

Economic Growth and International Reserves Accumulation in Nigeria

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Abstract: *There have been a few discussions on whether there is need to expand the degree of countries, worldwide saves or trim them, and this discussion is turning out to be really fascinating particularly in non-industrial nations like Nigeria. To this, the study examined the how economic growth impact on Gross domestic product, while exchange rate, inflation rate, foreign direct investment and financial development are the independent variables and international reserves accumulation is the dependent variables for the period of thirty years. The research design of this study is Ex Post Facto. The study employs secondary data which were gathered from CBN Statistical Bulletin. Ordinary Least Square (OLS) method was employed to analysed data with the aids of E-view 9. The result 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. This study realized that financial development have no significant impact on external reserve in Nigeria under the period of study. Therefore, the study concluded that there is no significant impact of economic growth in international reserve accumulation in Nigeria. The study therefore suggests that Nigerian government ought to foster legitimate techniques and methodologies of unfamiliar stores the board to realize the sufficiency level that is expected to achieve macroeconomic soundness.*

Keywords: Gross domestic product, Foreign Direct Investment, Financial Development, International Reserves Accumulation, External Reserves.

Introduction

In present time the issues connected with external reserves has acquired unmistakable quality and its practices have advanced quickly. Because of the likely effect on monetary development and monetary strength, it is fundamental that nations of the world do their most effort to gather cash. In this manner, the administration of outer stores is one of the centre acro-economic objectives of rural countries like Nigeria. To accomplish this goal, Nigerian government executed various strategies and techniques in it administration External reserves which is otherwise called unfamiliar trade save, unfamiliar reserve worldwide stores, are unfamiliar monetary forms, foreign exchange reserve and securities held by Central Banks of a country. Foreign reserves are those resources of a country's money related specialists that can be utilized straightforwardly or through guaranteed convertibility into different resources for help its

pace of trade (Osabuohien & Egwakhe, 2016; Archibong, 2013).

Many nations on the planet typically hold global reserves to have a positive degree of conversion scale particularly with the end goal of settling it and upkeep of vigorous economy. There have been a few discussions on whether there is need to expand the degree of countries, worldwide saves or trim them, and this discussion is turning out to be seriously fascinating particularly in non-industrial nations like Nigeria. A few financial specialists are of the assessment that keeping scant assets for possible later use when there are monetary issues to be gone to locally, like farming, foundation, training and wellbeing among others, may not be an exceptionally insightful choice. The organization of worldwide stores is vested in the ownership of the public power of a particular economy. The instance of Nigeria is troubling as the colossal unfamiliar stores announced continue draining on consistent schedule, without relating

advancement development as great infrastructural offices, high work rate and general improvement in the lifestyle of the general population (Anthonia, Joseph & Uduak, 2017).

Alasan and Shaib (2011), emphasised that the degree of international reserves in a nation is impacted by outer area improvements, for example, foreign exchange rate, foreign debt and other foreign obligations. In any case, when global reserves are utilized for supporting home-grown obligation, they could apply pressures on the interior financial climate. In this manner, on the off chance that a nation's exchange volume increments, banks and other monetary mediators may likewise apply tension on worldwide stores (CBN, 2015).

The comprehension of difficulties looked by less created financial matters in their drive towards supported monetary development will be worthless without grasping the elements that provoked the formed financial aspects into the condition of supported monetary development. Amassing capital and mechanical advancement are critical to support monetary development in the cutting edge period (Ifurueze, 2016). The CBN has been developing its outside reserves and it has developed to even out that is easily over the worldwide benchmark of essentially supporting three months of import. A large portion of the Nigeria unfamiliar hold are held in bonds by unfamiliar banks and institutional financial backers. The methodology of involving the global reserves as a protective component will more often than not sabotage the minor advantage in the event that the hold is siphoned into building mechanical base, capital stock and elevate import replacement to animate monetary development seeing the Nigerian outer save system and the formative difficulties perplexing the country (Egbulonu and Okani, 2019).

Consequently, reinforcing the place of certain specialists who have hence scrutinized the requirement for global reserves collection, they say it makes the intergenerational imbalance since it helps the present however troubles the people in the future who need to clear the obligation. As per Worldwide Financial Asset (IMF), global stores profile has become as a wellspring of worry to

everybody as more than \$68 billion were utilized for obligation administrations somewhere in the range of 2005 and 2017. The construction set up doesn't uphold effective save the executives. Most exceedingly terrible still, Nigeria economy, starting around 1970 has perseveringly relied upon unrefined petroleum trade as its super foreign exchange earner worker, representing over 90% of unfamiliar acquiring with the specialist circles of financial expansions and explored (Egbulonu & Okan, 2019).

Literature Review

International Reserves

International Reserve comprise of official public sector foreign assets that are promptly accessible to, and constrained by the monetary authorities, for direct supporting of instalments of lopsided characteristics, and straightforwardly controlling the extent of such awkward nature through mediation in the trade markets to influence the cash conversion scale and additionally for other purposes. It incorporates reign currency deposits of Central Banks or other monetary authorities used to back Central Bank's liabilities for example, the neighbourhood cash gave, the save stores of different Deposit Money Banks (DMBs), government or other monetary foundations. This implies that unfamiliar trade property of people, banks, government organizations and corporate bodies don't shape part of the country's Unfamiliar outside Stores. Despite that the administration of the country's unfamiliar trade steadiness is one of the fundamental justifications for why numerous nations - particularly agricultural nations like Nigeria accentuate on keeping up with helpful volume of outer hold, one of the greatest difficulties confronted locally level of unfamiliar save that ought to be viewed as sufficient or alluring (Egbulonu & Okani, 2019).

Exchange Rate in Nigeria

Exchange rate is the rate at which one money will be traded for another. It is additionally viewed as the worth of one country's money according to another cash (Emmanuel, Ike & Alhasan, 2019).

This is the proportion between a volume of one cash and how much one more money for which that unit can be traded at a specific time. Swapping



scale of money is the connection among home-grown and unfamiliar costs of labor and products (Ngerebo & Ibe, 2013). For example, an interbank swapping scale of 114 Japanese yen to the US dollar infers that ¥114 will be exchanged for each US\$1 or that US\$1 will be exchanged for each ¥114. For this present circumstance it is said that the expense of a dollar tantamount to yen is ¥114, or proportionately that the expense of a yen comparing to dollars is \$1/114. Exchange not completely set stone in the new exchange market, which is accessible to countless different sorts of buyers and merchants, and where cash trading is relentless (Ehinomen & Oladipo, 2012).

Foreign Direct Investment

Foreign Direct Investment (FDI) has been portrayed as the endeavour of resources in business practices outside an organization's country of beginning. Adeoye (2016), describe new direct hypothesis as the somewhat long endeavour that reflects the objective of a persevering through income and control by a tenant component of one economy (the prompt monetary supporter) in an endeavor that is inhabitant in another economy (the quick endeavour try). FDI is a critical piece of worldwide capital streams and it suggests adventure by overall companied with headquarters in made countries (Miguel, 2015). According to Cyril (2018), FDI0 adds to the host country's gross capital turn of events, higher turn of events, present day productivity and reality and opposite side task benefits like trade of advancement, authoritative dominance, improvement in the idea of HR and extended adventure. The normal meaning of FDI in Less Developed Countries (LDCs) headway process is getting esteemed, two significant issues concerning New Direct Endeavor stays agitated. Regardless of what are the determinants of unfamiliar direct venture (Hasan, & Salim, 2017).

Mercantile Theory of Reserve Accumulation

Gupta and Agarwal (2004); Izenman and Lee (2008) explained thought process of hold amassing. This hypothesis holds that development of exchange and different communications the monetary framework requires the expansion in gathering of outer saves particularly where the home-grown economy has a background marked by unpredictability and changes. In the event that an

economy is more powerless against emergency, the public authority will need to collect more preparatory investment funds as stores. Simultaneously the confidential area will need to grow its monetary record as a response to the public authority supporting of the extra holds; they will build their possessions of the self-made bonds that the public authority sells (this is really equivalent to present and future assessment instalments, under Ricardian Proportionality); what's more, simultaneously they will expand their issuance of outer obligation to finance these outgoings and keep up with utilization smoothing. In the event that all the more such confidential outer acquiring is required, the public authority needs to change capital controls. This is what is going on with Nigeria like many agricultural countries; most obviously terrible still as a mono-item trade economy.

On the other hand, in a more broadened economy, described in terms of professional career excess, the public authority will try to use on its exchange benefits by gathering unfamiliar saves, lessen or restrict outer getting to capital venture and improvement of foundation, and fix capital controls by forcing higher capital stream charges which currently lines up with the mercantilist motivation to force such duties to advance product drove development joined by a more fragile genuine conversion scale. The international reserves has been one of the largest sector which has been providing and accumulating wealth to the nation thereby increasing the economic growth, however, the foreign reserve accumulation has been abandoned by researchers and this has a positive relation with economic growth most especially agro system which has been contributing larger part to the economy.

Methodology

Ex post facto research design was utilized to accumulate significant time series information on the subject of conversation. This is helpful in studying the casual relationship in situations where it is not feasible or ethical to manipulate independent variables. To identify the possible causes of existing outcomes, to provide insight into complex issues and also to validate theoretical frameworks. Also, Single sampling technique which involves taking observations of the variable of interest at equal time intervals, such as daily,



weekly, monthly or yearly. Quantitative data was collected. Sample size is a subset of the entire population because it is essentially a good representative of the population. Since the focus of the current research study is on the Nigeria economy which is aggregated by international reserve accumulation. Data were extracted from CBN Statistical Bulletin, 2021. Ordinary Least Square (OLS) method was used as the main econometric tool. External reserves (EXTR), was adopt as dependent variable while Gross domestic product, exchange rate, inflation rate, foreign direct investment and financial development are the independent variables. The information was obtained essentially from CBN Statistical Bulletin and it showed the information on factors all through the 32 years' time span.

Model Specification

The following model was adopted:

$$EXTR = F(GDP, EXCH, INFLR, FDI, FD) \dots\dots\dots 1$$

$$EXTR = \beta_0 + \beta_1 GDP + \beta_2 EXCH + \beta_3 INFLR + \beta_4 FDI + \beta_5 FD + \mu \dots\dots\dots 2$$

Where:

EXTR= External Reserves

GDP= Gross Domestic Product

EXCH = Exchange Rate

INFLR = Inflation Rate

FDI= Foreign Direct Investment

FD = Financial development

β_0 = Constant term

β_1 - β_5 = Coefficient of informative factors

μ = Error term.

Data Analysis, Results and Discussion of Findings

Findings

Table 1: Result of Unit Root Test

Variables	Order of Stationarity	Augmented Dickey-Fuller test statistic	1% Level Critical Value
EXTR	At level	2.732542	-3.689194
	1 st difference	-6.273282	-3.699871
GDP	At level	0.730463	-3.679322
	1 st difference	-5.347333	-3.689194
EXCH	At level	3.272050	-3.679322
	1 st difference	-3.045869	-3.689194
INFLR	At level	3.422341	-3.679322

FDI	1 st difference	-0.568880	-3.737853	-2.991878
	At level	4.116373	-3.679322	-2.967767
FD	1 st difference	-1.279720	-3.689194	-2.971853
	At level	-2.035433	-3.679322	-2.967767
	1 st difference	-6.600340	-3.724070	-2.986225

Source: E-View Output, 2023

Nonetheless, the Augmented Dickey-Fuller test or unit root test was displayed in table 4.1 above. Unit root examination is a test directed to determine in the event that the factors viable are fixed. We take the accompanying choice rule: in the event that the outright worth of the Augmented Dickey-Fuller (ADF) test is more prominent than the basic worth either at 5% degree of importance at the request for nothing, one, or two, it shows that factors viable are fixed, in any case they are not. The aftereffect of the stationarity test result showed that main two factors; conversion scale and monetary improvement were fixed at level and at first contrast [I(1)]. While, external reserve and gross domestic product were not stationary at level, but they were stationary at first difference. While, inflation rate is estimated to be stationary at level.

Table 2: Regression Analysis

Dependent Variable: LEXTR
 Method: Least Squares
 Date: 10/24/21 Time: 22:57
 Sample: 1988 2019
 Included observations: 32

Variable	Coefficien	t	Std. Error	t-Statistic	Prob.
C	14052.54	5886.247	2.387351	0.0245	
LGDP	0.762801	0.487733	1.563973	0.1299	
LEXCH	12.10514	3.876279	3.122878	0.0042	
LINFLR	-144.4164	149.5655	-0.965574	0.3432	
LFDI	4.410327	5.322453	0.828627	0.0416	
LFD	-2.524344	2.156636	-1.170501	0.2524	

R-squared	0.608251	Mean dependent var	21374.85
Adjusted R-squared	0.532915	S.D. dependent var	17500.55
S.E. of regression	11960.51	Akaike info criterion	21.78397
Sum squared resid	3.72E+09	Schwarz criterion	22.05880
Log likelihood	-342.5435	Hannan-Quinn criter.	21.87507
F-statistic	8.073810	Durbin-Watson stat	0.430754
Prob(F-statistic)	0.000982		

Source: E-View Output, 2023

The outcome shows that log of economic growth, log of inflation rate and financial development with

0.1299, 0.3432 and 0.2524 respectively has no significant impact on the external reserve because there f-test is greater than the level of significance. While conversion scale and foreign direct investment with 0.0042 and 0.0416 fundamentally affects the outer save since there p esteem is lesser than the degree of importance

Coefficient of variables

The value of constant which is 14052.54 suggest that holding the independent variable consistent, external reserve will increment by same sum. The coefficient of GDP just is viewed as sure which demonstrate that for each unit expansion in the GDP, there will be an expansion in the external reserve. In any case, conversion scale, expansion rate, external reserve and monetary advancement are found to have negative relationship with outer save, this similarly intends that for each unit expansion in every one of the factors, there will be decline in the outside hold. From the outcome, esteem is (0.000982) which is under 5% degree of importance. Thus we reject the invalid speculation (H_0) that the general gauge throws a tantrum which infers that our free factors are all the while huge.

Contributions to Knowledge

Studies have examined various factors, including investment, trade, human capital, governance, and infrastructure, to identify their impact on economic growth (Asongu, 2017; Yusuf, 2018). Studies on economic growth and reserve accumulation in Nigeria provide valuable policy implications and recommendations for policymakers and stakeholders. They offer evidence-based insights into the effectiveness of different policy measures, such as fiscal and monetary policies, structural reforms, investment strategies, and reserve management techniques (Asongu & Odhiambo, 2019; Badinger, Breuss & Fink., 2020). Studies on economic growth and reserve accumulation in Nigeria provide valuable policy implications and recommendations for policymakers and stakeholders. They offer evidence-based insights into the effectiveness of different policy measures, such as fiscal and monetary policies, structural reforms, investment strategies, and reserve management techniques (Asongu & Odhiambo, 2019; Badinger et al., 2020).

Conclusion and Recommendations

The impact of T-estimation which gauges individual effect uncovered that every one of the four speculations tried was not measurably huge under the review period. This study found out that; there is no significant impact of gross domestic product on external reserve in Nigeria. Also, evidence of statistical significant impact was found on exchange rate and external reserve in Nigeria. In addition, analysis from this study revealed that there is no significant impact of inflation rate on external reserve in Nigeria. However, the study found out that there is significant effect of foreign direct investment on external reserve in Nigeria. Lastly, this study realized that financial development have no significant impact on external reserve in Nigeria. Hence, it concluded that there is no significant impact of economic growth in international reserve accumulation in Nigeria. In light of the discoveries made over this review, it was suggested that Nigerian government ought to foster legitimate techniques and methodologies of unfamiliar stores the executives to realize the sufficiency level that is expected to achieve macroeconomic security, likewise, make an extraordinary move in the expansion of the economy so the nation can send out essential horticultural items in which we enjoy relative benefit. All the more thus, Government ought to likewise contribute on capital products in view of their present and future venture reason, which thus, will create work for our young people.

References

- Adegbite, O. E., Alimi, O. Y., & Osabuohien, E. S. (2019). Optimal level of foreign reserves in Nigeria: An autoregressive distributed lag approach. *CBN Journal of Applied Statistics*, 10(2), 175-192.
- Adelowokan, O. A., Adesoye, A. B., & Balogun, O., D. (2015). Exchange rate volatility on investment and growth in Nigeria, an Empirical Analysis. *Global Journal of Management and Business Research*, 5(10), 12- 23.
- Adeolu, I. A. (2018). Economic growth and the accumulation of foreign reserves in Nigeria: An empirical investigation. *International Journal of Economics, Commerce and Management*, 6(11), 32-42.



- Adeoye, A. E., (2016). Foreign direct investment and economic growth in Nigeria. *An Empirical Investigation. Journal of Policy Modelling*, 10 (26), 627-39.
- Ahuja, A., & Nabar, M. (2012). Investment-led growth in China: Global spillovers. IMF Working Papers 12/267.
- Ajayi, D. T., (2020). Determinants of job satisfaction among physicians in public hospitals in Calabar, Nigeria. *Journal of Community Medicine and Primary Health Care*, 30(1), 19-33.
- Akinwumi, A. & Adekoye, R. (2016): External reserve management and its effect on economic growth of Nigeria. *International Journal on Business and Finance Management Research*, 1(2), 1-11.
- Ali, Y. S, Mohammed, I. I., & Zahir, M., O. (2017). Impact of changes in the exchange rate on oreign direct investment: Evidence from Somalia. *Journal of ECOWAS and sustainable Development*, 8(8) 27 – 54.
- Anthonia, U. U. & Joseph, M. E. & Uduak, B. U. (2017). Economic implication of foreign reserves management on the performance of the Nigerian economy. *Expert Journal of Finance, Sprint Investify*, 5(1), 31-40.
- Asongu, S. A., & Odhiambo, N. M. (2019). Foreign direct investment, information technology and economic growth dynamics in Sub-Saharan Africa. *Telecommunications Policy*, 43(6), 571-581.
- Azu, N. P., & Nasiri, A. (2015). Exchange rate fluctuation and sustainable economic growth in Nigeria: A VAR Approach. *Journal of Economics and Sustainable Development*, 6(13), 228-237.
- Badinger, H., Breuss, F., & Fink, G. (2020). Determinants of economic growth in Africa: A global perspective. *African Development Review*, 32(1), 1-22.
- Bassey, K. J., Mba, M., K. & Abraham, O. (2019). On economic growth - reserve accumulation nexus in Nigeria: A Nonlinear Asymmetric Cointegration Estimation. *West African Journal of Monetary and Economic Integration*, 5(6), 1-13.
- CBN (2015). Building and managing external reserves for economic development. *The CBN Bullion*. 31(2), 24-36.
- Choi, W. & Lee, J. (2018) Graphene: Synthesis and Applications. CRC Press, Taylor & Francis Group, Boca Raton.
- Cyrlil, H., K. (2018). Trade, foreign direct investment and growth: Evidence from transition economies Sam Houston State University Department of Economics and International Business Working Paper Series, 05-04.
- Egbulonu, K. G., & Okani, B., C. (2019). Foreign reserve management and economic growth in Nigeria, 1990-2018. *Journal of Economics and Sustainable Development*, 10(18), 125-135.
- Egbulonu, K., G. & Akamike, H., C. (2018). Relationship between population growth and industrial output in Nigeria; *International Journal of Innovation and Research in Education Sciences*, 5(5), 1-12.
- Emmanuel, B., Ike, E.C., & Alhasan, Y. (2019). Effect of exchange and interest rates on foreign direct investment in Nigeria 2006-2018. *International Journal of Contemporary Research and Review*, 10(7), 21572-21585
- Hasan, G., & Salim, H., R. (2017). Linkage between foreign direct investment, domestic investment and economic growth: Evidence from Nigeria. *International Journal of and Financial Issues, Economics journals*, 7(3), 97-104.
- Ifeanyi, M., C. (2020), External reserve; panacea for economic growth; *European Journal of Business Management*, 9(33), 98-115.
- Michael C., N. (2017). External reserves: panacea for economic growth in Nigeria. *European Journal of Business and Management*, 9(33), 36-47.
- Miguel, M., D. (2015). Foreign direct investment and the performance of the Nigerian economy. *Journal of Education and Social Sciences*, Special issue.
- Muritala, T. & Taiwo, A. (2011). Government expenditure and economic development empirical evidence from Nigeria. Published



- in: *European Journal of Business and Management*, 3(9), 18-28.
- Ngerebo, T., A. & Ibe., R., C. (2013). Exchange rate and macroeconomic performance in Nigeria: A Causal Post Structural Adjustment Programme Investigation. *Global Journal of Management and Business Research Finance*, 13(7), 2-12.
- Obida, G. W., Musa, Y., & Eze, O. R. (2020). Foreign reserves adequacy and the stability of exchange rate in Nigeria. *European Journal of Business, Economics, and Accountancy*, 8(2), 1-11.
- Ogundipe, A., A. & Oluwatobi, S. (2010), Government spending and economic growth in Nigeria: Evidence from disaggregated analysis, *Journal of Business Management and Applied Economics*, 2(4), 1-11.
- Ogunrinola, A. I., Yusuf, S. A., & Kolawole, A. O. (2019). Economic growth and inclusive development nexus in Nigeria: A post-Keynesian perspective. *African Journal of Economic Review*, 7(1), 96-108.
- Olasode, O. S., & Babatunde, T., S. (2016). External debts and economic growth in Nigeria: an empirical study using autoregressive distributed lag model. *Business Economics Journal*, 7(1), 239.
- Oniore, J. O., Gyang, E., & Nnadi, K., U. (2016). The impact of exchange rate fluctuations on private domestic investment performance in Nigeria. *IOSR Journal of Economics and Finance*, 7(3), 07-15.
- Opaluwa, D. J., Umeh, C., & Abu, A., A. (2010). The effect of exchange rate fluctuations on the Nigerian manufacturing sector, *African Journal of Business Management*, 4(14), 2994-2998.
- Osabuohien, E. S., & Egwakhe, A., J. (2016). External reserve management in Nigeria. *Journal of Economics and Finance*. 3(5), 7-16.
- Osuji, C., C. & Ebiringa, O., T. (2012). Analysis of effect of external reserves management on macroeconomic stability of Nigeria. *International Journal of Business and Management Economics Research*, 3(6), 646-654.
- Owolabi, A., U. & Arulogun T., A. (2014). Inflation and capital market performance: the Nigerian Outlook. *Journal of emerging trends in economics and management Sciences (JETEMS)* 5(1), 93-99.
- Ubom, A.U., Essien, J., M. & Ubom, U.B., (2017). Economic implication of foreign reserves management on the performance of the Nigerian economy, 1995 to 2013. *Expert Journal of Finance*, 5(1), 31-40.
- Yusuf, S. A. (2018). Infrastructure development and economic growth in Nigeria: An empirical investigation. *Cogent Economics & Finance*, 6(1), 1439737.