



Capital market development and infrastructural financing in Nigeria

Moyotole Daniel Ezuem¹ 
Samuel Aboje Ogbole² 

¹Department of Banking and Finance, Faculty of Management Sciences, Federal University Wukari, Taraba State, Nigeria.

¹Email: moyotoledanieezuem@gmail.com

²Department of Banking and Finance, Faculty of Management Sciences, Ebonyi State University Abakaliki, Ebonyi State, Nigeria.

²Email: Ogbolesam2004@gmail.com



(✉ Corresponding Author)

Abstract

This study examines the effect of capital market development on infrastructural financing in Nigeria, with particular emphasis on healthcare expenditure. The study adopts an ex-post facto research design and employs annual secondary data covering the study period. Capital market development is measured using capital market turnover ratio (CMTR), all share index (ASI), and market capitalization (MCAP), while healthcare expenditure (HCE) represents infrastructural financing. Data are sourced from the Central Bank of Nigeria Statistical Bulletin and the Global Health Expenditure Database and analyzed using the Autoregressive Distributed Lag (ARDL) technique. The findings reveal that CMTR has a negative and statistically insignificant effect on HCE, while ASI and MCAP exert positive but statistically insignificant effects. Despite the individual insignificance of the capital market indicators, the model is jointly significant, indicating that capital market development collectively contributes to variations in healthcare expenditure. The study concludes that Nigeria’s capital market has not sufficiently translated its expansion into effective infrastructural financing, particularly in the healthcare sector. The study therefore recommends stronger regulatory and institutional frameworks, alongside targeted capital market instruments such as infrastructure bonds and project-based securities, to channel market resources toward long-term infrastructural investment and reduce speculative market activities.

Keywords: Capital market development, Capital market turnover ratio, Health care expenditure, Infrastructural financing, Market capitalization.

JEL Classification: G11; G18; H54.

Citation | Ezuem, M. D., & Ogbole, S. A. (2026). Capital market development and infrastructural financing in Nigeria. *Asian Journal of Economics and Empirical Research*, 13(2), 130–137. 10.20448/ajeer.v13i2.9508

History:

Received: 13 August 2026

Revised: 18 September 2026

Accepted: 29 September 2026

Published: 14 October 2026

Licensed: This work is licensed under a [Creative Commons Attribution 4.0 License](https://creativecommons.org/licenses/by/4.0/) 

Publisher: Asian Online Journal Publishing Group

Funding: This study received no specific financial support.

Institutional Review Board Statement: Not applicable.

Transparency: The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

Data Availability Statement: The corresponding author may provide study data upon reasonable request.

Competing Interests: The authors declare that they have no competing interests.

Authors’ Contributions: Both authors contributed equally to the conception and design of the study. Both authors have read and agreed to the published version of the manuscript.

Contents

1. Introduction	131
2. Literature Review	132
3. Methodology	134
4. Data Presentation and Analysis	134
5. Summary, Conclusion and Recommendations	136
References	136

Contribution of this paper to the literature

This study extends the literature by jointly examining capital market turnover ratio, all share index, and market capitalization as distinct dimensions of capital market development against healthcare expenditure as an infrastructure-financing measure in Nigeria. It provides recent ARDL-based evidence on whether capital market expansion translates into tangible healthcare financing outcomes.

1. Introduction

A high standard of living is contingent upon access to essential services that support economic opportunities, social interaction, and overall physical and mental well-being; within this framework, the capital market performs a crucial intermediary function (Adetiloye, Babajide, & Ugwu, 2015; Ikechukwu & Orumhua, 2023). In Nigeria, the capital market has increasingly assumed a strategic role in economic development by channeling long-term funds from surplus to deficit units. While its origins can be traced to informal securities trading during the colonial era, formal institutionalization began with the establishment of the Lagos Stock Exchange in 1961, which subsequently evolved into the Nigerian Stock Exchange (NSE) and, following its demutualization in 2021, emerged as the Nigerian Exchange Group (NGX) (Nigerian Exchange Group, 2025). Over the years, the market has undergone substantial transformation, including the automation of trading platforms, the introduction of innovative financial instruments, and enhanced regulatory oversight by the Securities and Exchange Commission (SEC). Empirical literature consistently indicates that key capital market indicators, such as market capitalization, value of transactions, and the number of listed securities, exert a positive influence on economic welfare, although this effect is often weakened by macroeconomic instability, policy uncertainty, and low investor confidence (Adetiloye et al., 2015; Idris, 2020; Lucky & Uranta, 2024). This evolution underscores the potential of the capital market as a viable mechanism for financing long-term, capital-intensive sectors, particularly infrastructure.

Infrastructure remains fundamental to socio-economic productivity and the enhancement of living standards. Nonetheless, Nigeria continues to grapple with a significant infrastructure deficit, as evidenced by limited electricity access, unreliable power supply, and poorly maintained road networks (Wikipedia, 2025). These inadequacies increase operational costs for businesses, restrict access to essential services such as healthcare and education, and intensify income inequality. Extant studies highlight that adequate infrastructure plays a vital role in poverty reduction and economic development by improving market accessibility, lowering transportation costs, and facilitating trade and industrial efficiency (Okolo, Edeme, & Emmanuel, 2018). Supporting this view, Ebehung and Jacob Ogar (2025), employing an Error Correction Model over a 30-year period, demonstrate that both “hard” infrastructure (such as transportation, energy, and telecommunications) and “soft” infrastructure (including education and governance structures) significantly enhance industrial growth and economic welfare in Nigeria. Thus, addressing infrastructural deficiencies is both an economic and social imperative.

Despite its critical importance, infrastructure financing in Nigeria has been largely constrained by an overdependence on public sector funding and short-term bank credit, both of which are inadequate to meet the country’s substantial financing needs. Estimates suggest that Nigeria requires between 53.95 and 61.52 billion naira annually to meaningfully bridge its infrastructure gap (Aniefor & Amahalu, 2022; Odom & Uremadu, 2025). In this context, the development of the capital market, particularly through long-term financing instruments such as corporate bonds, infrastructure bonds, and Real Estate Investment Trusts (REITs), has been identified as a promising alternative (Ikechukwu & Orumhua, 2023; Jolaiya, 2024). A well-developed capital market enhances the mobilization of both domestic and international capital, facilitates risk diversification, and provides financing structures that align with the long-term nature of infrastructure projects.

However, notwithstanding its theoretical potential, the practical contribution of Nigeria’s capital market to infrastructure financing remains limited. Infrastructure development continues to rely heavily on government borrowing and short-term bank lending, largely due to a limited pipeline of viable investment projects, high perceived risks, and the underdevelopment of specialized financial instruments (Ologunwa & Sadibo, 2016; Omoke, Diugwu, Nwaogbe, Ibe, & Ekpe, 2015). Furthermore, regulatory bottlenecks, exchange rate volatility, and investor risk aversion have been identified as key impediments to effective capital market participation in infrastructure financing. For instance, Jolaiya (2024) finds that although infrastructure financing positively influences industrial sector performance, its full potential is constrained by these structural challenges. Against this backdrop, this study investigates the impact of capital market development on infrastructural financing in Nigeria, using capital market turnover ratio, all share index, and market capitalization as proxies for capital market development, and healthcare expenditure as a measure of infrastructural financing.

1.1. Statement of Problem

Despite Nigeria’s persistent infrastructural challenges, the country continues to grapple with limited access to long-term funding necessary to support sustainable infrastructure development. While the government has traditionally relied on budgetary allocations and external loans, these sources are often insufficient and unsustainable. Meanwhile, the capital market offers an alternative avenue for mobilizing long-term capital. However, the extent to which capital market development contributes to infrastructure financing in Nigeria remains inadequately explored, raising concerns about the underutilization of domestic capital markets to bridge the country’s infrastructure gap.

Empirical literature shows that attempts have been made to study the relationship between the capital market and infrastructure financing in Nigeria. Though these attempts are few, their findings seem to be mixed and not conclusive. For instance, Nyeche (2025) found a significant and positive effect between capital market proxies and infrastructural financing in Nigeria, while Nnoje and Ikechukwu (2025) found a contrary result. From the foregoing, there seem to be few studies in this area, and their findings are mixed; thus, the question of whether the capital market can be relied on to finance infrastructure in Nigeria remains unanswered and unclear, and needs further investigation. Therefore, this research seeks to fill this gap by empirically investigating the impact of capital market development on infrastructural financing in Nigeria from 2000 to 2024. Using the capital market turnover ratio, all share index,

and market capitalization as proxies of capital market development, while health care expenditure is used as a proxy for infrastructural financing.

2. Literature Review

2.1. Conceptual Review

2.1.1. Capital Market

The role of the capital market in financing infrastructure and promoting economic development is highly significant and cannot be overstated. Several scholars have provided insightful perspectives on what the capital market stands for. For instance, Akanbi (2021) posited that the capital market is an organized financial system where long-term funds are mobilized and made available to governments and corporate entities through the issuance and trading of securities. Similarly, Akintola and Aroyewun (2022) view the capital market as a structured segment of the financial system that facilitates the efficient allocation of financial resources through the buying and selling of securities. In the same vein, Ikechukwu and Orumhwa (2023) define the capital market as a mechanism that enables the transfer of long-term funds from surplus economic units to deficit units, thereby supporting investment and economic growth. Finally, Chukwuemeka (2018) conceptualizes the stock market as a network of specialized financial institutions, mechanisms, processes, and structures that facilitate the mobilization and allocation of medium- to long-term funds from surplus units to deficit units for socio-economic investment purposes. Structurally, the market is divided into the primary and secondary segments. The primary market, also known as the new issues market, serves as a platform through which governments and corporate entities raise fresh capital by issuing securities to the public or selected investors. Regulatory oversight of this segment is jointly provided by the Securities and Exchange Commission (SEC) and the Nigerian Stock Exchange (NSE). In contrast, the secondary market is concerned with the trading of already issued securities, providing liquidity and continuous valuation of financial assets (Pandey, 2006).

The stock market, as a component of the broader securities market, facilitates the organized trading of shares and other financial instruments among investors (Akintola & Aroyewun, 2022). It serves as a meeting point for buyers and sellers, enabling both domestic and foreign investments in listed companies (Kalu, Anselme, & Kirabo, 2019). Through this mechanism, it performs a critical intermediation function by channeling funds from savers to investors, thereby promoting efficient allocation of resources within the economy. While debt financing was historically dominant, equity and quasi-equity instruments have increasingly gained prominence due to their flexibility and growth-enhancing potential (Chukwuemeka, 2018). A stable and well-regulated equity market enhances firms' ability to raise capital and supports overall financial system efficiency. Furthermore, a well-functioning stock market contributes to economic growth by encouraging savings, improving investment allocation, and attracting foreign portfolio investment. It provides households with opportunities to invest in financial assets while simultaneously offering firms access to long-term financing for expansion and development projects. Additionally, the presence of a vibrant equity market tends to attract foreign investors, whose participation can lead to increased share prices and a reduction in the cost of capital for domestic firms by influencing valuation metrics such as the price-earnings ratio.

2.1.2. Concept of Infrastructure

Onwe, Ugwu, Nwogo, and Ibiam (2022) define infrastructure as social (or soft core) or physical (or hard-core) infrastructure. They contended that soft-core infrastructure had to do with healthcare, governance, education, and accountability, as well as property rights, which are the driving forces of economic activities; whereas hard-core infrastructure had to do with physical structures such as transport facilities, telecommunication facilities, power, water, and sewage, which they characterized as the wheels of economic activities.

Infrastructure is the general term for the basic physical systems of a business, region, or nation- transportation systems, communication networks, sewage, water, and electric systems. These systems tend to be capital-intensive and high-cost investments, and are vital to a country's economic development and prosperity. Projects related to infrastructure improvements may be funded publicly (government spending), privately, or through public-private partnership financing models. In economic terms, infrastructure often involves the production of public goods; hence, it is the foundation upon which the structure of the economy is built. Because infrastructure very often involves the production of public goods, it is very typical to see public financing, control, supervision, or regulation of infrastructure. This usually takes the form of more productive direct government production or production by closely regulated, legally sanctioned, and often subsidized models (Echekoba, Ananwude, & Lateef, 2018; Enimola, 2024).

2.1.3. Infrastructural Financing

Infrastructural financing refers to the mobilization of financial resources to build, maintain, and upgrade physical and social infrastructure such as roads, bridges, power generation and transmission systems, water supply, hospitals, and schools (Sulaiman, Adejayan, & Ilori, 2023). In Nigeria, where gaps in infrastructure are pervasive both in quality and access, financing these projects demands large and sustained capital inflows. These inflows may come from government budgetary allocations (capital expenditure), private sector investment (e.g., through public-private partnerships, private infrastructure funds), multilateral and bilateral grants/loans, and increasingly, capital market instruments such as bonds. The objective is not only to cover construction and installation costs but to ensure long-term operations, maintenance, and expansion, to support economic growth and improve social welfare (Nnoje & Ikechukwu, 2025).

According to Sulaiman and Rabi (2023), a key characteristic of infrastructure financing is its need for long-term, stable funding sources, since infrastructure assets often have long lifetimes, require high upfront costs, and may yield returns over many years (directly or indirectly). In Nigeria, traditional sources like government budgets are often constrained, unpredictable, or competed for by other priorities; borrowing from domestic or external debt has risks of currency, interest rate, or repayment burdens. Therefore, alternative mechanisms such as issuing infrastructure bonds, using pension funds, or attracting private investment are critical. For instance, the Nigerian Debt

Management Office's issuance of sovereign sukuk has been used to finance roads and bridges, creating jobs and enhancing the standard of living.

2.1.4. Capital Market Development and Infrastructural Financing in Nigeria

In the context of capital market development, infrastructural financing refers to the ability of the capital market to provide appropriate instruments and institutional frameworks that effectively channel savings into long-term infrastructure investments (Amadi & Agya, 2023). This entails the existence of well-regulated debt markets, particularly bond markets, alongside active participation from institutional investors such as pension funds and insurance companies that are willing to commit funds over extended periods. It also requires transparency, sound risk-mitigation mechanisms, and the availability of tailored financial instruments including long-term bonds, project-based securities, sukuk, and infrastructure funds. In Nigeria, regulatory authorities have emphasized that the capital market is strategically positioned to bridge the country's significant infrastructure financing gap, given its potential to mobilize large-scale domestic resources (Soltani Nejad, Darabi, & Hamidian, 2024). Consequently, a more developed capital market enhances the availability and stability of long-term finance by deepening both equity and debt instruments that align with the long gestation periods typical of infrastructure projects. This process facilitates the mobilization of domestic savings into long-term investment vehicles, thereby reducing overreliance on short-term bank financing and foreign borrowing (Lucky & Uranta, 2024).

However, despite these potentials, the contribution of capital market development to actual infrastructure delivery in Nigeria has remained uneven. The mere existence of deep financial markets does not automatically translate into viable or well-executed infrastructure projects. Several structural and institutional challenges, including weak project pipelines, inadequate project preparation capacity, regulatory inefficiencies, low market liquidity, and concerns over credit risks at both sovereign and sub-sovereign levels have constrained the effective utilization of capital market instruments (Lucky & Uranta, 2024). Although innovations such as sukuk and municipal bond frameworks have created new financing opportunities, their impact has been limited by broader institutional weaknesses and market immaturity (Odom & Uremadu, 2025). Therefore, achieving meaningful progress in infrastructure financing through the capital market will require targeted reforms aimed at strengthening project development processes, enhancing credit support mechanisms, and improving overall market liquidity.

2.2. Theoretical Review

2.2.1. The Indigenous Growth Theory

The Indigenous Growth Theory, also known as the Endogenous Growth Theory, was developed in the mid-1980s by economists such as Romer (1986) and Lucas Jr (1988) as an advancement on the classical and neoclassical growth models. The theory emphasizes that well-developed capital markets can stimulate sustained economic growth by providing the needed financial resources for infrastructure development. By mobilizing domestic savings and channeling them into productive investments such as roads, power, healthcare, and education, the capital market serves as a key driver of innovation and human capital formation factors emphasized by the theory. Thus, when Nigeria's capital market efficiently allocates resources and supports technological progress, it enhances infrastructure development, which in turn drives long-term economic growth from within the economy.

The theory holds the following assumptions.

- i. Efficient capital markets mobilize savings and channel them into infrastructure projects, promoting sustained economic growth.
- ii. Technological progress and innovation arise from within the economy through financial investments and entrepreneurship.
- iii. Investment in education and skills, supported by capital market funding, increases productivity and supports infrastructure development.

One of the major critics of the Indigenous (Endogenous) Growth Theory is Solow (1956), the proponent of the Neoclassical Growth Model. Solow and other traditional economists argue that the endogenous growth theory overstates the ability of internal factors such as human capital and innovation to sustain growth indefinitely without external influences. They contend that in reality, technological progress often arises from factors outside the economic system (Exogenous forces) such as global innovations, foreign direct investment, and international trade, which endogenous models tend to overlook.

However, despite the criticisms of this theory, it is still considered relevant for this study because it explains how internal factors like capital market development can drive sustainable economic growth. The theory aligns with the study focus by emphasizing that when financial systems, especially the capital market, efficiently mobilize and allocate domestic resources, they can stimulate infrastructural financing and long-term development without relying on external aid.

2.3. Empirical Review

Nyeche (2025) investigated the effects of the capital market on transportation sector growth in Nigeria over a period of thirty-three years (1990 to 2022). The study adopted an ex-post facto research design and made use of time series data sourced mainly from the Central Bank of Nigeria (CBN) statistical bulletin. The techniques of data analysis adopted were the Augmented Dickey-Fuller (ADF) approach of unit root and the Ordinary Least Squares (OLS) regression technique. The findings of the study showed that market capitalization, value of traded stocks, and all share index have a positive and significant effect on transportation GDP growth rate in Nigeria, while turnover ratio has an insignificant positive effect on transportation GDP growth rate in Nigeria.

Lucky and Uranta (2024) investigated the relationship between domestic debt and infrastructural financing of public transportation expenditure in Nigeria from 1986 to 2023. Time series data were sourced from Central Bank of Nigeria Statistical Bulletin, Nigeria Bureau of Statistics and Debt Management Office. The study employed Error Correction Model and Granger Causality techniques in analysing secondary data. The results showed that federal government Treasury bonds have a positive effect, while treasury bills and federal government bonds have a positive effect on public expenditure on transport.

Lucky and Uranta (2024) examined the effect of domestic debt and public health financing in Nigeria. Time series data were sourced from the Central Bank of Nigeria Statistical Bulletin from 1986 to 2023. The study employed the Error Correction Model for analysis. The study found that Treasury bonds and federal government bonds have a negative effect on public expenditure on health, while federal government treasury bills have positive effect on the dependent variable; a significant relationship between Treasury bonds and public health sector expenditure; a non-significant relationship between Treasury Bills and public health sector expenditure. Finally, a not significant relationship between FGN bonds and public health sector expenditure in Nigeria.

Sulaiman and Rabi (2023) examine the impact of Sukuk on infrastructural financing in Nigeria for the period 2013 to 2021. The data for the research were obtained from the Central Bank of Nigeria (CBN) Statistical Bulletin: Public Finance and Debt Management Office. The estimation technique of the study was Robust Least Square. It was found that Sukuk issued in Nigeria have a statistically significant impact on infrastructural financing for the period under review, among others.

Onwe et al. (2022) investigated the impact of infrastructure financing on industrial sector performance in Nigeria, 1985 - 2020. Time series data for the period of 1951-2020 sourced from CBN Statistical Bulletin and NBS data portal were used for the study. The ordinary least squares (OLS) technique was employed for the analysis. The findings indicate that government industrial loans have a positive significant impact on industrial sector gross domestic product in Nigeria; that government social infrastructure spending significantly impacts industrial sector gross domestic product in Nigeria; and that government economic infrastructure spending has no significant impact on industrial sector gross domestic product in Nigeria.

3. Methodology

3.1. Research Design

Research design provides the methodological structure that guides the systematic conduct of a study and determines how the research problem is empirically investigated. McCombes (2019) describes it as a framework that organizes the research process in a manner appropriate to the subject under investigation. Similarly, Bouchirika (2023) explains that an appropriate research design enhances the clarity, accuracy, validity, reliability, and generalizability of empirical inquiry. This study adopts an ex-post facto research design because the variables under investigation are based on historical data that had already been generated and documented prior to the commencement of the study.

3.2. Model Specification

The Autoregressive Distributed Lag (ARDL) model for the study is patterned after Enimola (2024), who investigated the effects of the capital market on transportation sector growth in Nigeria. The model is specified as follows;

HCE = f(CMTR, ASI, MCAP) (1)

The econometric form of the model is shown below;

ΔHCE_t = β₀ + Σ_{i=0}ⁿ β₁ΔHCE_{t-1} + Σ_{i=0}ⁿ β₂ΔCMTR_{t-1} + Σ_{i=0}ⁿ β₃ΔASI_{t-1} + Σ_{i=0}ⁿ β₄ΔMCAP_{t-1} + α₁CMTR_{t-1} + α₂ASI + α₃MCAP_{t-1} + μ_t (2)

- Where;
- HCE = Health care expenditure.
- CMTR = Capital market turnover ratio.
- ASI = All Share Index.
- MCAP = Market capitalization.
- μ_t = Stochastic term.
- t = Time or period.
- β₀ = Intercept of the regression line.
- β₁ – β₄ = Coefficient of long-run parameters.
- α₁ - α₃ = Coefficient of short-run parameters.

3.3. Analytical Techniques

The secondary data collected will be analyzed using descriptive statistics and a correlation matrix, and the Auto-Regressive Distributed Lag (ARDL) model will be used to evaluate the influence of the independent variables on the dependent variable. The choice of the Auto-Regressive Distributed Lag model stemmed from its robust results yielding even on small samples, simultaneous modeling of short- and long-run elasticity, and a perfect combination of variables with different order integration I(0) and (1).

4. Data Presentation and Analysis

4.1. Descriptive Statistics

The descriptive statistics are summarized in Table 1.

Table 1. Descriptive statistics.

Variables	Mean	Std. Dev.	Max.	Min.	Prob.	Obs.
HCE	3286218	2968012	10676786	220539	0.0457	25
CMTR	8.1356	7.0260	34.7900	0.9900	0.0000	25
ASI	34251	20574	102926	8111	0.0000	25
MCAP	21301	25580	109259	472.30	0.0000	25

Healthcare expenditure (HCE) recorded an average value of ₦3,286,218, with a high standard deviation of ₦2,968,012, indicating significant fluctuations in government spending on healthcare over the period. The maximum and minimum values of ₦10,676,786 and ₦220,539 further confirm this variability. Capital market indicators also

show volatility: CMTR has a mean of 8.14%, ASI averages 34,251 points, while MCAP records a mean value of ₦21,301 billion, all with relatively large standard deviations, suggesting instability in market performance.

4.2. Correlation Test

Table 2 depicts the relationship between the independent variables (Capital market turnover ratio, all share index, and market capitalization) and the dependent variable (Healthcare expenditure).

Table 2. Correlation matrix.

Variables	HCE	CMTR	ASI	MCAP
HCE	1.0000			
CMTR	-0.4128	1.0000		
ASI	0.8278	-0.1083	1.0000	
MCAP	0.9539	0.3508	0.9116	1.0000

Market capitalization (MCAP) exhibits a very strong positive relationship with healthcare expenditure ($r = 0.9539$), while the all share index (ASI) also shows a strong positive correlation ($r = 0.8278$). This implies that increases in market size and performance are associated with higher healthcare spending. In contrast, capital market turnover ratio (CMTR) has a moderate negative correlation with HCE ($r = -0.4128$), suggesting that increased trading activity does not necessarily translate into improved infrastructural financing.

Table 3. Autoregressive distributed lag estimates.

Variables	Coefficients	Std. error	T-statistic	P-values
CMTR	-12528.250	13698.930	-0.915	0.373
ASI	1.315	10.960	0.120	0.906
MCAP	5.683	18.090	0.314	0.757
C	164961.800	108869.900	1.515	0.147
R-Squared	0.496			
Adjusted R-squared	0.384			
F-statistic	4.432			
Prob(F-statistic)	0.011			
Durbin-Watson	2.024			

4.3. ARDL Regression Analysis

Table 3 presents the Autoregressive Distributed Lag (ARDL) estimates of the effect of capital market development on healthcare expenditure in Nigeria. The results show that capital market turnover ratio (CMTR) has a negative coefficient of -12,528.250 and a probability value of 0.373, indicating a negative but statistically insignificant effect on healthcare expenditure. The all share index (ASI) records a positive coefficient of 1.315 with a probability value of 0.906, implying that movements in the overall stock market index are positively associated with healthcare expenditure, although the effect is statistically insignificant. Similarly, market capitalization (MCAP) exhibits a positive coefficient of 5.683 and a probability value of 0.757, indicating a positive but statistically insignificant effect. The constant term is positive at 164,962.000 and statistically insignificant with a probability value of 0.147.

The model records an R-squared value of 0.496, indicating that approximately 49.6% of the variation in healthcare expenditure is explained by the included capital market indicators, while the adjusted R-squared is 0.384. The F-statistic of 4.433 with a probability value of 0.011 indicates that the model is statistically significant overall. Furthermore, the Durbin-Watson statistic of 2.024 suggests the absence of serious first-order serial correlation in the model.

4.4. Test Hypothesis

Decision Rule: Reject the null hypothesis if the probability value (p-value) is less than 0.05 (5%). Otherwise, accept the null hypothesis.

4.4.1. Hypothesis One

H_{01} : Capital market turnover ratio has no significant effect on healthcare expenditure in Nigeria.

The regression results show CMTR has a coefficient value of -12528.25 with a probability value of 0.3725; the probability value of 0.3725 falls above the threshold of the 0.05 level of significance. Therefore, the study accepts the null hypothesis and concludes that the CMTR has no significant effect on healthcare expenditure in Nigeria.

4.4.2. Hypothesis Two

H_{02} : All share index (ASI) has no significant effect on healthcare expenditure in Nigeria.

The regression result indicates that ASI has a coefficient value of 1.314991 with a probability value of 0.9057. The positive coefficient implies that increases in all share index is associated with increases in healthcare expenditure. Also, the probability value of 0.9057 is higher than the 0.05 significance level; as a result of this, the study accepts the null hypothesis and concludes that ASI has no significant effect on healthcare expenditure in Nigeria.

4.4.3. Hypothesis Three

H_{03} : Market capitalization (MCAP) has no significant effect on healthcare expenditure in Nigeria.

The regression results reveal that MCAP has a coefficient value of 5.683405 with a probability value of 0.7570. Also, the probability value of 0.7075 is greater than the 0.05 level of significance. The study therefore accepts the null hypotheses and concludes that MCAP has no significant effect on healthcare expenditure in Nigeria.

4.5. Discussion of Findings

The findings of this study reveal that capital market development indicators. Capital market turnover ratio (CMTR), all share index (ASI), and market capitalization (MCAP) exert insignificant effects on healthcare expenditure (a proxy for infrastructural financing) in Nigeria. Although MCAP and ASI show positive relationships, their lack of statistical significance suggests that the Nigerian capital market has not effectively translated its growth into tangible infrastructural financing outcomes. This reflects structural inefficiencies, weak linkage between financial markets and the real sector, and possible dominance of speculative activities over long-term investment. The negative (though insignificant) effect of CMTR further implies that increased trading activities do not necessarily support infrastructure financing, reinforcing the argument that liquidity alone is insufficient without proper financial intermediation mechanisms.

The results are consistent with the findings of Aladejare, Nasiru, and Odzie (2025), who reported that capital market indicators in Nigeria have insignificant or even adverse effects on infrastructure development, particularly in the long run. Similarly, Olusegun and Ajao (2024) found that capital market development has a positive but negligible impact on economic growth in Nigeria. In contrast, Idris (2020) found a significant positive and long-run relationship between capital market development and economic growth in Nigeria.

5. Summary, Conclusion and Recommendations

5.1. Summary of Findings

This study examined the effect of capital market development on infrastructural financing in Nigeria from 2000 to 2025. Specifically, the study investigated how capital market turnover ratio, all share index, and market capitalization influence healthcare expenditure. The study adopted an *ex-post-facto* research design utilizing Secondary data covering the period 2000 to 2025, sourced from the Central Bank of Nigeria Statistical Bulletin and the Global Health Expenditure database. Healthcare expenditure was used as the dependent variable, while capital market turnover ratio, market capitalization, and all share index served as the explanatory variables.

The study employed Autoregressive Distributed Lag (ARDL) regression analysis and revealed the following:

- i. Capital market turnover ratio has a negative and statistically insignificant effect on healthcare expenditure in Nigeria
- ii. All share index has a positive and statistically insignificant effect on healthcare expenditure in Nigeria.
- iii. Market capitalization exhibited a positive but statistically insignificant relationship with healthcare expenditure.

5.2. Conclusion

This study finds that capital market development has a limited and insignificant impact on infrastructural financing in Nigeria, as proxied by healthcare expenditure. Although indicators such as market capitalization and all share index exhibit positive relationships, their effects are weak and statistically insignificant, while the capital market turnover ratio shows a negative influence. This suggests that the Nigerian capital market, despite its growth, has not effectively mobilized and channeled funds into critical infrastructure development. However, the joint significance of the variables indicates that the capital market still holds potential for supporting infrastructural financing if properly structured. The findings highlight the need for policy reforms and institutional improvements to strengthen the linkage between capital market activities and long-term infrastructure investment in Nigeria.

5.3. Recommendations

Based on the findings of the study, the following recommendations are proposed.

- i. There is a need to strengthen the linkage between capital market activities and infrastructure financing by developing targeted financial instruments such as infrastructure bonds and project-based securities. This will ensure that increases in market capitalization translate into real investment in sectors like healthcare.
- ii. Policymakers should improve regulatory frameworks and incentives to reduce speculative trading and encourage long-term investment. The negative coefficient of CMTR suggests that high trading activity is not contributing to infrastructure; hence, reforms should redirect market liquidity toward productive uses.
- iii. Government and relevant authorities should complement capital market funding with supportive fiscal and institutional policies, since about 50.38% of variations in healthcare expenditure are explained by factors outside the model. This implies that relying solely on capital market development is insufficient for financing infrastructure, and a more integrated financing approach is required.

References

- Adetiloye, K. A., Babajide, A. A., & Ugwu, N. F. (2015). Constraints to capital market growth in African economies: The case of Nigeria. *Journal of Finance and Investment Analysis*, 4(3), 1-16.
- Akanbi, A. (2021). Effect of monetary policy on stock market performance in Nigeria. *Journal of Global Economics and Business*, 2(5), 101-115.
- Akintola, A. F., & Aroyewun, B. O. (2022). Monetary policy and stock market return in Nigeria. *International Journal of Recent Innovations in Academic Research*, 6(4), 23-27.
- Aladejare, S. A., Nasiru, H., & Odzie, T. (2025). The capital market and infrastructure development in Nigeria. *Journal of International Money, Banking and Finance*, 6(1), 39-54.
- Amadi, K. W., & Agya, A. A. (2023). Effect of debt service on infrastructural development in Nigeria. *International Journal of Advanced Studies in Economics and Public Sector Management*, 11(2), 1-14.
- Aniefor, S. J., & Amahalu, N. N. (2022). Effect of capital market financing on economic growth of Nigeria. *Journal of Accounting and Financial Management*, 8(6), 26-43. <https://doi.org/10.56201/jafm.v8.no6.2022.pg26.43>
- Bouchirika, I. (2023). *Types of research design: Design perspective and methodological approaches*. Retrieved from <https://research.com/>
- Chukwuemeka, A. (2018). Monetary policy and the performance of Nigeria Capital market: A time variant analysis. *European Journal of Accounting, Auditing and Finance Research*, 6(6), 22-43.
- Ebehung, N., & Jacob Ogar, O. (2025). Foundations of growth: Evaluating the interplay between infrastructure and economic growth in Nigeria. *International Journal of Research and Innovation in Social Science*, 9(2), 446-460.
- Echekoba, F., Ananwude, A., & Lateef, O. (2018). Effect of monetary policy on the performance of the Nigerian capital market (1986-2016): Stylized facts from ARDL approach. *Advances in Research*, 14(6), 1-15.

- Enimola, H. B. (2024). The impact of capital market on the economic growth of Nigeria. *EKSU Journal of the Management Scientists*, 3(1), 307–317.
- Idris, M. (2020). Analysis of capital market development and economic growth in Nigeria. *Global Journal of Applied, Management and Social Sciences*, 20, 156-172.
- Ikechukwu, O. J., & Orumhwa, E. S. (2023). Impact of policy measure on stock market development in Nigeria. *International Journal of Intellectual Discourse*, 6(3), 60-73.
- Jolaiya, O. F. (2024). The impact of infrastructure financing on industrial sector performance in Nigeria (1986–2022). *International Journal of Advances in Management and Economics*, 13(3), 129–137.
- Kalu, E., Anselme, B. S., & Kirabo, J. K. (2019). Monetary policy and stock market returns in Uganda. *Journal Economics & Business Atmajaya Indonesia*, 3(1), 57-68.
- Lucas Jr, R. E. (1988). On the mechanics of economic development. *Journal of Monetary Economics*, 22(1), 3-42. [https://doi.org/10.1016/0304-3932\(88\)90168-7](https://doi.org/10.1016/0304-3932(88)90168-7)
- Lucky, L. A., & Uranta, J. A. (2024). Domestic debt and public health financing: Evidence from Nigeria. *International Journal of Economics and Financial Management*, 9(9), 171–202.
- McCombes, S. (2019). *How to create a research design*. Scribbr. Retrieved from <https://www.scribbr.com/>
- Nigerian Exchange Group, P. (2025). *Annual report and financial statements for the year ended 31 December 2025*. Lagos, Nigeria: Nigerian Exchange Group Plc.
- Nnoje, A. I., & Ikechukwu, O. M. (2025). Funding the university education in Nigeria through the capital market:: A public private partnership (PPP) Model-case study of Unizik. *African Banking and Finance Review Journal*, 20(5), 58-74.
- Nyeche, E. (2025). Capital market and transportation sector growth: An empirical assessment of the effects on transportation sector in Nigeria. *International Journal of Social Sciences and Management Research*, 11(1), 98–109.
- Odom, C. P., & Uremadu, S. O. (2025). Capital markets financing and economic growth of Nigeria. *AKSU Journal of Administration and Corporate Governance*, 5(3), 104–124.
- Okolo, C. V., Edeme, R. K., & Emmanuel, C. (2018). Economic analysis of capital expenditure and infrastructural development in Nigeria. *Journal of Infrastructure Development*, 10(1-2), 52-62. <https://doi.org/10.1177/0974930618809173>
- Ologunwa, O. P., & Sadibo, O. (2016). Capital market development and economic growth in Nigeria: An empirical analysis. *FUTA Journal of Management and Technology Maiden Edition*, 1(1), 48-59.
- Olusegun, B. O., & Ajao, O. S. (2024). Capital market development and economic growth in Nigeria. *Open Access Library Journal*, 11, e10891. <https://doi.org/10.4236/oalib.1110891>
- Omoke, V., Diugwu, I. A., Nwaogbe, O. R., Ibe, C. C., & Ekpe, D. A. (2015). Infrastructure financing and management: The impact of concession on the operations and performance of Nigerian seaports. *Journal of Behavioural Economics, Finance, Entrepreneurship, Accounting and Transport*, 3(2), 65-70.
- Onwe, S., Ugwu, O., Nwogo, J., & Ibiam, C. (2022). Impact of infrastructure financing on industrial sector growth in Nigeria. *Journal of Public Administration and Governance Research*, 4(1), 42-58.
- Pandey, I. M. (2006). *Financial management*. New Delhi, India: Vikas Publishing House.
- Romer, P. M. (1986). Increasing returns and long-run growth. *Journal of Political Economy*, 94(5), 1002-1037. <https://doi.org/10.1086/261420>
- Solow, R. M. (1956). A contribution to the theory of economic growth. *The Quarterly Journal of Economics*, 70(1), 65-94. <https://doi.org/10.2307/1884513>
- Soltani Nejad, H., Darabi, R., & Hamidian, M. (2024). Analysis of the impact of risk factors and financing methods on company performance (Case Study: Transportation Industry). *Journal of Industrial and Systems Engineering*, 16(1), 1-14.
- Sulaiman, L. A., Adejayan, A. O., & Ilori, O. O. (2023). Capital market development and economic growth of West African countries. *Nigerian Journal of Banking and Financial Issues*, 9(1), 115–125.
- Sulaiman, L. A., & Rabi, I. D. (2023). Impact of Sukuk (Islamic Bond) finance on infrastructural development financing in Nigeria. *The American Journal of Humanities and Social Sciences Research*, 6(2), 27–35.
- Wikipedia. (2025). *Nigerian energy supply crisis*. Retrieved from https://en.wikipedia.org/wiki/Nigerian_energy_supply_crisis. [Accessed September 9, 2026]