THE NIGERIAN ECONOMIC SUMMIT GROUP

Exchange Rate Misalignment and Economic Growth in Nigeria

Dr. Mutiu Abimbola Oyinlola, NESG Non-Resident Senior Fellow

November 2023

Abstract

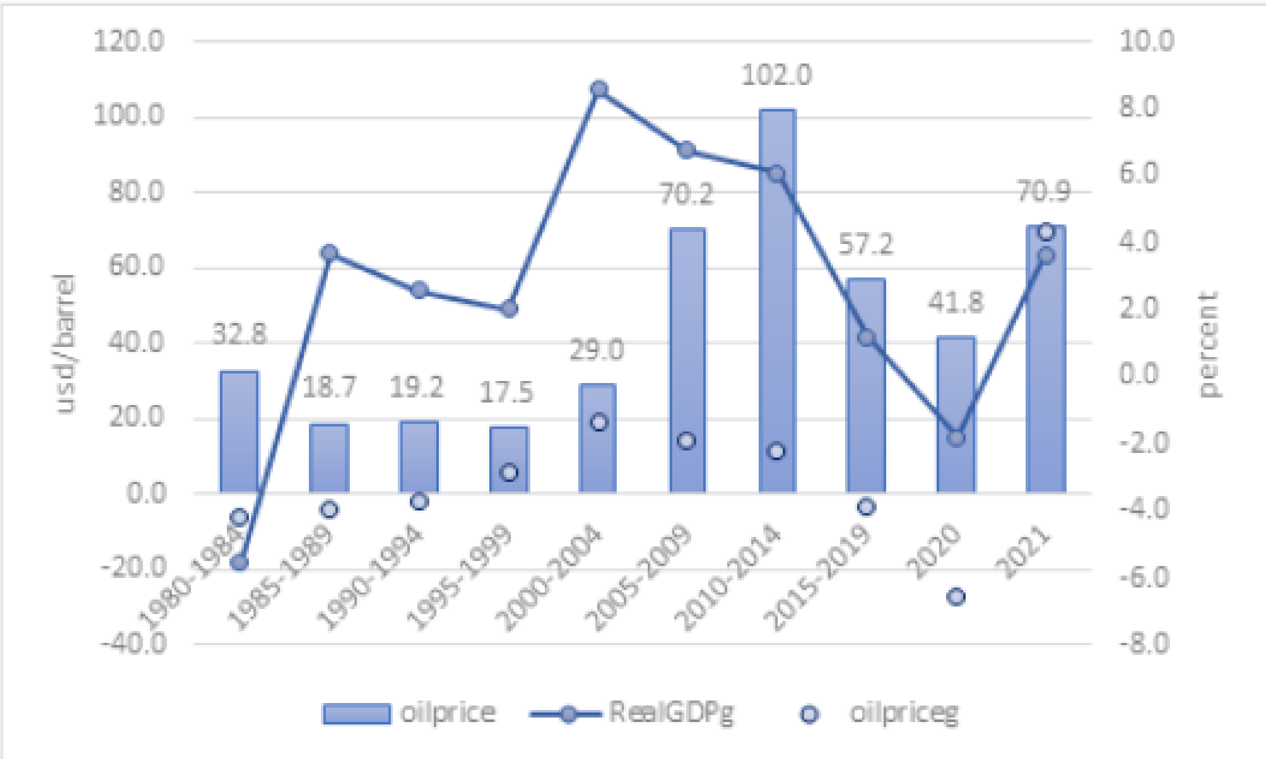
Over the last three decades, researchers and policymakers have been concerned about exchange rate management in Nigeria. There has been a push for Nigeria to adopt a market-determined exchange rate policy stance, which the Nigerian government has been hesitant to fully embrace despite the country's dwindling external reserves. The continuation of this misaligned exchange rate is therefore concerning. To that end, this policy brief investigated the implications of exchange rate misalignment on the economy. Specifically, the drivers of Nigeria's external competitiveness, as measured by the real effective exchange rate, were first identified, and the resulting misalignment was then determined. In a nutshell, oil prices and external reserves are found to be the two factors that improve Nigeria's external competitiveness. Furthermore, exchange rate misalignment drags economic growth. The findings remain the same when the misalignment is separated into overvaluation and undervaluation, with overvaluation having a slightly more significant adverse effect on the economy. This implies that a policy stance that either undervalues or overvalues the Nigerian exchange rate harms rather than helps the economy. Thus, Nigeria needs to intensify its efforts to diversify its export base and reduce its over-reliance on oil exports to increase government revenue and foreign exchange earnings, thereby enhancing the economy's resilience. Achieving this goal will necessitate a policy shift towards a more market-determined exchange rate stance, reducing observed misalignment.

INTRODUCTION

Nigeria's economic history has been marked by erratic conditions, primarily due to fluctuations in crude oil prices. The country has experienced periods of growth and stagnation, driven by resource booms and a fall in crude oil prices. The average GDP growth rate increased from -5.6 percent in 1980-1984 to 3.7 percent in 1985-1989 but declined to 2.0 percent over the next decade.

The COVID-19 pandemic and the Russia-Ukraine war have exacerbated the inconsistent economic growth, impacting revenue generation, foreign exchange earnings, and sustainable development goals.

FIGURE 1: REAL GDP AND OIL PRICE GROWTH DYNAMICS, 1980-2021



Source: Constructed by the author using data from the online databases of the World Bank (https://data.worldbank.org) and Statistical Review of World Energy, (https://www.bp.com/en/global/corporate/energy-economics/statistical-review-of-world-energy.html) accessed on 31 March 2023
Note: RealGDPg, oilpriceg denote growth rate of real GDP and crude oil price

The country's observed economic growth pattern is intrinsically linked to its heavy reliance on the oil and gas sector, which accounts for over 60 percent of government revenue and 90 percent of foreign exchange. However, the sector contributes little to the economy, with agriculture, manufacturing, and services contributing roughly 93 percent of GDP. As a result, any shock in the sector, such as the pandemic and war, will reduce revenue and foreign exchange earnings. This has led to a cycle of borrowing to meet government spending, stifling investments in critical areas. Nigeria needs to improve its non-oil sector's external competitiveness to depart from this cycle.

A country's competitiveness or external performance is usually gauged by the level of real effective exchange rate (REER), which is the weighted average of a country's currency in relation to an index or basket of other major currencies and an indication of trade capabilities of a country. A rise in this index indicates that a country's exports are becoming more expensive while imports are becoming less expensive. In other words, it is losing competitiveness, and its external performance is deteriorating, resulting in a decrease in revenue and foreign exchange earnings.

Put differently, the REER measures the average exchange rate of a country's currency with its trading partners - the equilibrium value. The REER equilibrium value will display no sign of overall misalignment as much as currency overvaluation relative to one or more trading partners is offset by its undervaluation to others. Any shift in the equilibrium exchange rate is thus shaped by changes in economic fundamentals. As a result, misalignment will arise in markets where actual exchange rates are not allowed to adjust to these fundamentals due to the country's exchange rate management posture. Hence, the insistence on an exchange rate management position contrary to economic realities may have far-reaching consequences for the economy. Some studies on Nigeria have indicated that real exchange rate misalignment significantly hampers economic growth and is overvalued during the study periods.[1] Nigeria's misaligned exchange rate is a cause for concern.

Overvalued currencies are associated with macroeconomic performance issues, such as unsustainably large current account deficits, balance of payments crises, stop-and-go macroeconomic cycles, depletion of external reserves, rent-seeking, and corruption.

[1] Ibrahim, (2016), and Essien, et. al, (2017).

On the contrary, currency undervaluation, as China pursues, is a deliberate policy stance to maintain competitiveness and foster economic growth through export promotion. However, China has a massive productive export sector to benefit from this position. On the other hand, Nigeria is heavily reliant on imported consumer products and raw materials and should exercise caution in this regard. As a result, policies that devalue nominal exchange rates have a limited impact on overall trade levels in Nigeria. Indeed, there is no clear consensus on whether devaluation boosts economic growth, and the evidence is mixed.

Understanding the implications of a policy stance, particularly on exchange rate management, is becoming increasingly important. The underlying drivers of external competitiveness must be identified to improve Nigeria's export performance and the economy. This policy brief probes into understanding the factors contributing to Nigeria's external competitiveness from 1980 to 2021 and explores the asymmetric effect of exchange rate misalignment on the economy.

Exchange rate Management and Misalignment in Nigeria

A review of the exchange rate regime and the resulting misalignment reveals that Nigeria experienced significant overvaluation during the fixed or pegged exchange rate regime and undervaluation during the flexible or managed floating system. Prior to 1985, Nigeria's exchange rate regime was fixed or pegged. However, except for a brief period in 1993-1994 when it was pegged, exchange rate management has been a dual or multiple exchange rate system in which a more market-oriented segment coexisted with a usually pegged official rate exchange rate that the government used. This dual or multiple exchange rate system resulted in the emergence of round-tripping activities, instability in the exchange rate markets, and a wide misalignment of the exchange rate. The swings of REER misalignment have subsided, especially since 2002. Overall, there was equal occurrence of exchange rate overvaluation and undervaluation in Nigeria during the period under consideration.

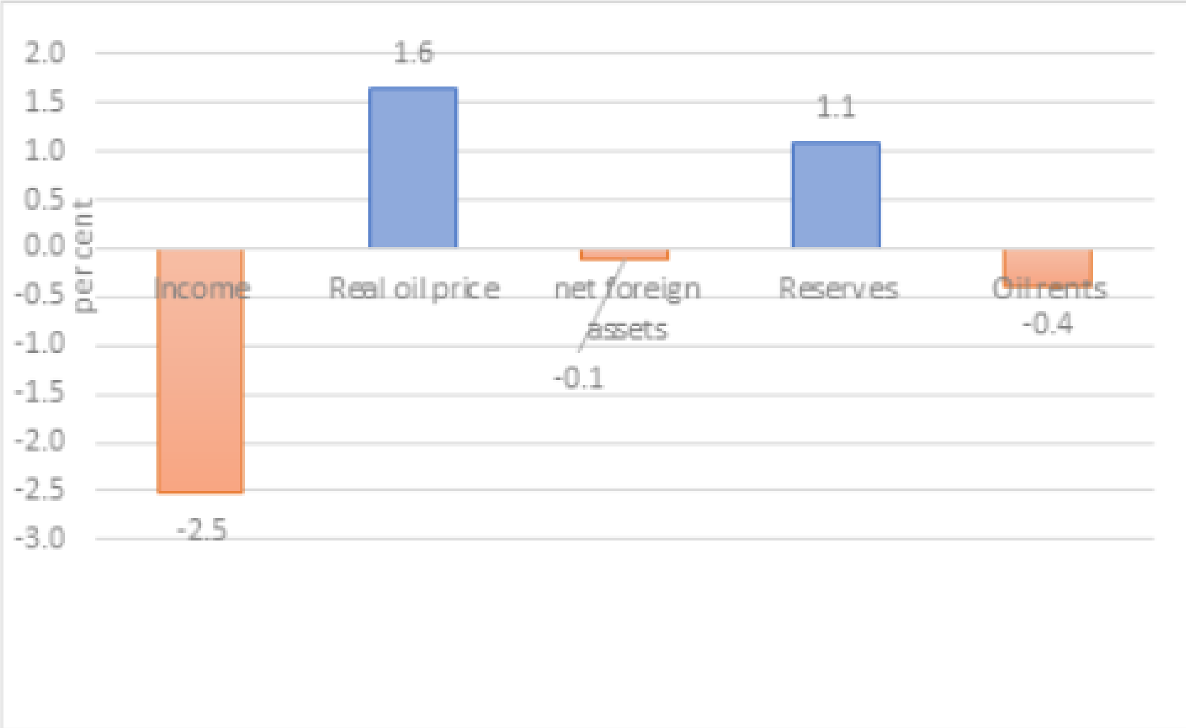
The findings of the analysis of the stance of exchange rate management in Nigeria presented in Figure 2 show that income, real oil price, net foreign assets, reserves, and realised oil rent all influence the overall position of exchange rate management. Higher oil prices and reserves positively impact the real effective exchange rate, while income, oil rents, and net foreign assets have a negative impact. Higher income causes a depreciation rather than an appreciation, possibly due to Nigeria's reliance on foreign products. To that end, Nigeria maintains a misaligned exchange rate management position that encourages cheap imports of goods and services if oil prices, and external reserves remain relatively high.

EXCHANGE RATE MISALIGNMENT REGIME AND TYPE

Year	Misalignment	Misalignment type	Exchange rate system	Pricing mechanism
1982-1985	0.280	overvaluation	Fixed	Pegged
1986-1992	-0.442	undervaluation	Dual	SFEM(1986), FEM(1987), AFEM(1988),IFEM(1989), BDC(1990),DAS(1990)
1993-1994	-0.284	undervaluation	Fixed	Pegged
1995-1998	0.769	overvaluation	Dual	Managed float: AFEM, Pegged(official)
1999-2001	-0.237	undervaluation	Dual	Managed float: AFEM (Jan-Sept, 1999); IFEM (Oct.1999-Jun. 2002)
2002-2005	-0.061	undervaluation	Multiple	Managed float: rDAS (Jul. 2002-Feb 2006.) IFEM, BDC, official
2006-2009	0.055	overvaluation	Multiple	Managed float: WDAS (Feb. 2006-Dec.2008); rDAS(Jan.-Jun.2009); WDAS(Jul.2009-
2010-2015	0.059	overvaluation	Multiple	Managed float: rDAS (Feb. 2015)
2016-2021	-0.016	undervaluation	Multiple	FMDQ (flexible) (Jun. 2016), IFEM,(I&E), BDC

Sources: Author's estimation, 2023; CBN (2021), Exchange rate Management in Nigeria, Understanding Monetary Policy Series No. 8. https://www.cbn.gov.ng/out/2022/mpd/series%208.pdf
Note: AFEM-autonomous foreign exchange market, IFEM-interbank foreign exchange market, DAS- Dutch auction sale, WDAS-wholesale Dutch auction sale, and rDAS-retail Dutch auction sale.

FIGURE 2: DRIVERS OF NIGERIA'S EXTERNAL COMPETITIVENESS



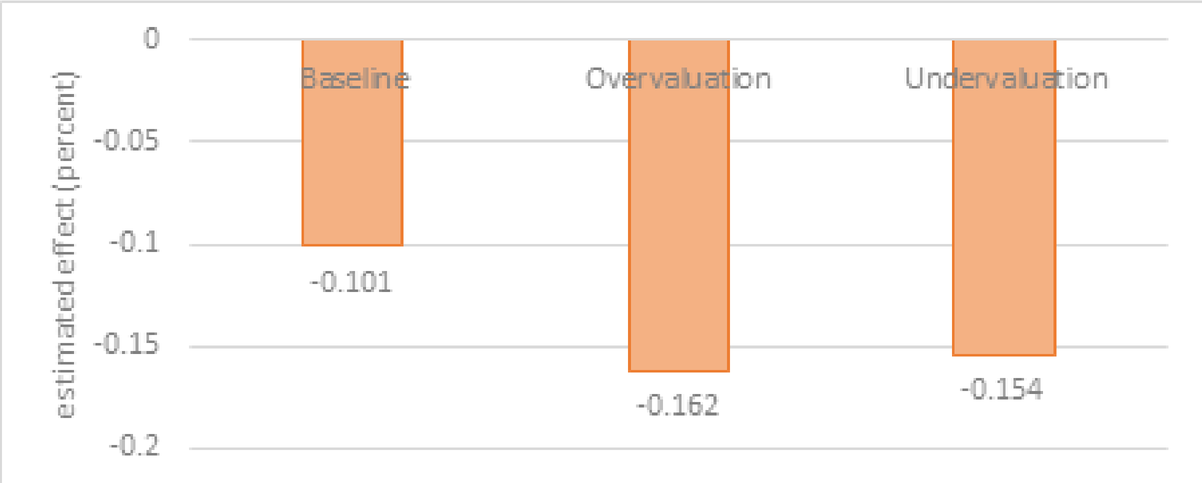
SOURCE: AUTHOR'S ESTIMATION, 2023

Exchange Rate Misalignment: Implications for real GDP growth in Nigeria

Figure 3 presents the effects of exchange rate misalignment on Nigeria's economic growth. The exchange rate misalignment model was used to analyse Nigeria's growth effects, dividing it into overvaluation and undervaluation components. The long-run equilibrium of the REER exchange rate was obtained using the Hodrick filter approach. The baseline misalignment has a significant negative impact on economic growth. This implies that high exchange rate misalignment causes a drag on economic growth. The brief probes further to show the effect of the components of exchange rate misalignment. It was observed that both the real effective exchange rate overvaluation and undervaluation have significant adverse effects on Nigerian economic growth.

The findings clearly show that increasing currency overvaluation and undervaluation levels are not beneficial to the economy and that a high overvaluation policy stance hurts the economy much more. The findings contradict Rodrick's (2008) findings, which suggested that an increase in undervaluation boosts economic growth. Nigeria's import-dependent economy and manufacturing sector have been impaired by structural issues and inconsistency in policy, while the country lacks sufficient external reserves to support its currency sustainably.

FIGURE 3: EFFECT OF EXCHANGE RATE MISALIGNMENT ON REAL OUTPUT GROWTH IN NIGERIA



SOURCE: AUTHOR'S ESTIMATION, 2023

Concluding Remarks

Nigeria's economy primarily relies on the oil and gas sector, and rising oil prices and external reserves induce the country to maintain a misaligned exchange rate management position that encourages cheap imports of goods and services, exacerbated largely by income and oil rents. The findings show that high exchange rate misalignment dampens economic growth. To manage the misaligned exchange rate, Nigeria should increase export diversification initiatives to generate stable revenues and foreign exchange flows and reduce its over-reliance on the oil and gas sector and its associated swings. This should improve its external competitiveness and allow market fundamentals to influence the currency's value.

Finally, the Central Bank of Nigeria should keep constant track of the country's exchange rate misalignment to ensure that the drivers of external competitiveness tilt toward ensuring the economy follows a stable and sustainable growth path.

References

Essien, S. N., Uyaebo, S. O., & Omotosho, B. S. (2017). Exchange rate misalignment under different exchange rate regimes in Nigeria. CBN Journal of Applied Statistics, 8(1), 1-21.

Ibrahim, W. (2016). Real exchange rate misalignment and economic growth in Nigeria (1960-2011). CBN Journal of Applied Statistics, 7(1), 93-110.

Rodrik, D. (2008). The real exchange rate and economic growth. Brookings papers on economic activity, 2008(2), 365-412.

Acknowledgement

The author would like to thank Prof. Perekunah. B. Eregha, NESG NRFP Non-Resident Faculty and Senior Fellow, for his helpful comments.

The author acknowledges the financial support of the NESG.

About the NESG

The NESG is an independent, non-partisan, non-sectarian organisation, committed to fostering open and continuous dialogue on Nigeria's economic development. The NESG strives to forge a mutual understanding between leaders of thought to explore, discover and support initiatives to improve Nigeria's economic policies, institutions and management.

Our views and positions on issues are disseminated through electronic and print media, seminars, public lectures, policy dialogues, workshops, specific high-level interactive public-private sessions and special presentations to the executive and legislative arms of government.

About the NRFP

The NESG Non-Residential Fellowship Programme (NRFP) is a knowledge hub that bridges the gap between socio‑economic research and public policy and promotes evidence-based policymaking in Nigeria. The programme brings together outstanding high-level intellectuals in academia, research-based institutions, the public sector and the private sector to collaborate, share ideas and ensure that findings from its research are applied in practice.

THE SUMMIT HOUSE
6, Oba Elegushi Street,
off Oba Adeyinka Oyekan Avenue,
Ikoyi, Lagos.
P.M.B 71347, Victoria Island, Lagos

ABUJA LIAISON OFFICE
4th Floor, Unity Bank Tower,
Beside Reinsurance Building
Plot 785, Herbert Macaulay Way,
Central Business District, Abuja.

www.nesgroup.org
research@nesgroup.org
+234-01-295 2849

officialNESG

NESG