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COMPARATIVE ANALYSIS OF GREEN SUKUK AND CONVENTIONAL GREEN BONDS: EXPLORING SYNERGIES AND DISTINCTIONS IN SUSTAINABLE FINANCE IN NIGERIA

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Abstract

This study explores and compares the roles of Green Sukuk and conventional green bonds in promoting climate-resilient development and sustainable finance in Nigeria. Guided by stakeholder theory, the study adopts a conceptual research approach based on secondary data drawn from peer-reviewed journal articles, institutional reports, and policy documents published between 2020 and 2025. Relevant literature was systematically reviewed using databases including Scopus, Web of Science, SSRN, and Google Scholar. A thematic synthesis approach was then used to identify and examine recurring themes relating to environmental impact, investor confidence, market acceptance, and policy frameworks. The findings indicate that both Green Sukuk and conventional green bonds are valuable financing instruments for supporting projects that enhance climate resilience and environmental sustainability. However, Green Sukuk offer a distinct advantage by integrating Shariah-compliant investment principles with sustainability goals. This dual focus enables them to attract both conventional and faith-based investors, thereby expanding the investor base and promoting greater financial inclusion. Furthermore, the ethical screening and certification processes associated with Green Sukuk improve transparency, strengthen investor trust, and enhance market credibility, contributing to their growing acceptance. The study concludes that Green Sukuk and conventional green bonds should be regarded as complementary rather than competing instruments for sustainable financing. When used together, they can provide a more inclusive, resilient, and effective financing framework for advancing Nigeria's sustainable development objectives. To maximize their potential, the study recommends the development of a national green taxonomy, strengthened certification standards, and more robust regulatory frameworks to enhance transparency, accountability, and investor confidence. Finally, it proposes a conceptual model demonstrating how certification, institutional credibility, and supportive policy frameworks work together to build investor confidence and encourage the wider adoption of green financial instruments in Nigeria.

Keywords: green sukuk, conventional green bonds, investor confidence, market acceptance, climate-resilient development

1. Introduction

The growing need to finance climate resilience has driven the emergence of innovative financial instruments, particularly conventional green bonds and Green Sukuk. These financing tools are designed to channel investment into projects that support renewable energy, climate adaptation, and low-carbon infrastructure. Since the World Bank and the European Investment Bank launched the first green bonds in 2008, the global green bond market has grown into a multi-trillion-dollar industry, fuelled by rising investor demand and stronger regulatory support (ICMA, 2025; European Union, 2025). Although Africa's share of the global green finance market remains relatively small, interest and participation continue to grow. Countries such as South Africa, Kenya, and Côte d'Ivoire have made significant progress in developing green finance initiatives (African Development Bank Group, 2023).

Nigeria has also established itself as a regional leader, becoming the first African country to issue a sovereign green bond in 2017. Since then, it has continued to strengthen its position, most recently through the successful issuance of an oversubscribed ₦50 billion sovereign green bond in June 2025 (Business Day, 2025). Alongside the expansion of conventional green bonds, Green Sukuk have gained attention as a Shariah-compliant financing instrument that combines the ethical principles of Islamic finance with environmental sustainability objectives. First introduced in Malaysia in 2017 and subsequently adopted by Indonesia, Green Sukuk have attracted investors seeking financial products that align with both Islamic values and responsible investment practices (World Bank, 2022; OECD, 2023).

While the Green Sukuk market is still in its early stages across Africa, Nigeria is well placed to become a leading player. The country's successful track record with conventional Sukuk, which has generated trillions of naira for infrastructure development, provides a solid foundation for the introduction of Green Sukuk as an additional source of sustainable finance (SEC Nigeria, 2021; Nairametrics, 2023). Expanding the use of Green Sukuk would not only diversify Nigeria's financing options but also strengthen its capacity to support climate action and achieve its long-term sustainable development goals.

Despite their growing importance, both Green Sukuk and conventional green bonds face a number of challenges that may limit their effectiveness. Globally, conventional green bonds continue to be affected by concerns over greenwashing, inconsistent classification standards, and inadequate monitoring and reporting practices, all of which can weaken investor confidence (Lam & Wurgler, 2024). In Africa, the market remains relatively underdeveloped, with green bonds accounting for less than 1% of total bond issuances. This slow uptake is largely attributed to high issuance costs, limited technical expertise, and the relatively low level of capital market development across many countries (Holtz & Heitzig, 2021; Falchi, 2024).

In Nigeria, these challenges are compounded by governance weaknesses and difficulties in project implementation, which have further constrained the effectiveness of green bond financing (Premium Times, 2025). Green Sukuk face a different, but equally important, set of obstacles. Their expansion is hindered by regulatory and institutional shortcomings, the relatively small size of the Islamic finance market, and limited capacity for effective Shariah governance and oversight (Alam et al., 2023; COMCEC, 2022). Addressing these barriers will be essential for unlocking the full potential of Green Sukuk as a sustainable financing instrument in Nigeria and across Africa.

Research on Green Sukuk and conventional green bonds remains relatively limited, particularly in developing economies such as Nigeria. Existing studies are largely descriptive, with only a few providing comparative analyses or evaluating the effectiveness of these financing instruments in promoting sustainable finance and climate resilience (Holtz & Heitzig, 2021; Lam & Wurgler, 2024). In Nigeria, the absence of a formal Green Sukuk framework has further constrained empirical research, leaving limited evidence on how Green Sukuk could perform within the country's financial system. Moreover, much of the available literature focuses on Southeast Asia and other established markets, creating a significant gap in understanding how these instruments can be applied within Nigeria's unique institutional, regulatory, and economic context.

Although Nigeria has distinguished itself as the first African country to issue a sovereign green bond and has successfully used Sukuk financing to fund critical infrastructure projects, limited scholarly attention has been given to comparing the strengths of Green Sukuk and conventional green bonds or exploring how the two instruments can complement one another in advancing sustainable finance.

To address this gap, this study undertakes a comparative analysis of Green Sukuk and conventional green bonds in Nigeria. Specifically, it examines and compares the environmental impact of projects financed through these instruments in promoting climate-resilient development. It also investigates how investor confidence and market acceptance of Green Sukuk influence the adoption, credibility, and overall acceptance of conventional green bonds. By addressing these objectives, the study provides insights into how both financing instruments can work together to strengthen investor confidence, expand access to sustainable finance, and support Nigeria's transition toward a greener, more climate-resilient, and low-carbon economy.

This study is guided by the following research questions:

i. How does the environmental impact of projects financed through Green Sukuk compare with those funded by conventional green bonds in promoting climate-resilient development in Nigeria?
ii. How do investor confidence and market acceptance of Green Sukuk influence the adoption, credibility, and overall acceptance of conventional green bonds in Nigeria?

2. Literature Review

Conceptual Review

Conventional Green Bonds (CGB)

Conventional Green Bonds (CGBs) are fixed-income debt instruments issued to raise capital for projects that deliver measurable environmental benefits. Unlike conventional bonds, whose proceeds can be used for a variety of purposes, the funds generated from Green Bonds are earmarked exclusively for environmentally sustainable initiatives. These typically include renewable energy, energy efficiency, sustainable transportation, climate adaptation, pollution control, and other projects that contribute to environmental protection and climate resilience (ICMA, 2025; European Union, 2025).

Structurally, Conventional Green Bonds function in the same way as traditional bonds. Investors receive periodic interest, or coupon, payments throughout the life of the bond, while the principal amount is repaid at maturity. Their defining feature, however, is

the requirement that the proceeds be used solely for eligible green projects. To ensure this, internationally recognised frameworks such as the Green Bond Principles (GBP) and the Climate Bonds Standard (CBS) provide guidance on project selection, fund allocation, reporting, and independent verification. These frameworks enhance transparency and accountability, minimise the risk of greenwashing, and strengthen investor confidence by ensuring that funds are used for their intended environmental purposes (World Bank, 2022).

Since the World Bank and the European Investment Bank introduced the first green bonds in 2008, the market has expanded significantly, becoming one of the fastest-growing segments of sustainable finance. It has evolved into a multi-trillion-dollar global market, attracting investments from governments, development finance institutions, corporations, and private investors committed to supporting the transition to low-carbon and climate-resilient economies (ICMA, 2025). Although Africa's green bond market is still developing, it has made notable progress in recent years. Nigeria has played a leading role in this growth, becoming the first African country to issue a sovereign green bond in 2017. Since then, the country has successfully used green bond financing to support projects in renewable energy, afforestation and reforestation, sustainable transportation, and other climate-related sectors (Nigeria Ministry/Climate Bonds Initiative, 2019; Business Day, 2025).

By combining the benefits of conventional debt financing with clearly defined environmental objectives, Conventional Green Bonds have become an important instrument for mobilising long-term capital for sustainable development. They enable investors to earn competitive financial returns while contributing to projects with measurable environmental and social benefits. In Nigeria, Green Bonds represent more than an alternative source of climate finance. They illustrate how well-regulated and transparent financial markets can drive economic growth, support environmental sustainability, and accelerate the country's transition toward a resilient, low-carbon economy.

Green Sukuk (GS)

Green Sukuk (GS) are Shariah-compliant financial instruments designed to raise funds for projects that generate positive environmental outcomes. These projects typically include renewable energy, sustainable agriculture, clean transportation, climate-resilient infrastructure, and other initiatives that support environmental sustainability. By combining the ethical principles of Islamic finance with the objectives of green investment, Green Sukuk offer a financing mechanism that promotes both economic development and environmental stewardship. Consistent with Islamic financial principles, they prohibit interest (*riba*), excessive uncertainty (*gharar*), and investments in activities considered unethical or harmful, while directing capital toward projects that create environmental and social value (COMCEC, 2022; Alam et al., 2023).

Unlike conventional green bonds, Green Sukuk are asset-backed and operate on the principle of risk sharing rather than interest-based lending. They are structured using Islamic financial contracts such as *Ijara* (leasing), *Mudarabah* (partnership), *Murabaha* (cost-plus financing), and *Wakalah* (agency). Consequently, investors earn returns that are generated from the performance of the underlying assets or projects rather than from fixed interest payments. To strengthen transparency and investor confidence, Green Sukuk issuers often align their offerings with internationally recognised frameworks such as the

Green Bond Principles (GBP) and the Climate Bonds Standard (CBS). These frameworks establish standards for project selection, fund management, reporting, and independent verification, thereby enhancing accountability, reducing the risk of greenwashing, and improving market credibility (World Bank, 2022; OECD, 2023).

Over the past decade, Green Sukuk have experienced substantial growth in countries such as Malaysia, Indonesia, Saudi Arabia, and the United Arab Emirates, demonstrating how Islamic finance can be effectively integrated with sustainability and climate action. Although the African Green Sukuk market is still in its early stages, Nigeria is well positioned to become a regional leader. The country's strong record of issuing conventional Sukuk, which has mobilised trillions of naira to finance critical infrastructure projects, provides a solid institutional and market foundation for the introduction and expansion of Green Sukuk (SEC Nigeria, 2021; COMCEC, 2022).

Beyond financing environmentally sustainable projects, Green Sukuk have the potential to expand financial inclusion by attracting a broader range of investors. Their unique combination of Shariah compliance and sustainability makes them appealing to both faith-based investors seeking investments that align with Islamic principles and conventional investors interested in responsible and sustainable finance. By diversifying the investor base and increasing access to green financing, Green Sukuk can play a significant role in supporting Nigeria's transition to a greener, more climate-resilient, and sustainable economy.

Environmental Impact of Green Sukuk-Financed Projects

Green Sukuk are designed to finance projects that deliver measurable environmental benefits while addressing critical challenges such as climate change, rising carbon emissions, energy inefficiency, and environmental degradation. The funds raised are dedicated exclusively to environmentally sustainable initiatives, including renewable energy, energy-efficient technologies, green transportation, sustainable agriculture, afforestation, and climate-resilient infrastructure (World Bank, 2022; OECD, 2023).

To ensure that these projects achieve their intended environmental objectives, issuers are required to monitor, evaluate, and report their performance in line with internationally recognised frameworks such as the Green Bond Principles (GBP) and the Climate Bonds Standard (CBS). These frameworks promote transparency and accountability by requiring independent verification and regular reporting on key environmental indicators, including greenhouse gas emissions avoided, renewable energy generated, and improvements in resource efficiency. Such measures strengthen investor confidence by demonstrating that the proceeds are being used for genuine environmental purposes (Alam et al., 2023; COMCEC, 2022).

The experiences of Malaysia and Indonesia demonstrate the environmental potential of Green Sukuk as a sustainable financing instrument. Malaysia's first Green Sukuk issuance in 2017 supported solar energy projects that increased the country's renewable energy capacity, while Indonesia's Green Sukuk issuances between 2018 and 2022 financed a broad range of clean energy and climate-resilient infrastructure projects, contributing to the country's efforts to reduce greenhouse gas emissions and meet its climate commitments (World Bank, 2022; OECD, 2023).

Although Green Sukuk are yet to gain widespread adoption in Nigeria, they present a significant opportunity to strengthen the country's sustainable finance ecosystem.

Building on existing green bond initiatives, Green Sukuk could attract additional investment into renewable energy, afforestation, sustainable transportation, climate adaptation, and other environmentally beneficial sectors. Their emphasis on ethical governance, Shariah compliance, independent certification, and transparent reporting further enhances their credibility, making them a promising instrument for strengthening investor confidence and supporting Nigeria's transition to a greener, more climate-resilient, and low-carbon economy (SEC Nigeria, 2021; COMCEC, 2022).

Investor Confidence and Market Acceptance of Green Sukuk

Investor confidence and market acceptance are essential to the long-term growth and success of Green Sukuk. Their attractiveness extends beyond financial returns, appealing to investors who also value ethical investing and environmental sustainability. Confidence in Green Sukuk is strengthened when issuers uphold high standards of transparency, accountability, and governance. Internationally recognised frameworks such as the Green Bond Principles (GBP) and the Climate Bonds Standard (CBS) play an important role in this regard by providing clear guidance on project selection, fund allocation, reporting, and independent verification. These standards reassure investors that the proceeds are directed toward genuine environmentally sustainable projects, thereby enhancing trust and market credibility (World Bank, 2022; OECD, 2023).

The level of market acceptance for Green Sukuk is influenced by several factors, including investors' perceptions of risk and return, the credibility of Shariah certification, the strength of the regulatory framework, and evidence that financed projects produce measurable environmental benefits. The experiences of Malaysia and Indonesia illustrate how supportive government policies, well-defined regulations, and active secondary markets can encourage investor participation. In both countries, strong investor confidence has resulted in several Green Sukuk issuances being oversubscribed, highlighting the growing demand for investment products that combine sustainability objectives with Shariah-compliant financing principles (Alam et al., 2023; World Bank, 2022).

Nigeria has significant potential to develop a robust Green Sukuk market, supported by its large Muslim population, established Sukuk market, and increasing interest in sustainable finance. Nevertheless, several barriers continue to limit wider adoption. These include low public awareness, weaknesses in Shariah governance, limited regulatory guidance, and the absence of standardised systems for monitoring, reporting, and verifying environmental outcomes. Addressing these challenges through stronger regulatory frameworks, enhanced investor education, more effective Shariah oversight, and credible certification mechanisms would help build investor confidence and encourage broader market participation (COMCEC, 2022; SEC Nigeria, 2021).

The future success of Green Sukuk in Nigeria will depend largely on the ability of issuers, regulators, and other stakeholders to maintain transparency, demonstrate measurable environmental impact, and uphold strong governance standards. Strengthening these foundations will not only increase investor trust but also reinforce the role of Green Sukuk as a credible complement to conventional green bonds, expanding sustainable financing opportunities and supporting Nigeria's transition to a more resilient, low-carbon, and environmentally sustainable economy.

Synergies and Distinctions in Sustainable Finance in Nigeria

Nigeria's sustainable finance landscape is undergoing significant growth as government institutions, investors, and other stakeholders increasingly recognise the importance of financing projects that support environmental sustainability and enhance climate resilience. Two key instruments contributing to this transition are Conventional Green Bonds (CGBs) and Green Sukuk (GS). While both instruments are designed to mobilise funding for environmentally sustainable projects, they differ in their financial structures, ethical foundations, and investor appeal (World Bank, 2022; OECD, 2023).

Despite these differences, Green Sukuk and Conventional Green Bonds share a common purpose: directing capital towards projects that deliver measurable environmental benefits. Whether supporting renewable energy, afforestation and reforestation, sustainable transportation, or climate adaptation initiatives, both instruments contribute to Nigeria's climate action and sustainable development objectives. They also rely on internationally recognised frameworks, including the Green Bond Principles (GBP) and the Climate Bonds Standard (CBS), which provide guidance on project eligibility, fund allocation, reporting, monitoring, and independent verification.

By promoting transparency and accountability, these standards help reduce concerns about greenwashing, strengthen investor confidence, and improve the credibility of sustainable finance instruments (Alam et al., 2023; COMCEC, 2022). The coexistence of both instruments provides Nigeria with greater opportunities to access international climate finance while expanding participation within its domestic capital market. However, important differences exist between the two financing mechanisms.

Conventional Green Bonds are interest-bearing debt instruments that appeal to a wide range of investors across global financial markets. Green Sukuk, on the other hand, are Shariah-compliant, asset-backed instruments that are structured around principles of risk and profit sharing rather than interest-based lending. They are particularly attractive to investors seeking financial products that align with Islamic ethical principles while also supporting environmental sustainability. In addition to meeting green finance requirements, Green Sukuk involve Shariah governance oversight and utilise Islamic financial contracts such as *Ijara* and *Mudarabah*, creating an additional layer of ethical and institutional accountability that distinguishes them from conventional green bond structures (SEC Nigeria, 2021; Aloui et al., 2023).

For Nigeria, these differences create both opportunities and challenges. Instead of treating Green Sukuk and Conventional Green Bonds as competing alternatives, policymakers and market participants can leverage their complementary features to diversify sustainable financing sources, promote financial inclusion, and attract a wider range of domestic and international investors. This requires a supportive regulatory environment that acknowledges the unique characteristics of each instrument while maintaining consistent standards for certification, disclosure, governance, and market supervision (Business Day, 2025; FSD Africa, 2023).

Overall, Green Sukuk and Conventional Green Bonds should be viewed as complementary pillars of Nigeria's sustainable finance ecosystem rather than competing financing tools. By combining the established global reach and market acceptance of Conventional Green Bonds with the ethical, inclusive, and values-based strengths of Green Sukuk, Nigeria can expand its capacity to mobilise climate finance, strengthen investor

confidence, and accelerate its transition towards a more sustainable, resilient, and low-carbon economy.

Conceptual Model

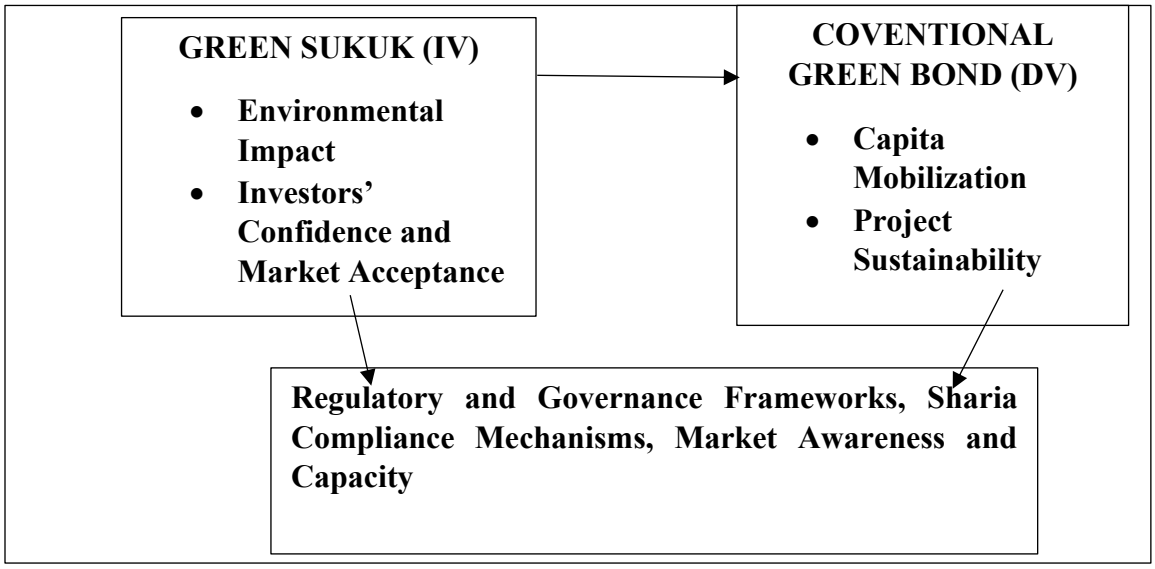

Figure 1: Synergies and Distinctions in Sustainable Finance in Nigeria
Source: Author's Compilation, 2026

Bai (2025) examined the impact of green bond issuance on the environmental and financial performance of Japanese firms listed between 2013 and 2022 using panel data regression analysis. The study revealed that companies issuing green bonds achieved significant reductions in emissions and energy intensity, demonstrating the positive environmental effects associated with these financial instruments. The findings highlight that properly designed financial mechanisms, such as green bonds, can encourage firms to adopt more sustainable practices while simultaneously supporting long-term business growth and improved environmental performance.

Similarly, the Bank for International Settlements (2025) examined the environmental performance of companies that issued green bonds compared with those that did not, using aggregated market-level data. The study found that green bond issuers generally demonstrated stronger capabilities in reducing and managing their emissions, highlighting the contribution of these instruments to corporate sustainability efforts. Overall, the findings indicate that green bonds are associated with improved environmental management and stronger sustainability outcomes, even when assessed from a broader market perspective.

In a related study, Yeow and Ng (2021) explored whether green bond issuance encourages firms to adopt more environmentally responsible practices. Using propensity score matching and a difference-in-differences (DiD) approach, the researchers compared companies that issued green bonds with similar firms that issued conventional bonds between 2015 and 2019. The findings showed that green bond issuers exhibited higher levels of environmental responsibility, particularly among firms operating in labour-intensive industries. The study suggests that green bonds provide benefits beyond access

to finance by creating reputational advantages and encouraging companies to strengthen their commitment to sustainable practices.

Furthermore, Wu (2020) conducted a comparative analysis of yield spreads between green bonds and conventional bonds across various industries, issuance sizes, and geographical regions. The results revealed mixed outcomes, indicating that the effectiveness of green bonds is influenced by factors such as market conditions, institutional structures, and firm-specific characteristics. These findings suggest that the environmental and financial benefits of green bonds are not universal but depend significantly on the context in which they are issued and implemented.

Zerbib (2019) examined the influence of investors' preference for environmentally responsible assets on bond pricing using bond market data. The study identified evidence of a "greenium" effect, where green bonds often trade at lower yields than comparable conventional bonds because investors are willing to accept slightly reduced financial returns in exchange for supporting sustainable projects. This finding demonstrates that green bonds provide not only environmental benefits but also possess market value, as investor demand for sustainable assets can create favourable pricing conditions compared with traditional bonds.

Investors' Confidence/Market Acceptance and Conventional Green Bond

Sun et al. (2024) investigated the relationship between green bond issuance and corporate performance using firm-level panel data that captured both environmental and financial indicators. The study found that companies issuing green bonds achieved improved overall performance and experienced greater investor confidence. These findings indicate that sustainable financial instruments can serve as valuable strategic mechanisms for attracting capital, enhancing corporate reputation, and strengthening firms' competitive position in the market.

Similarly, Löffler and Ziegler (2021) examined the influence of investor sentiment on the development of the green bond market. By combining panel data analysis with sentiment analysis based on social media information, the study revealed that positive investor perceptions significantly affect green bond demand and pricing. The findings emphasise that market participants' attitudes and expectations toward sustainable finance are important factors shaping the acceptance, growth, and long-term success of green bond markets.

In another study, Mokni et al. (2022) reviewed existing empirical research on the effects of green bond issuance on corporate financial performance. Their analysis showed that although the financial outcomes associated with green bond issuance vary across studies, there is a consistent indication of increasing market recognition and acceptance. This growing confidence reflects investors' expanding perception of green bonds as credible financial instruments that contribute to sustainable development objectives.

Furthermore, Wang and Xia (2023), in their study Green Preferences: Evidence from the Greenium in Green Bonds, examined how investors' sustainability preferences influence the pricing of green bonds. The study considered factors such as concerns about greenwashing and levels of climate change awareness. The findings confirmed the existence of a "greenium" effect, both at the initial issuance stage and in secondary markets, indicating that investors are often willing to accept slightly lower returns in exchange for the environmental and social benefits associated with green investments. The study also

found that the greenium effect becomes stronger when concerns about greenwashing are reduced and climate awareness among investors is higher.

Moreover, the IMF (2024), in its report Sovereign Green Bonds: A Catalyst for Sustainable Debt Market Development, examined the role of government-issued green bonds in promoting the expansion of private sustainable debt markets. Using a combination of quantitative and qualitative evidence from multiple countries, the study found that sovereign green bond issuance often stimulates growth in corporate green bond markets by increasing investor confidence, improving market credibility, and encouraging wider participation. The findings suggest that sovereign green bonds can serve as important catalysts for developing sustainable finance ecosystems and strengthening the broader acceptance of green financial instruments.

Theoretical Review

Signaling Theory (Underpinning Theory)

Signalling Theory, introduced by Spence (1973) in the field of labour economics, explains how individuals or organisations with better access to information can communicate credible signals to reduce information gaps between themselves and other stakeholders. In the context of sustainable finance, the issuance of a certified green financial instrument acts as a signal to investors that the issuer is committed to achieving genuine environmental objectives. The strength and reliability of this signal are enhanced through mechanisms such as independent certification, transparent reporting on the use of proceeds, third-party verification, and government-backed policies, all of which help to build investor trust and confidence.

The importance of Signalling Theory in green finance lies in its ability to explain why investors may choose to support environmentally focused financial instruments, even when these investments may offer slightly lower financial returns than conventional alternatives. This preference, often described as the "greenium," reflects investors' willingness to accept reduced returns when they believe that an issuer's sustainability commitments are credible and that their investment contributes to positive environmental outcomes. However, the effectiveness of sustainability signals depends largely on their authenticity and consistency.

When issuers fail to achieve the environmental outcomes they promise, confidence in the signal is weakened, increasing concerns about greenwashing and reducing market trust. Despite this challenge, Signalling Theory provides a useful lens for understanding how transparency, credibility, and demonstrated sustainability commitments influence investor perceptions and investment behaviour.

This study adopts Signalling Theory as its primary theoretical foundation because the success of green financial instruments depends significantly on the ability of issuers to provide credible information that investors can rely upon when making decisions. While Institutional Theory highlights the role of regulations, social expectations, and financial institutions in shaping sustainable finance practices, Signalling Theory offers deeper insight into how investors interpret these factors, assess credibility, and respond to sustainability-related information. Therefore, the theory provides an appropriate framework for examining how issuer credibility, transparency mechanisms, and sustainability commitments influence investor confidence and the acceptance of Green

Sukuk and Conventional Green Bonds within Nigeria's developing sustainable finance market.

Institutional Theory

Institutional Theory, initially developed by Meyer and Rowan (1977) and later expanded by DiMaggio and Powell (1983), explains how organisations adapt their structures, practices, and behaviours in response to social norms, regulatory requirements, and broader institutional expectations in order to gain legitimacy. In the context of sustainable finance, the theory suggests that governments, financial institutions, and corporations adopt instruments such as green bonds not only to mobilise capital but also to demonstrate their commitment to environmental responsibility, comply with emerging regulatory standards, and align with global climate and sustainability objectives. The theory emphasises the significant role of institutional influences, including government policies, sovereign green bond initiatives, international sustainability frameworks, and market expectations, in shaping investor confidence and promoting participation in green financial markets.

Nevertheless, Institutional Theory also highlights a potential challenge: organisations may sometimes adopt sustainability practices primarily as a means of gaining legitimacy rather than achieving meaningful environmental improvements. This form of symbolic adoption can contribute to greenwashing, where institutions portray themselves as environmentally responsible without making substantial changes to their operations or delivering measurable environmental outcomes. Despite this limitation, Institutional Theory remains a useful framework for examining the external pressures and institutional conditions that influence the adoption of green finance practices. Its relevance is particularly evident in emerging markets such as Nigeria, where compliance with international sustainability standards, strong regulatory institutions, and credible policy frameworks can improve market confidence, attract investment, and support the continued development of sustainable finance.

3. Methodology

This study adopts a conceptual research design based entirely on secondary data drawn from peer-reviewed academic articles, institutional publications, and relevant policy documents. To develop a comprehensive understanding of the existing body of knowledge, a systematic literature review was conducted using recognised academic databases, including Scopus, Web of Science, SSRN, and Google Scholar. The review focused primarily on studies published between 2020 and 2025 that addressed key issues related to green bonds, investor confidence, market acceptance, and sustainable finance.

The selected literature was examined and synthesised according to key themes, including pricing behaviour, issuer credibility, certification and verification mechanisms, regulatory and policy environments, and broader economic factors influencing sustainable finance markets. This thematic analysis approach allowed the study to identify recurring patterns, assess gaps within the existing literature, and develop a conceptual framework illustrating how credibility, certification processes, and supportive institutional policies interact to influence investor confidence and shape the adoption and acceptance of green financial instruments.

4. Results and Discussion

Although studies specifically focusing on Nigeria remain limited, the broader literature on Green Sukuk provides important insights into their potential contribution to sustainable finance. Existing research indicates that the Green Sukuk market is still developing, with much of the available literature examining its benefits, market growth, pricing characteristics, and overall performance (Alkadi, 2024). A key feature that distinguishes Green Sukuk is their ability to combine Shariah-compliant financial principles with environmental sustainability objectives, creating a financing mechanism that channels investment into climate-friendly projects through ethical financial structures. This unique characteristic makes Green Sukuk particularly relevant to Nigeria, where cultural and religious values continue to influence financial behaviour and investment preferences.

Unlike conventional green bonds, which largely depend on external sustainability standards and certification frameworks, Green Sukuk integrate environmental objectives within the wider principles of Islamic finance. This combination enables them to attract investors who seek not only financial returns but also investments that reflect ethical, social, and faith-based values. As a result, Green Sukuk have considerable potential to support climate-resilient development in Muslim-majority countries such as Nigeria while complementing existing green finance instruments (Helali, 2024). Although both Green Sukuk and conventional green bonds aim to promote environmental sustainability, Green Sukuk offer an additional advantage by enhancing financial inclusion and addressing the cultural preferences of a broader range of investors.

The ethical foundations and faith-based nature of Green Sukuk may also strengthen investor confidence by signalling an issuer's commitment to both environmental responsibility and responsible investment practices. Previous studies suggest that Green Sukuk can enhance the credibility of sustainable finance markets by providing assurance that funds are directed towards projects consistent with both environmental and ethical standards.

In the Nigerian context, this signalling effect could contribute to greater trust in green financial instruments, including conventional green bonds. However, several challenges continue to restrict their wider adoption. The lack of standardised classifications, limited regulatory frameworks, and uncertainty surrounding legal structures may reduce investor confidence and slow market development (Almutairi, 2023).

Similarly, research on Socially Responsible Investment (SRI) Sukuk highlights challenges such as differences in Shariah interpretations and a relatively narrow investor base, which may limit broader market participation (Delle-Foglie & Keshminder, 2024). Therefore, while Green Sukuk offer significant opportunities to strengthen Nigeria's sustainable finance ecosystem and complement conventional green bonds through ethical and credibility-based mechanisms, their full potential will depend on addressing existing regulatory limitations, improving standardisation, and strengthening governance structures. These measures will be critical in ensuring that Green Sukuk can make a meaningful contribution to Nigeria's transition towards a more sustainable, inclusive, and climate-resilient economy.

5. Conclusion and Recommendations

This study examined the environmental contributions of Green Sukuk in comparison with conventional green bonds and assessed how investor confidence and market acceptance influence the adoption of these instruments within Nigeria's evolving sustainable finance landscape. The findings show that both financing mechanisms play important roles in advancing climate-resilient development by mobilising capital for projects that generate positive environmental outcomes. However, Green Sukuk provide a unique advantage by combining Shariah-compliant financial principles with sustainability objectives. This distinctive feature enhances their relevance in Nigeria, where cultural and religious values often shape financial preferences and investment decisions.

At the same time, conventional green bonds remain a critical pathway for connecting Nigeria to global sustainable finance markets. Their integration with internationally recognised certification frameworks, disclosure requirements, and reporting standards promotes transparency, strengthens credibility, and improves access to international sources of green capital. Consequently, Green Sukuk and conventional green bonds should not be viewed as competing instruments but rather as complementary financing mechanisms that can jointly strengthen Nigeria's sustainable finance ecosystem.

The study further highlights that strengthening investor confidence in Green Sukuk could encourage wider acceptance of green financial instruments, including conventional green bonds, particularly when existing challenges related to regulatory frameworks, certification processes, governance structures, and market infrastructure are addressed.

By combining ethical credibility with verifiable environmental outcomes, Green Sukuk have the potential to enhance trust, minimise concerns about greenwashing, and attract a broader investor base. Overall, the strategic development and integration of Green Sukuk and conventional green bonds can expand Nigeria's sustainable finance capacity and contribute significantly to the country's transition towards a more resilient, inclusive, and low-carbon economy.

In line with the study findings, the following recommendations are provided:

i. It is recommended that Nigeria adopts a dual-instrument approach that integrates Green Sukuk and conventional green bonds within a unified national green taxonomy aligned with international sustainability standards. This strategy would create greater consistency in identifying eligible green projects, improve the measurement and reporting of environmental impacts, attract a wider range of global and faith-based investors, and strengthen climate-resilient development through effective certification, monitoring, and disclosure mechanisms.

ii. Policymakers and regulatory authorities in Nigeria should prioritise measures that enhance investor confidence and strengthen the credibility of both Green Sukuk and conventional green bonds. This can be achieved through the development of robust certification and verification systems, improved coordination among regulatory institutions, targeted policy incentives, and greater awareness of Green Sukuk as an inclusive and ethically oriented investment instrument. These efforts would promote transparency, increase market participation, and support the long-term growth and resilience of Nigeria's sustainable finance ecosystem.

Originality and Uniqueness of the Study

The originality of this study lies in its comparative examination of Green Sukuk and conventional green bonds within the context of Nigeria's sustainable finance landscape. While existing research has largely focused on either conventional green bonds or Green Sukuk separately, limited attention has been given to understanding how these two instruments can complement each other in advancing climate-resilient development in Nigeria. This study addresses this gap by exploring their relative environmental contributions, the factors influencing investor confidence, and the role of market acceptance in shaping their future adoption.

Furthermore, the study provides a unique perspective by examining how the ethical and Shariah-compliant features of Green Sukuk can enhance financial inclusion while supporting the credibility of sustainable finance instruments. By integrating insights from stakeholder theory, signaling Theory, and Institutional Theory, the research develops a conceptual framework that explains how certification, credibility, and supportive policy environments influence investor trust and the growth of green financial markets. The study therefore contributes to the emerging literature by offering a Nigeria-specific perspective on how Green Sukuk and conventional green bonds can work together to strengthen sustainable finance and support the country's transition towards a low-carbon and climate-resilient economy.

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