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Determinants of Tax Revenue Mobilization in Ghana: An Empirical Trend Analysis from 2010 – 2019

Diana Delali Amaglo*
College of Economics and Management, Nanjing University of Aeronautics and Astronautics, Nanjing, China
*delaliamaglo@gmail.com

Abstract

The study utilizes trend analysis to examine the determinants of tax revenue mobilization in Ghana from 2010 to 2019; the empirical results of a linear regression model and time series data analysis demonstrated that macroeconomic stability, trade openness, and share of agricultural GDP are significant predictors of tax revenue mobilization in Ghana. Tax collections have been influenced by GDP per capita and policy reforms. The descriptive and empirical analyses revealed that significant tax incentives exemptions, slow structural transformation, poor economic governance, weak administrative systems, and organizational capacities are challenges to increasing tax revenue. The country can reach its full potential by addressing these problems and increasing tax revenue. Furthermore, results from the study indicated that revising free zone policies and developing ways to tax the informal sector would boost tax revenue mobilization.

Keywords: Revenue Mobilisation, Trade Openness, Foreign Aid, Foreign Direct Investment, Taxation

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1. Introduction

Domestic resource mobilization (DRM) is the process through which countries raise domestic resources intending to deliver goods and services to their inhabitants (Ameyaw, Korang, Twum, & Asante, 2016; Ohemeng & Owusu, 2015). Domestic revenue mobilization strategies include tax collection, domestic borrowing, non-tax revenues, and other domestic income sources, implying that introducing additional taxes or increasing tax rates has no substantial effect on revenue mobilization because taxes are not the primary mechanism of revenue mobilization.

Consequently, domestic resource mobilization is the most reliable and sustainable source of development funding for most developing nations in Sub-Saharan Africa (Abdul–Razak & Adafula, 2013; Armah-Attoh, & Awal, 2013), contrary to international sources such as remittances, exports, foreign aid, grants, and other inflows that are unreliable and usually insufficient to support development programs for stimulating growth in developing countries (Acheampong, Debrah, & Yeboah, 2016; Engida & Baisa, 2014; Waiswa, Fekade, & Lake, 2019). In light of improving governments' ability to achieve long-term goals through improving fiscal sustainability, there has been an increasing emphasis on domestic resource mobilization in these developing countries as a source of interminable financing for development initiatives.

Recent research and financial experts agree that increasing domestic revenue is the most feasible way to attain fiscal sustainability (Lustig, 2018; Kumi & Hayman, 2019; Redonda & Neubig, 2018). Additionally, the ongoing global financial and economic crisis, as well as currently emerging financing needs in the areas of migration, terrorism, and other global shocks such as the recent global pandemic, have provided new impetus for efforts centered on domestic resource mobilization, particularly within the framework of taxation (Popoola, Asaleye, & Eluyela, 2018).

Furthermore, international conferences such as the Montreal Consensus, the Doha Declaration, and subsequent G7 and G20 summits have highlighted domestic income mobilization as a vital tool for sustainable development (Franks, Lessmann, Jakob, Steckel, & Edenhofer, 2018). Domestic resource mobilization has also been at the forefront of the debate on finance for development concerning Agenda 2030. Various government programs, like the one-district-one-factory (1D1F) public-private partnership and the Ghana Beyond Aid plan, point to the self-sufficiency and domestic income mobilization objective (Bedi, & Coffie, 2020; Kumi & Hayman, 2019; Kumi, 2017).

Despite the preceding evidence, emerging countries such as Ghana have had difficulty generating domestic resources for investment. Low tax collections continue to stymie development-country expenditure plans. In light of this, many developing countries, including Ghana, have prioritized enhancing domestic resource mobilization.

A recent development conference found that boosting domestic resource mobilization is vital for achieving the Sustainable Development Goals (SDGs). As a result, formulating pragmatic policies to improve developing countries' capacity for domestic income mobilization is usually under-emphasized.

Ghana has mobilized funds from domestic sources, particularly tax collection, over the last decade. In reality, tax collection ascended yearly, from GH 4311.57 billion in 2010 to GH 44 228.689 billion in 2019, representing a tenfold rise over the decade. Similarly, the share of domestic revenue in total public revenue increased from 61 percent to 72 percent during the same period, and the share of tax revenue in 2019 was 77 percent. However, there remains a hurdle in raising tax income as a percentage of GDP; the tax to GDP ratio remained low in 2019 at 14.1 percent, well below the Sub-Saharan average of roughly 19.4 percent, more than 20 percent for emerging economies, and more than 30 percent for industrialized economies. Ethiopia's tax-to-GDP ratio was 13.90 percent in 2005; following a decade of solid and sustained economic growth, the ratio had risen to 14.1 percent, indicating minimal gain.

Although the Ghanaian economy has been growing at a phenomenal rate of more than 5% on average, the slow development in the tax to GDP ratio suggests that the growth in tax collection does not correspond to the total economic expansion, indicating vast untaxed areas. Through detailed analysis, these considerations make it essential to investigate some of the limits to explain why tax to GDP remains low despite the seemingly steady and robust growth observed over the last decade. Furthermore, it is critical to investigate the disparity between potential and actual taxation using data from other major Western African economies (Nigeria, Côte d'Ivoire, and Senegal). Thus, the study seeks explicitly to

- Empirically investigate the determinants of tax revenue in Ghana
- Investigate the gap between potential tax and actual tax using data from other giant Western African economies

2. Literature Review

Tax is an involuntary payment or policy tool used to generate income to provide goods and services to the public (Ahmed & Muhammad, 2010; Karagöz, 2013). Adopting tax policies results in the redistribution of income/wealth in society, this helps solve inequality issues. It can also promote economic activity such as investment, work, equity, and economic progress. Any sound tax system adheres to several principles, including efficiency, fairness, and ease of administration. Researchers continue to dispute the determinants of tax revenue within countries, as measured by the tax-to-GDP ratio (Chaudhry, & Munir, 2010; Castro & Camarillo, 2014; Wawire, 2017). The findings of the majority of these researches support the notion that the economic structure of countries and the institutional complexity supported by efficient technology explain disparities in tax income. Furthermore, earlier research has used cross-sectional data and panel data analysis to explain the differences in tax performance between countries and regions.

- **The degree of trade openness:** the sum of exports and imports as a share of GDP is a crucial indicator of revenue performance. Tax revenue from international commerce accounts for a sizable portion of tax revenue in developing countries, owing to increased trade among countries and the relative ease with which the industry can be taxed. For example, the operation of international corporations in Ghana's mining and telecommunications sectors; these massive corporations generate significant cash for the government through tax declarations (Velaj & Prendi, 2014). On the other hand, the oil and gas sectors also account for substantial tax revenue due to the role of the oil and gas industry in Ghana (Wawire, 2017; Velaj & Prendi, 2014).

- **Inflation:** impacts economic activity and significantly impacts tax revenue collection as a general proxy for macroeconomic stability. The general rise in inflation places financial limitations on firms and businesses, creating a recipe for tax evasion (Kumi & Hayman, 2019).

- **Foreign Aid:** Existing literature shows that the influence of foreign aid on revenue remains uncertain. Despite this, there are several instances where aid is linked to trade liberalization. When foreign help is directly related to trading liberalization, it impairs the receiving country's revenue base. (Kumi & Hayman, 2019 Wawire, 2017).

- **Foreign Direct Investment (FDI):** It is widely acknowledged as one of the elements contributing to tax income variances. These investments have a strong potential for raising tax income from one perspective. On the other side, there is an opinion that tax breaks and other tax measures primarily benefit businesses. Some of these incentives include tax breaks and free zones. These incentives incapacitate developing countries' tax revenue capacities.

2.1 Tax Elasticity and Stability

One of the essential aspects of tax revenue analysis is its sensitivity to changes in national income. Tax elasticity and stability are metrics used to assess responsiveness. Tax elasticity measures the entire reaction of tax revenues to changes in national income or GDP and policy changes by tax authorities. It is often calculated by regressing tax revenue on GDP, occasionally with additional variables to account for other factors influencing revenue performance (Alm, Liu, & Zhang, K. (2019). A tax is buoyant if its revenue rises proportionately in response to increased output (Belinga et al., 2014).

Furthermore, tax elasticity is a theoretical construct that attempts to predict what would have happened if the tax regulations had not changed, which means it considers the pure effect of increases in income while controlling for discretionary changes and administrative improvements. Essentially, it aids in determining whether taxes generate or will generate more money as GDP rises. On the other hand, constructing tax elasticity is complex since it entails calculating the counterfactual, usually performed for each tax type rather than overall tax revenue. A generally acceptable metric of tax responsiveness is often tax elasticity.

Besides, tax stability refers to taxes whose revenue is relatively consistent or adversely associated with other taxes. Revenue stability enables governments to devise reasonable spending and borrowing plans. The coefficient of variation, defined as the standard deviation of tax income divided by its mean, is a simple indicator of revenue stability (Wawire, 2017).

2.2 Taxation Effort

The ratio of actual tax collection to the potential tax expected from the economy is measured by tax effort. Traditionally, a country's tax potential has been proxied by its gross domestic product (GDP); therefore, tax effort is simply the ratio of actual tax income to GDP. However, there is a growing body of work on tax efforts, particularly in cross-country comparisons (Dioda, 2012). One such innovative approach assesses tax potential by regressing tax to GDP on explanatory variables for sample nations. This method defines tax effort as the ratio of actual tax to GDP and tax potential (predicted value from the regression). This method proved effective for making cross-country comparisons with panel data. 2014 (Castro & Camarillo).

2.3 Factors Influencing Domestic Resource Mobilisation

There is no arguing that domestic resource mobilization is critical for long-term economic objectives. In emerging countries, the situation is deteriorating because the tax base in these developing countries is limited. Other sources of financing are not easily predictable due to conflicting demands for domestic and external resources during economic and financial crises, such as conflicts, migration, and terrorism. In Ghana, various problems impede the regular flow of income mobilization. The discussions below delve into some of these various methods in detail.

2.3.1 Slow Structural Transformation

Several studies have found that an economy's sectoral makeup significantly impacts tax revenue collection. Some areas of the economy are more easily taxed than others. For example, many African governments have found it difficult to tax the agriculture industry since many subsistence smallholder farmers control it. One of the structural reasons impeding domestic resource mobilization is low income and a high share of GDP devoted to agriculture. Prior research backs this up (Karagoz, 2013; Mawejje & Munyambonera, 2016). According to IMF research, a considerable part of the population – in agriculture or the informal sector – is challenging to tax due to low incomes (and expenditures) or being unregistered for taxes. As long as agriculture and informal sectors dominate developing countries, less money will be realized through taxes.

2.3.2 Tax Breaks and Exemptions

Several studies have found similar obstacles African countries face when mobilizing domestic resources. These studies discovered that revenue mobilization remained inadequate despite considerable improvements, primarily due primarily to capital flight, tax evasion, and an increase in tax exemptions (Chaudhry & Munir, 2010; Wawire, 2017). In order to attract foreign investments, many developing countries, particularly in Sub-Saharan Africa, offer significant tax exemptions and incentives, including tax holidays, tax credits, reduced income tax rates, expedited depreciation allowances, and subsidies in export processing zones, import duty exemptions, and complete repatriation of earnings. However, some research suggests that tax breaks are not always essential drivers of international investment. According to studies, many tax exemptions and incentives result in low effective tax revenue mobilization in Africa. For example, according to an African Development Bank (2010) analysis, tax exemptions contributed about 6% of GDP in 2008. (Kariuki & Kiragu 2011). While tax breaks might encourage economic activity and investment, tax exemptions can complicate tax administration and erode the revenue base; hence exemptions should be kept to a minimum. Furthermore, low levels of savings, poor local economic governance, capital flight, and a weak administrative structure and organizational capacities are frequently cited as barriers to increasing domestic resource mobilization in developing countries.

2.4 The Concept of the Tax Gap

The tax gap is the difference between actual tax revenues collected and expected / potential tax revenue based on an economy's current attributes and income level. According to a formal definition, the tax gap is the difference between the tax collected and the tax that should be paid; the theoretical liability is the amount collected if all individuals and businesses are obeyed (Castro & Camarillo, 2014). This aggregate gap is the sum of individual tax gaps, also known as aggregate tax gap components. According to research on taxes in developing countries, most low-income countries have a significant potential to boost tax revenue (Kumi & Hayman, 2019); due to the tax gap from government policy choices to administrative issues such as tax dodging and insufficient administrative procedures and capacities.

2.5 Empirical Studies on Domestic Revenue Mobilisation

Armah-Attoh and Awal (2013) analyzed revenue mobilization in Ghana's mining sector. The study's goal was to use tax elasticity and buoyancy ratios to examine the influence of fiscal regimes in Ghana's mining sector on revenue collection. According to the empirical results, buoyancy estimates were higher than elasticity estimates, and short-run elasticities were lower than static long-run elasticities. The estimation results also revealed that discretionary tax policies effectively mobilized additional tax revenues and that the tax system was inelastic.

One significant study in this field is Bayu (2015), which examines tax buoyancy and its determinants in Ethiopia. The study's findings suggest that direct and domestic indirect tax revenues were non-buoyant in the short and long run. However, foreign trade taxes exhibited signs of buoyancy in the long run. The study discovered that the proportion of services sector value-added, level of import, and overall government budget deficits to GDP had a favorable impact on tax buoyancy; however, the share of official development assistance to GDP had a negative impact. The contribution of industry value added to GDP had a positive but non-statistically significant influence.

The research by Bayu (2015) and Armah-Attoh and Awal (2013) gives empirical evidence on the factors that stymie tax revenue mobilization. Furthermore, the investigations found factors influencing tax buoyancy. These investigations (Armah-Attoh & Awal, 2013; Bayu, 2015) provide practical guidance for the current study. The current study builds on the empirical models used in prior studies to explore the gaps and loopholes in Ghana's tax performance and compare them to neighboring African countries.

Mawia and Nzomoi (2013) evaluated the influence of tax reform on private sector performance in Kenya, focusing on mobilization from the private sector. The analysis discovered significant disparities between laws and directives and various ambiguities in proclamations, regulations, and directives. Furthermore, the data revealed that there is frequently a significant time gap between the publication of tax proclamations and rules and the corresponding implementation directives, increasing risk and uncertainty for firms.

Torome (2013) evaluated the extent of Kenya's informal or underground economy and its implications for tax evasion in another related study. The study used a monetary approach to assess the underground economy's scale. According to the findings, a large quantity of economic activity is not reported or captured by official statistics. In 2012, tax evasion accounted for 10% of the economy's total size. This discovery has consequences for tax policy. Mawia and Nzomoi (2013) and Torome (2013) have highlighted some tax gaps in their previous investigations.

The tax gap identified by this research is due to legislative differences. This study evaluates the tax performance in Ghana to add to the literature on revenue.

Furthermore, Bekoe and Danquah Senahey (2016) studied Ghana's tax reform program and investigated whether it has assisted the overall tax system and individual tax revenue mobilization capability based on estimations of tax buoyancies and elasticities. Between 1970 and 2013, The findings indicate that, in general, tax reforms had a favorable impact on the overall tax structure as well as individual tax handling, as demonstrated by greater than unity buoyancy and elasticity. According to the findings, tax system improvements have benefited the country's entire tax structure. However, the effectiveness of taxation and income mobilization through taxation were not investigated.

2.6 Performance in Domestic Resource Mobilization

Typically, the government prioritizes domestic resource mobilization tools for financing developments, including non-tax revenue, tax collection, domestic borrowing, and other domestic income sources; and also resource mobilization by regional governments, mobilization of resources through capital bonds (Kumi & Hayman, 2019), and remittances for financing the foreign exchange component in the medium term. Enhancing domestic resource mobilization is to ensure sustainable high rates of growth. Unlike foreign aid and FDIs, domestic finances are more predictable, reliable, and directed to desired sectors. Moreover, other countries' experiences reveal that relying on domestic resources is essential to solidifying ownership over development strategies and strengthening the bonds of accountability between government and citizens. In consonance with this fact, Ghana has, over the period, enhanced its domestic resource mobilization with a level of tax collection increase through reforms, tax administration improvement, and trade facilitation. However, the ratio of tax mobilization to GDP is not encouraging; hence, there is a need to investigate mechanisms for increasing tax revenue mobilization in the country. Some of the mechanisms for increasing tax revenue mobilization have been subsequently explained:

2.6.1 Reviewing Free Zones Tax Concessions

Tax exemptions and concessions granted to operators in the country's free zones also undermine effective revenue mobilization. According to the Free Zone Act, 1995 (Act 504), a free zone enterprise shall have the right to produce goods and services for export, except environmentally hazardous goods. Free zone operators and enterprises granted licenses under the Act are exempted from the payment of income tax on profits for the first ten years from the date of commencement of operation, and the income tax rate after ten years shall not exceed a maximum of 8%, while companies operating outside the free zone pay between 25-30%. Also, free-trade zone shareholders are exempted from the payment of withholding taxes on dividends arising out of their investments. The issue is that while the outputs of the companies operating in the free zones form part of the country's GDP, not many taxes are paid due to the displacement of the tax bases, eroding the country's tax-to-GDP ratio; this means that the Free Zones Act needs to be changed significantly so that the businesses in the zone can bring in much money for the government.

2.6.2 Managing Oil Revenue Risks

The country's oil sector presents opportunities and risks to fiscal management, as it is expected to provide a solid but temporary boost to economic growth and government revenue. The oil sector was estimated to generate US$23 billion in public revenue between 2016 and 2036, with a projected peak in 2023 and a decline after that, with production ceasing entirely by 2036 (World Bank, 2017). However, these revenue projections are highly sensitive to developments in the global commodity markets, and if oil prices fail to recover, Ghana's oil revenue could fall by more than half. Leveraging this short-term revenue surge to promote sustainable development poses a considerable challenge. Although Ghana has developed a sound oil revenue-management strategy, the oil revenue projections that underpin it have repeatedly been inaccurate. As the sector's fiscal importance increases over the medium term, the risk of an oil-revenue shortfall destabilizing the budget will rise. Effectively transforming oil revenues into productive investment and human capital development will require a well-designed investment strategy combined with improvements in expenditure efficiency.

3. Methods, Data, and Model Estimation

In this section, an empirical analysis is employed to identify Ghana's determinants of tax revenue. This model is developed based on the theory, related literature on developing countries, and Ethiopia and South African contexts. A linear regression model is estimated to examine the country's determinant of tax revenue mobilization. Time series data from 2010-2019 from national data sources (Ministry of Finance and the Bank of Ghana) are used. The tax revenue to GDP ratio is specified as per capita income, the share of agricultural output, the economy's openness, macroeconomic stability, and tax reform. Variables such as the share of the informal economy are not included due to the unavailability of data. A policy dummy is also included to capture the effect of reforms.

$$tax/GDP = \alpha + \beta_1(\text{aggdp}) + \beta_2(open) + \beta_3(Inpcgdp) + \beta_4(\text{infl}ation) + \beta_5(reform) + \ell \quad (1)$$

The variables in equation one are explained in Table 1. The expected impacts are based on similar studies' theoretical priori and empirical findings.

Table 1: Variable definitions

Variable	Definition	The expected effect on Tax/GDP
AGGDP	Share in agricultural value-added in the GDP	Negative
Openness	the openness of the economy is measured as the sum of exports and imports as a ratio of GDP	Positive
LNPCGDP	per capita GDP to capture the impact of economic growth (in logarithm terms)	Positive
Inflation	inflation rate to capture the impact of macroeconomic stability	Negative
Reforms	A dummy variable to capture the influence of the reform from 2008	Positive

4. Estimation Results

The first step was to test the variables of interest for unit root to avoid spurious regression. Following this, the Augmented-Dick Fuller unit root test was performed on tax to GDP ratio, the share of agricultural GDP, openness and inflation, and per capita GDP. The following table shows the test results.

Table 2: Augmented-Dick Fuller unit root test

Variable	Test Result
Tax to GDP	Not Stationary (1/1)
Logarithm of Per capita Income	Not Stationary (1/1)
Openness (External trade/GDP)	Not Stationary (1/1)
Agricultural GDP	Not Stationary (1/1)
Inflation	Stationary (1/0)

Since the variables of interest, except inflation, are integrated of order (1/1) (non-stationary), and inflation is I (0), the Engle-Granger two-step approach can be used; in this case, the long-run cointegration and short-run dynamic models are estimated. The autoregressive distributed lag (ARDL) is adopted in the first scenario. The ARDL approach is appropriate for simultaneously generating short-run and long-run elasticities for small sample sizes and follows the ordinary least square (OLS) approach for cointegration between variables (Duasa 2007). ARDL affords flexibility in the order of integration of the variables. ARDL is suitable for the independent variable in the model, which is I(0), I(1), or mutually cointegrated (Frimpong & Oteng 2006). The second step involves estimating a short-run model using differenced (stationary) forms of the variables by including the first lag of the residual term from the long-run model called the error correction mechanism. However, there are limitations to this model as it allows only for one cointegrating relationship and simultaneity bias that could arise from the endogeneity of

variables treated as exogenous. The implication is that it would be challenging to give a practicable analytical interpretation of the coefficients of each variable in the long-run model.

Table 3 Results for long-run models

	Coefficient	T- statistics	Probability
Tax/GDP			
AGGDP*	-0.144	-2.09	0.058
Openness***	0.086	5.01	0.000
LPCGDP	-0.802	-0.88	0.453
Inflation***	-0.076	-4.31	0.000
Constant	18.17	4.15	0.159
D-reform	1.074	1.51	0.243
D-institution	1.072	1.16	0.003
Adj-R2	0.77	19.87 (F-Statistic)	0.000

4.1 Error Correction (short run dynamic) Model

The short-run model is specified as equation 2, where the first difference (changes) in the non-stationary variables are considered, and the first lag of the residual value from the long-run equation is included to account for the error correction model (ECM) or speed of adjustment to steady-state.

$$d.tax/GDP = \alpha + \beta_1(\mathrm{d.aggdp}) + \beta_2(\mathrm{d}.open) + \beta_3(\mathrm{d}.Inpcgdp) + \beta_4(\mathrm{infl}\,ation) - ECM(\mathrm{eqn}(1) - resid(-1)) + form) + \ell \quad (2)$$

Table 4 Error correction model (Short-run)

D.tax/GDP	Coefficient	T- statistics	P-Values
d.AGGDP	-0.092	-1.37	0.162
d.Openness	0.017	0.58	0.533
d.LPCGDP	0.467	0.22	0.807
Inflation**	-0.065	-3.04	0.007
L1.resid**	-0.491	-2.66	0.009
Constant	0.567	1.40	0.023
Adj-R2	0.37	6.7 (F-Statistic)	0.004

Table 4 illustrates the results of the short-run error correction model. The result indicates that the inflation rate and the error correction term significantly explained tax collection; this may imply that the inflation dynamics are essential in determining tax collection. The share of agriculture, trade openness, and per capita GDP have indicated the expected signs in their coefficients but do not show any significance. The coefficient of the lagged residual variable shows an adjustment of 49% towards long-run equilibrium. The implication is that 49% of the error or disequilibrium will be adjusted annually.

The overall results, as captured in Table 3, case sectoral composition of the economy, trade openness, and macroeconomic stability are the major determinants of the tax to GDP ratio. The dummy variable that captures tax reform was not significant enough, though it has a positive effect. The impact of GDP per capita was also insignificant.

The model explained 77% of the variation in tax revenue as indicated by the adjusted R2. As is the case in other developing countries, the dominance of the agriculture sector is negatively related to the level of tax revenue

mobilization. The effect of trade openness is significant and positive as Ghana receives most of its tax revenue from imports. The change in per capita income is not statistically significant compared to other countries' theories and empirical evidence. This indicates a reasonable share of the economy that is not taxed. So far, the growth registered in the economy has not resulted in commensurate taxation. The fact that services contribute to the economic growth, while at the same time it is the sector hoarding majority of the informal sector, which is out of the current taxing spectrum, could be one reason. As measured by inflation, macroeconomic stability is found to have significant adverse effects as expected.

5. Conclusion

The empirical results have suggested that macroeconomic stability, trade openness, and share of agricultural GDP are essential determinants of tax revenue mobilization in Ghana. GDP Per capita, as well as policy reforms, have also influenced tax revenues. Results of both the descriptive and empirical analysis above suggest that massive tax incentives exemptions and slow structural transformation, poor economic governance, and weak administrative system and organizational capacities are challenges to increasing tax revenue. If these challenges are addressed, it can tap the potential and increase tax revenue mobilization in the country. Besides, the existing literature pointed out that reviewing the free zones policy and devising mechanisms to tax the informal sector would increase tax revenue mobilization.

One significant conclusion of this study is the existence of lower tax revenue performance in the country throughout the study period, resulting in a fiscal deficit for an extended period. Although, this declined with the unstable economic growth and falling unanticipated level of spending. Therefore, the paper recommends that maintaining an efficient tax administration significantly augments tax performance. The study also concludes that a meager increase in the industrial value-added share of GDP may not be a guarantee for increasing tax revenue because the evidence reveals that tax revenue was inelastic to the change in industry value added, though its response was significant both in the long run and in the short run.

This study shows that the share of tax revenue to GDP is considerably low, implying that domestic resource mobilization is at an infant stage in Ghana. The study suggests that policymakers should implement strategies that will facilitate economic growth by giving the necessary attention to improving the efficiency of tax administration and broadening tax bases - boosting the industrial sector. GDP Per capita indicates a positive contribution in the long run. Moreover, due to the significant effect of the industrial value-added share of GDP on tax revenue, in the long run, the country has to shift its focus from the agricultural sector to develop the industrial sector while maintaining the relationship between the two sectors. Likewise, the government must enact and enforce policies that promote industrial production while striving to transition small-to-medium industries into large industries.

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