



## FOREIGN RESERVE AND ECONOMIC GROWTH: A COMPARATIVE ANALYSIS OF NIGERIA AND GHANA

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**ABSTRACT:** *This paper examined the comparative analysis of the effect of foreign exchange reserve on the economic growth of Nigeria and Ghana. The foreign reserve was proxy by country external reserve, while economic growth was equally proxy by Gross Domestic Product. Data extracted for the sampled period were analysed using descriptive and inferential statistics. An ex-post facto research design was adopted for the study. Data were obtained for sixty-four (64) years (1960-2023) from the reports of World Bank for Ghana and Nigeria. Regression test for the hypothesis was set at a significance level of 5%. The findings showed that external reserve was jointly positive and significant on the economic growth of Nigeria and Ghana ( $p$ -value = 0.0000;  $<0.05$ ) and ( $p$ -value = 0.0000;  $<0.05$ ) respectively. The findings also showed that Ghana had a stronger positive relationship between external reserve and economic development. The Adjusted R-Square of Ghana and Nigeria stood at 0.95 and 0.77 respectively. This implied that 5% and 23% are factors outside foreign reserve that are responsible for economic growth. This study recommends that the leaders of the two countries under consideration should pay more attention to developmental policy that will lead to accumulation of reserve, since it enhanced economic growth and currency stability of the two countries.*

**KEYWORDS:** Economic development, Economic growth, Foreign reserve, Ghana, Gross domestic product, Nigeria.



## INTRODUCTION

Management of foreign reserve has been an issue of concern to the government of every nation in the world for the past few decades. The rationale behind the concern was the associated effect of international reserve on development and direct impact on exchange rate of a nation. A mono product economy like Nigeria is prone to negative swing in exchange rate as the price of the only exchange earner (oil), that earns the country's hard currency is determined by international oil market price. Determination of oil price internationally leads to erratic change in the Nigerian reserve as her foreign trade benchmark continuously differs from actual price determined by international market (Dibiah & Madume, 2023).

To ameliorate problems associated with international reserve, the federal government of Nigeria and many other developing nations implemented a good number of policies, initiatives and measures in the management of their external reserves; yet, little or no success was achieved because the structure in place could not support sustainable external reserves management. Foreign exchange reserve plays a very clear role in the stability of any economy because it serves the purposes of financial cushion in times when an economy is under financial stress or faces unexpected external shocks (Nwachukwu *et al.*, 2023). Marshall (2022) opined that every nation strives hard to have a high foreign exchange reserve as it is an indication of prosperity. All mechanisms that make a nation affluent equally seem to work in harmony with increase in foreign reserve. Foreign exchange reserves or international reserves are assets held on standby by a monetary authority in foreign currencies. It is foreign assets held by the apex bank of a country. Foreign assets comprise assets that are not denominated in the domestic currency of the country. These reserves are used to back liabilities and influence monetary policy. Forex reserves are foreign currency assets held by the central banks of countries. A reserve currency is money held in significant amounts as reserves by central banks and monetary authorities as part of their foreign exchange reserves programme (Adebayo & Adedeji, 2023).

Foreign currency reserves impact exchange rates when they are used and manipulated by central banks in favour of their domestic currency. Foreign exchange reserves are kept to back liabilities and influence monetary policy. As no nation is self-sufficient, to utilise the comparative advantage of other nations in the world, countries import goods or services that they cannot produce and such need to be paid for in foreign currencies. Reserves provide the necessary funds to fulfil these obligations without putting unnecessary pressure on the domestic currency's value (Oyegoke & Aransi 2021).

It is very important to note that foreign reserves are held in foreign currency (Grover, 2014). This creates a major opportunity for the currency in which such reserves are held; hence, it reduces currency exchange rate risk since there is no need for a country to exchange its currency for the reserve currency to do trade. Reserve currency helps to facilitate global transactions, including investments and international debt obligations settlement. Countries with a high foreign reserve are perceived to be rich when compared to their counterparts with low reserve. It is generally believed that a nation with high reserve will enjoy stable exchange, all things being equal. The results provide ample support for the proposition that holding adequate reserves reduces exchange rate volatility (Irefin & Yaaba, 2023).



The specific objective of this study is to examine the effect of foreign reserve on the economic growth of Nigeria and Ghana.

### **Statement of the Problem**

This study addresses the effect of foreign reserves on economic growth: A Comparative Analysis of Nigeria and Ghana. International reserve plays a very critical role in the development of any economy. Therefore, there is a need for continuous study in this area as this is so germane to the development of a nation. This study will offer various recommendations as regards how it can be improved. Also, there is very little study in this area. A significant number of research in this area focused on advanced countries, leaving very insignificant percentage to African countries, like Nigeria and Ghana (Ndikumana & Elhiraika, 2008). In addition, a significant number of studies in this area were conducted before the COVID-19 incidence. This incidence changed the whole world's narration which would have made the past radically different from the current position. This therefore makes a new study to be essential (Timothy *et al.*, 2020).

Furthermore, the study is necessary to restore the concerned nation's macroeconomic fundamentals because, over the past few decades, the value of the naira and many other African countries' currencies have continuously declined in relation to developed nations' means of exchange, due to the depletion of external reserves (Adama *et al.*, 2022).

## **LITERATURE REVIEW**

This section reviews the conceptual, theoretical, and empirical studies.

### **Conceptual Review**

#### **Foreign Reserves**

According to the CBN (2007), "official public sector foreign assets that are readily available to and controlled by the monetary authorities for direct financing of payment imbalances and regulating the magnitude of such imbalances through exchange market intervention to affect the currency exchange rate and/or other purposes" are defined as foreign reserves, also known as international reserves or foreign exchange reserves. The international reserve assets of the monetary authority are defined as the foreign currency held by the general public, including banks and corporate entities, and are not included in international reserves. It is also acknowledged that foreign reserves are national assets through the monetary authority of the country. Stocks, money, or other financial instruments that allow one country to settle its debts with another are preserved as the assets.

Given that gold was and continues to be the most precious commodity in the world, it stands to reason that it might be included. It is made up equally of foreign currencies, gold, and liquid assets held by central banks (Dibiah & Madume, 2023). The main function of the foreign reserves is to sustain the domestic currency. Dibiah and Madume (2023) enumerated the following additional roles: source of cash for government expenditure overseas, insurance against natural calamities, monetary policy and exchange rate tool, payment of debts and



liabilities denominated in foreign currencies, and investment fund. On the other side, international reserves management is the process of optimizing a nation's external resources to meet its economic needs. The Central Bank of Nigeria is the only entity in charge of managing foreign reserves.

### **Reasons for Holding Reserves**

Global official reserves have expanded significantly and quickly in recent years. This remarkable increase illustrates how crucial it is for countries to keep adequate foreign reserves. Here are a few arguments in favor of maintaining reserves:

- a. **To Increase a Nation's Credibility.** When it is difficult or impossible to access the international capital market, external reserves act as a safety net. By permitting regular servicing of its external debt and avoiding the payment of fines and charges, a country with a respectable quantity of international reserves enhances its trustworthiness and reputation. Furthermore, credit rating agencies and foreign financial institutions use country risk models heavily influenced by a nation's useable foreign exchange reserve.
- b. **On-time performance of duties for payments paid overseas.** Liquid assets that can be quickly used to meet trade obligations, such as paying import charges, are necessary in order to finance international trade. Although commercial banks are usually involved, in many developing nations, such as Nigeria, authorized dealers purchase foreign exchange on behalf of 50% of the importers during auction sessions, which is how the central bank really provides foreign exchange. In developed economies, the need to save reserves for transactions is less significant since the manufacturing sector creates goods for export markets.
- c. **To shield against shocks from the outside.** When "external shocks" happen, the outer attitude of a nation falls completely out of whack. These include, among other unanticipated events, natural disasters and trade shocks. If a nation does not rely on expensive outside assistance and has a sizeable foreign reserve, it may be able to recover from shocks like these more quickly.
- d. **To protect the worth of the local money.** The local currency is backed by reserves abroad. Reserves were heavily utilized under the gold standard and continued to do so during the Breton Woods system following World War II. Foreign exchange reserves were used to preserve and foster confidence in domestic currency once the Breton Woods system was implemented, replacing gold. However, this is not the primary goal of reserves for the majority of wealthy nations.
- e. **Fall back option in the event of a "rainy day."** Economies of nations periodically experience drops in revenue, which forces them to depend on their reserves as a safety net. A healthy position in external reserves would easily supply this buffer and help for these economies to recover.
- f. **Adherence to deadlines for payments made abroad.** International trade necessitates the need for liquid assets that can be promptly deployed to meet trade commitments, including covering import costs. Commercial banks typically play a role, but in many developing countries, like Nigeria, the central bank actually provides the foreign



exchange through auction sessions, when authorized dealers buy the currency on behalf of half of the importers. In industrialized nations, the manufacturing sector produces items for export markets, making the demand to keep reserves for transactions less important (Egbulonu & Okani, 2019).

### **Gross Domestic Product**

The gross domestic product (GDP) is the total monetary worth of all finished goods and services produced in a nation over a given length of time, usually one year. It is one of the commonly used metrics in economics to gauge economic performance. The total output of a country's economy over a certain time period is represented by the gross domestic product, which is seasonally adjusted to eliminate quarterly variations brought on by weather or holidays. The GDP indicator that is most closely monitored is also adjusted for inflation in order to measure changes in output as opposed to changes in the cost of goods and services.

A common method for comparing the sizes of national economies is to utilize the annual GDP totals. Policymakers, investors, and business executives are more interested in changes in the GDP over time since it is reported as an annualized rate of growth or contraction. This makes comparing the quarterly and annual prices easier. Gross domestic product (GDP) is one of the most widely used indicators of economic performance. Gross domestic product measures a national economy's total output in a given period and is seasonally adjusted to eliminate quarterly variations based on climate or holidays. The most closely watched GDP measure is also adjusted for inflation to measure changes in output rather than changes in the prices of goods and services (Leslie, 2023)

### **National Development**

A nation's advancement in all domains such as political, economic, social, cultural, scientific, and material is referred to as "national development." A country's ability to raise the standard of living for its people is a good measure of how developed that country is.

### **Exchange Rate in Nigeria**

Exchange rate is the rate at which a country's currency is traded for another currency. For instance, it is the rate at which the Nigeria naira is traded with the United States of America dollar. It is additionally viewed as the worth of one country's money according to another cash (Emmanuel *et al.*, 2019). Currency value with regards to rate influenced country rating. It is the rate at which one currency will be exchanged for another currency and it affects trade and the movement of money between countries. This is the proportion between a volume of one cash and how much more money for which that unit can be traded at a specific time—the rate at which one currency can be exchanged for another between nations or economic zones.



## **THEORETICAL REVIEW**

### **Theory of Self-Insurance**

Ehrlich and Becker (1972) introduced the concepts of self-insurance and self-protection. Self-insurance is a strategy for mitigating against the possibility of a future loss by putting aside a set portion of your own money, rather than buying insurance and having an insurance company reimburse you for what you have spent. This theory was popularized by Fakuda and Kon (2008). It describes the practice of keeping a reserve buffer stock on hand to handle unanticipated shocks to the global financial markets. According to Guillermo (2009), easy money and reserve building contributed to the Subprime Crisis. As one of the main theories explaining the recurring economic crises in emerging markets, his theory of the counter productivity of reserve accumulation became well-known in the US and Europe. According to Guillermo, the primary causes of self-insurance plans were as follows. The 1997–1998 Asian–Russian crisis serves as a good place to start since it demonstrated to developing nations the value of amassing substantial foreign reserves in order to safeguard their own financial systems in the absence of IMF assistance. Recent empirical research supports this self-insurance drive; nevertheless, it appears that other factors are now activating the self-insurance motive for resource accumulation. Let this be the nominal interest rate on reserve money, assuming that it is a combination of cash and treasury bills. Therefore, the federal government can choose to adjust its supply or lower the policy interest rate in response to an increase in demand for international reserves. In conclusion, a large-scale creation of quasi money that is susceptible to self-fulfilling expectations could result from the rise in demand for international reserves combined with low interest rates and loose financial regulations. This could cause the economy to experience a liquidity collapse and ignite strong forces for price deflation (Guillermo, 2009).

### **International Financial Integration Theory**

Financial integration is a phenomenon in which financial markets in neighboring regional or global economies are closely linked together, for instance, through cross-border capital flows, foreign participation in the domestic financial markets, and information sharing among financial institutions. The theory of international financial integration posits that nations with high capital-to-labor ratios should see a capital flight from high income countries to those with lower capital-to-labor ratios (Nwafor, 2017). According to Prasad and Rajam (2008), this strategy would encourage international investors to transfer money overseas, increase investment levels by providing access to foreign capital, grow the economy of the developing nation, and provide higher returns for those investors. Positive terms of trade and foreign exchange stability would be boosted by this capital flow liberalization process.

### **Empirical Review**

The purpose of this study is to examine the effect of national foreign reserves on economic growth of Nigeria and Ghana. A significant number of studies have been conducted on how reserves impacted economic performance; yet, many lack an empirical assessment of the real performance of reserve holders and result inclusive. The relationship between external reserves and economic growth was investigated by Nwoye *et al.* (2022). The research design for the study was *ex post facto*. The CBN statistical bulletin was the source of the data for the study.



The results showed that the external reserve has a significant and positive impact on Nigeria's Gross Domestic Products. The research findings additionally demonstrated that the net national income of Nigeria is negatively and marginally impacted by the foreign reserve. According to the study's conclusions, careful management of Nigeria's foreign reserves is necessary to guarantee future growth. According to the study, policies that support greater accumulation of foreign reserves should be implemented by the government. Finally, the analysis indicates that the government should implement policies that will not allow office holders to use official funds for personal advantage.

Ihensekhien *et al.* (2023) examined the impact of external reserves on economic growth of Nigeria. The study revealed that in the long run, all the explanatory variables were key determinants of economic growth in Nigeria. However, in the short run, economic growth was observed to be significantly and positively responsive to changes in external reserves, inflation rate and a one-period lag of Gross Domestic Product contrary to its negative response to changes in the exchange rate. The paper, therefore, recommended that the Nigerian government should have a deliberate policy to boost her external reserves, maintain a stable exchange rate policy and also try to achieve a tolerable low inflation rate.

Likewise, another research was conducted on the effects of the foreign exchange reserves accumulation on real macroeconomic variables (GDP, employment, prices and exchange rates) in BRIC countries (Brazil, Russia, India, China). The results of the study show that after the initial shock of foreign exchange reserves, the exchange rate appreciation occurs, which can be explained by the fact that a higher level of foreign exchange reserves gives investors and rating agencies a lower risk of the country, which can consequently lead to an appreciation of the foreign exchange rate. In this way, the price reaction would be neutralized. Therefore, the growth of foreign exchange reserves leads to the growth of economic activity measured by Gross Domestic Product growth (Kruskovic, 2023).

There was also a positive correlation found between economic growth and external reserves in a different Nigerian study on the subject. Data for the study came from the Central Bank of Nigeria's annual report and statement of accounts for the years 1986–2020. According to study results, there were changes in both the economic growth rate and external reserves, with the latter showing comparatively greater significant oscillations. Thus, all of the explanatory variables were important factors in determining Nigeria's economic growth over the long term, according to the study. More specifically, economic growth responds negatively to changes in the currency rate by 0.10% but significantly and favourably to changes in foreign reserves by 0.22%, inflation rate by 0.08%, and GDP lag by 0.21% during one period (Adama *et al.*, 2022).

Furthermore, the relationship between exchange rates and GDP was investigated by Ramat *et al.* (2022). The years 1986–2010 were included in the analysis. Two methods are used to derive the relationship: one is by employing a simultaneous equations model inside a macroeconomic model that is fully described. It was investigated using the Generalized Method of Moments approach. The estimation results imply that there is no proof of a significant correlation between output growth and exchange rate fluctuations. Instead, changes in money have a direct impact on Nigeria's economic growth. Growth has not been favoured by the actual exchange rate pattern that these factors have tended to maintain. The exchange rate management needs to be improved, but the reforms alone will not be enough to boost Nigeria's economy.



Furthermore, another study examined how the money supply is affected by economic growth and foreign currency reserves, using panel data from five West African Monetary Zone member nations. Data used for the study was between 2001 and 2019. For the robustness check, the study used the dynamic technique, completely modified ordinary least squares and dynamic ordinary least squares. The result from the study revealed that foreign currency reserves have a positive effect on the money supply. In both theories, a rise in the money supply is linked to economic growth (Foday & Alieu, 2021).

Moreover, research was done on the connection between Ghana's economic stability and reserve quantity. The study also looked at whether the policy and economic factors are affected by reserve build-ups. This study denied the short-run matching of the Ghanaian central bank's reserves stock to the theoretical standard metrics of 20% of broad money and 100% of short-term debts using the Vector Error Correction Model. These findings could raise the cost of borrowing in the future and have an impact on the nation's credit ratings in the future. Additionally, the outcome demonstrated a varied response of the reserve build-up adjustments to the hypotheses and conclusions of empirical research. Furthermore, the research validated the long-run test of the central bank's restriction on exchange rate depreciation based on positive reserve accumulation. However, the short-run adjustments of the exchange rates on reserves rejected this relationship. Furthermore, the decomposition analyses showed that short-run variations in reserves are explained by external forces, whereas the long run variations are explained through the financial sector and partly by external forces. Therefore, an econometric specification of reserves beyond three months must specify in the model both the financial sector and external sector variables (Abdul-Rashid & Yao, 2019).

Likewise, Nwafor (2017) examined the effect of external reserve as a solution to economic growth of Nigeria. Two hypotheses were tested with data spanning from 2004 to 2015 using Ordinary Least Squares regression technique. Findings however revealed that external reserve has no positive significant impact on economic growth in Nigeria within the period under review. They equally showed that external reserves have no positive significant influence on exchange rate in Nigeria. Other things noted was that Nigeria's foreign reserve has been declining within the period under study and that it was occasioned by the 2007–2008 global financial crisis supported by the nonchalant attitude of the government towards the accumulation of international reserves. It was recommended amongst all that in accumulating excessive foreign exchanges, the country should have proper management of reserves.

In addition, Akinwumi and Adekoya (2016), investigated the impact of managing external reserves on the economic growth of Nigeria between 1985 and 2013. Data were sourced from the Nigeria Bureau of Statistics, and the Central Bank of Nigeria's statistical bulletin. The Durbin Watson auto-correlation test was used to assess the reliability of the data sources, and multiple regression was employed to examine the relationship between the explainable variables and Nigeria's external reserve management. Diagnostic tests included the unit root test (Augmented Dickey Fuller) and the Johansen co-integration test to determine whether the relationships were stationary or non-stationary over the long term between the dependent and independent variables. The results of the study showed a substantial correlation between the explanatory variables and foreign reserves. The study recommended that the government should provide a conducive environment for increased productivity, leading to increasing foreign reserves.





## METHODOLOGY

*Ex post facto* research design was employed to gather substantial time series information in this research work. Sample size is a subset of the entire population because it is essentially a good representative of the population. However, since the focus of this study is on the Nigeria and Ghana international reserve as well as gross domestic products of the two nations, data were extracted from, 1960 to 2023. Ordinary Least Square (OLS) method was used as the main econometric tool. External reserves (EXTR) was adopted as the dependent variable while gross domestic product was the independent variable. The information was obtained primarily from World Bank data that showed the information on all through the 63 years' time span. For ease of comparability, United States Dollar was used as a base currency for the two countries. Data were drawn on external reserve and gross domestic product for the two countries and analysed using the simple regression method. F-statistic was used to assess the individual effect of the explanatory variables on the criterion variables at 5% level of significance while the F statistics was used to test the overall goodness-of-fit and acceptability of the model from a statistical perspective, and also at 5% level of significant. The data were analysed using Stata 11.

### Model Specification

In order to investigate the impact of external reserves on economic growth in Nigeria and Ghana, the model for the study was specified thus:

$$RGDP = f(RSV) \dots (1)$$

where:

RGDP = Real gross domestic product (proxy for economic growth)

RSV = External reserves

The model in its econometric linear form can be written as:

$$RGDP = b_0 + b_1RSV + U \dots (2)$$

where:

U = random error term

$b_0$  = constant intercept

$b_1$  = coefficients of associated variable

Since the data for the analysis is time series, the Augmented Dickey-Fuller (ADF) unit root test was employed to ensure data stationarity and avoid the problem of spurious regression. The Augmented-Dickey Fuller (ADF) unit root test was employed to ensure data stationarity and avoid the problem of spurious regression since the data for the analysis is time series. Bound test was applied to determine the existence of a long-run equilibrium relationship among the variables.



## Data Analyses

**Table 1: NIGERIA**

Dependent Variable: GDP				
Method: Least squares				
Sample: 1960 to 2022				
Observation: 63				
VARIABLE	Coefficient	Std. Error	t-Statistic	Probability
C	36.9491	13.0823	2.82	0.006
FRSV	8.8484	0.60515	14.62	0.000
R-Squared	0.7780	Mean	GDP	Reserve
Adjusted R-Squared	0.7744	SD	157.08	13.57
F-statistics(1,61)	213.77	Mini	170.11	16.95
Prob. (F statistics)	0.0000	Maxim	4.2	0.11
			574.18	53.6

Source: Extraction from Stata 2024

The result of the simple regression relates to Nigeria's GDP and external reserve. From the relative statistics, we found that foreign reserve exhibited a positive coefficient of 8.8484 coefficients alongside a significant P-value of 0.0000, which suggests the existence of a positive and significant relationship between reserves and economic growth. By implication, the result suggests that a one percent increase in foreign reserve is capable of promoting economic growth in Nigeria to the tune of 8.8484 units, all things being equal. The result of this study is however in consonance with the empirical study of Dibiah and Madume (2023), Akinboyo *et al.* (2016) and Akinwumi and Adekoya (2016), which proved that reserve is a key driver to economic growth of Nigeria. Also, from the above statistics however, the R square, which is the coefficient of determination, exhibited a strong coefficient of 0.7780 while the adjusted R<sup>2</sup> exhibited a coefficient of 0.7744, thereby suggesting that about 77.44 percent variation in gross domestic product is caused by foreign reserve in Nigeria. The adjusted R<sup>2</sup> of 0.7744 from the table is an indication that the model designed covered 77.44% and the remaining 22.56 % is variation in growth caused by factors outside the model. The F-statistics testing the overall significance of the model in the short-run relationship based on the F-statistic output at a probability level of 0.0000 which is less than the critical value of 0.05 ( $0.00 < 0.05$ ). Therefore, it means that there is a significant relationship between the analysed variables. (There is a significant relationship between gross domestic products and external reserve.) The outcome of this study correlates with the study conducted in Nigeria. The study examined the impact of foreign reserves on the growth of the Nigerian economy. Economic growth was proxied by gross domestic product, while foreign reserve was the independent variable. Data used for the study was collected from the Central Bank of Nigeria statistical bulletin for the period 1985–2017. The result of the study shows that there is a positive and significant relationship between foreign reserves and gross domestic product in Nigeria.



However, the result above negates the result of Adewunmi (2023) who examined the how economic growth impacted foreign reserve in Nigeria. Exchange rate, inflation rate, foreign direct investment and financial development are the independent variables, while international reserves accumulation was the dependent variable. Thirty years' period was used as the period of study. Secondary data was equally used for the study. Data were gathered form CBN Statistical bulletin. The study found out there is no significant impact of gross domestic product on external reserve in Nigeria. Also, evidence of statistical significant impact was found between exchange rate and foreign direct investment in Nigeria. In addition, analysis from this study revealed that there is no significant impact of inflation rate and external reserve on international reserve in Nigeria.

<b>Table 2: GHANA</b>				
Dependent Variable: GDP				
Method: Least squares				
Sample: 1960 to 2022				
Included observation: 63				
VARIABLE	Coefficient	Std. Error	t-Statistic	Probability
C	0.9945	0.7864	34.52	0.211
FRSV	8.6786	0.2514	1.26	0.000
R-Squared	0.9513	Mean	GDP	Reserve
Adjusted R-Squared	0.9505	SD	16.79	1.821
F-statistics	1191.32	Minimum	22.81	2.56
Prob. (F statistics)	0.0000	Maximum	1.22	0.04
			79.52	9.92

**Source:** Extraction from Stata, 2024

Table 2 presents the result of the relationship of Ghana's gross domestic product and external reserve. It equally shows the result of simple regression that foreign reserve presents a positive coefficient of 8.6786 alongside a significant p-value of 0.000, which suggests the existence of a positive and significant relationship between external reserves and economic growth of Ghana by 8.6786. By implication, the result suggests that a one percent increase in foreign reserve of Ghana is capable of promoting economic growth by 8.6786%. The result of this study is in tandem with the study of work conducted by Ozan and Umut (2021), which suggests that external reserve has a positive effect on growth of a nation. Also, from the above statistics, however, the  $R^2$ , which is the coefficient of determination, exhibited a strong coefficient of 0.9513 while the adjusted  $R^2$  exhibited a coefficient of 0.9505, thereby suggesting that about 95 percent variation in gross domestic product is caused by foreign reserve in Ghana and the balance of 5% is variation caused by factors outside the model. The F-statistics test the overall level of significance of the model in the short-run relationship based on the F-statistic output of 1191.32 at a probability level of 0.0000, which is less than the critical value of 0.05 ( $0.00 < 0.05$ ). Therefore, it means that there is a significant relationship between gross domestic products and external reserve. The result of the study is in agreement with the study conducted on the impact of foreign reserves on the growth of the Nigerian economy. The study shows that there is a positive and significant relationship between foreign reserves and gross domestic



product in Nigeria. This study therefore concluded that foreign reserves in Nigeria contributed positively and significantly to the growth of the Nigerian economy within the period of study (Dibiah & Madume,2023).

## **CONCLUSION**

This study looks into how foreign reserves have affected the economic growth and development of Nigeria and Ghana. Foreign reserves remain a national asset through the country's monetary authority. The assets are held in stocks, other countries' currencies, and other financial instruments which allow one country to settle debts with other countries resulting from trading. The result indicated the existence of a positive relationship between external reserve and economic growth for both Nigeria and Ghana. However, the result shows a stronger statistical influence on Ghana model than in Nigeria. However, the study concluded that maintaining acceptable levels of foreign reserves is essential to Nigeria's economy as well as Ghana's in order to maintain economic stability and be trusted among other countries of the world. The investigation's findings also indicate that both Nigeria's and Ghana's foreign reserves have had a favourable and noteworthy influence on the nation's economic expansion. It equally suggests a growing foreign reserve.

## **RECOMMENDATIONS**

Based on the findings and conclusion of this study, the following recommendations are made:

The government of the two nations under review should implement measures that will facilitate the greater building of external reserves in addition to cautious management of county's foreign reserves to guarantee continued growth of the two nations. This is based on the premise that reserves have a positive influence on economic development.

In addition, despite the fact that external reserve has a direct impact on growth, yet the opportunity cost of holding heavy foreign reserves can be channelled to development in the fields of health, education, and the construction of infrastructure (such as roads, railways, electricity, clean water, etc.) that will further reduce poverty and promote economic expansion. Governments should cut down their expenditure at all levels to their optimizing size, so as to grow effectively and efficiently, which is a macroeconomic goal of every economy.



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