

FINANCIAL TECHNOLOGY AND PERFORMANCE OF DEPOSIT MONEY BANK IN NIGERIA: A DISAGGREGATED ANALYSIS

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Abstract

The Nigerian banking sector has experienced rapid digital transformation. Deposit money banks have invested in several digital technologies. Financial technology industry encompasses technology-enabled firms offering financial services, as well as entities providing technology services directly to financial institutions. The study examined financial technology and the performance of deposit money banks in Nigeria. Specifically, the study examined the influence of crowd funding financial platforms on the performance of deposit money bank in Nigeria. Assess the influence of block chain on the performance of deposit money bank in Nigeria. Examine the influence of virtual currencies on the performance of deposit money bank in Nigeria and investigate the influence of internet banking on the performance of deposit money bank in Nigeria. The study adopted *ex-post facto* research design because the data for the study are secondary data that already exist in various international and national publications. Econometric technique involving Augmented Dicker Fuller tests for unit roots and The Ordinary Least Square (OLS) were used to analyze the data. The regression result indicates that crowd funding financial platforms,

block chain, virtual currencies and internet banking has significant influence on the performance of deposit money bank in Nigeria. The study thus concludes that financial technology has positive and significant influence on the performance of deposit money bank in Nigeria. Amongst the recommendation is that Nigerian financial services industry should put adequate security mechanism in place to forestall fraudulent practices, invest in crowd funding financial platforms that are easy to use; reliable, works with speed, and guarantees privacy, affordable charges. Nigerian financial services industry should embark on intensive awareness campaign and sensitization of the citizenry on the influence of block chain and E-wallet in Nigerian financial services industry. Nigerian financial services industry should have in build camera that will be sending every transaction and picture to everybody transaction to the financial services industry through the use of virtual currencies. Internet banking has positive and significant influence on the performance of deposit money bank in Nigeria. Nigerian financial services industry should be encourage internet banking transactions to improve E-wallet in Nigerian financial services industry.

Keywords: Financial Technology, Deposit Money Bank, Nigeria

Introduction

FinTech, otherwise referred to as retail digital financial platforms or internet finance, involves the integration of technology into the functionalities of the classical financial system for payment and settlement, insurance, transfers, and peer-to-peer lending, among others (Adiga, Adigwe, Okonkwo & Gbonna, 2022). Despite an all-embracing advancement by microfinance institutions, banks, loan and savings societies among others to spread out financial services to the BoP, about 2.5 billion adults globally are still data poor and financially excluded (Hannig & Jansen, 2010).

In Nigeria, about 38.3 million adults are data and financially excluded, out of which 21.3 million are adult women, representing 20%, and 17 million are men. The World Bank's (2014) report disaggregated financial exclusion into voluntary and involuntary exclusion, as such decisions not to adopt financial services, either due to a lack of urgent need to use them or because of cultural and religious convictions, result in voluntary exclusion. Others blame their involuntary exclusion

on poverty, income inequality, burdensome documentation, market failures, and free market flaws, among other things (Onyenkachi, 2023).

To deal with the influences of widespread involuntary exclusion, the CBN reintroduced the inclusion strategy in 2012 to improve adult access to financial products-services from the 21.6% reported in 2010 to 70% in 2020, access to savings 24.0% to 60%, credit 2% to 40%, insurance 1% to 40%, and pension 5% to 40%. The first step to formal financial inclusion is maintain an account with any financial institution or other service providers (Demirguc-Kunt, et, al, 2018; Udo, 2023).

The 2022 Nigerian Inter-Bank Settlement System report, revealed that active accounts with a bank, credit union, microfinance organization and mobile money service provider rose from 14.41% to 97.485 million and 111.54 million in 2022. Total savings increased by 13.8%, from N114.13 million in 2019 to N138.91 million in May 2022. The result of FinTech integration into Nigeria's economic and financial climate is financial inclusion. The basic pivot of inclusiveness includes access to a broader spectrum of financial services; consumer privacy, data protection, and the provision of convenient, affordable, and secure services with dignity; delivery of focused services to the under banked and unbanked and a competitive financial system sustained by robust financial infrastructure and a defined regulatory framework, among others (Fadun 2014).

The advancement of financial technologies includes robotic financial transactions, payments made through non-cash encrypted platforms, crowd funding financial platforms, financial advice, technical and robotic assistance through virtual space, and last but not least virtual coins so developed lately. (Lu Wei, Yuqi Deng, Jie Huang, Chen Han & Zhongbo Jing, 2022).

However, financial technologies (FinTech), although rapidly growing in the virtual space, have positive stances in particular related to the rapidity of financial services (adapted and flexible) to the many financially excluded, but also to risks, such challenges be especially the data and consumer protection, the risk of increased financial volatility, and the alarming increase in cybercrime). Risks in particular attract the attention of financial services regulators, and at the level of the European Commission. The Financial Technology Task Force (FTTF), which together with the European Parliament's Committee on Monetary Affairs (ECON) produced the report on FinTech published in January 2017. At the global level, G20, the Financial Stability Board (FSB) presented the report on FinTech in July 2017. Global and European concerns have been transposed into discussions/themes/conferences and regulatory initiatives at national level.

As a result of the extensive use of FinTech, the authorities dealing with financial services regulation may face a dilemma: one based on very clear but limited rules, regulatory frameworks clearly lay down the compliance obligations of institutions involved in financial technologies, but they are often costly from the perspective of a start-up society and could be an obstacle to innovation and job creation; the principle-based financial regulation is more flexible, but it could create some uncertainty about what is exactly expected from the point of view of the compliance of those using the services of Fintech institutions (Nkwodimmah, & Ochei, 2019). Against the backdrop, the study examined the influence of financial technology on the performance of deposit money bank in Nigeria

Statement of the Problem

Fintech firms can be start-ups, incumbent companies, or platform-based businesses. Like any innovation, fintech business models bring about benefits, face challenges, and introduce new risks to their operating environment. Fintech aims to enhance the speed, affordability, convenience, security, and transparency of transactions. Fintech firms are exposed to risks related to malfunctions in the technology and financial service delivery, and compliance with relevant rules and regulations. Regulation and supervision of systemic fintech players are becoming increasingly important to ensure the stability of the financial system and to protect user rights (OECD, 2020) PFM is an “umbrella” concept that covers a set of systems aimed at producing information, processes, and rules that can help support fiscal policymaking as well as provide instruments for its implementation, including how governments manage the budget in its established phases (formulation, approval, and execution). While the literature has broadly explored the of digitalization on public finance, there is no specific study to date that explores the opportunities and challenges of incorporating fintech applications for E-payment in the Nigerian financial services industry. This study therefore, assessed the influence of financial technology on the performance of deposit money bank in Nigeria

Review of related Literature

Conceptual Review

Performance of Deposit Money Bank

Bank performance generally implies whether a bank has fared well within a trading period to realize its objectives. The only document that explains this is presumably the published financial

statements. According to Nzyuko and Jagongo, (2018) a fair evaluation of any bank's performance should start by evaluating whether it has been able to achieve the objectives set by management and stockholders. Certainly, many banks have their own unique objectives. Some wish to grow faster and achieve some long-range growth objective, others seem to prefer quiet life, minimizing risk and conveying the image of a sound bank, but with modest rewards to their shareholders (Salehi & Alipour, 2014). Ordinarily, stock prices and its behavior are deemed to reflect the performance of a firm. This is a market indicator and may not be reliable always. However, the size of the bank, the volume of deposit and its profitability could be deemed as more reliable performance indicators. For the purpose of this study, profitability indicators, precisely the Return on Equity Capital (ROE) and the returns on Assets (ROA) are used to assess bank performance.

These ratios are indicators of management efficiency, and rate of returns. These profitability measures vary substantially over time and from one banking market to another. The ROE and ROA are popularly in use today. Uchenna, (2015) posit that the amount of net income earned in relation to total assets is an indicator of how efficiently a company uses its economic resources. They further stressed that when the ROE is higher than the ROA, the company has favourable financial leverage

Basically, the financial performance of a DMBs could be a reflection of the trends in the banks return on assets, profitability, economic value added, return on equity, liquidity, solvency, riskiness of the bank and many others like how fast it concludes a loan facility request and ability to manage the loan facilities, the low level of non-performing loans (Arroyave, 2018; Faith & Agnes, 2015; El-Ansary, 2019; Fan & Yijun, 2014). The study by Makokha, Mukanzi and Maniagi (2016) and that of Shrivastave, Kumar and Kumar (2018) posited that financial performance is the measure of how well a firm uses its assets to generate revenues. This definition is used as a general measure of a firm's overall financial soundness over a given period of time, and can be used to compare similar firms in the same industry and across industry in aggregate. Financial performance measures are directed at reviewing the efficient and influenceive utilization of resources available to a firm aiming at maximizing returns of an organization as presented in financial statements. Similarly, Kariuki and Peddy (2017) opined that financial performance of a business enables managers and decision-makers to measure the results of business strategies and activities in an objective and unbiased monetary terms. It, therefore, facilitates measurement of a

firm's overall financial health over a given period of time, and can be used to compare similar firms across the same industry.

Consumer Fin Tech Risk

The financial technology industry encompasses technology-enabled firms offering financial services, as well as entities providing technology services directly to financial institutions. Fintech companies employ technology to support financial transactions among businesses and consumers. Technological advances, changing demand for financial products and competition in financial services are all driving a new wave of fintech startups and investments that have drawn attention to the industry in recent years (Lu Wei, Yuqi Deng, Jie Huang, Chen Han & Zhongbo Jing, 2022).

Startup companies are creating products and services to penetrate new areas of the financial system and to change the competitive landscape. These new forces are motivating traditional financial firms to invest in technology and to pay attention to changing trends among their customers. All new and incumbent players will be affected by the changes we see happening in the marketplace today. But understanding the space and focusing on key developments amid all the hype can be a challenge (Isamade, Sergius, & Patricia, 2022).

This primer outlines key segments of the fintech industry and in situations operating in the space, highlighting sub-sectors that are experiencing the most rapid change. S&P Global Market Intelligence includes the following sectors within the financial technology industry. The financial technology (fintech) industry continues to invest in innovations that create exciting new products and support evolving customer preferences. Emerging technologies such as artificial intelligence, robotics, and machine learning are increasingly the core elements of fintechs' product portfolios and customer interactions. In addition, many fintechs find themselves optimizing their business model by way of new products or services in response to customer needs, and in their partnerships with more regulated firms (e.g., banks and insurance companies (Okonkwo, & Ekwueme, 2022).

Evolving fintech risk management functions are tasked with addressing the potential exposures created by their innovation, partnerships, and ongoing financial and regulatory market developments. Consistent with this, there is increasing pressure for fintech firms to elevate their risk management capabilities, including the development of a responsive operational risk and compliance program. As these capabilities evolve, the callout of roles and responsibilities is occurring with a delineation of a more traditional "three lines of defense" financial service model (Titus Chukwuemezie Okeke., Basil & Greg, 2017).

One source of such pressure is regulator expectations: in a recently published report, the OCC (Office of the Comptroller of the Currency) urges traditional financial institutions to consider risk assessing and managing the of fintechs on their organizations. This points to a broader concept discussed in our previous point of view² that regulators continue to emphasize the importance of fintechs on the financial ecosystem—be it as a standalone organization, as a third-party service provider, or a partner. By looking to financial institutions to risk assess fintechs, regulators like the OCC are indirectly placing some of their regulatory requirements on fintechs via their expectations of the institutions they regulate. In response, many fintechs are working to achieve robust risk and compliance capabilities (Okifo, & Igbun, 2015).

Crowd Funding Financial Platforms

Crowd funding is the use of small amounts of capital from a large number of individuals to finance a new business venture. Depending on the type of *crowd funding*, *crowd funding* is a method of raising capital through the collective effort of friends, family, customers, and individual investors. The use of capital from several individuals (via social media and specialized websites) to finance a business project. It allows start-up companies to raise money without giving up control to venture capital investors. In return, it often offers investors the opportunity to acquire an equity position. Critics of crowd funding argue that funds may, for instance, be used for different purposes than those initially disclosed, or that tax laws governing e-commerce are not clearly defined, e.g. in the case of cross-border funding (Aduaka & Awolusi, 2020).

Small and medium enterprises (SME) seeking financial support from traditional funding opportunities bank loans and credits might now face more challenges upon their request than several years ago. Due to the financial market crisis and the resulting regulations, these requests seem to be significantly more difficult. In this regard, crowd funding is seen as a valuable alternative to the traditional funding opportunities in order to provide SME with the financial resources required (Anton, 2014). Answering questions on how to use crowd funding for SME, when to use it, for what purpose as well as specifying general conditions on how platforms should be designed to ensure success of a crowd funding campaign will help to strengthen this funding method for SME, irrespective of the crowd funding type applied. In the case of researching on the applicability of crowd funding for SME, it is important to note that SME differ a lot, particularly due to their size. Beside these open research questions, there are further questions that need to be answered. Among these are issues relating to the following questions: How could SME and other crowd funding stakeholders systematically use all potentials of crowd funding, not only in terms

of fundraising? Which business models are necessary to enable all these potentials? How should marketing, sales or product development processes as well as IT-systems be adjusted to ensure the use of crowd funding

These above-mentioned potential future directions for research represent only a minute proportion of potential research directions. Crowd funding in general still lacks deeper understanding.

Block Chain

A blockchain is essentially a distributed database of records or public ledger of all transactions or digital events that have been executed and shared among participating parties. Each transaction in the public ledger is verified by consensus of a majority of the participants in the system. And, once entered, information can never be erased. The blockchain contains a certain and verifiable record of every single transaction ever made. To use a basic analogy, it is easy to steal a cookie from a cookie jar, kept in a secluded place than stealing the cookie from a cookie jar kept in a market place, being observed by thousands of people. (Kemboi, 2018). Bitcoin is the most popular example that is intrinsically tied to blockchain technology. It is also the most controversial one since it helps to enable a multibillion-dollar global market of anonymous transactions without any governmental control. Hence it has to deal with a number of regulatory issues involving national governments and financial institutions (Kshitika, Meena, Vinutha & Kavitha, 2019).

However, Blockchain technology itself is non-controversial and has worked flawlessly over the years and is being successfully applied to both financial and non-financial world applications. Last year, Marc Andreessen, the doyen of Silicon Valley's capitalists, listed the blockchain distributed consensus model as the most important invention since the Internet itself. Johann Palychata from BNP Paribas wrote in the Quintessence magazine that bitcoin's blockchain, the software that allows the digital currency to function should be considered as an invention like the steam or combustion engine that has the potential to transform the world of finance and beyond. Current digital economy is based on the reliance on a certain trusted authority. Our all online transactions rely on trusting someone to tell us the truth—it can be an email service provider telling us that our email has been delivered; it can be a certification authority telling us that a certain digital certificate is trustworthy; or it can be a social network such as Facebook telling us that our posts regarding our life events have been shared only with our friends or it can be a bank telling us that our money has been delivered reliably to our dear ones in a remote country. The fact is that we live our life precariously in the digital world by relying on a third entity for the security and

privacy of our digital assets. The fact remains that these third party sources can be hacked, manipulated or compromised (Purnomo & Khalda, 2019).

Virtual Currencies

The European Banking Authority (EBA) defines a VC as a “digital representation of value that is neither issued by a central bank or public authority nor necessarily attached to a fiat (conventional) currency, but is accepted by natural or legal persons as a means of exchange and can be transferred, stored or traded electronically” (EBA, 2014). The European Central Bank (ECB) defines a VC as a “type of unregulated, digital money, which is issued and usually controlled by its developers, and used and accepted among the members of a specific virtual community” (ECB, 2012, p. 14). According to the definition of the Financial Action Task Force (FATF), “Virtual currency is a digital representation of value that can be digitally traded and functions as (1) a medium of exchange; and/or (2) a unit of account; and/or (3) a store of value, but does not have legal tender status (i.e. when tendered to a creditor, is a valid and legal offer of payment) in any jurisdiction”. (FATF, 2014). VCs have no intrinsic value in the sense that they are not linked to any underlying commodity or sovereign currency. However, in this respect, they do not differ from most contemporary sovereign currencies. VCs’ value emerges solely from the ability to transfer it from one place to another inside the particular VC’s “electronic ecosystem”, and relies entirely on trust, as there is no legal way of forcing anybody to accept it as a means of payment. The term “virtual currency” might be misleading, suggesting that a VC is a sovereign currency issued by a public authority such as a central bank and is officially recognized as a legal tender in at least one jurisdiction.¹ Instead, as we will discuss further in this paper (Subsection 3.1), they represent a form of private money (Adiga, Adigwe, Okonkwo, & Gbonna, 2022).

Internet Banking

Internet banking refers to systems that enable bank customers to get access to their accounts and general information on bank products and services through the use of bank’s website, without the intervention or inconvenience of sending letters, faxes, original signatures and telephone confirmations (Dawodu, & Osondu, 2013). Siyanbola (2013) puts it that internet banking involves conducting banking transactions on the internet (www) using electronic tools such as the computer without visiting the banking hall. E-commerce is greatly facilitated by internet banking and is mostly used to influence payment. Internet banking like mobile banking also uses the electronic card infrastructure for executing payment instructions and final settlement of goods and services

over the internet between the merchants and the customers. Commonly used internet banking transactions in Nigeria are settlement of commercial bills and purchase of air tickets through the websites of the merchants. Level of awareness of the advantages of this product to the saving populace is still very low; hence, there is every room for improvement if cashless banking would be influenceive as expected (Siyanbola, 2013). Funds transfer, airtime top up, balance enquiry, password change, bill payment etc can also be conducted on the internet banking plat form.

Internet banking (e-banking) is the use of internet and telecommunication networks to deliver a wide range of value added products and services to bank customers through the use of a system that allows individuals to perform banking activities at home or from their offices or over the internet. Some online banks are traditional banks which also offer online banking, while others are online only and have no physical presence. Online banking through traditional banks enables customers to perform all routine transactions, such as account transfers, balance inquiries, bill payments, and stop-payment requests, and some even offer online loan applications. Customers can access account information at any time, day or night, and this can be done from anywhere. Internet banking has improved banking efficiency in rendering services to customers (Simiyu, Ndiang'ui & Ngugi 2014).

Theoretical Framework

Innovation Diffusion Theory

The study is anchored on the Innovation Diffusion Theory (IDT) that explains individuals' intention to adopt a technology as a modality to perform a traditional activity. The theory is developed by Roger's (1983). The critical factors that determine the adoption of an innovation at the general level are the following: relative advantage, compatibility, complexity, trial ability and observability. Rogers, (1995) had tested the theory on the e-banking adoption. The nominal factors are complexity, triability and observability.

The underpinning theory employed in this work is a theory arising from the decomposed theory of planned behaviour. This theory considers that the use of technology is influenced by attitude, subjective norm and perceived behavioural control. The theory argues that the lesser the ratio of currency outside banks to broad money supply the higher the intermediation efficiency and vice-versa. This suffices that when the currency outside banks diminishes as a result of the increase in the use of electronic forms of payment, particularly ATM and other e-card products, as well as banking habits, the intermediation efficiency will be positive, otherwise it will be negative.

Empirical Review

Udo , Abner, Inim, Charles, Cross, Ogochukwu, Ikechukwu and Josaphat (2023). Studies exploring the financial technology (FinTech) and economic growth nexus in Nigeria utilized the indirect measures of FinTech along with bundle indicators of financial inclusion, disregarding the discrete index's influence. This study aimed to expand the FinTech frontier by utilizing the direct measures of FinTech, such as automated teller machines, web pay, mobile banking, and point of sale with unbundle financial inclusion indicators to examine their individual degree of influence. We employed the ARDL model in estimating the individual influence and respective equations. Findings revealed several vital insights: direct measures of FinTech positively influence financial inclusion and economic growth. Automated teller machines negatively influence economic growth and financial inclusion, due to high maintenance costs and security concerns, leading to closure of ATMs galleries both within and outside bank branches. This closure resulted in infrastructural deficits, which hindered inclusive financing of the growing banked populations. Individual financial inclusion indicators positively influence economic growth, while economic growth and usage index nexus was non-significant.

Muhammad, Abdulmalik and Halima, (2022) examines the of financial technology (FINTECH) on financial service delivery of deposit money banks in Nigeria. The research design used as a guide is ex-post facto method, as the study entails the use of annual reports and accounts of listed deposit money banks in the Nigerian Stock Exchange (NSE); secondary data were sourced from the bank's financial reports for the period of ten years from 2012 to 2021 as contained in bank's annual reports and accounts. Descriptive statistics, correlation and regression analysis are used to analyze the data using SPSS 22 statistical software. The result showed that mobile banking, internet banking and POS banking have significant on the financial service of listed deposit money banks in Nigeria. Based on findings the study recommends that mobile banking should focus more towards improving benefits associated with mobile transactions by providing more convenience to users in terms of user friendliness, fast network, payment methods etc. Psychological factors should be protected by building users trust on internet transaction, providing them better security and privacy infrastructure companies can reduce the of internet risk and gain more users also POS banking should be made to enabled anyone, from business-entrepreneurs who want to turn their passion into their profession, to open a retail store and grow and hence will improve the banking sector.

Inusa, Shuaib, Gambo, Shehu and Shehu, (2022) examines the influences of financial technology on Nigeria's national development amid COVID-19 recovery. 415 banks' customers were surveyed to determine the influences of fintech on national development. PLS-SEM was employed to analyze the data using Smart PLS3. The findings reveal that the relationship between sustainability and national development is positive and significant. Similarly, the findings indicate a positive and significant relationship between transaction efficiency and national development. It is concluded that FinTech provides financial channels that carry every citizen and reduce the poverty rate and income inequality which all translate to national development. It is recommended that policymakers continue to provide the enabling environment, including policy direction and regulation, to enhance FinTech development in the country.

Adam Konto, Bukar and Musa, (2021) investigate banks' perception of Fintech growth in Nigeria and how such growth affects their ICT investment decisions. Fintech has brought to the forefront the significance of ICT by providing traditional banking services, which were hitherto the exclusive rights of incumbent banks. This has made banks to increase their ICT expenditure by investing heavily in digital banking and on accelerators, alliances and innovation laboratories. Guided by the Sense and Respond theory, an in-depth interview was conducted and later transcribed manually without the use of any software. The analysis of the findings revealed that Fintechs are both threat and opportunity to Nigerian banks and are ing positively on their ICT investment decisions. Finally, this study recommends further research on the influenceiveness of banks' ICT investments decisions in containing the growth of Fintech in Nigeria.

Adam and Yusuf, (2020) assessed the level of adoption of Fintech among Nigerian commercial banks. The descriptive analysis reveals that the extent of adoption of Fintech by the majority of the banks sampled is at medium level, and common nature of this Fintech innovation among the banks are money transfer and payment. In addition to that, it was found that the level of adoption of Fintech innovation has a positive relationship with in-house R&D activities (IRD), collaboration with external companies (CEC), hardware technology acquisition (HTA) and software technology acquisition (STA). Results of a least square regression show that Fintech innovation adoption and software technology acquisition have positive and significant on the banks' financial performance at 5% level of significant.

Oshodin et al (2017) found that Australian banks, in realization of the threats pose by Fintech companies, are developing steps to ensure that proper knowledge about Fintech is obtained from external sources via customer engagement, crowd sourcing and channeling of inbound knowledge.

Equally, the banks have initiated ways to gain ideas from their personnel on how to contain the rapid transformation that is linked with Fintech companies.

Larsson (2018) carried out a study to determine the most important challenge pose by Fintech to the Swedish banks in terms of securing customer loyalty through the use of digital channels. The result revealed convenience as the most important challenge for a number of reasons. Some of the respondents viewed the website as substandard, which impliedly suggests customer access problem. Others perceived information asymmetric as the main reason for conflict between the banks and the customer. Some others perceived that the Swedish bank regulation and legal system have placed the incumbent banks at disadvantage relative to the Fintech companies in terms of customer relation. All these, led the customers feel obstructed in their digitalization endeavours by incumbent banks in a way the Fintech companies are not. In an investigation into how participants in the financial service industry perceive the influence of digital disruption and strategies adopted by incumbents (banks inclusive) in the

face of likely threats from Fintech, Zalan and Toufaily (2017) found that Fintech innovations in emerging markets are likely to be disruptive in some segments of the industry such as small and medium enterprises (SMEs) and some financial products such as wealth management and advisory. This finding further confirms that Fintech disruption is not only confined to the developed world. Realising that the strengths of Fintech companies lie on technological competence and innovative skills, banks have been responding in a number of ways to Fintech threats.

Gibson (2015) examined FINTECH on FINSERV industry in Ireland. The study involved six (6) interviews from industry experts within the financial service industry. Using qualitative method, the result proves that FinTech is changing the traditional financial services model and ing on the existing provider's bottom line. Michelle (2016) in his work "the influence of digital finance on FINTECH in the banking industry in Kenya" used a sample of thirteen (13) banks in Kenya out of forty-four (44). He used regression and correlation models to test the influence of digital finance on financial inclusion. The result shows that digital finance does not have any correlation on financial inclusion in banking sector in Kenya. Kemboi (2018) in his work influence of Financial technology on the performance of commercial banks in Kenya. His target population was all the forty-three (43) banks in Kenya. The study employed the multiple regression model for analysis. Findings showed that FINTECH ed DMBs performance positively.

Maja (2018) studied FinTech negative influences on FINSERV sector, with examples from the European Union, India and the United States of America. The study was historical analysis with findings that FINTECH was inappropriate in the region which leads to negative influence on FINSERV sector. Saidi (2018) examined e-payment technology influence on bank performance in emerging economies-evidence from Nigeria. The study relied on secondary data. Analysis of data was done with time dimensional, panel least square models and sortinoindex. The study affirms that emphasis should be made on current bank resources and not previous banks performances.

Kshitika, Meena, Vinutha and Kavitha (2019) examined FinTech innovative on DMBs profitability. Past year profits of HDFC bank, ICICI bank, Axix bank, Kotak Mahindra bank, IDBI bank, Canara bank, Industrial bank, Bank of Maharashtra and Federal bank to find out influence after collaboration with FinTech firms. The study relied on secondary data. Paired t-test and test of normality was used for analysis. Results show that HDFC bank, Federal bank, Kotak Mahindra bank, IndusInd bank, show a profit trend in our profits. ICICI bank, Axis bank, IDBI bank, Bank of India, State bank of India, Canara bank and Bank of Maharashtra show a negative trend in their profits.

Gap in Literature

The review pointed out a strong disagreement on the influence of financial technology on the performance of deposit money bank in Nigeria. This disagreement comes in the form of the direction of influence, relationship as well as the level of significance of the relationship. These shortcomings have contributed to the knowledge gap in the literature

Another gap in literature is the coverage of financial technology variables employed in the investigation of the influence of financial technology on the performance of deposit money bank in Nigeria. The present study includes all the core financial technology variables such as crowd funding financial platforms, block chain, virtual currencies and internet banking to determine the actual influence of financial technology on the performance of deposit money bank in Nigeria

Methodology

Research Design

The study adopted a longitudinal research design. Data for the study were subjected to preliminary test to confirm the behavior of the data set. The data was analyzed with econometric techniques

involving Descriptive Statistics, Augmented Dickey Fuller Tests for Unit Root and The Ordinary Least Square (OLS),

Data Analysis

Data Analysis

Descriptive Statistics

These measures the individual characteristics of the variables used in this study. The result of the descriptive statistics is presented in **Table 1**

Table 1: Descriptive Statistics for Financial Technology and Performance of Deposit Money Bank in Nigeria

	ROA	CFP	BC	VC	ITB
Mean	6582.619	18.78424	13.84091	10.38273	47.32485
Median	29.77443	17.98000	13.50000	6.320000	45.95000
Maximum	213182.0	29.80000	26.00000	75.00000	81.42000
Minimum	1.269320	11.78000	6.000000	0.330000	26.39000
Std. Dev.	37088.80	3.674345	3.854187	15.88733	11.95820
Skewness	5.479804	1.124086	0.697875	2.565036	0.635823
Kurtosis	31.02931	4.592239	4.876557	10.19248	3.605217
Jarque-Bera	1245.413	10.43557	7.520674	107.3179	2.727132
Probability	0.389205	0.735419	0.723276	0.742906	0.855747

Sum	217226.4	619.8800	456.7500	342.6300	1561.720
Sum Sq. Dev.	4.402710	432.0260	475.3523	8077.029	4575.952

Observations	33	33	33	33	33
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The descriptive statistics showed the mean and standard deviation. The mean is the average value of each variable over the years while the standard deviation shows the variability of the values. The descriptive statistics also showed the maximum and minimum values. The Jarque-Bera statistics is the test of normality of the time series variables.

Unit Root Test

Table 2: Summary of the Unit Root Result

Variables	T-statistics	Probability	Order of Integration
ROA	-6.088595	0.0000	1(0)
CFP	-3.867397	0.0053	1(0)
BC	-4.619034	0.0010	1(0)
VC	-5.531824	0.0031	1(0)
ITB	-2.757183	0.017	1(0)

Source: E-view Version 9.0

The variables were tested for stationarity. The test aimed at understanding the state at which the variables can be held stable for regression analyses. This test becomes pertinent because time series variables are often prone to non-stationarity which is capable of distorting the reliability of regression results. The variables used in the analysis were subjected to Augmented Dickey Fuller

(ADF) Tests, to determine whether they are stationary series or non-stationary series. The variables were tested for stationarity at “intercept only” and at “intercept and trend

The result on Table 4.3 revealed that at level, under the “intercept only”, Return on Asset, crowd funding financial platforms, block chain, internet banking and virtual Currencies

were stationary at [1(0)]. From the analyses of stationarity of the variables, it was seen that the variables have stationarity were stationary at level I(0). Thus, the most suitable tool of analyses is the Ordinary Least Square methods of analysis.

Analyses of the influence of Financial Technology on Performance of Deposit Money Bank in Nigeria

Table 3. Ordinary Least Square

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.667553	0.824890	10.809263	0.0260
CFP	0.164745	1.010577	2.163021	0.0058
BC	0.518247	0.672745	3.770347	0.0183
VC	0.068816	0.039042	2.762604	0.0302
ITB	0.164745	1.010577	2.163021	0.0058
R-squared	0.712561	Mean dependent var		4.676947
Adjusted R-squared	0.655073	S.D. dependent var		7.153306
S.E. of regression	6.953540	Akaike info criterion		6.888364
Sum squared resid	1208.793	Schwarz criterion		7.165910
Log likelihood	-100.7696	Hannan-Quinn criter.		6.978837

F-statistic	19.349696	Durbin-Watson stat	2.971283
Prob(F-statistic)	0.006525		

Source: E-view Version 9.0

Crowd Funding Financial Platforms (CFP): The coefficient of crowd funding financial platforms is positive at 0.164745 with probability value of 0.0058 which revealed that crowd funding financial platforms had positive and significant influence on the performance of deposit money bank in Nigeria. The implication is that 1 unit increase in revenue from crowd funding financial platforms will lead to 0.65 increases on the performance of deposit money bank in Nigeria.

Block Chain (BC): The coefficient of block chain is positive at 0.518247 with probability value 0.0183 which showed that block chain had positive and significant influence on re the performance of deposit money bank in Nigeria. This means that 1 unit increase in revenue from block chain will lead to 0.518 increases on the performance of deposit money bank in Nigeria

Virtual Currencies (VC): The coefficient of virtual currencies is positive at 0.068816 with probability value of 0.0302 showed that virtual currencies had positive and significant influence on the performance of deposit money bank in Nigeria. This means that the 1 unit increase in revenue from virtual currencies will lead to 0.068 increases on the performance of deposit money bank in Nigeria.

Internet Banking (ITB): To determine the influence of internet banking on real gross domestic product, the coefficient of internet banking was used. The result showed that internet banking (ITB) has positive (0.518247) and significant ($p. < 0.05$) influence on the performance of deposit money bank in Nigeria.

The coefficient of the Adjusted R-squared = 0.655073 showed that about 66% of changes on the performance of deposit money bank is accounted for by the level of financial technology in Nigeria. This implies that financial technology in Nigeria is one major contributor on the performance of deposit money bank in Nigeria.

The F-statistics (19.349696; $p. < 0.05$) indicated that all the variables of the model (Financial technology variables) have significant influence on performance of deposit money bank in Nigeria.

The Durbin Watson statistics (2.971283) showed that there was no autocorrelation in the model employed.

Discussion of Findings

The general objective of this discussion is to analyze the findings related to the influence of financial technology on the performance of deposit money bank in Nigeria. By conducting a comprehensive analysis of various empirical studies within this context, the researcher aims to provide a well organized overview of the key findings with a specific focus on stability. This discussion will consider any areas of agreement or disagreement among the empirical reviews and theories, highlighting the overall consensus or divergence regarding the role of financial technology in maintaining stability on the performance of deposit money bank

Crowd Funding Financial Platforms: The coefficient of crowd funding financial platforms is positive at 0.164745 with probability value of 0.0058 which revealed that crowd funding financial platforms had positive and significant influence on the performance of deposit money bank in Nigeria. Again, this influence is statistically significant. The findings align with the a priori expectation of a positive influence of financial technology on return on asset. Empirical studies supporting this influence include those by Duskobilov (2017) in Uzbekistan and Abille and Mpuure (2020) in Ghana, which demonstrated that financial technology variables positively influence return on asset of deposit money banks. The results of our findings are consistent with the work of Adu, (2016) in terms of crowd funding financial platforms, it was discovered that crowd funding financial platforms has positive influence on the performance of deposit money bank in Nigeria

Block Chain (BC): The coefficient of block chain is positive at 0.518247 with probability value 0.0183, suggesting that a 1% increase in revenue from block chain will lead to 0.518 increases on the performance of deposit money bank in Nigeria. Supporting evidence for the positive influence of block chain on return on asset includes studies by Omodero and Okafor (2020) and gwu, Atuma, Ikpefan, and Aigbiremolen, (2014) (2016), both conducted in Nigeria, which found that block chain significantly boosts return on asset. In contrast, Agrawal and Bansal (2018) in India highlighted a negative influence of financial technology on the performance of deposit money bank through various financial components without isolating the effect of block chain. Similarly, Srithilat et al. (2017) in Lao PDR reported a negative long-run influence of financial technology on return. This results deviate from the Innovation Diffusion Theory (IDT) that explains individuals' intention to adopt a technology as a modality to perform a traditional activity. The

critical factors that determine the adoption of an innovation at the general level is the relative advantage, compatibility, complexity, trial ability and observability which suggests would enhance a positive relationship between financial technology and performance of deposit money bank.

Virtual Currencies (VC): The coefficient of virtual currencies is positive at 0.068816 with probability value of 0.0302 showed that virtual currencies had positive and significant influence on the performance of deposit money bank in Nigeria. This suggesting that 1 unit increase in revenue from virtual currencies will lead to 0.068 increases on the performance of deposit money bank in Nigeria. These findings align with the a priori expectation of a positive influence of financial technology on return on asset. From a theoretical perspective, the results challenge The Transaction Cost Innovation Theory which submits that the dominant factor of financial innovation is the reduction of transaction cost, and in fact, financial innovation is the response of the advance in technology which caused the transaction cost to reduce. The reduction of transaction cost can stimulate financial innovation and improvement in financial services. The result of our findings are consistent with the work of Asidok, and Michael, (2018) in terms of virtual currencies, it was discovered that virtual currencies has significant influence on the performance of deposit money banks in Nigerian.

Internet Banking (ITB): The result showed that internet banking has positive (0.518247) and significant ($p. < 0.05$) influence on the performance of deposit money bank in Nigeria. These findings align with the a priori expectation of a positive relationship between financial technology on the performance of deposit money bank. The results are consistent with

Theory of Reasoned Action which emphasizes the effectiveness of internet banking operations as a tool to manage return on asset and stimulate short-term economic growth by influencing aggregate demand and supply. The results of our findings are consistent with the work of Onyekachi, (2019) in terms of internet banking, it was discovered that internet banking has positive influence on the performance of deposit money bank in Nigeria

Conclusion

The regression result indicates that crowd funding financial platforms, block chain, virtual currencies and internet banking has significant influence on the performance of deposit money bank in Nigeria. The study thus concludes that financial technology has positive influence on the performance of deposit money bank in Nigeria

Recommendations

Amongst the recommends is that crowd funding financial platforms has positive and significant influence on the performance of deposit money bank in Nigeria. Nigerian financial services industry should put adequate security mechanism in place to forestall fraudulent practices, invest in crowd funding financial platforms that are easy to use ;reliable, works with speed, guarantees privacy, affordable charges. Block chain has positive and significant influence on the performance of deposit money bank in Nigeria. Nigerian financial services industry should embark on intensive awareness campaign and sensitization of the citizenry on the influence of block chain and E-wallet in Nigerian financial services industry. Virtual currencies has positive and significant influence on the performance of deposit money bank in Nigeria. Nigerian financial services industry should have in build camera that will be sending every transaction and picture to everybody transaction to the financial services industry through the use of virtual currencies. Internet banking has positive and significant influence on E Nigerian economy. Nigerian financial services industry should be encourage internet banking transactions to improve E-wallet in Nigerian financial services industry

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