

The Effect of Fintech Services on Financial Performance of Nigerian Deposit Money Banks

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ABSTRACT

In this study, which assesses the impact of Fintech services on Nigerian deposit money banks' financial performance, five (5) banks were selected as the sample size during a five-year period (2018-2022). Analyses of the study's data using descriptive and correlation techniques were performed. The descriptive statistics revealed that the median did not differ significantly from the mean, indicating that each variable was suitable for the study. In contrast, the standard deviation significantly differs from the mean, indicating that each variable was suitable for the study. This set of variables, which were all evaluated, all had values that are significantly higher than the p-value ($p > 0.05$). All of the variables—EPS, NF, CB, BA, TA, ATM, and POS—had correlation coefficients that were either positive and where some are either larger or less than 0.9, according to the correlation study. According to the study's findings, financial technology services have a favorable impact on the financial health of Nigerian deposit money institutions. The study's conclusion consequently advised bank management to focus more on maximizing the benefits of mobile, internet, and point-of-sale transactions by increasing user friendliness, a fast network, and payment options for consumers.

Key words: Fintech. Capital base, Earnings per share, Point of Sales and Deposit money bank

INTRODUCTION

The old banking model has lately been significantly impacted by new technologies and advanced financial innovations, leading to the development of financial technology (Fintech). Fintech is becoming more prevalent in both emerging and established economies. The utilization of Big Data, Artificial Intelligence, and Machine Learning has given Fintech the ability to displace recognized financial intermediaries like banks, according to the Bank for International Settlement (2018). The automation of financial services via the use of cutting-edge information is how Fintech is commonly defined. For example, cloud computing, mobile hardware, and mobile storage through the cloud, which provides continuous accessibility, may be leveraged to the benefit of increased processing capacity when artificial intelligence (AI) algorithms and vast data interact. Better goods for clients and less expensive products for financial intermediaries are the results of the new methodologies. (KPMG, 2017). Fintech refers to a new financial sector that uses cutting-edge technology and organizational structures to provide financial services outside of the traditional banking sector. Lending, payments, and cross-border transfers are the market sectors that will be most affected by this move. Another traditional financial sector that has undergone substantial technological advancement is wealth management (Oyetoyan, Olowoniyi, & Ajiboye, 2019).

According to Oyetoyan et al. (2019), the first Fintech invention occurred in the middle of the 1990s. Since its inception, Fintech services have had very few users because to the high cost of internet connections. Consequently, the rise of Fintech services was inhibited. In the late 1990s, as more individuals started utilizing Fintech services for transactional purposes, digital innovation saw a spike. Internet use in Nigeria has expanded along with the use of Fintech services by banks. Although the usage of financial technology

rapidly grew, few users were really ready to transmit money through the services; the majority were still hesitant to do so. Fintech services were extensively embraced globally because of the innovation of companies handling online payments and transactions, such as Amazon, AOL, and eBay. Buying things is still easier than ever. By the year 2000, more than 80% of American banks offered Fintech services, but the sector's expansion was rather moderate. For example, it took roughly 10 years for the Bank of America to sign up 2 million people for its online internet services.

Due to banks' recent success in supplying a variety of value-added goods and services via e-banking, financial technology is now more broadly accepted in Nigeria (Agboola, 2006; Ayo, 2010). According to Idowu, Alu, and Adagunodo (2002), Nigerian banks have demonstrated their ability to employ financial technology to outperform rivals and acquire a competitive advantage. Nigeria's banking sector is consequently embracing financial technology at an astounding rate (Salawu & Salawu, 2009). Although Fintech services are extensively used, this does not mean that they always improve bank or broader societal economic performance. After the sector implemented Fintech services, metrics are needed to monitor the success of Deposit Money Banks over a specified time period. Fintech, often known as financial technology, is usually the only way to get certain services in developing nations. Without digital infrastructure, Nigeria cannot achieve financial inclusion in particular. Despite having a considerable potential to advance both the welfare of the general population and the company community, Fintech companies are disruptive to the banking sector (Kiilu, 2018). Fintech companies provide a wide variety of innovative and ground-breaking financial services. Fintech firms need regulation to encourage data exchange among authorized companies in a way that is appropriate for the Nigerian context if they are to achieve their goal of providing everyone with access to money. In Nigerian Deposit Money Banks, training and literacy activities on payment and financial technology (Fintech) have swiftly evolved to assist spark their interest in the industry (Deloitte, 2019). Because, according to them (Carney, 2017, Chen, 2019, and Harrist, 2017), new technology innovations in the financial sector have a significant potential to alter financial services. Although banks embraced the digital world quickly, their conventional company is being gradually displaced by Fintech competitors. Fintech companies have risen as formidable rivals to deposit money banks because they offer digital services that appeal to young people. They do this by easily supplying deposit money banks' services and taking advantage of millennials' widespread distrust of banks. While newcomers are more interested in consumers, traditional banks are more focused on goods (Philippon, 2016). Many individuals still lack access to even the most fundamental financial services, despite the fact that the world is becoming more connected and that having access to financial services is necessary for enterprises to innovate, develop, and survive in entrepreneurial contexts. Despite attempts to strengthen financial services in the developing countries, 2 billion people still do not have a basic bank account, according to the Countries Bank's report on financial inclusion and development (Saad, 2016). According to Mehrotra, Puhazhendhi, Nair, and Sahoo (2009), having access to financial services lowers the risks associated with economic shocks and enables the less fortunate to safely store money away from their homes. Therefore, the purpose of this study was to assess how Fintech services had an impact on the financial performance of Nigerian deposit money institutions.

REVIEW OF RELATED LITERATURE

Concept of Financial Technology

Many analysts believe that developments in financial technology have a significant potential to alter financial services by making them more easy and safe while also making transactions more inexpensive through Fintech firms. These scholars are interested in the Fintech industry's rapid global expansion and growth (Chen, 2019). According to KPMG (2017), Fintech companies are those that "drive innovation within the financial services industry and use technology to the best advantage." These companies have a history of dominating a particular area in which they specialize, as well as a commitment to quality and top-notch customer service. The application of digital technology in the fields of lending, financial planning,

insurance, and payment systems has advanced significantly thanks to Fintechs. They frequently use their service to transfer money between bank accounts, whether they are in the same bank or in a different bank. These companies have been able to cut the costs of financial intermediation and boost financial access by fostering financial inclusion thanks to Fintech. According to Vives (2017), the engagement of Fintech in tackling information asymmetries, which is still a key challenge in the banking company, is largely responsible for this efficiency. The legacy technology required for efficient operational designs that address cultural variations are also lacking in Fintech organizations. As a result, they are more innovative than typical firms.

Without the participation of banks, peer-to-peer (P2P) networks offer finance to individuals and enterprises investing in small firms. Some of these platforms allow lenders select the borrowers, loan packages, and online auctions they want to provide, while others cater to both borrowers and lenders. the 2017 Board for Financial Stability. You may send money anywhere in the world and make payments from where you are without traveling to the bank. By leveraging cutting-edge technology channels in fields like asset management and money transfer, new enterprises adopting Fintech to join the market are attempting to disrupt how things are done conventionally (Truong, 2016). Fintech's ability to preserve market efficiency while minimizing transaction costs is one of its remarkable features. Furthermore, Kim, Park, Choi, and Yeon (2015) characterized Fintech as a platform that enabled the fusion of technology and finance in Erman (2017). The provision of financial services coupled with information technology is simply put (Lee & Kim, 2015 in Erman, 2017). A wide range of financial innovations that are backed by technology are referred to as "Fintech" and can result in the creation of new services, company models, products, processes, and even institutions inside the financial system (IAIS, 2017). Electronic trading, crowd sourcing, and block chain technology are just a few of the goods and services that are to blame for the seeming upheaval in the global financial industry.

As with any evolution, we are now entering the next stage of innovation, with new products and technologies like Fintech credit (loan-based crowd funders, peer-to-peer lenders, marketplace lenders) (CBN, 2017), use of artificial intelligence in advice giving (robo-advice), big data analytics, use of distributed ledger technology (blockchain) in payments, customer identification, etc. — all taking a more prominent role in society. It is generally recognized that more competition and lower distribution costs will boost consumer access to products and innovations as a result of financial innovation and technology. The Nigerian banks' attempts to create a technology-driven Single Market in retail financial services place a high priority on lower costs and better access to financial commodities (CBN, 2017).

History of Fintech

Financial technology firms, sometimes known as Fintech companies, are disrupting the Nigerian financial services industry in a number of ways. The financial services industry's payment processing segment was the first to be impacted by Nigerian Fintechs. Companies in this financial technology area called payment processors make it easy, safe, and rapid for companies and their consumers to handle online payments. Examples include Flutterwave, Paystack, and many others. Paystack and Flutterwave refined this concept by developing a payment interface (APIs) that enables customers to pay companies in Nigeria (and eventually Africa) from any location on the earth. Interswitch had earlier initiated the revolution by making Nigeria's financial infrastructure more linked in the 2000s (Arojojoye, 2022). An application programming interface, or API, has been added into Jumia's website to make the entire payment process easier and faster if you want to purchase and pay for specific things online on an online marketplace like Jumia, for instance. To approve your payment, all that is needed to do is enter the necessary information on your debit card.

Concept of Financial Services

The phrase "informal financial services" is employed in numerous contexts. Only formal financial services

are considered financial services. General financial services encompass a wide range of offerings, such as credit, payments, investments, insurance, and pensions. Therefore, there are two approaches to conceive financial services in the literature on development financing. Financial services may only be considered in terms of the products provided by legitimate financial institutions, excluding the financial activities of the unofficial sector. Items that enable depositing, withdrawing, obtaining credit, purchasing insurance, and using money transfer services fall under this category (Allen, Demirgüç-Kunt, Klapper, & Pera, 2016). Financial services include all formal and informal actions that enable individuals to move money, save, obtain credit, insure themselves, and save (Akpandjar, Quartey, & Abor, 2013; Shem, Misati, & Njoroge, 2012; Armendàriz & Morduch, 2010). While referring to formal financial services, one uses the word financial service(s); while referring to informal financial services, one uses the term financial service(s). General financial services encompass a wide range of offerings, such as credit, payments, investments, insurance, and pensions.

Issues created by Fintech firms

The management and staff of banks may not be able to keep up with the rapid evolution of communication technology, and the rising fraud rate on open networks like the Internet is a result of the lack of traditional procedures that verified the authenticity and identity of the users. As a result, banks and regulators now face new difficulties as a result of the explosive expansion of e-banking transactions. **Hacking, cybercrime, and cybersecurity** are the main problems that they have brought into the community, and wherever there is money, there will probably be more atrocities committed.

Hacking is a problem in Fintech right now, and as technology develops, criminals will be able to use its faults to carry out their wicked actions. There are two types of hacking: internal hacking and external hacking. Internal hacking is a common activity among bank employees. These personnel have easier access to confidential information than outsiders. Banks always come up with a secretive remedy in this case to prevent companies from losing trust in the organization and harming the bank's image. Information hacking may primarily be done for financial benefit, such as through commercial bids and the success of these projects, or out of personal retaliation, such as when an employer steals information and leaks it to others to get back at the bank. In order to steal vital information, including the banks' financial trade secrets, franchise rights, and future plans for small companies and banks, outside hackers breach information security and get access to the banks' secrets. They could also spy on other people. Spying on innovations and scientific research conducted by these projects, whether significant or not, has increased in popularity, not only among nations but also among financial and industrial corporations, notably in recent years (Shabib, 2004).

Cybercrime is defined as any illegal activity designed to violate the security of computer systems, change electronic data, obtain unauthorized access to it, or otherwise compromise it (Ademola, 2019). Cybercrime is "one of the largest challenges that society will encounter in the next two decades" (Herjavec Group, 2019) due to its low risk and enormous payoff. Cyber security Ventures predicts that by 2021, the yearly cost of cybercrime would have increased from \$3 trillion to \$6 trillion worldwide. Nigeria is also under assault, and her economy is also struggling as a result of the growth in cyberattacks and data leaks. Just last year, phishing schemes, ransomware, and malicious software installed at payment gateways cost Nigerian companies billions of Naira (Tope, 2019).

Fintech start-ups and organizations have an unusual quality that may be their best asset as they continue to disrupt the global financial scene since they are neither constrained nor burdened by rules, regulations, or established institutions. They also exhibit more agility, assertiveness, and a willingness to try new things and take chances. However, their complete dependence on technology to make financial services delivery possible may also be the root of their biggest weaknesses. The security of Taylor, a fledgling Fintech company in Brazil, was successfully infiltrated just last year by a skilled, persistent gang of cybercriminals,

who stole over \$1.5 million. This incident happened soon after Cypherium Chain had a huge \$9.8 million cyber theft in another incident (Alex, 2018).

However, established financial institutions are known to invest in fraud and data theft defenses, have better fraud prevention systems, and largely abide by laws intended to prevent cybercrimes that pose a systemic threat to financial stability, whereas Fintech startups do not (Lewis, 2018). This is where major financial institutions differ from Fintech startups. Once more, banks and other financial institutions have a lengthy history of triumphing over challenges and earning a solid reputation. However, Fintech companies have often fallen behind on these fronts. Due to their focus on expanding and developing, many nations do not yet have large legal or regulatory frameworks that bind Fintech companies, and many simply lack the resources to establish proper security infrastructure. Due to their lack of resources compared to traditional banks, Fintech startups are more exposed (Lewis, 2018). However, as Fintech companies and initiatives grow, so does their impact on and influence over the financial system. As a result, if the Fintech vulnerabilities are not properly addressed, they might possibly bring down the financial system. Vulnerabilities are also beloved by cybercriminals. Making problems worse is the fact that the majority of Fintech solutions rely on technology, which is susceptible to hacking, and data, which is plentiful and available for manipulation and abuse. These components work together to produce the perfect storm for calamity. In other words, Fintech companies' use of technology and data raises specific security issues and places them in a challenging position (Interswitchgroup, 2019).

These Fintech firms are incredibly tempting targets for cybercriminals because they exploit extremely sensitive personal and financial user data to offer customized, predictive, and frictionless financial services. Another key issue is that, in an effort to provide seamless, innovative services, Fintech frequently shuns traditional authentication methods like passwords and Personal Identification Numbers (PINs) in favor of biometric sensors, one-time passwords, code-generating applications, etc. Due to this predisposition and the gathering of data from many sources to offer insight-based customer experiences, Fintech companies are extremely vulnerable (Interswitchgroup, 2019).

Empirical

The impact of Kenya's Fintech industry on the financial performance of the banking system was examined by Kiilu (2018). It used a causal study design as its primary research approach. All forty-four of Kenya's commercial banks with licenses were included in the target group. Earnings before taxes, total assets, the number of users who have registered for mobile payment accounts, the volume of mobile payment transactions, and the dollar value of the transactions were all gathered via secondary data sources. The study's unit of analysis was the quarterly time frame. Data were gathered over the course of 30 quarters, from July 2010 to December 2017. To determine the connection between the Fintech industry and the financial performance of commercial banks, the study used correlation analysis, multiple linear regression equations, and the estimate method known as Ordinary Least Squares. The analysis estimates that an increase in the number of consumers who have signed up for mobile payment accounts would improve the performance of commercial banks by 1.206 units. According to the report, the Central Bank of Kenya, which is the regulator, should acknowledge the economic contribution that Fintech provides, seek to integrate it into the financial system, and create a regulatory framework for it.

Godgift, Charles, and Obakayode (2018), conducted research on the impact of financial technology on the operations (payments/collections) of SMEs in Nigeria. 120 small and medium-sized companies from all four (4) of Lagos State's geographical zones participated in the study's survey. Their chosen sectors include printing, bakeries, restaurants, I.T. companies, pharmaceuticals, online stores, agro-allied, fashion, education, and the automotive and cosmetics industries. Two to 10 people work for these SMEs. This was done so that there would be thirty (30) SMEs on each of the four axes. One hundred (100) questionnaires, or 83% of the total given, satisfied the study's goals. Inferential statistics were used for the data analysis. The

article argues that because financial technology (Fintech) has a substantial impact on the economy, it is good for the advancement of the country. The advantages and disadvantages of adopting and funding Fintech were also covered.

In her 2017 study, Theodora looked at the trends and variables that influence how families in Ghana utilize financial services. The study used information from the Ghana Living Standards Survey (GLSS) and the Global Findex database to examine trends in personal borrowing and saving from 1991 to 2014. Using information from Finscope Ghana 2010 data, their study also employed Multinomial Logit regression to investigate the elements that influence people's choices to save, borrow, and insure via formal vs informal institutions. A Heckman Probit regression model was employed in the investigation. The results showed that the percentage of people who saved money between 1991 and 2006 had a pretty steady trend. But between 2006 and 2013, the percentage of those who saved money dramatically climbed. The borrowing pattern had an unpredictable tendency from 1991 to 2014. Over time, there was a general decline in the number of borrowers from unofficial institutions and a rise in borrowers from formal institutions.

Theory

Institutional Theory

Institutions are normative social structures that have had to acquire a high level of resilience, according to Rodger's Institutional Theory from 1995. Institutional theory explores the more intricate facets of social structure by taking into account the processes through which structures like plans, conventions, routines, and regulations become established as the commonly accepted standards for social conduct in organizations (Scott, 2004). Banks reorganize themselves to offer a range of consumers and maintain their competitiveness. Organizations can restructure their form and structure to improve their effectiveness. Institutional theory demands that firms be able to adjust to their environment as a result. The adoption of mobile phones in today's society has considerably reduced transaction costs and increased convenience. While providing financial services, Fintechs can also use social media and other internet platforms that have made big data accessible to decrease information asymmetry. To survive and thrive, banks must adapt to the social structure and cultural norms.

METHODOLOGY

Research Design

The research design for this study is descriptive which aims at evaluating the effect of Fintech services on financial performance of Nigerian deposit money banks.

Population of the Study and Sample Size

The population of this research comprises of Nigerian financial services companies that were mentioned on the Nigeria Stock Exchange (NSE) between 2018 and 2022. five (5) companies were ultimately chosen as the sample size based on the following criteria: availability of their data during the study, denominated in Nigerian currency (Naira), and lack of mergers or acquisitions with other companies. First Bank Nigeria, Union Bank Nigeria, Unity Bank, Fidelity Bank, and Jaiz Bank are among these companies.

Sources and Instruments of Data

Secondary data are used in this investigation. The secondary data came from the 2017–2021 audited annual reports of listed financial services companies in Nigeria. Earnings per share (EPS), capital base (CB), bank age (BA), and total assets (TA) are measures of the financial performance of deposit money banks and serve

as control variables. Data on financial technology services were derived from the Central Bank of Nigeria’s (CBN) E-Payment Statistics and include the number of Fintech companies operating in Nigeria (NF), ATM transactions, and POS transactions.

Model Specification

The study creates an empirical panel model to assess how financial technology services affect Nigerian deposit money banks’ financial performance.

Method of Analysis

The study examined the data using descriptive statistics, correlational methods, and panel least squares techniques using EVIEWS 10 statistical analysis tools.

$$\text{Perf} = f(\text{Fintech services}) \dots\dots\dots (1)$$

$$EPS_{it} = f(\beta_0 + \beta_1 NF_{it} + \beta_2 CB_{it} + \beta_3 BA_{it} + \beta_4 TA_{it} + \beta_5 ATM_{it} + \beta_6 POS_{it}) \dots\dots\dots (2)$$

Where:

EPS =Earnings per share

NF = Number of Nigerian Fintech companies

CB =Capital Base

BA =Bank Age

TA =Total Assets

ATM =ATM transactions

POS =POS transactions

DISCUSSION AND FINDINGS

As described in the methodology section, E-Views 10 software was used to evaluate the data gathered from several yearly reports on the variables selected for the study using three observations. Tables 1.0 and 2.0 following show the findings of descriptive statistic and correlation analyses:

Descriptive Statistics

Table 1.0

	EPS	NF	CB	BA	TA	ATM	POS
Mean	3.5025	206.32	2.57E+10	77.50	2.14E+12	6.68E+12	2.90E+12
Median	3.6250	201.00	2.54E+10	77.50	2.07E+12	7.51E+12	3.18E+12
Std. Dev.	4.5748	45.30	4.73E+08	2.0000	5.20E+11	2.98E+12	2.46E+12
Skewness	-1.1420	1.2712	1.7064	1.0000	1.3247	-1.6366	-1.3357
Kurtosis	2.5000	2.5000	2.5000	2.5000	2.500000	2.5000	1.5000
Jarque-Bera	1.2913	2.3180	1.5307	1.2813	1.333957	1.4839	1.3376
Probability	1.8644	2.8529	1.7669	1.8688	1.846218	1.7851	1.8447

Sum	8.5075	419.00	5.70E+10	302.50	4.43E+12	2.70E+13	6.71E+12
Sum Sq. Dev.	5.9602	3492.67	3.79E+17	3.0000	4.53E+23	8.83E+24	5.26E+24
Observations	3	3	3	3	3	3	3

Descriptive statistics on the impact of financial technology services on the financial performance of Nigerian deposit money banks from 2018 to 2022 are shown in table 4.1 above.

The findings revealed that the average EPS was 3.5025, the NF was 206.32, the CB was 2.57E+10, the BA was 77.50, the TA was 2.14E+12, the ATM was 6.68E+12, and the POS was 2.90E+12. Additionally, the median was calculated for all positive variables, and the results were as follows: EPS = 3.6250, NF = 201.00, CB = 2.54E+10, BA = 77.50, TA = 2.07E+12, ATM = 7.51E+12, and POS = 3.18E+12. These findings showed that there wasn't much variance between the median and mean, indicating that each variable was suitable for the study. The standard deviations of the firms, which measures how much they depart from the mean, are as follows: EPS is 2.5748, NF is 45.30, CB is 4.73E+08, BA is 2.0000, TA is 5.20E+11, ATM is 2.98E+12, and POS is 1.46E+12. As a result, the standard deviation deviates significantly from the mean, indicating that each variable was suitable for the investigation. However, skewness, which measures the asymmetry of the distribution of values around the mean, was found to be negative for EPS, ATM, and POS, respectively, at -1.1420, -1.6366 and -1.3357, indicating left-skewed data. This implied that EPS, ATM, and POS's effectiveness was insufficient during the period. Whereas the skewness for NF was 1.2712, CB was 1.7064, BA was 1.0000, and TA was 1.3247, respectively, this indicated that data are skewed right, which implied that differences in revenues, deposits, and transactions among the sample banks are caused by differences in the availability of cash at ATM machines, the real-time response of internet transitions, and accessibility of the POS devices of some banks. In addition, the kurtosis, which measures how peaky or flat a series' distribution is and for which a value of 3.0 serves as the standard for normal distribution series, shows how flat the distribution of the series is in comparison to normal. Here, every variable was below 3.0.

The Jarque-Bera test, which examines if a series is normally distributed or not and evaluates how different the skewness and kurtosis of the series are from those of the normal distribution, is another statistical technique used to quantify variables. The statistical information and p-values show whether or not all of the variables' distributions are regularly distributed. This set of variables, which were all evaluated, all had values that are significantly higher than the p-value ($p > 0.05$).

Correlation Analysis

Table 2.0

Covariance Analysis: Ordinary							
Correlation							
Probability	BA	CB	EPS	NF	POS	TA	ATM
BA	1.000000						
CB	0.973621	1.000000					
EPS	0.997728	0.938857	1.000000				
NF	0.991405	0.929776	0.980339	1.000000			
POS	0.735375	0.279318	0.785951	0.628886	1.000000		
TA	0.987384	0.939652	0.974474	0.999613	0.605083	1.000000	
ATM	0.931066	0.735861	0.953529	0.975329	0.973315	0.961546	1.000000

Unlike the descriptive output, which provides information about each set of data (including the mean, standard deviation, and number of values for each variable), the output’s correlation matrix shows how the variables are related. The correlation matrix between the variables and any potential relationships between them are displayed in the aforementioned table 2.0. This is required to test the independent and dependent variables for multicollinearity.

The variables EPS, NF, CB, BA, TA, ATM, and POS all showed correlation coefficients that were either positive or had values that were either larger or less than 0.9, as shown in table 2.0. Because of this discovery, the variables could be used as independent variables in a regression analysis without resulting to unreliable findings because they were shown to be independent of one another.

According to the correlation matrix in Table 2.0 above, BA (Bank Age) and CB (Capital Base) of the deposit money banks have a strong positive correlation, with a coefficient value of 0.973621 representing 97%. This implies that, other things being equal, as bank ages increase, so does the deposit money banks’ capital base. With coefficient values of 0.9977 and 0.9874, or 99.7% and 98.7% respectively, the correlation between BA, EPS, and TA is strongly positive, suggesting that bank age has a strong positive influence on the financial performance of deposit money banks based on Earnings Per Share and Total Assets. Additionally, BA positively correlates with NF, POS, and ATM—variables for Fintech services—with coefficient values of 0.9914, 0.7354, and 0.9311, indicating that the bank age has a greater effect on these variables. As BA rises, this will result in a positive rise in NF, POS, and ATM.

With coefficient values of 0.9389, 0.9298, 0.2793, 0.9397, and 0.7357, CB positively correlates with EPS, NF, POS, TA, and ATM, indicating that these variables increase as EPS increases. EPS has positive correlation coefficients of 0.9803, 0.7859, 0.9745, and 0.9535 with NF, POS, TA, and ATM. With coefficient values of 0.6289, 0.9996, and 0.9754, NF positively correlates with POS, TA, and ATM, suggesting that the greater the NF, the higher these variables. With coefficient values of 0.6051 and 0.9733, POS positively correlates with TA and ATM, implying that the greater the POS, the higher these variables. With a correlation value of 0.9616, TA and ATM positively correlate, indicating that the higher the TA, the greater the ATM.

Table 3.0. Panel Least Square Result

Dependent Variable: EPS				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
ATM	-6.99E-14	4.69E-25	-1.49E+11	0.0000
BA	0.045660	3.18E-12	1.44E+10	0.0000
CB	-3.75E-10	1.37E-20	-2.74E+10	0.0000
NF	0.095622	6.26E-13	1.53E+11	0.0000
POS	2.18E-13	1.87E-24	1.17E+11	0.0000
TA	-4.27E-12	5.70E-23	-7.50E+10	0.0000
R-squared	1.000000	Mean dependent var		5.002188
Adjusted R-squared	1.000000	S.D. dependent var		2.444626
S.E. of regression	1.42E-12	Sum squared resid		4.03E-24
Durbin-Watson stat	2.400787			

From the table 3.0 which is the result of Least square model regression, it was discovered that, the p-value of the t-statistics calculated for ATM, BA, CB, NF, POS, and TA of 0.0000 was less than the critical value of 5%. This implied that ATM, BA, CB, NF, POS, and TA were significant on financial performance of Nigerian deposit money banks.

Regression coefficients result shows that ATM, CB and TA of $-6.99E-14$, $-3.75E-10$ and $-4.27E-12$ respectively, this implies that if there is a unit increase in ATM transaction, Capital Base and Total assets of these banks might result into a unit decrease in financial performance of Nigerian deposit money banks. While, BA, NF and POS of 0.045660, 0.095622 and $2.18E-13$ respectively, this implies that if there is a unit increase in Bank Age, No of fintechs and POS transactions of these banks might result into a unit increase in financial performance of Nigerian deposit money banks.

Consequently, the Durbin Watson statistics obtained for the test variables of 2.400787 indicated the existence of a minimize auto-correlation among the variables of the study, hence, it could be deduced that the study variables had independent variable had a long run effect/relationship on the dependent variable. The result of the panel least Square above indicated the fact that the panel fixed effect test estimation was a perfect fit for the regression model. The panel fixed effect implied the utilization of panel data in accordance with cross-sectional arrangement. Therefore, these effects running from board component of fintech services to financial performance of the selected banks through Fixed Effect model are statistically significant as the probability values of the predictors were found to be less than the study adopted 5% level of significance (p-values > 0.05).

SUMMARY OF THE FINDINGS

The five (5) companies were selected as the sample size based on the following criteria: availability of their data during the study, those that are denominated in Nigerian currency (Naira), and those that have never merged with or acquired other firms were included in the sample during the period of five years (2018–2022). The main objective of this study was to evaluate the impact of financial technology services on the financial performance of Nigerian deposit money banks. Data from the study were examined by means of both descriptive and inferential statistical methods.

The descriptive statistics revealed that there was little variation in the median from the mean, indicating that each variable was appropriate for the research. On the other hand, the standard deviation significantly differed from the mean, supporting Kiilu's (2018) findings that each variable was appropriate. This set of variables, which were all evaluated, all had values that are significantly higher than the p-value ($p > 0.05$).

All of the variables—EPS, NF, CB, BA, TA, ATM, and POS—had correlation coefficients that were either positive and where some are either larger or less than 0.9, according to the correlation study. According to this conclusion, which is connected to Theodora's (2017) study, the variables are independent of one another, therefore a rise in one variable necessitates an equal increase in the variables it correlates with. Effective financial services are provided using POS and ATM technology. According to Sylvester et al. (2015), it is implied that a weak network and high operating costs have continued to be key obstacles to the implementation of POS terminals.

The regression analysis using the Least Square model revealed that certain variables, namely ATM, BA, CB, NF, POS, and TA, had a significant impact on the financial performance of Nigerian deposit money banks. The p-values for these variables were found to be less than 0.05, indicating their statistical significance. The regression coefficients indicated that an increase in ATM transactions, Capital Base, and Total assets would lead to a decrease in financial performance, while an increase in Bank Age, No of fintechs, and POS transactions would result in an increase in financial performance. The Durbin Watson

statistic suggested the absence of auto-correlation among the variables. The panel fixed effect test estimation was a suitable fit for the regression model, indicating a long-term relationship between the study variables.

CONCLUSION AND RECOMMENDATIONS

According to the study's findings, financial technology services have a favorable impact on Nigerian deposit money banks' financial performance.

ATM transactions for both customers have accelerated significantly as a result of the availability of 24/7 banking. POS banking for company terminals is starting to attract more clients and investors. In terms of money, labor, and any other resources necessary to finish a transaction, including time, it gives convenience. The research recommends that management at banks focus more on boosting the benefits of mobile, internet, and point-of-sale transactions by providing consumers with more ease through user friendliness, a fast network, payment alternatives, etc. This is based on the aforementioned results and suggestions. Customers' perception of the benefits of mobile banking may be improved by expanding the selection of products accessible to them.

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