

The Impact of Trade Policies on Economic Growth in Tanzania

James Daniel Chindengwike*¹ 

¹St. John's University of Tanzania, Dodoma, Tanzania

*Corresponding Author: chindengwikejames@gmail.com

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ABSTRACT

Effective trade policy is very important to support economic growth. This study's main goal is to evaluate how trade policies affect Tanzania's economic expansion. In this study, quantitative research techniques and a time series research design were used. The study's population consists of economic data spanning the years 1990 to 2020. The analysis examined thirty observations, or annual data, from two trustworthy sources: The World Bank and the International Monetary Fund (IMF). The study's findings indicate that, because the qualities are connected with growth, trade policy influences Tanzania's economic growth. The study comes to the conclusion that trade adjustments in these important sectors gave preference to ineffective operations over productive ones in order to support infrastructure, health, education, and agriculture, the government needs manage its resources well. It should also specify exactly which laws and rules need to be followed in order to implement national policies.

Keyword: Trade Policy, Trade Openness, Economic Growth, Tanzania

1. Introduction

Since the early 1970s, trade liberalization has been a hot topic in development literature, particularly among emerging countries in Africa. The key theme of this argument has been how decreasing trade barriers can help to boost development by increasing productivity and GDP. Many developing-country governments have prioritized rapid and sustained economic growth, particularly in recent years, in order to prosper in the difficult world of trade relations (Christopher et al., 2023). To achieve this purpose, countries have implemented economic policy reforms that include the elimination of trade obstacles such as import taxes, tariffs and quotas. Most countries have used trade to liberalize their economies (Utouh, 2024).

Like other developing countries, Tanzania started enacting trade liberalization laws in the early nineties. These policies included lowering import and foreign exchange controls, eliminating import quotas and other quantitative restrictions or turning them into tariffs, encouraging the private sector to participate in the nation's economy, and doing away with export taxes and price controls. Foreign direct investment (FDI), new management and skill sets, capital creation, technology spillover, FDI, and tax revenue all contribute to the eventual reduction of trade barriers (Chindengwike, 2023; Maganya, 2020; Farahane & Heshmati, 2020).

Meanwhile, it appears that political considerations take precedent over sound economic theory when it comes to trade liberalization. In reality, institutions such as the World Bank and the IMF frequently promote trade liberalization through structural adjustment and stabilization projects (Gabriel & David, 2021). Trade blocs such as the EU, SADC, ECOWAS, and GATT, as well as regional trade agreements like NAFTA and GATT, are founded on political arguments that are grounded in economic arguments. In order to meet the needs of an increasingly export-oriented economy and attract major foreign direct investment (FDI) inflows, many governments in developing and emerging markets continue to base their whole macroeconomic framework and policies around achieving rapid economic growth (Farahane & Heshmati, 2020).

Trade liberalization policies promote economic growth and prosperity (Muriu et al., 2024; Mlambo, 2021). Furthermore, Ismahene (2022) discovered that substantial trade liberalization, such as combined tariff cuts or the removal of nontariff trade barriers, stimulates growth. David Ricardo anticipated that countries would engage in mutually beneficial trade if they specialized and traded items with the lowest opportunity cost.

However, as Wang and Zhang, (2021) point out, there is currently no accurate information about how trade liberalization affects national growth. Furthermore, research in this field has shown mixed outcomes around the world (Herath, 2010). Tanzania's annual GDP growth rate has remained positive for the sixth straight year, according to an economic and operations report BoT (2003), despite a major decrease in trade, global oil price volatility, a general downturn in the global economy, and poor weather. The annual report (BoT 2004) shows that real GDP increased from 3.3% in 1997 to 6.2% in 2002 before falling to 5.6% in 2003. Tanzania's real GDP increased from 6.2% in 2015 to 6.9% in 2016, then fell to 6.8% in 2017, before recovering to 7.0% in 2018 and remaining there till 2019.

Despite significant growth in real GDP, Tanzania's economy remains to rely on external funding. According to Gammadigbe (2021), the majority of the underlying structural challenges that existed during the closed economy persist today. Financial repression continues, and countries' saving rates remain low, forcing them to borrow from abroad to support their economies. The private sector remains limited, and internal markets are suppressed. As a result, this research is required to assess the effects of trade policy on Tanzania's economic growth (Farahane & Heshmati, 2020). As a supplement to the literature, this study will look at the influence of trade policies in Tanzania starting in the 1990s.

2. Literatur Review

In his 1817 study, David Ricardo popularized the idea that two countries can engage in profitable commerce if they specialize and exchange commodities at the lowest feasible opportunity cost (Musya, et al., 2020). As technology progresses, free trade and the removal of trade barriers will promote efficient resource use and global trade. However, the concept of comparative advantage has some factual flaws. The Heckscher-Ohlin theory (H-O) posits that relative factor abundance influences international trade. Increased heterogeneity in factor endowment and technology among trading states will result in large trade gains. Anticipate trade barriers between nations with comparable factor endowments. This idea illustrates the "North-South" trading trend (Gammadigbe, 2021). Wassily Leontief's empirical evidence from the United States contrasted and questioned the H-O theory, resulting in the establishment of the Leontief Paradox. This is the result of a capital-rich country exporting more labor-intensive products, and vice versa. The following are the primary findings of the free trade model: Trade benefits all countries by increasing global output; countries will tend to specialize in products that make extensive use of their resources; factor prices will equalize among trading countries given equivalent technology and products around the world. This concept is an illustration of the "North-South" trading pattern. The Leontief Paradox developed from Wassily Leontief's empirical results in the United States, which challenged and contradicted the premise of H-O theory (Farahane & Heshmati, 2020). This happens when a country with enough of capital exports labor-intensive goods, and vice versa. The following are the key results of the free trade model: Trade benefits all countries by expanding global output; countries will tend to specialize in products that make extensive use of their resources; and factor prices will converge among trading countries given comparable technology and products around the world.

When examining how trade liberalization influences economic growth in a specific nation, most authors concentrate their analysis on the factors that influence the host country's real GDP. Sachs and Warner (1995) investigated the relationship between growth and openness. To categorize countries as open or closed, they combined a number of policy variables, including black market exchange rate premiums, state export monopolies, export monopolization, tariffs, and non-tariff measures, into a single dummy variable. According to their findings, growth and the openness index showed a substantial and positive relationship, with changes in the index accounting for up to 2% of yearly growth between 1970 and 1989. Farahane and Heshmati (2020) employed the same openness index as a measure of openness, as well as two additional dummy variables that aggregated various trade protective measures, to calculate the timeline of trade liberalization. The study discovered that liberalization resulted in a 2% boost in growth, with open countries having a GDP per capita that was more than 50% higher than closed ones. However, the study found that liberalization has a negative influence on growth at first before becoming advantageous the following year.

Gammadigbe (2021), used an updated database to duplicate Sachs and Warner's findings. The study initially examined within-country liberalization dynamics, and the findings revealed that liberalization had a large and robust effect on growth. However, their investigation revealed that, despite having a similar impact to Sachs and Warner's study, the positive connection appeared to deteriorate in the 1990s as a result of changing protectionism policies. Bessonova et al. (2003) looked at firm-level data from 1993 to 2000 to see how trade liberalization affected Russian enterprises, and their findings showed that competition with imports and FDI

benefited domestic firms directly. For companies in advanced industries, this effect was less apparent before the 1998 crisis. The mid-1990s saw a surge in domestic company productivity due to the increased availability of imported inputs and inputs produced by foreign-owned enterprises. However, in 1998, the devaluation of the ruble forced firms to temporarily boost their total factor productivity (TFP). After 1998, this benefit declined, most likely as a result of the detrimental effects of devaluation on foreign-owned businesses.

Muriu et al., (2024) investigated the effects of trade liberalization on Sri Lanka's economic growth. Secondary data from 1960 to 2007—both before and after trade liberalization—were acquired in order to assess the impact of trade liberalization on growth and trade balance. The study's findings showed a direct link between trade liberalization and Sri Lanka's economic growth. A study by Mlambo (2021) on the impact of trade liberalization on economic growth in Pakistan indicates that trade liberalization can be advantageous to the country's economy if it is paired with a sensible set of macroeconomic policies. These include efficient administration, coordinated and supported community-based activities, focused FDI inflows into export-focused services and enterprises, and improved market accessibility. The study reinforced the conclusions of the previous economists by analyzing some of the most contentious domestic and global issues.

Furthermore, the focal points of an empirical study on the impact of trade liberalization on economic growth in Tanzania carried out by Mlambo (2021) were the industrial structure of Tanzania and trade liberalization. He employed both parametric and non-parametric tests to assess how trade liberalization measures affected the pace of growth in exports. He evaluated the effect of liberalization on land production after testing the inverse association hypothesis using the OLS model and instrumental factors. Finally, he assessed the relationship between openness and economic growth using co-integration approaches. The results demonstrated that growth is not as strong even when traditional exports have a significantly different composition. Furthermore, even though the volume of food crops during the post-reform period was significantly larger than it was prior to the reforms, there were no indications of improved growth over time. Empirical data from econometric research demonstrated the declining returns on land experienced by the agriculture industry. However, liberalization did have a mixed impact on land productivity; although it significantly and negatively affected some conventional exports, it barely affected others.

2.1. Conceptual Framework

The literature study highlights the connection between trade and economic growth, which confuses opposing viewpoints. The conceptual framework's Figure 1 illustrates the relationship between trade policy and economic growth. The variables are trade policy, GDP growth, and trade openness taken together.

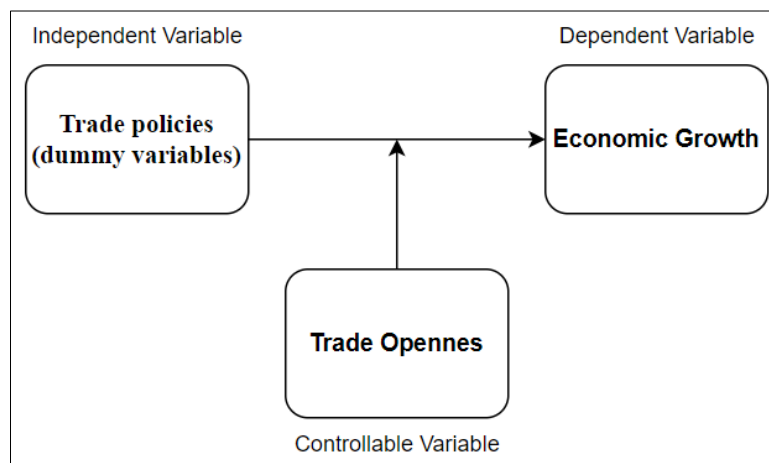


Figure 1 : Conceptual Framework

2.2. Research Hypothesis

- i. H_0 : There is no relationship between trade openness and economic growth in Tanzania
 H_1 : There is relationship between trade openness and economic growth in Tanzania
- ii. H_0 : There is no influence of trade policies on economic growth in Tanzania
 H_1 : There is influence of trade policies on economic growth in Tanzania

3. Method

Time series research design and quantitative research methods were applied in this study. The population of the study consisted of economic data from 1990 to 2020. The research employed thirty observations, or yearly data, from reliable sources like the International Monetary Fund (IMF) and the World Bank.

The data were analyzed using STATA and the Autoregressive Distributed Lag Model (ADLM) to determine the impact of trade policy on Tanzania's economic growth. The GDP%, or "continuous data in nature," is the dependent variable used in this study, and it is accurate. This makes the ADLM suitable for our research.

$$GDP_t = \beta_0 + \beta_1 TP_t + \beta_2 TO_t + \varepsilon \quad (1)$$

Where by; GDP_t = Gross Domestic Products, $\beta_0, 1, 2$ = constant terms, TO = trade openness, ε = Error Term. The exponential can be expressed in Logarithms as following equations.

$$\ln GDP_t = \beta_1 \ln((M+X)/GDP) + \beta_2 \ln TP_t + \varepsilon \quad (2)$$

Where by; GDP_t = Gross Domestic Products, $\beta_0, 1, 2$ = constant terms, TP = trade policy, \ln = Natural Log, ε = Error Term

4. Result and Discussion

4.1. Descriptive Statistics

The sample and measure summaries, which formed the basis for the quantitative data analysis, were explained in this way. The research was presented using an easily readable graphical depiction and a simple data summary to facilitate comprehension of the main findings.

Table 1. Descriptive Statistics.

Variable	Obs	Mean	Std. Dev.	Min	Max	Skewness	Kurtosis
TO	50	0.03278	0.01921	0.014	0.093	0.012	0.093
TP	50	0.64666	0.1046	0.423	0.841	0.223	0.141
GDP	50	0.64666	0.1046	0.423	0.841	0.423	0.241

Source: STATA Output, 2024

Every standard deviation and its matching mean have a substantial link with one another. This may point to significant variations in four areas: GDP, trade openness, trade policy, and foreign direct investments. Nevertheless, how the study is conducted will determine how much of a disparity there is. Because the test static is less than the threshold value at the 5% level, none of the four variables exhibit any discernible movement. In addition, the results demonstrate that the normality test yielded a p-value for the Skewness/Kurtosis tests that was greater than 0.05, showing that the null hypothesis is not rejected even though the null hypothesis claimed that the data was normally distributed. This suggests that the distribution of the data is normal.

4.2. Lag Tests

To include each variable in the unit root tests and determine if the data were non-stationary or stationary, you need to find the largest lag for each variable (Hill et al., 2011). The following table displays the examined lag length selection criteria:

$$AIC_p = -2T \left[\ln(\sigma_p^2) \right] + 2p \quad (3)$$

$$SBIC_p = \ln(\sigma_p^2) + [p \ln(T)]/T \quad (4)$$

$$HQC_p = \ln(\sigma_p^2) + 2T^{-1} P \ln[\ln(T)] \quad (5)$$

$$FPE_p = \sigma_p^2 (T - p)^{-1} (T + p) \quad (6)$$

Where by; AIC: Akaike Information Criterion, SBIC: Schwarz Bayesian Information Criterion, HIC: Hannan-Quimm criterion, FPE: Final Prediction Error

Table 2. Lag Length Test.

Variables	Lag	FPE	AIC	HQIC	SBIC
GDP	0	0.000381	-5.0458	-5.12053	-4.99357
	1	0.000143	-6.21278	-5.98325*	-4.92834*
	2	.000143*	-6.1517*	-5.96237	-5.8885
TO	0	0.000381	-5.0558	-4.02153	-4.99357
	1	0.000143	-6.03278	-5.98325*	-5.92834*
	2	.000143*	-6.02517*	-5.96937	-5.8885
TP	0	0.000481	-5.0158	-5.02053	-4.99357
	1	0.009143	-6.01178	-5.98225*	-5.92834*
	2	.000153*	-6.01217*	-5.96937	-5.8885

Source: STATA Output, 2024

Delays 1 and 2 had the maximum income, as Table 2 above demonstrates, because AIC had the lowest value relative to all other values. Additionally, it was demonstrated that because lag two (2) has the lowest AIC, it has the largest lag for variables. When there is a small sample size, this AIC is a better criterion than other ones being studied ([Liew, 2004](#)).

4.3. Augmented Dickey-Fuller (ADF) Test

Table 3. Test for Stationarity both Augmented Dickey Fuller Test and Phillips Perron.

Variables	Level		First difference		Order of integration
	Test statistics	Critical value	Test statistics	Critical value	
ADF Test					
GDP	-1.398	-2.952	-4.875	-2.955**	I(1)
TO	-1.398	-2.952	-4.875	-2.955**	I(1)
TP	-1.398	-2.952	-4.875	-2.955**	I(1)
PP Test					
GDP	-1.582	-2.930	-6.978	-2.952**	I(1)
TO	-1.572	-2.950	-6.978	-2.852**	I(1)
TP	-1.482	-2.350	-6.978	-2.752**	I(1)

Source: STATA Output, 2024

The findings of the PP and ADF tests for public spending and economic development are shown in Table 3 below. At five percent significance levels, every variable was non-stationary in level form. Stated differently, all variables were stationary at 5% significance levels following the initial discrepancies. The integration of these variables is then of order one (1).

4.4 Lag Test for Co-integration

The maximum number of lags must be determined before determining whether or not the variables have a long-term relationship (co-integrated) in order to include the maximum number of lags for the overall variable in the Johannes's co-integration test ([Hill et al., 2011](#)).

Table 4. Lag Test for Overall Variables (GDP, TO, FDI, GE and TP).

Lag	FPE	AIC	HQIC	SBIC
0	3.20E-06	-6.2698	-6.8323	-6.7254
1	4.7e-07*	-9.6417*	-8.92016*	-8.7284*
2	4.10E-07	-8.8866	-8.824	-8.5644
3	4.50E-07	-8.2698	-8.2561	-8.2287
4	5.50E-07	-8.7103	-8.5356	-8.0203

Source: STATA OUTPUT, 2024

Table 4. shows that lag 1 was the largest lag for all variables since, for different lag numbers, it had the lowest values of FPE, AIC, HQIC, and SBIC.

4.5 ARDL Model

Furthermore, Tanzania's economic growth was assessed in relation to trade liberalization using the autoregressive distributed lag model.

The ARDL modeling approach can be demonstrated by looking at the following basic model:

$$y_t = a + \beta x_t + \sigma z_t + e_t \quad (8)$$

The error correction version of the ARDL model is given by:

$$\Delta y_t = \alpha_0 + \sum_{i=1}^p \beta_i \Delta y_{t-i} + \sum_{i=1}^p \sigma_i \Delta x_{t-i} + \sum_{i=1}^p \epsilon_i \Delta z_{t-i} + \lambda_1 y_{t-1} + \lambda_2 x_{t-1} + \lambda_3 z_{t-1} + u_t \quad (9)$$

The short run dynamics of the model are shown in the first half of the equation with β , δ , and ϵ . Long-term partnerships are represented by the second component with λ s. $\lambda_s + \lambda_s + \lambda_s = 0$, the null hypothesis of the equation, indicates the absence of a long-term relationship.

Table 5. ARDL Short Run Estimates for GDP (Autoregressive distributed lag model).

Economic growth	Coef.	Std. Err.	T	P>t
GDP	0.7727532	0.0845646	10.24	0.000***
TO	0.6727532	0.0735646	11.34	0.000***
TP	0.0735325	0.4637455	0.13	0.875
Cons	0.0843087	0.0503213	1.88	0.102

$R^2 = 0.7647$, F- value = 65.00, $P < 0.1$, ** Significant at $P < 0.05$ and *** = Significant at $P < 0.01$

Source: STATA Output, 2024

Based on the projected components, Tanzania's current growth rate might have been boosted by the GDP volume during the previous year. For every variable, there exist statistically significant coefficients. GDP lag one has a significant ($P < 0.01$) impact on GDP today, with a coefficient of 0.873. This suggests a positive relationship between current and lag economic growth, with a 0.873 percent increase in current economic growth for every percent increase in lag economic growth.

Determining the relationship between Tanzania's trade openness and economic growth is the study's main objective. It used to be believed that nations with lower trade openness would have faster GDP growth. Tanzania may choose to employ imports and exports to finance long-term investments given the correlation between trade openness and economic growth. The study's findings indicate that there is a propensity for net imports to be high and that the unproductive sector—which is unable to compete with other sectors is the primary source of these imports.

Tanzania is thus having trouble with a large volume of imports, which is reducing its rate of economic growth. The results corroborated the claims made by previous researchers (Mueni, 2019; Mustafa et al., 2019) that trade openness is the reason for the slow rate of economic growth. A high export volume increases GDP as well. Moreover, prior research indicates that effective resource management in clinics and hospitals is a major contributor to GDP growth, which runs counter to the results of this investigation. Furthermore, trade openness aided economic growth, however the results analysis were not statistically significant.

Table 6. Summary of Hypotheses Tested.

Hypotheses	Results
Hypothesis 1: "Trade openness and economic growth are positively correlated in Tanzania."	Accepted
Hypothesis 2: "Trade Policy and economic growth are positively correlated in Tanzania."	Not Accepted

Source: STATA Output, 2024

The findings were corroborated by the findings of a substantial body of research on the connection between trade openness and economic growth (Chude & Chude, 2014; Omodero & Dandago, 2019; Cooray, 2009; Meheus & McIntyre, 2017). Thus, the findings of this study revealed that there is a positive relationship between trade openness and economic growth.

Even though trade policy was the predictor variable with the most influence in the case of a lag, it nevertheless had a statistically significant effect on Tanzania's GDP. The current trade model accelerates economic growth by 0.0735 percent for every percentage increase. This suggests that Tanzania's trade policy enhances its human capital and promotes economic growth. Salim (2017) supported this assertion with evidence from Zanzibar. In order to ensure effective management and monitoring of funds allocated for development in these enterprises, he proposes that the government should fortify its trade policies.

5. Conclusion

The analysis concludes that trade adjustments in these significant sectors prioritized inefficient operations over effective ones. Effective resource management by the government is necessary to enhance infrastructure, agriculture, health, and education. It should also explicitly lay out the standards and laws that control the country's trade practices. The researcher suggests that future investigators make more observations.

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