Macroeconomic Policy Implications of African Continental Free Trade Area (AfCFTA) for Nigeria

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Abstract

This research analysed the macroeconomic policy implications of the African Continental Free Trade Area (AfCFTA) for Nigeria from 2019 to 2023. A quantitative study methodology was utilised, employing regression analysis to examine the association between AfCFTA and essential macroeconomic variables. The study's findings indicated that AfCFTA significantly enhanced Nigeria's GDP and trade balance, implying that greater trade liberalisation might foster economic growth and elevate Nigeria's foreign trade performance. The study revealed no significant correlation between AfCFTA and inflation, suggesting that inflation in Nigeria is predominantly affected by local factors, including fiscal and monetary policy, rather than external trade agreements. The regression model successfully passed essential diagnostic tests for multicollinearity, heteroskedasticity, and autocorrelation, hence affirming the dependability of the results. The study concludes that Nigeria can benefit from AfCFTA through economic growth and trade expansion; however, the country must implement suitable macroeconomic policies to tackle current challenges, including infrastructure deficits and industry preparedness, to fully leverage the agreement's potential. The study advocated for the enhancement of trade facilitation infrastructure, the support of export-oriented industries, the promotion of public-private partnerships, the maintenance of fiscal discipline to control inflation, and the improvement of the overall business environment to ensure Nigeria's competitiveness in the AfCFTA market. These strategies will empower Nigeria to optimise the advantages of AfCFTA while alleviating potential risks and challenges linked to heightened trade liberalisation.

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1. Introduction

The African Continental Free Trade Area (AfCFTA), initiated in 2018 and implemented in 2021, signifies a pivotal milestone in the economic integration of Africa, with the objective of establishing a cohesive market for goods, services, and investments among African Union member states (Nkalu & Udeaja, 2020). The AfCFTA, the largest free trade area worldwide in terms of participating nations, aims to enhance intra-African trade by diminishing tariffs and non-tariff obstacles, while promoting regional value chains and economic diversification. The AfCFTA possesses revolutionary potential for Nigeria, Africa's largest economy by GDP, since it can augment the nation's exports, improve competitiveness, and stimulate industrialisation (United Nations Economic Commission for Africa [UNECA], 2021). Nonetheless, although the AfCFTA provides significant benefits, Nigeria's participation into this extensive trading framework also poses several macroeconomic policy concerns. The expected rise in imports and exports might substantially affect Nigeria's balance of trade, thereby worsening current structural imbalances in the economy (Adekunle, et al., 2022). Similarly, as rivalry intensifies, Nigerian companies may encounter heightened demands for innovation and possible threats from neighbouring nations with superior production capabilities (Mould & Mukwaya, 2019). The capacity of AfCFTA to draw foreign investment is contingent upon the efficacy of Nigeria's regulatory, fiscal, and trade policies, which must evolve to meet the requirements of a regionalised economy (Olayinka, et al., 2023). Adjustments in macroeconomic policy, especially regarding currency stability, trade liberalisation, and fiscal incentives, are crucial for Nigeria to capitalise on the advantages of AfCFTA while alleviating concerns (African Development Bank, 2022). Despite significant excitement for the AfCFTA, concerns remain, with experts emphasising the necessity for country-specific studies to evaluate its effects on growth, employment, and poverty reduction among member states. A thorough analysis of Nigeria's macroeconomic policy within the AfCFTA framework is necessary to assist policymakers in utilising the trade area for sustainable economic growth (Aladejebi & Adedoyin, 2021). However, this paper examined themacroeconomic policy implications of the African Continental Free Trade Area (AfCFTA) for Nigeria.

1.2 Statement of the Problem

The AfCFTA offers Nigeria significant prospects with formidable obstacles, since the trade area may heighten competitiveness throughout the continent, affecting the configuration of Nigeria's economy. Although Nigeria is a prominent economy in Africa, its manufacturing sector remains underdeveloped relative to other African nations, prompting worries regarding its competitiveness under the AfCFTA framework (Orji, et al., 2021). Furthermore, the liberalisation of trade and the removal of tariffs may result in an influx of imports in Nigeria, exacerbating its trade deficit and impeding the expansion of native industries. Concerns exist regarding probable revenue decline due to lowered tariffs, which may undermine the government's economic stability and impact public service funding (Akpan & Udoh, 2020). The insufficient infrastructure, including transport and electricity, together with security issues, may impede Nigeria's ability to fully capitalise on AfCFTA (Omobolaji, et al., 2023). Theoretical studies indicate that free trade may foster growth; nevertheless, the precise effects of AfCFTA on Nigeria's macroeconomic stability are still ambiguous. This research examines the essential requirement to comprehend the impact of AfCFTA on Nigeria's macroeconomic 283environment and suggests policy modifications to promote sustainable growth within this emerging trade framework.

2. Review of Related Literature

2.1 Conceptual Framework

2.1.1 Overview of African Continental Free Trade Area (AfCFTA)

The African Continental Free Trade Area (AfCFTA), initiated in January 2021, seeks to unify Africa’s economies by establishing a cohesive market of over 1.3 billion individuals, with a collective GDP of around $3.4 trillion, thereby rendering it the largest free trade area in the world by membership (Anyanwu, 2021; United Nations Economic Commission for Africa, 2020). The AfCFTA aims to diminish tariffs on 90% of goods, thereby promoting the unrestricted movement of money and individuals, ultimately improving intra-African trade, which is significantly lower than that of other areas (African Union, 2019). The ramifications of AfCFTA for Nigeria are significant, as it is the largest economy on the continent, a major oil exporter, and an essential market for regional commerce (Akinkunmi, 2022). Researchers have determined that the success of AfCFTA depends on rectifying infrastructural deficiencies, standardising regulatory frameworks, and regulating competitive interactions among member states to prevent market disparities (Obayelu & Adepoju, 2023; Mureverwi, 2021). Furthermore, although AfCFTA presents Nigeria with considerable prospects for industrial diversification and economic expansion, it also presents challenges for local industries that may find it difficult to compete with imports from other African countries, thereby requiring supportive policies to facilitate the transition (Olanrewaju, et al., 2021). The agreement encompasses norms regarding products, services, investment, and intellectual property, jointly designed to stimulate economic development inside African economies (Akinyele, 2020).

2.1.2 Key Macroeconomic Policies in Nigeria

Nigeria's macroeconomic policies have developed to tackle several economic difficulties, including inflation management, exchange rate stability, and fiscal consolidation (Olaoye & Adegoke, 2022). At the core of Nigeria's macroeconomic strategy are initiatives designed to diversify the economy away from oil reliance, foster sustainable industrialisation, and stabilise the naira in the face of currency fluctuations (Central Bank of Nigeria, 2021). Fiscal policy has concentrated on augmenting non-oil income via tax reforms, whilst the Central Bank of Nigeria (CBN) implements monetary policy through interest rate modifications and liquidity management to mitigate inflation, which stays consistently elevated due to structural causes (Akinwale, 2021). Additionally, the Economic Recovery and Growth Plan (ERGP), initiated in 2017, and the Nigeria Economic Sustainability Plan (NESP) established in 2020, have underscored structural reforms aimed at improving productivity and promoting job creation, critical aspects expected to coincide with AfCFTA objectives (Adedayo, 2022). The congruence of Nigeria's macroeconomic policies with AfCFTA objectives is essential to harness the expected trade advantages, particularly as trade liberalisation may enhance government revenue via customs duties while necessitating economic adjustments to safeguard vulnerable sectors (Okoli & Mbah, 2023). Macroeconomic stability is essential for Nigeria's participation in AfCFTA, as erratic policies may hinder investment inflows and weaken the competitiveness of local industries (Ibekwe, 2023).

2.1.3 Trade Policies and Regional Economic Integration in Africa

Africa's trade policy and regional integration initiatives have grown in recent decades, culminating in the AfCFTA as a premier endeavour within the African Union's Agenda 2063 (ECA, 2021). Regional Economic Communities (RECs), such as the Economic Community of West African States (ECOWAS), have significantly contributed to fostering economic cooperation, though their success has been inconsistent due to infrastructural deficiencies, political factors, and disjointed policies among nations (Nwosu & Kalu, 2022). Essential components of trade policy include tariff reductions, customs collaboration, and the establishment of frameworks for investment protection and dispute resolution to facilitate cross-border commerce (Aigbokhan & Yusuf, 2023). The notion of regional economic integration in Africa is based on strengthening economic resilience, promoting value chain connections, and diminishing external economic reliance, which are essential for sustainable development (Mohammed & Adepoju, 2023). In Nigeria, ECOWAS serves as a basic framework for executing AfCFTA policies, wherein the harmonisation of trade standards and the reduction of non-tariff barriers are essential for enhancing regional trade dynamics (Olawale, 2020). Scholars emphasise that regional integration in Africa has been hindered by factors such as inadequate institutional frameworks, insufficient intra-African connection, and economic structural imbalances (Obioma, et al., 2023). The AfCFTA aims to resolve these challenges by improving policy consistency among member states and promoting infrastructural investments necessary for the uninterrupted flow of goods and services (Acheampong & Mensah, 2022). Nigeria must reconcile the prospects presented by AfCFTA with its national trade policy to prevent internal economic disturbances while capitalising on regional integration (Adetunji, 2023).

2.1.4 Challenges and Risks Posed by AfCFTA on Nigeria's Domestic Industries and Fiscal Policies

The AfCFTA presents significant challenges and risks for Nigeria's domestic industry and budgetary policy. Nigeria's industrial sector, yet emerging compared to other African nations such as South Africa and Egypt, confronts dangers from heightened competitiveness that may jeopardise local businesses incapable of enduring competitive pressures (Adekunle, et al., 2021). Small and medium-sized enterprises (SMEs), which constitute the foundation of Nigeria's economy, may be especially susceptible, as they frequently lack the economies of scale required to compete with more established overseas companies (Ogundipe&Ojeaga, 2019). Fiscal policy concerns are high, as tariff reductions on imports from AfCFTA member nations are expected to diminish government revenue from import taxes, which constitute a substantial component of Nigeria's non-oil revenue (Ezenwa & Ogbaga, 2022). The decrease in tariffs may burden public budgets; potentially affecting funding for essential infrastructure and social programs unless counterbalanced by heightened trade volumes or new revenue sources (Olufemi & Adeyemi, 2023). A further difficulty stems from the possible regulatory and operational misalignment among AfCFTA members, since divergent standards and practices may incur compliance costs and hinder cross-border trade efficiency (Amadi, et al., 2022). Nigeria's difficulties with border security and smuggling intensify these issues, as inadequate border controls may result in an influx of inferior goods that undermine domestic prices, hence further burdening local industries (Obi &Salisu, 2023). Nigeria must implement strategic policies to manage these risks, including capacity-building initiatives for local sectors, fiscal reforms to offset lost revenue, and improved regulatory procedures for consistent cross-border commerce (Okorie &Ude, 2021).

2.2 Theoretical Review

2.2.1 Comparative Advantage Theory

The Comparative Advantage Theory, introduced by David Ricardo in 1817, asserts that nations gain by specialising in the production of commodities and services they can provide more efficiently than others. Ricardo posits that comparative advantage enables governments to allocate resources to industries with a lower opportunity cost, hence enhancing global trade efficiency (Irwin, 2019). This theory is based on assumptions such as perfect competition, continuous returns to scale, and the immobility of labour and capital across borders (Johnson & Ruffin, 2018). It posits that international trade is advantageous for both nations, even when one nation possesses an absolute edge in numerous products.

Recent studies highlight the importance of comparative advantage in the African Continental Free Trade Area (AfCFTA). Adekunle (2020) contends that Nigeria can capitalise on

AfCFTA’s open market by specialising in industries like agriculture and crude oil to access new trade opportunities. Obasan and Kehinde (2022) assert that AfCFTA promotes specialisation, resulting in efficient resource allocation, decreased production costs, and improved productivity among participating African nations. Nonetheless, researchers such as Adeleye and Oni (2021) challenge the theory's practical validity in poor nations like Nigeria, where obstacles include insufficient infrastructure, restricted access to technology, and trade limitations hinder its effectiveness. Ajayi, et al., (2023) express apprehensions over the influence of competitive pressures from more industrialised African nations, which may hinder Nigeria’s industries from fully capitalising on comparative advantage.

Critics of Comparative Advantage Theory contend that it simplifies global trade by supposing unchanging comparative advantages and neglecting variables such as technology progress and resource allocation (Oluwole & Okoli, 2019). Nigeria's reliance on oil exports may result in volatility from shifting oil prices, undermining the concept of a stable comparative advantage. Nonetheless, the theory is pertinent for comprehending Nigeria's prospective economic status within AfCFTA, highlighting the necessity for Nigeria to cultivate non-oil industries to diversify and secure enduring trade benefits in the free trade area.

2.2.2 Economic Integration Theory

The Economic Integration Theory, proposed by Bela Balassa in 1961, delineates the stages of economic integration: free trade regions, customs unions, common markets, and economic unions (Balassa, 1961). The theory posits that economic integration promotes trade creation, resulting in new commerce among member states, and trade diversion, when trade transitions from non-member to member states as a consequence of preferential policies (Martinez &Nicolini, 2020). These concepts rely on the premises of market accessibility, tariff abolition, and the alignment of economic policies among linked regions.

In the context of the AfCFTA, economic integration provides a framework for comprehending the expected advantages of diminished trade barriers and enhanced intra-African commerce. Nwankwo and Ude (2021) assert that AfCFTA has the potential to stimulate economic growth in Nigeria by broadening export markets and improving competitive capabilities. Furthermore, Yusuf and Oladimeji (2023) contend that integration will diminish trade expenses, allowing Nigeria to participate more vigorously in intercontinental commerce. Nonetheless, economic integration in Africa encounters distinct hurdles, such as disparate levels of economic growth and infrastructural deficiencies, which experts like Asiedu and Mensah (2022) contend may hinder Nigeria's complete involvement. Adewale, et al., (2020) assert that Nigeria's regulatory system necessitates substantial modifications to conform to AfCFTA's rules, hence complicating Nigeria's integration into the free trade area.

Although Economic Integration Theory is crucial for comprehending the consequences of AfCFTA, it has encountered criticism. Critics such as Eze and Onwuka (2023) contend that the theory's premise of unified strategies is unfeasible for a continent characterised by varied political and economic environments. Nigeria's dependence on customs revenue may present more difficulties, as the abolition of tariffs could diminish government income (Suleiman & Adamu, 2021). Nevertheless, the theory supports the potential macroeconomic transformations and competitive dynamics Nigeria may encounter as it strengthens its connections within AfCFTA.

2.2.3 Trade Liberalization and Macroeconomic Stability Theory

Theory of Trade Liberalisation and Macroeconomic Stability examines the relationship between trade openness and macroeconomic results, suggesting that liberalised trade policies can improve a nation's economic stability and growth capacity (Rodrik, 1998). Rodrik (1998) asserts that liberalised trade promotes capital inflows, facilitates technological diffusion, and boosts productivity, hence contributing to macroeconomic stability. The theory posits that free trade policies diminish market distortions and enhance competition, hence promoting efficiency across industries.

Within the framework of AfCFTA, the effects of trade liberalisation on Nigeria might be revolutionary, potentially fostering economic diversification and diminishing the nation's reliance on oil exports. Ibeh and Ikeji (2022) assert that the trade liberalisation elements of AfCFTA may enhance Nigeria's integration into African value chains, allowing for the export of a variety of goods. Subsequent research by Abdullahi and Akpan (2023) demonstrates that diminished tariffs and enhanced market access will beneficially impact Nigeria's GDP growth and customer welfare. Ngige and Ogbonna (2021) assert that Nigeria must rectify structural deficiencies, including power supply and transport infrastructure, to fully capitalise on the advantages of trade liberalisation. Olufemi and Adeola (2020) contend that trade liberalisation could subject home sectors to fierce competition from more industrialised African nations, hence jeopardising local businesses.

Critics contend that trade liberalisation can destabilise economies with fragile industrial foundations, as evidenced by research by Peters and Okeke (2023), which indicates that open trade may heighten Nigeria’s susceptibility to external shocks, especially within the unstable oil sector. Notwithstanding these critiques, the Trade Liberalisation and Macroeconomic Stability Theory offer a significant framework for examining Nigeria's economic path under AfCFTA, emphasising both the prospects for macroeconomic expansion and the possible hazards linked to heightened market accessibility.

2.3 Empirical Literature Review

A research by Abebe, et al., (2021) examined the significance of AfCFTA in promoting economic integration among African nations, emphasising the contributions of member states to intra-African trade. The aim was to assess the anticipated increases in trade volume resulting from tariff removals and improved economic cooperation. The research indicated that diminishing trade obstacles might substantially enhance regional trade flows under AfCFTA, as evidenced by Kenya, South Africa, and Nigeria. The results indicate that economic integration through AfCFTA improves market access, bolstering regional economic resilience (Abebe, et al., 2021). A research conducted by Ogutu and Mensah (2022) evaluated the impact of AfCFTA's trade liberalisation on regional stability, emphasising advantages such as less reliance on foreign imports and the diversification of trade commodities in sub-Saharan Africa. Conversely, Okoro and Adedeji (2020) discovered that integration could burden indigenous industries unable to compete with regional imports, indicating the necessity for competitive policies. In conclusion, these studies advocate for the formulation of policies that safeguard vulnerable businesses while optimising the advantages of AfCFTA to promote unity and economic development throughout Africa.

Johnson and Amadi (2020) conducted a study assessing the influence of trade agreements on macroeconomic stability in Nigeria, with a focus on fiscal policy and trade balance. The research sought to measure the impact of tariff reductions on Nigeria's income generation, inflation, and GDP growth. The results revealed varied outcomes, with some sectors experiencing growth while others, particularly in manufacturing, encountered heightened rivalry, resulting in profit reductions (Johnson &Amadi, 2020). Nwafor and Tunde (2021) investigated the effects of trade liberalisation on inflation rates, finding that although price stability enhanced in certain product categories, inflationary pressures escalated for domestically manufactured items. A contrary study by Agyemang (2023) indicated that trade agreements with minimal tariff protection may augment foreign investment and knowledge transfer, hence bolstering economic resilience. These studies indicate that although trade agreements such as AfCFTA provide macroeconomic potential, certain economic policies are crucial for enduring stability and growth.

Chukwu, et al., (2022) evaluated the effect of free trade on Nigeria's GDP development trajectory while analysingAfCFTA's impact on economic variables. Their aim was to determine whether the introduction of AfCFTA could improve economic productivity and production. The findings indicated a significant association between the adoption of AfCFTA and GDP growth, attributed to enhanced exports and investment inflows. Madu and Akinyemi (2020) indicated that AfCFTA could lower inflation rates by diversifying import sources, thereby stabilising the consumer products market. Adebayo and Ogunyemi (2023) identified a marginal rise in unemployment rates following the AfCFTA, attributed to the pressure on domestic industry. These findings highlight that the influence of AfCFTA on economic indicators is intricate, requiring comprehensive employment strategies and skills development initiatives to maximise economic advantages. Imoagwu, Ozoh, Madueke, and Mbah (2021) employed a descriptive statistical approach to investigate the potential contributions of the AfCFTA to poverty reduction, highlighting Nigeria's prolonged struggle with poverty alleviation. The following variables were examined: household income, illiteracy rate, unemployment rate, and access to healthcare. The analyses indicated that the AfCFTA may confer modest advantages to Nigeria by enhancing the efficiency of production factors and product markets, thereby augmenting household income, decreasing illiteracy and unemployment, and improving access to healthcare, resource allocation, and industrial competitiveness. This is anticipated to facilitate a substantial reduction in poverty levels and foster economic development in Nigeria.

Imoagwu, et al., (2023) examined the effects of trade liberalisation on unemployment in Nigeria from 1981 to 2022. The study categorised trade liberalisation into export commerce and import trade. The study utilises Ordinary Least Squares and demonstrates that trade liberalisation (including both export and import trade) has a negative and substantial correlation with unemployment in Nigeria. Akamobi and Unachukwu (2022) employed the Autoregressive Distributed Lag (ARDL) approach to analyse trade flow patterns in Nigeria before and during COVID-19, revealing a decline in trade patterns during and after the pandemic both internationally and within African nations, including Nigeria. Onwuka, et al., (2024) investigated the political instability and its effects on Foreign Direct Investment inflows in five African nations: Nigeria, Ghana, Kenya, and South Africa. The panel ARDL model analysis yielded the following results: The political investment climate variable (PSI) significantly positively influenced the entry of foreign direct investment in Nigeria, Ghana, Kenya, and South Africa. The findings indicated that characteristics related to the political investment climate (political stability and corruption index) had substantial negative impacts on the entry of foreign direct investment into Nigeria, Ghana, Kenya, and South Africa. Ezeanyeji, et al., (2023) employed the Error Correction Model to examine the relationship between industrial sector growth and economic performance in Nigeria from 1981 to 2021. The analysis reveals that the rise of crude petroleum, natural gas, solid minerals, and the manufacturing subsector positively and significantly influences the performance of the Nigerian economy.

2.4 Gaps in Literature

This analysis of previous research underscores AfCFTA's capacity to enhance economic integration and promote macroeconomic growth throughout Nigeria and Africa. Nevertheless, current study indicates deficiencies in comprehending the specific employment effects and sectoral susceptibilities, especially within the manufacturing sector. Despite numerous studies acknowledging the beneficial effects on GDP and trade flows, complete evidence regarding the long-term socioeconomic ramifications for Nigeria remains insufficient. Future study may benefit from longitudinal studies investigating AfCFTA's dynamic impact on employment, inflation stability, and local industry competitiveness to maintain policy coherence with Nigeria's economic objectives.

3. Methodology

3.1 Model Specification

Model formulation entails constructing an econometric model to evaluate the proposed links between AfCFTA and Nigeria's macroeconomic variables. A precisely defined model is essential to appropriately assess the effects of AfCFTA on the Nigerian economy. This study employs a linear regression model, facilitating the direct calculation of associations between dependent and independent variables. The model's functional shape is articulated as follows:

$$Y_t=\alpha+\beta_1X_{1t}+\beta_2X_{2t}+\beta_3X_{3t}+\epsilon_t$$

Where:

$Y_t$represents the dependent variable (e.g., GDP, trade balance, or inflation rate at time$_t$)

X_{1t}, X_{2t}, X_{3t}represent independent variables (such as AfCFTA membership, trade openness, and foreign direct investment inflows),

$\alpha$is the intercept,

β_1, β_2, $\beta_3$are the coefficients for each variable, and

$\epsilon_t$is the error term.

3.2 Estimation Technique

This research used Ordinary Least Squares (OLS) regression analysis to assess the correlations among the chosen variables. Ordinary Least Squares (OLS) is suitable for modelling continuous data and is frequently employed in economic research to assess the linear influence of independent variables on a dependent variable. The Ordinary Least Squares method is employed to estimate the coefficients of the regression model. This method reduces the total of squared residuals, providing estimates that reflect the degree and direction of the correlation between AfCFTA membership and macroeconomic indicators in Nigeria.

3.4.2 Diagnostic Tests

Diagnostic tests are essential to verify the assumptions of the regression model and to guarantee the robustness of the results.

Multicollinearity: The Variance Inflation Factor (VIF) test is performed to evaluate multicollinearity among the independent variables. Severe multicollinearity can skew the model's estimations; thus, any detected multicollinearity will necessitate remedial measures, such as eliminating or amalgamating variables.

Heteroskedasticity: The Breusch-Pagan or White test is utilised to detect heteroskedasticity, a condition where the variance of the error terms is not uniform. Heteroskedasticity is mitigated by employing robust standard errors to guarantee unbiased estimates.

Autocorrelation: The Durbin-Watson test is employed to identify autocorrelation, particularly as macroeconomic data often exhibits temporal dependency. Autocorrelation is addressed through data transformation or the application of time-series-specific methodologies.

3.3 Sources of Data

Data for this study is obtained from reputable sources such as the World Bank, the International Monetary Fund (IMF), the African Development Bank (AfDB), and Nigeria's National Bureau of Statistics (NBS). These organizations provide consistent, reliable, and regularly updated data on economic indicators, making them suitable for regression analysis. Specifically, data on Nigeria's GDP, trade balance, inflation rate, and trade volumes with African countries will be extracted from these sources, covering a range of years to capture AfCFTA's effects since its implementation in 2021.

4. Data Analysis and Discussion of Results

4.1 Descriptive Analysis of Variables

Table 4.1: Descriptive Statistics for Key Macroeconomic Variables

Variable	Mean	Median	Standard Deviation	Minimum	Maximum
GDP Growth Rate (%)	3.1	3.0	1.5	1.2	5.6
Trade Balance (USD Billion)	-1.2	-0.9	2.1	-5.6	1.4
Inflation Rate (%)	12.8	12.5	4.3	8.2	20.1
FDI Inflow (USD Million)	2,500	2,300	950	1,100	4,200

Analysis, 2024

This analytical report offers a summary of essential macroeconomic indicators in Nigeria anticipated to demonstrate the impacts of AfCFTA. The average GDP growth rate of 3.1% implies modest economic expansion during the research period, while the standard deviation of 1.5 demonstrates that GDP growth has been rather stable, though subject to occasional disruptions from external shocks. The trade balance, averaging -$1.2 billion, indicates a sustained trade deficit, highlighting Nigeria's dependence on imports compared to exports. This imbalance is anticipated, considering Nigeria's demand for industrial inputs and capital goods.

The inflation rate, averaging 12.8%, indicates a significant inflationary climate. The inflation rate has seen considerable swings, varying from 8.2% to 20.1%, presumably affected by domestic policies and global price shocks. The average inflow of global Direct Investment (FDI) into Nigeria was $2.5 billion, reflecting the nation's appeal to global investors, especially in the oil, agriculture, and telecommunications industries. The substantial standard deviation (950) indicates that foreign direct investment (FDI) has fluctuated considerably, influenced by policy alterations and global economic circumstances. Examining these variables will elucidate the impact of the AfCFTA on Nigeria's economy.

4.2 Regression Results

4.2.1 Model Estimation and Interpretation

Table 4.2: Regression Results for GDP Growth Rate and AfCFTA Implementation

Variable	Coefficient	Standard Error	t-Statistic	p-Value
Intercept	2.5	0.6	4.17	0.000
AfCFTA Membership	0.4	0.1	4.00	0.000
Trade Openness	0.3	0.07	4.29	0.000
FDI Inflows	0.002	0.001	2.00	0.045

Analysis, 2024

The regression results in Table 4.2 suggest that AfCFTA membership has a positive and statistically significant effect on Nigeria's GDP growth rate. The coefficient for AfCFTA membership (0.4) indicates that, holding other factors constant, GDP growth increases by 0.4 percentage points with AfCFTA integration. This implies that AfCFTA membership positively contributes to Nigeria's economic growth, likely due to increased trade access and investment flows.

Trade openness, which measures the extent of Nigeria's international trade activity, also exhibits a significant positive coefficient (0.3), indicating that greater trade engagement enhances GDP growth. This result aligns with economic theories suggesting that open trade policies enhance resource allocation and productivity. Furthermore, the FDI inflows variable has a coefficient of 0.002, indicating a modest yet positive effect on GDP growth. The statistical significance (p-value of 0.045) confirms that FDI plays a role in boosting GDP, which may be due to FDI's role in funding large-scale projects and technology transfer.

4.2.2 Testing of Hypotheses

Table 4.3: Hypothesis Testing Results

Hypothesis	Beta Coefficient	t-Statistic	p-Value	Decision
H1: AfCFTA positively impacts GDP	0.4	4.00	0.000	Accept
H2: AfCFTA improves Trade Balance	0.25	2.78	0.007	Accept
H3: AfCFTA influences Inflation	-0.1	-1.22	0.227	Reject

Analysis, 2024

Table 4.3 delineates the results of the hypothesis testing for the investigation. The first hypothesis, that AfCFTA positively influences GDP, is corroborated by a substantial beta coefficient of 0.4 (p-value = 0.000). This outcome indicates that the adoption of AfCFTA positively influences Nigeria's economic growth. AfCFTA offers continent-wide market access and trade efficiency, enabling Nigerian enterprises to expand production, enhance exports, and realise economies of scale, hence stimulating GDP growth.

AfCFTA enhances trade balance, with a beta coefficient of 0.25 (p-value = 0.007) that is statistically significant, so corroborating the premise. This conclusion suggests that AfCFTA could mitigate Nigeria's trade deficit by enhancing export volumes and diminishing reliance on imports. The enhanced trade balance indicates that AfCFTA's trade integration framework has allowed Nigeria to capitalise on intra-African trade, providing more favourable trade conditions and promoting the export of domestic goods and services.

AfCFTA impacts inflation and lacks support. The coefficient of -0.1 (p-value = 0.227) is non-significant, suggesting that AfCFTA does not exert a discernible influence on inflation rates. This result indicates that although AfCFTA impacts trade and economic growth, it does not directly alter inflation dynamics. Domestic monetary policy, supply chain disruptions, and global inflation patterns may exert a more significant influence on Nigeria's inflation rates, eclipsing any possible impacts from AfCFTA.

4.3 Diagnostic Tests and Model Robustness

4.3.1 Multicollinearity Test

Table 4.4: Variance Inflation Factors (VIF) for Multicollinearity

Variable	VIF
AfCFTA Membership	1.6
Trade Openness	2.0
FDI Inflows	1.8

Analysis, 2024

The multicollinearity test findings in Table 4.4 indicate variance inflation factors (VIFs) below the threshold of 5, signifying the absence of significant multicollinearity among the independent variables. The VIF values—1.6 for AfCFTA membership, 2.0 for trade openness, and 1.8 for FDI inflows—indicate that the variables are independent and exhibit minimal correlation with one another. This verifies that each variable can consistently provide distinct information to the regression model without much overlap. The lack of multicollinearity enhances the model's dependability, indicating that the estimated impacts of AfCFTA membership, trade openness, and FDI inflows on GDP are independently valid.

4.3.2 Heteroskedasticity Test

Table 4.5: Heteroskedasticity Test Results (Breusch-Pagan Test)

Test Statistic	**p-Value**
4.5	0.103

Analysis, 2024

The heteroskedasticity test results presented in Table 4.5, including a test statistic of 4.5 and a p-value of 0.103, suggest the absence of significant heteroskedasticity. A p-value greater than 0.05 indicates that the variance of the error terms is constant, satisfying a fundamental assumption of the Ordinary Least Squares (OLS) regression model. This indicates that the error terms do not consistently fluctuate with the independent variables, hence strengthening the reliability of the regression estimations. Confirming the absence of heteroskedasticity enhances the model's dependability in forecasting the association between AfCFTA and Nigeria's macroeconomic outcomes.

4.4 Discussion of Findings

The results indicate that AfCFTA membership provides Nigeria significant economic advantages, particularly through increased GDP growth and improvements in trade balance. Nigeria must enhance trade policy alignment with AfCFTA protocols. Policies that foster export-oriented industries, enhance infrastructure investment, and promote trade diversification will be essential for maximising the benefits of AfCFTA. Moreover, promoting public-private partnerships can enhance capacity in sectors where Nigeria possesses competitive advantages, such as agriculture and industry, to optimise export potential. Nigeria's macroeconomic strategy should prioritise the readiness of domestic industry to confront heightened competition from international enterprises resulting from trade liberalisation under AfCFTA. This may entail bolstering sectors through subsidies or incentives designed to improve productivity and export preparedness.

Moreover, the government must establish comprehensive monitoring and evaluation systems to examine the immediate impacts of AfCFTA on trade balance and GDP growth. Through the ongoing modification of policies informed by empirical evidence, Nigeria can cultivate economic resilience against global economic disruptions. The persistent trade imbalance issue necessitates policies designed to enhance Nigeria's export potential while regulating non-essential imports. Furthermore, the minimal effect of AfCFTA on inflation suggests that additional direct measures may be necessary to mitigate inflationary pressures. These actions may involve augmenting food security, optimising supply systems, and alleviating the risks associated with external price fluctuations. In summary, although AfCFTA presents a favourable opportunity for economic expansion, Nigeria's macroeconomic policies must be flexible, anticipatory, and congruent with the continental trade framework to guarantee sustained success.

The findings of this study correspond with existing literature regarding the economic advantages of trade agreements in Africa. Osei and Akinboade (2018) discovered that regional trade agreements, including the Economic Community of West African States (ECOWAS), positively influenced GDP growth in member nations, paralleling the results of this study on AfCFTA. Both research emphasised the significance of trade openness and market integration in fostering economic growth. Furthermore, the beneficial impact of foreign direct investment (FDI) on GDP growth, as demonstrated in this study, aligns with the conclusions of Olusegun (2019), who contended that FDI is crucial for enhancing economic performance by supplying capital for infrastructure development and industrial growth.

This analysis, however, diverges from previous research regarding the impact of AfCFTA on inflation. Although experts such as Adeyemo et al. (2020) have posited that trade agreements may mitigate inflation by decreasing the cost of commodities via heightened competition, this analysis revealed no substantial effect of AfCFTA on inflation in Nigeria. This gap may be ascribed to variations in the analysed eras and the differing economic conditions across various African nations. The results indicate that although AfCFTA can stimulate economic development and enhance the trade balance, inflation is predominantly influenced by domestic factors, including monetary policy, currency volatility, and foreign price shocks. Moreover, the results of this study corroborate those of Johnson (2021), who discovered that trade agreements can significantly alter trade balances by diminishing trade barriers and enhancing access to global markets. This study expands the argument to the broader African context of AfCFTA, positing that Nigeria's involvement in the agreement may result in long-term enhancements to the trade balance, contingent upon structural adjustments in sectors capable of leveraging the opportunities afforded by the agreement.

5. Conclusion and Recommendations

5.1 Conclusions

This analysis has shown that Nigeria's involvement in AfCFTA possesses considerable potential to stimulate economic growth, improve trade balance, and enhance foreign direct investment. The empirical evidence indicates that AfCFTA can serve as a potent instrument for economic transformation, especially in promoting trade diversification and fostering industrial growth.

The affirmative link between AfCFTA and GDP growth substantiates the idea that enhanced integration into regional and global markets might facilitate economic possibilities for emerging economies such as Nigeria. The enhancement of the trade balance underscores the country's ability to augment its exports, especially in areas where it possesses comparative advantages, such as agriculture and industry. The study also revealed no significant effect on inflation, indicating that inflationary pressures in Nigeria are not directly linked to the trade liberalisation initiated by AfCFTA, but are more affected by domestic economic factors, including fiscal and monetary policies, alongside global commodity price fluctuations.

The results suggest that Nigeria can capitalise on AfCFTA's trade opportunities, but these advantages will be maximised if Nigeria implements suitable macroeconomic policies to rectify infrastructure deficiencies, enhance industrial competitiveness, and foster a conducive business environment. Nigeria must prepare its local industries for the heightened competition introduced by AfCFTA by enhancing productivity and assuring export readiness.

5.2 Recommendations

This finding presents the following recommendations for Nigeria to properly capitalise on the prospects offered by AfCFTA and to prevent potential risks:

1. **Strengthening Trade Facilitation and Infrastructure:**Nigeria must emphasise the improvement of its commercial infrastructure, including ports, highways, and energy supplies, to support easier trade flows under AfCFTA. The country should also invest in logistics solutions to minimise transportation costs and boost the efficiency of its supply networks. A more efficient infrastructure will assist Nigerian industries become more competitive and increase the ease of doing business.
2. **Support for Export-Oriented Industries:**The Nigerian government ought to enact policies that promote the development of export-oriented sectors, especially in agriculture and industry. These industries possess considerable potential to gain from AfCFTA market access; however, they require assistance in capacity building, funding, and technology implementation. Policies including export subsidies, tax incentives, and access to low-interest loans may facilitate growth in these sectors.
3. **Fostering Public-Private Partnerships (PPPs):** Nigeria should foster Public-Private Partnerships (PPPs) in sectors with significant export potential to facilitate essential industrial transformation. These partnerships can furnish the necessary money and technical proficiency to advance infrastructure, elevate product quality, and bolster the competitiveness of Nigerian firms in the worldwide marketplace.
4. **Addressing Inflation through Monetary and Fiscal Policies:**The analysis revealed no substantial impact of AfCFTA on inflation; however, the Nigerian government should persist in prioritising inflation control via prudent monetary policy and budgetary discipline. This entails implementing stringent monetary policy as needed to mitigate inflationary pressures and ensuring that fiscal actions do not jeopardise economic stability. The Central Bank of Nigeria should prioritise the maintenance of a stable exchange rate to mitigate inflationary effects from external price shocks.
5. **Improving the Business Environment:**Nigeria should implement proactive measures to improve its business environment by minimising bureaucratic obstacles, refining the regulatory framework, and addressing corruption. A more conducive business environment will promote both domestic and foreign investment, thereby allowing Nigerian firms to prosper in the competitive AfCFTA market. Streamlining the procedures for business establishment and operation might entice additional entrepreneurs and enhance industrial output.

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