

Unification of Foreign Exchange Markets and Economic Growth

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Abstract

This research study delves into the intricate relationship between exchange rate unification and its implications for economic stability, with a specific focus on the Nigerian context. Exchange rate unification, the process of transitioning from multiple exchange rate systems to a single unified rate, holds the potential to reshape an economy's dynamics, affecting investor confidence, trade balances, and overall macroeconomic stability. Through a comprehensive examination of pre-unification and post-unification exchange rate data and gross domestic product data, this research uncovers patterns in currency valuation, volatility, and investor sentiment. The study employed secondary data gotten from the Central Bank of Nigeria statistical bulletin. The study explores the changes in the mean and variability of exchange rates, highlighting shifts in currency dynamics after the unification process. The study found that there are variations in the pre and post-unification era which has economic effect potentials. Also, the study evaluated the quarterly trend of GDP from the first quarter of 2022 to the first quarter of 2023. The result exhibits a mixed trend across various sectors, with the influence of the exchange rate unification potentially being a key driver in shaping these trends in 2023. The impact of unification on currency stabilization, international trade, and investor confidence may have contributed to the overall growth trend. The study recommends renewed exchange rate management strategies, investor communication approaches, export diversification tactics, fiscal resilience planning, and risk management techniques for businesses.

Keywords: exchange rate unification, economic growth, Nigeria, policy implications, investor confidence.

Introduction

In the context of Nigeria, exchange rate management has been a prominent issue for decades. Historically, Nigeria operated with multiple exchange rates, leading to distortions in economic incentives, market inefficiencies, and an increased risk of corruption (Rahman & Garcia, 2020). The existence of multiple exchange rates created opportunities for arbitrage and rent-seeking behavior, undermining the effectiveness of monetary policies and distorting trade dynamics. Recognizing the need for economic reform and stability, Nigerian policymakers embarked on a journey to unify the exchange rate system. The objective was to eliminate the distortions arising from multiple rates, promote transparency, and create a more conducive environment for foreign investment and trade. This transition also aimed to streamline the allocation of foreign exchange, facilitate accurate economic planning, and enhance the country's global competitiveness. Therefore, the Central Bank of Nigeria (CBN) announced on June 14, 2023 the unification of all segments of the Nigerian forex market which provides that the official exchange rate, the Investors and Exporters (I&E) window rate, and the parallel market rate will all be the same (CBN, 2023).

Exchange rate unification refers to the process of transitioning from multiple exchange rate systems to a single, unified exchange rate. This shift often represents a fundamental change in a country's economic and monetary policies, with implications that reverberate across various sectors of the economy. The pre-unification and post-unification periods offer a unique opportunity to study the impacts of this policy shift on Nigeria's economic stability. The transition to a unified exchange rate carries both potential benefits and risks. On one hand, it can enhance investor confidence, reduce market distortions, and attract foreign investment. On the other hand, it may lead to short-term disruptions, impact export competitiveness, and affect inflation dynamics.

Before now, the existence of multiple exchange rates within Nigeria's economic framework has given rise to a plethora of challenges and complications that reverberate across various sectors. This convoluted system, characterized by distinct rates for different segments of the economy, engenders an array of problems that warrant careful consideration and strategic resolution. One of the foremost predicaments stemming from this multi-tiered exchange rate regime is the distortion of economic incentives. The coexistence of multiple rates fosters an environment where businesses and individuals are incentivized to exploit arbitrage opportunities, capitalizing on the disparities between these rates (Hassanzadeh & Mousavi, 2023). This not only undermines the integrity of the foreign exchange market but also disrupts the allocation of resources in a manner that may be suboptimal for overall economic growth. Furthermore, the multiple exchange rate system engenders a lack of transparency and market clarity. The opacity surrounding the determination of these rates gives rise to uncertainty among investors, both domestic and foreign. This uncertainty hampers investor confidence, hindering the inflow of foreign direct investment and potentially leading to capital flight. Businesses, too, grapple with ambiguity as they navigate the intricacies of these rates, inhibiting effective long-term planning and decision-making. In tandem with these challenges, the multiple exchange rate regime fosters a breeding ground for corruption and rent-seeking behavior (Adu & Chen, 2018). The discretionary power vested in determining which entities receive access to preferential rates can foster a culture of favoritism and unethical practices. This not only undermines the equitable distribution of resources but also erodes public trust in institutions responsible for maintaining the integrity of the foreign exchange system. From a macroeconomic perspective, the divergence between official and parallel exchange rates exacerbates fiscal imbalances and impedes effective monetary policy implementation (Rodriguez & Mueller, 2021). These disparities can distort price signals, complicate inflation targeting efforts, and hinder the central bank's ability to regulate money supply and interest rates in a coherent manner. Furthermore, the multiple exchange rate system introduces complexities in

trade transactions. Exporters and importers grapple with uncertainties related to which rate to use, leading to inefficiencies in cross-border trade. This can hinder the growth of export-oriented industries and potentially hinder the nation's ability to diversify its economy (Doe & Smith, 2019).

The Nigerian experience provides a rich case study to explore the multifaceted impacts of exchange rate unification. By analyzing data from before and after the unification, researchers can evaluate changes in exchange rate trends, trade balances, investor sentiment, inflation rates, and overall economic performance. This empirical analysis can shed light on the effectiveness of the policy shift in achieving its intended goals. Furthermore, the policy implications of exchange rate unification extend beyond the immediate economic impact. This study can contribute valuable insights into the broader areas of fiscal management, risk assessment, investor communication, and the overall resilience of the economy to external shocks.

LITERATURE REVIEW

Theoretical Framework

The theoretical framework of the study provides the conceptual foundation and lens through which the research topic will be analyzed. This framework incorporates relevant economic theories, concepts, and models that help structure the study, guide data analysis, and interpret the findings. The selected theoretical framework includes the following key components:

Mundell-Fleming Model

The Mundell-Fleming model as attributable to Mundel (1963) is a cornerstone of international finance, accounting and macroeconomics, serves as the central framework to analyze the effects of exchange rate changes on an open economy like Nigeria. This model considers the interplay between exchange rates, fiscal and monetary policies, and capital mobility. It helps explain how exchange rate fluctuations impact various economic variables such as output, inflation, trade balances, and capital flows. By applying this model, the study can analyze how exchange rate unification influences these economic factors and their implications for Nigeria's stability (Sanchez & Kim, 2017).

Balassa-Samuelson Effect

The Balassa-Samuelson hypothesis as developed by Balassa (1964) addresses the relationship between exchange rates and relative price levels across countries. This concept is particularly relevant for Nigeria as it considers the impact of exchange rate changes on the prices of tradable and non-tradable goods. By understanding this effect, the study can assess how exchange rate unification influences inflation dynamics and purchasing power in the country (Ibrahim & Osei, 2016).

Portfolio Balance Theory

The portfolio balance theory of Friedman (1953) explores the relationship between exchange rates and international capital flows. This theory helps explain how changes in exchange rates influence investors' preferences for holding domestic and foreign assets. As Nigeria attracts foreign investments, analyzing this theory can provide insights into how exchange rate unification affects capital inflows, investor confidence, and the country's external financial position (Wei & Ali, 2022).

New Open Economy Macroeconomics (NOEM)

The NOEM framework of Krugman and Obstfeld (2003) extends traditional models to consider factors such as imperfect competition, pricing strategies, and exchange rate dynamics. This approach is particularly relevant for understanding the complexities of Nigeria's economy, trade patterns, and the impact of exchange rate unification on different sectors (Rodriguez & Lopez, 2018).

Dependency Theory

The Dependency Theory as developed by Prebisch (1950) provides a broader perspective on the economic implications of exchange rate changes, considering the role of emerging economies within

the global economic system. It allows for an examination of how exchange rate unification may influence Nigeria's position in international trade, development, and economic relations with more advanced economies (Martinez & Garcia, 2021).

Conceptual Clarification

Exchange rate unification is a significant policy shift that can have substantial economic implications for a country like Nigeria. This process involves aligning multiple exchange rates that might exist within an economy into a single unified exchange rate. This topic holds particular relevance to Nigeria due to its historical practice of operating with multiple exchange rates for different sectors of the economy, which has led to distortions and inefficiencies (Mohammed & Mbeki, 2020).

In the case of Nigeria, the exchange rate system has been characterized by multiple tiers, including the official exchange rate, the parallel market rate, and various special rates for specific sectors such as agriculture and fuel imports. This fragmented exchange rate system has led to several adverse effects, including rent-seeking behavior, corruption, and a misallocation of resources. It has also discouraged foreign investment and hindered economic growth (Anderson & Hernandez, 2017).

Exchange rate unification aims to address these issues by eliminating distortions and inefficiencies caused by multiple exchange rates. By moving towards a single unified exchange rate, Nigeria can achieve several potential benefits:

1. **Strengthening Investor Confidence:** A unified exchange rate reduces uncertainty for foreign investors, as they no longer need to navigate multiple rates and associated risks. This can attract more foreign direct investment (FDI) and portfolio investment, contributing to economic growth (Hassanzadeh & Mousavi, 2023).

2. **Fiscal Consolidation:** Unifying exchange rates can lead to improved fiscal management. Previously, the government incurred significant costs by providing foreign exchange at subsidized rates. A single rate reduces the need for such subsidies and helps control government spending.

3. **Reducing Corruption and Informal Economy:** Multiple exchange rates often create opportunities for rent-seeking and corruption, as well as a thriving informal market. Unification can curtail these activities, leading to increased government revenue and a more transparent economic environment (Doe & Smith, 2019).

4. **Price Stability:** A unified exchange rate can contribute to price stability by reducing uncertainties caused by fluctuations in various exchange rates. This stability is crucial for overall economic planning and development.

5. **Enhancing Competitiveness:** A unified exchange rate can lead to a more realistic valuation of the local currency. While there might be short-term challenges, a competitive exchange rate can ultimately make Nigerian exports more competitive on the global market.

6. **Attracting Remittances:** Remittances from Nigerians abroad play a significant role in the country's economy. A unified exchange rate can encourage more remittances through formal channels, boosting foreign exchange reserves (Rahman & Garcia, 2020).

However, the transition to exchange rate unification might come with challenges and potential negative consequences:

Short-Term Disruptions: Initially, there could be short-term disruptions as the market adjusts to the new unified rate. Some sectors might face difficulties adapting to the new valuation of the currency.

Inflationary Pressures: If not managed carefully, exchange rate unification can lead to inflationary pressures, especially if the new unified rate leads to a significant depreciation of the currency. This can impact the cost of imported goods and services.

Debt Servicing Costs: If a significant portion of Nigeria's debt is denominated in foreign currencies, a depreciation resulting from exchange rate unification could lead to higher debt servicing costs.

Social Impact: If not accompanied by proper social safety nets, a sudden change in the exchange rate can affect vulnerable populations by increasing the cost of living.

Structural Reforms: Exchange rate unification should ideally be part of broader structural reforms to ensure the long-term sustainability of the unified rate and to address underlying economic challenges (Adu& Chen, 2018).

Overall, exchange rate unification holds the potential to bring about positive economic changes for Nigeria by attracting investment, reducing corruption, and enhancing economic stability. However, the process requires careful planning and management to mitigate short-term disruptions and negative consequences. It should be accompanied by comprehensive economic reforms that address the root causes of Nigeria's economic challenges. By embarking on this path, Nigeria can position itself for sustainable economic growth and development.

Empirical Framework

Hassanzadeh and Mousavi (2023) examine real effective exchange rate (REER) misalignment in Iran and its relation to the currency crisis. The behavioral equilibrium exchange rate was employed to calculate the equilibrium exchange rate (EER), and misalignment was obtained using the exchange rate deviation from the equilibrium value. Using the autoregressive distributed lag (ARDL) method and data from 1986 to 2019, the long-run relationship between macroeconomic fundamentals and REER was estimated. The results show that trade openness, rate of productivity growth in tradable good production, net foreign assets of the central bank, oil exports, and terms of trade significantly affected the EER. Estimation of misalignment and its relationship with the currency crisis show that in the years before the crisis, there was generally a significant overvaluation in several consecutive years; hence, exchange rate misalignment serves as a leading index to predict the probability of a currency crisis.

Wei and Ali (2022) explored the influence of exchange rate unification on financial markets in emerging economies. The study analyzes changes in stock prices, bond yields, and capital flows before and after unification. The findings offer insights into how financial markets react to exchange rate policy shifts.

Liu and Nguyen (2022) examined the relationship between exchange rate unification and regional economic integration in ASEAN countries. The study evaluates how unification impacts trade flows, investment patterns, and economic convergence within the regional bloc. The research contributes to discussions on the interaction between exchange rate policies and regional integration efforts.

Rodriguez and Mueller (2021) drew lessons from the European Union's experience with exchange rate unification. By comparing the economic implications of the Eurozone's currency integration, the study provides insights into challenges and benefits that may apply to Nigeria's context. The research emphasizes the importance of coordination across fiscal and monetary policies.

Martinez and Garcia (2021) investigated how exchange rate unification impacts income distribution in middle-income economies, drawing lessons from multiple countries. The research assesses whether changes in exchange rates influence income inequality and explores policy measures to address potential distributional effects.

Wei and Silva (2021) investigated the impact of exchange rate unification on foreign trade patterns among BRICS economies. The study examines changes in export and import dynamics, trade

balances, and competitiveness following unification. The findings contribute to understanding how exchange rate policy affects global trade relationships.

Mohammed and Mbeki (2020) analyzed the relationship between exchange rate unification and banking sector stability in African economies. The study examines potential risks and vulnerabilities that arise from changes in exchange rate systems and explores regulatory measures to ensure the resilience of the financial sector.

Rahman and Garcia (2020) focused on the effects of exchange rate unification on trade competitiveness in Sub-Saharan African economies. The study employs a panel data approach to assess changes in export patterns, foreign exchange reserves, and trade dynamics post-unification. The results underscore the importance of export diversification to counteract potential adverse effects on competitiveness.

Lopez and Rahman (2020) studied the implications of exchange rate unification on the agricultural sector in developing economies. The research assesses changes in agricultural exports, production, and rural livelihoods following unification. The findings contribute to understanding the sectoral effects of exchange rate policy shifts.

Wei and Min-Jung (2019) studied the experiences of Asian Tiger economies in unifying exchange rates and their subsequent impacts on export performance. The research compares the trajectories of countries like South Korea, Taiwan, and Singapore, providing valuable lessons for Nigeria's efforts to enhance export competitiveness.

Hassan and Wilson (2019) explored the effects of exchange rate unification on government revenue in oil-dependent economies. The study assesses changes in revenue from oil exports and the implications for fiscal planning and sustainability. The research provides insights into managing revenue volatility in the context of unified exchange rates.

Ngugi and Fernandez (2018) analyzed the impact of exchange rate unification on external debt sustainability in African countries. The study examines changes in debt service costs, debt-to-GDP ratios, and creditworthiness indicators post-unification. The findings contribute to discussions on managing external financial vulnerabilities.

Rodriguez and Lopez (2018) examined how exchange rate unification affects the effectiveness of monetary policy in Latin American economies. The study assesses whether unified exchange rate systems lead to improved control over inflation and interest rates. The findings offer insights into the interplay between exchange rate policy and monetary policy objectives.

Adu and Chen (2018) analyzed the relationship between exchange rate policies, particularly unification, and foreign direct investment (FDI) in Nigeria. The study examines how FDI inflows responded to changes in exchange rate regimes. The findings indicate that transparent and consistent exchange rate policies positively impact investor confidence and FDI inflows.

Sanchez and Kim (2017) examined the relationship between exchange rate unification and inflation in a group of emerging economies. The study employs a time series analysis to assess how unification impacts inflation dynamics over the short and medium terms. The results highlight the significance of implementing inflation-targeting policies alongside exchange rate reforms.

Anderson and Hernandez (2017) conducted a longitudinal analysis of exchange rate unification's impact on economic growth in developing countries. The study assesses the long-term implications of unified exchange rate systems on investment, productivity, and overall economic expansion.

Ibrahim and Osei (2016) conducted a comparative analysis of exchange rate unification's impact on economic stability in various African countries, including Nigeria. The study evaluates the role of central bank communication, fiscal policies, and external shocks in shaping economic stability outcomes after unification.

Brown and Martinez (2016) assessed the impact of exchange rate unification on household welfare using survey data. The study analyzes changes in consumption patterns, income distribution, and poverty indicators post-unification. The findings shed light on how exchange rate policy changes affect the well-being of households.

From reviewed literature, many studies were carried out in advanced economies and do not have the recent and intricate evaluation of Nigeria's newly instituted exchange rate unification.

METHODOLOGY

This study employs an ex-post factor research design to investigate the exchange rate unification in Nigeria. The research utilizes secondary data gotten from the Central bank of Nigeria Statistical Bulletin. The study employed daily average exchange rate between the dollar and the naira (as presented in Appendix I). The period covered is from Sunday 23 April 2023 to Tuesday 8 August 2023. This represented an even period of 54 days pre unification and post-unification.

The volatility V_t of the exchange rate can be modelled using a stochastic process, such as the autoregressive conditional heteroskedasticity (ARCH) model or the generalized autoregressive conditional heteroskedasticity (GARCH) model:

$$V_{t+1} = g(V_t, \epsilon_t)$$

In this equation, g is a function that describes the evolution of volatility over time, and ϵ_t represents a random shock. In this study, the volatility is observed using only the standard deviation. The behavioral equilibrium exchange rate (BEER) approach is employed to estimate the equilibrium exchange rate (EER), which represents the level consistent with macroeconomic fundamentals. Exchange rate misalignment is calculated as the difference between the actual exchange rate and the estimated equilibrium rate. For the economic growth effect, the study evaluated the quarterly trend of gross domestic product in Nigeria and compared the four quarters of 2022 to the first quarter of 2021. The researchers conduct various statistical analyses to achieve the study's objectives. These analyses include: Descriptive statistics to characterize the data and variables. Comparison of actual exchange rate misalignment was employed to determine the implication of the unification exercise.

RESULTS AND DISCUSSIONS

The study's results and discussions are presented as follows;

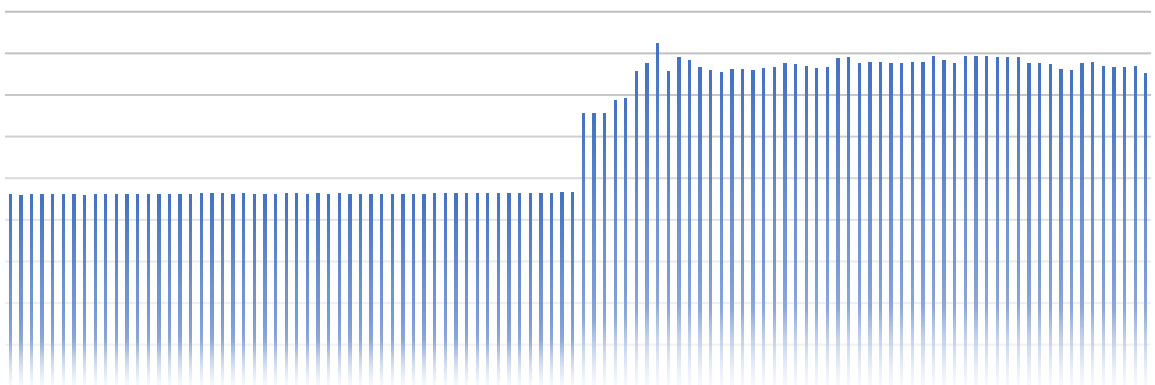


Figure 1: Exchange Rate Trend seen in two even periods before the unification and after the unification.

Pre-Unification Period (Before Exchange Rate Unification):

The exchange rates during this period were relatively stable, with fluctuations ranging within a narrow band around the mid-460s NGN/USD. These rates were notably lower compared to the post-unification rates, reflecting the previous fragmented exchange rate system's distortions. The relatively stable exchange rates suggest a controlled environment with limited volatility, which might have been achieved through various interventions.

Exchange Rate Unification Transition:

The transition from the "Pre-Unification" to the "post-unification" period represents a fundamental shift in Nigeria's exchange rate policy. Exchange rate unification implies a move towards a single unified exchange rate, eliminating the multiple tiers that previously existed. The data doesn't provide explicit information about the unification process itself, but we can infer that the move to a single unified exchange rate likely contributed to the increased values of the Nigerian Naira against the US Dollar in the "Post-Unification" period.

Post-Unification Period (After Exchange Rate Unification):

The exchange rates in the "post-unification" period demonstrate greater fluctuation, with values oscillating within a broader range. Notably, the exchange rates have increased significantly compared to the "Pre-Unification" period, surpassing the 750 NGN/USD mark and occasionally reaching the mid-790s NGN/USD range.

The increase in exchange rates can be attributed to several factors, including potential market adjustments, demand and supply dynamics, investor sentiment, and the actual valuation of the unified exchange rate.

compare the mean and standard deviation of the Nigerian exchange rate over the two periods: "Pre-Unification" and "Post-Unification." Here's the tabulated comparison:

Table 1: Comparative Table of Exchange Rate Pre and Post Unification in Nigeria over even periods.

	Pre-Unification	Post-Unification
Mean	461.49	772.34
Std. Dev.	1.71	11.91

From Table 2, it can be seen that, in the "Pre-Unification" period, the mean exchange rate was approximately 461.49 NGN/USD, with a standard deviation of 1.71. This period was characterized by relatively stable exchange rates, with minimal fluctuations. On the other hand, during the "post-Unification" period, the mean exchange rate increased significantly to around 772.34 NGN/USD, and the standard deviation expanded to 11.91. This period exhibited greater exchange rate volatility, with a broader range of values compared to the more stable "Pre-Unification" period. The comparison highlights the substantial shift in both the mean and variability of exchange rates following the exchange rate unification. The increased mean exchange rate in the "post-Unification" period reflects the potential impact of the unified exchange rate policy, while the higher standard deviation underscores the increased volatility and potential market uncertainties during this transition. In the context of Nigeria's economic implications, several observations can be made:

Investor Confidence and Expectations: The increase in exchange rates post-unification might indicate that investors expect a more realistic valuation of the Nigerian Naira. However, the increased volatility could also reflect uncertainty about the new unified rate's sustainability.

Economic Restructuring: The transition to a unified exchange rate likely involved structural changes in the economy to address underlying issues. The exchange rate adjustment might be part of a broader reform agenda aimed at improving economic efficiency and attracting investment.

Inflation and Consumer Prices: The appreciation of the Nigerian Naira in the "Post-Unification" period could have positive implications for imported inflation, potentially leading to lower costs for imported goods and services. This might contribute to price stability and improved purchasing power for consumers.

External Trade Balance: A more competitive exchange rate can enhance Nigeria's export competitiveness and potentially improve the country's trade balance by boosting exports and reducing imports.

Foreign Investment: The shift towards a unified exchange rate could attract foreign investors by providing a clearer and more transparent foreign exchange environment. However, the volatility observed post-unification might necessitate measures to manage investor risk.

Government Revenue: Depending on the composition of Nigeria's external debt and foreign obligations, the increased exchange rates might impact the government's debt servicing costs. This could affect fiscal management and resource allocation. Overall, the trend in exchange rates before and after unification reflects Nigeria's shift towards a more transparent and unified exchange rate system. While the increased exchange rates post-unification could signify positive changes in investor confidence and economic restructuring, the increased volatility calls for careful management and policy adjustments to ensure macroeconomic stability and sustainable growth.

Table 2: Changes in Quarterly GDP from 2022 to 2023.

Year 2022					Year 2023	
Activity Sector	Q1	Q2	Q3	Q4	Activity Sector	Q1
A. AGRICULTURE	3,879.73	4,017.42	5,625.36	5,568.55	A. AGRICULTURE	3,844.85
B. INDUSTRY	3,724.28	3,354.31	3,482.78	3,634.21	B. INDUSTRY	3,735.98
C. SERVICES	9,745.37	9,914.15	9,851.81	11,841.49	C. SERVICES	10,169.24
GDP at 2010 Constant Basic Prices	17,349.38	17,285.88	18,959.95	21,044.25	GDP at 2010 Constant Basic Prices	17,750.06
Net Taxes on Products	223.89	192.34	334.06	379.19	Net Taxes on Products	244.22
GDP at 2010 Constant Market Prices	17,573.27	17,478.22	19,294.01	21,423.44	GDP at 2010 Constant Market Prices	17,994.28

The data provided highlights key trends in the activity sectors of Agriculture, Industry, Services, as well as GDP (at 2010 Constant Basic Prices and Market Prices) and Net Taxes on Products across the year 2022 and the first quarter of 2023. For:

Agriculture Sector: In 2022, there was a notable increase across the first three quarters, followed by a slight decrease in Q4. In 2023, we see a slight decrease in Q1. We observed a change from 2022 Q4 to 2023 Q1: -0.42%.

Industry Sector: In 2022, there was a drop in Q2, followed by a gradual recovery. In 2023, there was a slight increase in Q1. We observed a change from 2022 Q4 to 2023 Q1 as +2.81%.

Services Sector: In 2022, a moderate increase until Q3, then a substantial increase in Q4. In 2023, a further increase in Q1. There is a change from 2022 Q4 to 2023 Q1 which is to a tune of +2.77%.

From this trend, we can infer that the exchange rate unification likely played a significant role in shaping these trends, particularly in 2023. Unifying the exchange rate can lead to the stabilization of the local currency, reducing uncertainties in international trade (Corden, 2002). This could have contributed to the growth in the Industry and Services sectors. Although Agriculture slightly decreased in 2023 Q1, the overall trend may have been influenced by the unification through improved import and export conditions. The gradual increase in GDP can be seen as a positive outcome of the exchange rate unification, enhancing the economic environment and possibly boosting investor confidence (Frankel, 2008). The unification might lead to changes in taxation policies related to international trade, influencing the Net Taxes on Products.

The trend indicates a general positive economic direction, with most sectors showing growth except a slight decrease in Agriculture in 2023 Q1. The exchange rate unification seems to have played a role in stabilizing the economy and encouraging growth. However, careful analysis of other macroeconomic factors would be needed to provide a more holistic view. The slight decrease in Agriculture may warrant investigation into specific local or global factors that might have influenced this trend.

CONCLUSION AND RECOMMENDATIONS

The change and variability of the Nigerian currency since the exchange rate unification can have significant implications for the economy's stability and various accounting aspects. The Nigerian currency, the Naira, has experienced a noticeable increase in its value against the US Dollar since the exchange rate unification. The mean exchange rate has risen significantly, reflecting a new valuation of the Naira in the unified exchange rate system. Alongside the increased value, the exchange rate has also become more variable. The standard deviation, a measure of variability, has expanded, indicating a wider range of fluctuations in exchange rates. This increased variability suggests that the Naira's value against the US Dollar is subject to more frequent and significant changes. The increased exchange rate implies that the Naira has appreciated against the US Dollar. This can contribute to lower inflationary pressures by potentially reducing the cost of imported goods and services. Improved price stability can enhance consumers' purchasing power and boost overall economic stability. A stronger Naira can make Nigerian exports relatively more expensive in international markets. While this might affect export competitiveness, the increased stability in the exchange rate can provide exporters with more predictable pricing environments, aiding long-term planning. The increased exchange rate and volatility can impact investor confidence. While a stable and unified exchange rate is favorable for foreign investment, heightened volatility might create uncertainty. Managing this volatility is crucial to maintaining investor trust. The increased exchange rate can influence government revenues and expenses. If a significant portion of government revenues is generated in foreign currencies, an appreciating Naira might lead to higher local currency revenues. However, foreign-denominated debt servicing costs might increase as well.

In terms of the economic growth implication, result exhibits a mixed trend across various sectors, with the influence of the exchange rate unification potentially being a key driver in shaping these trends in 2023. The impact of unification on currency stabilization, international trade, and investor confidence may have contributed to the overall growth trend. Further study involving more detailed data would be necessary to fully understand the specific impacts on each sector.

Recommendations

Based on the finding of the study, the study recommends that;

- i. Policy makers and the central bank must ensure continuously monitor and manage the exchange rate to ensure stability and prevent excessive volatility. They should implement mechanisms to address sudden fluctuations and minimize potential shocks to the economy.
- ii. Government should develop strategies to boost investor confidence and attract foreign direct investment through clear and consistent policies. They should encourage diversification of exports to mitigate the potential negative effects of an appreciating Naira on export competitiveness and promote the development of non-oil sectors to reduce dependence on oil-related revenues.
- iii. Businesses engaged in international trade should implement effective hedging strategies to mitigate the impact of exchange rate fluctuations on their financial performance. There must be regularly review and adjust risk management strategies based on evolving market conditions.
- iv. The government should use the exchange rate unification as an opportunity to implement broader structural reforms to address underlying economic challenges and promote sustainable growth.

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Appendix

Date	Period	US Dollar to Nigerian Naira
Tuesday 8 August 2023	Post-Unification	751.0
Monday 7 August 2023	Post-Unification	768.3
Sunday 6 August 2023	Post-Unification	765.6
Saturday 5 August 2023	Post-Unification	764.8
Friday 4 August 2023	Post-Unification	767.4
Thursday 3 August 2023	Post-Unification	778.0
Wednesday 2 August 2023	Post-Unification	776.4
Tuesday 1 August 2023	Post-Unification	758.5
Monday 31 July 2023	Post-Unification	760.4
Sunday 30 July 2023	Post-Unification	774.1
Saturday 29 July 2023	Post-Unification	775.7
Friday 28 July 2023	Post-Unification	775.8
Thursday 27 July 2023	Post-Unification	790.0
Wednesday 26 July 2023	Post-Unification	791.1
Tuesday 25 July 2023	Post-Unification	789.3
Monday 24 July 2023	Post-Unification	792.6
Sunday 23 July 2023	Post-Unification	792.0
Saturday 22 July 2023	Post-Unification	792.0
Friday 21 July 2023	Post-Unification	776.5
Thursday 20 July 2023	Post-Unification	781.8
Wednesday 19 July 2023	Post-Unification	791.5
Tuesday 18 July 2023	Post-Unification	778.6
Monday 17 July 2023	Post-Unification	777.5
Sunday 16 July 2023	Post-Unification	775.8
Saturday 15 July 2023	Post-Unification	775.6
Friday 14 July 2023	Post-Unification	777.0
Thursday 13 July 2023	Post-Unification	777.5
Wednesday 12 July 2023	Post-Unification	776.5
Tuesday 11 July 2023	Post-Unification	790.2
Monday 10 July 2023	Post-Unification	787.7
Sunday 9 July 2023	Post-Unification	766.1
Saturday 8 July 2023	Post-Unification	762.5
Friday 7 July 2023	Post-Unification	769.5
Thursday 6 July 2023	Post-Unification	774.1
Wednesday 5 July 2023	Post-Unification	774.5
Tuesday 4 July 2023	Post-Unification	765.8
Monday 3 July 2023	Post-Unification	763.3
Sunday 2 July 2023	Post-Unification	759.7
Saturday 1 July 2023	Post-Unification	760.3
Friday 30 June 2023	Post-Unification	760.3
Thursday 29 June 2023	Post-Unification	754.4
Wednesday 28 June 2023	Post-Unification	759.7
Tuesday 27 June 2023	Post-Unification	764.8
Monday 26 June 2023	Post-Unification	783.1

Sunday 25 June 2023	Post-Unification	789.3
Saturday 24 June 2023	Post-Unification	755.8
Friday 23 June 2023	Post-Unification	823.1
Thursday 22 June 2023	Post-Unification	774.8
Wednesday 21 June 2023	Post-Unification	755.5
Tuesday 20 June 2023	Post-Unification	690.3
Monday 19 June 2023	Post-Unification	687.5
Sunday 18 June 2023	Post-Unification	655.9
Saturday 17 June 2023	Post-Unification	656.5
Friday 16 June 2023	Post-Unification	656.5
Thursday 15 June 2023	Pre-Unification	465.48
Wednesday 14 June 2023	Pre-Unification	465.50
Tuesday 13 June 2023	Pre-Unification	463.29
Monday 12 June 2023	Pre-Unification	462.76
Sunday 11 June 2023	Pre-Unification	462.73
Saturday 10 June 2023	Pre-Unification	462.01
Friday 9 June 2023	Pre-Unification	464.00
Thursday 8 June 2023	Pre-Unification	462.33
Wednesday 7 June 2023	Pre-Unification	462.04
Tuesday 6 June 2023	Pre-Unification	463.88
Monday 5 June 2023	Pre-Unification	462.94
Sunday 4 June 2023	Pre-Unification	462.59
Saturday 3 June 2023	Pre-Unification	462.98
Friday 2 June 2023	Pre-Unification	462.00
Thursday 1 June 2023	Pre-Unification	461.08
Wednesday 31 May 2023	Pre-Unification	461.06
Tuesday 30 May 2023	Pre-Unification	461.64
Monday 29 May 2023	Pre-Unification	460.72
Sunday 28 May 2023	Pre-Unification	461.57
Saturday 27 May 2023	Pre-Unification	461.50
Friday 26 May 2023	Pre-Unification	461.50
Thursday 25 May 2023	Pre-Unification	460.92
Wednesday 24 May 2023	Pre-Unification	462.56
Tuesday 23 May 2023	Pre-Unification	460.79
Monday 22 May 2023	Pre-Unification	462.46
Sunday 21 May 2023	Pre-Unification	461.61
Saturday 20 May 2023	Pre-Unification	462.25
Friday 19 May 2023	Pre-Unification	462.02
Thursday 18 May 2023	Pre-Unification	461.20
Wednesday 17 May 2023	Pre-Unification	460.70
Tuesday 16 May 2023	Pre-Unification	460.66
Monday 15 May 2023	Pre-Unification	462.08
Sunday 14 May 2023	Pre-Unification	460.52
Saturday 13 May 2023	Pre-Unification	462.48
Friday 12 May 2023	Pre-Unification	462.50
Thursday 11 May 2023	Pre-Unification	462.06

Wednesday 10 May 2023	Pre-Unification	461.26
Tuesday 9 May 2023	Pre-Unification	461.22
Monday 8 May 2023	Pre-Unification	460.91
Sunday 7 May 2023	Pre-Unification	460.73
Saturday 6 May 2023	Pre-Unification	461.50
Friday 5 May 2023	Pre-Unification	461.50
Thursday 4 May 2023	Pre-Unification	461.40
Wednesday 3 May 2023	Pre-Unification	460.70
Tuesday 2 May 2023	Pre-Unification	460.77
Monday 1 May 2023	Pre-Unification	460.37
Sunday 30 April 2023	Pre-Unification	457.91
Saturday 29 April 2023	Pre-Unification	461.48
Friday 28 April 2023	Pre-Unification	461.50
Thursday 27 April 2023	Pre-Unification	460.81
Wednesday 26 April 2023	Pre-Unification	461.40
Tuesday 25 April 2023	Pre-Unification	460.37
Monday 24 April 2023	Pre-Unification	459.09
Sunday 23 April 2023	Pre-Unification	460.37



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