

THE ROLE OF FINTECH EDUCATION IN DRIVING FINANCIAL INCLUSION FOR SUSTAINABLE DEVELOPMENT GROWTH IN NIGERIA: CHALLENGES AND PROSPECTS

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Abstract

The study examined the role of financial technology (FinTech) education in promoting financial inclusion and sustainable development in Nigeria, with a particular focus on Kaduna State. It explored how smartphone-based FinTech applications are adopted, considering factors such as perceived ease of use, perceived usefulness, and institutional frameworks, drawing on the Technology Acceptance Model and Institutional Theory. The study reviewed global, regional, and Nigerian empirical evidence linking FinTech innovation, financial literacy, and inclusion. Findings indicate that while FinTech provides opportunities for poverty reduction, gender empowerment, and broader economic participation, challenges including regulatory constraints, limited financial literacy, and inadequate infrastructure impede its full potential. The study underscores the importance of targeted digital literacy initiatives, supportive regulatory policies, and improved infrastructure to enhance the effectiveness of FinTech in driving inclusive economic growth. Recommendations are provided for policymakers, educators, and industry stakeholders to leverage FinTech education as a catalyst for achieving sustainable development goals in Nigeria.

Keywords: FinTech, education, financial inclusion, financial system

Introduction

The increasing integration of technology into the financial sector has fundamentally transformed how individuals and businesses access, manage, and utilize financial services. Financial technology, commonly known as FinTech, represents a paradigm shift in the banking and financial landscape, offering innovative solutions that can bridge the gap for millions of unbanked and underserved populations (Philippon, 2016). In Nigeria, where financial exclusion remains a persistent challenge, FinTech education has emerged as a critical mechanism for promoting financial literacy, economic empowerment, and inclusive development (Motorga, 2023). By equipping individuals with the knowledge and skills necessary to navigate digital financial platforms, FinTech education fosters active economic participation and supports long-term sustainable growth.

Technological innovations including smartphones, cloud computing, artificial intelligence, big data analytics, and blockchain distributed ledger technology have expanded financial services' reach and efficiency, making them accessible to previously marginalized populations (Villasenor, West, & Lewis, 2016). Smartphone-based FinTech applications, for example, allow secure, fast, and cost-effective financial transactions, even in rural and underserved areas, contributing significantly to financial inclusion (Lumsden, 2018). Beyond access, FinTech education enhances financial literacy, enabling individuals to make informed decisions about saving, investing, borrowing, and managing risk—skills that are critical for building resilience and long-term economic stability (Zehri, et al., 2024). Financial inclusion driven by FinTech education also intersects with other Sustainable Development Goals, including poverty alleviation, gender equality, and

economic growth. Women and marginalized communities, often excluded from traditional banking systems, are increasingly empowered through mobile banking, digital wallets, and microfinance platforms, reducing inequality and fostering social inclusion (Babajide, Adepoju, & Okafor, 2020). Moreover, FinTech education can enhance entrepreneurial development by providing aspiring business owners with access to digital payment systems, credit scoring tools, and financial planning resources, thereby fostering small and medium enterprises' growth, which is essential for Nigeria's economic diversification and sustainable development (Odeleye & Oyeneye, 2022).

Notwithstanding these benefits, challenges to implementing effective FinTech education persist in Nigeria. Infrastructural deficits, unreliable electricity, limited internet access, socio-cultural resistance, and regulatory bottlenecks impede widespread adoption (Olowookere, 2019). Additionally, low levels of digital literacy, lack of trust in online financial systems, and cybersecurity concerns remain barriers that limit FinTech's potential in fostering financial inclusion (Wayne, 2020). Addressing these challenges requires coordinated efforts by policymakers, educators, financial institutions, and technology providers to ensure that FinTech education is accessible, inclusive, and aligned with the broader goals of sustainable development. Previous studies in Nigeria and Sub-Saharan Africa have explored financial inclusion, digital banking, and financial literacy, but few have focused specifically on the role of FinTech education as a driver of inclusion within unique socio-economic and institutional contexts (Damilola, 2022). This study, therefore, investigates how FinTech education can be leveraged to promote financial inclusion and sustainable development in Nigeria, examining its prospects, challenges, and practical strategies for implementation. By addressing this gap, the research contributes to the understanding of how digital financial literacy and technological innovations can be harnessed for socio-economic empowerment and inclusive growth.

Institutional Theory and Technology Acceptance Model (TAM)

This study's theoretical framework comprises the Technology Acceptance Model (TAM) and Institutional Theory. The TAM framework posits that perceived ease of use and perceived usefulness are key determinants of technology adoption (Wentzel, K. R., 2016). In this study, perceived ease of use refers to how seamlessly users can engage with smartphone-facilitated financial education and Fintech applications, while perceived usefulness captures the extent to which users perceive these tools as beneficial in enhancing their financial knowledge and decision-making. However, digital literacy is critical in ensuring individuals can effectively navigate Fintech applications, understand financial tools, and make informed financial decisions for these factors to translate into actual adoption. Applying the institutional theory to financial inclusion discourse helps provide a conceptual and analytical framework for understanding the importance of functional institutions in driving financial inclusion and will also help in recommending ways to solve the problem of financial exclusion in developing and emerging markets. Institutional theory is the processes and mechanisms by which structures, schemas, rules, and routines become established as authoritative guidelines for social behaviour (Scott 2004). Institutional theory is described as the policy-making that emphasises formal and legal aspects of government structures. Institutional theory is based on the notion of institutions; Ohnesorge argued that economic behaviour, whether by the individuals or by the firms, is affected by the institutional setting in which the actors find themselves (Ohnesorge, 2007). Therefore, the institutional theory explains how Nigeria's institutional environment impedes financial inclusion by limiting property rights, access to financial

services, and other financial opportunities that should be available to the adult population. The institutional theory is based on the notion that institutions influence market participation; therefore, institutions supporting market development are crucial for economic growth and poverty reduction (Tebaldi and Mohan, 2010).

Financial Technology

Before exploring the definitions of fintech, examining the historical development of financial technologies will be helpful as this would lay the necessary foundation for understanding the nexus between fintech and financial inclusion, particularly as it relates to countries with challenging institutional contexts. Fintech has been very topical in recent times; however, the concept is not new. The historical concept dates back to July 1867, when the foremost communication through the Trans-Atlantic transmission cable occurred. The connection successfully reduced the communication time between North America and Europe from ten days to seventeen hours. It also improved services related to the financial sector, known as fintech (Leong and Sung, 2018). Therefore, the development of financial technology is connected to the development of enabling technologies. According to Leong and Sung (2018), there are three key stages of financial technology. The first stage is known as fintech 1.0. During fintech 1.0, the concept of financial globalisation came into use during this period. Through fintech 1.0, the important enabling technology included Trans-Atlantic transmission cable and mainframe computer systems, amongst others. Those technologies breed associated financial technology products, some of which include SWIFT and ATMs. In the 1950s, credit card systems were introduced to reduce the stress of carrying cash.

Studies in Developed countries

Existing studies in developed countries have explored the impact of Fintech innovation and financial literacy on financial inclusion separately. At UMKM in Bandar Lampung, Marini et al. (2024) examined the impact of financial literacy on financial inclusion, financial literacy on financial technology, and financial technology on financial inclusion. They imply that with enough financial literacy, UMKM should be able to make the best management and financial decisions to enhance business performance and sustainability. This reaffirms that FinTech products have a positive impact on financial literacy. French et al. (2020) investigated whether smartphone applications can be used to enhance desirable financial competence. They provide smartphone applications (i.e., loan interest comparison, expenditure comparison, cash calendar, and debt management applications) to working-age members of the largest credit union in Northern Ireland. They found that people who utilised the applications were more likely to track their income and expenditures and demonstrated more resilience in the face of a financial shock, meaning that creating greater awareness of FinTech products would benefit financial inclusion and financial literacy. Bede Uzoma et al. (2020) studied how mobile banking boosts financial inclusion and improves individuals' well-being and wealth in developing nations based on quantitative analysis of World Bank (2018) database data. They discovered a small correlation between mobile banking and financial problems while suggesting that additional empirical research is needed by employing data from different sources. De Sant'Anna and Figueiredo (2024) pointed out that Fintech is a promising avenue for reducing inequality in access to financial services, while it also drives unequal access to financial services and may generate potential biases.

FinTech Education and Financial Inclusion in Sub-Saharan Africa

Different studies have emerged in the area of inclusive finance in Africa. For instance, Nanziri examined the state of financial inclusion concerning the gender gap in South Africa and discovered that women primarily use structured financial and informal financial mechanisms while the men utilise recognised credit facilities, and there are no differences or gaps in their access to financial services (Nanziri, 2016). Zins And Weill investigated factors for financial inclusion in 37 countries and found that being a man who is rich, properly educated and older is connected with greater financial inclusion in African countries (Zins and Weill 2016). A study conducted by Demircug-Kunt and Klapper on African countries found that although there is a growth within the financial sector in African countries, they lag behind developed economies in the usage and access of financial products by adults and firms (Demircug-Kunt and Klapper 2012). The research also found barriers to financial inclusion that both individuals and firms face; when a country has a more competitive, open, market-oriented and well regulated financial system with more developed contractual and informational infrastructures, barriers tend to lessen. Financial inclusion is better in some developed economies; for example, in the United Kingdom, Germany and Luxemburg, fintech companies are able to drive financial inclusion more efficiently because of these countries' high-level potential for financial sector development, thereby bridging the gap in financial inclusion in those countries. In the UK, Germany and Luxembourg, financial institutions are urged to take a proactive approach, recognising persons without bank accounts or other financial services as a commercial potential rather than only a source of humanitarian donations (Marshall, 2004).

However, research has shown that a significant number of people are still financially excluded in some European Union countries, such as Bulgaria, Cyprus, Greece and Romania because they have no access to formal credit (Grazioli et al., 2021). These are people who have experienced or are experiencing unexpected events, have no access to income, and cannot access financial services frequently due to illiteracy and geographical dislocation in areas with economic issues. In contrast, in most African countries, financial inclusion is impeded by physical, regulatory, and financial obstacles and removing these seems complicated since it also necessitates addressing the underlying structural reasons (Demircug-Kunt and Klapper 2012). Bongomin et al. (2018a) conducted a semi-structured questionnaire survey to elicit responses from poor households in rural Uganda. They revealed that there exists a significant and positive relationship between mobile money usage and financial inclusion, while social networks significantly and positively moderate the relationship between mobile money usage and financial inclusion.

FinTech Education and Financial Inclusion in Nigeria

Ozili (2021) identified key factors that determine financial inclusion in Nigeria, including banking account ownership, credit and debit card ownership, savings, and the rate of formal borrowings. Previous studies in Nigeria, sub-Saharan African nations and other developing countries focused either on financial literacy or Fintech innovation as a key determinant of financial inclusion. Achugamonu et al. (2016) examined the connection between agent banking and financial inclusion in Nigeria. They illustrated that high levels of illiteracy among Nigeria's unbanked population are a major barrier to the country achieving high levels of financial inclusion. Central Bank of Nigeria illustrated that the key challenges in achieving financial inclusion include a lack of infrastructure and low penetration of mobile money accounts. They point out that FinTech is a major tool in

promoting financial inclusion in Nigeria, as they discovered that households receiving financial services via mobile phones are more likely to have higher savings than those receiving financial services manually. Isibor et al. (2018) investigated the influence of e-banking on bank performance, customer satisfaction, and economic growth in Nigeria, pointing out that e-banking had increased both consumer satisfaction and economic growth. Oumaa et al. (2017) investigated whether the widespread use of a mobile telephone to provide commercial services is advantageous for the deployment of savings in sub-Saharan African nations. They found that access to mobile financial services can boost the likelihood and increase the amount of savings, due to the frequency and convenience of conducting transactions using mobile phones. Jack and Tavneet (2014) explored the impacts of reduced transaction costs of Fintech products on risk sharing capability. They found that households who did not use M-PESA suffered a 7% drop in consumption when hit by a negative shock, while the consumption of households who used M-PESA was unaffected.

Challenges of Fintech and Financial Inclusion in Nigeria

The limited access to financial services among adults globally poses a significant challenge to economic growth and development (Giwa-Osagie & Osiobe, 2021). In Nigeria, the proportion of adults with genuine access to such services remains low. This is because ownership of a bank account does not necessarily equate to financial inclusion—particularly in Nigeria’s complex institutional environment. For instance, while some individuals possess bank accounts, various barriers may hinder their effective use, preventing them from reaping the full benefits enjoyed by account holders in developed economies such as the United Kingdom. Consequently, the scope of financial inclusion in countries with institutional constraints has become a critical subject of discourse. Although fintech is still relatively new and evolving, its potential to enhance financial inclusion can only be realised if key barriers to its adoption are addressed within Nigeria’s institutional context. The subsequent section of this paper therefore examines the specific challenges hindering fintech’s role in advancing financial inclusion in Nigeria and proposes strategies to overcome them.

Regulatory Issue

Financial services remain one of the most heavily regulated sectors globally, with regulatory concerns intensifying as technological integration grows increasingly complex. While efforts have been made to modernise regulation through innovation and digitisation, regulators continue to face the challenge of striking a balance between fostering innovation and safeguarding financial stability and consumer protection. For instance, the Central Bank of Nigeria (CBN) recently issued a directive prohibiting financial institutions from engaging in cryptocurrency transactions (Bakare, 2021). Similarly, the Securities and Exchange Commission (SEC) introduced a policy restricting unregistered entities from facilitating the exchange of securities in Nigeria (SEC, 2021). These regulatory measures have sparked debates among stakeholders; however, the regulators maintain that such guidelines are necessary to preserve a fair, transparent, and stable financial system (Nwanisobi, 2021). Based on the above, one would argue that there seems to be a disconnect between regulators and relevant stakeholders. Therefore, to avoid challenges of this kind, CBN and SEC should provide a platform for discourse whereby innovators can discuss how existing regulations can advance the development of fintech and how their products can fit within these regulations. Regulators ought to likewise consider the fact that the battleground may be uneven and unbalanced. For instance, if fintech companies

are to have similar limitations as traditional banks, this may be restrictive (Giwa-Osagie and Osiobe, 2021). Additionally, since it serves new markets and gives financial tools to new populations, fintech operates in an area where regulations are at the moment sparse.

The Predominance of Financial Illiteracy

Amidst the unbanked and unmerited, there is a viewpoint that they need not bother with the financial products offered by banks. Countless people in Nigeria resort to casual loaning from loved ones rather than approaching a bank for a loan. Similarly, for the most part, when it comes to savings amongst the unbanked Nigerians, they would prefer to engage in a highly conventional approach to savings by concealing their cash in protected spots at their home or resort to casual saving clubs fondly called Osusu (Osiki, 2020). Such practices have made it hard for financial companies to break into these areas. However, some fintech companies have tried to introduce computerised investment apps such as Piggyvest, Bamboo, Risevest, Chaka and Trove to encourage individuals to invest or save their money outside the traditional banking system. Using such computerised investment apps requires the individual to be literate to a certain extent to understand the nature of the investments or savings they are entering into. Consequently, there is still a need to expand the degree of financial aid education to get to a bigger pool of customers, as research shows that more than 60 per cent of Nigerian adults remain unbanked (EFInA, 2021).

Use of Technology

The pith of fintech is the disbursement of wealth through digital methods to reach the unbanked and underprivileged populaces. It should be designed to help reduce poverty in any given country; therefore, fintech should provide formal financial products that are seamlessly delivered at a reasonably low cost to citizens. However, the embrace of fintech by Nigerian financial institutions has further widened the country's level of financial exclusion because individuals who previously used traditional banks can no longer do due to illiteracy. These affected customers are then added to the underbanked, increasing the number of people systematically pushed out of the banking corridors due to a lack of understanding of the use of advanced financial banking platforms, such as internet banking, mobile banking, and automated banking teller machines, amongst others. However, the commitment of the conventional cash loan specialists, Osusu/Esusu, towards financial inclusion is evident from how this casual area has served the requirements of uneducated individuals residing in rural communities, who do not have access and capability to participate in the digitised banking system because the current legal and regulatory framework has systematically ignored them due to Nigeria's institutional context. This class of individuals has effectively been excluded from the advanced financial framework that requires that one be taught and have innovative abilities before adjusting to the framework.

Lack of Infrastructure

The presence of functional infrastructure is key to how fintech can help promote financial inclusion. According to Manyika (2016), three building blocks are required to promote financial inclusion: widespread digital infrastructure, a dynamic financial services market, and products people prefer to existing alternatives, which must be provided at a minimal cost. However, due to the institutional voids in Nigeria, there are several challenges with physical infrastructure ranging from the epileptic power supply, unstable mobile network receptions and the outdated servers and other pieces of equipment used by the banks. This

dearth of infrastructure results in a flawed payment system evidenced by duplicating transactions and applying several charges to customers' accounts. It is argued that with the proper infrastructure in place and an adequate legal and regulatory framework aimed at protecting customers, fintech can be a tool to drive financial inclusion. The unbanked population will be motivated to take full advantage of such services if they are seamless and cost-effective.

Prospects of FinTech

Financial Technology (Fintech) is a combination of financial systems and technology. The development of fintech in Nigeria has given rise to various application innovations, especially in financial services, such as payment transaction tools, money storage tools, and also money lending tools. The proliferation of fintech in Nigeria is evidence of society's shift from traditional financial systems to using fintech. The shift in society is based on the speed and ease of fintech in accessing various interests related to the financial system (Safitri, 2021). Fintech changes our perception when it comes to borrowing money. Previously, loans for individuals and businesses were known to only be possible through banks and had to go through a complicated and tiring process. Fintech provides easy access for borrowers. One of them is making loans online where customers only need to submit the required documents online. Rizal et.al (2018), said that in the current era of digitalization, various activities use technology for cost efficiency.

Here's a conclusion based on your topic and abstract:

Conclusion

The study concluded that FinTech education plays a pivotal role in driving financial inclusion and supporting sustainable development in Nigeria. By enhancing digital financial literacy and facilitating the adoption of smartphone-based FinTech applications, individuals—particularly in underserved regions like Kaduna State, can gain greater access to financial services, engage in economic activities, and participate meaningfully in development initiatives. The research highlighted that while FinTech offers significant opportunities for poverty reduction, gender empowerment, and inclusive growth, structural challenges such as regulatory constraints, inadequate infrastructure, and low levels of financial literacy limit its full potential. Therefore, the study emphasizes that coordinated efforts from policymakers, educators, and industry stakeholders are essential to create enabling environments that maximize the benefits of FinTech education. Ultimately, strengthening FinTech education can serve as a transformative strategy to achieve equitable financial inclusion and contribute to Nigeria's sustainable development objectives.

Suggestions

To improve financial inclusion and promote sustainable development through FinTech education, the following strategies are recommended:

1. Implement targeted educational programs to raise awareness about the benefits and usage of various FinTech products beyond Mobile Money. Utilize digital platforms and community outreach to educate underserved populations about FinTech solutions.
2. Invest in technological infrastructure to support the seamless operation and integration of various FinTech services. Ensure interoperability between different FinTech platforms to enhance user experience and service accessibility.

3. Develop and enforce robust consumer protection regulations to build trust and confidence in digital financial services. Establish grievance redressal mechanisms to address consumer issues promptly and effectively.
4. Launch programs similar to India's Jan Dhan Yojana and Vietnam's National Financial Inclusion Strategy to increase access to financial services, especially in rural and underserved areas. Encourage public-private partnerships to drive innovation and expand the reach of FinTech services.

REFERENCES

- Achugamonu, B., et al. (2016). *Agent banking and financial inclusion: The Nigerian experience*. Seville, Spain: International Business Information Management Association.
- Babajide, A., Adepoju, T., & Okafor, P. (2020). Financial technology and inclusion in Sub-Saharan Africa: Emerging trends and evidence from Nigeria. *Journal of African Business Studies*, 15(3), 45–60.
- Babajide, A., et al. (2020). Financial technology, financial inclusion and MSMEs financing in the south-west of Nigeria. *Academic Entrepreneurship Journal*, 26(3), 1–17.
- Bakare, A. (2021). Cryptocurrency trading: CBN orders banks to close operating accounts. *CBN Updates*, 3(2), February 2021.
- Bede Uzoma, A., Omankhanlen, A. E., Obindah, G., Arewa, A., & Okoye, L. U. (2020). Digital finance as a mechanism for extending the boundaries of financial inclusion in Sub-Saharan Africa: A general methods of moments approach. *Cogent Arts & Humanities*, 7(1), 1788293.
- Bongomin, G., Ntayi, J. M., Munene, J. C., & Malinga, C. A. (2018). Mobile money and financial inclusion in Sub-Saharan Africa: The moderating role of social networks. *Journal of African Business*, 19(3), 361–384.
- Damilola, A. (2022). FinTech and financial inclusion in West Africa: Nigeria's SMEs market. *International Journal of Multidisciplinary Contemporary Educational Research*, 4(1), 210–218.
- Demirguc-Kunt, A., & Klapper, L. (2012). Measuring financial inclusion: The global Findex database. The World Bank.
- de Sant'Anna, D. M., & Figueiredo, P. N. (2024). Fintech innovation: Is it beneficial or detrimental to financial inclusion and financial stability? A systematic literature review and research directions. *Emerging Markets Review*, 101140.
- French, D., McKillop, D. G., & Stewart, E. (2020). The effectiveness of smartphone apps in improving financial capability. *European Journal of Finance*, 26(4–5), 302–318.
- Giwa-Osagie, O., & Osiobe, I. (2021). How Fintech can stimulate financial inclusion: Challenges and opportunities. Retrieved from <https://www.giwa-osagie.com/how-fintech-can-stimulate-financial-inclusion-challenges-and-opportunities>

- Grazioli, R., Milioli, M. A., Notte, A., & Poletti, L. (2021). Financial and social inclusion in Europe. *EIF Working Paper*, 2021/72. Retrieved from <https://www.econstor.eu/bitstream/10419/232575/1/1752696492.pdf>
- Jack, W., & Tavneet, S. (2014). Risk sharing and transactions costs: Evidence from Kenya's mobile money revolution. *American Economic Review*, 104(1), 183–223.
- Leong, K., & Sung, A. (2018). Fintech (financial technology): What is it and how to use technologies to create business value in FinTech way? *International Journal of Innovation, Management and Technology*, 9(2), 74–78.
- Lumsden, E. (2018). The future is mobile: Financial inclusion and technological innovation in the emerging world. *Stanford Journal of Law, Business, and Finance*, 23(1), 1–44.
- Manyika, J., Lund, S., Singer, M., White, O., & Berry, C. (2016). *Digital finance for all*. McKinsey Global Institute.
- Marshall, J. N. (2004). Financial institutions in disadvantaged areas: A comparative analysis of policies encouraging financial inclusion in Britain and the United States. *Environment and Planning A*, 36(2), 241–261.
- Motorga, M. E. (2023). Digital transformation in adult education: Empowering global understanding and sustainable development. *Revista de Științe ale Educației*, 48(2), 46–63.
- Nanziri, E. L. (2016). Financial inclusion and welfare in South Africa: Is there a gender gap? *Journal of African Development*, 18(2), 109–134.
- Odei-Appiah, S., Wiredu, G., & Adjei, J. (2021). Fintech use, digital divide and financial inclusion. *African Conference on Information Systems and Technology*, 11.
- Odeleye, B. T., & Oyeneye, J. (2022). Exploring the impact of financial technology on economic empowerment in Nigeria. *African Journal of Economics and Technology*, 9(2), 101–115.
- Olowookere, D. (2019). Role of Fintech in accelerating financial inclusion in Nigeria. *Business Post Nigeria*. Retrieved from <https://businesspost.ng/featureoped/role-of-fintech-in-accelerating-financial-inclusion-in-nigeria>
- Olowookere, T. (2019). Challenges to FinTech adoption in Nigeria: Regulatory and infrastructural perspectives. *Journal of Banking and Finance Policy*, 5(1), 33–46.
- Osiki, A. (2020). Esusu cooperative as a means of extending social protection to the Nigerian informal economy. *Journal of the Academy of Social Sciences*, 15(4), 461–475.
- Ozili, P. (2021). Financial inclusion in Nigeria: Determinants, challenges, and achievements. *New Challenges for Future Sustainability and Wellbeing*, 377–395.
- Philippon, T. (2016). The FinTech opportunity. *NBER Working Paper Series*, No. 22476. National Bureau of Economic Research.
- Philippon, T. (2019). On FinTech and financial inclusion. *National Bureau of Economic Research*.

- Scott, R. W. (2004). Institutional theory: Contributing to a theoretical research program. In K. G. Smith & M. A. Hitt (Eds.), *Great minds in management: The process of theory development* (pp. 460–484). Oxford University Press.
- SEC. (2021). Proliferation of unregistered online investment and trading platforms facilitating access to trading in securities listed in foreign markets. Retrieved from <https://sec.gov.ng/proliferation-of-unregistered-online-investment-and-trading-platforms-facilitating-access-to-trading-in-securities-listed-in-foreign-markets/>
- Tebaldi, E., & Mohan, R. (2010). Institutions and poverty. *The Journal of Development Studies*, 46(6), 1047–1066.
- Villasenor, J., West, D., & Lewis, R. (2016). Financial and digital inclusion project report. Washington, DC: Brookings Institution.
- Wayne, T. (2020). Digital financial literacy in emerging economies: Barriers and prospects. *Journal of Development Studies*, 18(2), 120–135.
- Zehri, C., Ahmed, S., & Khan, R. (2024). Digital financial literacy and inclusive development in emerging economies. *Journal of Sustainable Development in Finance*, 12(1), 23–41.
- Zehri, C., Bendahmane, M. E. A., Amina, K., Zgarni, I., & Sekrafi, H. (2024). Decent work, financial inclusion, and economic growth: Analysis under SDG 8. *Heritage and Sustainable Development*, 6(1), 197–218.
- Zins, A., & Weill, L. (2016). The determinants of financial inclusion in Africa. *Review of Development Finance*, 6(1), 46–57.