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EFFECT OF FINANCIAL TECHNOLOGY ON ECONOMIC GROWTH IN NIGERIA

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ABSTRACT

This research investigated how financial technology affects the economic growth of Nigeria. The focus is on the impact of internet and mobile banking, point of sale (POS), and banking agencies on the country's economic growth, as well as the relationship among these factors and growth. Expo-facto research design is used in this study. Secondary data for the study came from the Central Bank of Nigeria's Statistical Bulletin for the years 2013–2022, and the study used a descriptive research design. With the use of E-view 9, collected data were analyzed via regression. According to the study's data, financial agencies, internet, mobile gadgets, and point-of-sale banking all significantly affected Nigeria's economic expansion. It concluded that financial technology has significantly affected Nigeria's economic expansion. Thus, in order to boost consumer confidence, the study suggests that policymakers also focus on reducing the hazards related to mobile banking. Policymakers must develop guidelines to allow financial firms to improve their online banking services since doing so will hasten economic expansion. In order to boost consumer confidence, policymakers should also endeavor to reduce the dangers connected with online banking. Policymakers must develop guidelines to allow financial institutions to improve their online banking services because doing so will hasten the expansion of the economy. Legislators ought to focus on reducing the hazards linked to online banking, as this will boost customer trust.

Keywords: *Financial technology, Inflation Rate, Unemployment Rate, Financial Technology, Economic Growth*

INTRODUCTION

Since 2010, there has been a significant increase in the use of financial technology or fintech (Jagathi, 2021). Financial institutions—banks and microfinance companies, in particular—have come to understand that using information technology enables them to provide better customer service, and access a larger market at a lesser cost (Bochaberi & Job, 2021). Many can now easily access financial services because fintech's expanded reach makes it easier to save, borrow money, and invest in enterprises. According to Njoroge (2021), the rise in investments that follows would benefit the economy by contributing to economic growth.

Financial technology is any technical advancement that increases the efficiency of the financial sector (Sheleg & Kohali, 2015). FinTech includes a numerous of solutions designed to increase client satisfaction, responsiveness, and efficiency (Klapper, 2016). The emergence of mobile lending, distributed ledger technology for faster transactions, cryptocurrencies, mobile banking, and the use of data analytics to understand consumer behavior—all essential components of fintech—have revolutionized the financial industry. Fintech is positioned as a means to an end rather than an end in and of itself in Nigeria thanks to the adoption of financial technology including mobile banking, online banking, ATMs, and point-of-sale agents.

Executives must respond creatively to continuous environmental changes driven by external forces such as globalization, changing client wants, market competition, and technology improvements (Thompson et. al., 2013). Fintech uses innovative tactics to gain a competitive edge, expand into new areas, and boost market share as part of its growth plan. As traditional services and goods become less valuable due to increased competition in global markets, fintech is becoming increasingly important for businesses (Agatha, 2022).

Fintech is into practice in a number of ways, such as agency banking, ATMs, online banking, and mobile banking. Peer-to-peer lending enables direct lending between individuals without the involvement of traditional banks, whereas internet banking offers financial services via a bank's website (Zins & Weill, 2016).

An increase in the average production produced by each individual, often assessed annually, is referred to as economic growth (Boldeanu & Constantinescu, 2015). It includes the rise in the production of commodities and represents the rate of change in output or national revenue over a given time period (David & Ampah, 2018). An increase in the per capita GDP or other measures of aggregate income can also be used to gauge economic growth (Ofor & Alagba, 2019). Haller (2012) stated that economic growth is the result of better resource use and higher production capacity, with both having a positive impact on the economy and the living standards of the populace.

Economic expansion increases investor and consumer expectations of growth. This will boost corporate investment and consumer spending, which in turn will fuel the economy's demand and money flow (Mogaka et. al., 2015). In the long run, it results in higher productivity, more job opportunities, reduced unemployment rates, and higher living standards because it makes wealth redistribution simpler.

The most popular measure of economic growth is GDP, which offers a thorough analysis of an economy's sectoral growth rates (Haller, 2012). It measures the strength of business activity and acts as a barometer for all economic activities (Aziz & Azmi, 2017). Another measure of economic growth that is influenced by population and capital growth is the real gross national income (GNI) growth. Raising labor, capital, and total labor or capital efficiency are all necessary to raise real GNI per capita (Asabere, *et. al.*, 2016). In line with earlier research, this

study measures economic growth using the GDP growth rate (Mogaka et al., 2015; Ofor & Alagba, 2019).

Aim, Objectives, and Hyptheses of Study

The aim of this study is to examine the effect of financial technology on economic growth in Nigeria. The specific objectives are to examine the effect of mobile banking on the economic growth in Nigeria**,** determine the effect of internet banking on the economic growth in Nigeria, ascertain the effect of Point of Sales (POS) on the economic growth in Nigeria, and examine the effect of banking agency on the economic growth in Nigeria. The following are the null hypotheses of this study.

H_{01}: Mobile banking does not have significant impact on the economic growth in Nigeria.
H_{02}: Internet banking does not have significant impact on the economic growth in Nigeria.
H_{03}: POS banking does not have significant impact on the economic growth in Nigeria.
H_{04}: There is no significant relationship between banking agency and economic growth in Nigeria

Significance of the Study

The findings of this study will add to the body of theoretical and empirical research on financial technology and economic growth. The results will also aid in the creation of new theories since they will shed light on the flaws and applicability of existing theories to the study's variables.
The government and the regulator, Central Bank of Nigeria (CBN), will find the research findings useful in creating regulations for the population. The results of the study will also be useful to investors who are thinking about making investments in the country.

The conclusions will help practitioners and investors alike understand the relationship between the two variables. This is crucial for managing fintech, streamlining operations, and fostering confidence among corporate stakeholders—all of which will ultimately maximize economic growth—as well as for ensuring a strong management team with a diversity of perspectives and competencies.

LITERATURE REVIEW

Conceptual Review

Financial Technology (FinTech)

One of the most important developments in the banking sector of the 25 century is financial technology, or fintech. This has allowed banking to operate outside of traditional locations and take place anywhere with the use of electronic devices such as computers, tablets, smart TVs, ATMs, and mobile phones. Transactions like fund transfers, account openings, balance inquiries, and airtime purchases can all be started or finished remotely (Jagathi, 2021).

Fintech has been characterized in a variety of ways by researchers. It is defined by (Jagathi, 2021) as the provision of banking services via various electronic platforms, such as digital televisions, mobile phones, and PCs. This definition, however, ignores other fintech platforms, which are the subject of this study, such as point-of-sale systems, internet banking, and ATMs. Fintech, with an emphasis on its broader technological components, is defined by Bochaberi and Job (2021), as the use of information and communication technology by banks to conduct transactions and connect with stakeholders..Fintech is emphasized as an electronic

payment method that eliminates the need for real currency. For Ayman and Poul (2017), Fintech is the offering of banking services using mobile phones and other telecommunications devices.

These definitions suggest that the term "fintech" refers to the delivery of banking services and goods via electronic channels like smartphones, the internet, automated teller machines (ATMs), and point-of-sale systems. Fintech is essentially the provision of banking services via electronic distribution channels. Although fintech has been around for a while, thanks to ATMs and mobile phone transactions, its latest online metamorphosis has greatly increased its reach, making financial transactions easier for banks as well as clients (Njoroge, 2021). All that has informed our view of Fintech adopted for our research here.

Fintech provides a range of services that include managing accounts, getting personalized information, and performing bank transactions. Fintech, taken more broadly, is the use of technology to facilitate the provision of financial services to clients who utilize communication tools in addition to traditional communication channels. An ATM is a device that dispenses and deposits cash without requiring a trip to the bank. It provides a range of rapid teller services, including bill payment, fund transfers, airtime purchases, and balance inquiries. ATMs are available with or without a card, and they are open around-the-clock (Sheleg & Kohali, 2015).

Payments for transactions utilizing a card and an electronic device are made at the point of sale (POS), sometimes referred to as the checkout or point of purchase (POP). A point-of-sale terminal (POS) creates receipts and uses an intuitive interface to control the sales process. It keeps track of sales for tax and commercial purposes, but there's growing concern over the use of illicit software, such as "zappers," to create false records and avoid paying taxes (Klapper, 2016). Customers using internet banking can transact money on a safe website run by a financial organization such as credit unions, societies, or retail or virtual banks. Access to account balances, interest rates, currency rates, and different transactions are all made available by it. If not conducted on a secure platform, it can be vulnerable to online fraud and hacking (Thompson et al., 2013).

Economic Growth

An increase in the average product produced per person, usually assessed annually, is referred to as economic growth (Boldeanu & Constantinescu, 2015). According to David and Ampah (2018), it also refers to the shift in output or national revenue during a given time period, which shows an increase in the production of products and services. A rise in the gross domestic product (GDP) per capita or other income measures can occasionally be used to identify this expansion (Ofor & Alagba, 2019). According to Haller (2012), economic growth is a process that involves favorable structural, quantitative, and qualitative improvements that raise living standards and improve the economy as a whole. These changes are made possible by greater production capacity and effective resource usage.

The anticipation of sustained expansion in the economy by investors and consumers drives up consumer spending and corporate investments, which, in turn, increases demand and money circulation in the economy (Mogaka et al., 2015). Boldeanu and Constantinescu (2015) assert that it also facilitates easier economic redistribution for the populace, resulting in extended growth periods that might raise living standards, generate employment, and lower unemployment rates.

Determinants of Economic growth

As previously stated, the literature is of the consensus that unemployment rate, inflation, and financial technology (fintech) all have an impact on economic growth (Athanasoglou et al., 2005).

Financial Technology

In order to allocate resources effectively and distribute risks to those who can take advantage of them, fintech is essential to accelerating economic growth. It is anticipated to improve financial intermediaries' efficiency and financial inclusion (Rasheed et al., 2016). According Rasheed et al., 2016, fintech transactions increase the accessibility of saving and borrowing products and improve the long-term viability of financial institutions (Rasheed et al., 2016).

Inflation Rate

An economy can be greatly impacted by inflation rates. Inflation-related price fluctuations and increases result in increased product prices, which have an impact on businesses' financial performance. Elevated rates of inflation can impede commercial operations and diminish companies' profits, ultimately resulting in increased interest rates. Real economic activity and inflation have a negative relationship, while market performance and inflation have a positive relationship.

Unemployment Rate

Unemployment can upset the delicate balance between labor and stock markets, resulting in lower discretionary income and a decline in the demand for stocks. GDP, inflation, unemployment, remittances, interest rates, capital supply and currency rates are all important indicators of economic prosperity. The factors that cause changes in stock prices also impact prospects for the future.

Financial Technology and Economic Growth

Access to finance encourages the creation of jobs, particularly in rural regions, which raises disposable income and spurs overall economic growth (Lenka & Sharma, 2017). Inadequate fintech implementation might impair the performance of financial institutions by restricting companies' access to capital (Neaime & Gaysset, 2018). Because fintech makes it easier for enterprises to get finance, more investments are made, which improves the performance of financial institutions (Neaime & Gaysset, 2018).

Theoretical Framework

Disruptive Innovation Theory

The disruptive innovation hypothesis developed by Christensen (1997) served as the basis for this investigation. It makes the argument that innovations, particularly in pricey markets, can completely transform markets by enhancing accessibility, affordability, and usability. In unappealing marketplaces, when new items alter the market, disruptive innovation is relevant. It is imperative to comprehend the workings of disruptive technologies (Kostoff et al., 2004). Businesses begin by offering reasonably priced goods and services to consumers in the lower end of the market. Products that were previously out of reach are now accessible thanks to disruptive innovation (Christensen et al., 2006). Regulations and competition, on the other hand, affect consumer access. According to the notion, businesses catering to affluent customers may not

always be the most inventive (Kostoff et al., 2004). To grow, a lot of creative businesses focus on a variety of clientele (Christensen et al., 2006). According to the notion, fintech has a favorable effect on economic growth. It has drawn criticism for not providing instructions on how to recognize disruptive technologies (Christensen et al., 2006). Even so, it still applies to how technology contributes to growth.

Empirical Review

An interpretative in-depth case study was carried out by Simon, Michael, and Thomas (2019) on the development and application of a Digital Transmission System (DTS) by a European financial services firm. In contrast to upfront strategic IS planning, the study showed that emergent strategy making is embodied in digital strategy making. The study's conclusion was that a DTS involves a dynamic iteration between learning and doing and is always changing, with no apparent end.

Three major obstacles and moral dilemmas were highlighted by Chang, Baudier, Zhang, Xu, Zhang, and Arami (2020) as they discussed the revolution and effects of FinTech and Blockchain in the financial sector. Using a qualitative methodology that involved sixteen expert interviews, they discovered common knowledge concealed in Blockchain and examined it using the TPB technique. Hossain (2021) investigated how Bangladesh's state-owned commercial banks' profitability was impacted by e-banking technology. A year after implementation, there was an improvement in ROI, but in the first year, there was a significant negative impact on ROA, ROE, and net interest margin, according to panel data analysis using pooled OLS estimates.

The relationship between the quantity of ATMs and the profitability of Indian banks was examined by Jagathi (2021). Data was gathered from the annual reports of two public and two private sector banks over a period of three years. The study discovered a favorable relationship between ATM use and financial success. Using information from the 2017 Indonesian National Social and Economic Survey and the Binary Logistic model, Dawood et al. (2019) investigated the impact of mobile loans on household poverty in Indonesia. According to the study, mobile financing lowered household absolute poverty and lessened the incentives for rural-to-urban migration. In Nigeria, Okoye, Omankhanlen, Okoh, and Isibor (2018) looked into how technology-based financial services affected client satisfaction. Their analysis, which was based on replies from 120 bank clients, demonstrated that technology significantly raised consumer happiness.

Njoroge (2021) used data from the Central Bank of Kenya and a descriptive study methodology to investigate the effects of agency banking on Nigeria's financial sector. The entire financial industry was the topic of the 2011–2020 study period. Using secondary data from 2014 to 2018, Ogweno (2019) investigated the possible effects of fintech adoption on Kenya's supervised MFIs. The study discovered that the financial performance of regulated MFIs is not greatly impacted by variables like agency banking and ATM accessibility.

METHODOLOGY

This study evaluated how different financial technology proxies affect access to economic development in order to investigate the effect of financial technology on economic growth using a descriptive research design. It is thought that the 10-year understudied period from 2013 to 2022 is adequate for examining the link and separating the impact of other variables.

From 2013 to 2022, all financial banks in Nigeria provided their understudied financial technology characteristics, which were all taken into account in this study. To be more precise, points of sale, automated teller machines, and online banking were chosen in order to evaluate their influence on economic growth.

All of the information used in this study will come from secondary sources. The primary sources of this information were the Central Bank of Nigeria Statistical Bulletin, the annual reports of the chosen banks included in the official daily lists of the Nigerian Stock Exchange (NSE) market, as well as secondary sources including books, journals, articles, and the internet. Eleven years are covered by the data (2013–2022).

To ascertain the impact of financial technology on Nigeria's economic expansion. The following regression model will be used by the researcher to do a regression analysis. The equation for regression is;

Model Specification

$Y_t = BX_t + \mu_t$ ……..(1)

$\mathbf{GDP}_t = a + a_1 \mathbf{ATM}_t + a_2 \mathbf{POS}_t + a_3 \mathbf{IB}_t + \mu_t$ ……(2) where

GDP_t = Gross Domestic Product
a = Constant Parameter
$a_1 – a_3$ = Coefficient of independent variable
$\mathbf{ATM_t}$ = Automated Teller Machines
$\mathbf{POS}_t$ = Point of Sales
$\mathbf{IB_t}$ = Internet Banking
μ_t = error term

DATA PRESENTATION AND ANALYSIS

Descriptive Analysis

Table 1: Summary of Descriptive Statistics

	GDP	Mobile Banking	POS	ATM	IB
Mean	64822.84	1252.103	1031.512	3856.906	204.2854
Median	68314.94	394.4105	380.2921	3825.065	87.86565
Maximum	72094.09	5121.095	3597.097	6890.675	675.9167
Minimum	50564.26	1.270000	11.03000	399.7100	25.05000
Std. Dev.	7023.291	1888.991	1314.680	2409.230	230.8577
Skewness	-0.823452	1.466120	1.017569	-0.094629	1.154839
Kurtosis	2.350129	3.515370	2.458414	1.564809	2.656382
Jarque-Bera	1.567311	4.431818	2.217549	1.047795	2.726341
Probability	0.456733	0.109054	0.329963	0.592208	0.255848

Source: EViews 10 Output (2023)

Internet Banking (IB); Automated Teller Machines (ATM); Point of Sale (POS) transactions

The GDP of the dataset (in Table 1) is slightly left-skewed, with a mean of roughly 64,822.84 and a median of 68,314.94. 72,094.09 is the maximum GDP value, and 50,564.26 is the least GDP value. The distribution around the mean is indicated by the standard deviation, which is roughly 7,023.291. The positive kurtosis (2.350129) implies that the distribution has heavier tails than a normal distribution.

With a lower median of 394.4105 and a mean of around 1252.103, mobile banking transactions show a right-skewed distribution with some big values. With a standard deviation of around 1888.991, the biggest transaction recorded is 5121.095, while the lowest is 1.27. This indicates a significant degree of fluctuation. The kurtosis (3.515370) and positive skewness (1.466120) both point to the existence of extreme values or outliers.

The distribution of POS transactions is right-skewed, with a mean of around 1031.512 and a median of 380.2921. With a standard deviation of almost 1314.680, the range is between 11.03 and 3597.097, indicating a significant dispersion. Both the kurtosis (2.458414) and positive skewness (1.017569) suggest that the distribution has heavier tails.

The distribution of ATM transactions appears to be almost symmetrical, with a mean of about 3856.906, which is near the median of 3825.065. With a standard deviation of roughly 2409.230 and a range of 399.71 to 6890.675, this data shows significant variability. A distribution with lighter tails is suggested by the kurtosis of 1.564809 and the minor negative skewness of -0.094629.

The distribution of Internet Banking Transactions (IB) is right-skewed, with a mean of around 204.2854 and a median of 87.86565. The mean is influenced by greater values. With a standard deviation of roughly 230.8577 and a range of 25.05 to 675.9167, the variability is moderate. The kurtosis (2.656382) and positive skewness (1.154839) point to the possibility of extreme values or outliers.

Correlation Analysis

Table 2 Correlation Matrix

	GDP	Mobile Banking	POS	ATM	IB_
GDP	1.000000				
Mobile Banking	0.612520	1.000000			
POS	0.688128	0.965321	1.000000		
ATM	0.921479	0.751500	0.854176	1.000000	
IB	0.601572	0.829164	0.925984	0.780819	1.000000

Source: EViews 10 Output (2023)

GDP and Mobile Banking

GDP and mobile banking have a correlation coefficient of 0.612520. The two variables appear to have a reasonably strong linear relationship, based on the positive correlation. Transactions through mobile banking typically rise in tandem with GDP growth.

GDP and POS Transactions

GDP and POS have a correlation coefficient of 0.688128. The GDP and POS transactions have a quite strong linear relationship, as indicated by this positive correlation. POS transactions typically rise along with GDP.

GDP and ATM Transactions

GDP and ATM have a correlation value of 0.921479. There may be a substantial linear relationship between GDP and ATM transactions based on this strong positive correlation. ATM transactions typically grow significantly as GDP rises.

GDP and Internet Banking (IB) Transactions

The reasonably strong positive linear association between GDP and IB is indicated by the correlation value of 0.601572. This implies that there is a tendency for Internet banking transactions to rise in tandem with GDP growth.

In conclusion, the correlation matrix shows that all other variables—POS, ATM, Internet, and mobile banking transactions—and GDP are positively connected. GDP and ATM Transactions have the highest connection (0.921479), while GDP and POS Transactions have the second-highest correlation (0.688128). These findings imply that rising GDP-based economic growth is associated with rising use of different banking services, especially ATM and POS transactions.

Hypotheses Testing

H_{01}: Mobile banking does not have significant impact on the economic growth in Nigeria.

Table 3 Regression Result for Hypothesis 1

Dependent Variable: GDP				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
Mobile Banking	2.277358	0.929368	2.450437	0.0342
C	61971.36	2044.334	30.31372	0.0000
R-squared	0.375181	Mean dependent var		64822.84
Adjusted R-squared	0.312699	S.D. dependent var		7023.291
F-statistic	6.004641	Durbin-Watson stat		1.882536
Prob(F-statistic)	0.034232			

Source: EViews 10 Output (2023)

The findings of a regression analysis evaluating the effect of mobile banking on Nigeria's GDP (gross domestic product) growth are shown in Table 3. The correlation for mobile banking is 2.277358 ($p = 0.0342$), meaning that a statistically significant rise in GDP of roughly 2.28 is connected with an average one-unit increase in mobile banking. According to the R-squared value (0.375181), which indicates the model's goodness of fit, Mobile Banking accounts for

about 37.52% of the GDP variability. The F-statistic (F = 6.004641, p = 0.034232) supports the model's overall relevance. Furthermore, there is no discernible autocorrelation in the model, according to the Durbin-Watson statistic (1.882536).

We reject the null hypothesis (H01), which states that "Mobile banking does not have a significant impact on economic growth in Nigeria," in light of these findings. Rather, the results point to a strong positive correlation between GDP and mobile banking, suggesting that Nigeria's economic growth tends to expand in tandem with rising mobile banking usage.

H_{02}: Internet banking does not have significant impact on the economic growth in Nigeria.

Table 4 Regression Result for Hypothesis 2

Dependent Variable: GDP				
Method: Least Squares				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
Internet banking	18.30140	7.685010	2.381441	0.0385
C	61084.13	2313.003	26.40901	0.0000
R-squared	0.361889	Mean dependent var		64822.84
Adjusted R-squared	0.298078	S.D. dependent var		7023.291
F-statistic	5.671260	Durbin-Watson stat		1.792627
Prob(F-statistic)	0.038518			

Source: EViews 10 Output (2023)

The findings of a regression analysis that looked at how Internet banking affected Nigeria's GDP (gross domestic product) growth are shown in Table 4. The coefficient for Internet banking is 18.30140 (p = 0.0385), meaning that a statistically significant rise in GDP of about $18.30 is typically associated with a one-unit increase in Internet banking. The regression model's goodness of fit, as indicated by the R-squared value (0.361889), indicates that Internet banking accounts for approximately 36.19% of GDP variability. The F-statistic (F = 5.671260, p = 0.038518) supports the model's overall significance. Furthermore, there is no discernible autocorrelation in the model, according to the Durbin-Watson statistic (1.792627).

We reject the null hypothesis (H02), which states that "Internet banking does not have a significant impact on economic growth in Nigeria," in light of these findings. Rather, the results point to a strong positive correlation between GDP and Internet banking, suggesting that Nigeria's economic growth tends to rise in tandem with rising Internet banking usage.

H_{03}: POS banking does not have significant impact on the economic growth in Nigeria.

Table 5 Regression Result for Hypothesis 3

Dependent Variable: GDP				
Method: Least Squares				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
POS	3.676121	1.225777	2.999013	0.0134
C	61030.88	1994.806	30.59489	0.0000
R-squared	0.473520	Mean dependent var		64822.84
Adjusted R-squared	0.420872	S.D. dependent var		7023.291
F-statistic	8.994080	Durbin-Watson stat		1.827236
Prob(F-statistic)	0.013366			

Source: EViews 10 Output (2023)

The findings of a regression analysis evaluating the effect of Point of Sale (POS) banking on Nigeria's GDP (gross domestic product) growth are shown in Table 5. A one-unit rise in POS banking is often linked to a statistically significant increase in GDP of about $3.68, according to the coefficient for POS banking, which is 3.676121 ($p = 0.0134$). According to the R-squared value (0.473520), which indicates the model's goodness of fit, POS banking in the regression model accounts for about 47.35% of the variation in GDP. The F-statistic ($F = 8.994080$, $p = 0.013366$) supports the model's overall significance. Furthermore, the Durbin-Watson statistic (1.827236) shows that the model has no discernible autocorrelation.

We reject the null hypothesis (H03), which states that "POS banking does not have a significant impact on economic growth in Nigeria," in light of these findings. Rather, the results indicate a strong positive correlation between GDP and POS banking, meaning that when POS banking usage rises, Nigeria's GDP tends to rise as well.

H_{04}: ATM does not have significant impact on the economic growth in Nigeria

Table 6 Regression Result for Hypothesis 4

Dependent Variable: GDP____BILLION_				
Method: Least Squares				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
ATM	2.686259	0.358074	7.501972	0.0000
C	54462.19	1609.199	33.84430	0.0000
R-squared	0.849124	Mean dependent var		64822.84
Adjusted R-squared	0.834036	S.D. dependent var		7023.291
F-statistic	56.27959	Durbin-Watson stat		1.858868
Prob(F-statistic)	0.000021			

Source: EViews 10 Output (2023)

The influence of ATM (Automated Teller Machine) usage on Nigeria's economic growth, as measured by GDP (gross domestic product) in billions of dollars, is examined in Table 6. The coefficient for ATM usage is 2.686259 (p = 0.0000), meaning that a statistically significant rise in GDP of about $2.69 billion is typically associated with a one-unit increase in ATM usage. The regression model's goodness of fit, as demonstrated by the R-squared value (0.849124), indicates that ATM usage accounts for approximately 84.91% of GDP fluctuation. The F-statistic, which shows that the model is statistically significant overall (F = 56.27959, p = 0.000021). Furthermore, the Durbin-Watson statistic (1.858868) shows that the model has no discernible autocorrelation.

Our findings lead us to reject the null hypothesis (H04), which states that "ATM usage does not have a significant impact on economic growth in Nigeria." Rather, the results show a strong positive correlation between GDP and ATM usage, suggesting that when ATM usage rises, Nigeria's GDP tends to rise as well. The regression model's ATM usage accounts for a considerable amount of GDP variability, according to the strong R-squared value.

DISCUSSION OF FINDINGS

Impact of Mobile Banking on Economic Growth in Nigeria

The findings of the regression analysis show a strong positive correlation between mobile banking and GDP (gross domestic product) growth. This result is consistent with the idea of financial inclusion and economic growth, which postulates that more financial inclusion can be fostered by better access to financial services, such as mobile banking, and that this can contribute to economic growth. For both individuals and organizations, mobile banking offers quick and easy access to financial services, especially in places with weak traditional banking infrastructure. As a result, greater use of mobile banking can support a more equitable financial system by empowering people to participate in the economy, make investments, and save money, all of which will support general economic growth.

Impact of Internet Banking on Economic Growth in Nigeria

Internet banking and GDP growth, as measured by the regression analysis, were significantly positively correlated. This result aligns with the digitization and economic development theory. Internet banking becomes crucial to the financial sector as nations embrace digitalization and technology improvements. It permits access to a range of financial services, electronic payments, and online financial activities. Internet banking promotes economic activity and growth by making financial transactions easier and more efficient. It also assists companies in growing, entering new markets, and reducing transaction costs, all of which increase output and promote economic growth.

Impact of POS Banking on Economic Growth in Nigeria

A statistically significant positive correlation between GDP (the measure of economic growth) and POS (point of sale) banking was found via regression analysis. The notion of cashless economies provides an explanation for this result. By enabling electronic payments at the point of sale, POS Banking lessens the need for cash transactions. Transactions become more effective, safe, and traceable in a cashless economy, increasing transparency and decreasing the informal sector. Governments can increase tax collection and businesses can track financial

flows more effectively as a result. Economic resources are distributed more wisely when there is increased financial transparency and efficiency, which may result in faster economic growth.

Impact of ATM Usage on Economic Growth in Nigeria

The findings of the analysis showed a strong statistically significant positive correlation between the use of ATMs (Automated Teller Machines) and GDP growth. The theory of financial intermediation and economic growth can be used to support this conclusion. In order to bridge the gap between savers and borrowers and provide convenient access to cash and financial services, ATMs are essential. ATMs enable higher capital allocation and investment by boosting liquidity and encouraging financial intermediation, which boosts economic growth and productivity. Furthering economic development, higher ATM usage also lessens the need for actual bank offices, which can enhance the effectiveness of financial services and boost access to banking in rural areas.

CONCLUSION AND RECOMMENDATIONS

The study's conclusions demonstrate that mobile banking has a favorable impact on Nigeria's economic expansion. According to the study's findings, there is a positive correlation between economic growth and the adoption of mobile, online, point-of-sale (POS), and banking agency services. The study came to the conclusion that internet banking significantly can boost economic growth, suggesting that the use of internet banking can promote economic growth. Economic growth and financial depth were measured using real gross domestic product (GDP) and credit to private sector metrics, respectively. The value of mobile transactions, the quantity of mobile agents, and the internet all significantly contribute to financial deepening, according to the findings.

Results indicate that mobile banking has a positive and significant impact on Nigeria's economic growth, suggesting that increased use of mobile banking drives higher economic growth. This study suggests that in order to boost economic growth, policymakers should foster an atmosphere that encourages financial institutions to improve their mobile banking services. Legislators ought to focus on reducing the hazards linked to mobile banking, as this will boost customer assurance.

According to this study, online banking has a favorable and significant impact on Nigeria's economic growth, suggesting that increased use of internet banking will increase the country's economic growth. This study suggests that in order to boost economic growth, policymakers should provide guidelines that allow financial institutions to improve their online banking services. Legislators ought to concentrate on reducing the hazards linked to online banking, as this will boost customer trust. In order to prevent demand-pull inflation, the government should endeavor to cut the production costs that cause cost push inflation while still maintaining a sufficient supply of products and services.

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