

## International Trade and Economic Growth: A Panel Data Analysis of Some Selected Sub-Saharan African Countries

MUA'ZU YUSUF MUHAMMAD, AMINA ALIYU GUJIYA  
Federal University, Birnin Kebbi, Kebbi State-Nigeria

**Abstract.** This paper is to empirically evaluate the impact of international trade on economic growth in some selected Sub-Sahara African countries spanning from 2010 to 2017 using panel data obtained from World Bank (World Economic Indicators). The research used GDP as proxy for economic growth and the dependent variable whereas trade balance (proxy for international trade), money supply and CPI (proxy for inflation) are explanatory variables. Pooled Regression, fixed effect and random effect Analysis as well as Estimated Generalized Least Square Regression Analysis were employed for data analysis. The findings of the research shows that trade balance and CPI are positive but not significant in the three regressions and Estimated Generalized Least Square Regression. Money supply is negative significant under both pooled regression and Estimated Generalized Least Square Regression, but positively and negative but statistically not significant under fixed effect and random effect respectively. Therefore, the research recommends that Sub-Sahara African countries should pursue export promotion and import substitution with the sincerity of purpose. The monetary policies that will manipulate money supply to level of capable economy growth and avoid inflationary pressure should be adopted.

**Keyword:** International Trade, Economic Growth, Estimated Generalized Least Square

### 1. Introduction

Poor economic growth performance and the resulting high level of poverty in Sub Saharan

Africa have dominated economic debates for many decades. The search for solutions to the poverty problem globally has led to various perspectives on international trade and its relevance as one of the many ways of solving the poverty problem. As largely argued in trade theory and buttressed by several empirical studies in many countries; both developed and developing, exports growth and its impact on economic growth has dominated economic debates for quite a long time and become integral part of policy making by governments. The formation of Regional Trade Blocs, governments assistance to tradable goods sectors, signing trade agreements, establishment of trade institutions and infrastructure, extension of credit to the exports sectors are among the few but notable efforts to promote growth through enhanced trade participation in the global market by SSA countries.

The popular argument that trade restrictions and protectionism lead to higher growth formed the policy orientation of many developing nations in the 1950s and 1960s. This largely informed the import-substitution and infant-industry development strategies of developing countries, including those in the Sub-Saharan Africa region during those two decades. The world economic challenges of the 1970s led to the unsustainability of these trade strategies and hence the shift towards more liberalized trade regimes. Through the advocacy and implementation of the Structural Adjustment Programmed (SAP) with the help of the International Monetary Fund (IMF), liberalized trade regimes have since

become an integral part of policy formulation in many developing countries. Mwaba (2000) stressed on how impossible it has become for a country to think about economic growth without considering trade as a measure to achieving that. Mwaba (2010) also asserts that the choice of liberalization or maintaining a closed and protected economy is no longer in the hands of individual economies since the incorporation of the terms of the Uruguay Round into the World Trade Organization (WTO). Further observation indicates that African countries like many other developing countries export large share of their produce and at the same time spend the huge chunk of their income on imports as compared to advanced countries.

African countries, as advanced nations, have recognized the importance of international trade as a vehicle of economic growth. This is in line with the ideals of earliest economists (mercantilists). The traditional trade theory of Ricardian-Heckscher-Ohlin outlines that trade openness enhances output in the short-run through more efficient allocation of resources. This model however, does not address the impact of trade openness on long-term growth. According to the endogenous growth models of Grossman and Helpman (1991) and Rivera-Batiz and Romer (1991), trade openness promotes growth in the long-run through the transmission of technologies, increases in the size of the market available to domestic firms and through product.

Furthermore, the relationship between trade and productivity has not been established theoretically even though some researchers have indeed found some, if not complete, support for the view that increasing openness has a positive impact on productivity. Bernard and Jensen (1999) reported that mainly through reallocation of resources from less efficient to more efficient plants (Ricardian Theory); manufacturing exporters within the same industry tend to grow faster than non-exporters. Lawrence (2000) also established that trade with developing countries boosts Total Factor Productivity (TFP) growth in manufacturing industries with a relatively large share of imports from developing countries (UNCTAD, 2001).

Therefore, many economic associations have instituted in Africa for this purpose, such as ECOWAS, ADB. As results of these unionisms, their economies have started recording significant effects on their GDP. For instance, trade in Africa as a share of GDP increased from 38% to 43% between 1988 to 1989 and 1999 to 2000, respectively. The marginalization of the African continent is the outcome of the interaction of declining terms of trade with the inability of the region to expand its productive capacity and shift to dynamic products. The region has been resisting open trade regimes. African countries need to focus on growth enhancing policies including promotion of exports of dynamic products.

Over the past four decades, economists have created a large amount of statistical evidence on the relationship between International trade and economic growth. They estimate the coefficients of correlation, coefficients of regression, co integration test, and perform various other statistical tests to confirm the existence of the relationship between foreign trade and economic growth. But also the empirical evidence does not clearly established whether the International trade leads to economic growth or whether it merely follows economic growth.

Few latest empirical evidences on effectiveness of international trade on economic growth conducted in African continent. Among them are: Hussaina and Shuaibu (2015) who conducted a research on a relationship between foreign trade and economic growth in Central Africa over a period of 1991-2011; Edward and John (2016) evaluated the relationship between the export composition and economic growth in 35 Sub-Saharan Africa; Clement and Hlalefang (2018) assessed the impact of trade openness on economic growth in Southern African Development Cooperation for time frame 1990 to 2016; Osei et al (2012) examined effectiveness of trade openness on economic growth of African Countries from 1980 to 2008; Louis et al (2015) evaluated the relationship between export diversification and economic growth using panel data of forty-two (42) SSA countries from 1995 to 2010; Iyoha and Okim (2017) conducted research on impact

of Trade on Economic Growth in ECOWAS Countries and Abubakar et al (2016) examined the impact of international trade on economic growth in West Africa from 1991 to 2011.

Similarly, most empirical studies on effectiveness of international trade on economic growth in Africa employed either pooled OLS or dynamic regression. It is only Clement and Hlalefang (2018) that assessed the impact of trade openness on economic growth in Southern African Development Cooperation for time frame 1990 to 2016 that employed the ARDL-bounds test approach and the Pooled Mean Group (PMG)

However, this research examines empirically effectiveness of international trade on economic growth of 17 Sub-Sahara African Countries from 2010 to 2017. This research adopts model developed by Hussaina and Shuaibu (2015) with incorporating in the model money supply and inflation rate to replace exchange rate using the same technique (Panel Regression Techniques with the Estimated Generalized least Square techniques). So, the variables of this study are: GDP proxy for economic growth; trade proxy for international trade while money supply and inflation rate are controlled variables. Therefore, the general objective of this study is to empirically examine the impact of international trade on economic growth in Sub-Sahara Africa. Other specific objectives are following; to investigate the relationship between international trade and economic growth in Sub-Sahara Africa, to assess the short run effect of trade, money supply and inflation rate on economic growth in Sub-Sahara Africa, and to assess the long run effect of trade, money supply and inflation rate on economic growth in Sub-Sahara Africa.

### 1.1 Research Hypotheses

The following hypotheses will be formulated based on the objectives of the study:

$H_{01}$ = there is no significant relationship between the international trade and economic growth in Sub-Saharan Africa under the time consideration

$H_{02}$ =trade, money supply and inflation rate do not have short run effects on economic growth in Sub-Sahara Africa under time investigation

$H_{03}$ =trade, money supply and inflation rate do not have long run effects on economic growth in Sub-Sahara Africa under time investigation.

## 2. Literature Review

Researches on International trade and economic growth have used various theories of Economics in their analysis. The theories adopted include Mercantilist Trade Theory approach, Absolute Advantage Trade Theory approach with can be seen in the famous book by Adam Smith “The wealth of Nation” (1776), the Comparative Advantage Trade Theory approach advocated by Ricardo, Heckscher – Ohlin Trade Theory, Neo-Classical Growth Theory approach by Robert Solow, Endogenous Growth Theory, Mundell–Fleming Model and Harrod-Domar Growth Model among others. However, this paper, after reviewing the different theories on both international trade and economic growth individually, adopts and anchors on the Mundell–Fleming Model and Export-Led Growth Theory because of these implications:

- The models are applicable in an open economic like Sub-Sahara Africa
- The gap that exists between the domestic income and domestic output leads to international trade.

This gap is known as economic growth. If domestic income is greater than domestic output, there will be more import and reverse is the case for more export.

Export-led growth has the following implications:

- Export as an engine of growth
- Increased World output
- Consumers can exercise their preference due to availability of commodities at low price
- Market expansions
- Change in technologies and investments
- Exportation of primary products

There are also many empirical studies that investigate the impact of International Trade on economic growth. Iyoha and Okim (2017), Pam (2017), Abubakar et al (2016), Ababio (2015), Louis et al (2015), Henok (2015), Iskra and Klimentina (2014), Subash (2012), Osei et al (2012)

The recent study by Clement and Hlalefang (2018) assessed the impact of trade openness on economic growth in Southern African Development Cooperation for time frame 1990 to 2016 uses GDP as dependent variable whereas investments, labor force, trade openness and inflation are independent variables. The study employed the ARDL-bounds test approach and the Pooled Mean Group (PMG) model to estimate the long run relationship among the variables. The evidence revealed that co-integration is detected at the 1% level in all countries with the exception of Malawi, Mauritius, Swaziland and Tanzania. Co-integration is only detected at the 10% level in Tanzania while Malawi, Mauritius and Swaziland. Furthermore, the results revealed trade openness has a negative impact on economic growth in the long-run. Olawale (2017) evaluated the determinants of economic growth in 18 Sub Sahara African countries, the decomposition of export and import between the periods of 1996 to 2015. This study used a neoclassic economic growth model containing GDP, export components, import components, export concentration index, capital and labor force as variables of analysis. More so, this study uses annual data from the United Nations Conference on Trade and Investment Statistics (UNCTAD), and World Development Indicators (World Bank, 2015) over the period under the study for 18 countries in Sub-Saharan Africa including Benin, Botswana, Burkina Faso, Cameroon, Ethiopia, Gambia, Ghana, Ivory Coast, Kenya, Mauritius, Mozambique, Namibia, Nigeria, Rwanda, Senegal, South Africa, Tanzania and Uganda. The results of fixed effects estimations show that both exports and imports contribute significantly to economic growth. On a specific level, growth in raw material exports, and not manufactured exports, is significantly associated with GDP growth while growth in manufactured imports, and not

raw material imports, is significantly associated with GDP growth. The export concentration index is found to have no significant relationship with GDP growth. In addition, the results find that capital formation has a more significant influence on economic growth than labor does.

Another research conducted by Edward and John (2016) evaluate the relationship between export composition and economic growth in 35 Sub-Saharan Africa between 1988 and 2007. The study sourced panel data from World Bank World Development Indicators and International Monetary Fund International Finance Statistics online facilities and United Nation's Statistical Database under Standard International Trade Classification (SITC) Revision 4. The Generalized Methods of Moments estimator was employed for the data analysis. The researchers find that it is the growth in agricultural exports, and not manufactured exports, and significantly associated with per capita income growth in our sample. It is recommended that these countries should adopt policies that increase agricultural exports in the medium term as they design strategies for increasing manufactured exports in the long term. Other factors significantly influencing growth are gross capital formation, capital goods imports, infrastructure, government consumption, and inflation rate, political systems and governance, and education. Variables of the study are: GDP per capita growth, GDP per capita, Export total, Agriculture exports, Manufacturing exports, Capital goods imports, Gross capital formation, Labor force, Telephone lines Per 100 people, Government consumption, Domestic credit, Inflation, Civil liberties index, Real effective exchange rate and Secondary school enrolment rate % of gross enrolment

Hussaina and Shuaibu (2015) conducted a research on the relationship between foreign trade and economic growth in Central Africa over a period of 1991-2011. The variables used in the research are GDP as dependent variable likewise export, import and foreign exchange rate as independent variables.. Panel Regression Techniques was applied which incorporated both Fixed and Random Effects in analyzing the data set. The study reported that exports has a

positive significant influence on economic growth in Central Africa while import is negative and statistical significant. Foreign exchange rate did not significantly influenced economic growth during the period under study.

**3. Methodology of the Study**

This develops the procedures and methodologies that will be undertaken to analysis the data for the research. Specifically, the section covers research design;, model specification and techniques for data analysis

**3.1 Research Design**

This study covers a period of 8 year starting from 2010 to stop at 2017. The justification for using the period is for the fact that the economy of Nigeria began to restore stability after financial crisis of 2008. The 2017 witnesses’ major improvement in our economy after economic recession and oil shocks of 2015 to 2017. We employ Non-probability sampling in the form of availability sampling techniques. This study makes use of inferential statistics. The study also uses panel data on the variables of the study to examine the impact of international trade on economic growth of Sub-Saharan African Countries 2010 to 2017. The study covers the period of (8) years from 2010 to 2017 which is in line with accordance of central limit theorem.

**3.2 Method of Data Analysis**

In this study, we employ descriptive statistics and inferential statistics. Descriptive statistics described the mean, median, standard deviation, skewness and kurtosis statistics. In the Inferential statistics, we use panel data that include Pooled OLS, Fixed Effect and Random effect. Moreover, hausman specification for best model selection are use to select the most appropriate model.

**3.3 Model Specification**

This study will adopt model developed by Hussaina and Shuaibu (2015) with incorporating in the model money supply and inflation rate to replace exchange rate. So, the variables of this study are: GDP is a proxy for economic growth; Total trade, CPI (consumer price index) proxy for inflation and money supply (M2) are controlled variables.

**3.3.1 Economic Model**

The economic model describes that economic growth is a function of trade, money supply and CPI is a proxy for inflation rate. This model is as follows:

$$GDP = f(TR, M2, CPI, ) \dots \dots \dots (1)$$

**3.3.2 Econometric Model**

The econometric model is to be specifying as follows:

$$GDP_{it} = \beta_0 + \beta_1 TR_{it} + \beta_2 M2_{it} + \beta_3 CPI_{it} + \mu_{it} \dots \dots \dots (2)$$

Where: GDP= Gross Domestic Product, TR= Trade, M2= Money supply, CPI= Consumer Price index,  $\mu$ = Error term (it include all other variables that are not included in the model). t= time trend, i= individual countries,  $\beta_0 > 0$  intercept of the model,  $\beta_1, \beta_2, \beta_3$ , =Coefficients of independent variables

**3.4 Post Estimation Techniques**

This study aims at examining the impact of international trade on economic growth in Sub-Saharan Africa. After the regression, various tests such as Ramsey stability test, Serial correlation test, heterocedasticity test, multi colinearity and normality tests are to be diagnosed to confirm the classical assumptions and valid conclusion.

**4. Result of the Study**

**4.1 Descriptive Analysis**

The table below explains the summary statistics of the dependent and independent variables used in the study. The mean, median, standard deviation, minimum and maximum values were reported in this study. Table 4.2 revealed summary statistics for the dependent and independent variables.

**Table1: Summary Statistics for Dependent and Independent Variables**

Variables	Observations	Mean	Std Dev.	Minimum	Maximum
Growth	136	4.717	4.182	-20.6	20.72
Trade	136	72.56	25.55	0	146.81
M2	136	33.72	19.33	0	105.5
CPI	136	4.34	5.084	-3.7	21.35

(Sources: Computed by authors' Using STATA 12.0)

Table 4.2 presented the result of distributive statistic. The result shows that economic growth with a minimum standard deviation value of 4.2 with average mean of 4.72 and the maximum value of 20.72. The average value of trade is 72.56 with a higher value of deviation of 25.55 and the maximum value of 146.81. Moreover, broad money supply is proxy by M2 with average value of 33.72 having a higher deviation of 19.33. Inflation proxy with consumer price index (CPI) show an average value of 4.34 with a smaller deviation value of 5.0 and have a maximum value of 21.35. The next table is to show the Skewness/Kurtosis test for normality:

**Table 2: Skewness/Kurtosis test for normality:**

Skewness / Kurtosis tests for normality					
					.....joint.....
Variables	Obs	Pr(skewness )	Pr(kurtosis)	Adj Chi <sup>2</sup> (2)	Pro> Chi <sup>2</sup>
Growth	136	0.0000	0.0000	47.07	0.0000
Trade	136	0.7429	0.0550	3.86	0.1449
LM2	136	0.0000	0.0000	3.86	0.0000
CPI	136	0.0000	0.1037	20.15	0.0000

(Sources: Computed by authors' Using STATA 12.0)

The table above shows Skewness/Kurtosis test for normality. The result shows that all the variables (growth, M2 and CPI) are found not normally distributed with their probabilities showing significant value of 0.000. Trade show normally distributed and this is evident from the probability value showing insignificant 0.144.

**4.2 Inferential Statistics**

This section presents the results of the inferential Statistics that has been carried out in the study.

**4.2.1 Correlation Result**

Table 4.3.1, present the results of the correlation for the analysis. The correlation result shows the anticipated direction between the dependent variable and the independent variables in a given research.

**Table 3: Correlation Analysis among variables**

	Lgrowth	Ltrade	LM2	CPI
Lgrowth	1.0000			
Ltrade	-0.0608	1.0000		
LM2	-0.2438	0.4199	1.0000	
CPI	0.1679	0.1134	-0.2282	1.0000

(Sources: Computed by authors' Using STATA 12.0)

Table 3 revealed correlation result of all the study variables. It is generally regarded that, a value of correlation greater than 0.8 to be positively strong, while a value of correlation that is less than 0.5 to be described as weak (Binh, et. al 2014). Considering the relationship among variables, all the variables are below 0.5 showing weak correlation. Some of the variables display positive while some shows negative value. For instance, ltrade shows negative value of -0.06 indicating negative correlation.

#### 4.2.2 Regression Result

The following tables present the result of the regression analysis

**Table 4: Regression Results**

	Estimated coefficient and p- values		
	POOLED OLS	FIXED EFFECT	RANDOM EFFECT
<b>Dependent Variable</b>	<b>IGrowth</b>		
<b>Independent</b>			
LTrade	.0498	.2965	.0701
IM2	-.359**	.1344	-.3258
CPI	.0167	.0161	.0168
Constant	2.501*	-.261**	2.295

(Source: Computed by Author Using Stata 12.0& Significant at 5% and 1% indicated by \*\* & \*\*\*)

Table 4 shows the panel regression result based on Pooled OLS, Fixed Effect (FE) and Random Effect (RE). The result of the models reveals that trade coefficient shows positive in all the models but found not significant. LM2 reveal negative and statistically significant in pooled OLS model while found positive but not significant in fixed and random effect. CPI reveal positive but insignificant in all the models pooled, fixed and random model while constant shows negative and statistically significant in pooled OLS model at 1 percent and also found negative and statistically significant value at 5 percent in the fixed effect.

#### 4.3 Post- estimation diagnostic test

This section presents the result of some pre- estimation diagnostic test which includes Breusch pagan/Cook- Weisberg test for heteroskedasticity, multi co linearity test (vif) and Wooldridge test for serial correlation etc. Among includes;

**Table 5: Diagnostic Test**

	Chi_2/F-stat	Probability value	Remark
Hausman Test	0.73	0.865	Random Appropriate
Heteroskedasticity	3426.	0.000	Present of Heteroskedasticity
Serial Correlation	0.255	0.624	Free serial correlation
Ramsey Reset test	1.15	0.3326	Structurally stable
Mean VIF	1.25		No Multi-collinearity

(Source: Computed by Authors' Using STATA 12.0)

##### 4.3.1 Hausman Specification Test

The Hausman specification test is a test for best model selection. The probability of the test found insignificant with a value 0.86 which indicate that random effect is the best. As such we fail to reject the null hypothesis and conclude that random effect is most appropriate. Hence the study will make use of random effect.

**4.3.2 Result of Breusch Pagan/ Cook – Weisberg Test for Heteroskedasticity.**

Table 4.3.3 shows result of Breusch pagan/ cook- Weisberg test for Heteroskedasticity. The test is for null hypothesis of no heteroskedasticity. The result reveals that it is statistically significant at 1 percent with a value 0.000. Hence we reject the null hypothesis and conclude that the model is suffering from heteroskedasticity. Random effect model cannot be presented in the presence of heteroskedasticity. Whenever autocorrelation and homoskedasticity is violated in the RE model, the best solution is to employ efficient estimator or give weight justification to the used of EGLS, by controlling the influence of Heteroskedasticity and Autocorrelation Hence this study will employ Generalized Least Square Estimator (GLS).

**4.3.3 Result of Multi Co-linearity (VIF test) Test**

Table 4.3.3 also reports the checks for multi co-linearity in the regression model. Normally when we are conducting regression analysis, the statistical problem of multi co-linearity should be considered among the independent variables. As per the recommendation of Gujarati (2003) as cited by Vinasithamby (2015), Variance Inflation Factor (VIF) was used to diagnose multi co-linearity issues among the independent variables. It can be observed from the results of Table above that no any sign of multi co-linearity between the explanatory variables, as none of the variables coefficients is less than 1 and greater than 5 and this makes us to conclude that there is no multi co-linearity in our model (VIFs < 5 for all variables). The overall mean of VIF shows the value of 1.25.

**4.3.4 Result of Wooldridge test for Serial Correlation/Autocorrelation**

From the Table 4.3.3, it can be seen clearly that the probability value is 0.624. We therefore failed to reject the null hypothesis of no serial correlation and conclude that the model is free from serial correlation.

**4.3.5 Ramsey Reset Test**

From Table 4.3.3, we can see clearly the result of Ramsey Reset test for stability of the model. The result shows that the model is not suffering from any instability. This is evident from the value of probability which shows statistically not significant (0.33). Hence we conclude that the model is structurally stable.

**Table 6: Estimated Generalized Least Square**

Independent Variable	Dependent= Lgrowth
Ltrade	.0498
LM2	-.3594**
CPI	.0167
Constant	2.501*
Observation	120

Source: Author computation Using Stata 12.0 &  
 \*\* & \*\*\* % indicating Significant at 5% and 1%

Table 4.3.4 shows the results of Estimated Generalized Least Square Regression in which the coefficient of LM2 (-0.3594) show negative and statistically significant at 5% level. The coefficient of Ltrade and CPI shows positive but not statistically significant (.0498 and .0167). The coefficient of constant reveals positive and statistically significant at 1 percent.

#### 4.4 Discussion of Results

The variable trade found positive and but statistically not significant. This means that if trade increases by 1%, the country gross domestic product (GDP) will rise and hence economic growth with a value 49%. This work is in accordance with Iyoha and Okin (2017) and contrary to Dowrick and Golley (2004). The variable Money supply (M2) shows negative and statistically significance at 5%. It means that an increase in money supply will result to a declined in the economic growth by 36%. This result is in line with the work of Ekpo and Effiong and contradicts the work of Vera (2015). The variable CPI reveals positive but insignificance. This means that any decrease in Inflation (CPI), will result to an increase in the economic growth by 16%.

Estimated Generalized Least Square regression in which the coefficient of LM2 (-0.3594) shows statistically significant at 5% but negative. The coefficients of Ltrade and CPI show positive but not statistically significant (0.0498 and 0.0167). The coefficient of constant reveals positive and statistically significant at 1 percent. Unfortunately, the result of this research that trade positively affect economic growth is contrary to the result of the Clement and Hlalefang (2018) who found that trade openness has a negative impact on economic growth in the long-run.

Money supply has negative significant on economic growth is sub-Sahara Africa, implying that increase in money supply by one economic growth in sub- Sahara Africa decline by 0.3594, thus, fisher theory said 'since the output is constant in the long-run, a further increase in money supply will lead a rise in general price level, output gradually declines which would lead to inflationary pressure in economy. Money supply and price have positive correlation with other.'

CPI which is proxy for inflation rate has positive insignificant coefficient. As general price level increased by one in sub-Sahara Africa, the economic growth would increase by 0.0167. Theoretically, this is correct, in short-run, there

is direct correlation between the general price level and economic growth while in the long-run reverse is the case. The result is similar with work of Edward and John (2016) who found that inflation positively significant influence economic growth, but the result of this project is contrary to the work of Ababio (2015) who found that inflation has negatively significant effect on economic growth in SSA.

#### 5. Conclusion and Policy Recommendations

In this research, an attempt has been made to analyze the impact of international trade on economic growth both from a theoretical perspective and using econometric evidence from some selected Sub-Sahara Africa Countries. A review of the classical and neoclassical theories of trade showed that international trade can stimulate economic growth and development. First, export expansion can provide a stimulus for the greater utilization of erstwhile idle human and capital resources. Secondly, it can also provide foreign exchange for financing capital goods needed in the industrial sector. Thirdly, export expansion can stimulate investment, especially in the export sector of the developing country.

Econometric evidence revealed through the panel regression result based on Pooled OLS, Fixed Effect (FE), Random Effect (RE) and Estimated Generalized Least Square Regression economic that trade balance and CPI have not impacted on economic growth as expected in Sub-Sahara Africa. The research therefore recommends as follows:

- Sub-Sahara African countries should pursue export promotion and import substitution with the utmost sincerity for them to rife the benefit of international trade considering the based deposit of mineral resources. The deregulated exchange rate regime should be guarded and placed in perspective which will improve the value of local currency relative to other currencies.
- Sub-Sahara African countries should reduce inflation rate because inflation rate has inverse relation with their

economic growth. Such reduction could lead to rapid economic growth.

- Sub-Sahara African countries should adopt policies that will increase agricultural exports in the medium term as they design strategies for increasing manufactured exports in the long term.
- The monetary policies that will manipulate money supply to level at which the capacity of the economy can absorb inflationary pressure and, thus stimulate growth of economies, should be adopted.

## References

- Abdullahi, Y.Z., Sokoto, A.A & Safiyanu, S.S. (2013), Analysis of the relationship between foreign trade and economic growth in Africa, *Economic and Financial Review*, 3(03): 01-10, ISSN: 2047-0401, Retrieved from <http://www.businessjournalz.org/efr>
- Adeyemi, A. (2002), Balance of payment constraints and growth rate differences under alternative policy regimes, National Institute of Social and Economic Research (NISER) Monograph Series No. 10 I
- Ahmed, A.D., Cheng, E. and Messinis, G. (2008) The Role of Exports, FDI and Imports in Development: New Evidence from Sub-Saharan African Countries. Working Paper No. 39. Center for Strategic Economic Studies, Victoria University, Melbourne
- Arodoye, N. L. & Iyoha, M. A. (2014). Foreign Trade-Economic Growth Nexus: Evidence from Nigeria. *CBN Journal of Applied Statistics*. 5(1), 121 – 141.
- Addis A. (2008), „Trade Liberalization and Economic Growth: a Bound Test Approach“, MA Project, School of Economics, Addis Ababa University
- Afonso, O. (2001). The Impact of International Trade on Economic Growth; *Investigação-Trabalhos em curso*. Working paper n° 106: 4-24.
- Balassa, B. (1985), Exports, Policy Choices, and Economic Growth in Developing Countries after the 1973 Oil Shock. *Journal of Development Economics*, 18(2), 23-35.
- Brueckner, M. and Lederman, D. (2015). Trade Openness and Economic Growth: Panel Data Evidence from Sub-Saharan Africa. *Economica*, 82:1302–1323
- Hesse, H. (2008). “Export Diversification and Economic Growth.” The World Bank Commission on Growth and Development, Working Paper 21: 1–25.
- Imbs, J. and R. Wacziarg (2003). “Stages of Diversification.” *American Economic Review* 93 (1): 63–86.
- International Monetary Fund (2015). *Regional Economic Outlook - Sub-Saharan Africa*. Washington, DC, (April 2015).
- Iyoha, M. A. & Adamu, P. A. (2011). The Impact of external trade on economic growth in Nigeria: A roadmap for the twenty-first Century. *West African Social and Management Sciences Review*, 2(1).
- Iyoha, M. A. (1998). An Econometric Analysis of the Impact of Trade on Economic Growth in ECOWAS Countries. *Nigerian Economic and Financial Review*, Vol. 3, December.
- Iyoha, M.A. (1995). Traditional and Contemporary Theories of External Trade. In A.H. Ekpo, ed., *External Trade and Economic Development in Nigeria*. Selected Papers for the 1995 Annual Conference of the Nigerian Economic Society. Ibadan: NES.
- Iyoha, M.A. (1984). Economic Development and Trade Theories: Relevance and Implications for ECOWAS. In A. Orimalade and R.E. Ubogu, eds., *Trade and Development in Economic Community of West African States (ECOWAS)*. New Delhi: Vikas Publishing House Ltd.
- Krueger, A.O. (1997), Trade Policy and Economic Development: How we learn, *American Economic Review*, 87(1): 1-21.
- Obadan, M.I. and Okojie, I.E. (n.d) “An Empirical Analysis of the Impact of Trade on Economics Growth in

- Nigeria". *Jos Journal of Economics* Vol.4, No.1.
- Oviemuno, K. (2007), "International Trade as an Engine of Growth on Developing Countries, A Case Study of Nigeria" (1980-2003). *Journal of Economics Perspective* 12(4) 45-62.
- Oyejide, A. (1975), "Exports and Economic Growth in African Countries" *Economic International* 2:177- 185.
- Perraton, C. (1990), "The Harrod Foreign Trade Multiplier and the Developing Countries; 1970 to 1985: An Examination of the Thaiwall Hypothesis", University of Nottingham.
- Sachs, J.D. and Warner, A. (1997), "Sources of Slow Growth in African Economy", *Journal of African Economics*, No. 6 Oxford.
- Usman, O.A. (2011), "Performance Evaluation of Foreign Trade and Economic Growth in Nigeria: *Research Journal of Finance and Accounting* Vol. 2. No. 2.
- World Bank (2012) "World Bank Database on Macroeconomics Indicators" An annual publication of World Bank.
- World Trade Organization (2005), *World Trade Report*. World Trade Organization (2007), *World Trade Report*.
- Wörz, J. (2005), "Skill Intensity in Foreign Trade and Economic Growth", *Empirica*, Vol. 32(1), pp. 117-144.
- Zakari A., Mohammed, H., & Adamu, Y. (2012). Does FDI Cause Economic Growth? Evidence from Selected Countries in Africa and Asia. *African Journal of Social Sciences*, 2(4).
- Zahonogo, P. (2017). Trade and economic growth in developing countries: Evidence from Sub-Saharan Africa. *Journal of African Trade*. Available at: <http://dx.doi.org/10.1016/j.joat.2017.02.001> (Accessed 01 March, 2017).