VOL. 10 NO. 7,
NOVEMBER, 2025
E-ISSN 3026-9679
P-ISSN 3026-9423

African Scholar Publications & Research International
www.africanscholarpub.com

Journal of Business Dev. and Management Res. (JBDMR)

Financial Technology and Financial Access in Nigeria: Evidence from an Autoregressive Distributed Lag Model

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DOI: https://doi.org/10.70382/ajbdmr.v10i7.042

Abstract

Financial technologies have made financial access easy for financial users therefore, this study examined the impact of financial technologies on creating financial access from 2009 to 2022. Data were collated on volume of automated teller machine, and volume of web transaction to measure the independent variable while usage dimension and availability if banking service were used to measure financial access. Research design adopted for the study was causal research design. The method of data analysis adopted for study to test the two models was Autoregressive Distributed Lag. The study arrived at the findings that ATM has negative and insignificant impact on usage dimension while WEB has positive but insignificant impact on usage dimension. Furthermore, the study found that ATM has a negative but significant impact on availability of banking service while WEB has positive insignificant impact on availability of banking service in the short-run. In the long-run ATM and WEB have significant impact on availability of banking service with ATM having negative impact in the long-run. the study also found a long-run cointegration. The study recommended that policy makers should pay attention to other factors such as income level and cultural habit that make people avoid financial innovation, and improving payment sites security.

Keywords: Financial Technology, Usage Dimension, Automated Teller Machine, Web Payment Transaction, Availability of Banking Service.

Introduction

Technology has been introduced into every aspect of life to enhance productivity and increase efficiency. It makes human activities effective. It reduces cost and risk.

Technology when introduced in education it is called EduTech, in agriculture it is AgriTech, while in finance it is referred to Fintech. The Fintech helps to brings finance to the door post of its user. Finance as used here encompasses the identification, generation, allocation, utilisation, appropriation, evaluation of fund, (Agundu, 2019). FINTECH in Nigeria gained ground as the result of lapses in the financial sector to meet the need of businesses after the global financial crisis of 2007-2008.

Fintech in Nigeria grew as the result of the strengthening of the Payment System Vision 2020 that was implemented by CBN in 2007. Nwosu et al. (2022) noted that Payment System brought about enhancement in use of cards, ATM, POS, terminals, electronic fund transfers and mobile payment. Another thing that made financial technology to spread speedily is the population of the young and tech savvy, and high mobile phone usage. Statistics showed that investment in financial technology industry amounted to more than US$200.00 million, which showed that Fintech is playing a major role in Nigerian financial sector despite the challenges, (Nwosu et al. 2022). Fintech is understood to be an improvement in finance in the aspect of delivery and usage of financial service as asserted by (Popescu, 2019). In addition, it enhances financial service delivery by applying technologies to financial services (Leong & Sung, 2018; Wojcik, 2020).

Financial access is simply when price is absent and there are non-price barriers to finance (Demigue-Kunt and Levine, 2008). Fintech is one major tool that can create financial access because the financial innovations reduce cost of transaction and agency, (Levine 2020; Rajan, 2015). Claesens (2006) elaborately defined financial access as the availability of a supply of reasonable quality financial services at reasonable costs, where reasonable quality and reasonable cost have to be defined relative to some objective standard, with costs reflecting all pecuniary and non-pecuniary costs . Adenuga and Omotosho (2020) explained that having financial access is when there are no obstacles to potential bank customers who are desiring to enjoy financial services. Usoro (2022) stated that mobile connection which is one among the seven emerging technologies create convenience and accessibility. He added that cost is efficient because the intermediaries are eliminated and verifications are reduced, by that it lowers cost and increased profit to customers and institutions respectively.

Against this background it can be said that Fintech is paramount in creating financial access through its products and its emerging technologies. Financial technologies such as automated teller machine, point of sales, mobile banking, online banking, web payment, remita, among others enable users to transact and check their account at the comfort of their door steps. Peer to peer (P2P) lending helps credit to be given without the interference of the financial intermediaries. Though financial technology has come with enormous benefit yet there are many challenges that it is facing in Nigeria which Nwosu et al. (2022) outlined to include limited data access, inadequate cyber security, lack of market confidence, access to funding, and institutional gaps such as weak laws to enforce it. Scholars such as Haruna and Dibal (2024), Quresh et al. (2023), Asif et al. (2023), Islam et al. (2022), Usoro (2020), Feye et al. (2021) studied impact of fintech in relation to topical issues such as financial inclusion;

financial service delivery by checking the opportunities and challenges facing the development within the country and globally. Adenuga and Omotosho (2020) research on financial depth, financial access and economic growth in Nigeria but there is need to research whether Fintech creates financial access when measured with user dimension and bank availability. This study is arranged in this order: the first section presented the background of the study, followed by conceptual review, empirical review, theoretical review, methodology, data analysis and interpretation, discussion of findings and finally, conclusion and recommendations.

The main aim of the study is to evaluate financial technology on creating financial access. Specifically, four objectives were drawn which are:

i. To determine the impact of Automated Teller Machines transactions on the dimension of usage.
ii. To determine the impact of web pay transactions on the dimension of usage.
iii. To determine the impact of automated teller machine on availability of banking service
iv. To determine the impact of web pay transaction on availability of banking service.

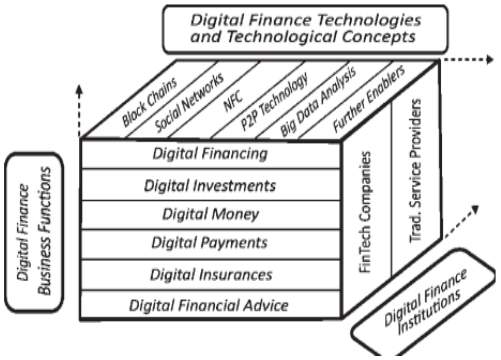
CONCEPTUAL REVIEW

Financial Technology

Financial technology according to Nwosu et al. (2022) is an industry that is made up of all forms of technology used to deliver financial services to businesses and households. Zavolokiana et al. (2016) described financial technology as the union of technology and finance. By marrying technology and finance it leads to Fintech. Quresh et al. (2023) stated that fintech is made up of innovative use of technology, digital platforms, and data analytics to provide financial products and services. Those technologies and applications that make up financial technology are mobile banking, digital payments, crowdfunding, peer-to-peer lending, robo-advisory services, blockchain, and artificial intelligence. There are seven emerging technologies that are shaping the future of financial services across the globe which Usoro (2022) highlighted to include mobile connectivity in helping users interact with financial services. They are important in convenience and accessibility, personalized services, increased security, and disruption of traditional financial institutions. The Artificial Intelligence (AI) services help to streamline financial services and improve customer experience. AI is helpful in fraud detection, risk assessment, customer services, portfolio management, and personal finance management. Decentralized ledger technology which bypasses centralized server to spread across network of computers is another emerging technology; open sourcing; hyper automation; cloud technology; and no-code development, (Usoro, 2022).

There are three dimensions of Fintech commonly known as digital financial cube which are digital finance technologies and technological concepts, digital finance business functions, and institutions that offer digital finance (Nwosu et al., 2022; Gomber et al., 2017).

The three dimensions of digital finance cube are presented in the figure below:



Source: Gomber et al (2017)

Financial Access

Financial access is the ability to have unrestricted access to financial services which could have arisen due to cost of information or taxes. Demirguc-Kunt and Levine (2008) viewed financial as the absence of price and non-price barriers in finance. To Claessens (2006) financial access is when financial service is supplied at reasonable cost. This definition implied that cost is not totally eliminated but reduced reasonably. Sarma (2008) stated that bank penetration (number of bank accounts per total population); availability of banking services (the number of bank branches per 1000 population); and usage dimension (bank credit as a percentage of GDP) are the three dimensions of financial access. Financial access can benefit either privately or socially. Kumar et al (2005) stated that the private benefits include increase in consumption benefits, choice between the time to consume (now or later), safe storage and accumulation of wealth, and expansion in production; while socially include increment in national savings and expanded production possibility curve.

Financial Technologies Roles in Creating Financial Access

Financial technology are invented technologies and applications that enable users to access financial services anytime they want and without cost. The frictions that could deter a user from accessing financial services such as distance, insecurity, cost are reduced such that borrowing and lending can be made directly between borrower and lender without any intermediary. Account can be opened without going a bank hall or a bank agent. Therefore, the introduction of technology in finance made financial inclusiveness easier. Enhancing Financial Innovation and Access (EFInA) (2021) reported that the number of total populations of the banked people rose from 40% in 2018 to 45% in 2020. This showed that as technology is increasing, number of people having access to financial service is increasing because owning account today is not as rigorous as before. Likewise, sourcing credit facility is not cumbersome and rigid as during the traditional mortar and brick bank era.

EMPIRICAL REVIEW

In the study conducted by Haruna and Dibal (2024) on the effect of financial technology on financial inclusion in Nigeria adopted ARDL for data analysis. The study found that ATM statistically significant on financial inclusion at 10% significance level in the long-run with positive coefficient but POS and Mobile banking are insignificant. Nwome et al. (2024) studied the effects of financial innovations on the financial inclusion in Nigeria from 2005 to 2021. He employed Pooled Ordinary Least Square to analyse data and found that point of sales, agency banking, and mobile banking have positive significant impact on financial inclusion. They have this to say that financial innovations have significant and positive impact on financial inclusion. Their findings are similar to the findings of Asif et al. (2023) though the study was conducted in different geographical area. This means in any geographical area the same variable can lead to financial inclusion. The study of Li et al. (2024) was on how digital payment affects international trade where they studied 25 countries from 2012 to 2020 while fixed effect model was adopted as the method of data analysis. The study found that the development of digital payment can bring enhancement in status of international trade effectively and reduce barrier of cross-border flow of capital which will improve international trade, but an eyebrow was raised that there are different degrees of openness across countries. Iwedi et al. (2023) investigated the impact of effect of financial technology on financial inclusion in Nigeria, and adopted Vector Auto Regression (VAR) for data analysis. The result stated that web banking has positive and significant impact on financial inclusion while ATM, POS and mobile banking are positively insignificant on financial inclusion. They high speed network among the financially excluded population. Asif et al. (2023) studied the impact of fintech and digital financial services on financial inclusion in India and adopted regression and correlation and found that financial technology businesses have significant impact on financial inclusion in India. This agreed with the work of Li et al. (2024) but disagreed with Islam et al. (2022) In Nigeria, Ugwuanyi and Okore (2022) focused on financial technology and financial inclusion. they judgmentally sampled 300 persons from Ugbawka, Nara, Agbani, Nkerefi and Akpogu. The study found that financial technology eases accessibility to financial service like withdrawal, account opening, savings, borrowing, and bill payment. It was recommended that good policies should be made to enhance financial technology enhancement in Nigeria. In another study conducted by Islam et al. (2022) on the impact of financial technology (FINTECH) on financial service delivery of deposit money banks in Nigeria from 2012 to 2021. The study found that mobile banking, internet banking, and point of sale have no significant impact on the financial service. so, they suggested friendliness and low risk of the innovations.

In another work done by Adenuga and Omotosho (2020) on financial depth, financial access and economic growth in Nigeria used Eagle Granger causality Test and Johansen cointegrating Test. The study therefore found that increase in financial depth can propel the growth of output in Nigeria. Their work further showed that there is need for financial access in order for an economic to grow and advised that government effort of financial inclusion will promote

economic growth. Chukwunulu (2019) examined the effect of financial innovation on the Nigerian economy and used Generaised Method of Moment (GMM). The study revealed that point of sale, ATM, mobile banking, and internet banking have significant impact on economic growth. He arrived at the same findings with Iwedi et al. (2023).

THEORETICAL REVIEW

Unified Theory of Acceptance and Use of Technology

The Unified Theory of Acceptance and Use of Technology (UTAUT) was propounded by Viswanath Venkatesh, James Y. L. Thong, and Xin Xu in 2003. The theory got it origin from six theories of technology which are Theory of Reasoned Action, Technology Acceptance Model, Motivational Model, Theory of Planned Behaviour, Diffusion of Innovation, Social Cognitive Theory. The proposition of the UTAUT is that the actual use of technology is determined by behavioural intention (Marikyan and Papagiannidis, 2023). The chances that that people will adopt a technology depends on four key constructs which are: 1) performance expectancy: which is the degree at which an individual believes that using the system will help him attain gains in jobs performance; 2) effort expectancy: this construct has to do with easiness in the use of a system; 3) social influence: the degree to which an individual perceives that important others believe he or she should use the new system; and 4) facilitating conditions: the degree to which an individual believes that an organization and technical infrastructure exists to support the use of the system (Venkatesh et al., 2003). Marikyan and Papagiannidis (2023) stated that age, gender, experience and voluntariness of use are the moderating effect that define the strength of the predictors on intention. Venkatesh et al. (2003) stated that the original intention of developing the theory is to explain the acceptance of technology in an organisation. The limitations of the theory are its inability to explain behavioural intention in different settings and methodological limitation, (Marikyan and Papagiannidis, 2023).

METHODOLOGY

Research Design

The research design adopted for this study is a causal research design because the study is aimed at finding the effect of fintech on financial access. Also, causal research design is adopted the data is historic and not subject to manipulating.

Model Specification

The model specified for this study is patterned after the work of Iwedi et al (2023). they worked on effect of financial technology on financial inclusion in Nigeria and formulated a mathematical model as follows: $DEPt = \alpha o + \beta 1\ POSt + \beta 2\ ATMt + \beta 3\ MOBt + \beta 4\ WEBt + \mu$. For the purpose of this study the model was adopted with just and modified. Thus, the model this study is thus:

Financial Access = *f*(Financial Technology)

$USD = f(, VATM, VWEB,)$ ..... *(i)*

$ABS = f(, VATM, VWEB,)$ ..... *(ii)*

$USD_t = \alpha_o + \beta_1 VATM_t + \beta_2 VWEB_t + \mu_t$ ..... *(ii)*

$ABS_t = \alpha_o + \beta_1 VATM_t + \beta_2 VWEB_t + \mu_t$ ..... *(iv)*

Where;

USD = Usage Dimension

ABS = Availability of Banking Service

VATM = Volume of Automated Teller Machine Transactions

VWEB = Volume of Web Payment Transactions

t = period

αo = Intercept

β_1, β_2, β_3, β_4 = Coefficient of the independent variables

μ = Error Term

Table 1: Description of Variables

S/N	Types	Variables	Measure Proxy	Sources
1	Independent	Financial Technology	Automated Teller Machine	CBN Statistical Bulletin (2022)
			Web Banking Technology	CBN Statistical Bulletin (2022)
2	Dependent	Financial Access	Usage Dimension (Bank Credit as a Percentage of GDP)	CBN Statistical Bulletin (2022)
			Availability of Banking Services (the Number of Bank Branches Per 1000 Population)	CBN Statistical bulletin (2022) and World Bank Annual Report.

Source: Author's Compilation (2024)

Method of Data Analysis

The data collected were analyzed using Augment Dickey Fuller Test for stationary, other pre-regression test conducted include, descriptive statistics to check the behaviour of the variables, and correlation test to check the direction of the variables. Autoregressive Distributed Lag Model was conducted and robustness tests conducted include Breusch Godfrey LM Test for Serial Correlation, CUSUM Test and CUSUM Square Test for model stability, and causality test was conducted to check the cause of the independent variables against the dependent variable. ARDL is preferred over other methods because it takes care of mixed order of integration, suitable for small sample, and also captures short run dynamics and long run equilibrium. In ARDL Bond Testing is incorporated (Pasaran et al., 2001) whereas, in Vector Autoregressive, counteraction is conducted separately using Johansen and Error Correction Method assumes that co-integration is already established.

DATA ANALYSIS AND INTERPRETATION

Table 2: Stationarity Test Summary

Variables	ADF	t-statistics	Probability	Order Of Integration	Remark
USD	-3.708582	-3.144920	0.0198	I(0)	Stationary
ASB	-6.384881	-3.175352	0.0004	I(1)	Stationary
VATM	3.281265	-3.175352	0.0423	I(1)	Stationary
VWEB	-4.069156	-3.144920	0.0109	I(0)	Stationary

Source: Author's Compilation (2025)

The summary of the stationarity table showed that the variables exhibit a mixed order of integration. The mixed order of integration warrants the use of Autoregressive Distributed Lag Model.

Table 3: Descriptive Statistics

	USD	ABS	VATM	VWEB
Mean	18.79351	0.029655	6.64E+08	2.00E+09
Median	18.73707	0.029626	5.12E+08	11034804
Maximum	22.75484	0.036091	1.60E+09	1.41E+10
Minimum	15.06752	0.022779	60133610	1601086.
Observations	14	14	14	14

Source: Author's Compilation (2025).

The descriptive statistics show the nature of the data. The mean showed the averages the median shows the middle number while maximum and the minimum showed the largest and the smallest number. From Table 3 above, it's revealed that the average volume of ATM transaction for the period under study is 664 million while volume of WEB transaction stood averagely at 200 million over the period studied. The percentage of bank credit to GDP stood at 18.7% for the period study while there are averagely 0.0297 bank branches per 1000 persons. This showed that at least 29,000 people are using one bank branch.

The middle percentage of Usage dimension for the period studied is 18.74%. At half of the years the credit is higher while at the other half of the years the credit is lower throughout the period under study. 0.0296268 is the middle number of bank customers per one bank branch. Half of branches recorded higher while the other half recorded lower. The middle number of ATM transaction recorded for the period studied was about 512 million. In half of the years the volume of ATM transaction recorded less while the other half recorded higher than 512 million. For the volume of WEB transaction, 110034804 million web transactions were conducted. Half of the years recorded less the value while half recorded greater than the value above.

The highest percentage of Bank credit as a percentage of GDP pas 22.8%, the highest number of bank branches per 1000 persons is 0.036, the highest volume of ATM transaction is 1.60 billion, the highest volume of WEB transaction is 1.41 billion. The least percentage of credit

advanced for the period under study was 15%, the least number of customers per bank branch was 0.02, the least volume of ATM transaction was 60133610 million, and 1601086 million for volume of WEB transaction.

Table 4: Correlation Table

	USD	VATM	VWEB	ABS
USD	1			
VATM	-0.0891	1		
VWEB	0.0494	0.8471	1	
ABS	0.11544	-0.9429	-0.6752	1

Author's compilation (2025)

Table 5 above contain the correlation of the variables. This depicts the direction of association of one variable with another in the model. Usage dimension is inversely related with VATM but directly associated with VWEB and ABS. The VATM has a direct correlation with VWEB but inversely related with ABS. ABS has an inverse relationship with VWEB. This implies that increase in Usage dimension reduce the volume of ATM transaction, also increase in in volume of ATM transaction reduces the number people visiting bank branches. But increase in Usage dimension increase volume of WEB transaction and Available of banking service but at a weak level. As ATM volume increases volume of WEB payment increases but available of banking services reduces. Finally, increase in volume of WEB payment strongly decreases number of bank branches as many people reduce bank visit.

Table 5: Bound Test

F-Bounds Test		**Null Hypothesis: No levels relationship**		
Test Statistic	Value	Signif.	I(0)	I(1)
Asymptotic: n=1000				
F-statistic	7.161077	10%	2.63	3.35
K	2	5%	3.1	3.87
		2.5%	3.55	4.38
		1%	4.13	5

Author's Compilation (2024)

Table 6: ARDL Short-Run Estimation

Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
D(VATM)	-2.16E-09	2.59E-09	-0.834531	0.4315
D(VWEB)	1.82E-10	2.33E-10	0.780706	0.4606
CointEq(-1)*	-0.799115	0.209208	-3.819706	0.0065

Author's Compilation (2025)

Table 6 above is the ARDL estimation of the short-run, VATM has a negative and statistically insignificant impact on the dimension of usage at 5% significance level with the coefficient of -2.16E-09 and the probability of 0.4315, while VWEB is statistically insignificant but a positive effect on the usage dimension. The coefficient is 1.82E-10 while the probability value 0.4606.

The error correction term (CointEq(1)) has a negative coefficient of -0.799115 and the probability of 0.0065 which is significant at less than 5%. This showed that financial technology is co-integrating with financial access. The speed of adjustment from disequilibrium is 79.91%.

Table 7: ARDL Estimation

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Short-Run				
D(VATM)	-7.08E-12	2.08E-12	-3.399269	0.0094
D(VWEB)	3.27E-14	1.04E-13	0.313419	0.7620
CointEq(-1)*	-0.649875	0.103552	-6.275821	0.0002
Long-Run				
VATM	-1.09E-11	1.93E-12	-5.640828	0.0005
VWEB	7.11E-13	3.00E-13	2.367397	0.0454
C	0.035736	0.001032	34.61155	0.0000

Source: Author's Compilation (2025)

Table 7 showed the short-run and the long-run ARDL estimation of financial technology on availability of banking service. In the short-run. The estimation showed that ATM has a negative but positive significant impact on availability of banking services in the short-run with the coefficient of -7.08E-12 and the probability of 0.0094, while WEB has a positive but insignificant impact on the availability of banking services with the coefficient of 3.27E-14 and the probability of 0.7620. In the long-run ATM and WEB are statistically significant of 0.0005 and 0.0454 respectively. In the long-run, ATM has a negative effect while WEB has a positive effect with the coefficient of -1.09E-11 and 7.11E-13 respectively.

The error correction Term is negative and statistically significant with the coefficient of -0.649875 and the probability of 0.0002. this shows a disequilibrium of 64.99% which needs to be balanced in the short-run. The result of the error correction term indicated that there is a cointegration of the financial technology and availability of banking service.

Test of Hypotheses

Hypothesis one stated that volume of automated teller machine has significant impact on dimension of usage. This hypothesis is rejected in the short-run with the probability value of 0.4315 which is greater than 0.05, and a negative coefficient of -2.16. Hypothesis two stated that volume of web payment transactions has significant impact on dimension of usage. The hypothesis is rejected with the outcome of the short-run ARDL estimation which has the

probability of 0.4606. The null hypothesis is accepted because the probability value is greater than the 5% significance level. Hypothesis three states that volume of ATM has significant impact on availability of banking service. This hypothesis is accepted in the short-run and in the long-run. ATM has a probability value of 0.0092 in the short run, while in the long ATM has a probability value of 0.0005. Hypothesis four stated that volume of web pay transactions has significant impact on availability of banking service. This hypothesis is rejected in the short run but accepted in the long-run. The confirmation of this is with the probability value of 0.7620 and 0.0454 respectively.

DISCUSSION OF FINDINGS

The findings of this study on the first two hypotheses showed that there is no long-run cointegrated relationship between financial technology and financial access when financial technology is measured against the usage dimension which is bank credit as a percentage of GDP. This means the volume of ATM transactions and the volume of WEB transaction do not increase the credit that bank in giving. This showed that the volume of credit that is advanced by bank do not enhance access to finance. It is concluded that the volume of ATM and POS transaction did not increase bank credit to customers. On a more serious note, it is discovered from result that when there is increase in volume of ATM, there is a decrease in the percentage of bank credit to GDP. But volume of web transaction has an insignificant increase in the percentage of bank credit to GDP. While going through literatures, there was no specific study that tested financial technology on financial access using dimension of usage. Most of the studies in the field such as Haruna and Dibal (2024), who studied financial technology on financial inclusion found ATM to be significant in the long-run which contradict the finding of this study, Nwome et al (2024) studied financial innovation on financial inclusion and found that financial innovation can promote financial inclusion based on the proxies they chose. Li et al. (2024) studied digital payments which are often used a measure of financial innovation on trade and found that they enhance international trade. Asif et al. (2022) studied fintech and financial inclusion in India and found it to be impactful in including the financially excluded people. Ugwuanyi and Okore (2022) conducted a study on fintech and financial inclusion where they collected primary data and arrived at a finding that Fintech eases accessibility to financial service deliver which include borrowing. Though they did not specify whether the borrowing is from the banks. Chukwunulu (2019) looked at financial innovation on it impact on economic growth and found ATM to have significant impact. In agreement with this study Islam et al. (2022) from Pakistan found an insignificant impact on financial inclusion when they studied financial technology on financial service delivery.

Financial technology when measure by the availability of banking service which is the number of bank branch per 1000 population found that ATM has a very significant but negative impact on availability of banking service both in the long run and short-run. Although volume of web transaction has positive insignificant impact on financial access measured by availability of banking service but there is a positive significant impact of financial technology in the long-

run at 10%. It is said that the financial technology devices complement deficiency of having 1000 population using one bank branch at a time which is not feasible. It can be said that financial technology improves financial access because those who would not have had access to banking service because of population in the bank can easily serve themselves at the ATM terminal of web payment. In line with Haruna and Dibal (2024), Nwome et al. (2024), Li et al. (2024), Asif et al. (2023), Ugwuanyi and Okore (2022) and Chukwunulu (2019), the study agreed that financial technology increases financial access in the short-run and long-run. But Islam et al. (2022) has a different submission that did not agree with this study.

Looking at how financial technology could not create financial access in term of getting access to credit facility, it is agreed that the factors that Caamara and Tuesta (2014) identified as other means to be considered in creating access to financing such as income level, economic development level, welfare, cultural habit and regulation are true and cannot be taken for granted. One could recommend that these factors should be considered too instead of relying of the financial technology product to provide financial access.

Diagnostic Tests

The following tests were conducted to check the strength of the model specified. The table below showed that there is positive autocorrelation in the first model but no autocorrelation in the second model, there is no serial correlation in both models. The Ramsey RESET Test showed that the model specification has no error in specifying. The CUSUM Test and the CUSUM Square Test for the two models in figures 1 to 4 are all with the 5% significance level which showed that the models are all stable.

Table 8: Diagnostic Test

Specification	**Stat (P-Value)**		**Conclusion**
	Model I	*Model II*	
Durbin Watson (autocorrelation)	1.580237	2.013496	Positive autocorrelation and no autocorrelation
Bruesch-Godfrey (serial correlation)	0.3846	0.7481	No serial correlation
Jarque-Bera (normality)	3.749954(0.153358)	0.716552(0.69880)	Normally Distributed
Ramsey RESET Test	0.461290(0.6569)	1.230720(0.2582)	No Model specification error
R^2	63.10%	75.40%	

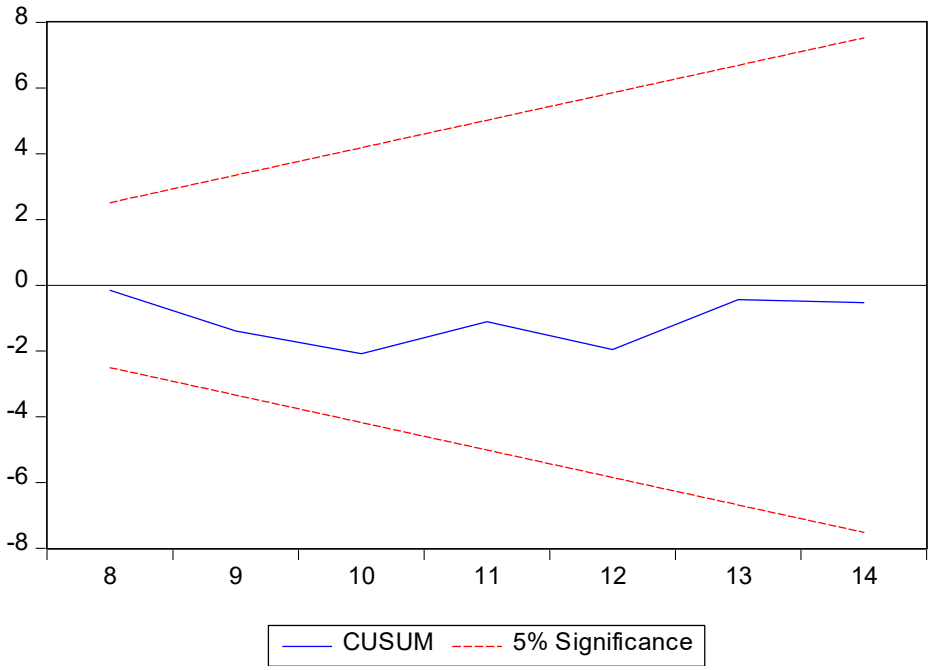


Figure 1: CUSUM Test for Model One

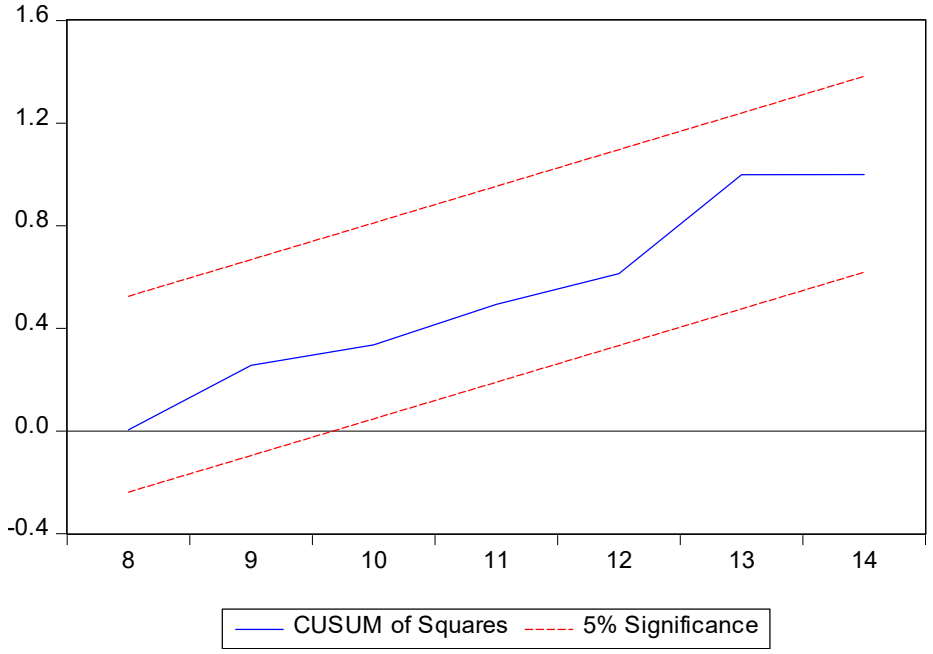


Figure 2: CUSUM of Square for Model One

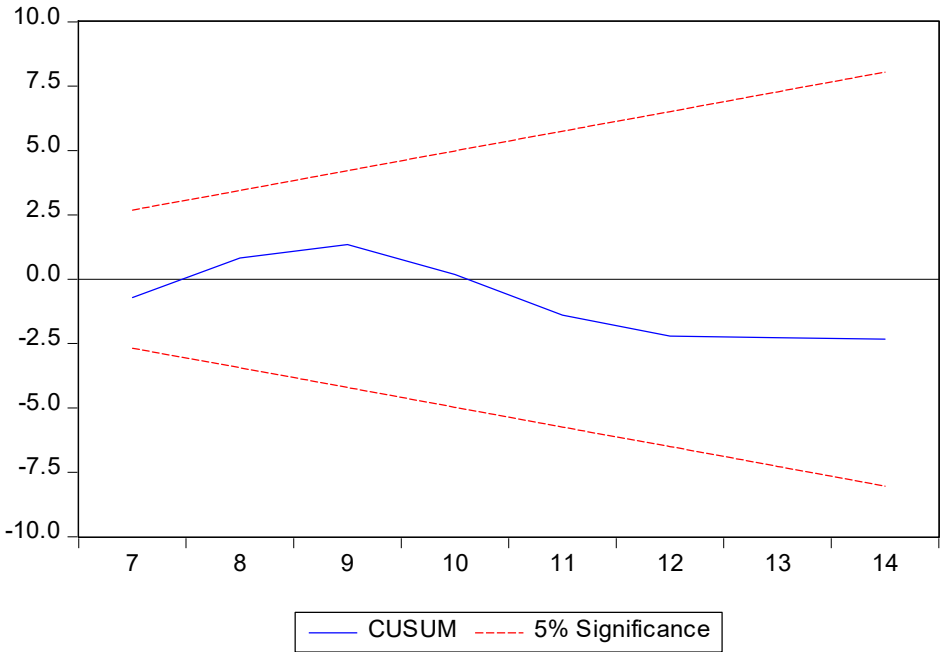


Figure 3: CUSUM Test for Model Two

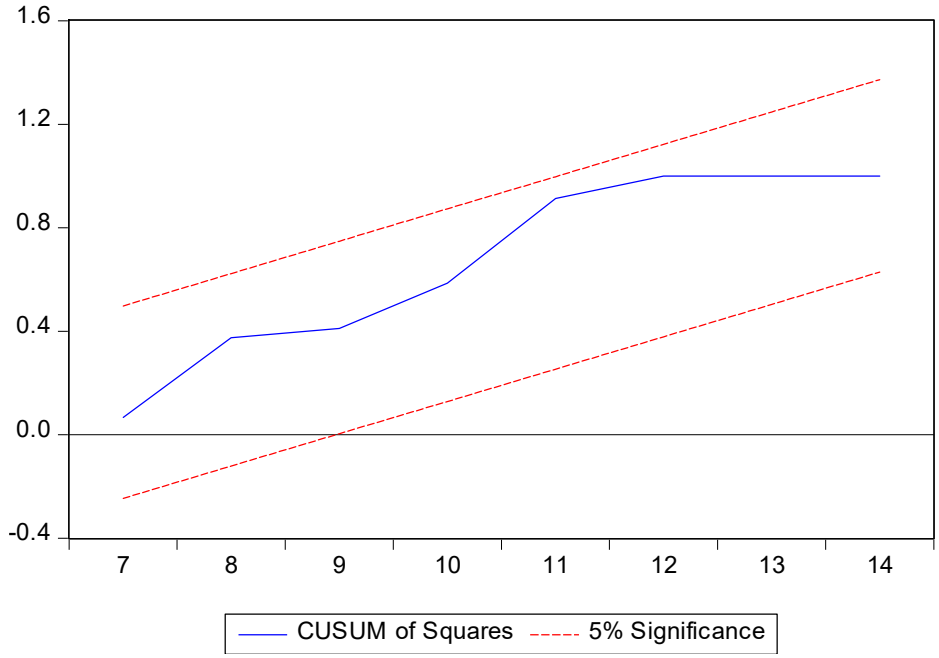


Figure 4: CUSUM of Square for Model Two

CONCLUSION AND RECOMMENDATIONS

This study examined the impact of financial technology on creating financial access in Nigeria. The study found that financial technology has significant impact in creating financial access when measure on availability banking usage. But when financial technology proxies (Automated Teller Machine, and web pay transaction) are tested against dimension of usage they are not significant.

The following recommendations are made:

1. Since ATM machine transaction cannot create financial access because of level of income, illiteracy, lack of economic development, poor welfare among other factor, therefore, policy makers should tackle the background challenges without leaving the prevailing ones not tackled. By enhancing the factors mentioned above, the repulsive effect can cause financial access.
2. The masses should be educated on how to use web payment service as well as strengthening payment sites against cyber fraud.

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