The Relative Effect of Trade and Tax Reforms on Import Tax Revenues in Ghana

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ABSTRACT

This study examines the relative effects of alternative import policy reform features and value added tax on import tax revenues in Ghana. To achieve this objective, the study first estimates the effect of alternative import policy features and VAT on import tax changes. The estimated coefficients are then applied to the observed values of each respective import policy feature and VAT to obtain the contribution of each policy feature to change in import tax revenue. The study concludes that Ghana has made some revenue gains by reducing the average official duty rate and imposing VAT rate on imports, and that revenue gains have outstripped revenue losses from the reforms. It is subsequently suggested that the government should maintain the current strategy of replacing tariffs with a type of consumption tax.

Keywords: Duty Rate; Value Added Tax; Import Tax Revenues

JEL classification codes: E6, H2, E62, H21

1. Introduction

Trade and tax reforms continue to be an important policy issue in Ghana and other developing countries. Reducing barriers to trade and reforming the domestic tax system have formed an important aspect of the structural adjustment program in many developing countries. Trade reforms included reduction of statutory customs duty rates and simplification of the range of rates, and, have been accompanied by reforms to the domestic tax system. Among the prevailing domestic tax reforms, is the decision to introduce some type of consumption tax as a replacement for loss of revenue incurred by reducing import and export duty rates. Yet, in spite of the anticipated loss of revenue from reduction of the average duty rates on imports and exports, taxes on trade have continued to be an important source of tax revenue for fiscally stretched governments (Keen and Ligthard, 2002).

Since 1986, Ghana's import tax policy reforms have featured prominently in the overall strategy of liberalizing international trade and reforming the tax system, and, had formed part of a broader economic reforms program, which started in 1983. Key features of the liberalization of trade included a gradual reduction and simplification of the tariff rates on imports and the elimination of most quantitative restrictions. The replacement of sales tax with value added tax (VAT) also formed an important aspect of overall tax reforms (Obeng, Brafu-Insaidoo and Ahiakpor, 2011). The foregoing suggests that, under the current dispensation of a liberal trade regime and reformed tax system, the two main types of taxes on imports are customs duty and VAT.

In spite of the liberalization of customs duties on imports, the introduction of VAT on imports have ensured that taxes on international trade have remained an important share of the total tax revenues collected in Ghana. Customs duty on imports have accounted for an annual average of 17.2% of the total tax revenues collected between 2000 and 2016. Value added tax (VAT) on imports has also constituted an annual average 16.9% of total tax revenues collected over the same period. This implies that, duties and VAT collected on

imports have amounted to not less than 32% of tax revenues collected over the period between 2000 and 2016 (sourced from the Ministry of Finance online database).

Literature on the revenue implications of duty reforms does not provide conclusive arguments and evidence on how the reform measures affect tax revenues. Obeng, Brafu-Insaidoo and Ahiakpor (2011) used a robust decomposition analytical approach to examine the relative effects of alternative features of import policy reforms on import tax revenues in Ghana. Their study found that Ghana suffered from some loss of revenue by reducing the level of average duty rates but gained in revenue as a result of real currency depreciation. They also found a surge in imports to have contributed to the growth in import tax revenues following the adoption of a liberal trade regime. However, their study covered the period from 1966 to 2007 and as such failed to account for differences in conditions under the pre-reforms and reforms periods. Also, their study did not cover the period beyond 2007. The approach used by Kusi (1998) is also flawed on the grounds that their computations are simply ratios of proportional rates of change, and does not give ample indication of the contribution of each import policy feature to changes in import tax revenue in Ghana.

The current study differs from the study by Obeng et al. (2011) by focusing on the reforms period and extending the study period to 2016. As such the study period is from 1986 to 2016 and is justified on the grounds that Ghana has made frequent changes to its tariffs for the purpose of improving on her fiscal revenues and reducing budget deficit since 2008. The 2014 World Trade Organization (WTO) report indicates that Ghana's tariff regime has been very unstable between 2008 and 2014 which could alter the relative revenue effects of the alternative import policy features. The study also adds value to the literature by analyzing the relative contribution of the introduction of VAT to import tax changes in Ghana.

The empirical purpose of the study is to examine the relative effects of alternative import policy reform features and VAT on import tax revenues in Ghana. To achieve the stated objective, this study uses an analytical approach that decomposes the contribution of the different aspects of the sources of change in import duty and import VAT to changes in import tax revenue in Ghana. Similar to Obeng, Brafu-Insaidoo and Ahiakpor (2011), the first step of the approach to analysis involved an estimation of the contribution of alternative import policy features and VAT in two separate equations for import tax changes. The estimated coefficients are then applied to the observed values of each respective import policy feature and VAT to derive the contribution of each to the change in import tax revenue, expressed as a proportion of the observed change.

2. Literature review

2.1 Theoretical literature review

Identified theory that comes close to offering an explanation to how changes in import duty rates and import VAT rates contribute to changes in import tax revenues are the works by Keen and Ligthart (2002), the Organization for Economic Co-operation and Development (2004), and the International Monetary Fund (2005). The analysis made in the theoretical model assumes a governed small open economy of the kind that comprises a representative household and a market-led production sector. The model also assumes that the commodities in question are both tradables and non-tradables. Additionally, the representative economy is one which cannot have any impact on prices in world markets, implying that the price faced by consumers would remain unchanged. With the existence of tariffs and destination-based consumption taxes, producer prices constitute the sum of world price and tariffs whilst consumer prices comprise the sum of world price, tariffs and destination-based consumption taxes. Other assumptions made are that: there is initially some domestic production and trade; and initial consumption taxes are all strictly positive.

Production prices could be expressed in the following notational form:

$R + otr$, where R is world prices and otr is tariffs.

Consumer prices is defined as follows: $C \equiv R + otr + xvr$, where xvr is destination-based consumption taxes.

The representative household is also assumed to have an expenditure function

$$X(C, U) = Q(R + otr) + rev \tag{1.1}$$

where rev denotes revenue from consumption taxes and tariffs and is assumed to be returned to the household in the form of lump-sum transfer

$$rev \equiv xvr'_c X_c(c, u) + otr'[X_c(c, u) - Q_R(R + otr)] \tag{1.2}$$

where $xvr'_c X_c(c, u)$ is revenue from consumption taxation and $otr'[X_c(c, u) - Q_R(R + otr)]$ is tariff revenue.

Furthermore, one of the commodities is used as a numeraire and is assumed to attract a zero tariff or a zero consumption tax. Consider then that there is a reform that involves reducing tariffs by $\Delta otr < 0$ followed with raising consumption taxes by the same (offsetting) magnitude ($\Delta xvr > 0$). The outcome of the implementation of such reform is that this could result in a reduction in producer prices and domestic production to reflect the tariff reform, but consumer prices would not be affected. Keen and Ligthart (2002) offer proof in their work in support of the proposition that with the existence of some positive values for tariffs and consumption taxes, cut in tariffs which strictly raises the value of domestic output at world prices in conjunction with consumption tax reform which leaves consumer prices unchanged, results in a strict increase in both welfare and public revenue.

In their second proposition, Keen and Ligthart (2002) show that a composite two step reform can enhance public revenue. In a scenario where the sum of initial tariffs and consumption taxes are strictly negative, enhancing public revenue would mean that import subsidy is eliminated and the corresponding production tax is increased by the same amount. In an alternative scenario where import tariff is initially strictly positive, a cut in import tariff with a corresponding increase in consumption tax by the same amount would be revenue-enhancing. The conditions under which the two-step reform would be revenue-enhancing are that: whilst the first step to the reform increases consumption prices and, in so doing, reduce the value of compensated demand at world prices, the second step of the reform changes producer prices and subsequently raise the value of domestic output at both world prices and world prices plus production taxes. Keen and Ligthart (2002)'s model also predicts that combining tariff reform with consumption tax reform enhances public revenue if the joint reform reduces the maximized value of traded and non-traded goods at domestic producer prices, and if the initial tariffs and consumption taxes are strictly positive. Additionally the joint reform could be revenue – enhancing if tradeable intermediate goods are used only to produce non-tradeable consumption goods. In summary, the Keen and Ligthart (2002) model postulates that it is possible to preserve tax and tariff revenues during reforms by just offsetting tariff reductions, with an equal measure of increases in destination-based consumption taxes, and in this manner leave consumer prices unaffected.

The International Monetary Fund (IMF) (2005) also indicates that reforms to trade tax could affect public revenue in a number of ways aside the direct impact through trade tax. Levying consumption taxes on tariff-inclusive prices tends to have a direct effect through consumption taxes. Secondly, currency depreciation, which is an outcome of liberalization, increases the local currency denominated-value of imports which in turn reinforces revenues from import tariffs and domestic consumption taxes.

2.2 Empirical Literature

Empirical literature reveals contrasting outcomes from tariff cuts with a corresponding increase or introduction of consumption taxes. For instance, the IMF (2005) study shows that low-income countries that implemented reforms experienced trade tax loss and reduction in total tax revenues as share of GDP. Middle income countries that liberalized their tariff regime and increased their consumption taxes have been able to keep total tax revenues unchanged whilst high income countries that executed similar reforms have succeeded

in increasing the revenues. The literature also indicates significant differences in revenue outcomes across the globe. On average, in Middle East countries, there have been less than complete replacement of lost trade tax revenues whilst in Sub-Saharan African and American countries there have been more than full offsetting in the 1990s. However, none of the identified studies used a quantitative analytical approach to analyze the relative impact of tariff cuts and domestic tax reforms in the form of an increase in consumption tax on import tax revenues. Also, a study of similar type for Ghana is yet to be identified.

The only identified related studies for Ghana is Obeng, Brafu-Insaidoo and Ahiakpor (2011) and Kusi (1993). However, these studies only focused on examining the relative contribution of alternative import policy features to import tax changes. Their studies exclude the relative contribution of domestic tax reforms cast in the form of the introduction of VAT (a type of consumption tax) to import tax changes.

3. Methodology

The focus of our estimation and other computational exercises is to first determine the impact of import liberalization and domestic tax reform on tariff revenue from imports, and secondly, to determine the main relative contribution of alternative features of the import policy and domestic tax reforms.

3.1 Method of analysis

The approach adopted involved a formal decomposition analysis of the changes in import tax revenue (VAT inclusive) with the use of existing data for Ghana. The outcome of the computational analysis provides information about the actual or revealed effects of import policy and tax reforms measures required for examining the relative revenue effects of alternative features of import policy and tax reforms.

We first make a presentation of an identity for trade and consumption tax revenues from imports as follows:

$$rev = (\tau + v) * rer * m \tag{1}$$

where rev is the sum of import tariff and VAT revenues in the current year, τ and v are respectively the effective tariff/duty and VAT rates on imports, and rer is the exchange rate and m is imports (measured in US dollars) in the current year.

When expressed in log form and as regression equation to be estimated, this yields the following:

$$lnrev_t = \theta_0 + \beta_1 ln\tau_t + \beta_2 lnv_t + \theta_1 lnrer_t + \theta_2 lnm_t + \varepsilon_t \tag{2}$$

All measures are in real terms. However, in view of the fact that regressing Equation 2 confirms it as an identity with coefficients of 1 for each explanatory variable, the effective tariff rate for imports was replaced with the official average tariff (otr) and VAT (xvr) rates. The replacement is further justified on the grounds that the effective rate may simply be a reflection of the rate of revenue collection by the customs division of the Ghana Revenue Authority, and may not be an indication of trends in official rates (Brafu-Insaidoo and Obeng, 2008). Thus, following from equation 2, we get the following equation:

$$lnrev_t = \theta_0 + \beta_1 lnotr_t + \beta_2 lnxvr_t + \theta_1 lnrer_t + \theta_2 lnm_t + \varepsilon_t \tag{3}$$

where β_i and θ_i for $i = 1, ...n$ respectively represent coefficients for the statutory tax rates and other explanatory variables, ε is the error term denoting the residual unexplained variation in import tax revenue and ln symbolizes natural logarithm.

Equation 3 is re-written to indicate change Δ in tariff revenue expressed as a function of change in the respective explanatory variables and is represented as follows:

$$\Delta lnrev_t = \theta_0 + \beta_1 \Delta lnotr_t + \beta_2 \Delta lnxvr_t + \theta_1 \Delta lnrer_t + \theta_2 \Delta lnm_t + \varepsilon_t \tag{4}$$

Equation 4 has been estimated using the Cochrane–Orcutt iterative procedure, which corrects for multicollinearity and autocorrelation (Cochrane and Orcutt, 1949). The estimated coefficients are then used to conduct the formal decomposition analysis of changes in import tax revenue.

3.2 Data sources and definition of variables

The study used annual data collected from various sources. These include the International Monetary Fund (IMF) database, the World Bank database, Ghana Statistical Services, Customs, Excise and Preventive Services, and the Ministry of Finance and Economic Planning.

For this paper, the following variable definitions applied. Real import tax or duty and VAT revenues were calculated by deflating nominal import duty and VAT revenues with the consumer price index. This measure has been used by Obeng, Brafu-Insaidoo and Ahiakpor (2011), Brafu-Insaidoo and Obeng (2008) and Kusi (1998). The average import duty rate variable used in the estimation exercises is the average official duty rates for imports. The real exchange rate was computed by deflating the nominal exchange rate by the consumer price index. The value for real imports is the dollar value of imports.

4. Decomposition analysis

This section reports the results of the decomposition exercises undertaken to determine the relative revenue effects of alternative features of the import trade policy reforms and the introduction of VAT (a type of consumption tax).

Estimation results for equation 4 are presented as **Table 1**. In general, the results indicate that the imposition of VAT rates on imports, real currency depreciation and rise in volume of imports account for increase in the level of tax revenues from imports in Ghana. A 1% rise in the statutory VAT rate leads to 0.28% increase in the level of import tax revenues whilst 1% currency depreciation and a rise in volume of imports by the same proportion respectively account for 0.51% and 0.26% increase in the level of tax revenues from imports in the country. Surprisingly, reduction in the average official tariff /duty rates has rather led to an increase in the level of tax revenues from imports. A 1% decrease in the average official duty rates has accounted for a 0.67% increase in the level of tax revenues from imports. The results mean that import tax revenues have increased significantly in response to a rise in VAT rates and volume of imports, and to domestic currency depreciation. Although, this study focused on the liberalization period (1986 to 2016) as compared to the period (1966 to 2007) covered in the study by Obeng, Brafu-Insaidoo and Ahiakpor (2011), the sign of the estimated coefficients for real exchange rate, volume of imports and average tariff /duty rates are similar to the results obtained by Obeng et al. (2011).

Table 1. Regression results for import tax revenue, 1986 to 2016

$\Delta lnrev$	Coefficient	Standard error	T	P>{t}
$\Delta lnotr$	-0.666	0.303	-2.20	0.038
$\Delta lnxvr$	0.275	0.091	3.02	0.006
$\Delta lnrer$	0.508	0.262	1.94	0.064
$\Delta lnm\$$	0.263	0.145	1.81	0.083
Constant	0.082	0.038	2.17	0.039

D-W (original) 2.270   D-W (transformed) 2.070
Source: Computed using Intercooled Stata 13.0

In the next step of the analysis, the estimated coefficients are used to conduct the formal decomposition analysis of changes in import tax revenues. This analysis examines the relative effects of alternative elements of the trade policy reform and the introduction of VAT (an important element of domestic tax reforms). The data reflect the contribution of or magnitude of impact of change in each policy feature to change in import tax revenues.

Table 2. Decomposition analysis of sources of changes in import tax revenue

Year	VAT	DUT	M$	RE	Overall net contribution
1986		0.348	-0.015	0.254	0.588
1987		0.912	0.549	-0.943	0.517
1988		2.490	-1.512	0.011	0.989
1989		0.114	0.089	0.094	0.298
1990		3.204	-4.933	-3.262	-4.991
1991		0.302	-0.745	-0.222	-0.665
1992		0.000	-26.295	-6.233	-32.529
1993		0.147	-0.063	0.409	0.493
1994		0.000	-0.557	0.421	-0.136
1995		0.000	-24.127	-19.689	-43.815
1996		0.000	0.087	0.043	0.130
1997		0.000	-3.377	-0.931	-4.308
1998		0.000	-0.055	-0.042	-0.097
1999	0.856	0.000	0.067	0.018	0.941
2000	0.088	-0.081	-0.274	0.678	0.412
2001	0.197	0.588	-0.402	-0.038	0.344
2002	0.000	0.000	-8.272	-2.076	-10.348
2003	0.000	0.000	-0.104	-0.417	-0.521
2004	0.263	0.000	0.315	-0.417	0.161
2005	-2.285	0.000	-3.295	6.466	0.885
2006	0.000	0.000	0.705	-0.969	-0.264
2007	0.000	-0.117	0.087	-0.183	-0.213
2008	0.000	0.023	0.173	-0.111	0.084
2009	0.000	-0.012	2.551	-1.296	1.243
2010	0.000	0.024	0.317	-0.259	0.083
2011	0.000	0.000	0.273	-0.053	0.221
2012	0.000	0.000	0.055	0.331	0.386
2013	0.000	0.436	-0.667	-0.275	-0.506
2014	0.332	0.000	-0.683	0.999	0.649
2015	0.000	0.000	-4.559	2.827	-1.732
2016	0.000	0.158	-0.690	-0.764	-1.296

Note: Change in import tax revenue is expressed as the contribution of each policy feature to change in import tax revenue each year, where 'VAT' is defined as the product of change in the statutory VAT rate and its respective estimated coefficient divided by change in import tax revenue, that is $(\beta_2\Delta lnxvr)/\Delta lnrev$; 'DUT' is defined as product of change in the statutory official average import duty rate and its respective estimated coefficient divided by change in import tax revenue, that is $(\beta_1\Delta lnotr)/\Delta lnrev$; 'M$' is defined as product of change in dollar value of imports and its respective estimated coefficient divided by import tax revenue, that is $(\theta_2\Delta lnm)/\Delta lnrev$; and 'RE' is defined as the product of change in real exchange rate and its respective estimated coefficient divided by change in import tax revenue, that is $(\theta_1\Delta lnrer)/\Delta lnrev$.
Source: Computed using data from *Ghana Statistical Service's and World Development Indicator databases*

Table 2 shows the direct relative contributions of the import policy features and official VAT rate to changes in import tax revenues in Ghana. For the period prior to the implementation of VAT (1986 to 1998), the contribution of the alternative import policy features to import tax changes vary considerably. While the contribution of the official average import duty rate to changes in import tax revenues was positive for 7 out of 13 years, imports (in dollar value) and real exchange rate contributed negatively to changes in import tax revenues for 10 and 7 years out of the 13-year period, respectively. The findings suggest that the decline in average official duty rates for the period between 1986 and 1998 instead increased import tax revenues for that period. The negative contribution of imports and real exchange rate to total tax revenues from imports could be the result of malpractices and leakages related to import tax revenue collections and administration.

The period after the introduction of VAT reveals interesting outcomes. The imposition of VAT on imports and its infrequent upward adjustments have contributed positively to changes in import tax revenues for the period between 1999 and 2016. Statutory VAT rates have contributed to import tax revenues in 5 out of the 18 years of its implementation. For 12 out of the 18 years, the VAT rate was not adjusted; hence, it did not contribute to changes in import tax revenues for the period in question. Similarly, the average official import duty rate was not adjusted for 10 years out of the 18 years (the VAT period). For the period in which the average import duty rates were adjusted, it contributed positively to changes in import tax revenues for 5 years.

The relative impact of imports (in dollar value) to changes in import tax revenues was positive for 9 out of the 18 year period and was negative for a similar length of time during the VAT period (1999 to 2016). Real currency depreciation also contributed to growth in import tax revenues in 6 out of the 18 (VAT) years considered for the analysis. The rate of real currency depreciation has been highly volatile throughout the period of observation (1986 to 2016) and might have contributed to its negative impact on changes to import tax revenues for 12 out of the 18 (VAT) years under consideration.

An analysis of the average impact reveals that import duty rates was the most important contributor to growth in import tax revenues in the pre-VAT period (1986 to 1998) whilst the introduction of, and, infrequent upward adjustment of the statutory VAT rate was the most important contributor to growth in import tax revenues for the period after 1998 (the VAT period, 1999 to 2016). Real currency depreciation also impacted positively on changes to import tax revenues for both the pre-VAT and VAT periods. On the contrary, imports (in dollar value) impacted negatively on import tax revenues for the pre-VAT (1986-1998) and VAT (1999-2016) periods. This could be explained by the decline in imports (the taxable base) by 11.3% during the pre-VAT period and by 3.2% for the period after the introduction of VAT.

An analysis of the overall net contribution of the alternative policy features to changes in import tax revenues shows an interesting outcome. The average total net contribution was 0.094 for the pre-VAT period (1986 to 1998) and 0.594 for the period 1999 to 2016 (the period of implementation of VAT).

It might be conclusive from the analysis that the introduction of, and infrequent adjustment of the VAT has impacted positively and significantly on tax revenues generated from imports since its introduction. Additionally, the overall net impact of the alternative policy features on growth of import tax revenues has been more pronounced after the introduction of the VAT.

The official VAT rate has increased at an annual average of 3.5% since its introduction in 1999, which is at a time that the average official import duty rate has consistently declined (by 4.7% in the pre-VAT period and by 0.5% in VAT period). Over the same period under consideration, the real value of import tax revenues has increased at an annual average of 10.5% between 1986 and 1998, and at an annual average of 18.4% between 1999 and 2016. Observation of this trend in the variables of interest clearly point to the comparatively significant contribution made by the statutory VAT rate to growth in tax revenues from imports in Ghana.

The results obtained from the analysis are in contrast with the results obtained in the study by Obeng, Brafu-Insaidoo and Ahiakpor (2011) certainly because of the differences in the study period covered in the analysis, but also because the previous study excluded the contribution of VAT. In the study by Obeng et al. (2011), imports (in dollar value) is identified as the most important contributor to import tax changes during the liberalization period, whilst in the current study the statutory VAT rate is found to be the most potent contributor to import tax changes in Ghana. The extension of the current study to include VAT adds value to the study on public revenues generated from imports, particularly because it is expected that VAT (a type of consumption tax) will compensate for any loss of public revenue associated with reductions in average official tariff (duty) rates following trade liberalization.

5. Summary and conclusion

As part of measures to liberalize her external trade regime, Ghana has reduced the level of tariffs (duties) rates, simplified the existing rates into more uniform rates, and has accompanied this with a liberalization of her exchange rate regime. These measures were put in place mindful of their ramifications on public revenue mobilization. As a strategy to compensate for the potential revenue loss associated with the implementation of such measures, the Government of Ghana introduced the Value Added Tax as a replacement for sales tax in 1999. VAT is charged on domestic consumption and imports to the country, and tax revenues from imports have remained important in public revenue mobilization since the introduction of VAT. Hence, the present

study has attempted to find out the relative contributions of VAT and alternative import policy features to growth of import tax revenues in Ghana.

The findings from the analysis are as follows:

- Reductions in the average official import duty rates have impacted positively on import tax revenues (it has led to an increase in the rate of growth of import tax revenues).
- The introduction of, and infrequent upward adjustment of, the statutory value added tax (VAT) rates on imports have also impacted positively on import tax revenues (the sum of duties and VAT revenues from imports).
- The average decline in real imports has impacted negatively on growth in import tax revenues.
- Real currency depreciation has also impacted positively on growth of import tax revenues by increasing the domestic currency value of imports and hence the taxable base.
- The overall net contribution of the alternative import policy features and VAT to changes in import tax revenues was positive for the period studied.
- The average official duty rate was the most important contributor to growth in import tax revenues in the pre-VAT liberalization period whilst the statutory VAT rate was the most important contributor to growth in import tax revenues after the introduction of VAT in 1999.
- Although reductions in the average official import duty rate has increased growth in tax revenues from imports, VAT has contributed comparatively more to import tax increases in Ghana for the period studied.

In sum, this study provides evidence of the revenue compensating effect of the introduction of VAT (a type of consumption tax) during the period of trade liberalization which includes reductions in the average official duty rate in Ghana.

6. Policy and economic implications

Findings from the study indicate that tariff liberalization in the form of reductions in the average official duty rate has been fiscally compatible and the introduction of VAT has also contributed more to growth in tax revenues from imports in Ghana. Revenue gains made has outstripped revenue losses incurred from reductions in the average official duty rate. Additionally, Ghana has boosted her public revenues by generating additional tax revenues from imports with the introduction of and infrequent upward adjustment of the VAT. The findings attest to the huge potential revenue gains that the country can make by sustaining the implementation of the VAT even when the average official duty rate is further reduced as part of the implementation of the Interim Economic Partnership Agreement (IEPA) with the European Union.

Furthermore, the fiscal incompatibility of reductions in the average official duty rate may not be a matter of concern since the equilibrating effect of a liberal exchange rate regime causes the taxable base to increase and as such enhances the tax potentials from imports to the country even during the period of liberalization.

Moreover, the positive correlation between imports (valued in U.S. dollars) and tax revenues from imports found in the regression analysis imply that one of the huge gains to be made from growth in the volume of imports is rise in public revenues from imports to Ghana. The biggest lesson to be learnt from the study is that if Ghana wants to maintain the twin policy objectives of increasing international trade and revenue generation, she should maintain the current strategy of replacing import duty with a type of consumption/sales tax (in this instance, the VAT).

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