Foreign Exchange Rate and Purchasing Power Parity: A Review of Literature

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ABSTRACT

With a focus on Nigeria and comparative global evidence, this study examines the literature on the connection between Foreign Exchange Rates and Purchasing Power Parity (PPP). Analyzing how changes in exchange rates affect PPP while taking inflation, economic stability, and price level adjustments into account is the goal. Nine international papers and twelve Nigerian studies were chosen using a PRISMA-style framework. According to the review, some studies support PPP validity over long time horizons, while others highlight variations related to inflation shocks, fiscal imbalances, and dependency. Gaps in methodological rigor are found in the review, especially in the restricted application of sophisticated econometric approaches such panel ARDL models and nonlinear PPP tests. The policy implications point to Nigeria's exchange rate control and inflation targeting being strengthened. A research agenda that emphasizes methodological innovation and wider coverage of moderating variables is presented in the paper's conclusion.

Keywords: Foreign Exchange Rate, Purchasing Power Parity, Exchange Rate, Exchange Rate Volatility and Inflation

INTRODUCTION

Globalization has made national economies more interconnected, resulting in previously unheard-of cross-border flows of capital, commerce, and services (Krugman & Obstfeld, 2020). Exchange rate management has become a crucial component of economic stability as a result of these developments, especially for developing nations like Nigeria. Exchange rates have an impact on capital flows, inflation, import and export costs, and macroeconomic performance as a whole (Reserve Bank of Australia, 2018). Multinational corporations and international investors rely on equitable exchange rates to ensure fair trade and competitiveness, underscoring the importance of theories that explain currency valuation (Kevin, 2010; Pandey, 2004).

The principle of Purchasing Power Parity (PPP) offers one such standard. PPP, which has its roots in Cassel (1918), asserts that exchange rates ought to fluctuate in order to equalize the buying power of currencies among nations. While Relative PPP highlights inflation disparities as the primary cause of exchange rate fluctuations, Absolute PPP proposes that a standardized basket of products should cost the same across countries if transformed into a single currency (Samuelson, 1964; Rogoff, 1996; Taylor & Taylor, 2004). PPP remains a cornerstone of international economics, widely used to compare living standards, assess currency misalignment, and evaluate macroeconomic stability (Taylor & Taylor, 2023). However, empirical evidence has consistently shown deviations from PPP predictions, particularly in developing economies where structural rigidities, commodity dependence, and policy misalignment distort parity (Obadan, 2006; Olufemi & Adebayo, 2022).

Nigeria’s experience illustrates these complexities. As an oil-dependent economy, Nigeria’s exchange rate is highly sensitive to global commodity price shocks, fiscal imbalances, and inflationary pressures (Adebayo & Sulaimon, 2019). Studies have shown that while PPP may hold in the long run, short-term deviations are common

due to volatility in the naira, speculative capital flows, and policy interventions (Ononugbo, 2005; Nwachukwu & Chijioke, 2020). These deviations have significant implications for inflation, purchasing power, and economic stability. For instance, exchange rate depreciation often triggers inflationary spirals that erode consumer welfare, while misalignment undermine investor confidence and complicate debt management (Micheal & Daniel, 2021).

Despite extensive theoretical and empirical work, several gaps remain. First, most Nigerian studies rely on traditional econometric approaches such as Error Correction Models (ECM) and Vector Auto-regressive Models (VAR), with limited application of advanced techniques like nonlinear PPP tests, threshold regressions, and panel ARDL models (Ayodele & Olatunji, 2023; Anderl & Caporale, 2022). Second, the literature often overlooks moderating variables such as oil prices, fiscal deficits, and political risk, which are critical in shaping exchange rate dynamics in resource-dependent economies (Xie, Chen, & Hsieh, 2024). Third, comparative regional studies remain sparse, limiting insights into how Nigeria's experience aligns with or diverges from other Sub-Saharan African economies (Dung & Okereke, 2022).

The objective of this paper is therefore to provide a systematic review of literature on the relationship between foreign exchange rates and PPP, with emphasis on Nigeria's context. By synthesizing findings thematically—evidence supporting PPP validity, evidence of deviations, and methodological gaps—the review aims to map existing knowledge, identify critical shortcomings, and propose a research agenda for future studies. In doing so, the paper contributes to the broader discourse on exchange rate management and economic stability in developing economies, offering insights that are both academically rigorous and policy-relevant

LITERATURE REVIEW

Conceptual Framework

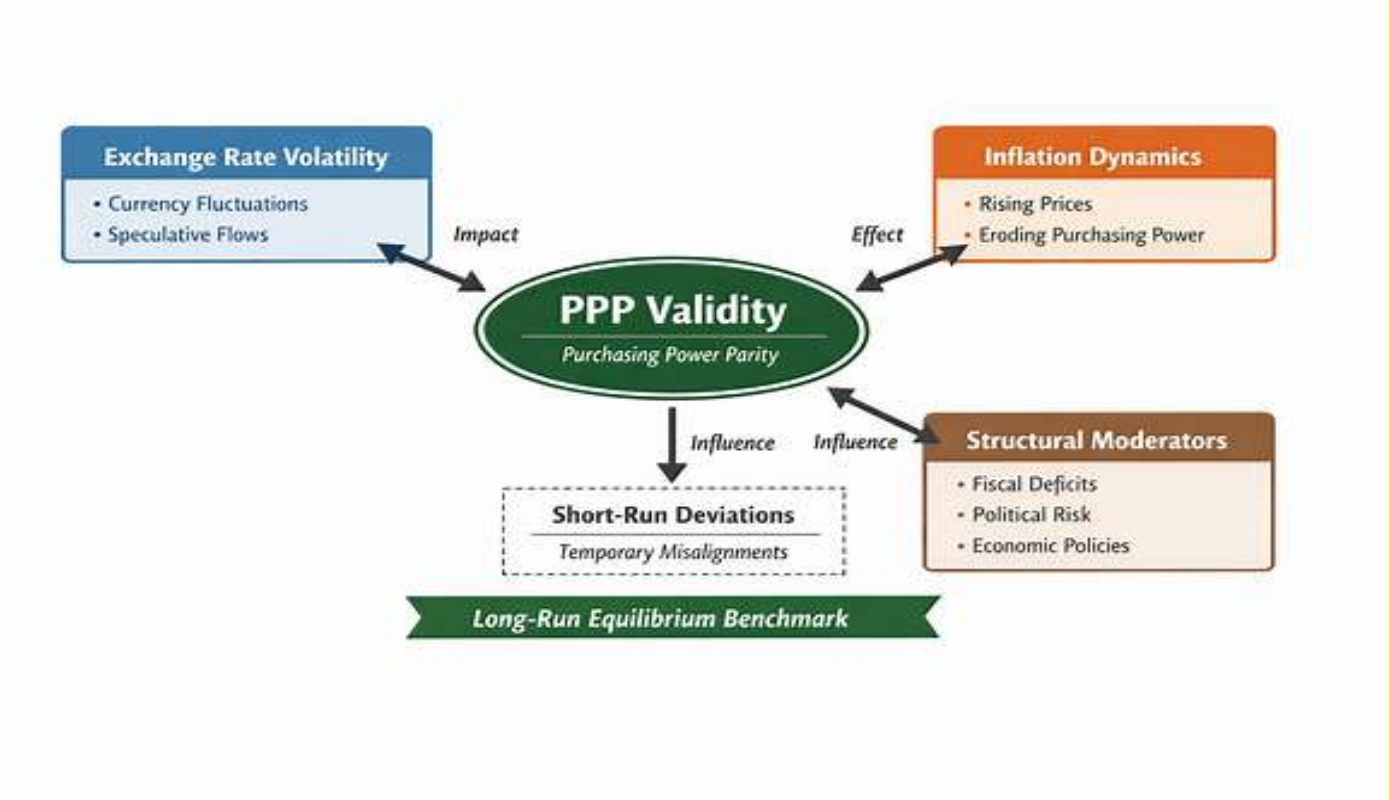
The conceptual framework guiding this study is anchored on the interaction between foreign exchange rate dynamics and purchasing power parity (PPP) within Nigeria's macroeconomic environment. PPP posits that exchange rates should adjust to equalize the purchasing power of currencies across countries (Cassel, 1918; Taylor & Taylor, 2023). However, empirical evidence suggests that this relationship is conditional, shaped by inflationary pressures, commodity dependence, and fiscal imbalances (Adebayo & Sulaimon, 2019; Olufemi & Adebayo, 2022).

This framework conceptualizes PPP validity as a long-run equilibrium condition, while recognizing that short-run deviations are driven by structural and policy-related distortions. Specifically, three dimensions are emphasized:

Exchange Rate Volatility – Persistent fluctuations in the naira, often linked to oil price shocks and speculative capital flows, disrupt PPP alignment (Obadan, 2006; Bergman & Gustafsson, 2023).
Inflationary Dynamics – Depreciation-induced inflation erodes consumer purchasing power, weakening PPP validity in the short run (Micheal & Daniel, 2021).
Policy and Structural Moderators – Fiscal deficits, political risk, and weak diversification amplify PPP deviations, underscoring the need for integrated policy responses (Dung & Okereke, 2022; Xie, Chen, & Hsieh, 2024).

Thus, the conceptual framework positions PPP as a benchmark for currency valuation but highlights its conditional validity in Nigeria's context. It integrates both economic shocks and policy interventions as moderating variables, providing a holistic lens for analyzing exchange rate behavior.

Figure 1: Conceptual Framework of PPP Validity in Nigeria



Source: https://copilot.microsoft.com/th/id/BCO.6bf064dd-7853-4caf-981a-6d475889dd88.png

Interpretation of the model:

Central Node (PPP Validity): Represents the benchmark condition where exchange rates align with purchasing power parity.

Exchange Rate Volatility (left): Currency fluctuations and speculative flows disrupt PPP equilibrium.

Inflation Dynamics (top right): Rising prices and erosion of purchasing power weaken PPP validity.

Structural Moderators (bottom right): Fiscal deficits, political risk, and policy misalignment amplify deviations.

Short-Run Deviations (below PPP): Temporary misalignment occur due to shocks and volatility.

Long-Run Equilibrium Benchmark (base): PPP tends to reassert itself over extended horizons, consistent with long-run theories.

This conceptual framework illustrates the dynamic relationship between exchange rate volatility, inflationary pressures, and structural moderators in shaping the validity of Purchasing Power Parity (PPP) in Nigeria. The model positions PPP as a long-run equilibrium benchmark, while acknowledging short-run deviations driven by shocks and structural constraints. Each component exerts a distinct influence—impact, effect, or moderation—on PPP outcomes, highlighting the need for integrated policy responses.

THEORETICAL FRAMEWORK

This study is underpinned by three major theoretical perspectives that explain the relationship between exchange rates and PPP:

Purchasing Power Parity Theory

PPP theory, which dates back to Cassel (1918), states that exchange rates fluctuate in order to equalize the cost of a standardized basket of commodities between nations. While relative PPP stresses inflation differences as the primary cause of exchange rate fluctuations, absolute PPP places more emphasis on price equalization (Samuelson, 1964; Rogoff, 1996). Despite deviations, PPP remains a cornerstone of international economics, offering a long-run equilibrium benchmark (Taylor & Taylor, 2023).

Monetary Approach to Exchange Rates

Building on Frenkel (1976), this theory posits that exchange rates are determined by relative money supplies, inflation expectations, and interest rates. It complements PPP by explaining short-run deviations through monetary shocks and policy misalignment. Dornbusch's (1976) overshooting model further elaborates how exchange rates can temporarily deviate from PPP due to sticky prices and speculative behavior.

Nonlinear and Asymmetric Adjustment Models

Recent scholarship emphasizes that PPP adjustments are not linear but often asymmetric, responding differently to depreciation versus appreciation (Anderl & Caporale, 2022; Lawali & Namadina, 2025). These models provide a more nuanced theoretical lens, capturing the complexity of exchange rate behavior in inflation-prone and commodity-dependent economies like Nigeria.

When combined, these theories offer a solid framework for PPP analysis in Nigeria. Asymmetric dynamics are captured by nonlinear models, short-run aberrations are explained by the monetary method, and long-run equilibrium is provided by PPP theory. This triangulation guarantees that the research is both theoretically sound and adaptable to new developments in methodology.

Empirical Review

Thematic Analysis

Theme A: Evidence Supporting PPP Validity

Several studies provide evidence that PPP holds, at least in the long run, within Nigeria and other economies. Ononugbo (2005) employed an error correction model (ECM) to examine the co-movement between the naira exchange rate and relative price levels of Nigeria and the United States. His findings confirmed PPP validity, showing that exchange rates revert to equilibrium after shocks. Similarly, Nwachukwu and Chijioke (2020) used Johansen cointegration and Granger causality tests to demonstrate that exchange rate misalignment in Nigeria have long-term effects consistent with PPP predictions. These results align with Rogoff's (1996) global evidence that suggests PPP often reasserts itself over extended periods, even though short-term deviations occur. International studies also support partial PPP validity: Bergman and Gustafsson (2023) found that exchange rate depreciation in Sweden leads to long-run price adjustments, while Ceglowski (2003) reported convergence toward PPP in several developing economies. Collectively, these findings suggest that PPP remains a useful benchmark for long-term exchange rate analysis, even in volatile environments.

Table 1 - Theme A: Evidence Supporting PPP Validity

Author(s) & Year	Methodology	Key Findings	Critique
Ononugbo (2005)	Error Correction Model (ECM)	PPP holds in Nigeria; exchange rate reverts to equilibrium after shocks.	Limited to Nigeria–US comparison; lacks broader regional perspective.
Nwachukwu & Chijioke (2020)	Johansen cointegration; Granger causality	Long-run PPP validity; misalignment contribute to persistent inflation.	Short-term effects not adequately explored.

Rogoff (1996)	Global empirical synthesis	PPP tends to hold in the long run despite short-term deviations.	Lacks focus on developing economies.
Bergman & Gustafsson (2023)	Cointegration analysis (Sweden)	Exchange rate depreciation leads to long-run price adjustments consistent with PPP.	Context limited to advanced economy; not generalizable to Nigeria.

Source: Researchers Compilation (2026)

Evidence from both Nigerian and international contexts suggests that PPP holds in the long run, with exchange rates reverting to equilibrium after shocks. These findings reinforce PPP's relevance as a benchmark for currency valuation, though they remain limited by narrow geographic scope and insufficient exploration of short-term dynamics.

Theme B: Evidence of PPP Deviations

Other studies highlight persistent deviations from PPP, particularly in Nigeria's inflationary and commodity-dependent context. Adebayo and Sulaimon (2019) applied an ARDL model to show that exchange rate volatility significantly disrupts PPP, primarily by fueling inflation and distorting price levels. Olufemi and Adebayo (2022) found that naira depreciation undermines PPP by triggering inflationary spirals, reducing consumer purchasing power. Micheal and Daniel (2021), using a Vector Auto-regressive (VAR) model, concluded that devaluation of the naira had a significant negative effect on PPP, eroding welfare through higher inflation. These findings resonate with Dornbusch's (1976) overshooting model, which explains short-term deviations driven by monetary shocks. Globally, Anderl and Caporale (2022) demonstrated nonlinear and asymmetric PPP adjustments across inflation-targeting countries, while Xie, Chen, and Hsieh (2024) confirmed that PPP adjustments often respond unevenly to inflation shocks, highlighting the need for models that capture nonlinear dynamics. Together, these studies underscore that PPP validity is conditional and often undermined by structural distortions, policy misalignment, and external shocks.

Table 2 - Theme B: Evidence of PPP Deviations

Author(s) & Year	Methodology	Key Findings	Critique
Adebayo & Sulaimon (2019)	ARDL model	Exchange rate volatility disrupts PPP; inflation distortion observed.	Focuses on volatility; ignores global shocks and trade balances.
Olufemi & Adebayo (2022)	Cointegration analysis	Naira depreciation undermines PPP by triggering inflationary spirals.	External trade policies and commodity prices not considered.
Micheal & Daniel (2021)	Vector Auto-regressive (VAR)	Naira devaluation reduces purchasing power significantly.	Sectoral breakdown of PPP impacts missing.
Dornbusch (1976)	Overshooting model	Monetary shocks cause short-term PPP deviations before stabilization.	Theoretical; lacks empirical Nigerian application.
Anderl & Caporale (2022)	Nonlinear PPP model	Asymmetric PPP adjustments across inflation-targeting countries.	Global scope; Nigerian application absent.
Xie, Chen, & Hsieh (2024)	Nonlinear cointegration	PPP deviations persist due to asymmetric inflation responses.	Focused on international sample; Nigeria not included.

Source: Researchers Compilation (2026)

Studies highlight persistent PPP deviations in Nigeria, largely driven by inflationary shocks, naira volatility, and structural dependence on oil. International evidence confirms that PPP adjustments are often nonlinear and asymmetric, suggesting that traditional linear models underestimate the complexity of exchange rate behavior.

Theme C: Methodological Gaps

A recurring limitation in Nigerian PPP studies is methodological simplicity. Mostly rely on ECM, VAR, or basic cointegration techniques (Ayodele & Olatunji, 2023), with limited application of advanced econometric approaches. Nonlinear PPP tests, threshold regressions, and panel ARDL models remain underutilized, despite their ability to capture asymmetries and cross-country dynamics (Lawali & Namadina, 2025; Xie et al., 2024). For instance, while Dung and Okereke (2022) conducted a panel study of Anglophone West African countries, their reliance on panel least squares limited insights into sectoral differences and nonlinear dynamics. Moreover, many Nigerian studies fail to incorporate moderating variables such as oil prices, fiscal deficits, and political risk, which are critical in shaping exchange rate behavior in resource-dependent economies (Obadan, 2006; Olufemi & Adebayo, 2022). International literature demonstrates the value of methodological innovation: nonlinear ARDL and threshold cointegration models reveal asymmetric PPP adjustments that traditional linear models overlook (Anderl & Caporale, 2022). Expanding Nigerian research to include these techniques would significantly deepen understanding of PPP dynamics.

Table 3 - Theme C: Methodological Gaps

Author(s) & Year	Methodology	Key Findings	Critique
Ayodele & Olatunji (2023)	Error Correction Model (ECM)	Positive relationship between exchange rate fluctuations and PPP.	Relies on linear models; nonlinear dynamics ignored.
Dung & Okereke (2022)	Panel Least Squares (PLS)	Inflation, interest rate, and trade terms depreciate exchange rates in West Africa.	Sectoral differences not analyzed; lacks nonlinear modeling.
Lawali & Namadina (2025)	Asymmetric ARDL	Exchange rate depreciation and appreciation have asymmetric inflation effects.	Focused on inflation; broader PPP implications underexplored.
Obadan (2006)	Policy analysis	Exchange rate management challenges in Nigeria linked to PPP deviations.	Descriptive; lacks econometric testing.

Source: Researchers Compilation (2026)

Methodological gaps remain a major limitation in Nigerian PPP research. Nigerian PPP studies frequently depend on traditional econometric tools such as ECM and VAR, which limit their ability to capture nonlinear and sectoral dynamics such as nonlinear ARDL, threshold regressions, or panel models. International literature demonstrates the value of these approaches, but Nigerian studies have yet to fully adopt them, leaving critical dynamics unexplored.

Synthesis

The literature reveals three dominant patterns. First, is Partial PPP validity in the long run, that is exchange rates tend to revert to equilibrium, supporting PPP as a benchmark; second - persistent deviations in the short run driven by inflationary shocks, volatility and structural distortions, and three - methodological limitations is evident in reliance on traditional models, with insufficient use of nonlinear and panel approaches.

This synthesis highlights both the utility and limitations of PPP in Nigeria's context. While PPP provides a framework for understanding exchange rate behavior, its predictive power is constrained by methodological gaps and structural realities. Addressing these shortcomings requires broader coverage, deeper methodological critique, and integration of moderating variables.

METHODOLOGY

This study adopted a systematic literature review design, focusing on empirical and theoretical works that

examine the relationship between foreign exchange rates and purchasing power parity (PPP). The review emphasizes Nigeria but situates findings within broader international evidence to allow comparative insights. Relevant literature was identified through searches of academic databases including Google Scholar, JSTOR, ScienceDirect, EconLit, and African Journals Online (AJOL). Supplementary sources included working papers, policy briefs from the Central Bank of Nigeria, and international institutions such as the IMF and World Bank.

DISCUSSION

Building on the conceptual and theoretical foundations, the discussion examines how PPP deviations manifest in Nigeria's macroeconomic environment. As highlighted in Figure 1, exchange rate volatility, inflationary dynamics, and structural moderators interact to produce persistent short-run misalignment that weaken purchasing power and economic stability. Depreciation of the naira often translates into higher import costs, fueling inflationary spirals that erode consumer welfare and complicate monetary policy. At the same time, these deviations exacerbate debt sustainability challenges, as foreign-denominated obligations become more expensive to service under a weakened currency. Trade competitiveness is similarly constrained, with potential gains from cheaper exports offset by structural dependence on oil and underdeveloped non-oil sectors. Taken together, PPP deviations serve as practical signals of Nigeria's macroeconomic fragility, linking inflation, debt, and trade into a single narrative of vulnerability that requires integrated policy responses.

Inflationary Pressures

Exchange rate depreciation in Nigeria often translates directly into higher import costs, which in turn fuel inflationary spirals that erode consumer welfare. As an import-dependent economy, Nigeria is particularly vulnerable to this dynamic: when the naira weakens, the cost of essential goods such as food, fuel, and manufactured products rises sharply. These inflationary pressures reduce household purchasing power and complicate monetary policy, as the Central Bank of Nigeria struggles to balance exchange rate stabilization with inflation targeting (Olufemi & Adebayo, 2022; Micheal & Daniel, 2021).

Moreover, PPP deviations serve as early warning signals of inflationary shocks. Persistent misalignment between exchange rates and domestic price levels highlight structural vulnerabilities, including reliance on oil revenues and limited diversification. Without effective inflation management, PPP deviations can quickly escalate into broader macroeconomic instability, undermining both consumer confidence and investor sentiment.

Debt Sustainability

Figure 1 underscores that PPP deviations are conditional, driven by volatility, inflation, and structural weaknesses, which collectively explain Nigeria's persistent macroeconomic fragility

PPP deviations also carry significant implications for Nigeria's external debt management. When the naira depreciates, the cost of servicing foreign-denominated debt rises, increasing fiscal pressure and reducing resources available for development spending. Exchange rate misalignment exacerbate this challenge by creating uncertainty in debt repayment projections, making it difficult for policymakers to plan long-term fiscal strategies. This dynamic often forces Nigeria into cycles of borrowing and refinancing, which further weakens fiscal credibility (Dung & Okereke, 2022).

Furthermore, PPP deviations demonstrate the relationship between fiscal imbalances and exchange rate volatility. Budget deficits exacerbate inflationary pressures and jeopardize currency stability when they are not accompanied by revenue growth. Maintaining debt viability requires coordinating fiscal policy with exchange rate management, which can be achieved by better revenue collection, rationalized spending, and fiscal regulations that restrict excessive borrowing. PPP deviations are therefore useful indicators of fiscal fragility rather than just theoretical anomalies.

Trade Competitiveness

While exchange rate depreciation can make Nigerian exports cheaper and potentially boost competitiveness, the benefits are often offset by inflationary pressures and structural dependence on oil. Non-oil sectors such as

agriculture and manufacturing remain underdeveloped, limiting Nigeria's ability to leverage PPP adjustments for trade diversification. As a result, PPP deviations frequently reinforce existing structural weaknesses rather than creating opportunities for growth (Obadan, 2006; Adebayo & Sulaimon, 2019).

Furthermore, PPP findings illuminate Nigeria's broader trade competitiveness challenges within regional and global contexts. Persistent misalignment undermine investor confidence and complicate trade negotiations, while volatility discourages long-term commitments from international partners. Strengthening non-oil exports, investing in manufacturing, and promoting regional cooperation within ECOWAS could help Nigeria stabilize foreign exchange earnings and reduce vulnerability to commodity price shocks. In this sense, PPP deviations serve as both a diagnostic tool and a policy signal for trade competitiveness reform.

Concluding Synthesis

Taken together, the evidence demonstrates that PPP deviations in Nigeria are not isolated anomalies but interconnected signals of deeper macroeconomic fragility. Inflationary spirals triggered by exchange rate depreciation erode consumer welfare and weaken monetary policy effectiveness, while rising debt burdens expose fiscal vulnerabilities and undermine long-term sustainability. At the same time, structural dependence on oil exports constrains trade competitiveness, preventing Nigeria from leveraging PPP adjustments for diversification and growth. These dynamics reinforce one another, creating a cycle in which volatility, inflation, and fiscal imbalances perpetuate economic instability. By situating PPP deviations within this integrated narrative, the discussion underscores the urgent need for coordinated policy responses that combine inflation targeting, debt management, and trade diversification to strengthen Nigeria's resilience in the face of external shocks and domestic structural weaknesses.

Policy Implications

The synthesis of evidence on PPP deviations underscores the urgent need for Nigeria to adopt integrated and forward-looking policy responses. Persistent inflationary pressures, rising debt burdens, and weak trade competitiveness reveal that exchange rate misalignment are not merely theoretical anomalies but practical indicators of macroeconomic fragility. To address these challenges, policymakers must strengthen inflation targeting by explicitly incorporating PPP deviations into monetary policy models, align fiscal discipline with exchange rate management to reduce deficits and borrowing pressures, and diversify the export base beyond oil to enhance resilience against external shocks. In addition, adopting advanced econometric monitoring tools and fostering regional cooperation within ECOWAS would provide Nigeria with more accurate forecasts and greater stability in exchange rate regimes. These implications highlight that PPP evidence is not only academically relevant but also directly applicable to Nigeria's economic management strategies.

Inflation Targeting

Evidence shows that exchange rate depreciation in Nigeria often triggers inflationary spirals that erode purchasing power (Olufemi & Adebayo, 2022; Micheal & Daniel, 2021). This underscores the need for a more robust inflation-targeting framework by the Central Bank of Nigeria (CBN). Policy should integrate PPP deviations into inflation forecasts, ensuring that monetary responses—such as interest rate adjustments—anticipate the inflationary effects of exchange rate misalignment. By explicitly linking PPP monitoring to inflation targeting, Nigeria can strengthen price stability and reduce welfare losses.

Furthermore, adopting forward-looking models that incorporate nonlinear PPP dynamics would improve the accuracy of inflation projections. This would allow the CBN to respond proactively to shocks rather than reactively, thereby enhancing credibility and stabilizing expectations in financial markets.

Oil Dependence and External Shocks

Nigeria's reliance on oil exports makes its exchange rate highly vulnerable to global commodity price fluctuations (Obadan, 2006; Adebayo & Sulaimon, 2019). PPP deviations are often amplified during periods of oil price volatility, leading to exchange rate instability and inflationary pressures. Policy implications include diversifying Nigeria's export base to reduce dependence on oil revenues. Expanding non-oil sectors such as

agriculture and manufacturing would stabilize foreign exchange earnings, mitigate PPP deviations, and enhance resilience against external shocks.

In addition, adopting hedging mechanisms and building stronger foreign reserves can cushion the economy against oil price swings. These measures would reduce the transmission of external shocks into domestic inflation and exchange rate volatility, thereby reinforcing PPP stability.

Fiscal Policy Alignment

PPP deviations are also linked to fiscal imbalances, including budget deficits and inconsistent government spending (Dung & Okereke, 2022). Unbalanced fiscal expansion, when not matched by revenue growth, intensifies inflationary pressures and undermines currency stability. To address this, Nigeria must align fiscal policy with exchange rate management by reducing fiscal deficits through improved tax collection and expenditure rationalization.

Coordinating fiscal and monetary policies is equally important to avoid conflicting signals that destabilize exchange rates. Implementing fiscal rules that limit excessive borrowing would reduce pressure on the naira and support PPP stability. In this way, fiscal discipline becomes a critical complement to monetary policy in sustaining exchange rate credibility.

Methodological Monitoring

The review highlights methodological gaps in Nigerian PPP studies, with limited use of nonlinear and panel ARDL models (Ayodele & Olatunji, 2023; Anderl & Caporale, 2022). Policymakers should adopt advanced econometric monitoring tools to capture asymmetric and threshold effects in exchange rate dynamics. Integrating such models into policy analysis would provide more accurate forecasts of PPP deviations, enabling proactive interventions in exchange rate management.

For example, nonlinear ARDL and threshold cointegration models can reveal asymmetric responses to inflation shocks, while panel ARDL approaches allow for regional comparisons across Sub-Saharan Africa. By institutionalizing these methods within policy frameworks, Nigeria can strengthen its analytical capacity and improve the precision of exchange rate management.

Regional and Global Coordination

Nigeria's exchange rate management cannot be isolated from broader regional and global contexts. PPP deviations in Nigeria often mirror those in other Sub-Saharan economies (Dung & Okereke, 2022). Strengthening regional monetary cooperation within ECOWAS could help harmonize exchange rate policies, reduce volatility, and enhance competitiveness.

At the global level, Nigeria should align its PPP monitoring with international best practices, ensuring that domestic policies remain credible to investors and trading partners. By embedding PPP analysis into regional and global coordination frameworks, Nigeria can enhance resilience, attract investment, and improve its standing in international trade.

Concluding Synthesis

In sum, the policy implications of PPP deviations in Nigeria highlight the need for a multidimensional and coordinated response. Strengthening inflation targeting ensures that monetary policy anticipates the inflationary effects of exchange rate misalignment, while reducing oil dependence through diversification cushions the economy against external shocks. Aligning fiscal discipline with exchange rate management addresses deficits and borrowing pressures, and adopting advanced econometric monitoring tools enhances the accuracy of forecasts and interventions. Finally, embedding PPP analysis within regional and global coordination frameworks reinforces credibility and stability in international markets. Taken together, these strategies underscore that PPP evidence is not merely theoretical but a practical guide for policy design, offering Nigeria a pathway to greater resilience, stability, and competitiveness in the global economy.

Research Agenda

Building on the insights from this study, future research should prioritize **methodological innovation**, particularly the application of nonlinear and panel ARDL models to capture asymmetric and threshold effects in PPP deviations. Incorporating **moderating variables** such as fiscal deficits, political risk, and trade openness will enrich the analysis by highlighting the structural conditions under which PPP holds or fails. In addition, a stronger **sectoral focus**—examining agriculture, manufacturing, and services separately—will provide a more nuanced understanding of how exchange rate misalignment affect different parts of Nigeria's economy. Together, these directions establish a comprehensive agenda that advances both theoretical rigor and policy relevance in the study of PPP validity.

Methodological Innovation

Future research on PPP validity in Nigeria must move beyond traditional linear models and embrace more advanced econometric techniques. Nonlinear ARDL, threshold cointegration, and panel ARDL approaches can capture asymmetric responses to shocks and reveal conditions under which PPP holds or fails. These methods allow researchers to identify whether depreciation and appreciation have different impacts on inflation, debt, and trade competitiveness, thereby providing richer insights than conventional models.

In addition, methodological innovation should extend to comparative regional studies, applying panel ARDL across Sub-Saharan Africa to assess whether Nigeria's PPP deviations are unique or part of broader regional patterns. This would strengthen both the theoretical and empirical foundations of PPP research, ensuring greater policy relevance.

Moderating Variables

Another critical direction for future research is the incorporation of moderating variables that shape PPP outcomes. Fiscal deficits, political risk, trade openness, and institutional quality all influence the extent to which PPP deviations persist or converge. By explicitly modeling these moderators, scholars can move beyond simple exchange rate–inflation relationships to uncover the structural conditions under which PPP validity is enhanced or undermined.

For example, fiscal discipline may moderate the inflationary effects of exchange rate depreciation, while political instability may amplify volatility. Integrating such variables into econometric models will provide policymakers with a more nuanced understanding of how structural reforms can strengthen PPP validity in Nigeria.

Sectoral Focus

Finally, future research should adopt a sectoral lens to examine how PPP deviations affect different parts of Nigeria's economy. Agriculture, manufacturing, and services respond differently to exchange rate misalignment, with implications for competitiveness, employment, and growth. A sectoral focus would reveal whether PPP deviations disproportionately harm consumer goods, industrial inputs, or service-based industries, thereby guiding targeted policy interventions.

Such analysis would also highlight opportunities for diversification. For instance, if PPP deviations consistently undermine manufacturing competitiveness, policies could prioritize stabilizing exchange rates for industrial inputs. Conversely, if agriculture proves more resilient, research could explore how to leverage this sector for export diversification. Sectoral studies thus provide a granular perspective that complements macro-level analysis.

CONCLUSION

The validity of Purchasing Power Parity (PPP) in Nigeria has been investigated in this study, which places it within theoretical and conceptual frameworks. The assessment of the literature showed that although PPP provides a helpful long-term baseline for currency valuation, its predictive ability in Nigeria is limited by recurring short-term departures caused by exchange rate volatility, inflationary shocks, and structural reliance

on oil earnings. The discussion focused on the practical manifestations of these aberrations, which include weakening trade competitiveness due to inadequate diversification, eroding consumer welfare through inflationary pressures, and undermining fiscal credibility through growing debt burdens. When taken as a whole, these results highlight the fact that PPP deviations are linked indicators of Nigeria's macroeconomic vulnerability rather than abstract oddities.

The analysis's policy implications highlight the necessity of integrated solutions that incorporate enhanced econometric monitoring, fiscal restraint, diversification outside of oil, strong inflation targeting, and regional collaboration. These suggestions show how PPP evidence may be directly applied to Nigeria's economic management, providing policymakers with a diagnostic tool to identify risks and plan coordinated remedies. Simultaneously, the research agenda indicates future directions that will enhance theoretical and empirical understanding: sectoral analyses to identify distinct impacts across manufacturing, services, and agriculture; methodological innovation to capture nonlinear dynamics; and incorporation of moderating variables to reflect structural realities.

In summary, PPP validity in Nigeria needs to be viewed as conditional, influenced by the interaction of structural limitations, policy decisions, and economic shocks. This paper offers a thorough framework for examining exchange rate behavior in Nigeria by combining conceptual insights, theoretical underpinnings, applied discussion, policy implications, and a future research goal. In the end, PPP evidence is reframed as both an intellectual concept and a useful manual for boosting stability, resilience, and competitiveness in Nigeria's economy.

In the end, this study emphasizes that PPP deviations in Nigeria are practical indicators of economic fragility with ramifications for both research and policy, rather than just an intellectual conundrum. The results show that in order to improve theoretical understanding, researchers must improve methodology and include structural moderators. Policymakers can use PPP evidence as a diagnostic tool to identify weaknesses and create coordinated solutions that increase resilience. In a broader sense, our approach supports Nigeria's economic future by redefining PPP as a link between theory and practice, directing tactics that support competitiveness, stability, and sustainable growth.

This study confirms that Nigeria's route to stability and resilience is to turn exchange rate fragility into a basis for long-term economic reform by redefining PPP deviations as both a theoretical lens and a useful diagnostic.

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