

The Impact of the Ratio of Traded Stock to Gross Domestic Product (GDP) on Inclusive Growth in Nigeria (1986 - 2024)

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Abstract

The study examined the effect of the ratio of traded stock to GDP on inclusive growth in Nigeria from 1986 to 2024. The study was motivated by the concern that improvements in financial market activities and economic growth in Nigeria have not necessarily translated into broad-based improvements in the standard of living of the country's citizens. The ratio of traded stock, which measures the value of shares traded relative to the size of the economy, reflects the liquidity and depth of the stock market and provides an important indicator of how effectively the market facilitates the mobilisation and allocation of financial resources. The study employed key indicators of capital market development, value of traded stock to GDP (RATS), and control variables such as Interest rates (INTR) and Exchange rates (EXCR). While the economic and social dimension of inclusive growth indicators, such as the equality index, government effectiveness, GDP per capita, employment to population ratio, ratio of female to male labour force, poverty headcount, social protection rating and government expenditures on education and health, were measured and composed using principal component analysis. Anchored on the financial intermediation theory, institutional theory and endogenous theory, the study adopted the Autoregressive Distribution Lag (ARDL) model to analyse both the short-run and long-run dynamics using time series data that were sourced from World Development Indicators (WDI), World Governance Indicators (WGI), Central Bank of Nigeria (CBN), and National Bureau of Statistics (NBS). The ARDL result shows that the coefficient in the short and long run of RATS (0.041638) (0.128128) and the p value of (0.0061) (0.0092) shows that there is a positive and statistically significant impact of RATS on INCG in Nigeria in the short run and long run. The results further indicate that structural and institutional constraints, including limited financial inclusion, weak regulatory framework and macroeconomic instability, hinder the effective transmission of capital market development indicators into inclusive growth in Nigeria. Consequently, the study recommends strengthening regulatory oversight, enhancing investors' confidence and implementing policies that encourage broader participation

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Introduction

The pursuit of inclusive growth has become a central objective of economic policy in developing countries such as Nigeria, where rapid economic growth has not consistently translated into broad-based improvement in the standard of living of the populace (UNCTAD, 2022). Inclusive growth emphasises not only the pace of economic growth but also its distribution across different segments of the economy, ensuring that the benefits of growth are equitably shared. The role of the financial market, particularly the capital market, in this context has gained increasing attention as a mechanism for mobilising savings, allocating capital efficiently, and fostering economic participation (Eric & Charles, 2012).

Capital market development is commonly measured using indicators such as the ratio of traded stock to Gross Domestic Product (GDP). The ratio of traded stock to GDP captures market liquidity, which reflects the ease with which investors can buy and sell securities, while new equity issuance represents firms' ability to raise long-term capital for expansion and productive investment. RATS are an important indicator of stock market development, particularly the liquidity and level of activity of the capital market. It measures the total value of shares traded on the stock exchange relative to the size of the economy, expressed as a percentage of GDP. This indicator is expected to promote inclusive growth through efficient financial intermediation, improved resource allocation, and enhanced investment opportunities (Schumpeter, 1911).

There is a persistent gap between capital market indicators and inclusive growth. Specifically, while indicators such as the ratio of traded stock to GDP have shown some improvement, their impact on inclusive growth, measured by broad-based welfare gains, poverty reduction, and employment creation, remains insignificant (Yaroe, 2011). Also, further structural challenges, such as market inefficiencies, speculative trading, a weak institutional framework, and limited access to the financial market, continue to hinder the effective transmission of capital market activities to the real sector in the country.

The establishment of capital markets enabled modern economies such as China, the United States of America (USA), and the United Kingdom (UK) to grow and expand. Capital markets development in these economies is the envy of the world, meeting the financial needs of businesses, from small enterprises to public companies (Charles & Eric, 2012). The US capital market's dominance, including the deepening of its stock, bond, and derivative markets, has enhanced risk and capital allocation across the US economy, promoting inclusive growth. Evidence includes the United States' higher returns on capital than in other countries, the consistently significant inflows of foreign capital into the country, the improved stability of the country's banking system, and the capacity of new businesses to raise capital. However, by raising the productivity growth rate, the development of the capital markets has enabled the economy to operate at a lower unemployment rate, and raised funds for infrastructure, productivity and social protection of citizens.

In addition, higher productivity growth has led to faster gains in real wages and has bridged the income inequality gap (Dudley & Hubbard, 2004). Known as the Asian Tigers, Hong Kong, Singapore, South Korea, and Taiwan are among the Asian nations that experienced rapid industrialisation and economic expansion starting in the 1960s, moving from low-income to high-income economies. The Hong Kong Stock Exchange (HKEX) dates back to 1891 but was renamed in 1914. The HKEX began with 14 listed companies at its inception, with a market capitalisation of less than USD 500 thousand and fewer than 20 equities. With 2600 listed companies and a market capitalisation of around USD 4.5 trillion as of 2024, the market has experienced substantial growth, with 13,635 listed securities across diverse equity markets.

The HKEX is characterised by its high liquidity, strong regulatory framework and international participation. Their international listing and market innovation have embraced financial innovations, including the launch of stock connect programs with mainland China, enabling cross-border trading. China's growth averaged 10% while the poverty rate declined from 66% to 0.7%. Very important to note, therefore, is the fact that China's capital market development (HKEX) played a strong role as an agent for mobilising the country's capital for inclusive growth (International Finance Corporation, 2021).

Capital market development involves increasing efficiency and liquidity. This means ensuring that market transactions are executed smoothly and swiftly with minimal costs and with accurate reflection of all available information on securities and prices, diversification of instruments, regulatory framework, market accessibility, financial education and global integration, using the market instrument and components such as market capitalization (to measure the market deepening), ratio of traded stock to Gross Domestic Product (GDP) (to measure the growth of the secondary market) (Ayyagari & Maksimovic, 2013)

Government funding for infrastructure and private sector company growth depend on the development of capital markets, which also creates good corporate governance and accountability, transparency, wealth creation and distribution, inclusivity, democratization of access to prosperity, and meritocracy (IFC, 2021). Capital market development has the potential to accelerate inclusive growth because of its potential effects on capital accumulation, technological innovation, resource allocation, and productivity growth. It can also mobilize surplus funds into productive investments, create jobs, and provide financial services that benefit everyone, including the poor, with the aim of raising everyone's standard of living. One of the major economic issues facing most developing countries in Africa in recent times is how to make economic growth more inclusive.

Several countries across the world (especially Africa countries) are growing faster than most of the high income economies of Europe and North America, but poverty, unemployment, income inequality rates, government effectiveness, access to education, infrastructures and gender inequality have remained high in these regions in the last decade in spite of the continuous economic growth recorded (Adediran, Oduntan & Matthew, 2020). This might not be unconnected with the poor progressive nature of capital markets in these economies. Domestic capital markets are a vital source of stable, sustainable finance and underpin a private sector associated with employment and economic growth. Yet capital markets are underdeveloped across the emerging market, leading to illiquidity, elevated transaction costs, low level of market capitalization and share index.

Conversely, inclusive growth refers to a complete decrease in poverty that is linked to the creation of productive jobs as opposed to direct income distribution programs. Achieving the intersection of economic growth and income distribution is necessary for growth to be inclusive. This suggests that a robust inclusive growth strategy will complement capital market policies to stimulate economic growth with those that foster equality of opportunity, alongside a social security net to protect the most vulnerable, therefore, in order to foster social inclusion and equal access to jobs, economic policies that encourage structural change and the creation of productive employment for people (Duisenberg, 1999).

Thus, the RATS to GDP serves as an important measure of capital market liquidity and activity, while inclusive growth captures the extent to which economic progress create opportunities and improves socioeconomic welfare across different segment of the society. It is also important to note that a more liquid and active market can promote inclusive growth through improved capital mobilization, investment, business expansion, employment creation and income generation. Against this backdrop, there is therefore need for an empirical investigation into the extent to which ratio of traded stock to GDP affects inclusive growth in Nigeria.

Literature Review

Conceptual Review

The pursuit of inclusive growth has become a central objective of economic policy in developing countries such as Nigeria, where rapid economic growth has not consistently translated into broad-based improvement in the standard of living of the populace (UNCTAD, 2022). Inclusive growth emphasises not only the pace of economic growth but also its distribution across different segments of the economy, ensuring that the benefits of growth are equitably shared. The role of the financial market, particularly the capital market, in this context has gained increasing attention as a mechanism for mobilising savings, allocating capital efficiently, and fostering economic participation (Eric & Charles, 2012).

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Thus, the RATS to GDP serves as an important measure of capital market liquidity and activity, while inclusive growth captures the extent to which economic progress create opportunities and improves socioeconomic welfare across different segment of the society. It is also important to note that a more liquid and active market can promote inclusive growth through improved capital mobilization, investment, business expansion, employment creation and income generation. Against this backdrop, there is therefore need for an empirical investigation into the extent to which ratio of traded stock to GDP affects inclusive growth in Nigeria.

Methodology

The study adopted an ex-post facto research design, in which econometric models were employed to analyse the data sourced. The data required for this study were primarily secondary, collected from the indices in the Central Bank of Nigeria (CBN) Statistical Bulletins and World Development Indicators (WDI) publications. Augmented Dickey-Fuller (1987) and Phillips-Perron (1988) unit root tests were conducted to avoid spurious results. The Phillips-Perron unit root test measures both the mean and variance of time series data. The econometric technique used for data analysis was the Autoregressive Distributed Lag (ARDL) model. The techniques chosen agreed with the Augmented Dickey-Fuller and Phillips-Perron unit root test results obtained. This process allows for a systematic sequence, such as identifying problems, reviewing the literature, formulating hypotheses and postulations, employing sound methodology, and collecting and analysing data to interpret research findings.

Model Specification

This study adopted the financial intermediation theory. This is justified because the theory explained the theoretical framework supporting the relationship between the ratio of traded stock to GDP and inclusive growth. The model for the study is specified as:

$$INCG = f(RATS, INTR, EXCR) \quad (1)$$

Equation 2 is the econometric function of model 1

$$INCG = \alpha_0 + \alpha_1 \ln RATS - \alpha_2 \ln INTR - \alpha_3 \ln EXCR + \epsilon_t \quad (2)$$

The a priori expectation, based on theoretical postulation, was that an increase in RATS would lead to an increase in inclusive growth (INCG) in Nigeria, while an increase in INTR and EXCR would lead to a decrease in INCG. The a priori expectations are; α_0 , and $\alpha_1 > 0$ while α_2 and $\alpha_3 < 0$.

Where:

INCG = inclusive growth

RATS = ratio of traded stock to GDP

INTR = interest rates

EXCR = exchange rate

Model Estimation

The Autoregressive Distributed Lag (ARDL) model is appropriate for estimating the model because of the mixed order of integration of the variable. The generic ARDL model proposed by Perasan and Shin (1999) is expressed as:

$$\Delta Y_t = \beta_0 + \beta_1 Y_{t-1} + \beta_2 X_t + \beta_3 X_{t-1} + \beta_4 Z_t + \beta_5 Z_{t-1} + \sum_{pi=1} \delta \Delta X_{t-1} + \sum_{pi=1} \lambda \Delta Y_{t-1} + \sum_{pi=1} \Psi \Delta Z_{t-1} + \varepsilon_t \quad (3)$$

Where;

ΔY_t = the dependent variable (it is a function of its own lag value and other variables)

β_0 = is the slope parameter

X and Y are the independent variables

β_1 , β_2 and β_3 = the long-run parameters estimate

δ , λ and Ψ = the short-run parameter estimates

ε_t = the error term

the mathematical function of the ARDL model is expressed as follows:

$$\Delta \ln INCG_t = \alpha_0 + \alpha_1 \ln RATS_t + \alpha_2 \ln RATS_{t-1} + \alpha_3 \ln INTR_t + \alpha_4 \ln INTR_{t-1} + \alpha_5 \ln EXCR_t + \alpha_6 \ln EXCR_{t-1} + \sum \phi \Delta \ln INCG_{t-1} + \sum \beta \Delta \ln RATS_{t-1} + \sum \lambda \Delta \ln INTR_{t-1} + \sum \partial \Delta \ln EXCR_{t-1} + \varepsilon_t \quad (4)$$

Note that ϕ and $\beta > 0$, and λ and $\partial < 0$. They are the coefficients of the short-run parameter estimates of the ARDL model. The a priori expectations based on economic theory postulate that the coefficients of the long-run parameter estimates for the explanatory variables are positive (α_1 and $\alpha_2 > 0$) and negative (α_3 , α_4 , and $\alpha_5 < 0$). Inclusive growth (INCG) is the dependent variable, while the independent variable is the ratio of traded stock to GDP (RATS), while interest rate (INTR) and exchange rate (EXCR) were employed as control variables. This implies that a positive relationship is expected between components of capital market development and inclusive growth in Nigeria. α_0 is the intercept, t is a temporal time trend, t-1 is the time lag, and ε_t is a random error term.

Presentation of Results

Unit Root Test Results

The stationarity properties of the variables included in the model were tested using ADF and PP unit root tests, as presented in Table 1.

Table 1**Augmented Dickey-Fuller (ADF) and Philips-Perron Unit Root Tests Results**

Variables	ADF		PP		Order of Integration
	At Level P-value	1 st Difference P-value	At Level P-value	1 st Difference P-value	
INCG	0.3892	0.0000**	0.4201	0.0000**	I(1)
RATS	0.0010**	0.0000**	0.0015**	0.0000**	I(0)
INTR	0.0025**	0.0000**	0.0023**	0.0000**	I(0)
EXCR	0.9994	0.0004**	0.9999	0.0004**	I(1)

**Denotes significant at 5% level

Source: E views12

The results of both the ADF and PP tests presented in Table 1 showed that the variables of interest (RATS and INTR) were stationary at the 5% level of significance, while INCG and EXCR were not. The test results for both ADF and PP, conducted at the level and first-difference levels, revealed that all the variables became stationary at the 5% level of significance. This justified the use of ARDL to estimate the model, since the variables had a mixture of I(0) and I(1) variables.

Table 2**Dependent Variable: Inclusive (INCG)****Autoregressive Distributive Lag (ARDL) Results of Model 2**

SHORT-RUN				
Variable	Coefficient	Std. Error	t-Statistic	P-value
Constant	-0.172889	0.377315	-0.458209	0.6498
D(INCG)(-1))	0.036618	0.131102	1.537033	0.1338
D(RATS)	0.041638	0.002436	0.672242	0.0061**
D(INTR)	-0.005107	0.012607	-0.405085	0.0080**
D(EXCR)	0.001150	0.000927	1.240448	0.2236
ECt-1	-0.401509	Durb-Wat. Stat	2.074644	
R ²	0.931253	Adjusted R ²	0.922920	
LONG-RUN				
Constant	-0.857972	1.726940	-0.496817	0.6226
RATS	0.128128	0.012475	0.651515	0.0092**
INTR	-0.025343	0.062474	-0.405664	0.0076**
EXCR	-0.005705	0.002174	-2.624396	0.0130**

** indicated 5% significance level

Source: E Views 12

The result of the ARDL short-run was presented in Table 2. The coefficient of the constant was negative (-0.172889), incorrectly signed, and statistically insignificant at 5% ($P = 0.6498$). This implied that if all the study's variables were held constant, inclusive growth (INCG) would decrease by the same amount. The coefficient of inclusive growth ($D(INCG(-1))$) was positive (0.036618), correctly signed but statistically insignificant at the 5% significance level ($P = 0.2356$). The positive and statistically insignificant coefficient of inclusive growth implied that in the short run, the value of $D(INCG)(-1)$ in the previous year increased INCG in the current year by 3.66 %. The coefficient of the ratio of traded stock to GDP (RATS) was positive (0.041638) and statistically significant at 5% significance level ($P = 0.0061$). The positive and statistically significant coefficient on the ratio of traded stock to GDP implied that, in the short run, a 1% increase in RATS led to a 4.16% increase in INCG during the study period.

The coefficient on the interest rate (-0.005107) was negatively related to INCG and statistically significant at the 5% significance level ($P = 0.0080$). This met the a priori expectation of a negative sign. The negative and statistically significant coefficient on the interest rate implied that, in the short run, when INTR increased by 1 unit, INCG decreased by 0.51% during the period under review. The coefficient of exchange rate (EXCR) was positive (0.001150), incorrectly signed, and statistically insignificant at the 5% significance level ($P = 0.2236$). The positive and statistically insignificant coefficient on the exchange rate indicated that, in the short run, a 1% increase in EXCR led to a 0.12% increase in INCG over the period of study. This contradicted the a priori economic theory of a negative sign. This explained the lack of access to foreign currencies, especially dollars, which needed to be exchanged for naira in the short run.

The coefficient of the ECT_{t-1} was negative (-0.401509) and correctly signed. This indicated a slow but responsive economic system in which short-run dynamics and variations were corrected slowly, leading to a stable long-run equilibrium relationship among the variables in the model. It suggested that the system gradually absorbed shocks and returned to its long-run equilibrium. The speed of adjustment from short-run to long-run equilibrium would be corrected by 40.2%.

The ARDL long-run results in Table 2 showed that the intercept coefficient was negative (-0.857972) and statistically insignificant at the 5% significance level ($P = 0.6226$). The negative and statistically insignificant intercept coefficient implied that, if all other variables were held constant, inclusive growth (INCG) decreased by the same amount during the period of review. The estimated ARDL-Error Correction long-run results showed that the coefficient (0.128128) of the ratio of traded stock to GDP (RATS) was positively related to INCG and statistically significant at the 5% significance level ($P = 0.0092$). The positive and statistically significant coefficient implied that, in the long run, a 1-unit increase in RATS led to a 12.81% increase in INCG during the study period.

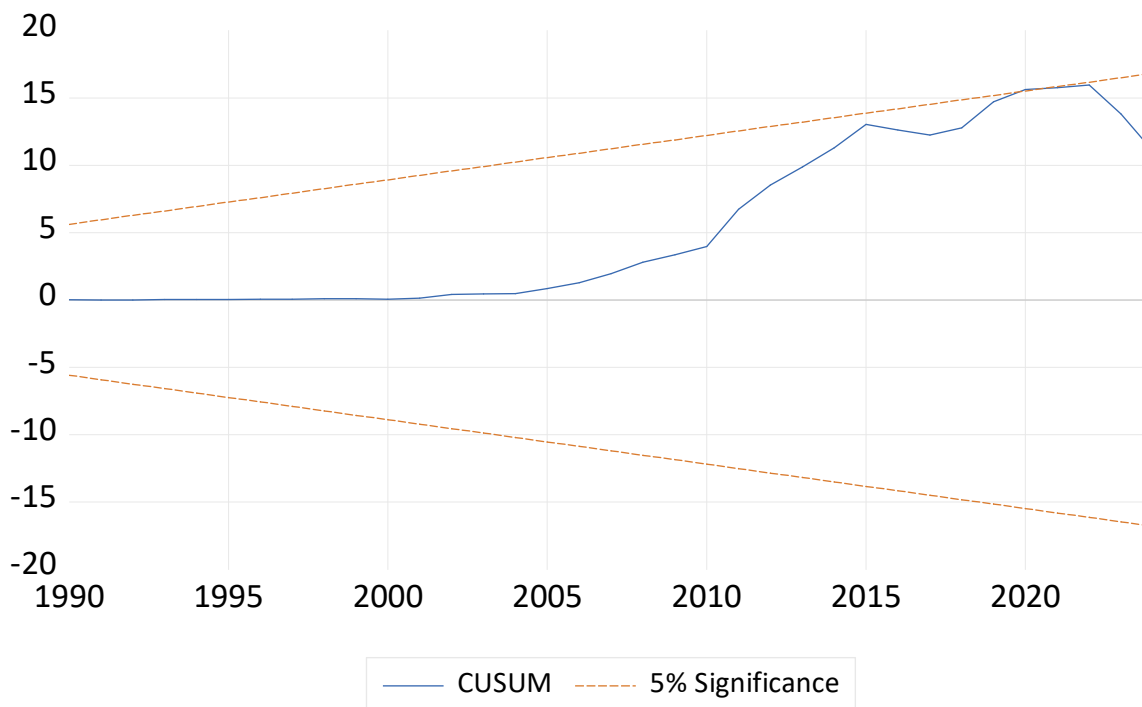
The coefficient on the interest rate (-0.025343) was negatively related to INCG and was correctly signed and statistically significant at the 5% significance level ($P = 0.0076$). The negative and statistically significant coefficient on the interest rate implied that, in the long run, a 1% increase in INTR reduced INCG by 2.53% over the study period. The policy implication is that a lower interest rate is required for a purposeful increase in INCG. The coefficient of exchange rate EXCR was negative (-0.015705) and statistically significant at 5% significance level ($P = 0.0130$). The negative and statistically significant coefficient on EXCR indicated that, in the long run, a 1-unit increase in EXCR was associated with a 1.57% decrease in INCG during the study period. This negated the a priori expectation of a negative sign. The coefficient of determination ($R^2 = 0.931253$) implied that 93% variation in the dependent variable (INCG) was accounted for by the independent variables (RATS, INTR, and EXCR). The adjusted R^2 was 0.922920, indicating that the model was well-fitted and could be relied upon for policy recommendations.

Table 3
Diagnostic Test Results for the Model

Test	F(stat)	Prob.
Serial Correlation Test /Breush-Godfrey LM Test	0.128626	0.8798
Heteroskedasticity Test /Breush-Pagan Godfrey Test	2.112693	0.1014
Specification Error Test /Ramsey Reset Test	1.538723	0.2148

Source: E Views 12

The p-value (0.8798) from the serial correlation test in Table 3 is greater than the typical significance level of 0.05; the null hypothesis was accepted, indicating no serial correlation in the residuals. The p-value (0.1014) of the heteroskedasticity test was greater than 0.05. The null hypothesis was that the variance of the residuals was constant. The Ramsey Reset test was used to detect non-linear relationships between the dependent variable and the independent variables. The p-value (0.2148) was greater than the significance level of 0.05; therefore, the null hypothesis of misspecification was rejected. This showed that the model was not mis-specified and the relationships between the variables were adequately captured by the linear specification. The CUSUM stability test for model 2 is presented in Figure 1



Discussion of Findings

The ARDL short-run results revealed that inclusive growth (INCG) in the past year had a positive and statistically insignificant impact on INCG in the current year in Nigeria. This implied that the past values of INCG were used to interpret its current values. The study found that, in the short run, the ratio of traded stock to GDP (RATS) had a positive and statistically significant impact on inclusive growth (INCG). It meant that there was an increase in the volume of stock traded in the capital market, which aided inclusive economic growth in Nigeria. The policy implication is that an increase in investment in traded stock will boost inclusive economic growth in Nigeria. This finding was in consonance

with the studies conducted by Levine and Zervos (2016), Demiurgue-Kunt and Levine (2015), Osinubi (2020), and Adam and Sanni (2018).

The findings of the study revealed that, in the short run, the interest rate (INTR) had a negative impact on INCG in Nigeria, and the effect was statistically significant. This showed that a decrease in INTR led to an increase in INCG during the period under review. This was attributed to the monetary authority's regulatory policy of reducing the interest rate charged on long-term loans accessible to investors in the capital market. The finding of a negative impact of INTR on INCG was consistent with the study by Dang and Wu (2024). Dang and Wu (2024) found that, in the short run, the exchange rate (EXCR) had a positive impact on INCG in Nigeria, but the effect was not statistically significant. This showed that an increase in EXCR was associated with a decrease in INCG during the study period. The finding of a positive impact of EXCR on INCG was consistent with the study by Ologunwa and Sadibo (2019).

The ARDL long-run results showed that the intercept coefficient was negative and statistically insignificant. The negative and statistically insignificant coefficient of the intercept implied that if all the variables were held constant, inclusive growth (INGG) decreased by the same value during the period of review. The study found that, in the long run, the ratio of traded stock to GDP (RATS) had a positive and statistically significant impact on inclusive growth (INCG). This finding was in consonance with the studies conducted by Levine and Zervos (2016), Osinubi (2020), and Adam and Sanni (2018). The study found that, in the long run, the interest rate (INTR) had a negative and statistically significant impact on inclusive growth in Nigeria. The policy implication of this finding was that a reduction in the interest rate on loanable funds in the capital market contributed to an increase in inclusive growth in Nigeria during the study period. Also, the study found that, in the long run, the exchange rate (EXCR) had a negative and statistically significant impact on inclusive growth in Nigeria. The policy implication of the findings was that, despite exchange rate volatility in Nigeria, a decrease led to a significant improvement in inclusive growth. This finding is corroborated by the study conducted by Arestis, Demetriades, and Luintel (2020).

Conclusion

This paper examined the impact of the ratio of traded stock on GDP on inclusive growth in Nigeria. Time series data from 1986 to 2024 were used. The Autoregressive Distributed Lag (ARDL) econometric technique was used to estimate the model. The study found that RATS had a positive impact on inclusive growth in Nigeria during the study period

Recommendation

1. The Security and Exchange Commission (SEC) and the Nigerian Exchange Group should implement measures that encourage more frequent and efficient trading, including improved market-making arrangements, security lending, faster settlement systems, and broader participation by institutional and retail investors. This is because value of shares traded relative to GDP is seen as an indicator of stock market activity/ liquidity relative to the economy.
2. Government and capital market regulators should intensify financial literacy and investors educational programmes so that ordinary Nigerians can participate safely in the capital market. This is particularly important for inclusive growth because an expanding stock market will have limited distributional benefits if participation is concentrated among wealthy individuals and large institutions.
3. Policies should encourage more small and medium-sized enterprises to raise funds through equity and other capital market instruments. This could include reducing listing costs, simplifying appropriate disclosure requirements and strengthening the SME-focused market segment. Increase access to finance, create employment and improve productivity, thereby strengthening the link between capital market activities and inclusive growth.

References

- Adam, J. A., & Sanni, I. (2018). Stock market development and Nigeria's economic growth. *Journal of Economics and Allied Fields*, 2, 116-132.
- Adediran, O. S., Oduntan, E. A., & Matthew, O. O. (2020). The interaction effect of institutions and trade liberalization on economic growth in Africa. *Journal of Political Economy*, 3(4), 1-11.
- Adenuga, A. O. (2010). Stock market development indicators and economic growth in Nigeria (1990-2009): empirical investigations. *Economic and Financial Review*, 48(1), 33-70.
- Arestis, P. P., Demetriades, P. O., & Luintel, K. B. (2020). Financial development and economic growth: The role of Stock Markets. *Journal of Money, Credit and Banking*, 33(13), 16-41.
- Ayyagari, M., & Maksimovic, V. (2013). Financing in developing countries. In G. M. Constantinides, M. Harris, & R. M. Stulz (Eds.), *Handbook of the economics of finance*. Elsevier.
- Central Bank of Nigeria (2020). *Statistical Bulletin*. Published by Research Department, Central Bank of Nigeria, Abuja.
- Central Bank of Nigeria (2024). *Statistical Bulletin*. Published by Research Department, Central Bank of Nigeria, Abuja.
- Dudley, W. C., & Hubbard, R. G. (2004). *How capital markets enhance economic performance and facilitate job creation* (2-27). Being a paper presentation at Global Market Institute. Goldman Sachs, Columbia.
- Duisenberg, W. F. (1999). *The role of capital markets and financing in the euro area*. Being a paper presented at the Waarborgfonds Sociale Woningbouw in Utrecht, the Netherlands, on 14 June 1999.
- Gurley, J. & Shaw, E. (1960). *Money in the theory of finance*. Brookings Institution.
- International Finance Corporation (2021). *Annual Report*.
- International Labour Organization. (2024). World Employment and Social Outlook Trends. ILOSTAT Database. Geneva, Switzerland: International Labour Organization.
- Ishioro, B. O. & Taruhor, E. M. (2023). Impact of capital market performance on economic growth. *Finance and Accounting Research Journal*, 4(3), 324-337.
- Ishioro, B. O. (2022). The dynamic relationship between stock market development and inclusive growth in a retrospectively-tended economy. *International Journal of Advanced Economics*, 4(9), 208-221.
- Ishioro, B. O., & Tarurhor, E. M. (2022). Has stock market development engendered short and long run inclusive growth in Nigeria? *Finance and Accounting Research Journal*, 4(6), 324-337.
- Levine, R. L., & Zervos, S. S. (2016). Stock market development and long run growth. *The World Bank Economic Review*, 10(2), 323-339.
- Maku, P. A., & Atanda, U. Y. (2020). Determinants of stock market performance in Nigeria: Long run analysis. *Journal of Management and Organizational Behaviour*, 1(3), 1-17.
- Nwokwo, P. I., & Okoye, C. C. (2013). Financial development and economic growth in Nigeria: an empirical analysis. *Journal of Economics and Sustainable Development*, 4(19), 1-10.
- Oladigbo, O.F., Dauda, R. S., Onatunji, O. G., Olaniyi, O. A., & Olopade, B. C. (2025). Stock market development and sustainable economic growth in Nigeria: an empirical analysis (1990-2022). *Journal of the Management Sciences*, 62(2), 316-328.

- Osinubi, T. S. (2020). The three pillars of institutional theory and IFRS implementations in Nigeria. *Journal of Accounting in Emerging Economies*, 10(4), 575-599.
- Ozegbe, R. O., Adedokun, F. A., Osinowo, A. D., & Oladele, C. T. (2023). Does stock market growth translate to broader economic development? Annual time series data insights from Nigeria. *Journal of Financial Studies and Research*, 74(6), 200-231.
- Pesaran, H., Shin, Y., & Smith, R. (1999). Bounds testing approaches to the analysis of level relationships. *Journal of Applied Econometrics*, 16(3), 1924-1996.
- Phillips, P. C. B., & Perron, P. (1988). Testing for unit root in time series. *Biometrika*, 75(2), 335-346.
- Romer, P. M. (1990). Endogenous technological change. *Journal of Political Economy*, 98(5), 71-102.
- Schumpeter, J. A. (1911). *The Theory of Economic Development: An inquiry into Profits, Capital, Credit, Interest and Business Cycle*. Harvard University Press
- United Nations Conference on Trade and Development (2022). UNCTAD Annual Report 2023. United Nations.
- World Bank. (2009). *Annual Report: Year review*. Washington DC, USA: The World Bank Group.
- World Bank. (2024). *World Development Indicators*. Washington, DC: World Bank
- Yaroe, B. D. (2011). *Understanding capital market operation and indexes*. Paper presentation at workshop organized by the NSE, Lagos, Nigeria.