

Overcoming the Challenges of Sukuk Issuance as a Source of Fund for Constructing High Quality Trunk a Road in Nigeria

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Abstract

This study examines how challenges associated with Sukuk issuance can be overcome to enhance its effectiveness as a sustainable financing mechanism for constructing quality Trunk A roads in Nigeria. Sukuk, a key instrument of the Islamic Capital Market, is grounded in Shariah principles that prohibit riba and emphasize asset-backed, risk-sharing transactions, offering an ethical alternative to conventional debt. Despite seven sovereign Sukuk issuances totaling over ₦1.1 trillion since 2017, institutional, regulatory, and market constraints limit Sukuk's full potential. The research adopts a mixed-methods design, collecting primary data from forty purposively selected respondents across key institutions; the Debt Management Office (DMO), Securities and Exchange Commission (SEC), Central Bank of Nigeria (CBN), Jaiz Bank, TAJ Bank, and Alternative Bank because these bodies regulate, supervise, issue, or operationally implement Sukuk and provide authoritative insights. It also uses secondary data from DMO's 2017–2025 Sukuk issuance records. Quantitative data were analyzed with descriptive statistics and trend analysis to assess issuance patterns, while qualitative responses were examined using thematic content analysis to identify regulatory, institutional, and market challenges. Findings indicate that Sukuk financing has enhanced road connectivity in corridors funded under the sovereign Sukuk programme, improving transport flow, market access, and local economic activity. However, weak regulatory harmonization, high issuance costs, limited investor awareness, and shallow secondary-market depth hinder scalability. The study recommends a unified regulatory framework, investor education, toll-based revenue models, and measures to improve market liquidity to strengthen Sukuk's role as a credible, sustainable mechanism for financing Nigeria's critical road infrastructure.

Key Words: Infrastructure Financing, Islamic Capital Market, Regulatory Challenges, Sukuk, Toll-Based Revenue Models. Trunk A Roads

1. Introduction

The Islamic Capital Market Certificate (SUKUK), as a Shariah-compliant financing instrument within the Islamic Capital Market (ICM), is designed to mobilize capital through asset-backed and risk-sharing mechanisms rather than conventional interest-bearing debt (Iqbal & Mirakhor, 2019). It embodies the principle that capital must be tied to productive activities, with investors receiving returns derived from real assets or project performance rather than speculative gains. Unlike bonds, which represent a debt obligation promising fixed interest payments, sukuk holders acquire a proportional ownership interest in the underlying asset, usufruct, or economic venture (El-Gamal, 2021). This asset-backing requirement makes sukuk a preferred option for infrastructure financing because it guarantees that funds allocated must be directly tied to physical projects that generate tangible socio-economic outcomes (Ahmed

& Mollah, 2019). Consequently, sukuk has increasingly become a strategic global tool for funding long-term development projects in countries where ethical finance, transparency, and sustainability are prioritized.

Globally, the success of sukuk financing has been evident in countries such as Malaysia, Indonesia, Saudi Arabia, and the United Arab Emirates. In Malaysia, for instance, sukuk accounts for over 60% of Islamic capital market transactions and has historically funded large-scale transportation, energy, and public housing projects (Razak & Hassan, 2020). The government's ability to align sukuk issuance with sound legal frameworks and secondary-market liquidity has facilitated strong investor confidence and deepened participation from local institutional investors and foreign ethical finance markets (Haniffa & Hudaib, 2019). Similarly, Indonesia's sovereign sukuk has been instrumental in providing long-term funding for roads, urban rail systems, ports, and electricity infrastructure, demonstrating its capacity to support asset-intensive sectors (Abdullah, & Masih, 2018). These international models provide practical benchmarks for Nigeria, illustrating how well-governed sukuk systems can advance major development objectives.

Nigeria adopted sovereign sukuk in 2017 as part of wider efforts to diversify financing mechanisms and reduce dependence on conventional borrowing and volatile oil revenues. The Debt Management Office (DMO) launched the first ₦100 billion sovereign sukuk with the aim of repairing and upgrading key federal highway corridors. Since then, the government has raised approximately ₦1.1 trillion through multiple issuances to support the rehabilitation and construction of over 124 national road projects (Securities and Exchange Commission [SEC], 2024). As of 2025, not less than ₦1.092 trillion had been utilized for the rehabilitation of more than 4,100 kilometres of Trunk A routes and nine federally controlled bridges (DMO, 2025). These interventions have facilitated improved road connectivity, reduced transit time, stimulated interregional trade, and catalyzed growth along major logistics corridors. These outcomes align with the core objectives of Islamic capital markets, where instruments are deployed to promote socio-economic well-being and support infrastructure that benefits society (Iqbal & Mirakhor, 2019).

Despite these achievements, the issuance of sukuk in Nigeria continues to face institutional, financial and regulatory barriers that constrain its scalability as a sustainable financing mechanism. One of the most pronounced challenges is weak institutional coordination. Regulatory fragmentation among bodies such as the SEC, DMO, Central Bank of Nigeria (CBN), and the Federal Ministry of Works produces inconsistencies in approval processes, project monitoring, and issuance timelines (Olayemi, 2023). Unlike Malaysia, where regulatory roles are centralized under well-integrated financial authorities, Nigeria's regulatory ecosystem is disjointed, creating procedural delays and reducing operational efficiency. Such fragmentation increases transaction risk, undermines investor confidence, and constrains market expansion.

A related challenge is the scarcity of bankable Shariah-compliant assets. For a sukuk instrument to qualify, the financed project must demonstrate clear ownership characteristics and must be capable of generating permissible returns. Many Trunk A roads lack inherent revenue models because they operate as public goods that do not directly yield cash flow to investors (Yusuf & Ahmad, 2022). In the absence of tolling mechanisms, concession-based structures, or revenue-sharing frameworks, these assets cannot easily be securitized into sukuk, complicating structuring and reducing issuance viability. In contrast, Indonesia and Saudi Arabia have enhanced sukuk bankability by pairing public infrastructure with regulated

toll systems, thereby guaranteeing predictable returns and creating a clear asset-based investment model (Haniffa & Hudaib, 2019).

Beyond structural constraints, market dynamics also hinder sukuk growth. The Nigerian sukuk secondary market remains shallow, limiting liquidity and restricting exit opportunities for institutional investors such as pension funds, cooperative societies, and Islamic banks (Abdullah et al., 2018). Secondary markets are essential to deepen investor confidence, attract long-term capital, and reduce concentration risk. Without a liquid market, investors become locked into long maturities, limiting portfolio flexibility and discouraging repeat subscriptions. This challenge is compounded by generally low financial literacy and limited public awareness of Islamic finance instruments. Many Nigerians perceive sukuk as strictly religious or exclusive to Muslim investors, despite its fundamentally universal economic philosophy (PwC Nigeria, 2024). Such misconceptions reduce subscription levels and inhibit cross-sector participation.

Furthermore, the cost of sukuk issuance remains significantly higher than conventional bonds due to layers of legal structuring, Shariah certification, asset valuation, and trustee supervision (Ahmed & Mollah, 2019). These administrative burdens increase overhead and reduce issuance frequency, particularly during periods of fiscal pressure. Nigeria's persistent macroeconomic instability characterized by inflation, currency depreciation, and rising debt service ratios, further complicates large-scale sukuk deployment (CBN, 2024). Without supportive fiscal incentives such as tax exemptions or regulatory guarantees, issuance challenges are likely to persist.

These structural and market challenges are particularly consequential given the strategic importance of Nigeria's Trunk A highway network. Trunk A roads connect major urban centers, industrial hubs, ports, airports, and borders, forming the core arteries of the national logistics ecosystem (Usmani & Mohammed, 2022). They facilitate the movement of agricultural produce, industrial goods, and labor, directly influencing productivity, cost efficiency, and regional trade competitiveness. The deterioration of this network imposes severe economic externalities such as longer travel times, higher vehicle operating costs, reduced market access, and increased accident frequencies. The Federal Ministry of Works estimates that over 60% of federal highways require major rehabilitation, yet available budgetary allocations are insufficient to address accumulated deficits (Federal Ministry of Works & Housing [FMW&H], 2023). Traditional financing models hinged on petroleum revenues and interest-based debt instruments have proven volatile and unsustainable.

Thus, sukuk offers a promising mechanism for sustainable infrastructure finance by linking public financing to specific assets, enhancing transparency, reducing leakages, and enforcing accountability in project execution (El-Gamal, 2021). Its proper implementation will promote intergenerational equity by ensuring that infrastructure benefits future users without overburdening taxpayers with unsustainable debt. Moreover, sukuk's ethical foundation fosters investor trust and can attract diaspora capital, ethical investment funds, and corporate treasury participation. However, these advantages remain underutilized unless institutional reforms, legal standardization, Shariah governance strengthening, and secondary-market development are pursued (Haniffa & Hudaib, 2019).

Therefore, addressing the institutional, regulatory, and operational bottlenecks surrounding sukuk issuance is essential for Nigeria to leverage its full potential in infrastructure financing. This includes improving regulatory coordination, strengthening Shariah governance, enhancing project bankability through PPP and tolling frameworks,

expanding investor education, and introducing fiscal incentives capable of reducing issuance costs and improving market participation. If properly harnessed, sukuk can become a transparent, sustainable, and efficient financing mechanism for delivering high-quality Trunk A road infrastructure in Nigeria.

Nigeria's increasing reliance on Sukuk for financing Federal Road infrastructure demonstrates the instrument's potential as a sustainable alternative to conventional borrowing. However, persistent institutional fragmentation, weak regulatory coordination, limited sukuk-eligible assets, shallow secondary-market liquidity, and low investor awareness continue to constrain its effectiveness in financing Trunk A roads. Despite the increasing importance of sukuk within Nigeria's infrastructure financing framework, existing studies have largely concentrated on its conceptual evolution and macroeconomic relevance, with limited attention given to the practical institutional and operational challenges affecting its effectiveness and broader application in financing Trunk A roads. Consequently, this study examines the institutional, regulatory, market, and operational constraints affecting sukuk issuance for Trunk A road financing in Nigeria. It further evaluates the effectiveness of existing policy instruments, including SEC sukuk regulations and sovereign guarantees, while also exploring measures for strengthening Shariah governance, improving project structuring, and expanding the supply of sukuk-eligible assets. In addition, the study investigates market-based and fiscal interventions capable of reducing issuance costs and improving secondary-market liquidity, as well as strategies for enhancing institutional capacity, stakeholder awareness, investor participation, and overall market confidence in sukuk financing for federal highway development.

2. Literature Review

2.1 Conceptual Framework

Unlike conventional bonds which are debt-based and interest-bearing, sukuk is a key instrument of Islamic finance founded on Shariah principles that emphasize fairness, asset-backing, and shared risk. It represents fractional ownership in tangible assets or projects that generate lawful (halal) returns to investors generated through profit-sharing, rental income, or asset performance, not fixed interest. This will assist in tagging finance to real economic activity, promoting transparency and sustainable development (Usmani, 2020). This asset-backed and risk-sharing nature aligns financing with productive ventures, providing transparency, ethical compliance, and promoting sustainable development (Furqaniy & Mulyawiy, 2020).

At the core of the Sukuk structure are Shariah-compliant contracts such as Ijarah (leasing), Musharaka or Mudarabah (partnership/profit-sharing), Istisna'a (construction/manufacturing), and Murabaha or Salam in trade-based implementations (Kamaluddin, 2025). These structures ensure that the financing vehicle (often a Special Purpose Vehicle, SPV) acquires or controls specified tangible assets or revenue-generating projects, then issues Sukuk certificates to investors who hold beneficial ownership. Through this mechanism, investors receive returns derived from rental income, profit-sharing, or project performance rather than interest payments (Afifi, 2024).

The governance under Shariah law further prohibits involvement in prohibited (haram) sectors such as alcohol, gambling, or conventional interest-based financial dealings ensuring the ethical integrity of both the asset and the financing mechanism. This ethical screening differentiates Sukuk from conventional bonds and expands its appeal not only to

Muslim investors but also to ethical/institutional investors seeking socially responsible investment (SRI) options (Ibrahim, 2023).

The conceptual advantage of Sukuk becomes particularly relevant for large-scale infrastructure financing, such as highway or road network projects. In contexts where public budgets are constrained or conventional borrowing is unsustainable, sovereign or project-backed Sukuk provide a viable alternative. Governments or public agencies can securitize future tangible assets (e.g., highways, bridges, or public facilities) or the revenue stream they eventually yield into Shariah-compliant certificates (Iqbal & Utara, 2023). This allows mobilization of long-term capital while spreading risk and aligning investor returns with real economic growth.

For example, in countries with well-developed Sukuk markets, highway or infrastructure Sukuk have been used to finance roads, energy facilities, ports, or urban rail, thereby enabling long-duration funding without reliance on conventional interest-bearing debt (Afifi, 2024).

In the Nigerian context, applying this conceptual framework to the financing of high-quality Trunk A roads implies that these road projects when properly structured to satisfy Shariah requirements of asset-backing and revenue linkage, can be effectively funded through Sukuk instruments rather than relying solely on conventional debt or annual budgetary provisions. Such an approach aligns with the core principles of Islamic finance, which emphasize fairness, transparency, real-asset backing, and equitable risk-sharing between issuers and investors. In Nigeria, the Debt Management Office (DMO) has successfully used sovereign Sukuk to fund Federal (Trunk A) roads, bridges, and housing projects.

2.2 Trunk A Roads and Sukuk Financing

Nigeria's road system is officially classified into Trunk A, Trunk B, and Trunk C categories based on ownership, administrative responsibility, and functional hierarchy. According to the Federal Ministry of Works and Housing (FMW&H, 2023) and the National Integrated Infrastructure Master Plan (NIIMP, 2021), Trunk A roads are federal highways managed exclusively by the Federal Government. They constitute the primary national corridors, connecting major cities, state capitals, international borders, seaports, airports, industrial zones, and key economic centres (Ogunbodede, 2019; FMW&H, 2023). Examples include the Lagos–Ibadan Expressway, Abuja–Lokoja Road, Kano–Maiduguri Road, and Enugu–Port Harcourt Expressway. Due to their national and international significance, Trunk A roads function as the backbone of Nigeria's transport and economic integration network.

In contrast, Trunk B roads fall under the jurisdiction of State Governments and consist mainly of intra-state highways linking major towns, local government headquarters, and secondary urban centres (Iwuagwu & Ajayi, 2020). These roads connect communities to the major federal corridors and support state-level commerce and mobility. Trunk C roads, also referred to as rural or local government roads, are administered by Local Government Councils and serve as feeder routes connecting villages, farms, and rural settlements to markets and larger road systems (Akintoye & Odumosu, 2020). These routes are fundamental for agricultural productivity, rural accessibility, and grassroots development.

Collectively, this classification ensures a coherent functional hierarchy within Nigeria's road transportation system. Trunk A roads primarily support long-distance and interstate movement under federal administration, while Trunk B roads facilitate intra-state connectivity and regional accessibility under state governments. In contrast, Trunk C roads

provide critical rural–urban linkages at the local government level, enhancing access to markets, healthcare, education, and other socio-economic services. Together, these categories form an integrated transport network that promotes national mobility, economic welfare, territorial integration, and balanced regional development (FMW&H, 2023; NIIMP, 2021).

Nigeria's Trunk A roads constitute the core of the national transportation system, serving as the primary arteries that connect major cities, industrial corridors, seaports, airports, agricultural belts, and border points. They facilitate the movement of goods, labour, and services, while forming the central backbone of interstate commerce and regional integration within the ECOWAS sub-region (Vanguard News, 2025). The strategic importance of these federal highways is underscored by their role in reducing logistics costs, supporting supply-chain efficiency, and enhancing national competitiveness. Efficient road networks remain vital to Nigeria's economic diversification agenda, particularly in sectors such as agriculture, mining, manufacturing, and internal trade.

Despite their critical role in national integration and economic development, Nigeria's Trunk A roads have deteriorated significantly due to chronic underfunding, weak maintenance culture, and increasing traffic demand. Nairametrics (2025) reports that over 35,000 kilometres of federal highways are in poor or failed condition, resulting in traffic congestion, rising transportation costs, frequent accidents, and delays in the movement of goods and services. The deterioration of these roads adversely affects agricultural distribution, industrial productivity, regional trade, and overall economic efficiency. According to the Federal Ministry of Works and Housing (FMW&H, 2023), the funding required for the rehabilitation and maintenance of federal highways far exceeds available budgetary provisions. This widening infrastructure financing gap highlights the limitations of conventional public financing and underscores the urgent need for alternative and sustainable funding mechanisms such as sukuk for long-term road infrastructure development in Nigeria.

Historically, the financing of Trunk A roads has relied predominantly on oil revenues, and conventional borrowing. However, the volatility of global oil prices, persistent fiscal deficits, competing government expenditure demand, and rising public debt servicing obligations have rendered these funding models increasingly unsustainable (Oyekola & Habeeb, 2024). In addition, traditional public finance mechanisms often suffer from delayed releases, insufficient allocations, and bureaucratic constraints, which collectively impede timely project delivery. Consequently, alternative financing instruments that are stable, transparent, and capable of mobilizing long-term capital have become indispensable.

In this context, sukuk an asset-backed, Shariah-compliant financing instrument has emerged as a strategic and credible option for addressing Nigeria's road infrastructure deficit. Unlike conventional bonds, sukuk represent fractional ownership in tangible assets or projects, ensuring that investors are directly linked to real economic activity (Usmani, 2020). By securitizing road projects into investment certificates, sukuk create a financing structure in which returns to investors are derived from the performance or utility of the underlying assets rather than interest payments. This makes sukuk particularly suitable for financing public infrastructure that generates demonstrable economic value.

Nigeria's adoption of Sukuk for infrastructure financing has already shown significant promise. Since 2017, the Debt Management Office (DMO) has raised over ₦1.1 trillion through sovereign Sukuk issuances to fund 124 federal road projects covering more than 5,000 kilometres (SEC, 2024). These investments have led to the reconstruction and rehabilitation of major highways such as the Abuja–Lokoja, Lagos–Ibadan, Kano–Maiduguri, and Enugu–Port

Harcourt expressways. The model has improved project transparency, strengthened public confidence, and introduced enhanced accountability mechanisms through dedicated project monitoring and reporting frameworks. Sukuk proceeds are ring-fenced, meaning they can only be used for the specific projects identified in the issuance prospectus, thereby reducing the risk of diversion.

Applying Sukuk to Trunk A road financing also promotes broader financial inclusion by providing investment opportunities to diverse groups including Islamic financial institutions, pension funds, ethical investors, and retail savers who may avoid interest-bearing instruments. This aligns with Islamic finance principles of fairness, shared risk, and socio-economic welfare. Furthermore, Sukuk deepens domestic capital markets by providing long-term, asset-based instruments that attract both institutional and non-institutional investors, thereby improving liquidity and market participation (Haniffa & Hudaib, 2019).

Importantly, Sukuk financing ties government repayment obligations to the economic benefits generated by the asset rather than to interest-based debt servicing. This strengthens the long-term sustainability of public finance by reducing pressure on annual budgets. For example, roads financed under an Ijarah (leasing) Sukuk structure allow the government to make periodic rental payments linked to the asset's use, while investors receive stable returns backed by tangible infrastructure (Iqbal & Mirakhor, 2019). Where feasible, mechanisms such as tolls, maintenance fees, and weighbridge charges can provide additional revenue streams, enhancing the bankability and financing viability of road projects.

Moreover, the use of Sukuk for Trunk A roads aligns with Nigeria's broader policy objectives of increasing private-sector participation in infrastructure delivery and transitioning towards more diversified, resilient financing frameworks. As oil revenues decline and fiscal constraints tighten, Sukuk offer a pathway for mobilizing long-term capital while reinforcing ethical, transparent, and asset-linked financing practices. They also support compliance with global trends in sustainable and responsible investing, making Nigeria's infrastructure financing system more attractive to international partners.

Thus, Sukuk financing provides a transformative platform for addressing Nigeria's Trunk A road deficits by combining Shariah-compliant principles with practical infrastructure needs. By linking investment returns to real assets, promoting financial inclusion, enhancing project monitoring, and reducing dependence on volatile revenue sources, Sukuk stands as a sustainable alternative to traditional public financing mechanisms. Strengthening regulatory coordination, developing Shariah-compliant project pipelines, and enhancing investor awareness will further optimize Sukuk's potential to support the construction of high-quality federal highways and advance national development goals.

2.3 Challenges of Sukuk Issuance for Trunk A Roads

The issuance of Sukuk as a financing mechanism for Nigeria's Trunk A roads offers a promising alternative to conventional debt instruments, particularly because it mobilizes long-term funds in a Shariah-compliant manner. Despite these prospects, multiple challenges constrain its widespread adoption and effectiveness. One of the primary challenges is regulatory fragmentation. Sukuk issuance in Nigeria involves several regulatory bodies, notably the Securities and Exchange Commission (SEC), the Debt Management Office (DMO), and the Central Bank of Nigeria (CBN). While each agency plays a critical role, the involvement of multiple institutions often creates procedural delays, duplicative requirements, and inconsistencies in oversight that discourage both public and private sector participation

(Olayemi, 2023). Moreover, ambiguities in existing legislation particularly around Shariah-compliant structures and the legal recognition of Sukuk as an asset-backed security further complicate the issuance process (Olaniwun, 2025).

Another significant barrier is the high cost and complexity of structuring Sukuk. Unlike conventional bonds, Sukuk require rigorous adherence to Shariah principles, including the establishment of underlying assets, formal asset transfers, and compliance with international governance standards such as those set by the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) and the Islamic Financial Services Board (IFSB). These requirements not only increase legal and administrative costs but also prolong issuance timelines, making Sukuk less attractive for smaller projects or private sector participants (Yusuf & Ahmad, 2022).

Market limitation is another challenge as the secondary market for Sukuk in Nigeria remains shallow, with limited liquidity and trading activity. Most instruments are held to maturity, restricting price discovery and reducing investor flexibility. This situation is compounded by low public awareness and understanding of Islamic finance instruments, which limits participation, especially among retail investors who form a critical component of market depth (PwC Nigeria, 2024).

The bankability of road assets is another pressing challenge, where many Trunk A roads do not generate predictable cash flows through tolls or user fees, which are necessary for structuring asset-backed Sukuk. Without a clear revenue stream, potential investors are hesitant to commit capital due to concerns over repayment risks. This is particularly relevant for private sector-led Sukuk, which rely heavily on robust financial projections and enforceable revenue models to secure investor confidence (Ahmed & Umar, 2023).

Additionally, governance, transparency, and maintenance concerns remain major impediments. Effective oversight of Sukuk proceeds, timely project execution, and proper asset maintenance are crucial for sustaining investor confidence. Weak monitoring frameworks, inadequate maintenance systems, and poor reporting mechanisms erode transparency and can threaten the long-term viability of Sukuk-financed road projects (Salaudeen, 2025).

Finally, the Nigerian Sukuk market remains highly dependent on sovereign issuance. Limited private-sector engagement and a lack of diversified issuers reduce the depth and resilience of the market. This reliance on government-backed Sukuk restricts the opportunity for public-private partnerships (PPPs) or corporate issuance that could otherwise broaden funding sources and encourage more innovative infrastructure financing (Yusuf & Ahmad, 2022).

Collectively, these challenges highlight that, while Sukuk presents a viable tool for mobilizing infrastructure finance, structural, regulatory, market, and governance constraints must be addressed to maximize its potential for Trunk A roads.

2.4 Pathways to Overcome the Challenges

Addressing the challenges facing Sukuk issuance in Nigeria requires a multifaceted approach combining regulatory reform, market development, institutional capacity building, and investor education. A critical step is the creation of a coordinated regulatory framework, such as a Joint Sukuk Infrastructure Coordination Framework (JSICF). Such a framework would harmonize the roles of the SEC, DMO, CBN, and other stakeholders, reduce duplicative procedures, streamline approval processes, and ensure consistent application of Shariah

principles (Oyekolade & Habeeb, 2024). International examples, such as Malaysia's successful Sukuk market, demonstrate that a strong, centralized regulatory framework significantly enhances investor confidence and market efficiency.

Enhancing the bankability of road assets is another essential strategy. This can be achieved by integrating tolling mechanisms, user-fee systems, or PPP models to generate predictable revenue streams. These cash flows serve as the basis for asset-backed Sukuk structures, reducing risk and making them attractive to both domestic and international investors (Ahmed & Umar, 2023). Additionally, structuring Sukuk with clear legal and operational frameworks, including ring-fenced revenue accounts, can further secure investor confidence and mitigate financial risks.

Market depth and liquidity can be improved by listing Sukuk on exchanges such as the Nigerian Exchange (NGX) and the FMDQ Securities Exchange, complemented by liquidity-support initiatives and active market-making strategies. Such measures would encourage trading in the secondary market, enhance price discovery, and increase investor participation (SEC, 2024). Diversifying the investor base, through both retail-targeted Sukuk units and institutional investor engagement, is equally important. This can be supported by targeted public awareness campaigns, financial literacy initiatives, and investor education programs designed to demystify Sukuk instruments and Islamic finance principles (PwC Nigeria, 2024).

Strengthening governance and transparency is vital to sustaining long-term market confidence. Independent audits, robust reporting standards, and clearly defined fund utilization practices including ring-fenced maintenance funds can ensure that project resources are used as intended and infrastructure assets are adequately maintained (Olayemi, 2023). This approach not only protects investors but also enhances the credibility and sustainability of the Sukuk market.

Finally, promoting private-sector and corporate participation alongside sovereign issuances will diversify funding sources and expand the market. Enabling private entities, state governments, and infrastructure concessions to issue Sukuk can enhance competition, encourage innovation, and foster a more resilient financial ecosystem (Yusuf & Ahmad, 2022). Such strategies, when combined with targeted incentives and capacity-building initiatives, can transform the Nigerian Sukuk market into a reliable, sustainable instrument for infrastructure financing.

2.5 Empirical Review

Several empirical studies have examined the relationship between Sukuk financing and economic growth, particularly in emerging and developing economies. In a study covering Indonesia, Malaysia, and Brunei, (Yusuf, & Awad, 2025) employed a pooled-panel data analysis covering the period 2019 to 2023 using simultaneous equation modeling (two-stage least squares) to address endogeneity problems, the study found out that a 1% increase in sukuk financing is associated with a 0.09% increase in GDP growth (significant at $p < 0.05$). They further show that such growth correlates with a 5.97% reduction in poverty head-count ratio ($p < 0.01$), indicating that Sukuk financing may deliver both growth and socio-economic welfare gains.

Similarly, Novitasari and Arundina (2023) investigated the dynamic relationship between Sukuk issuance and economic growth in Indonesia using the Vector Error Correction Model (VECM), Impulse Response Function (IRF), Variance Decomposition (VD), and wavelet analysis. The study focused on both sovereign and corporate Sukuk and found evidence of a

positive long-run relationship between Sukuk issuance and GDP growth. Their findings indicate that sukuk issuance has a positive long-term effect on economic growth, while in the short term, economic growth also influences the sukuk market, suggesting feedback or bidirectional causality.

In another related study, Kartini and Milawati (2020) examined the comparative effects of Sukuk and conventional bonds on economic growth in Indonesia using the Autoregressive Distributed Lag (ARDL) model for the period 2011–2019. The results revealed that in the short term, conventional bonds significantly affect growth, while sukuk do not; but in the long term, sukuk show a positive and significant effect on economic growth, while conventional bonds do not. This suggests that Sukuk, as a financing instrument, may have a more sustainable long-term contribution to growth than conventional debt instruments in certain contexts.

Ledhem (2020) employed a dynamic panel estimation technique using the system Generalized Method of Moments (GMM) approach to examine the relationship between sukuk market development and economic growth in selected Southeast Asian sukuk-issuing countries between 2013 and 2019. The study controlled for conventional financial and institutional variables in order to isolate the specific contribution of sukuk market expansion to long-term economic performance. The findings revealed that sukuk market development has a significant positive effect on GDP growth, indicating that Islamic capital market instruments can contribute meaningfully to sustainable economic development and financial sector deepening.

Empirical studies on sukuk financing in Nigeria indicate that sovereign sukuk has emerged as an important instrument for infrastructure development, particularly in the transport sector. Since the first sovereign sukuk issuance in 2017, Nigeria has raised over ₦1.1 trillion through multiple sukuk offerings, which have been utilized for the rehabilitation and construction of federal road infrastructure, including Trunk A roads (Debt Management Office [DMO], 2025; Securities and Exchange Commission [SEC], 2024). These issuances demonstrate the increasing role of Islamic capital market instruments in addressing Nigeria's infrastructure financing gap. Empirical evidence from Oyekolade and Habeeb (2024) shows that six sovereign Sukuk issuances financed 124 federal road projects covering over 5,820 kilometers. These projects have reportedly improved connectivity, reduced travel time, and contributed to regional economic activities, although rigorous project-level evaluation remains limited.

Yusuf and Ahmad (2022) provide empirical evidence on the constraints of Sukuk financing in Nigeria. Their study, employing survey and archival data from the Debt Management Office (DMO) and related agencies. Findings indicated that poor regulatory coordination among the Securities and Exchange Commission (SEC), DMO, and Central Bank of Nigeria (CBN) slows down project disbursement and monitoring. Moreover, the scarcity of Shari'ah-compliant, bankable infrastructure assets, such as tollable roads or revenue-generating transport projects, limits the pool of projects eligible for Sukuk financing. These findings underscore the importance of developing structured, revenue-backed road projects to maximize Sukuk's effectiveness.

Ahmed and Mollah (2019) observed that high issuance costs associated with legal structuring, Shari'ah certification, and asset valuation increase the overall cost of sukuk transactions compared to conventional bonds. Similarly, Yusuf and Ahmad (2022) found that limited public awareness, weak secondary-market liquidity, and inadequate regulatory

coordination reduce investor participation and constrain market expansion. Supporting industry reports from PwC Nigeria (2024) further indicate that concerns relating to transparency, project monitoring, and governance frameworks continue to affect investor confidence in long-term infrastructure financing. Consequently, although sukuk has mobilized substantial capital for infrastructure projects in Nigeria, its full potential in financing roads and other public infrastructure remains underutilized.

Comparative empirical evidence from Southeast Asia reinforces these observations. Studies in Malaysia and Indonesia (Razak & Hassan, 2020) show that strong legal frameworks, transparent project monitoring, and well-developed secondary markets are critical for translating Sukuk proceeds into tangible infrastructure outcomes. This implies that Nigeria's Sukuk market could benefit from adopting similar governance structures, such as independent audits, ring-fenced maintenance funds, and revenue-backed project structures, to ensure the sustainability of road infrastructure projects.

Recent studies by Ahmed and Umar (2023) further provide empirical insights into financing challenges and pathways for Nigerian road infrastructure. Using case study analysis of select Trunk A road projects funded via Sukuk, they demonstrate that implementing tolling mechanisms or public-private partnership (PPP) structures significantly improves project bankability. These structures create identifiable cash flows, which enhance the eligibility of roads as Sukuk assets and attract long-term investment.

Despite the growing body of evidence showing that Sukuk financing contributes positively to economic growth and infrastructure development, empirical research specifically examining its impact on Trunk A road infrastructure in Nigeria remains limited. Existing studies largely focus on the volume of funds raised and the number of projects financed through sovereign Sukuk issuances without conducting rigorous project-level assessments relating to road quality, maintenance efficiency, traffic utilization, or broader socio-economic outcomes. In addition, challenges relating to regulatory coordination, market depth, and investor confidence have mainly been discussed from a descriptive perspective, leaving issues concerning the efficiency, sustainability, and long-term effectiveness of Sukuk-funded road infrastructure insufficiently explored. Consequently, there is a need for more systematic and data-driven empirical studies aimed at identifying strategies for overcoming the challenges associated with Sukuk financing in order to enhance the delivery of efficient, sustainable, and effective Trunk A road infrastructure in Nigeria.

2.6 Theoretical Framework

This study is anchored on the Public Finance Theory, Institutional Theory, and the Risk-Sharing Theory derived from Islamic finance principles. Collectively, these theories provide a comprehensive framework for explaining how sukuk can serve as a sustainable and ethical financing mechanism for addressing Nigeria's Trunk A road infrastructure deficit. Public Finance Theory emphasizes that government expenditure should be financed through efficient and sustainable methods that promote public welfare and maintain macroeconomic stability (Hakeem, 2021). In many developing economies, including Nigeria, excessive reliance on conventional debt financing has contributed to rising debt-service obligations, fiscal imbalances, and increased exposure to macroeconomic shocks (CBN, 2024). Sukuk financing offers an alternative asset-backed approach that links public spending directly to productive infrastructure such as highways, bridges, and transport networks. This supports the principle of intergenerational equity by ensuring that infrastructure development benefits future

generations without imposing excessive debt burdens. In addition, sukuk promotes transparency, accountability, and prudent public finance management by tying funds to identifiable projects and attracting ethically conscious investors (Olayemi & Usman, 2023).

The study also draws on Institutional Theory, which posits that the effectiveness of public financial innovations depends largely on the strength, legitimacy, and coordination of institutions responsible for their implementation (Scott, 2001). Within Nigeria's Islamic capital market framework, institutions such as the Securities and Exchange Commission (SEC), Debt Management Office (DMO), Central Bank of Nigeria (CBN), and the Federal Ministry of Works play critical roles in sukuk regulation, issuance approval, project monitoring, and infrastructure execution. However, weak institutional coordination, bureaucratic inefficiencies, and limited Shariah governance capacity have continued to constrain the effectiveness of sukuk financing in Nigeria (Yusuf & Ahmad, 2022). Institutional Theory therefore explains the regulatory and operational challenges affecting the efficient utilization of sukuk proceeds for Trunk A road development. The theory further suggests that strengthening governance structures, improving institutional synergy, and ensuring effective oversight are essential for enhancing investor confidence and maximizing the developmental impact of sukuk-funded projects.

Furthermore, the Risk-Sharing Theory underlying Islamic finance explains the ethical and participatory nature of sukuk financing. Unlike conventional interest-based debt instruments, sukuk operates on principles of profit-and-loss sharing, asset-backing, and equitable risk distribution (Chapra, 2016). This approach aligns the interests of investors and project implementers by linking returns directly to the performance of the financed assets. In the context of road infrastructure financing, risk-sharing mechanisms encourage accountability, efficiency, and sustainability in project execution while reducing speculative financial practices. The theory also highlights the capacity of sukuk to broaden financial inclusion and attract diverse categories of investors through ethically compliant investment structures (El-Gamal, 2021).

Collectively, these theories explain the fiscal, institutional, and ethical dimensions of sukuk financing and provide the conceptual basis for examining the challenges and prospects of utilizing sukuk for financing Trunk A roads in Nigeria. However, among the three theories, Institutional Theory serves as the primary underpinning theory for this study because the success of sukuk financing in Nigeria depends significantly on the effectiveness of regulatory institutions, governance frameworks, policy coordination, and project monitoring mechanisms. While Public Finance Theory and Risk-Sharing Theory provide important insights into fiscal sustainability and ethical financing principles, Institutional Theory offers the most direct explanation for the structural and operational challenges affecting sukuk implementation in Nigeria's infrastructure financing framework.

3. Methodology

3.1 Research Design

The study adopts a mixed-methods research design to address the research objectives comprehensively. Quantitative data collected through structured questionnaires enable measurement of stakeholder perceptions, project performance, and regulatory effectiveness, while qualitative data from secondary sources such as the Debt Management Office (DMO) and Securities and Exchange Commission (SEC) provide in-depth insights into institutional

practices, operational challenges, and contextual factors. This combination allows for triangulation, enhancing the validity and reliability of findings, and ensures that both measurable outcomes and the underlying mechanisms influencing Sukuk financing for Trunk A roads in Nigeria are thoroughly examined.

3.2 Population of the Study

The population of the study comprised 40 officials directly involved in sukuk regulation, issuance, and infrastructure financing activities in Nigeria. These officials were drawn from key regulatory and financial institutions, including the Debt Management Office (DMO), Securities and Exchange Commission (SEC), Central Bank of Nigeria (CBN), Federal Ministry of Works, Jaiz Bank, TAJBank, and The Alternative Bank. The population included management personnel, regulatory officers, Islamic finance experts, and project implementation officials whose responsibilities relate directly to sukuk operations, policy formulation, Shariah compliance, and infrastructure financing. These institutions were considered appropriate because of their active involvement in the regulation, administration, and utilization of sukuk for financing Trunk A road projects in Nigeria.

3.3 Sample Size and Sampling Technique

Due to the relatively small number of officials directly involved in sukuk regulation and infrastructure financing activities within the selected institutions, the study adopted a census approach by including all 40 accessible respondents considered relevant to the study. The population comprised 40 officials drawn from key regulatory and financial institutions, including the Debt Management Office (DMO), Securities and Exchange Commission (SEC), Central Bank of Nigeria (CBN), Jaiz Bank, TAJBank, and The Alternative Bank. The distribution included 10 respondents from CBN, 5 each from SEC and DMO, 10 from Jaiz Bank, and 5 each from TAJ Bank and Alternative Bank. These officials constituted the accessible population because of their direct involvement in sukuk operations, regulatory oversight, Islamic finance administration, and infrastructure financing activities. The adoption of census sampling ensured comprehensive coverage of the accessible population and enhanced the reliability of data collected for the study.

3.4 Method of Data Collection

Copies of questionnaire were administered electronically via Google Forms to enhance convenience and ensure wider coverage of respondents across different institutions. Follow-up reminders were issued to improve response rates. Secondary data were collected through desk research, extracting relevant information from official reports and verified institutional databases.

3.5 Method of Data Analysis

Data collected through the administered questionnaires were coded and analyzed using the Statistical Package for the Social Sciences (SPSS Version 20). Descriptive statistical tools such as frequency distributions, percentages, mean scores, and standard deviations were used to analyze respondents' demographic characteristics and perceptions regarding sukuk financing and Trunk A road development in Nigeria. Multiple response analysis was also employed to identify the major challenges associated with sukuk issuance as well as measures for addressing those challenges.

Furthermore, Pearson Product Moment Correlation analysis was used to examine the relationship between respondents' participation in sukuk-related activities and their perception of sukuk's contribution to Trunk A road development. Secondary data obtained from Debt Management Office (DMO) and Securities and Exchange Commission (SEC) reports covering the period from 2017 to March 2025 were analyzed using trend analysis to evaluate the pattern of sukuk issuance in Nigeria over time. The results were presented using tables, percentages, charts, and narrative explanations.

4. Results and Discussion

This session presents and analyzes the data collected from respondents and secondary sources. It covers the demographic characteristics, key variables, and challenges associated with Sukuk issuance in Nigeria and also propose measures to address these challenges

4.1 Demographic Characteristics of Respondents

This section presents the demographic profile of the forty (40) respondents who participated in the study. The variables considered include gender, organization type, work experience, and position.

Table 1: Gender Distribution of Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	29	72.5	72.5	72.5
	Female	11	27.5	27.5	100.0
	Total	40	100.0	100.0	

Source: Field Survey (2025), SPSS Output

Table 1 indicates that the majority of respondents (72.5%) were male, while females constituted 27.5% of the sample. This gender imbalance reflects the prevailing trend in the Nigerian financial and regulatory sectors, particularly in areas related to Islamic finance, capital markets, and infrastructure financing, where men traditionally dominate senior and technical roles. The predominance of male respondents suggests that the perspectives captured in this study may largely reflect experiences and insights from male professionals.

Table 2: Distribution of Respondents by Organization Type

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	CBN	10	25.0	25.0	25.5
	DMO	5	12.5	12.5	37.5
	SEC	5	12.5	12.5	50.0
	ISLAMIC BANKS	20	50.0	50.0	100.0
	Total	40	100.0	100.0	

Source: Field Survey (2025), SPSS Output

As presented in Table 2, 25% of respondents were from the Central Bank of Nigeria (CBN), 12.5% from the Debt Management Office (DMO), 12.5% from the Securities and Exchange Commission (SEC), and 50% from Islamic Banks. (Jaiz, 25%, Taj, 12.5 and

Alternative Bank 12.5%). This is to ensure that information were adequately sourced from both the regulators and operators of sukuk issuance respectively

Table 3: Distribution of Respondents by Work Experience

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0-5yrs	5	12.5	12.5	12.5
	5-10yrs	14	35.0	35.0	47.5
	11-15yrs	21	52.5	52.5	100.0
	Total	40	100.0	100.0	

Source: Field Survey, 2025, SPSS Output

Table 3 shows that the majority of respondents (52.5%) have between 11 and 15 years of work experience, 35% have 5–10 years, and only 12.5% have less than 5 years of experience. This indicates that most respondents are highly experienced professionals with substantial knowledge and exposure to Sukuk operations, regulatory processes, and infrastructure financing. The dominance of respondents with 11–15 years of experience enhances the credibility and reliability of the data, as their responses are likely informed by extensive practical and institutional knowledge. It also suggests that the findings of the study reflect seasoned insights on the challenges and effectiveness of Sukuk financing for Trunk A roads. However, the relatively smaller proportion of respondents with less than 5 years of experience implies that newer perspectives or recent operational innovations may be underrepresented. Overall, the work experience distribution supports the robustness of the study's conclusions while highlighting the importance of incorporating perspectives across different experience levels in future research.

Table 4: Distribution of Respondents by Position

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Management staff	9	22.5	22.5	22.5
	Senior staff	28	70.0	70.0	92.5
	Junior staff	3	7.5	7.5	100.0
	Total	40	100.0	100.0	

Source: Field Survey, 2025, SPSS Output

Table 4 shows that the majority of respondents (70%) occupy senior staff positions, 22.5% are management staff, and 7.5% are junior staff. This indicates that most respondents hold positions that likely involve decision-making, policy implementation, or significant operational responsibilities in the context of Sukuk issuance and infrastructure financing. The predominance of senior staff suggests that the responses reflect practical expertise and informed perspectives on the challenges, operational procedures, and effectiveness of Sukuk financing for Trunk A roads. Their insights are particularly valuable for understanding institutional coordination, project monitoring, and investor engagement.

4.2 Descriptive Analysis of Key Variables

This section presents the descriptive analysis of key study variables to summarize respondents' views on Sukuk management, participation, and its contribution to infrastructure development in Nigeria. The analysis provides insight into the overall trends and patterns observed in the data.

Table 5: Descriptive Statistics of Key Variables

	N	Minimum	Maximum	Mean	Std. Deviation
Respondent familiarity with sukuk management	40	1.00	5.00	4.3250	.85896
Participation in Sukuk related activities	40	1.00	2.00	1.0250	.15811
Perceived contribution of Sukuk to Trunk A road development	40	2.00	5.00	4.3750	.66747
Valid N (listwise)	40				

Source: Field Survey, 2025, SPSS Output

Table 5 presents the descriptive statistics of key variables relating to sukuk financing and Trunk A road development in Nigeria. The results show that respondents demonstrated a high level of familiarity with sukuk management, with a mean score of 4.33 on a 5-point scale and a standard deviation of 0.86. This indicates that most respondents possess adequate knowledge of sukuk operations and management practices. The results further show a mean score of 1.03 for participation in sukuk-related activities, suggesting relatively low direct involvement of respondents in operational sukuk activities. The low standard deviation (0.16) indicates consistency in respondents' responses.

Furthermore, respondents rated the contribution of sukuk to Trunk A road development highly, with a mean score of 4.38 and a standard deviation of 0.67. This implies that respondents generally perceive sukuk financing as having a significant positive impact on road infrastructure development in Nigeria. Overall, the low standard deviation values indicate limited variation in responses and suggest a general consensus among respondents regarding the study variables.

4.3 Challenges Associated with Sukuk Issuance For Trunk A Road Construcrtrion in Nigeria

This section examines the major challenges hindering Sukuk issuance in Nigeria. It highlights respondents' views on factors limiting its growth and effective implementation.

Table 6: Multiple Response Analysis of Challenges of Sukuk Issuance

		Responses		Percent of Cases
		N	Percent	
Challenges of Sukuk Issuance ^a	Low public awareness of Islamic finance	39	26.2%	97.5%
	Regulatory and policy inconsistencies	22	14.8%	55.0%
	Limited investor participation	22	14.8%	55.0%
	Lack of Shari'ah-compliant investment assets	5	3.4%	12.5%
	High issuance cost	1	0.7%	2.5%
	Weak institutional capacity	2	1.3%	5.0%
	Dominance of conventional debt frameworks	22	14.8%	55.0%
	No revenue potential of Trunk A roads limits their suitability for asset-backed Sukuk financing	36	24.2%	90.0%
	Total	149	100.0%	372.5%

Source: Field Survey, 2025, SPSS Output

Table 6 presents the key challenges of Sukuk issuance as identified by respondents. The most frequently cited challenges are low public awareness of Islamic finance (97.5% of cases) and the lack of revenue potential of Trunk A roads for asset-backed Sukuk financing (90% of cases). Other notable challenges include regulatory and policy inconsistencies, limited investor participation, and the dominance of conventional debt frameworks, each identified by 55% of respondents. Less frequently reported issues include high issuance costs (2.5%), weak institutional capacity (5%), and limited Shari'ah-compliant investment assets (12.5%). These findings indicate that the primary obstacles to Sukuk issuance in Nigeria are structural and awareness-related, rather than purely financial. The low public awareness highlights the need for education and outreach programs to inform potential investors and stakeholders about Islamic finance instruments. The revenue limitation of Trunk A roads underscores the importance of developing bankable, revenue-generating infrastructure projects, such as through tolling or public-private partnerships (PPP), to enhance the feasibility of Sukuk financing.

Table 4.7: Most Critical Challenge Affecting Sukuk Issuance

Most Critical challenge		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No Major Challenges Identified	2	5.0	5.0	5.0
	Low public awareness of Islamic finance	17	42.5	42.5	47.5
	No revenue generation from roads	21	52.5	52.5	100.0
	Total	40	100.0	100.0	

Source: Field Survey, 2025, SPSS Output

Table 7 presents respondents' assessment of the most critical challenge affecting sukuk issuance for Trunk A road financing in Nigeria. The results show that the majority of respondents (52.5%) identified the lack of revenue generation from Trunk A roads as the most significant challenge affecting sukuk issuance. This was followed by low public awareness of Islamic finance, identified by 42.5% of respondents, while only 5% indicated that no major challenge exists.

The findings suggest that the absence of reliable revenue-generating mechanisms, such as tolling systems and concession arrangements, significantly limits the suitability of Trunk A roads for asset-backed sukuk financing. In addition, low public awareness of Islamic finance continues to hinder investor participation and broader acceptance of sukuk instruments in Nigeria. The identification of these challenges was based on respondents selecting the single most important constraint from the list of challenges earlier presented in Table 4.6. The results therefore indicate that both structural financing limitations and inadequate public sensitization remain major obstacles to the effective utilization of sukuk for infrastructure development in Nigeria.

Table 8: Measures to Overcome Challenges of Sukuk Issuance

		Responses		Percent of Cases
		N	Percent	
Measures to overcome sukuk Issuance Chal ^a	Strengthening legal and regulatory frameworks	37	26.2%	92.5%
	Enhancing investor education and public awareness	31	22.0%	77.5%
	Encouraging institutional collaboration (DMO, SEC, CBN, Islamic banks)	13	9.2%	32.5%
	Developing secondary Sukuk markets	6	4.3%	15.0%
	Promoting transparency and accountability in fund utilization	4	2.8%	10.0%
	Providing tax incentives and cost reductions	1	0.7%	2.5%
	Capacity building among professionals	10	7.1%	25.0%
	Enforce Toll gate for asset revenue generation	39	27.7%	97.5%
	Total	141	100.0%	352.5%

Source: Field Survey, 2025, SPSS Output

Table 8 presents respondents' views on measures to overcome challenges associated with Sukuk issuance. The most frequently cited measures are enforcing toll gates for asset revenue generation (97.5%) and strengthening legal and regulatory frameworks (92.5%), followed by enhancing investor education and public awareness (77.5%). Other suggested measures include encouraging institutional collaboration (32.5%), capacity building among professionals (25%), developing secondary Sukuk markets (15%), promoting transparency and accountability (10%), and providing tax incentives or cost reductions (2.5%).

These results indicate that respondents perceive the creation of revenue-generating mechanisms and regulatory/legal reforms as the most critical factors for facilitating Sukuk issuance. Educational initiatives and public awareness campaigns are also considered essential to boost investor participation and market depth. Measures such as institutional collaboration and professional capacity building complement these efforts by improving operational efficiency and governance standards.

4.4 Correlation Analysis

Table 9: Correlation between Participation and Perceived Contribution of Sukuk to Road Development

		To what extent has Sukuk contributed to the development of Trunk A roads in Nigeria?	Participation recoded as 1 = Yes, 0 = No or Not sure
To what extent has Sukuk contributed to the development of Trunk A roads in Nigeria?	Pearson Correlation	1	.091
	Sig. (2-tailed)		.576
	N	40	40
Participation recoded as 1 = Yes, 0 = No or Not sure	Pearson Correlation	.091	1
	Sig. (2-tailed)	.576	
	N	40	40

Source: Field Survey (2025), PPMC Output from SPSS Version 20.

Table 9 shows a Pearson correlation coefficient of 0.091 between respondents' participation in Sukuk operations and their perceived contribution of Sukuk to Trunk A road development. The relationship is positive but very weak and not statistically significant ($p = 0.576 > 0.05$). This indicates that respondents' direct participation in Sukuk-related activities does not meaningfully influence their perception of Sukuk's impact on road infrastructure. The weak and non-significant correlation suggests that perceptions of Sukuk's contribution are influenced more by policy awareness, institutional reports, or overall sector performance rather than individual participation in operations. This highlights the importance of combining quantitative perception data with secondary institutional records to gain a more accurate assessment of Sukuk's actual impact on road development. It also underscores the need for broader stakeholder engagement in future studies, including field-level operational staff, to capture insights from direct project implementation.

4.5 Trend of Sukuk Issuance in Nigeria (2017–2025)

The study also examined secondary data on the total and mean amounts of Sukuk issued by the Federal Government of Nigeria between 2017 and 2025. The data were obtained from official publications of the Debt Management Office (DMO) and presented in Figure 1.

Figure 4.10: Trend of Mean Sukuk Issuance in Nigeria (2017–2025)

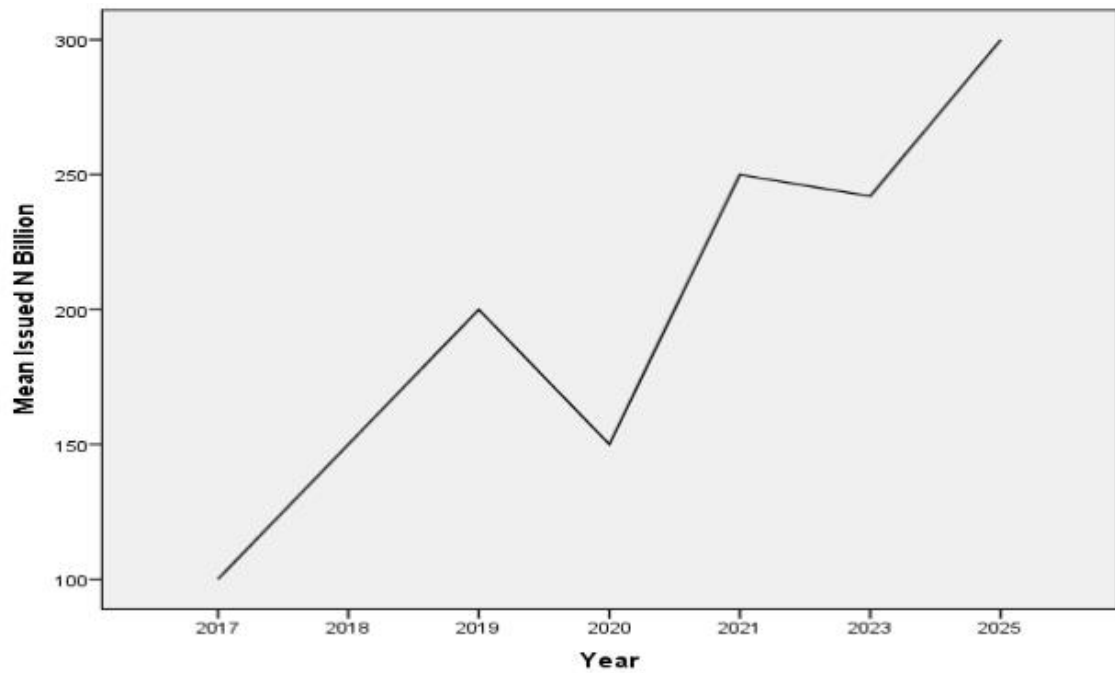


Figure 1: Trend of Mean Sukuk Issuance in Nigeria (2017–2025)

Source: DMO Statistical Bulletin, 2025

The line chart illustrates the trend in mean Sukuk issuance in Nigeria, measured in billions of naira, from 2017 to 2025. Overall, the chart reveals a steady upward trajectory in Sukuk issuance over the years, highlighting the increasing adoption of Sukuk as a financing instrument for infrastructure development and public projects in the country. Between 2017 and 2019, mean issuance rose significantly from approximately ₦100 billion to ₦200 billion, reflecting the early success and expansion of sovereign Sukuk programmes. However, in 2020, issuance declined to about ₦150 billion, likely due to macroeconomic and operational challenges, including project delays and the adverse effects of the COVID-19 pandemic on government revenues and capital markets. From 2021 to 2023, Sukuk issuance rebounded strongly, reaching nearly ₦240 billion, which suggests a recovery in economic activities and renewed investor confidence in Sukuk instruments. By 2025, projected issuance is expected to peak at around ₦300 billion, indicating sustained growth in Sukuk adoption, improved project bankability, and the possible introduction of additional revenue-backed infrastructure projects and supportive regulatory incentives. Overall, the upward trend demonstrates that Sukuk has become an increasingly viable mechanism for mobilizing long-term financing in Nigeria, particularly for infrastructure projects such as Trunk A roads. At the same time, the temporary decline in 2020 underscores the sensitivity of Sukuk issuance to macroeconomic and institutional factors, emphasizing the importance of robust regulatory frameworks and sustainable revenue-backed project structures. The projected increase by 2025 further reflects growing market confidence, strengthened legal and institutional mechanisms, and the potential for large-scale infrastructure financing through Sukuk instruments.

5. Conclusion and Policy Recommendations

This study examined the role of Sukuk financing in Nigeria's infrastructure development, with particular emphasis on Trunk A road projects. Data obtained from key financial and regulatory institutions, including the Central Bank of Nigeria, Debt Management Office, Securities and Exchange Commission, and Islamic banks, revealed that Sukuk has emerged as a viable and effective Shari'ah-compliant financing instrument for infrastructure development in Nigeria. The findings showed that respondents possessed substantial professional experience and occupied senior positions within their respective institutions, thereby lending credibility to the study's outcomes. Respondents demonstrated a high level of familiarity with Sukuk operations and generally acknowledged that Sukuk financing has contributed significantly to the development of Trunk A roads through the mobilization of long-term capital and the provision of alternative financing mechanisms that complement conventional debt instruments.

Despite these positive contributions, the study found that the full potential of Sukuk financing remains constrained by several challenges. Major obstacles identified include the non-revenue-generating nature of many Trunk A road projects, low public awareness of Islamic finance, regulatory and policy inconsistencies, limited investor participation, and the continued dominance of conventional debt financing frameworks. These challenges undermine project bankability and limit the sustainability and scalability of Sukuk-funded infrastructure initiatives. Furthermore, the weak and statistically insignificant relationship between respondents' operational participation and their perception of Sukuk's contribution suggests that institutional awareness and policy-level understanding currently play a greater role in shaping perceptions than direct operational engagement.

Based on the findings of this study, several recommendations are proposed to enhance the effectiveness and sustainability of Sukuk financing for Trunk A road development and broader infrastructure projects in Nigeria.

- i. There is a need to strengthen the legal and regulatory frameworks governing Sukuk issuance. Relevant institutions such as the Central Bank of Nigeria, Securities and Exchange Commission, and Debt Management Office should review and harmonize existing policies to ensure consistency, transparency, and compliance with both Shari'ah principles and national financial regulations. Clear operational guidelines and effective monitoring mechanisms should also be established to enhance investor confidence and reduce legal uncertainties.
- ii. Public awareness and investor education on Islamic finance and Sukuk instruments should be intensified. Financial regulators, Islamic banks, and professional bodies should organize nationwide sensitization programmes, workshops, seminars, and media campaigns to educate potential investors, policymakers, and the general public on the benefits and operational structures of Sukuk financing. Increased awareness would broaden participation and encourage greater acceptance of Islamic financial instruments in Nigeria.
- iii. Stronger institutional collaboration among relevant stakeholders is essential. Agencies such as the Debt Management Office, Central Bank of Nigeria, Securities and Exchange Commission, the Ministry of Finance, and infrastructure-related agencies should establish coordinated frameworks or inter-agency committees to improve project structuring, monitoring, and implementation of Sukuk-financed infrastructure projects. Such

- collaboration would enhance operational efficiency and ensure better oversight of projects.
- iv. The study recommends the introduction of toll-based systems and other revenue-generating mechanisms for Trunk A roads and similar infrastructure projects. Since non-revenue-generating projects reduce the attractiveness of Sukuk financing, the implementation of toll gates, public-private partnership arrangements, and alternative revenue models would improve project bankability and create sustainable cash flows for Sukuk repayment.
 - v. Efforts should be made to develop active secondary markets for Sukuk instruments in Nigeria. Regulatory bodies, investment banks, and the Nigerian capital market should facilitate standardized Sukuk listing procedures and promote trading platforms that improve market liquidity and provide investors with viable exit opportunities. The development of a robust secondary market would attract a broader investor base and further strengthen the growth and sustainability of Sukuk financing in Nigeria's infrastructure sector.

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