

ICFB-UCB-2026-011
FINTECH DISRUPTION AND BANKING STABILITY IN NIGERIA

John, John Ime¹, Orok, Akaniyene Billy², Odogwu, Helen Ede³, Mgbado, Michael Ujor⁴, Essien, Aniekpeno⁵

^{1,2}Department of Banking and Finance, University of Calabar, Calabar, Nigeria

³Prince Abubakar Audu University, Ayingba, Nigeria

⁴Sterling Bank Plc, Abuja, Nigeria

⁵Stanbic IBTC Bank, Calabar, Nigeria

Abstract

The study examines the relationship between fintech disruption and banking stability in Nigeria using an Autoregressive Distributed Lag (ARDL) model over the period 1990–2024. The study incorporated key fintech indicators; mobile banking adoption rate, fintech transaction volume, mobile money accounts per 1,000 adults, and digital payment usage, as explanatory variables, while banking stability was proxied by the Z-score. The ARDL approach was employed due to its suitability for mixed-order integration and its ability to capture both short-run dynamics and long-run equilibrium relationships. Empirical findings from the long-run ARDL estimates revealed that fintech disruption variables exert a significant but mixed effect on banking stability. Specifically, mobile banking adoption and digital payment usage demonstrated a positive and statistically significant long-run relationship with bank stability, suggesting that increased digital financial participation enhances efficiency, improves risk diversification, and strengthens deposit mobilization in the banking system. Conversely, fintech transaction volume exhibited a negative, but statistically significant effect on banking stability in the short run, indicating that rapid increases in digital transaction activity may initially heighten operational risk, cybersecurity exposure, and competitive pressure on traditional banks. Mobile money penetration showed a positive and stabilizing effect over the long run, reflecting its role in broadening financial inclusion and improving liquidity flows within the financial system. Based on these findings, the study recommended that policymakers should strengthen regulatory technology (RegTech) frameworks, enhance cybersecurity infrastructure, and promote collaborative fintech–bank partnerships to mitigate short-run risks. Furthermore, the Central Bank of Nigeria should deepen policies that support digital financial inclusion, while ensuring adequate oversight of rapidly growing fintech transaction ecosystems to sustain long-term financial stability

Keywords: FinTech Disruption, Fintech disruption, Mobile Banking, Electronic Payments, Financial Technology, Financial System Stability

1.0 Introduction

The banking sector plays a critical role in promoting economic growth and development through financial intermediation, liquidity creation, payment facilitation, and efficient allocation of financial resources. A stable banking system enhances investor confidence, supports monetary policy implementation, and promotes financial inclusion within an economy. In Nigeria, the banking sector has historically served as the backbone of the financial system, contributing significantly to savings

mobilization, credit allocation, and economic transformation. However, the emergence and rapid expansion of financial technology (FinTech) innovations have fundamentally altered the structure, operations, and competitive dynamics of the traditional banking industry. Financial technology, commonly referred to as FinTech, describes the integration of digital technologies into financial service delivery to improve efficiency, accessibility, speed, and customer experience. FinTech encompasses a wide range of digital financial innovations including mobile banking, mobile money services, digital payments, peer-to-peer lending, crowdfunding, blockchain technology, cryptocurrencies, artificial intelligence, robo-advisory services, and digital banking platforms. Globally, FinTech has transformed the financial services landscape by disrupting traditional banking models and creating alternative channels for financial transactions and service delivery (Zetzsche et al, 2017).

The rise of FinTech has been particularly remarkable in developing economies where traditional banking infrastructure remains inadequate or inaccessible to a significant proportion of the population. In Nigeria, the growth of FinTech has accelerated over the past decade due to increased internet penetration, widespread mobile phone usage, expanding digital literacy, regulatory reforms, and changing consumer preferences toward faster and more convenient financial services. Nigeria has emerged as one of Africa's leading FinTech hubs, attracting substantial domestic and foreign investments into digital financial services. Companies such as Flutterwave, Paystack, and Opay, have significantly reshaped payment systems and financial transactions within the Nigerian economy. The rapid expansion of FinTech innovations has introduced significant opportunities for improving financial inclusion and financial efficiency in Nigeria. FinTech platforms have enhanced access to financial services among previously unbanked and underbanked populations, especially in rural and underserved areas. Mobile payment systems, agency banking, and digital lending platforms have reduced transaction costs, increased convenience, accelerated payment settlements, and improved customer experience. These developments align with the broader objective of achieving inclusive financial development and supporting sustainable economic growth (Yusuf & Bala, 2021).

Despite these benefits, the growing influence of FinTech has also raised concerns regarding banking stability and the sustainability of traditional banking institutions. FinTech disruption refers to the process through which technological innovations alter or replace conventional banking operations, products, and market structures. The disruptive nature of FinTech has intensified competition within the financial sector, reducing banks' monopoly over payment systems, lending services, and customer deposits. Traditional banks now face increasing pressure from agile FinTech firms that provide faster,

cheaper, and technology-driven financial solutions. The disruption created by FinTech may affect banking stability through several channels; first, FinTech innovations reduce banks' profitability by eroding traditional revenue sources such as transaction fees, commissions, and interest income. As customers increasingly migrate to digital platforms and alternative financial service providers, banks may experience declining market shares and weakened earnings performance. Second, FinTech expansion increase operational and cybersecurity risks within the banking sector. The growing reliance on digital platforms exposes financial institutions to cyberattacks, data breaches, fraud, and technological failures, all of which can threaten financial system stability. Third, FinTech disruption weaken banks' liquidity positions by diverting customer deposits toward mobile wallets, digital savings platforms, and non-bank financial institutions. This could reduce banks' capacity to create credit and perform their traditional intermediation functions effectively. Additionally, the increasing interconnectedness between banks and FinTech firms may create systemic vulnerabilities capable of transmitting shocks across the financial system, as the emergence of cryptocurrencies and decentralized financial systems further complicates monetary policy transmission and regulatory oversight within the banking sector (Vives, 2019).

In Nigeria, concerns regarding banking stability have become increasingly important due to recurring episodes of financial fragility, non-performing loans, liquidity constraints, banking distress, and macroeconomic instability. Although regulatory authorities such as the Central Bank of Nigeria have introduced several reforms aimed at strengthening banking supervision and digital financial regulation, the pace of technological innovation continues to outgrow existing regulatory frameworks. The introduction of policies such as the cashless policy initiative, payment system reforms, open banking frameworks, and digital banking licenses reflects ongoing efforts to balance innovation with financial system stability. Furthermore, the COVID-19 pandemic accelerated the adoption of digital financial services in Nigeria, leading to unprecedented growth in online transactions, mobile banking usage, and electronic payment systems. While this transition enhanced financial accessibility and operational efficiency, it also amplified cybersecurity concerns and intensified competition between banks and FinTech operators, hence, the relationship between FinTech disruption and banking stability has become a critical area of policy and academic interest (Vives, 2019).

Empirical studies on FinTech and banking stability have produced mixed findings. Some studies argue that FinTech innovations improve banking stability by enhancing operational efficiency, reducing transaction costs, increasing financial inclusion, and improving risk management practices. Other studies contend that FinTech disruption weakens banking stability by intensifying competition,

reducing bank profitability, increasing operational vulnerabilities, and encouraging excessive risk-taking behavior among financial institutions. In the Nigerian context, most existing studies have focused primarily on the impact of mobile banking and digital payments on financial inclusion and banking performance, with limited attention given to the broader implications of FinTech disruption for banking stability. Moreover, previous studies have largely concentrated on developed economies, where financial systems, technological infrastructure, and regulatory environments differ significantly from those of developing countries such as Nigeria. This creates a contextual gap in the literature, as the Nigerian banking environment is characterized by infrastructural deficits, regulatory inconsistencies, cybersecurity challenges, financial exclusion, and macroeconomic volatility. Consequently, the extent to which FinTech disruption influences banking stability within Nigeria remains insufficiently understood, hence, it is against this backdrop, that this study seeks to examine the effect of FinTech disruption on banking stability in Nigeria.

The specific objectives of the study include:

1. To examine the effect of mobile banking adoption rate on banking stability in Nigeria;
2. To investigate the extent to which fintech transaction volume influence banking stability in Nigeria;
3. To assess the relationship between mobile money accounts per 1,000 adults and banking stability in Nigeria.
4. To examine the effect of digital payment usage on banking stability in Nigeria

2.0 Literature review and theoretical framework

2.1 Theoretical framework

2.1.1 Schumpeter's theory of innovation

The principal theory underpinning this study is the innovation theory developed by Joseph Schumpeter in 1934. Schumpeter argued that economic growth and development are fundamentally driven by innovation and technological advancement. According to the theory, innovation introduces new products, production methods, markets, and organizational structures that transform existing economic systems. Schumpeter described this process as “creative destruction,” whereby new technologies continuously replace obsolete systems and reshape industries. The theory maintained that firms that embrace innovation gain competitive advantages, while organizations that resist change gradually become irrelevant. In modern financial systems, technological innovation has become a major determinant of institutional survival and competitiveness, and the banking sector, traditionally

characterized by physical branch operations and manual service delivery, has increasingly experienced technological transformation through digital financial innovations (Philippon, 2016).

Within the context of banking operations, Financial Technology (FinTech) represents a disruptive innovation capable of transforming conventional banking activities. FinTech innovations such as mobile banking, electronic payment systems, internet banking, digital lending platforms, blockchain technology, and artificial intelligence-driven financial services have significantly altered the nature of financial intermediation; and these technologies provide faster, cheaper, more accessible, and highly efficient financial services compared to traditional banking methods. The innovation theory explains how FinTech firms challenge conventional banking institutions by introducing innovative solutions that redefine customer expectations and financial transactions. Through the process of creative destruction, traditional banks are compelled to adopt digital transformation strategies, invest in technological infrastructure, and redesign operational frameworks to remain competitive within the evolving financial ecosystem. Banks that fail to innovate risk losing market share, profitability, and relevance in the financial system. In Nigeria, the rapid growth of FinTech firms such as digital payment providers, mobile money operators, and online lending platforms has significantly transformed the banking landscape, and the expansion of cashless policies by the Central Bank of Nigeria has further accelerated digital financial innovation and intensified competition within the banking industry. Consequently, banks increasingly rely on digital channels to enhance customer experience, operational efficiency, and market competitiveness.

2.1.2 Financial intermediation theory

The financial intermediation theory explains the traditional role of financial institutions, particularly banks, as intermediaries between surplus economic units and deficit economic units. The theory posits that banks exist because they facilitate the efficient allocation of financial resources within the economy by mobilizing savings from depositors and channeling them to borrowers in the form of loans and investments. It emphasizes that banks reduce transaction costs, manage information asymmetry, provide liquidity, diversify risks, and enhance financial efficiency within the economy. Financial intermediaries possess expertise in credit assessment and risk management, making them essential institutions for economic growth and financial system stability (Ozili, 2019).

Traditionally, banks dominated financial transactions and payment systems because they served as the primary institutions for deposit mobilization, credit allocation, funds transfer, and financial advisory services. However, advancements in digital technology have significantly altered the intermediary role of banks, as FinTech innovations increasingly provide alternative platforms

through which financial transactions can occur without direct reliance on conventional banking institutions. Digital financial platforms such as peer-to-peer lending systems, crowdfunding platforms, mobile money services, digital wallets, cryptocurrency systems, and online payment gateways now perform functions previously reserved for banks. These innovations reduce dependency on physical banking infrastructure and facilitate direct financial interactions between economic agents. In Nigeria, FinTech companies have expanded financial inclusion by providing accessible and affordable financial services to previously unbanked and underbanked populations. Mobile payment systems and agency banking have particularly enhanced financial access in rural and semi-urban areas where traditional banking infrastructure remains inadequate. However, despite these benefits, the growing role of FinTech firms challenges the traditional profitability structure of banks and may weaken banks' intermediary functions.

2.1.3 Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) was developed by Fred Davis in 1989 to explain the factors influencing the adoption and utilization of technological innovations. The theory posits that users' acceptance of technology is primarily determined by two major factors namely; perceived usefulness and perceived ease of use. Perceived usefulness refers to the degree to which individuals believe that using a particular technology will improve their performance or productivity. Perceived ease of use entails the extent to which users believe that a technology is simple, convenient, and free from difficulty. According to the theory, when individuals perceive technology as useful and easy to use, they are more likely to adopt and continuously utilize it. The Technology Acceptance Model is particularly relevant in explaining customer adoption of FinTech innovations within the banking sector, as the effectiveness and success of digital banking services depend largely on customers' willingness to adopt and utilize technological platforms such as mobile banking applications, internet banking systems, automated teller machines, digital wallets, and electronic payment platforms (Olugbenga, Ibitoye & Innocent, 2026).

In Nigeria, increased smartphone penetration, internet accessibility, and digital literacy have accelerated the adoption of FinTech services, as customers increasingly prefer digital financial platforms because they provide convenience, speed, flexibility, and accessibility. The growing use of mobile transfers, online banking, QR payments, and agency banking reflects the increasing acceptance of financial technologies among banking customers. However, technological adoption within the financial sector is also influenced by challenges such as cybersecurity concerns, digital fraud,

inadequate technological literacy, network failures, and low trust in digital systems. These challenges may hinder the widespread adoption of FinTech services and affect the stability of banking operations.

2.1.4 Disruptive innovation theory

The disruptive innovation theory was developed by Clayton Christensen to explain how smaller innovative firms challenge established institutions through simpler, cheaper, and more accessible technologies. According to the theory, dominant firms often fail to respond effectively to emerging innovations because they are deeply rooted in traditional operational structures and established market systems. The theory argues that disruptive innovations initially target underserved or overlooked markets with relatively simple and low-cost solutions. Over time, these innovations improve in quality and gradually penetrate mainstream markets, eventually displacing established firms that fail to adapt. In the financial sector, FinTech firms represent disruptive innovators challenging conventional banking institutions, as digital financial service providers now offer payment solutions, lending services, investment platforms, savings applications, remittance services, and cross-border transaction systems that compete directly with traditional banks. These innovations often provide faster, more affordable, and more user-friendly alternatives to conventional banking services (Ngaikedi, 2026).

In Nigeria, FinTech firms have significantly transformed the financial ecosystem through innovations in digital payments, mobile banking, agency banking, and online lending. The emergence of FinTech companies has intensified competition within the banking industry and compelled traditional banks to adopt digital transformation strategies. Deposit money banks increasingly invest in financial technologies, cybersecurity systems, and digital infrastructure to maintain competitiveness and customer retention.

2.1.5 Financial stability theory

The financial stability theory emphasizes the ability of the financial system to withstand shocks, maintain efficient financial intermediation, and sustain public confidence in financial institutions. The theory posits that a stable financial system is one in which banks and other financial institutions effectively perform their core functions without experiencing systemic crises or operational disruptions. It explains that banking stability is achieved when financial institutions remain liquid, profitable, adequately capitalized, and resilient to internal and external shocks, as a stable banking system supports economic growth by ensuring efficient payment systems, effective credit allocation, and investor confidence. (Demirgüç-Kunt et al, 2022)

However, the rapid growth of FinTech innovations has introduced both opportunities and risks to financial stability. On one hand, FinTech enhances operational efficiency, reduces transaction costs, promotes financial inclusion, improves payment systems, increases access to financial services, and facilitate faster transactions and improve customer convenience within the banking sector. On the other hand, FinTech disruption may expose banks and financial systems to systemic risks such as cybersecurity threats, digital fraud, data breaches, operational failures, technological dependence, and regulatory arbitrage, as increased competition from FinTech firms also weaken banks' profitability and market dominance, thereby affecting financial stability. In Nigeria, the expansion of digital financial services has raised concerns regarding cybersecurity vulnerabilities, online fraud, regulatory adequacy, consumer protection, and operational resilience. The increasing interconnectedness between banks and FinTech firms further heightens the risk of systemic disruptions in the event of technological failures or cyberattacks.

2.2 Literature review

Digital financial services encompass mobile banking, electronic payment systems, and other technology-driven financial solutions that facilitate seamless financial transactions and improve access to banking services. These innovations have transformed the banking sector by enhancing transaction efficiency, reducing operational costs, and promoting financial inclusion. In Nigeria, the rapid adoption of digital financial technologies has significantly reshaped the financial landscape, particularly following the introduction of the cashless policy by the Central Bank of Nigeria. Mobile banking involves the use of mobile devices to conduct financial transactions such as fund transfers, bill payments, deposits, withdrawals, and account management services. Through mobile banking platforms, financial institutions are able to extend banking services to previously underserved and unbanked populations, thereby deepening financial inclusion. The growth of mobile banking contributes positively to banking stability by increasing deposit mobilization, improving customer convenience, reducing transaction costs, and enhancing operational efficiency. The accessibility and speed associated with mobile banking also strengthen customer confidence in the banking system. However, the increasing dependence on mobile platforms exposes banks to cybersecurity threats, operational risks, network failures, and digital fraud, which may threaten banking stability if not properly managed (Frost, 2020).

Similarly, electronic payment systems entail digital channels that enable financial transactions without the use of physical cash. These include Point-of-Sale (POS) terminals, Automated Teller Machines (ATMs), internet banking platforms, mobile transfers, and other electronic payment

infrastructures. Electronic payment systems improve banking operations by facilitating faster transactions, lowering transaction costs, and reducing the risks associated with cash handling. In Nigeria, the adoption of electronic payment systems accelerated significantly following the implementation of the cashless policy by the Central Bank of Nigeria. The increased use of electronic payment channels has enhanced the efficiency of financial intermediation and improved the overall performance of banks. Nevertheless, electronic payment systems are also associated with challenges such as cybercrime, electronic fraud, system failures, and technological disruptions, which may undermine banking stability when security frameworks are weak (Atoi, 2017).

2.3 Empirical review

Ngaikedi (2026) examined the effect of financial technology on the stability of the traditional banking system in Nigeria using annual time-series data from 2006 to 2024. The study employed the Auto-Regressive Distributed Lag (ARDL) technique and used Automated Teller Machine (ATM) transactions, mobile banking transactions, internet banking transactions, and Point-of-Sale (POS) transactions as proxies for FinTech disruption, while Z-score was used to measure banking stability. The findings revealed that ATM transactions, mobile banking, and POS transactions significantly influenced banking stability in Nigeria. The study further showed that mobile banking and ATM transactions had a short-run negative relationship with banking stability, while internet banking and POS transactions exhibited positive relationships. The study recommended that the Central Bank of Nigeria should strengthen digital financial regulations and improve financial literacy to sustain banking stability.

Atoi (2018) investigated the effect of non-performing loans on banking stability in Nigeria using panel data from nationally and internationally licensed banks between 2014 and 2017. The study adopted the Panel Generalized Method of Moments (GMM) and Panel Vector Autoregressive (PVAR) techniques. Banking stability was proxied using the Z-score model. The findings showed that increasing loan default risks weakened banking stability and exposed banks to financial vulnerabilities. The study concluded that financial innovation and rapid digital credit expansion without adequate risk management frameworks could worsen banking instability through rising non-performing loans.

Ozili (2019) examined the determinants of banking stability in Nigeria using aggregate banking sector data. The study employed regression analysis and identified regulatory capital ratio, bank efficiency, financial depth, banking concentration, and non-performing loans as key determinants of banking stability. The findings indicated that technological innovations and financial deepening positively contributed to banking system resilience by improving efficiency and expanding financial

access. However, weak regulatory oversight and poor risk management were found to undermine banking stability. The study recommended stronger regulatory supervision of digital financial activities in Nigeria.

Aniemeke (2024) analyzed the determinants of bank stability in Nigeria using time-series data covering 2000 to 2021. The study used Ordinary Least Squares (OLS) estimation with Z-score as the proxy for bank stability. The findings revealed that domestic private credit, capital adequacy ratio, non-performing loans, and banking concentration significantly influenced banking stability. The study noted that digital financial innovations and financial deepening could improve banking efficiency and financial intermediation, thereby support banking stability when properly regulated.

Yusuf and Bala (2021) conducted an empirical study on electronic banking service quality and customer satisfaction in Nigeria. Using survey research and regression analysis, the study found that electronic banking platforms significantly improved customer satisfaction, transaction efficiency, and banking operations. The study concluded that electronic banking technologies strengthened banking sector performance through improved service delivery and operational efficiency. However, system reliability and cybersecurity challenges were identified as major threats to sustainable banking stability.

Olugbenga, Ibitoye and Innocent (2026) examined the relationship between digital currency adoption and financial stability in Nigeria using the eNaira framework as a case study. The study adopted a policy review and conceptual-empirical approach. The findings revealed that digital currency innovation could improve financial system efficiency and payment system stability. Nevertheless, low trust, weak digital infrastructure, cybersecurity concerns, and poor merchant integration limited the impact of the eNaira on banking stability. The study recommended stronger institutional frameworks and consumer confidence measures to enhance the stability benefits of digital financial innovation in Nigeria.

3.0 Methodology

Based on the theories under reviewed and the hypotheses of the study, a model showing the effect and relationship amongst/between the variables of interest shall be specified in consonance with the work of Festus (2024).

$$Zscore = \partial_0 + \partial_1 LOGMBA + \partial_1 LOGFNT + \partial_1 LOGMBT + \partial_1 LOGDGP + \varepsilon$$

The ARDL model is utilized to basically ascertain the long and short run connection between Fintech disruption and banking stability of the country. The ARDL method has many benefits when compared with other co-integration techniques, and can be used notwithstanding if the underlying variables are wholly 1(0), 1(1) or jointly co-integrated, and can also be estimated with little sample features. The study shall design the ARDL model for appraisal as stated beneath:

$$\begin{aligned} \log Zscore &= \alpha_0 \\ &+ \sum_{k=1}^n \alpha_1 \Delta \log Zscore + \sum_{k=1}^n \alpha_2 \Delta \log MBA + \sum_{k=1}^n \alpha_3 \Delta \log FNT + \sum_{k=1}^n \alpha_4 \Delta \log MBT \\ &+ \sum_{k=1}^n \alpha_5 \Delta \log DGP + \partial_1 \log Zscore + \partial_2 \log MBA + \partial_3 \log FNT \\ &+ \partial_6 \log MBT + \partial_6 \log DGP + \varepsilon \end{aligned}$$

4.0 Data analyses and discussion of findings

Descriptive data

	BANKING_S...	MOBILE_BA...	FINTECH_T...	MOBILE_M...	DIGITAL_PA...
Mean	9.174286	18.40286	35.87286	182.8571	20.42000
Median	9.400000	4.500000	1.400000	25.00000	7.500000
Maximum	12.50000	86.00000	320.0000	1080.000	89.00000
Minimum	5.600000	0.000000	0.000000	0.000000	0.100000
Std. Dev.	2.244646	25.57371	74.20774	294.3473	26.56687
Skewness	-0.042348	1.355963	2.546212	1.754127	1.311075
Kurtosis	1.580466	3.591457	8.860288	5.000034	3.447017
Jarque-Bera	2.949114	11.23553	87.90213	23.78248	10.31843
Probability	0.228880	0.003633	0.000000	0.000007	0.005746
Sum	321.1000	644.1000	1255.550	6400.000	714.7000
Sum Sq.	3117.170	34089.77	232271.0	4116058.	38591.33
Sum Sq. Dev.	171.3069	22236.49	187230.8	2945772.	23997.16
Observations	35	35	35	35	35

Source: Eviews 14

The results indicate that banking stability, measured by the Z-score, recorded a mean value of 9.17 and a median value of 9.40. The closeness of the mean and median suggests a relatively balanced distribution of banking stability across the study period. The variable attained a maximum value of 12.50 and a minimum value of 5.60, indicating moderate variations in the stability of the Nigerian banking sector over time. The standard deviation of 2.24 further confirms that fluctuations in banking stability were relatively low. The skewness coefficient of -0.04 reveals that the distribution is

approximately symmetric, while the kurtosis value of 1.58 suggests a platykurtic distribution characterized by fewer extreme observations than a normal distribution. Furthermore, the Jarque-Bera probability value of 0.229 exceeds the conventional 5 percent significance level, implying that the null hypothesis of normality cannot be rejected. Thus, banking stability is normally distributed.

Mobile banking adoption rate recorded a mean value of 18.40 and a median value of 4.50. The considerable difference between the mean and median indicates that mobile banking adoption experienced substantial growth during the latter part of the study period, resulting in higher average values. The variable ranged from a minimum value of 0.00 to a maximum value of 86.00, reflecting the gradual transition from negligible adoption levels to widespread utilization of mobile banking services in Nigeria. The relatively high standard deviation of 25.57 suggests considerable variability in mobile banking adoption over time. The skewness coefficient of 1.36 indicates a positively skewed distribution, implying that higher observations occurred less frequently but exerted a significant influence on the average value. Similarly, the kurtosis coefficient of 3.59 suggests a leptokurtic distribution characterized by heavier tails than the normal distribution. The Jarque-Bera statistic is significant at the 5 percent level ($p = 0.0036$), indicating that the variable does not follow a normal distribution.

Fintech transaction volume exhibits a mean value of 35.87 and a median value of 1.40, indicating a substantial divergence between average and central values. This pattern reflects the rapid expansion of fintech transactions in recent years. The variable ranges from 0.00 to 320.00, demonstrating significant growth in fintech activities over the study period. The standard deviation of 74.21 reveals a high degree of variability and volatility in transaction volumes. The skewness coefficient of 2.55 indicates a highly positively skewed distribution, suggesting that a relatively small number of large observations dominate the dataset. Furthermore, the kurtosis value of 8.86 indicates a highly leptokurtic distribution characterized by pronounced peaks and heavy tails. The Jarque-Bera statistic is highly significant ($p = 0.0000$), leading to the rejection of the null hypothesis of normality. Therefore, fintech transaction volume is not normally distributed.

The descriptive statistics for mobile money accounts per 1,000 adults reveal a mean value of 182.86 and a median value of 25.00. The large disparity between these measures of central tendency suggests that the distribution is influenced by exceptionally large observations recorded in recent years. The variable attained a minimum value of 0.00 and a maximum value of 1,080.00, highlighting the substantial expansion of mobile money services in Nigeria. The standard deviation of 294.35 indicates significant fluctuations in mobile money account ownership throughout the study period.

The skewness coefficient of 1.75 indicates a positively skewed distribution, while the kurtosis coefficient of 5.00 suggests a leptokurtic distribution with relatively more extreme observations than expected under normality. The Jarque-Bera probability value of 0.000007 is statistically significant, indicating that the variable is not normally distributed.

Digital payment usage recorded a mean value of 20.42 and a median value of 7.50, suggesting a significant increase in digital payment adoption during the period under review. The variable ranged from a minimum value of 0.10 to a maximum value of 89.00, reflecting the rapid growth of electronic payment systems in Nigeria. The standard deviation of 26.57 indicates substantial variability in digital payment usage over time. The skewness coefficient of 1.31 reveals a positively skewed distribution, implying the presence of relatively few but substantially large observations. Similarly, the kurtosis value of 3.45 indicates a slightly leptokurtic distribution with a greater concentration of observations around the mean and the presence of some extreme values. The Jarque-Bera probability value of 0.0057 is statistically significant, leading to the rejection of the null hypothesis of normality.

Dependent Variable: BANKING STABILITY Z SCORE
Method: ARDL
Date: 05/28/26 Time: 06:19
Sample: 1992 2024
Included observations: 33
Lag selection: Automatic (deplags=2, reglags=2)
Selected model: ARDL(2,2,0,2,1) using AIC (162 models evaluated)

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
Distributed-lag Regressors				
Dependent				
BANKING STABILITY Z SCORE (-1)	1.373825	0.183235	7.497624	0.0000
BANKING_STABILITY_Z_SCORE_(-2)	-0.503754	0.179876	-2.800560	0.0107
Independent				
MOBILE BANKING ADOPTION RATE	-0.054651	0.052959	-1.031950	0.3138
MOBILE_BANKING_ADOPTION_RATE_...	0.246145	0.082906	2.968970	0.0073
MOBILE BANKING ADOPTION RATE ...	-0.203584	0.084377	-2.412795	0.0251
FINTECH_TRANSACTION_VOLUME_...	-0.024639	0.007651	-3.220456	0.0041
MOBILE MONEY ACCOUNTS PER 1 0...	0.016578	0.005967	2.778384	0.0113
MOBILE MONEY ACCOUNTS_PER_1_0...	-0.035053	0.010777	-3.252551	0.0038
MOBILE MONEY ACCOUNTS_PER_1_0...	0.036259	0.011218	3.232295	0.0040
DIGITAL PAYMENT USAGE	-0.232623	0.065869	-3.531622	0.0020
DIGITAL_PAYMENT_USAGE____(-1)	0.159796	0.069377	2.303308	0.0316
Deterministic Regressors				
C	1.516643	0.693566	2.186733	0.0402
R-squared	0.999561	Mean dependent var	8.975758	
Adjusted R-squared	0.999331	S.D. dependent var	2.154505	
S.E. of regression	0.055721	Akaike info criterion	-2.661645	
Sum squared resid	0.065201	Schwarz criterion	-2.117461	
Log likelihood	55.91714	Hannan-Quinn criter.	-2.478544	
F-statistic	4347.402	Durbin-Watson stat	2.134572	
Prob(F-statistic)	0.000000			

*Note: p-values and any subsequent test results do not account for model selection.

Source: Eviews 14

The long-run results of the ARDL model reveal the nature and magnitude of the relationship between fintech disruption indicators and banking stability in Nigeria. The estimated error correction coefficient is negative and statistically significant ($\beta = -0.1299$; $p < 0.05$), confirming the existence of a stable long-run equilibrium relationship among the variables. The coefficient indicates that approximately 12.99 percent of deviations from the long-run equilibrium are corrected within a year. This finding suggests that although short-run disequilibria may arise due to shocks within the financial system, the banking sector possesses an inherent adjustment mechanism that gradually restores equilibrium over time. The long-run coefficient of mobile banking adoption rate is negative but

statistically insignificant ($\beta = -0.0121$; $p > 0.05$). This implies that mobile banking adoption does not exert a significant long-term influence on banking stability in Nigeria. Although mobile banking has improved accessibility, convenience, and financial service delivery, the findings suggest that these benefits may not be sufficiently strong to influence the overall stability of the banking sector in the long run. The result may indicate that the gains from mobile banking are offset by associated operational costs and technological risks.

Fintech transaction volume is found to exert a negative and statistically significant effect on banking stability ($\beta = -0.0246$; $p < 0.01$). This result implies that increases in fintech transaction activities tend to reduce the stability of the banking sector over time. The finding may be attributed to the disruptive nature of fintech innovations, which intensify competition in the financial sector, reduce traditional banking revenues, and increase exposure to operational and cybersecurity risks. Consequently, the expansion of fintech transaction activities appears to challenge the traditional business models of deposit money banks and may weaken their long-term stability. The results further indicate that mobile money accounts per 1,000 adults have a positive and statistically significant effect on banking stability ($\beta = 0.0178$; $p < 0.01$). This suggests that greater mobile money penetration contributes positively to the stability of the banking sector. The positive impact can be linked to the role of mobile money services in promoting financial inclusion, increasing access to formal financial services, mobilizing savings, and expanding the customer base of financial institutions. Therefore, mobile money development appears to strengthen the resilience and sustainability of the banking system in Nigeria. Digital payment usage exhibits a negative and statistically significant relationship with banking stability in the long run ($\beta = -0.0728$; $p < 0.05$). The result implies that sustained increases in digital payment activities may adversely affect banking stability. This outcome may reflect the increasing vulnerability of financial institutions to cybercrime, fraud, technological failures, and intensified competition from non-bank financial service providers. As digital transactions continue to expand, banks may face growing pressure to invest heavily in technological infrastructure and risk management systems, thereby affecting their stability.

Turning to the short-run dynamics, the coefficient of the lagged change in banking stability is positive and statistically significant ($\beta = 0.5038$; $p < 0.05$), indicating persistence in banking sector performance. This suggests that improvements in banking stability in one period tend to be transmitted to subsequent periods. The contemporaneous effect of mobile banking adoption on banking stability is negative but statistically insignificant ($\beta = -0.0547$; $p > 0.05$), indicating that immediate increases in mobile banking adoption do not significantly influence banking stability. However, the lagged

coefficient is positive and statistically significant ($\beta = 0.2036$; $p < 0.05$), suggesting that the beneficial effects of mobile banking adoption emerge after an adjustment period. This finding implies that banks require time to integrate mobile banking technologies effectively before their stabilizing effects become evident.

Mobile money accounts exert a positive and statistically significant contemporaneous effect on banking stability ($\beta = 0.0166$; $p < 0.05$), indicating that increased mobile money penetration immediately enhances banking sector performance. Nevertheless, the lagged coefficient is negative and statistically significant ($\beta = -0.0363$; $p < 0.01$), suggesting that the expansion of mobile money services may initially generate adjustment costs and operational challenges before yielding sustainable benefits. The short-run coefficient of digital payment usage is negative and statistically significant ($\beta = -0.2326$; $p < 0.01$), indicating that increases in digital payment activities reduce banking stability in the short run. This finding may be explained by implementation challenges, cybersecurity concerns, fraud risks, and technological adjustments associated with rapid digitalization within the banking sector. The overall performance of the model is satisfactory. The coefficient of determination ($R^2 = 0.7020$) indicates that approximately 70.2 percent of the variation in banking stability is explained by the explanatory variables included in the model. The adjusted R^2 value of 54.6 percent further confirms the explanatory power of the model after accounting for degrees of freedom. The F-statistic is statistically significant ($F = 4.4971$; $p < 0.01$), demonstrating that the explanatory variables jointly influence banking stability in Nigeria. Furthermore, the Durbin-Watson statistic of 2.13 suggests the absence of serial correlation, indicating that the estimated model is statistically reliable and suitable for policy inference.

Dependent Variable: BANKING STABILITY Z SCORE
Method: ARDL
Date: 06/02/26 Time: 09:24
Sample: 1992 2024
Included observations: 33
Lag selection: Automatic (deplags=2, reglags=2)
Selected model: ARDL(2,2,0,2,1) using AIC (162 models evaluated)

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
Long-run Regressors				
Linear: Dependent				
BANKING_STABILITY_Z_SCORE_(-1)	-0.129928	0.057178	-2.272338	0.0337
Linear: Independent				
MOBILE BANKING ADOPTION RATE ...	-0.012089	0.039514	-0.305952	0.7627
FINTECH TRANSACTION VOLUME ...	-0.024639	0.007651	-3.220456	0.0041
MOBILE MONEY ACCOUNTS PER 1 0...	0.017784	0.006136	2.898356	0.0086
DIGITAL_PAYMENT_USAGE____(-1)	-0.072827	0.032786	-2.221269	0.0375
Deterministic				
C	1.516643	0.693566	2.186733	0.0402
Short-run Regressors				
Linear: Dependent				
D(BANKING_STABILITY_Z_SCORE_(-1))	0.503754	0.179876	2.800560	0.0107
Linear: Independent				
D(MOBILE_BANKING_ADOPTION_RATE...	-0.054651	0.052959	-1.031950	0.3138
D(MOBILE_BANKING_ADOPTION_RATE...	0.203584	0.084377	2.412795	0.0251
D(MOBILE MONEY ACCOUNTS PER 1...	0.016578	0.005967	2.778384	0.0113
D(MOBILE MONEY ACCOUNTS PER 1...	-0.036259	0.011218	-3.232295	0.0040
D(DIGITAL_PAYMENT_USAGE____)	-0.232623	0.065869	-3.531622	0.0020
R-squared	0.701992	Mean dependent var	-0.206061	
Adjusted R-squared	0.545892	S.D. dependent var	0.082687	
S.E. of regression	0.055721	Akaike info criterion	-2.661645	
Sum squared resid	0.065201	Schwarz criterion	-2.117461	
Log likelihood	55.91714	Hannan-Quinn criter.	-2.478544	
F-statistic	4.497081	Durbin-Watson stat	2.134572	
Prob(F-statistic)	0.001530			

Long-Run and Short-Run Effects of Fintech Disruption on Banking Stability in Nigeria

The ARDL long-run estimates provide evidence on the permanent effects of fintech disruption indicators on banking stability in Nigeria. The coefficient of the error correction term (ECT), represented by the lagged dependent variable, is negative and statistically significant ($\beta = -0.1299$, $p = 0.0337$). The negative sign and significance of the coefficient confirm the existence of a stable long-run equilibrium relationship among banking stability, mobile banking adoption, fintech transaction volume, mobile money accounts, and digital payment usage. The coefficient further indicates that approximately 12.99 percent of deviations from the long-run equilibrium are corrected annually,

implying a relatively slow but stable adjustment process toward equilibrium whenever short-run disequilibrium occurs. With respect to mobile banking adoption, the long-run coefficient is negative but statistically insignificant ($\beta = -0.0121$, $p = 0.7627$). This finding suggests that although mobile banking has transformed financial service delivery and enhanced customer convenience, its long-run contribution to banking stability in Nigeria is not statistically discernible. The result implies that the expansion of mobile banking services alone may not be sufficient to influence the stability of the banking sector over time.

Fintech transaction volume exhibits a negative and statistically significant relationship with banking stability ($\beta = -0.0246$, $p = 0.0041$). This finding indicates that increases in fintech transaction activities are associated with reductions in banking stability in the long run. Specifically, a one-unit increase in fintech transaction volume leads to an estimated 0.0246-unit decline in the banking stability index. The result may be attributed to the disruptive nature of fintech innovations, which intensify competition within the financial sector, erode traditional sources of bank revenue, and expose banks to heightened operational and cybersecurity risks. This outcome aligns with the Schumpeterian theory of innovation, which posits that technological innovations can disrupt established institutions and alter market structures. The coefficient of mobile money accounts per 1,000 adults is positive and statistically significant ($\beta = 0.0178$, $p = 0.0086$). This finding suggests that the expansion of mobile money services contributes positively to banking stability in Nigeria. The positive effect may stem from the ability of mobile money platforms to promote financial inclusion, increase access to financial services, mobilize savings, and strengthen the overall resilience of the financial system. Consequently, mobile money development appears to complement rather than substitute traditional banking activities. Digital payment usage, however, exerts a negative and statistically significant effect on banking stability in the long run ($\beta = -0.0728$, $p = 0.0375$). The result implies that a one-unit increase in digital payment usage reduces banking stability by approximately 0.073 units. This negative relationship may reflect challenges associated with rapid digital transformation, including increased exposure to cybercrime, fraud risks, technological vulnerabilities, and growing competition from non-bank financial service providers. The constant term is positive and statistically significant ($\beta = 1.5166$, $p = 0.0402$), indicating the existence of a positive baseline level of banking stability even in the absence of the explanatory variables included in the model.

The short-run dynamics reveal additional insights into the immediate effects of fintech disruption on banking stability. The lagged change in banking stability is positive and statistically significant ($\beta = 0.5038$, $p = 0.0107$), suggesting persistence in banking sector performance. This

implies that improvements in banking stability in one period tend to carry over into subsequent periods. The contemporaneous effect of mobile banking adoption is negative but statistically insignificant ($\beta = -0.0547$, $p = 0.3138$), indicating that current increases in mobile banking adoption do not exert an immediate influence on banking stability. However, the lagged effect of mobile banking adoption is positive and statistically significant ($\beta = 0.2036$, $p = 0.0251$), suggesting that the benefits of mobile banking adoption materialize after a short adjustment period. This finding implies that banks require time to integrate mobile banking technologies effectively before realizing their stabilizing benefits. Similarly, mobile money accounts demonstrate a positive and significant contemporaneous effect on banking stability ($\beta = 0.0166$, $p = 0.0113$), indicating that increases in mobile money penetration immediately enhance banking sector stability. Nevertheless, the lagged effect is negative and significant ($\beta = -0.0363$, $p = 0.0040$), suggesting the presence of short-term adjustment costs or operational challenges associated with the expansion of mobile money services.

Digital payment usage exhibits a negative and statistically significant short-run effect on banking stability ($\beta = -0.2326$, $p = 0.0020$). This finding indicates that rapid increases in digital payment activities may initially weaken banking stability due to implementation challenges, cybersecurity concerns, fraud risks, and increased operational complexity. However, these effects may diminish over time as institutions adapt to the evolving digital financial landscape. The diagnostic statistics indicate that the estimated model is robust and statistically reliable. The coefficient of determination ($R^2 = 0.7020$) suggests that approximately 70.2 percent of the variations in banking stability are explained by the fintech-related variables included in the model. The adjusted R^2 value of 0.5459 further confirms the model's explanatory power after adjusting for the number of regressors. In addition, the F-statistic of 4.4971 with a probability value of 0.00153 indicates that the explanatory variables are jointly significant in explaining variations in banking stability. The Durbin-Watson statistic of 2.13 suggests the absence of serial correlation, thereby supporting the validity of the estimated results.

Test of hypotheses

The hypotheses of the study were tested using the probability values of the ARDL regression estimates at a 5% level of significance. The decision rule states that the null hypothesis should be rejected where the probability value is less than 0.05, otherwise the null hypothesis should be accepted.

Hypothesis one

Null Hypothesis (H_{01}): Mobile banking adoption rate has no significant effect on financial deepening in Nigeria.

From the ARDL result, the probability values for Mobile banking adoption rate are greater than 0.05, thus, the null hypothesis is accepted, and it was concluded Mobile banking adoption rate exert no significant effect on banking sector stability in Nigeria.

Hypothesis two

Null Hypothesis (H_{02}): Fintech transaction volume has no significant effect on banking sector stability in Nigeria.

The probability value for fintech transaction volume which is less than 0.05, thus, the null hypothesis was rejected, and it was concluded that Fintech transaction volume has a significant effect on banking sector stability in Nigeria.

Hypothesis three

Null Hypothesis (H_{03}): Mobile money accounts per 1,000 adults has no significant effect on banking stability in Nigeria.

The probability value for Mobile money accounts per 1,000 adults is greater than 0.05, thus, the null hypothesis was rejected, and it was concluded that mobile banking transaction value has a significant effect on banking stability in Nigeria.

Hypothesis four

Null Hypothesis (H_{04}): Digital payment usage has no significant effect on banking stability in Nigeria.

The probability value for digital payment usage is greater than 0.05, thus, the null hypothesis was rejected, and it was concluded that Digital payment usage has a significant effect on banking stability in Nigeria.

Discussion of Findings

The ARDL results provide important insights into the dynamic relationship between fintech disruption and banking stability in Nigeria. The findings reveal that banking stability, measured by the Z-score, exhibits a high degree of persistence over time. The positive and statistically significant coefficient of the first lag of the Z-score indicates that current banking stability is strongly influenced by its past performance. This in line with Boot (2017) suggests that stability is not a short-lived phenomenon but rather a characteristic that tends to persist due to institutional resilience, accumulated capital buffers, established risk management practices, and regulatory oversight. However, the negative coefficient observed at the second lag indicates partial mean reversion, implying that unusually high or low levels of stability tend to adjust back toward their long-run equilibrium over time. Consequently, while shocks to banking stability can persist, their effects gradually diminish as corrective mechanisms within the banking system take effect.

The results further indicate that mobile banking adoption exerts a complex and non-linear influence on banking stability. The contemporaneous effect of mobile banking adoption is statistically insignificant, suggesting that the immediate introduction or expansion of mobile banking services does not directly alter the stability of banks. This finding may be attributed to the time required for customers to fully adopt and integrate mobile banking into their financial activities. Interestingly, the first lag of mobile banking adoption exhibits a positive effect on stability, indicating that the benefits of digital banking become more apparent after a period of adjustment. Increased customer convenience, enhanced financial inclusion, improved deposit mobilization, and stronger customer retention may contribute to this positive outcome. Mobile banking can strengthen the relationship between banks and customers by increasing transaction frequency and promoting the formalization of financial activities, thereby improving banks' funding stability. However, the negative effect observed at the second lag suggests that rapid and sustained expansion of mobile banking may eventually introduce challenges that undermine stability. As digital platforms grow, banks may face increased operational complexity, cybersecurity threats, fraud risks, and pressures on credit screening and monitoring systems. If digital expansion outpaces the development of adequate risk management frameworks, the resulting vulnerabilities may offset earlier gains. This pattern resembles an S-curve transition, where initial adoption generates positive outcomes, but unchecked growth may create strains before longer-term efficiencies are fully realized. The finding underscores the need for banks to balance innovation with robust operational controls and risk management practices.

The analysis also reveals that fintech transaction volume has a significant negative contemporaneous relationship with banking stability. This result in line with Atoi (2018) suggests that increased fintech transaction activity may intensify competitive pressures on traditional banks within the Nigerian financial system. As customers increasingly rely on fintech platforms for payments, transfers, lending, and other financial services, traditional banks may experience reductions in fee-based income and transaction-related revenues. Furthermore, the rise of fintech transactions may require banks to incur substantial expenditures on technological upgrades and cybersecurity infrastructure. The emergence of non-bank financial service providers may also challenge traditional banking business models and contribute to market fragmentation. Consequently, while fintech transactions promote innovation and financial inclusion, their rapid growth may generate short-run instability if banks are unable to adapt effectively to the changing competitive landscape.

Mobile money accounts per 1,000 adults demonstrate alternating effects across different lag periods, revealing a cyclical adjustment process. The positive contemporaneous coefficient in line with

Aniekeme (2024) suggests that greater mobile money penetration immediately contributes to banking stability. This may occur through enhanced financial inclusion, increased access to financial services, and the mobilization of previously unbanked populations into the formal financial system. As more individuals gain access to digital financial services, savings accumulation and transaction efficiency improve, potentially strengthening the overall financial ecosystem. Nevertheless, the negative coefficient at the first lag indicates the presence of short-run adjustment costs associated with expanding mobile money services. These costs may include customer onboarding challenges, infrastructure investments, operational learning curves, agent network management issues, and heightened fraud risks. During this transitional phase, financial institutions may experience temporary inefficiencies that weaken stability. However, the positive coefficient at the second lag suggests that these initial challenges are eventually overcome. As users become more familiar with mobile money platforms and institutions gain experience in managing digital ecosystems, the benefits begin to materialize. Broader savings mobilization, improved payment efficiency, enhanced liquidity management, and greater financial resilience contribute positively to banking stability. This alternating pattern highlights the dynamic nature of financial innovation, where short-run frictions often precede longer-term gains.

Similarly, digital payment usage exhibits a negative impact in the current period but becomes positive after one lag. The initial negative effect can be explained in line with Arner, Barberis & Buckley (2016) by the substantial costs associated with implementing and expanding digital payment infrastructure. Banks may incur significant expenditures on technology acquisition, cybersecurity systems, network maintenance, and customer support services. Additionally, increased digital activity may expose institutions to higher risks of cyberattacks, fraud incidents, and operational disruptions. Competitive pressures may also lead to reduced transaction fees and compressed profit margins during the early stages of digital payment adoption. Over time, however, the positive lagged effect indicates that banks successfully adapt to these challenges and begin to realize the efficiency gains associated with digital payment systems. Enhanced transaction processing speed, reduced operating costs, improved customer experience, and the availability of transaction data for risk assessment contribute to improved banking stability. Digital payment systems generate valuable data that can support more accurate credit assessments, fraud detection, and strategic decision-making. As institutions become more proficient in leveraging digital technologies, the long-term benefits outweigh the initial adjustment costs.

Conclusion

From the findings, the study reveals that FinTech disruption has become a significant determinant of banking stability in Nigeria, although its effects vary across different dimensions of digital finance. The results indicate that digital financial innovations are not inherently destabilizing; rather, their impact depends on the ability of banks, regulators, and other stakeholders to effectively manage the transition process. The evidence suggests that while digital transformation may initially generate operational and financial pressures, successful adaptation can enhance the resilience and stability of the banking system in the long run. However, from a policy perspective, the findings underscore the importance of implementing measures that facilitate a smooth digital transformation process. Regulatory authorities, particularly the Central Bank of Nigeria, should strengthen prudential oversight, cybersecurity regulations, and risk management frameworks to address emerging challenges associated with digital finance. Banks should invest in technological capabilities, staff competencies, and robust internal control systems to mitigate risks arising from rapid digital expansion. In addition, collaborative partnerships between traditional banks and FinTech firms should be encouraged to foster innovation while maintaining financial stability. By adopting proactive regulatory and managerial strategies, the Nigerian banking sector can maximize the benefits of digital innovation while minimizing its potential adverse effects on stability.

Recommendations

1. Banks and regulators should improve the quality, accessibility, and security of mobile banking platforms, by increasing investment in digital infrastructure, customer education, and cybersecurity measures, as this will strengthen the contribution of mobile banking to financial intermediation and stability in the long run.
2. Since fintech transaction volume exerts a significant effect on banking stability, regulatory authorities such as the Central Bank of Nigeria should encourage responsible FinTech innovation while maintaining adequate oversight.
3. Given the significant influence of mobile money accounts per 1,000 adults on banking stability, efforts should be intensified to expand mobile money penetration, particularly in underserved and rural communities.
4. As digital payment usage significantly affects banking stability, policymakers should accelerate the transition toward a cash-lite economy by promoting secure and efficient digital payment systems, as investments in payment infrastructure, consumer protection mechanisms, and public awareness campaigns can increase confidence in digital transactions.

References

- Atoi, N. V. (2018). Non-performing loans and banking sector stability in Nigeria: A panel data analysis. *Central Bank of Nigeria Journal of Applied Statistics*, 9(1), 43–74.
- Aniemeke, S. C. (2024). Determinants of banking stability in Nigeria: Evidence from time series analysis. *Nigerian Journal of Banking and Finance*, 16(2), 89–107.
- Arner, D. W., Barberis, J. N., & Buckley, R. P. (2016). The evolution of FinTech: A new post-crisis paradigm? *Georgetown Journal of International Law*, 47(4), 1271–1319.
- Boot, A. W. A. (2017). The future of banking: From scale and scope economies to FinTech. *European Economy*, 2, 77–95.
- Central Bank of Nigeria. (2023). *Annual report and statement of accounts 2023*. Central Bank of Nigeria.
- Demirgüç-Kunt, A., Klapper, L., Singer, D., Ansar, S., & Hess, J. (2022). *The Global Findex Database 2021: Financial inclusion, digital payments, and resilience in the age of COVID-19*. World Bank.
- Frost, J. (2020). The economic forces driving FinTech adoption across countries. *Bank for International Settlements Quarterly Review*, 2020(March), 103–119.
- Ngaikedi, C. K. (2026). FinTech disruption and the stability of the traditional banking system in Nigeria: Evidence from ARDL analysis. *African Journal of Financial Innovation*, 5(1), 15–34.
- Olugbenga, A. O., Ibitoye, T. O., & Innocent, C. E. (2026). Digital currency adoption and financial stability in Nigeria: Evidence from the eNaira initiative. *Journal of African Financial Studies*, 8(2), 102–121.
- Ozili, P. K. (2018). Impact of digital finance on financial inclusion and stability. *Borsa Istanbul Review*, 18(4), 329–340.
- Ozili, P. K. (2019). Determinants of banking stability in Nigeria. *Journal of Financial Regulation and Compliance*, 27(4), 462–475.
- Philippon, T. (2016). The FinTech opportunity. *National Bureau of Economic Research Working Paper Series*, No. 22476.
- Vives, X. (2019). *Digital disruption in banking and its impact on competition*. *Annual Review of Financial Economics*, 11(1), 243–272.
- Yusuf, A. A., & Bala, H. U. (2021). Electronic banking service quality and customer

satisfaction in Nigeria. *International Journal of Finance and Banking Research*, 7(3), 56–68.

Zetsche, D. A., Buckley, R. P., Arner, D. W., & Barberis, J. N. (2017). From FinTech to TechFin: The regulatory challenges of data-driven finance. *New York University Journal of Law and Business*, 14(2), 393–446.