 53.5% relative to Industry which recorded an average of 41.9% over the same period.** Agricultural sector only contributed a marginal average of 4.7%.
- The VAT Tax Gap on the average remained steady in the period under consideration.
- The smallest tax gaps were registered in 2015 & 2017 (55.3%) and the highest in 2020 (65.9%).
- Industry started as the lead contributor to the tax gap but Services took over immediately after 2013 and increased its share consistently over the years of the research.



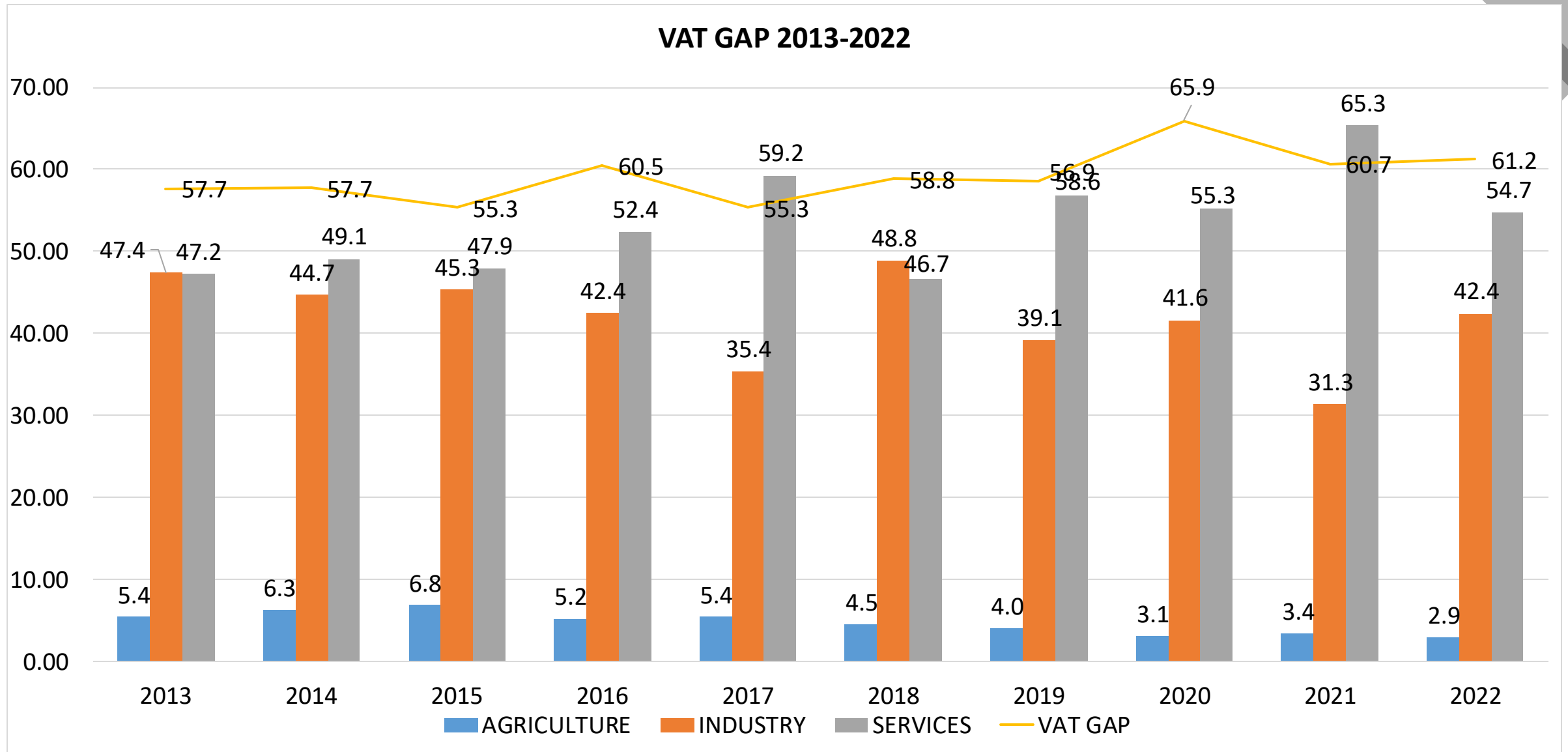
Key Findings (VAT Gap - Compliance)

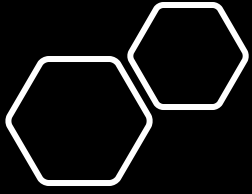
- The revenue contribution of the Agricultural sector remained insignificant over the years; contributed less than 1.0% over the entire period of the study. This is as a result of the fact that this sector is largely exempt from VAT and most taxes as Government policy. Subsequently, the Agriculture sector accounted a decreasing portion of overall VAT gap for the period.
- There were revenue losses arising from tax policy choices of government which the GRA had little or no control over. These came in the form of exemptions, dispensations, tampered tax rates, bilateral government-to-government agreements among others. **These constitute the policy gap.**

VAT Gap Calculation: The Results

YEAR	VAT GAP	AGRICULTURE	INDUSTRY	SERVICES
	%	% CONTRIBUTION	% CONTRIBUTION	% CONTRIBUTION
2013	57.7	5.39	47.39	47.21
2014	57.7	6.25	44.66	49.09
2015	55.3	6.81	45.30	47.89
2016	60.5	5.19	42.45	52.37
2017	55.3	5.39	35.39	59.22
2018	58.8	4.48	48.85	46.67
2019	58.6	4.01	39.14	56.85
2020	65.9	3.09	41.62	55.29
2021	60.7	3.36	31.31	65.33
2022	61.2	2.90	42.39	54.71
AVERAGE	59.2	4.7	41.9	53.5
MINIMUM	55.3	2.9	31.3	46.7
MAXIMUM	65.9	6.8	48.8	65.3

VAT Gap By Trend And Sector (2013 – 2022)





Application of Results: Tax Policy and Administration Implications



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Application Of Results To Tax Administration

- VAT Gap Analysis has shone a bright light on Ghana's VAT system and pushed the Revenue Authority to invest (time and resources) in VAT Audits.
 - **The net results have been a significant increase in VAT collections – Growth Year on Year increased by 58.2% in 2023 compared to a growth of 15.7% in 2022 and 14.8% in 2021.**
 - **Driven by extensive registration and Refund Audits.**
- Compliance by the Revenue Authority focusing on key sectors with the highest revenue leakages – Services
- Introduction of digitisation (E-invoicing) to cur VAT fraud and improve monitoring and compliance



Application Of Results To Tax Policy – Addressing the VAT Policy GAP

- Ghana is currently under an IMF Programme
- As per government Efforts to improve domestic tax revenue mobilisation under the current IMF programme, reforms to the country's VAT system were identified as a key source of additional revenue to address the fiscal imbalance
- Subsequently, the 2024 National Budget targeted the removal of VAT Exemptions.
- This however has been a subject of huge political debate which is impeding the reform process.

No.	Category	Item	GhsMn	Revenues (% of GDP)
1	Inputs for Non-Agricultural Use	Heavy equipment	110.35	0.010
		Spraying machine	21.03	0.002
		Other equipment	18.40	0.002
		Herbicides	28.90	0.003
		Livestock (imported)	7.63	0.001
		Chemical fertilizer for purposes other than Agric	42.04	0.004
		Insecticides for purposes other than Agric	34.16	0.003
		Organic fertilizer for purposes other than Agric	5.25	0.001
		Animal vaccines other than for Agric	5.25	0.001
2	Financial Services	Short-term insurance	115.61	0.011
3	Medical services	Other medical services such as spas, and wellness centres	7.36	0.001
4	Exercise books, newspapers and publications	Imported Exercise books	123.50	0.012
		Imported Newspapers	-	-
		Publications (Others)	23.65	0.002
5	Transport Services	By air – domestic	10.50	0.001
6	Accommodation, electricity	Sale of residential accommodation	3,152.93	0.300
		Electricity	1,755.10	0.167
7	Supplies	Postage	-	-
Total			5,461.66	0.520



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Thank you!



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