


Effects of Yuan to Naira and Dollar to Naira Exchange Rates on Economic Growth in Nigeria

Isiaq Olasunkanmi Oseni¹, Olayinka Esther Atoyebi², Rasak Adetunji Adefabi³,
Emeka Okoro Akpa^{4*}

¹ Department of Economics, Olabisi Onabanjo University, Ago-Iwoye, Ogun, Nigeria

 <https://orcid.org/0000-0002-1344-4343>

e-mail:osenioou@yahoo.com


² Department of Economics, Olabisi Onabanjo University, Ago-Iwoye, Ogun, Nigeria

e-mail:atoyebi.olayinka@oouagoiwoye.edu.ng

³ Department of Economics, Emmanuel Alayande College of Education, Oyo, Nigeria

e-mail: adefabiadetunji@gmail.com

⁴ Babcock University Centre for Open Distance and e-Learning (BUCODEL), Ogun, Nigeria

 <https://orcid.org/0000-0002-2566-3156>

e-mail: akpaemeka@gmail.com

Original research paper

Citation:

Oseni, I.O., Atoyebi, O.E., Adefabi, R.A., & Akpa, E.O. (2023). Effects of Yuan to Naira and Dollar to Naira Exchange Rates on Economic Growth in Nigeria. *Economic Insights – Trends and Challenges*, 12(2), 87-97. <https://doi.org/10.51865/EITC.2023.02.07>

Abstract: *This study aims to explore the effect of the Yuan-Naira and Dollar-Naira exchange rates on economic growth in Nigeria. The study covers the period 2010Q1–2021Q4 quarterly data. Using the Vector Autoregressive method, the study finds the following: (1) innovations to the dollar-naira exchange rate causes a cyclical response in economic growth rate across the forecast horizon. The effect of the innovation did not fizzle out within the forecast horizon; (2) there is more cyclical in economic growth than in the dollar-naira exchange rate. The effect of shock to the yuan-naira exchange rate dies faster than that of the dollar-naira exchange rate; (3) in the first quarter, about 2 percent of the forecast error in RGDP is explained by the dollar-naira exchange rate; (4) in the first quarter, about 0.8 percent of the forecast error in RGDP is explained by the yuan-naira exchange rate. The policy implication of the is that Nigeria should prioritize the stability of the dollar-naira exchange rate given that the dollar-naira exchange rate has more effects on the country's economic growth..*



Copyright: © 2023 by the authors

JEL Classification:
O40; F40; F4.

Keywords: Exchange Rate; Dollar; Yuan; Economic Growth; VAR.

* Corresponding author

Introduction

Any country's robust economic growth is proof that it is on the verge of reaching its long-term steady state balanced growth path. Increases in macroeconomic measures, such as gross domestic product per person and national economy size, are indicators of economic growth (Haller, 2012). When a country's productive capacity has increased, economic growth is thought to have occurred (Akpan, 2008). Economic growth is the expansion of national economies, macroeconomic indicators, particularly the GDP per capita, in an upward trend, with favourable consequences on the economy as a whole. As economic activities increase, it also increases the transaction level which involves exchanges of goods and services and by extension exchanges of currencies.

The exchange rate is crucial in every economic transaction a country must have with another country, whether it be an import or an export, because the transaction involves at least two nations using distinct currencies. The exchange rate is a key macroeconomic indicator of a country's economic standing globally and is one of the metrics used to assess its level of international competitiveness. The country's exchange rate is crucial to its foreign trade.

According to Mishkin (2006), exchange rate refers to the cost of foreign currency in terms of domestic currency. As a result, an increase in the exchange rate indicates that the cost of foreign exchange is rising, which makes domestic currency relatively expensive or causes depreciation to occur. In contrast, if there is a decrease in the quantity of domestic currency required to purchase one unit of foreign exchange, there is a relative increase in the value of domestic currency appreciation or occurs. Actual manufacturing of goods and services encourages exporting and occasionally necessitates imports (of raw materials), entailing exchanges of foreign currencies (Oyovwi, 2012).

The Nigerian economy aspires to be one of the biggest by the year 2020, according to the vision 2020. Instead, imports have increased more dramatically, and as of the first quarter of 2021, China was the country from which more goods and commodities were imported than from any other nation, including India, the Netherlands, the United States, and Russia. According to the Nigeria Bureau of Statistics, China overtook the United States as Nigeria's top importer in the second quarter of 2021, accounting for more than 30% of the N6.95 trillion in total imports during that period. Products like toys, games, sports equipment, iron and steel, plastic and rubber, cereal, flour, starch, ceramics, printed books, newspapers, photos, cotton, and many other completed and unfinished commodities. Prior to China becoming Nigeria's primary importer, the United States of America was the country from which we sourced the majority of our imports. All products imported into Nigeria were paid for in dollars, and all goods exported from Nigeria were paid for in dollars. Even after the Bretton Woods system collapsed in 1971, which officially put an end to the gold standard, this method of payment has persisted for years. With each phase of exchange rate management (ERM) bringing its own potential issues, the Nigerian economy has been clearly enthusiastic.

In order to improve the administration of foreign reserves and simplify trade between China and Nigeria, the Central Bank of Nigeria (CBN) and the Peoples Bank of China (PBoC) inked a contract in May 2018. This agreement, also known as the currency SWAP, enables importers of goods from China to continue their commerce in Renminbi, commonly known as Yuan, rather than Naira to Dollar. Nigeria joined South Africa and Egypt as the third African nation to sign a similar contract with China. According to the agreement, Nigeria and China could exchange a total of 15 billion Renminbi, also known as Yuan, for N720 billion over the course of the next three years. Between 2010 and 2020, the naira to yuan exchange rate has been steadily rising. Prior to that, the exchange rate between the naira and the yuan, popularly known as the Renminbi, had been static at 0 to 1 (Exchange Rates UK, 2009). However, a rise in the naira to yuan exchange rate was noted at the end of the first quarter of 2010, and as of the end of 2010,

the average naira to yuan exchange rate was 19 NGN to 1 yuan. By the end of 2021, the average exchange rate-which has been steadily growing over time-was 63 NGN to 1 Yuan.

This agreement between the Nigerian monetary authorities and the Chinese comes despite the continued dominance of the dollar in Nigerian international transactions. The volume of trade between Nigeria and China has grown over the years. In 2020, Nigeria imported goods worth \$17.4 billion from China, while exporting goods worth \$2.54 billion (Observatory of Economic Complexity, 2020). Using the Chinese Yuan and Nigerian Naira to facilitate such volume of trade in direct exchanges will enable smoother trade between both countries. However, the volume of trade between Nigeria and the rest of the world is still largely denominated in US dollars. For example, in 2020, the total volume of Nigerian export was \$35.63 billion (Statista, 2020) while the total volume of import stood at \$55.4 billion (Statista, 2020). If the imports from, and export to China is removed from this import and export figures, it is still a substantial amount. Thus, it is likely that the dollar-naira exchange rate will have a more enduring effect on economic growth in Nigeria than the yuan-naira exchange rate, given that the volume of trade conducted with the dollar is more than the with the Chinese yuan.

Over the past 40 years, Nigeria's exchange rate system has experienced numerous international transitions (changes), with varying degrees of impact on the country's economic structure and specifically on growth performance (Akpan and Atan 2012). Although the government and monetary authorities have implemented a number of initiatives to stabilize the exchange rate and boost the economy, there hasn't been a discernible influence on the latter. Instead, because neither the monetary authorities nor the government have been able to raise the local currency to a significant level, the currency rate has been failing on the foreign market occasioned by increased trade deficits and disequilibrium in balance of trade. The rate of growth in Nigeria has been impacted by the lack of continuity in policies and authority

Effect of exchange rate and economic growth in Nigeria has received a lot of attention from academic researchers throughout the years. While some studies found negative effects of exchange rate on economic growth (Ewubare and Ushang, 2022; Nwobia, Ogbonnaya and Okoye, 2020; Akinbode, Fapetu, Olabisi and Ojo, 2019; Ufoeze, Okuma, Nwakoby and Alajekwu, 2018; Abayomi, Adepoju and Aasa 2017; Adedoyin, Oluwafunke, Victor, and Asaleye, 2017), others found that exchange rate has a positive significance on economic growth (Shim, Kalemlı-Ozcan and Liu, 2020). However, little to no research has been conducted on this topic or used the data of the yuan to naira exchange rate to assess the influence on economic growth in Nigeria since the gradual increase in the naira to yuan exchange rate and since China became Nigeria's top trading partner in 2021. Most, if not all, academics that studied how the dollar exchange rate affected Nigeria's economic growth used data on the dollar to naira exchange rate to determine the connection between the two variables. The academic researchers expressed their views and solutions to the frequent depreciation of the Nigerian currency in the direction of resurgence and a stable naira-to-dollar exchange rate that could strengthen the Nigerian economy. Hence, the study attempts to add to the growing body of literature in this area by estimating the extent to which each of the yuan-naira and dollar-naira exchange rates affect the Nigerian economic growth.

Having introduced the study, the rest of the paper is structured so that section two contains a brief review of literature; section three contains the research methodology where we dealt with data issues and estimation technique; I section four, we discuss results while in section five we conclude, with policy implications for Nigeria.

Brief Review of Literature

The Purchasing Power Parity Theory (PPP)

The purchasing power parity (PPP) is one of the earliest and perhaps most widely used theories of exchange rates between two currencies, assuming the absence of trade barriers and transaction costs and the existence of the purchasing power parity (PPP). In its most basic form, the purchasing power parity (PPP) doctrine equates the equilibrium exchange rate with the ratio of domestic to foreign price levels (Lyon, 1992). If all countries produced the same tradable goods, the PPP doctrine would be equivalent to applying the law of one price. It is critical to understand that the PPP is a key component of the monetary approach. The purchasing power parity (PPP) between two currencies, as calculated by Gustav Cassel in 1998, is the amount of purchasing power. The relative version of the PPP doctrine relates the equilibrium exchange rate to the product of the exchange rate in a base period and the ratio of the country's price by definition, we have the related Purchasing power parity (PPP) (Lawal, et. al., 2016).

Optimal Currency Area Theory

The optimal currency area (OCA) theory, developed by Mundell (1961) and McKinnon (1963), is a framework for evaluating the costs and benefits of different exchange rate regimes. The theory argues that countries that are highly integrated economically and share similar economic shocks are more likely to benefit from a common currency. The OCA theory takes into account three key factors: shock symmetry, degree of openness, and labor market mobility. By shock symmetry, it means the extent to which countries are exposed to the same economic shocks. By degree of openness, it means the extent to which countries trade with each other. Countries that trade more with each other are more likely to benefit from a common currency, as it will make it easier for them to do business with each other. On the other hand, labour market mobility refers to the ease with which workers can move from one country to another. Countries with high labor market mobility are more likely to benefit from a common currency, as it will make it easier for workers to find jobs in countries with better economic conditions.

However, OCA has faced criticism for its inability to provide a clear recommendation for the optimal exchange rate regime. The reason for this is that the links between the nominal exchange rate regime and macroeconomic performance can both counterbalance and reinforce each other. For example, a fixed exchange rate regime can reduce exchange rate volatility, which lowers the cost of hedging against currency risk. This can encourage investment by making it easier for businesses to plan for the future. Additionally, a fixed exchange rate can lower the currency premium on interest rates, which can also make it cheaper for businesses to borrow money. All of these factors can lead to increased trade and output growth. However, a fixed exchange rate can also make it difficult for a country to adjust its currency in response to changes in economic conditions. This can lead to trade imbalances and ultimately reduce economic growth (Akpan and Atan, 2011).

Empirical Literature

The relationship between the exchange rate and economic growth from 1981 to 2020 was studied by Ewubare and Ushang in 2022. Bounds cointegration, unit roots, descriptive statistics, and autoregressive distributed lag were all used in the study (ARDL). The study's variables included the exchange rate, the rate of inflation, the interest rate, and the rate of economic expansion. The variables are mixed integrated, as evidenced by the unit roots test results. At levels, inflation is stationary, and at the first difference, the other variables are as well. According to the results of the bounds cointegration test, there is a long-term relationship between GDP growth and the underlying explanatory variables. The results demonstrated that exchange rates and inflation have a detrimental effect on economic growth.

The impact of the exchange rate and economic expansion in Nigeria was examined by Godwin and Sergius in 2021. The study used Ordinary Least Square to analyze the relationship between the exchange rate and economic growth for the annual time series from 2009 to 2018. Exchange rate, GDP, GNP, and unemployment are the variables used in the analysis. The empirical finding indicated that the exchange rate has a favorable significance on GDP-proxied economic growth. There was no descriptive analysis or correlation to show how the dependent and independent variables correlate; the study only focused on the use of OLS. Without taking into account other macroeconomic factors that could affect GDP, the study focuses only on GDP, GNP, and unemployment.

Nwobia, Ogbonnaya and Okoye (2020) studied the effect of exchange rate fluctuation on Nigeria's external trade on the annual time series from 2000-2019. The research made use OLS to analyze the secondary data that was derived from CBN. The model consists of GDP, INF, Balance of Payment (BOP) and exchange rate and the result of the analysis showed that exchange rate has a negative impact on the economy. However, the research made of the exchange rate between Naira and US dollars and the data on the trade between Nigeria and US.

Thomas (2019) found a negative relationship between exchange rate and economic growth in his analysis of the Impact of Exchange Rate Fluctuation on the Nigerian Economic Growth using annual time series data from 1986 to 2016. He used variables like exchange rate, INT, INF, GDP growth, export, and import. Ordinary Least Square (OLS) was used in the study to analyze the data.

Akinbode, Fapetu, Olabisi and Ojo (2019) assessed the impact of exchange rate on economic growth in Nigeria using the annual time series from 1981-2016. The research made use of ARDL approach to analyze the data on exchange rate and economic growth. The bound test showed that there was a long run relationship between economic growth and exchange rate. It was concluded that exchange rate had a negative effect on the growth of the Nigerian economy in the long run. The result also showed that the present year exchange rate did not affect economic growth in the short run but in it one-year lag, it did. Variables like GDP, exchange rate, INF, INT, FDI, trade openness, final consumption, imports, exports and government expenditures were included in the model.

Using an annual time series covering the years 1970–2012, Ufoeze, Okuma, Nwakoby, and Alajekwu (2018) looked into the impact of currency fluctuations on the Nigerian economy. On variables like GDP, exchange rate, INF, money supply, and oil revenue, the study used multiple regression analysis using the Ordinary Least Square (OLS) method. To determine which had a better effect on the economy, researchers compared the eras of fixed exchange rates and flexible exchange rates. The results indicated that, while exchange rates have a negative impact on GDP during an era of floating exchange rates, they have a positive impact on GDP during an era of fixed exchange rates.

Research Methodology

Research Design

Ex-post facto research design was used in this study. It used secondary data, in which the researcher has no direct control over the variable involved, and the issue investigated is based on already-completed events that examine the relationship between exchange rate and economic growth over time. The secondary data used is thought to be the most suitable for the variables to be used in this research study and it spans the period 2010Q1–2021Q4. The study focuses on the economy of Nigeria as a whole which consists of the total population of the nation with a data span of 11 years. The data used was sourced from the Central Bank of Nigeria (CBN) statistical bulletin 2021.

Model Specification and Data Issues

This study attempted to establish a relationship between yuan- naira and dollar-naira exchange rates and economic growth in Nigeria by basing its empirical model on the findings of our theoretical framework. It is especially important to note the work by Sarkar and Amor (2009) influenced the choice of the control variables adopted in the study.

For the purpose of comparing the effects of the dollar-naira and yuan-dollar exchange rates on economic growth in Nigeria, we will specify a vector autoregressive (VAR) model. This specification is important because we believe that exchange rate is not strictly exogenous in the Nigerian economy, especially when it is considered that the exchange rate being sought for this study is the official rate for the dollar and the yuan.

$$y_t = \alpha_1 + \sum_{i=1}^p \beta_{1i} y_{t-i} + \sum_{i=1}^p \beta_{2i} x_{t-i} + \varepsilon_{1t} \quad (1)$$

$$x_t = \delta_1 + \sum_{i=1}^p \delta_{1i} y_{t-i} + \sum_{i=1}^p \delta_{2i} x_{t-i} + \varepsilon_{2t} \quad (2)$$

In equation (1) y_t is the dependent variable while x_t represents the independent variable. In equation (2), both variables switch places. Meanwhile, β_1 , β_2 , δ_1 and δ_2 represent the coefficients of the independent variables. On the other hand, ε_1 and ε_2 represent the error terms. The value p is the optimal lag length.

The variables used in the study include official dollar-naira and yuan-naira exchange rates (EXR), measured in terms of change in the series across time, economic growth, measured as change to real gross domestic product (RGDP), inflation rate (INF), measured as percentage change in consumer price index, and interest rate (INTR) which is measured in terms of change in the series over time. These variables are thus measured so that they do not suffer the problem of unit root, given that series to be used in the VAR analysis must be stationary.

We expect the dynamic effect of the dollar-naira exchange rate to be more than the yuan-naira exchange rate.

Results

Descriptive Statistics

We will begin the discussion of the results of the study by briefly considering the statistical features of the series used which is presented in Table 1.

Table 1. Descriptive statistics

	EXR (Dollar- Naira)	EXR (Yuan- Naira)	GDPG	INF	INTR
Mean	242.9476	21.33262	1.374965	12.30525	26.92021
Median	197	20.66333	3.397588	11.91333	26.95667
Maximum	418.8333	28.93667	11.07168	18.45333	31.44667
Minimum	150.0667	17.89667	-17.22741	7.823333	21.85000
Std. Dev.	90.1143	2.754015	8.278390	3.126453	3.037302
Skewness	0.402052	0.946946	-0.896313	0.361022	-0.085267
Kurtosis	1.677439	2.991122	2.480709	2.102355	1.815438
Jarque-Bera	4.791499	7.024362	6.821210	2.598933	2.804858
Probability	0.091104	0.029832	0.033021	0.272677	0.245999

Source: Authors' computation (2023).

The descriptive statistics shows that the official dollar-naira exchange rate had a highest value of N418.8/dollar while the highest official yuan-naira exchange rate is N28.9/yuan. The economy grew the highest at about 11.9 percent while it declined to a low of about 17.23 percent. The descriptive statistics table also shows that the dollar-naira exchange rate, inflation and interest rates exhibit normality, as shown by the p-value of the Jarque-Bera test for the series.

Unit Root Test

We measured the variables in such a way as to circumvent the problems of unit roots as earlier explained, we went further to test the series for unit root problems. The tests used in this study are the augmented Dickey-Fuller (ADF) and Philip-Perron (PP) tests. The result of the test is presented in Table 2

Table 2. Unit Root Test

	Augmented Dickey-Fuller (ADF) Test			Philip-Perron (PP) Test			
	LEVEL			LEVEL			
	Constant	Constant and Trend	None	Constant	Constant and Trend	None	Decision
<i>Exr</i> (yuan-naira)	-7.8705***	-4.1706***	-7.9416***	-8.0963***	-8.0095***	-8.1155***	<i>I</i> (0)
<i>Exr</i> (dollar-naira)	-5.4148***	-5.4022***	-5.1209***	-5.4148***	-5.4022***	-5.1047***	<i>I</i> (0)
<i>inf</i>	-3.8396***	-3.8055***	-3.8819***	-3.8602***	-3.8361***	-3.9025***	<i>I</i> (0)
<i>intr</i>	-4.6902***	-4.9788***	-0.0455	-4.6547***	-4.9788***	0.1137	<i>I</i> (0)
<i>rgdp</i>	71.2168***	-70.3012***	72.0483***	14.0804***	14.2118***	14.3373***	<i>I</i> (0)

Note: ***, ** and * imply significance at 1%, 5% and 10% respectively.

Source: Authors' computation (2023).

From the unit root test, we find that all the variables are integrated at level (the two tests being in agreement). This indicates that the variables do not suffer from unit root problems that would have rendered the use of a VAR model impossible.

Lag Length Structure

For the lag length of the VAR mode, we used the rate of the natural logarithm of maximum likelihood function (logL), Likelihood Ratio (LR), the Final Predictor Error (FPE), Akaike Information Criterion (AIC), Schwarz Information Criterion (SIC), and Hannan-Quinn Information Criterion (HQIC). Most of the criteria suggest a lag length of 3 as reported in Table 3.

Table 3. Optimal lag length criteria

Lag	Dollar					
	LogL	LR	FPE	AIC	SC	HQ
0	-519.1468	NA	2692211.	26.15734	26.32623	26.21840
1	-501.5340	30.82233	2496628.	26.07670	26.92114	26.38202
2	-480.3992	32.75902	1982330.	25.81996	27.33995	26.36954
3	-389.6659	122.4900*	50493.78*	22.08329	24.27884*	22.87713*
4	-380.1045	10.99556	79534.43	22.40523	25.27632	23.44332
5	-362.6563	16.57576	93624.56	22.33282	25.87946	23.61517
6	-336.9152	19.30582	85785.23	21.84576*	26.06796	23.37238

Table 3 (cont.)

Optimal lag length = 3						
Yuan						
0	-492.1030	NA	696402.4	24.80515	24.97404	24.86621
1	-479.6908	21.72130	837595.4	24.98454	25.82898	25.28986
2	-460.2808	30.08549	724955.5	24.81404	26.33403	25.36362
3	-364.8352	128.8517*	14589.68*	20.84176*	23.03730*	21.63560*
4	-350.3787	16.62496	17991.47	20.91893	23.79003	21.95703
5	-336.5799	13.10887	25418.29	21.02899	24.57564	22.31135
6	-323.8704	9.532104	44683.49	21.19352	25.41572	22.72013
Optimal lag length = 3						

Source: Authors' computation (2023).

From Table 3, it is seen that the optimal lag length for both the yuan and dollar equations is 3. Hence the VAR equation was estimated with lag 3.

Interpretation of Results

Impulse Responses

Figure 1 shows the result of the impulse response function of dollar-naira exchange and yuan-naira exchange rates on economic growth.

It is observed that innovations to the dollar-naira exchange rate causes a cyclical response in economic growth rate across the forecast horizon. The effect of the innovation did not fizzle out within the forecast horizon.

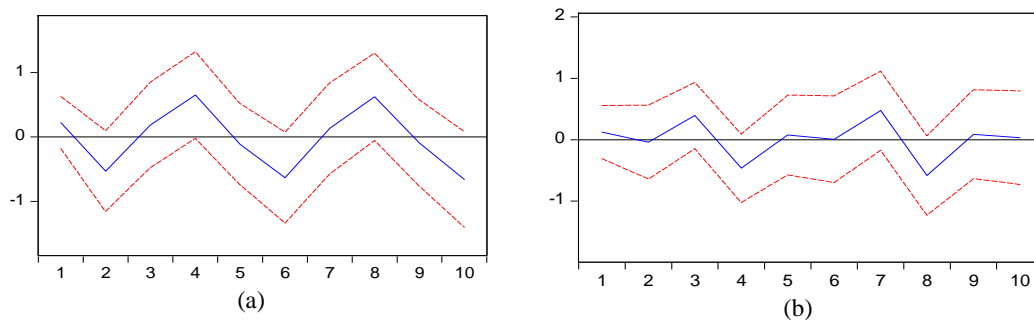


Fig. 1. (a) shows the response of GDP to dollar-naira exchange rate shock while (b) is the response of GDP to yuan-naira exchange rate shock

Source: Authors' computation (2023).

Meanwhile, it is observed that there is more cyclicity in economic growth than in the dollar-naira exchange rate. The effect of shock to the yuan-naira exchange rate dies faster than that of the dollar-naira exchange rate.

The fact that the effect of the innovation to dollar-naira exchange rate does not fizzle out easily, specifically within the forecast horizon, shows how much effect the dollar has on the Nigerian economy, as against the yuan whose effect on economic growth is more cyclical, but fizzles out in time

Variance Decomposition

Table 4 shows that in the first quarter, about two percent of the forecast error in RGDP is explained by the dollar-naira exchange rate. It jumps further to about 17.85 percent in the fourth quarter (the highest within the period under review).

Meanwhile, the table also shows that in the first quarter, about 0.8 percent of the forecast error in RGDP is explained by the yuan-naira exchange rate. It jumped further to its highest of about 10 percent in the eight quarter, but this proportion of the forecast error of RGDP explained by the yuan-naira exchange rate declines progressively from the ninth to tenth quarter.

This result lends credence to the earlier findings from the impulse response function – that the dollar-naira exchange rate exerts more effect on the Nigerian economy than the yuan-naira exchange rate.

Table 4. Variance Decomposition

Dollar-Naira exchange rate				
Response of Economic growth				
Quarters	EXR	INFR	INTR	GDP
1	2.761898	1.946876	1.085173	94.20605
2	8.835042	0.982967	0.726962	89.45503
3	9.232208	2.960542	3.244675	84.56257
4	17.85327	2.977731	3.487746	75.68125
5	12.67646	2.090060	2.590163	82.64332
6	13.95118	2.402479	1.918463	81.72788
7	13.63985	3.690673	3.937203	78.73227
8	17.08171	3.641103	4.386764	74.89042
9	13.92477	3.038971	3.670771	79.36549
10	14.56262	3.170319	3.039000	79.22806
Yuan-Naira exchange rate				
Response of Economic growth				
Quarters	EXRR	INFR	INTRR	GDP
1	0.760843	1.723323	1.400738	96.11510
2	0.430656	0.899023	0.806956	97.86337
3	4.146459	1.549467	1.103891	93.20018
4	8.642295	2.211292	2.433452	86.71296
5	5.799273	1.612364	2.148516	90.43985
6	4.433021	1.291750	1.642468	92.63276
7	6.777630	1.417610	1.790388	90.01437
8	10.00554	1.575939	2.702297	85.71623
9	7.916455	1.376941	2.374410	88.33219
10	6.690165	1.234050	2.005476	90.07031

Source: Authors' computation (2023).

Conclusion and Policy Implications of Findings for Nigeria

As an open economy, Nigeria depends on the value of the exchange rate for imports and exports. The economy is influenced by both the US dollar and Chinese yuan, to varying degrees. While the US dollar is the world's reserve currency and most sought currency, the yuan currency is beginning to gain attention because it is the currency of the world's second largest economy.

In the international market, it is usually the case that two or more currencies convert their domestic currencies to the US dollar to ease the exchange of goods and services, thus, having a possible effect on the growth of such economies. China, being a very large economy in the world and a major trading partner with Nigeria will definitely exert some influence on the economy due to the exchanges between the naira and the yuan as a result of business transactions between both countries. However, the naira-dollar exchange rate is important for the transactions done between Nigeria and the rest of the world.

From this study, we can find that compared to the yuan-naira exchange rate, the dollar-naira exchange rate has a bigger effect on the economic growth of Nigeria. In fact, the findings of the

study shows that the dollar-naira exchange rate changes in RGDP in the immediate period than the yuan-naira exchange rate.

Hence, while Nigeria does a lot of trade with China, and while China is a large investor in the country, its exchange rate with the naira is not as much impressive on the growth rate of the country as the dollar. Hence, even if China continues to grow in economic influence, and even though Nigeria had signed an agreement with China in 2018 that will enable the convertibility of naira to yuan for the sake of buying and selling of goods and services, we find that the dollar-naira exchange rate still explains more changes in economic growth. This implies that Nigeria still conducts a lot of trade with other countries using the dollar-naira exchange rate.

Policy makers in 2018 entered an agreement with the Chinese for direct exchange of the naira for the yuan. While that is a good policy direction for those who transact with China directly, it is important that policy towards the stabilization of the dollar-naira exchange rate be pursued given that it has a more enduring and bigger effect on economic growth in Nigeria than the yuan-naira exchange rate. Such policies can include maintaining low inflation and managing the country's foreign reserves effectively.

References

1. Abayomi, M.A., Adepoju, T.F. and Aasa, O. P. (2017). Influence of exchange rate movements on economic growth in Nigeria. *Developing Country Studies*, 7(7), 86 – 95.
2. Adedoyin, L. I., Oluwafunke, A. I., Victor, A., & Asaleye, A. (2016). Exchange rate fluctuation and the Nigeria economic growth. *EuroEconomica*, 35(2).
3. Akinbode, S. O., Fapetu, O., Olabisi, J., & Ojo, O. T. (2019). Impact Of Exchange Rate On Economic Growth In Nigeria (1981-2016): An ARDL Approach. *Contemporary Economy Journal*, 4(2), 158-171.
4. Akpan, P. L. (2008). Unemployment and exchange rate uncertainty in an emerging Sub-Saharan economy: A case for Nigeria (1970-2005). *Global journal of social sciences*, 7(2).
5. Akpan, E. O., & Atan, J. A. (2011). Effects of exchange rate movements on economic growth in Nigeria. *CBN Journal of Applied Statistics*, 2(2), 1-14.
6. Akpan, U. F., & Atan, J. A. (2015). Macroeconomic effects of fiscal policy shock in Nigeria: A SVAR approach. *International Journal of Business and Economic Research*, 4(3), 109-120.
7. Alasha, R. U. (2020). The impact of exchange rate fluctuations on economic growth in Nigeria. *A Project Submitted in Partial Fulfillment of the Requirements for The Award of Bachelors of Science (B. Sc.) Degree in Economics. Department of Economics, Faculty of Management and Social Sciences Baze University, Abuja.*
8. Ewubare, D. B., & Ushie, U. A. (2022). Exchange Rate Fluctuations and Economic Growth in Nigeria (1981-2020). *International Journal of Development and Economic Sustainability*, 10(1), 41-55.
9. Exchange Rates UK. (2009, December 31). GBP Historical Exchange Rates (British Pound) – X – Rates https://www.exchangerates.org.uk/historical/GBP/31_12_2009
10. Haller, A. P. (2012). Concepts of Economic Growth and Development. Challenges of Crisis and of Knowledge. *Economy Transdisciplinarity Cognition*, 15(1).
11. Lawal, A. I., Atunde, I. O., Ahmed, A. V., & Asaleye, A. J. (2016). Exchange rate fluctuation and the Nigeria economic growth. *EuroEconomica*, 2(35), 127-142.
12. Lyons, R. K. (1992). Floating exchange rates in Peru, 1950–1954. *Journal of Development Economics*, 38(1), 99-118.
13. McKinnon, R (1963), “Optimal Currency Areas” *American Economic Review*, 53, pp. 717-724.
14. Mishkin, F. S. (2006). Monetary Policy Strategy: How Did We Get Here?. *NBER Working Paper*, (w12515).
15. Mundell, R.A. (1961). A theory of optimal currency areas. *American Economic Review*, 51, 509-517
16. Nwobia, C.E., Ogbonnaya, U.N., & Okoye, J.N. (2020). Effect of Exchange Rate Fluctuation on Nigeria External Trade. *International Journal of Economics, Business and Management Research*, 4(10), 47-60

17. Observatory of Economic Complexity. (2020). *China (CHN) and Nigeria (NGA) Trade, OEC*. OEC - the Observatory of Economic Complexity. <https://oec.world/en/profile/bilateral-country/chn/partner/nga>
18. Oyovwi, O. D. (2012). Exchange rate volatility and imports in Nigeria. *Academic Journal of Interdisciplinary Studies*, 1(2), 103-114
19. Sarkar, A. U., & Amor, T. H. (2009). The effect of exchange rate disequilibrium and financial integration on economic growth. *International Journal of Economics and Finance*, 1(2), 69-81.
20. Shim, I., Kalemli-Ozcan, S., & Liu, X. (2020). Exchange Rate Fluctuations and Firm Leverage. Available at SSRN 3772488.
21. Statista. (2020). *Nigeria: export of goods 2020*. Statista; Statista. <https://www.statista.com/statistics/383166/export-of-goods-to-nigeria/#:~:text=Goods%20totaling%20at%20a%20value,a%20net%20exporter%20of%20goods>.
22. Statista. (2020). *Nigeria: import of goods 2020*. Statista; Statista. <https://www.statista.com/statistics/383154/import-of-goods-to-nigeria/#:~:text=In%202020%2C%20goods%20valued%20at,dueto%20the%20Great%20Recession>.
23. Thomas, M. P. (2019). Impact of services trade on economic growth and current account balance: Evidence from India. *The Journal of International Trade & Economic Development*, 28(3), 331-347.
24. Ufoeze, L. O., Okuma, C. N., Nwakoby, C., & Alajekwu, U. B. (2018). Effect of foreign exchange rate fluctuations on Nigerian economy. *Annals of Spiru Haret University. Economic Series*, 18(1), 105-122.