



# **Impact of Export Diversification on Economic Growth in Sub-Saharan Africa (SSA)**

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**Author's contribution**

*The sole author designed, analyzed, interpreted and prepared the manuscript.*

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## **ABSTRACT**

This study investigated the impact of export diversification on the economic growth of countries in Sub-Saharan African (SSA). Trade Data are gathered from the World Integrated Trade Solution (WITS), and UN Comtrade database, using a 6-digit level range of the Standard International Trade Classification (SITC) and the Harmonised System (HS) for the Countries. Export diversification Indices data are proxies from the Herfindahl Hirschman Index (HHI) which represents the level of export product diversification for all forty-eight (48) SSA Countries between 1995 and 2020. The Panel Autoregressive Distributed Lagged Model (P-ARDL) was applied in the study. Other analysis including correlation analysis, multicollinearity, and Unit Root tests were used to achieve the objective of the study. The findings showed that export diversification has not really benefitted the SSA Countries; also, exporting raw materials and other primary products does not benefit the region, and therefore, the countries should continue leveraging on the potential of diversifying their exports and exploring sectors such as the manufacturing to attain more economic gains. To achieve export gains, oil/minerals products should be exported as finished products, not as raw materials, especially, from those nations that are resources endowed. These raw materials should be best used domestically to aid production into finished/refined products for subsequent exports.

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## 1. INTRODUCTION

Several studies have found that the manufacturing sector has remained the primary driver of economic growth in a number of countries, particularly those with developed economies. This is due to the fact that growing domestic output always leads to increased exports to other economies, which create wealth from exports. Because the SSA region is known to be endowed with natural inputs, high export concentration, and weak structural and infrastructural constraints, therefore, diversifying the structure of domestic production, natural resource endowments, and infrastructure availability are critical in achieving diversification of exports in developing countries, according to Osakwe [1]. Economists and government policymakers have been concerned with reviewing SSA nations' export results in order to strategize a path for achieving growth and, in general, enhancing the populace's standard of living (Cerny et al., 2005). It is worth noting, however, that one of the areas that has received a lot of attention in terms of increasing economic performance is through 'external trade' [2].

Several studies have sought to investigate the relationship between export diversification and potential growth. Specifically, if the export-led growth hypothesis is consistent with the growth path of countries, particularly in mono-product/resource-dependent economies in Sub-Saharan Africa (SSA). According to economists, one significant advantage of diversifying exports is that it contributes to the overall growth of the host country's economy. Diversification of trade can be performed in a variety of ways. Diversification of markets or trading partners is one component of this. Both intensive margin and extensive margin refer to more harmoniously merging current exports. It may also entail the addition of new product categories.

The classical principle, which holds that countries should specialize in producing and exporting items in which they have a comparative advantage, has traditionally served as the foundation for the importance of trade in growth and development. So, due to the factor of low technological advancement, African countries would be susceptible to exporting primary products while importing manufactured goods, but a paradigm shift is required, and it is recommended that countries focus on exporting

different product lines rather than engaging in large volume production or export of homogenous products.

Since 2015 till date, most SSA countries have consistently recorded significantly poor performances. For instance, Nigeria, the Gambia, Liberia, and Sierra Leone recorded negative growth of 38.96 percent, 6.46 percent, 4.17 percent, and 40.59 percent, respectively. Only Ghana and Guinea recorded marginal growth rates of 35.82 percent and 7.1 percent. The low performances in recent times can be explained by the non-diversification of export products, as many countries in this region are mono-product exporting nations, with the majority of the Countries exporting only primary products.

Moreso, countries with limited export options or heavy reliance on primary commodities or single products frequently experience export instability or unpredictability because of inelastic and volatile global demand. Many of these nations in SSA have been somewhat vulnerable to the consistent drop in commodity prices, which has severely impeded growth rates and export revenues. For instance, Countries like Nigeria, Gabon, Congo, and Ghana which depend on exporting crude oil and other mineral resources as the mainstay of their economies were severely affected during the US discoveries of the Shale oil and during the Covid-19 pandemic which resulted in a drop in global demand and eventually plummeting the product prices. Invariably. This has a significant adverse impact on the countries' revenue, exchange rate, and ultimately macroeconomic stability.

The SSA economies need to diversify their economies now more than ever to reduce macroeconomic volatility, avoid the resource curse, and sustain higher growth rates while utilizing globalization and the speedy pace of technological advancement, this is indeed feasible. Even though, Countries like Malaysia, Chile, Indonesia, and Vietnam which are comparable with the SSA in terms of natural resource endowments were able to diversify their economies and maintain higher growth rates for longer periods of time.

Diversification of exports, therefore, remains a means to alleviate these constraints. Export diversification is regarded as a movement from traditional to nontraditional product exports [3], (Hoekman & Mattoo, 2008); [4].

The objective of the study, therefore, is to investigate the contribution of export diversification to the economic growth of countries in SSA. Thus, the paper employed the Panel Auto Regressive Distributive Lag (P-ARDL) technique using yearly time series data to achieve the objective. The contribution of the paper to the body of knowledge is that; in this context, not many studies have covered the entire economies within the SSA and have employed the P-ARDL, thus the peculiarity of the paper.

## 2. THEORETICAL REVIEW

Three theories were adopted in this study based on the nexus between trading activities (export/import) and economic growth. The theories are export Based Theory, the Prebisch-Singer Hypothesis, and the Rybczynski Theorem. The export-based theory and Prebisch-Singer Hypothesis export diversification theory are somewhat related while Rybczynski Theorem is based on an open economy theory since no economy operates in isolation.

### 2.1 Export Based Theory

The idea that commerce is an engine of growth serves as the foundation for the export basis hypothesis and it provides externality and productivity benefits to economies. The theory goes on to say that, under the assumption of perfect elasticity of input supply and export demand, an increase in production and employment is a function of exogenous demand for export. In addition to the direct sales of export commodities, Keynesian income multipliers are also used to promote growth. As a nation's exports expand, the demand for local goods also rises, which in turn results in more income growth [5]. The following is an expansion of the straightforward export-based theory made by North (1955).

Tiebout [6] argued that the theory of export-based trade is only one aspect of a general theory of short-run regional income determination; in the case of large regions, other factors may be just as important as exports; (2) the concept of export base may be useful in describing regional income growth, but this need not be viewed as the same problem as general economic development; and (3) the theory of export-based trade is only one aspect of a general theory of long-run regional income determination; (4) Since an area must maximize

the utilization of factors as between exports and residentiary outputs, the concept of the export base should not be viewed as a substitute for the crucial role of residentiary activities in determining the cost of potential regional exports, a decline in export activity may even be accompanied by rising regional income.

### 2.2 Prebisch-Singer Hypothesis

Originally in the 1950s, Prebisch and Singer advanced a theoretical position linking export diversification with economic growth, the fundamental concern was that the export of primary goods was a growth inhibitor. Prebisch and Singer's position is that developing countries basing their export majorly on primary goods impedes their growth potential, impedes their terms of trade, and distort income reliability. This theoretical proposition is known as the Prebisch-Singer Hypothesis. In recognizing the importance of diversifying export products into different portfolios (portfolio theory), Due to the possibility that commodity prices do not always follow a deterministic trajectory, export diversification may help to mitigate the worsening in trade terms brought on by the dependency on export commodities, as claimed by Prebisch's works, according to Strobl's findings in 2002.

To prevent unreliability in income flows as stated earlier, it is imperative for countries to diversify their export composition, (portfolio effect/theory). Consequently, in diversifying their products, developing exporting countries must compete with other countries in the international market scene on similar goods. Hence, the issues of comparativeness and absolute advantages have become viable. Invariably, if a country's product price rises, this tends to lessen or affect its positive competitiveness in the international market. This is because their products can easily be substituted by similar and cheaper products coming from other countries.

Shewangizaw [7] identified different dimensions of export diversification, the horizontal and vertical dimensions. The former involves the adjustments in the export mix to counter commodity prices on the international scene, while the latter involves the development of new uses for both new and current commodities through value-added processes like processing and marketing. Through the development of new uses and new services, vertical diversification can result in an increase in market potential for raw materials.

## 2.3 Rybczynski Theorem

The Rybczynski theorem, like the Stolper-Samuelson theorem, assumes a small, open economy that engages in free trade to illustrate the relationship between endowments and outputs. It illustrates how, when full employment is maintained, changes in an endowment have an impact on the output of goods. According to this theory, an increase in a factor's endowment will result in a higher output for the industry that uses it most heavily and a lower output for the other industry (Lam, 2015). The Rybczynski model states that an external increase in the supply of one production factor should result in an increase in the production of the good that employs this production element heavily and a drop in the production of the other good (Berkum & Meiji, 1998).

## 3. EMPIRICAL REVIEW

Espoir et al. [8] examined "the impact of export diversification on economic growth in the Southern African Development Community (SADC) using the GMM approximation technique, while capturing time-series variations in the data, country-specific time-invariant effects, and controlling for endogeneity in the estimation model." The results showed that export diversification frameworks have a significant impact on economic growth. The study also demonstrates a significant outcome for the extra control variables, such as (human capital, domestic capital, and foreign direct investment). Based on the research, the paper made recommendations for SADC governments, including maintaining political stability, promoting export diversification, investing in human and physical capital, and putting in place strategies to draw foreign direct investment into enhancing their national economies' productive sectors.

Dahmani [9] used an Autoregressive Distributed Lag (ARDL) bounds testing approach with annual data for the period 1991–2017 to Analyze the dynamic relationship between Tunisia's export diversification and economic growth. The results suggested that Tunisia can prosper by diversifying its exports. The econometric analysis has revealed that, while financial development has a short-term negative influence on economic growth, investment, and export diversification, an increase in exported goods, and quality of life have long-term beneficial effects. Export diversification has a relatively modest immediate impact, though. Policymakers looking to increase

and enhance the export diversification, stability, and economic growth of their countries should take note of the findings' implications for economic policy.

Yuni [10] did a study to ascertain the relationships between export diversity and economic growth in the Sub-Saharan African nations using fixed effect and generalized least square regression models. For lower-middle-income nations, the study indicates a positive but insignificant correlation, a positive and significant relationship, and a negative but insignificant association for upper-middle-income countries.

Similarly, for the United Arab Emirates and using the VECM, Shadab [11] investigated the short- and long-term relationships between export diversification and economic growth from 1975 to 2017. The findings obtained from the test suggested a significant relationship between the diversification of exports and the growth of the UAE economy. Using the Toda-Yamamoto Causality approach, his findings also established a unidirectional causality emanating from the diversification of export to growth for the UAE, further suggesting the success of the export-growth policies adopted by the UAE government.

Jongwanich [12] measured export diversification for Thailand using the three approaches; the HHI, Gini, and Theil; and established that growth in the industrial/manufacturing sectors is mostly explained by intensive margins, while extensive margins have limited effect, but, however, effective in the agricultural sector.

Elodie and Arsène [13] conducted a panel analysis on export diversification in a few developing economies in Latin America, Sub-Saharan Africa, and Developing Asia for the period 1995–2015, alluding to the recent economic literature's consensus on the advantages of an export diversification-based economic development strategy. The findings indicated that export diversification helps emerging countries' economies expand. The potential for growth and economic development varies among different export baskets, though. Therefore, it is necessary to evaluate the quality of export diversification considering a country's capacity for growth.

Arnold et al. [14] considered how economic diversification via exports (goods and Services Sectors) impacted the economies of 34 small countries. They evaluated the economic performance of these economies from 1990 to

2015 and discovered that those with greater economic diversification had less production volatility and higher average growth than the majority of other smaller states. They also discovered that in small countries, export diversification has a greater influence on lowering output volatility than it does on boosting long-term growth. Diversification calls for fundamental adjustments and should be factored in within the framework of a comprehensive development strategy.

Karahan [15] conducted research for some groups of countries that have been in the searchlight after the global crisis due to their favorable economic prospects and demographics. He classified them as "MINT", they comprise Mexico, Indonesia, Nigeria, and Turkey. According to his research, Nigeria's product concentration ratios were among the highest in the group, with high Herfindahl concentration values and a nearly undiversified portfolio at the level of 0.99 in 2001; a declining trend was seen for the following years. The Herfindahl product value for Nigerian exports decreased in this regard from 0.93 in 2008 to 0.85 in 2014, respectively. This is a result of Nigeria's exports being heavily dependent on mineral fuels and oils. Turkey's economy in the 2000s had the lowest level of concentration. Turkey was the most diverse economy in the group when the period of interest began, with the country's product concentration beginning at 0.05 and rising to 0.06 just before the financial crisis. It then fell to 0.05 in 2014.

In contrast to other trade variables, such as trade openness and export growth, Lugeiyamu (2016) studied the impact of export diversification in defining economic growth variations throughout Africa. It also tested its robustness using various samples and estimate approaches. In a cross-section dataset covering the periods 1998 to 2009. The study applied an upgraded Solow growth model and discovered that nations with greater export diversification often enjoyed quicker economic growth. As a result, the variation in export diversification levels accounts for the observed growth disparities across Africa. The findings indicated that, in contrast to trade openness, export diversification and export growth are strong predictors of economic growth rates in the region. The findings have a significant impact on trade policy by emphasizing the necessity of more diverse exports in mitigating the negative effects of global economic shocks on regional economic growth.

Mudenda et al. (2014) examined the significant contribution of export diversification to the economic growth in South Africa using annual time series for the period covering 1980 to 2010. The effects of export diversification and potential factors influencing economic growth were assessed using the Vector Error Correction Model (VECM), which was used in the study. According to the study's results, trade openness and export diversification are positively correlated with economic growth, while the real effective exchange rate, capital formation, and human capital have long-term negative relationships with growth. The analysis advises the South African government to keep implementing trade liberalization. Additionally, the South African government is urged to support the creation of a diverse export portfolio by providing subsidies, encouraging innovation, and producing new exportable goods.

### 3.1 Gap(s)

After reviewing the empirical literature, this study found a methodology gap. It was discovered that none of the empirical research under consideration used the panel-ARDL method of estimation. The long- and short-term consequences of associations are shown using the Panel-ARDL estimate technique. The application of Panel-ARDL in this study is justified by the need to ascertain the impact of export diversification in both the short- and long-term. It is equally important to look at whether export diversification is sustained over time or if it only has short-term benefits.

## 4. METHODOLOGY

Trade Data are gathered from the World Trade Organization (WTO), World Integrated Trade Solution (WITS), United Nations Conference Trade and Development (UNCTAD), and UN Comtrade database, using a 6-digit level range of the Standard International Trade Classification (SITC) and the Harmonised System (HS) for the Countries. Export diversification and concentration Indices data are proxies from the Herfindahl Hirschman Index (HHI) which represents the level of export product diversification from forty-eight (48) African countries between 1995 and 2020. Data collected for the dependent and independent variables include the GDP Growth rate which represents a proxy for economic development and serves as the study's dependent variable, Gross Capital formation, Monetary Credit to

Private Sector, percentage of working population (Ages 15-65) to total population represents a proxy variable for human capital, access to electricity. Panel Autoregressive Distributed Lagged Model (P-ARDL) was applied, descriptive statistics, correlation analysis, multicollinearity, and Unit Root tests were used to achieve the objective of this study.

X<sub>3it</sub> = Inflation (Inflation rate);  
 X<sub>4it</sub> = ToT (Terms of Trade);  
 X<sub>5it</sub> = Lending rate (LendRt)  
 X<sub>6it</sub> = MCPS (Monetary Credit to Private Sector) are the regressors;  
 U<sub>it</sub> = Component error term  
 Φ = coefficient of the Error correction term  
 z<sub>t-1</sub> = Error Correction Variable

#### 4.1 Panel Analysis - Model Specification

The functional linear growth model estimation is specified generally as:

GDP growth = f(Expdiv, Growth of Gross Capital Formation, Trade Openness, Monetary credit to private Sector)

Expdiv = The Herfindahl-Hirschman Diversification Index, developed by the World Bank, is used to proxy the export diversification index.

The Econometrics model can be expressed as:

$$\Delta GDPgrwth_{it} = \alpha_0 + \alpha_1 \Delta GDPgrwth_{it-i} + \alpha_2 \Delta Expdiv_{it-i} + \alpha_3 \Delta GCFgrwth_{it-i} + \alpha_4 \Delta inf_{it-i} + \alpha_5 \Delta lendRt_{it-i} + \alpha_6 \Delta MCPS_{it-i} + \alpha_7 \Delta Tot_{it-i} + \beta_1 GDPgrwth_{it-i} + \beta_2 Expdiv_{it-i} + \beta_3 GCFgrwth_{it-i} + \beta_4 inf_{it-i} + \beta_5 lendRt_{it-i} + \beta_6 MCPS_{it-i} + \beta_7 Tot_{it-i} + \phi Z_{it-1} + U_{it} \dots\dots\dots (1)$$

Where:

- y<sub>it</sub> = GDP growth (explained variable),
- X<sub>1it</sub> = Expdiv (Export Diversification);
- X<sub>2it</sub> = growth of Gross Capital Formation);

#### 5. ANALYSES AND RESULTS

Table 1 shows the descriptive statistics for variables used in the models, the variables and their mean values include Gdpgrwt (4.05), lendRt (14.14), Tot (77.40), expdiv (0.77), gcfgrwth (8.76), inf (17.72), and mcps (17.14). The maximum value of 4,145.11 is obtained for Inf, while the minimum value of 0.00 is obtained from variables such as lendrt, mcps, tot. The standard deviation which measures the level of volatility showed that the inflation and tot are most volatile at 151.012 and 69.52, while expdiv is the least volatile variable.

##### 5.1 Correlation Analysis

The correlation analysis for variables Gdpgrwt, lendrrt, tot, expdiv, gcfgrwth, inf, and mcps. The results indicated that expdiv and mcps negatively correlate to economic growth. While lendrrt, Tot, gcfgrwth, and inf positively correlated with economic growth. The relationship between the dependent and independent variables correlated below 50% which connotes that they are weakly correlated to economic growth.

**Table 1. Summary of descriptive statistics**

Variable	Obs.	Mean	Std. Dev.	Min	Max
gdpgrwt	1,248	4.051	7.198	-46.08	149.97
expdiv	1,238	0.769	0.0795	0.45	0.94
gcfgrwth	1,046	8.757	32.138	-240.72	466.89
inf	1,126	17.716	151.012	-9.62	4145.11
lendRt	1,248	14.143	14.618	0.00	217.88
mcps	1,168	17.138	15.993	0.00	106.31
Tot	1,248	77.403	69.521	0.00	539.24

**Table 2. Test for multicollinearity**

Variable	VIF	1/VIF
mcps	2.35	0.425034
lendrrt	1.90	0.525556
inf	1.77	0.563434
Tot	1.64	0.610904
expdiv	1.16	0.865009
gcfgrwth	1.02	0.981986
Mean VIF	1.67	

The variance inflation factor for a predictor indicates whether there is a strong linear association between one predictor and the remaining predictors. The correlation in a situation in which two or more explanatory variables in a multiple regression are highly and linearly related, it renders one of the affected variables redundant and ineffective on the dependent variable. It is observed that in Table 2, VIF value revealed an absence of multicollinearity because the VIF values are all below 10.

### 5.2 Unit Root

In most econometrical studies, it is required to always check the stationarity of the time series data used for the analysis. Determining the order of integration of variables used in a model is a fundamental step that needs to be taken when carrying out a time series analysis to prevent the spurious results. In order to ensure that the included variables used in the model in is unstable, it is essential to verify that the right sequence of the data series integration are determined.

Table 3 shows the result of the unit root test for the variables under study, which was derived from the Levin, Lin Chu (LLC) method. The result shows that *gdpgrwt*, *lendrt*, *tot*, *GCFgrwt*, and *inf* were stationary at level which have integration order of *I(0)*. While *expdiv*, and *MCPs* are stationary at first difference which implies that the variables arranged according to the models have an integration order of *I(1)* and *I(0)*. This result

has a mixture of *I(1)* and *I(0)* integration. Hence, this study applied the Panel-ARDL method of analysis.

The panel ARDL approach is applied regardless of whether unit root level of stationarity is *I(0)*, *I(1)*, or both *I(0)* and *I(1)* [16]. The conventional cointegration test is not relevant when employing panel ARDL with different variables because different lags may be present. Using panel ARDL, both long-term and short-term coefficients are produced at once.

When examining how exports affect a country's economic growth in one direction or the other, it is anticipated that there exists a positive relationship between export diversification and economic growth. Though, this has been established in literature Hasan and Toda [17] and Zaharieva [18]. The inflation rate should have an indirect relationship with production, leading to product diversification due to the increased cost of production. Gross Capital formation or reserve, which represents the capital inventory of government that serves as input to production in the economy should have a direct nexus with economic growth and development. Monetary Credit to the Private Sector (%GDP), reflects the level of access to funds from surplus units to private entities/producers for the purpose of investments in the real sector of the economy. It is expected that there should be a positive relationship between the factors. If funds are channeled to boost domestic production, it will lead to product exportation, thus improving economic growth.

**Table 3. Levin, Lin Chu (LLC) unit root tests**

Variable	LLC@ Level	LLC @ First difference	Order of co-integration
Gdpgrwt	-11.70**	-48.89**	I(0)
Lendrt	-4.12**	-22.65**	I(0)
Tot	-3.79**	-29.99**	I(0)
Expdiv	0.91	-43.95**	I(1)
GCFgrwt	-28.26**	-55.32**	I(0)
Inf	-15.15**	-41.31**	I(0)
MCPs	7.74	-28.89**	I(1)

**Table 4. Apriori expectation**

Variables	Variable notation	Measurement	Apriori expectation
Export Diversification	expDiv	Index	+ve
Inflation Rate	Inf	Percentage	-ve
Gross Capital Formation Growth	GCFgrwt	Percentage	+ve
Lending rate (%)	lendRt	Percentage	-ve
Monetary Credit to Private Sector (% GDP)	MCPs	Percentage	+ve
Terms of trade	ToT	Ratio	+ve or -ve

**Table 5. Panel ARDL results for mean group (MG) and dynamic fixed effect (DFE)**

	Mean Group MG	Dynamic Fixed Effect DFE
	Coeff	Coeff
	Long-run	
$expdiv_{it}$	-26.61	-36.12**
$gcfgrwt_{it}$	-0.1818	0.0787**
Inf	-0.1407	0.0049
Lendrt	-1.786	-0.0856
$mcp_{it}$	-1.152	-0.197**
$Tot_{it}$	-0.531	-0.0236**
	Short-run	
ECM(-1)	-0.9305**	-0.669**
$\Delta expdiv_{it}$	16.768**	18.14**
$\Delta gcfgrwt_{it}$	-0.0038	-0.0106
$\Delta Inf$	-0.2121	-0.0053
$\Delta Lendrt$	-0.2534	0.1077
$\Delta mcp_{it}$	-0.4427	-0.1386
$\Delta Tot_{it}$	0.0365	0.0379**
CONST	19.797	24.95**
N	1200	1200

Dependent variable:  $(Gdpgrwt)_{it}$  \* \*\* \*\*\* show significance at 1%, 5% and 10% respectively

The Hausman specification test showed that the dynamic fixed effect model is a better estimator than the Mean Group (MG). The DFE method is the best estimator. Hence, all interpretation is based on the DFE outcome.

### 5.3 Long-run Relationships

Export diversification's long-term impact on the economic growth of SSA countries under review from 1995 to 2020 was shown to be negative and significant with a coefficient value of -36.12 according to the study. The implication of this finding is that throughout the research period, export diversification in Africa has not yet had a significant impact. Most African Countries' exports are mono-product in nature and primary commodity exporters, many are yet to diversify their exports as diversification of export products is the panacea to attaining growth.

The result revealed that the control variables showed a mixed outcome. For instance, gross capital formation growth and inflation rate positively influence economic growth in all the SSA countries. But gross capital formation significantly influences economic growth while inflation indicated a positively insignificant effect on economic growth which is contrary to theory. Consequently, lending rates, Monetary Credit to Private Sector (MCPs), and terms of trade (TOT) were found to negatively affect economic growth for the period under study. While Credit to Private Sector (MCPs) and terms of trade (TOT)

show a significant negative effect, lending rate showed an insignificant effect. MCPs is negative as a result of increasing level of interest rates on funds, most financial institutions are very reluctant to lend to producers due to uncredited-worthiness and fear of ability to repay. Moreover, funds accessible are not channeled to the right purposes.

### 5.4 Short-run Relationships

Because the unit root was present, the ECM(-1) demonstrated that the variables had a long-run equilibrium connection, it takes a very high speed of 66.9% for disequilibrium caused by the presence of unit root to adjust to equilibrium in the following year. The ECM value and the coefficient sign confirm to standards.

The effect of export diversification on economic growth in the short run, had a positive and significant impact on economic growth of all SSA countries under review from 1995 to 2020, with a coefficient value of -18.14. The implication of this result is that export diversification in Africa in the short run significantly affects economic growth, but it is too short a period to sustain economic growth in Africa with the period of study.

The result also revealed that the control variables showed a mixed outcome. For instance, gross capital formation growth, inflation rate, and Monetary Credit to Private Sector (MCPs) negatively and insignificantly influence economic



growth in all the SSA countries. But lending rate and term of trade (ToT) positively influence economic growth. While lending rate indicated an insignificant effect on economic growth, Term of trade (ToT) indicated a significant effect on economic growth.

### 5.5 Discussion of Findings

The result revealed that export diversification contributes to the economic growth of Countries in SSA. Considering the importance of specialization in maximizing the benefits of export diversification for African Countries which was advocated by the classical theories which proffered that, Countries would have to specialize in importing manufactured items while exporting commodities in which they have a comparative advantage. By using the Krueger-Leamer form of the Heckscher-Ohlin model, Wood (2003) offered evidence that factor endowments differ between Africa and Asia, explaining why Africa's export structure leans toward manufactured goods made from natural/raw resource-based commodities. Therefore, the study concludes that expanded trade in raw materials would lead to greater growth in the industrial sector in African nations than in their Asian counterparts.

A developing country's economy is considered to be an emerging market economy if it is growing and becoming more integrated with international markets. This is made possible, particularly, by trade liberalization. Those nations possessing some but not all the traits of a developed market are categorized as emerging market economies. They frequently go from a pre-industrial, generally low-income, less developed economy to a more developed, contemporary economy with a greater standard of living. Karahan [15] investigated the contribution of export diversification for emerging economies, the BRICS group which comprises countries like Brazil, Russia, India, China, and South Africa. In his findings, he held the view that trade portfolio diversification has been a major driver for the growth of the countries under investigation.

This finding is inconsistent with Hammouda, Karingi, Oulmane [19] and Jallab et al. (2008) found that deepening diversification is linked to an increase in productivity. Similarly, Naud'e and Rossouw [20] study for South Africa confirmed a nexus between export diversification Granger causing per capita growth.

In contrast, Songwe and Winkler [21] used a collection of panel data for 30 African nations from 1995 to 2008 to evaluate the impacts of exports and export diversification on labor productivity, labor demand, and value-added. They found that exports increased value-added and labor productivity but did not boost demand for labor. It would therefore be difficult to argue that diversification would improve employment in this situation.

However, Songwe & Winkler [21] presented opposing findings for South Africa positioning that export concentration on a few products where they have a high comparative advantage delivers more benefits than product diversity in goods in which they have a lower comparative advantage. Hodey, Oduro, and Senadza's [22] recent study, which claimed that diversification of exports leads to a favorable and significant contribution to economic growth in SSA, disputed this position.

The findings did not support the underpinning theories in the long run but agreed with the theories in the short run, in which it asserted that trade is an engine of growth and provides externality and productivity benefits to economies. According to the theory, an increase in output and employment, under the assumption of perfect elasticity of input supply and export demand, is a function of exogenous demand for a given export.

## 6. CONCLUSIONS AND RECOMMENDATION

This study investigated the impact of export diversification on the economic growth of countries in SSA. Findings showed that export diversification has not really benefitted the countries, also, exporting raw materials and other primary products does not also benefit the region, and therefore, the countries should continue leveraging on the potential of diversifying their exports and exploring sectors such as the manufacturing to attain more economic gains.

Diversification should be encouraged by implementing entrepreneurship support programs, creating a welcoming investment environment, and encouraging investment in new production sectors as well as expanding existing export sectors. For any economy to maximise growth potential, there is a need for the economy

to be diversified and hence the composition of export baskets.

SSA's comparative advantage in other primary sectors should be leveraged domestically in producing finished or semi-finished goods that could be exported later. It is noticeable that some Countries within the SSA have increased their share of manufactured exports in total merchandise exports bases in recent times. Countries, such as South Africa, Nigeria, Egypt, Ghana, Cote 'Devoir, etc. have relatively developed their manufacturing bases.

Governments should prioritize infrastructure development in order to advance the growth of important economic sectors, particularly the service sector, which will increase output and exports.

Oil/minerals recourses should be exported as finished products, not as raw materials, especially, in those nations that are endowed with natural resources. These raw materials should be best used domestically to aid production into finished/refined products for subsequent exports.

## 7. LIMITATIONS OF STUDY

This study encountered some constraints while carrying out the research work which could have affected the overall findings. One significant constraint is that the data used for the forty-eight (48) Countries employed were diverse in nature. There were social-political, economic, demographic, and topographical distinctions for individual economies. For instance, since independence, SSA's Countries like Kenya, Mauritius, Malawi, Tanzania, and Zambia have experienced a fair amount of political stability. Countries like South Africa, Mauritius, and Nigeria are among the nations that have also advanced industrially among other nations in the Bloc. Even among agricultural countries, some, such as Burundi, Ethiopia, and Uganda, rely heavily on a single export crop. Others, particularly, the mineral and oil producing countries, are resource richer than other Countries. Such variety may lead to erroneous generalizations. In addition, there are issues such as insufficient sample size covering current periods and a lack of previous research studies on the topic. In addition, the issue of unavailability and unbalanced data for some Countries was a major concern, that was, however, addressed using some data mining techniques.

## COMPETING INTERESTS

Author has declared that no competing interests exist.

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