How Macroeconomic Indicators Behave During the Periods of Currency Devaluation in Nigeria

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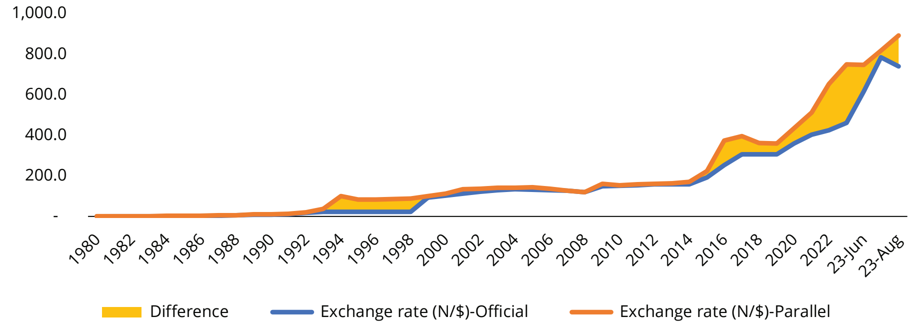
Abstract
Currency devaluation in Nigeria poses significant challenges for key macroeconomic variables. This study examines the behaviour of these variables around the periods when the Naira underwent major devaluation or depreciation, defined as episodes between 1980 and August 2023 where the currency lost at least 20 percent of its value in a single year. The analysis aims to inform policy discussions in the wake of recent exchange rate unification in Nigeria, which caused a notable surge in official and parallel exchange rates. Findings indicate that the observed worsening of most macroeconomic indicators due to the current exchange rate unification policy is consistent with the outcome of major devaluation events in the past. The behaviour of most indicators one or two years after the analysis suggests that the positive effects anticipated by the government from the current devaluation may not be fully realized in the short to medium term. The study, therefore, recommends that the government adopt an expenditure-switching approach, a short-term strategy for foreign purchases of domestic products, easing pressure on foreign reserves and ensuring transparency in the foreign exchange market.

Introduction
Currency devaluation has become a pronounced issue in Nigeria since 1986. Devaluation magnifies the impact of exchange rates on macroeconomic variables in a manner that can be far-reaching. It is the downward adjustment in the price of a currency with respect to another currency. Nigeria's currency, the naira, has suffered a significant loss in value against the US Dollars, for instance, and this has a lot of effects on the country's economic performance.

The primary objective of this paper is to analyse the behaviour of key macroeconomic variables around the periods when the Naira underwent major devaluation or depreciation. This is defined as the period when the naira lost a minimum of 20 percent of its value in a single year between 1980 and August 2023. The aim is to guide policy discussion and decisions on the effect of the current exchange rate unification in Nigeria, which has led to a tremendous rise in the official and parallel exchange rates. The analysis of the behaviour of the selected macroeconomic indicators is based on three main periods. What can we observe concerning their average growth path two years before the devaluation, the year of the devaluation, and two years after?

Episodes of Major Currency Devaluations in Nigeria
Nigeria's exchange rate has experienced significant devaluation over the years. In 1986, the annual average exchange rate increased to ₦2.0/US$1 from N0.5 in 1980. In 1999, it also rose to ₦92.7 and further to ₦148.9 in 2009. The naira continued to depreciate as it rose to ₦193.3, ₦253.5, and ₦305.8 in 2015, 2016, and 2017 respectively. The official exchange rate ended 2022 at ₦448.6/US$1, recording an average value of ₦426/US$1 for the year. Following the introduction of the policy in June 2023 to harmonise the country's multiple exchange rates, the value increased from ₦466 to ₦755 per dollar. Generally, the official and parallel exchange rates exhibit similar trends in most of the years, apart from some marked divergence between 1993 and 1999. From 2015, however, the variation has become very pronounced. Although it narrowed following the introduction of the I&E foreign exchange window in April 2017, the gap has continued to widen thereafter, such that the current harmonization efforts have not adequately closed the gap.

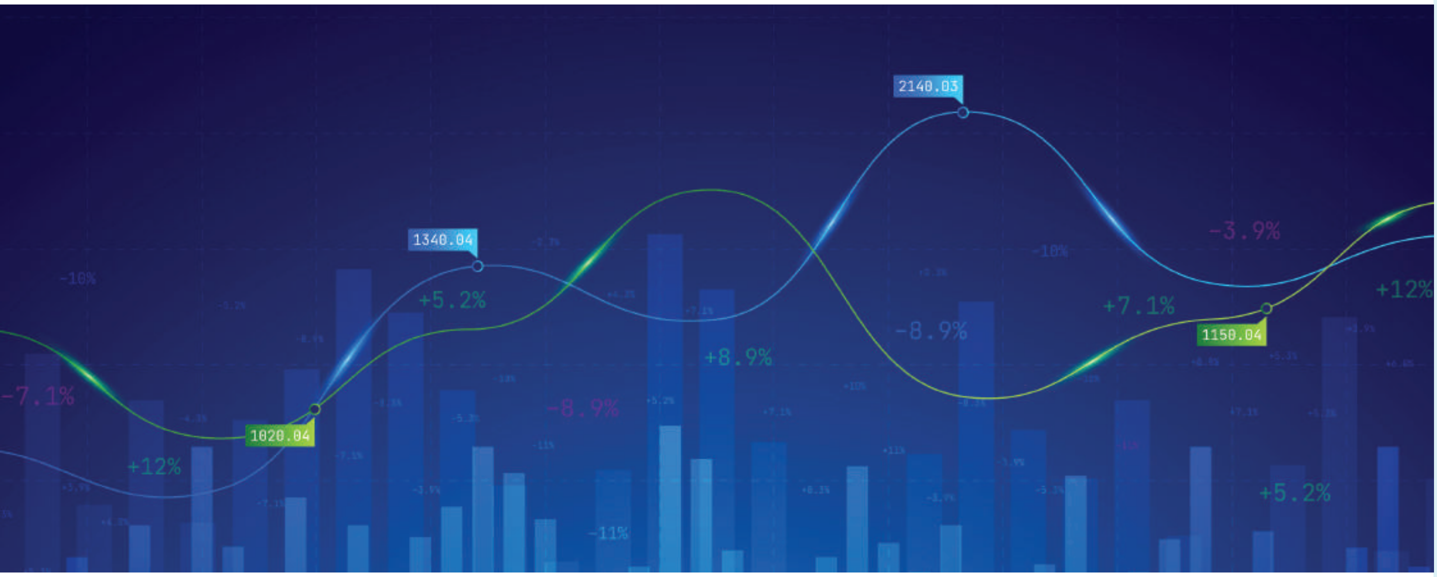
Figure 1: Trend of Official and Parallel Exchange Rates



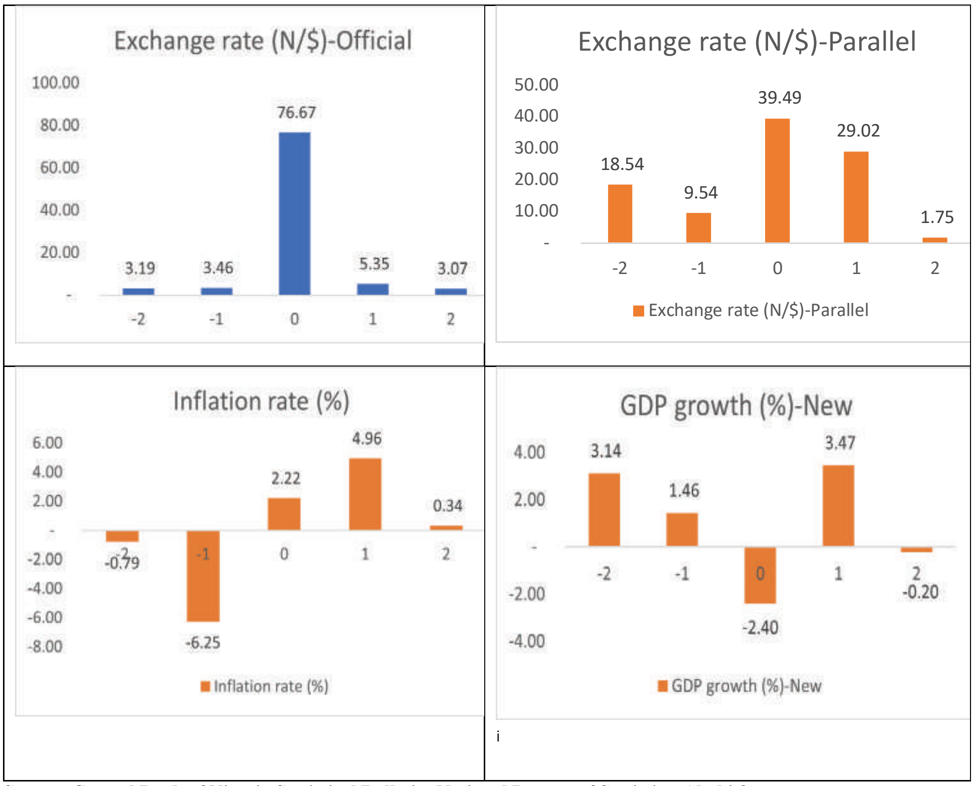
Source: Central Bank of Nigeria, and forex websites

Behaviour of Economic Indicators around Currency Devaluation

- The average change in the official exchange rate in the year of devaluation is 76.67 percent over the period of analysis (1980 to 2023, August). In the years following the major devaluation, the increase in the official exchange rate reduced to 5.35 percent on average, steadily decreasing to 3.07 percent.
- In the year of major devaluation, the growth of the parallel exchange rate is observed to grow significantly by 39.49 percent on average and, much higher than the growth before the devaluation. This jump in the parallel exchange rate reduced slightly in the year following the devaluation to 29.02 percent and significantly reduced in the second year to 1.75 percent.
- The growth of the inflation rate increases gradually in the year of a significant devaluation, increasing by an average of 2.22 percent. Following the year of major devaluation, the inflation rate increased steadily in the first year by 4.96 percent before dropping drastically in the following year by 0.34 percent.
- In the year of major devaluation, the GDP growth rate fell to -2.40 percent from the previous year's average value of 1.46 percent. Following the year of devaluation, the GDP growth rate increased to 3.47 percent before drastically dropping in the following year by -0.20 percent.



[1] In these charts and subsequent ones, '0' indicates the year of major devaluation, '-2' indicates 2 years before the major devaluation, '-1' indicates 1 year before major devaluation, '2' indicates 2 years after major devaluation, and '1' indicates 1 year after major devaluation



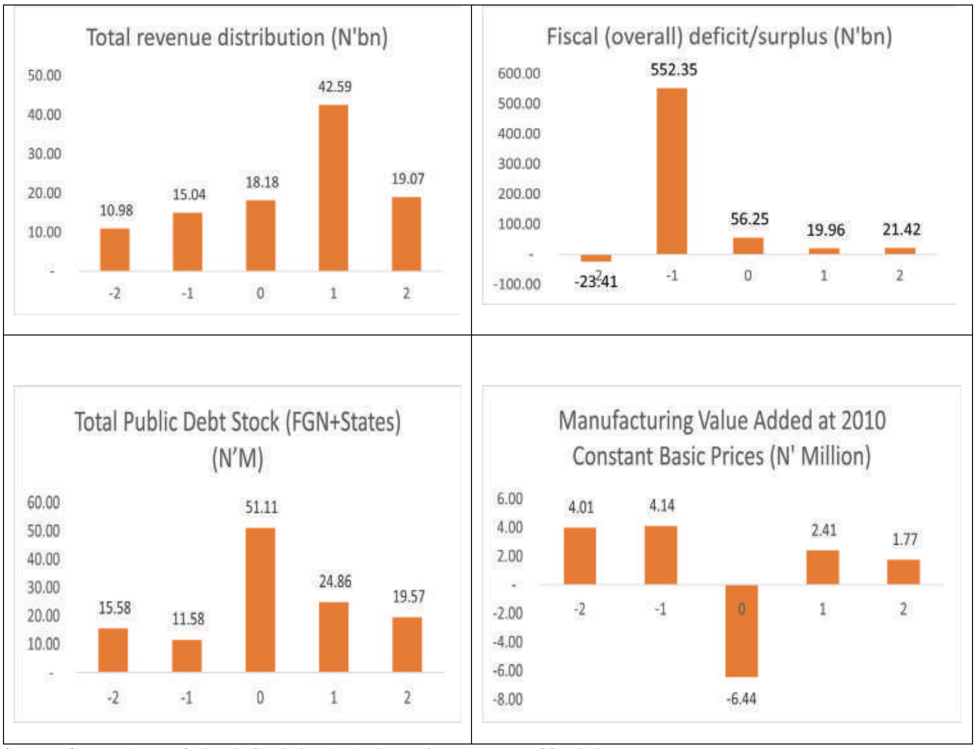
Source: Central Bank of Nigeria Statistical Bulletin, National Bureau of Statistics, Aboki fx

- The total revenue distribution from the Federation Account Allocation Committee (FAAC) grows by 18.18 percent on average in the year of devaluation and experiences a jump of 42.59 percent in the following year and 19.07 percent in the second year following major devaluation.

- In the year of major devaluation, growth in fiscal deficit is observed to decrease significantly to 56.25 percent on average, from an average value of 552.35 percent in the year before the devaluation. This fall in the fiscal deficit continues to decrease in the year following the devaluation.

- The growth of total public debt stock increases substantially by 51.11 percent on average in the year of a significant devaluation, significantly higher than 11.50 percent, which was the growth before the devaluation. In the year following the devaluation, the growth of total public debt stock fell but not to the level before the major devaluation.

- The growth in manufacturing value added significantly falls by -6.44 percent on average in the year of devaluation. The growth becomes positive in the two years thereafter, but lower than the years before the devaluation.



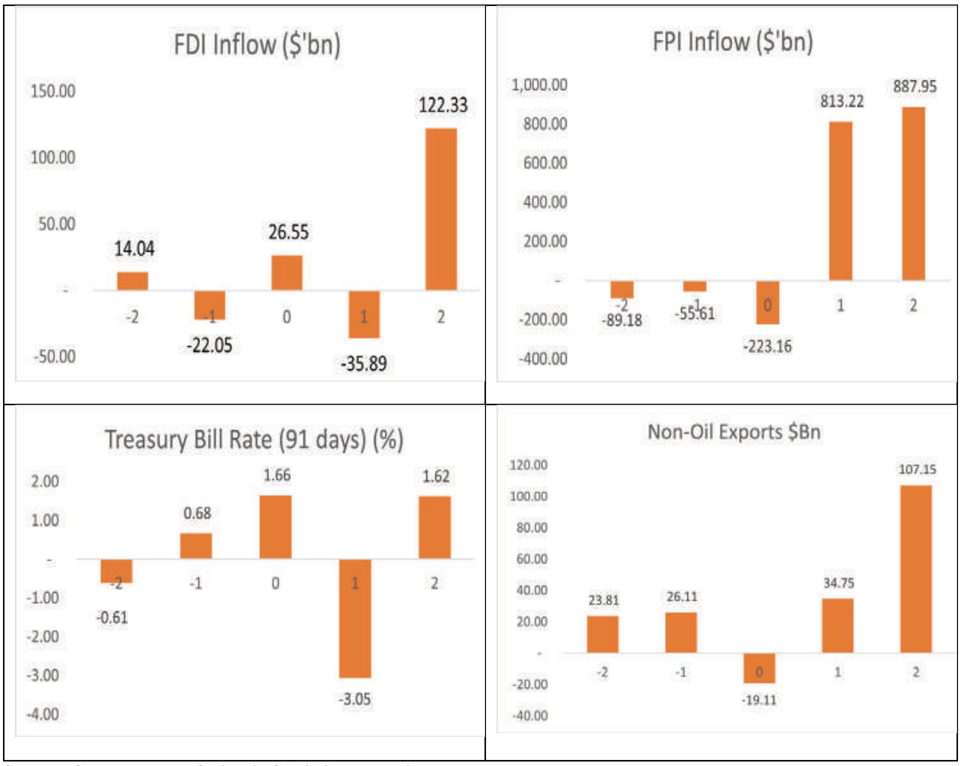
Source: Central Bank of Nigeria Statistical Bulletin, National Bureau of Statistics

- In the year of major devaluation, the growth of the FDI inflow increases to 26.55 percent on average but decreases to -35.89 percent and 122.33 percent in the 2nd year after.

- The FPI inflow is observed to decrease drastically in the year of major devaluation by -223.16 percent on average, a lot lower than the fall before the devaluation. The FPI inflow experienced a significant increase in the year following the major devaluation by 813.22 percent and steadily increased in the second year by 887.95 percent.

- In the year of major devaluation, the growth of the treasury bill rate is observed to increase significantly to 1.66 percent on average and falls much lower by -3.05 percent in the following year and significantly increases in the second year by 1.62 percent.

- Non-oil export growth follows a slow upward trend of 23.81 percent to 26.11 percent within the two years before the year of major devaluation, respectively, and falls in the year of major devaluation to -19.11 percent. However, it is observed to grow significantly in the following year by 34.75 percent before experiencing a jump in the second year by 107.15 percent.



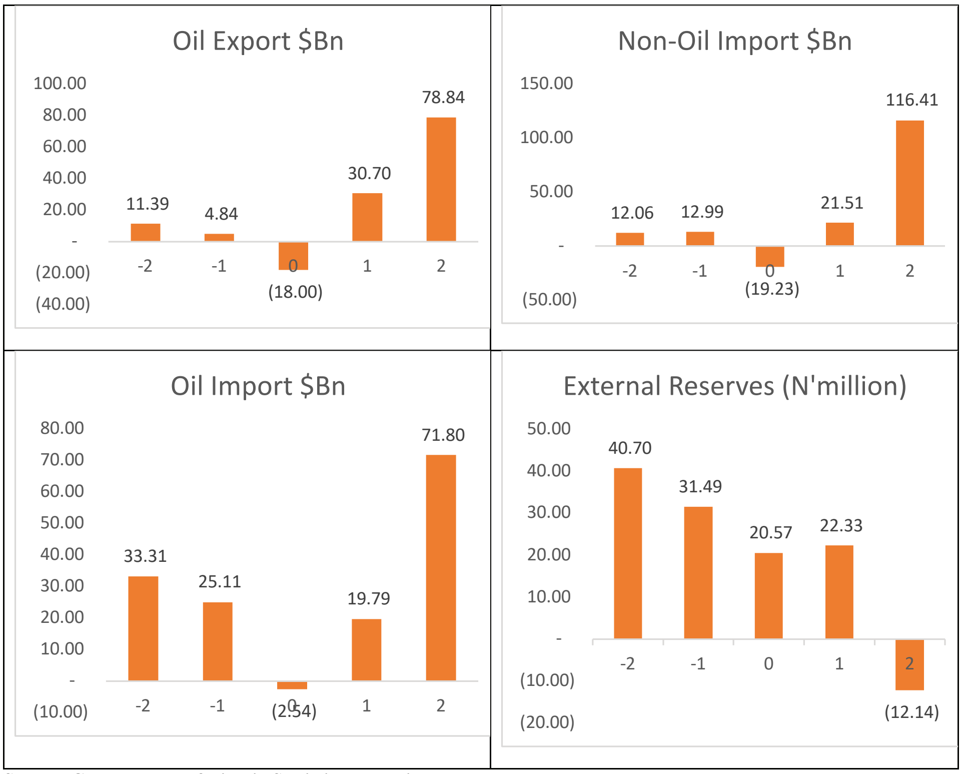
Source: Central Bank of Nigeria Statistical Bulletin

- In the year of the major devaluation, the growth of oil exports is observed to fall significantly to -18.00 percent on average. This is followed by a 30.70 percent increase in the following year and a jump in oil exports in the second year by 78.84 percent.

- Non-oil import growth falls in the year of major devaluation by -19.23 percent, but it is observed to grow significantly in the following year by 21.51 percent and in the second year by 116.41 percent.

- The growth of oil imports decreased substantially from 33.31 percent to 25.11 percent in the two years before the year of major devaluation, falling to -2.54 percent on average. However, in the years after the devaluation, it increased by 19.79 percent and 71.80 percent in the two years respectively.

- Nigeria's external reserve growth follows a steady downward trend from 40.70 percent to 31.49 percent within the two years before the year of major devaluation and further falls in the year of major devaluation to 20.57 percent. The external reserve is observed to increase slightly in the following year by 22.33 percent before experiencing a major decline in the second year by -12.14 percent.



Source: Central Bank of Nigeria Statistical Bulletin

Summary and Implications

Table 1 shows the summary of the behaviour of the selected macroeconomic indicators prior to the identified major devaluation, during and after the devaluation on the average from 1980 to August 2023. Generally, it is observed that the normal or expected growth paths of most of these indicators were disrupted during the year of major devaluation; while most of these indicators recovered in about one to two years, not all of them reached their pre-devaluation status in such a short term. This implies that the current worsening outcome of most macroeconomic indicators arising from the current exchange rate unification policy is in line with the behaviour of most macroeconomic indicators in Nigeria during the years of major devaluation. Meanwhile, the improvement observed in most of the macroeconomic indicators a year or two after this analysis suggests that whatever positive outcome the government envisaged, leading to the current devaluation may not be fully realized in the short to medium term.

Table 1: Behaviour of Selected Macroeconomic Indicators Prior, during, and after Major Devaluation

Indicator	Trends before	Behaviour in the year of devaluation	Recovery
Exchange rate (N/$) Official	↗	↑	↘
Exchange rate (N/$) Parallel	↘	↑	↘
Inflation rate (%)	↓	↗	→
GDP growth (%)	↘	↓	→
Total revenue distribution (N'bn)	↑	↑	↘
Fiscal (overall) deficit/surplus (N'bn)	↗	↘	→
Total Public Debt Stock (FGN States) (N'M)	↘	↑	↘
Manufacturing Value Added at 2010 Constant Basic Prices (N'Million)	↑	↓	↘
FDI Inflow ($'bn)	↓	↑	→
FPI Inflow ($'bn)	↓	↓	↑
Treasury Bill Rate (91 days) (%)	↘	↑	↗
Non-Oil Exports $Bn	↑	↓	↑
Oil Exports $Bn	↘	↓	↑
Non-Oil Imports $Bn	↑	↓	↑
Oil Imports $Bn	↘	↓	↑
External Reserves (N'million)	↘	↘	→

Source: Authors summarized analysis

For instance, devaluation is expected to make a country's export sector globally competitive and result in an export boom for foreign reserves accretion, which will invariably lead to exchange rate stability. Also, net capital flows are expected to improve significantly as the country experiences an export boom because there will be a need for increased production that will necessitate capital accumulation. However, this is not the experience of Nigeria as the country's export sector is inelastic with respect to exchange rate adjustment, and capital flows are also limited due to other structural and fiscal constraints as the country's fiscal policy stance during and after such major devaluation is mostly not favourable to the BOP position.

Unification is supposed to curb the transmission of fiscal pressure on domestic prices as government revenue improves and also curtails the illicit round-tripping behaviour of agents in starving the economy with the needed liquidity to finance the real sector. This is, however, subject to ensuring transparency within the official exchange rate market as genuine demands are met.

In the short term, the government needs to pursue an expenditure-switching approach to government foreign purchases of domestic products to curb the pressure on the foreign reserves and ensure transparency and supply to genuine demand in the official market. This should be followed with macroeconomic policy coordination and the needed structural and fiscal reforms to spur productivity and economic diversification in the medium to long term.

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 so as to explore, discover and support initiatives directed at improving NIgeria's economic policies, institutions, and management.

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