Interdisciplinary Research Journal of Management and Social Sciences
ISSN: 2837-9985| Impact Factor: 6.27
Volume. 11, Number 3; July-August, 2024;
Published By: Scientific and Academic Development Institute (SADI)
8933 Willis Ave Los Angeles, California
https://sadijournals.org/Journals/index.php/irjmss|editorial@sadijournals.org

ANALYZING THE CUMULATIVE IMPACT OF DIVERSE ELECTRONIC TRANSACTIONS ON THE FINANCIAL GROWTH OF DMBS IN NIGERIA

Ahmed Abubakar Zik-Rullahi, Ph.D.
Department of Accounting, Faculty of Management Sciences, University of Abuja,
P.M.B 117, Gwagwalada- Abuja, Nigeria.

DOI: https://doi.org/10.5281/zenodo.13614173

Abstract: This study analyzed the cumulative impact of diverse electronic transactions on the financial growth of listed deposit money banks in Nigeria. The analysis utilizes regression analysis to investigate the impact of ATM usage and POS transactions on Earnings per share Growth (EPSG). The findings indicate that both ATM usage and POS transactions have a positive but statistically insignificant impact on EPSG. The coefficients suggest a positive relationship between these variables and EPSG, indicating that an increase in ATM usage and POS transactions may contribute to some degree of financial growth. However, the p-values exceed the significance level, indicating that these relationships are not statistically significant. These results suggest that while ATM usage and POS transactions may positively influence the financial performance of deposit money banks, their impact on EPSG is not statistically significant. Therefore, banks should consider exploring additional avenues for driving financial growth, such as diversifying revenue streams, embracing technological advancements, focusing on customer engagement and experience, monitoring market trends, strengthening risk management practices, and fostering collaboration and partnerships. The findings of this study provide valuable insights for deposit money banks in Nigeria to make informed decisions regarding their business strategies.

Keywords: Electronic Transactions, ATM, POS, EPSG and Financial Growth.

Introduction

The advent of technology and the proliferation of digital platforms have revolutionized the way financial transactions are conducted, presenting both opportunities and challenges for Deposit Money Banks (DMBs) in the country.

The Nigerian banking sector has been progressively embracing electronic transactions such as online banking, mobile banking, electronic fund transfers, and card-based payments. This shift is driven by a global trend towards digitalization, aimed at enhancing efficiency, reducing costs, and improving overall customer experience. As a key player in the country's economic development, the banking sector's ability to leverage these technological advancements is crucial for sustaining financial growth and fostering economic inclusivity (Nwankwo & Agbo, 2021).

Electronic banking refers to an electronic payment system that empowers clients of a bank or any other financial institution to execute various financial transactions using electronic devices without the necessity of visiting the physical banking premises. The surge in e-banking has been remarkable, revolutionizing conventional approaches

and causing a fundamental change in marketing strategies, consequently contributing to notable advancements in the banking industry (Nwakoby et al., 2020)

The adoption of technology and electronic banking has allowed banks to streamline their operations, automate services, and enhance their competitiveness in a highly competitive industry. The Nigerian banking sector has witnessed increased investments in information technology equipment, leading to the introduction of electronic banking services.

Despite the potential benefits associated with diverse electronic transactions, the Nigerian banking industry faces a myriad of challenges in fully realizing the cumulative impact on financial growth. Infrastructure limitations, cybersecurity threats, regulatory complexities, and varying levels of digital literacy among the population contribute to a complex landscape that requires careful examination (Adaramola & Kolapo, 2019).

More so, the understanding of the drivers and empirical impact of electronic banking technology on the performance of DMBs remains limited. This study aims to fill this research gap by analyzing the cumulative impact of diverse electronic transactions on the financial growth of listed DMBs in Nigeria. The findings of this study will provide valuable insights into the potential benefits and challenges of online banking adoption in the Nigerian banking industry, helping banks, policymakers, and stakeholders make informed decisions and formulate strategies for sustainable growth.

Statement of the Problem

In an ideal scenario, the adoption and integration of diverse electronic transactions within the financial operations of Deposit Money Banks (DMBs) in Nigeria should contribute positively to overall financial growth. The ideal situation involves a seamless and efficient electronic transaction environment that enhances operational efficiency, customer satisfaction, and economic stability. This encompasses a robust digital infrastructure, secure electronic payment systems, and widespread financial inclusion.

However, the current landscape reveals challenges and complexities associated with diverse electronic transactions in the Nigerian banking sector. Issues such as inadequate technological infrastructure, cybersecurity concerns, regulatory hurdles, and varying levels of digital literacy among customers pose obstacles to the optimal realization of the benefits of electronic transactions. Additionally, there may be disparities in the adoption rates of electronic transactions among different DMBs, leading to an uneven impact on the overall financial growth of the sector.

If the challenges surrounding diverse electronic transactions within the Nigerian banking sector are not effectively addressed, several adverse consequences may unfold. Firstly, DMBs may experience suboptimal financial growth as the expected efficiency gains and cost reductions associated with electronic transactions may not be realized. Secondly, the financial sector's vulnerability to fraud and cyber threats could increase, potentially eroding trust in electronic banking systems. Lastly, a failure to address these challenges may hinder the achievement of broader national economic goals, including financial inclusion and economic development.

In summary, understanding and mitigating the identified challenges related to diverse electronic transactions are critical for ensuring the sustained and positive impact on the financial growth of Deposit Money Banks in Nigeria.

Objectives of the Study

The main objective of the study is to determine the Cumulative impact of Diverse Electronic Transactions on financial growth of DMBS in Nigeria. The specific objectives of the study are to:

i. Evaluate the impact of ATM transactions on the financial growth of listed Deposit Money Banks (DMBs) in Nigeria.

ii. Examine the influence of POS transaction on the financial growth of listed Deposit Money Banks (DMBs) in Nigeria

Research Questions

The following research questions guided the study:

i. To what extent has ATM transactions impacted the financial growth of listed Deposit Money Banks (DMBs) in Nigeria?
ii. To what has POS transactions impacted the financial growth of listed Deposit Money Banks (DMBs) in Nigeria?

Statement of Hypotheses

The following hypotheses stated in null form (H_0) were formulated for this research:

i. H_{01}: ATM transactions have no positive and significant impact on the financial growth of listed Deposit Money Banks (DMBs) in Nigeria.
ii. H_{02}: POS transactions have no positive and significant impact on the financial growth of listed Deposit Money Banks (DMBs) in Nigeria

Conceptual Review

Concept of Electronic Transaction

An electronic transaction refers to the exchange of goods, services, or information between parties conducted through electronic means, typically over computer networks or the internet. This mode of transaction has become increasingly prevalent in modern commerce due to advancements in technology. Electronic transactions offer efficiency, speed, and convenience compared to traditional paper-based methods (Agwu & Murray, 2014).

Key characteristics of electronic transactions

Digital Format: Electronic transactions involve the use of digital data and documents, eliminating the need for physical paperwork.

Online Platforms: Transactions are often conducted through online platforms, websites, or specialized applications that facilitate the exchange of information and funds.

Data Encryption: To ensure security and privacy, electronic transactions commonly employ encryption techniques to protect sensitive information, such as personal details and financial data.

Authentication: Secure electronic transactions often involve user authentication methods, such as passwords, PINs, or biometric verification, to confirm the identity of the parties involved.

Real-time Processing: Many electronic transactions occur in real-time, allowing for immediate confirmation and completion of the transaction.

Payment Methods: Electronic transactions encompass various payment methods, including credit/debit card payments, bank transfers, digital wallets, and mobile payments.

E-commerce: Online shopping and electronic payments are integral components of electronic transactions, enabling consumers to purchase goods and services remotely.

Business-to-Business (B2B) and Business-to-Consumer (B2C): Electronic transactions occur in both B2B and B2C contexts, facilitating interactions between businesses and consumers or between different businesses.

Examples of electronic transactions include online purchases, electronic banking, wire transfers, digital subscriptions, and any other transaction where information is exchanged or financial transactions are conducted electronically (Oni & Ayo, 2010). The widespread adoption of electronic transactions has transformed the way

businesses operate and individuals conduct financial activities, contributing to a more connected and digitized global economy.

Concept of Electronic Transaction

Electronic banking is not one technology, but an attempt to merge several different technologies but each evolving in different ways (Onodugo, 2015). The first applications of the computer age within banks are the use of mainframes and minicomputers. These were used to process data such as customer accounts, bank inventories, personnel records, and accounting packages. At that period, technology was used as a support tool for banking operations, and the idea of direct customer services was less clear. Technology was then used to assist staff in doing their work faster, more conveniently, and with less human errors (Agwu & Murray, 2015).

Advantages of Electronic Banking

The transition to electronic banking, as opined in Chemtai (2016) offers major opportunities in terms of competitive advantage. Specifically, it provides banks with the opportunity to develop a stronger and more durable business relationship with their customers. For instance, it makes access to finance from banks attractive with funds appearing to be much more available (Salehi and Alipour, 2010), and customers are given the opportunity to conduct banking transactions with great peace of mind and at their convenience (Offei and Nuamah-Gyambrah,

2016). Before the introduction of electronic banking, transactions took a lot of time to execute and this was tiring. Now, services are rendered quicker with transactions much more accurate hereby saving time, as well as reducing human errors and clerical overhead cost. Some other benefits derived from e-banking are increased customer satisfaction, expanded product offerings and extended geographic reach. These have helped to attract more customers since the level of

satisfaction is high and also helped to conserve the energy of employees therefore giving them the opportunity to put in their best into the roles they have to play in the bank. The advantages of e-banking can thus be summarized into increased bank productivity (Chemtai, 2016), increased comfort and timesaving, quick and continuous access to information, better cash management (Salehi and Alipour, 2018) and improved customer experience (Onodugo, 2015).

Disadvantages of Electronic Banking

It must be noted that, while electronic banking provides many benefits to customers and banks, the cost of its implementation and maintenance is high. Equipment and machines used to aid electronic banking are quite expensive and may not be easily affordable. Fraud is another major downturn; for example credit card fraud, foreign exchange fraud, stolen cheques, etc. Most perpetrators of fraud use their knowledge of information technology to the detriment of others by creating malicious programs that are used to tamper with vital information. As affirm in Kujur and Shah (2015),compared to developed countries, developing countries face many impediments while implementing e-banking initiatives since if not well managed, could aggravate traditional banking risks such as Transaction/Operations risk arising from fraud, processing errors, system disruptions, or other unanticipated events, strategic risk resulting from poor e-banking planning and investment decisions and security risk wherein customers' rights and information are not adequately safeguarded and provided for. Some other disadvantages of e-banking include unemployment, insufficient skilled personnel within formation security expertise, and low level of IT appreciation among customers with over dependence on cash for all types of transactions. In addition, e-banking encourages excessive spending since customers can easily

make payments any time and place and also have access to cash even on non-working days via the ATMs (Karjaluoto et al., 2019).

Concept of ATM

ATM stands for "Automated Teller Machine." It is an electronic banking device that allows customers to perform various financial transactions without the need for direct interaction with bank staff or tellers. ATMs are typically available 24/7 and are commonly found in banks, standalone kiosks, or public places such as shopping centers.

Kondabagil (2017) posited that the first visible face of electronic banking, Automated Teller Machine (ATM), came into commercial use in 1968. The ATM, later evolved from being a mere currency dispenser into a multifunctional device that enables customers to conduct a whole range of transactions from account management, fund transfer, to bill payments.

In the latter half of the 1990s, but with the development of the Internet and the World Wide Web (WWW), customers could bank from the comfort of their homes (Salehi & Alipour, 2010) and since then, as affirmed in Offei and Nuamah-Gyambrah (2016), the banking industry has been undergoing changes, in form of innovative use of information technology and development in electronic commerce. For this reason, the emergence of e-banking can be said to be one of the advantages of e-commerce in relation to the needs of business to conduct easy, quick and precise banking operations (Hoseini & Dangoliani, 2015). With the e-banking system, settlement of transaction either national or international level is speedup; thereby bridge the gap between customer and the bank. Most of the services are being offered through several distribution e-channels with activities ranging from balance inquiry, cash withdrawals, bill payments, fund transfer, electronic payment, and loan applications, among others (Agwu & Carter, 2014).

Concept of POS

POS stands for "Point of Sale." It refers to the location or system where a transaction takes place between a merchant and a customer. The term is commonly used to describe both the physical location (such as a checkout counter) and the electronic system used to complete a sale. In the context of electronic transactions, a POS system typically includes hardware and software that facilitate the processing of payments (Ekwueme, Egbunike & Okoye, 2012).

Key features of a POS system include:

Payment Processing: POS systems allow merchants to accept various forms of payment, including credit cards, debit cards, mobile payments, and sometimes cash.

Sales Recording: POS systems record details of transactions, including the items or services purchased, the quantity, and the total cost.

Inventory Management: Many POS systems integrate with inventory management systems, helping merchants track and manage their stock levels.

Receipt Generation: A POS system generates receipts for customers, providing a record of the transaction and itemizing the purchased items.

Sales Reporting: Merchants can use POS systems to generate reports on sales, revenue, and other relevant metrics to analyze business performance.

Integration with Other Systems: POS systems may integrate with accounting software, customer relationship management (CRM) systems, and other business tools.

Security Features: POS systems are designed to be secure, with features such as encryption to protect customer payment information.

Customer Loyalty Programs: Some POS systems support loyalty programs, allowing merchants to reward customers for repeat business.

Financial Growth

Financial growth refers to the increase in the financial metrics or indicators of an individual, organization, or economy over a specific period. It is a comprehensive term that encompasses various aspects of financial well-being and success. Financial growth can be measured through a range of indicators, and the specific metrics considered may vary based on the context (Obiri-Yeboah et al., 2013). Some the key components and factors associated with financial growth include Revenue Growth, Profitability, Asset Accumulation, Investment Returns, Savings and Wealth Accumulation, Market Capitalization, Earnings Growth, Debt Management, Economic Growth, Financial Education etc.

Theoretical Framework

The Theory of Reasoned Action

The Theory of Reasoned Action (TRA), formulated in 1975 by Fishbein and Ajzen, has been extensively used in marketing research. TRA is applied to explain behavior beyond the acceptance of technology and encompasses four general concepts: behavioral attitudes, subjective norms, intention to use, and actual use. It argues that individuals evaluate the consequences of a particular behavior and form intentions to act consistent with their evaluations. More specifically, TRA states that individuals' behavior can be predicted from their intentions, which, in turn, can be predicted from their attitudes and subjective norms. Following this chain of prediction further back, attitudes can be predicted from an individual's beliefs about the consequences of the behavior. Subjective norms can be predicted by understanding how significant others think the behavior should or should not be done. A particularly helpful aspect of TRA from a technological perspective is its assertion that any other factors can influence attitudes and subjective norms. These variables include, among other things, system design characteristics, user characteristics (including cognitive styles and other personality variables), and task characteristics. Hence, TRA is quite appropriate for predicting the behavior of using multimedia technology. Although TRA is a very general theory and, as such, these beliefs would be pertinent in particular situations, the inclusion of subjective norms represents an important variable not even included in more popular models.

Empirical Review

Dabwor and Dalis (2017) studied the effect of ICT adoption on the competitive performance of banks in an emerging economy: The Nigerian experience. The study adopted both inferential and descriptive design using a t-test, the findings of the study revealed that a positive relationship exists between ICT and banks performance in Nigeria. This implies that a marginal change in the level of the investment and adoption of ICT such as (Automated teller machine, Web based transactions, and Mobile payments) in the banking industry resulted in a proportionate increase in the profit level. The study recommends that it is paramount for bank management to intensify investment in ICT products to facilitate speed, convenience, and accurate service delivery.

Auwal and Abubakar (2015) examined the impact of e-banking on the performance of the banking sector in Nigeria. E-banking will be measured by the expenditure made on information and communication technology (ICT) investments, number of debit cards issued to customers, and number of automated teller machines (ATMs) installed by the banks. Return on assets (ROA), return on equity (ROE), and net interest margin (NIM) will be used as performance variables. The impact of e-banking on the bank performance will be examined in two periods: pre-consolidation (i.e., before adopting the e-banking) and post-consolidation (i.e., after adopting the e-banking).

Data collection involves secondary data gathered via annual reports of 21 Nigerian banks and analyzed via SPSS software.

Madugba et al. (2021) explored how E- banking impacted the financial performance of banks in Nigeria. Study shows that Automated Teller Machine is positively significant to Earning per share and Return on Asset, but Point of Sale only have a significant effect on ROA and WEB has no effect on either EPS or ROA.

Sharul et al. (2019) explored Online Banking Adoption and Profitability of banks in Bangladesh and it was discovered that Return on asset and return on equity of banks has a strong relationship with online banking.

Mawutor (2014) evaluated E-Banking and Profitability of Banks in Ghana. They studied how internet banking and Automated Teller Machine on the profitability of banks. They consider Margin, Return on Asset (ROA) and Return on Equity as measured of profitability. It was discovered that E- banking has impact on profitability.

Uchenna and Awolusi (2020) research on the influence of E- banking and bank profitability in Nigeria. A survey study design based on inference was adopted. Both personnel and customers of the studied bank were polled using questionnaires to acquire primary data and secondary data from 2010 to 2017. Multiple regression techniques were used in the study. Study results indicated that E-Banking have impact on profitability, retention and loyalty of customers.

Mapharing and Basuhi (2017) explored e-banking and performance of banks in Botswana. Using multiple regressions. Only Cheque Clearing was statistically significant at the 0.05 percent level under both the ROA and ROE models, with respective p-values of 0.0002 and 0.0000 and it was discovered that the predictive potential of ROE was greater than that of ROA. The remaining three variables were not statistically significant ($p > 0.05$): Teller Machines, Electronic Funds Transfer, and Card & Electronic Funds Transfer at Point of Sale. The results indicate that commercial banks in Botswana use traditional banking practices such as the usage of checks on a large scale.

Van, Uyen and Phuong (2015) studied internet banking and performance of banks in Vietnam from 2009 to 2014. The correlations between Internet indicators and bank performance using random effect model and fixed effect. Finally, it shows that internet banking has impacted on bank profitability.

Jonathan and Uju (2019), Using quarterly time series data, investigated the influence of E- banking on performance of banks in Nigeria using Ordinary Least Squares. In the long run, the estimated regression equation revealed that e- banking channeled except for interbank transfer has negatively impact on performance. The result shows that e-banking has positive impact on bank performance.

Mahardini et al. (2022) explored how internet banking (IB) mobile banking (MB) and ATM impacted bank performance ROA is the proxy for performance for banks in Indonesia and results shows that IB have negative effect, while MB and ATM have positive effect.

Raymond et al. (2022) studied how E- banking effect bank performance in Nigeria Johansen Co-integration and Vector Error Correction Method was applied to the variables obtained between 2009 to 2017. The results demonstrate a long-term link between the variables. Mobile banking and Web banking have a big impact on Net Interest Margin negatively whereas POS has a positive impact on Net Interest Margin.

Amos et al. (2020) ascertained the effect of electronic banking on bank performance in Nigeria. The study utilized secondary data derived from the audited annual financial statement of the deposit money banks quoted on the Nigerian Stock Exchange from 2008–2017. The study also made use of journals, textbooks, Nigerian Stock Exchange fact books, the Central Bank of Nigeria (CBN) Bullions and other published materials. Using the multiple regression analysis techniques, the findings revealed that e-banking measured by return on equity (ROE),

return on assets (ROA), and earnings per share (EPS) has no significant impact on the performance of banks in Nigeria. With the findings, we can conclude that investment in electronic banking has not improved the performance of deposit money banks in Nigeria.

Okonkwo and Ekwueme (2022) examined the effect of E-payment on the performance of deposit money banks in Nigeria. The study employed Ex post facto research design. A sample size of 13 deposit money banks in Nigeria was used from the population of 22 banks. Data were analyzed with descriptive statistics and the hypotheses regression analysis was carried out with the aid of E-Views 9.0 statistical software. The study revealed that the MPAY payment method has a positive effect on the return on assets of quoted deposit money banks in Nigeria, but is not statistically significant at a 5% level of significance, and online (WEB) payment methods hurt the return on assets of quoted deposit money banks in Nigeria, and this effect was not statistically significant at 5% level of significance.

Aigbovo and Orobator (2022) examined the effect of electronic banking on the financial performance of deposit money banks in Nigeria was investigated and the period of study was from 2009 – 2018. The multivariate panel estimation and the dynamic panel data regression were employed in the data analysis. The results obtained from the GMM estimate reveal that the total value of Automated Teller Machine transaction positively and significantly impact the financial performance of deposit money banks while the total value of point-of-sale transactions exerts a negative influence on deposit money banks financial performance. Also, the relationship between the total value of mobile payment transactions and financial performance was negative but failed the significant test. The study recommends that deposit money banks should increase the number of ATM machines to reduce the queue usually observe in most ATM to encourage their continuous usage. Also, deposit money banks should collaborate with Telecommunication network providers and security agents to checkmate and prosecute hackers in order to reverse the negative effect of mobile payment on deposit money banks' financial performance. Furthermore, deposit money banks should collaborate with Telecommunication network providers to resolve the problem of poor network service that has mar the progress in Point of Sales adoption rate in Nigeria.

Demaki, et al. (2022) examined the relationship between electronic banking and the performance of deposit money banks (DMBs) in Nigeria using ex-post facto research design. Quarterly time series data of mobile banking, automated teller machine, internet banking, point of sales and return on assets were obtained from the Central Bank of Nigeria Statistical bulletin during the period 2009-2019. Data obtained were analyzed using both descriptive (mean, standard deviation, and Pearson correlation) and inferential (unit roots, co-integration, error correction model, Jacque-Bera test and variance inflation factor test) statistical techniques. Findings revealed that mobile banking; automated teller machine and point of sales were statistically significant, suggesting that they are critical technological factors enhancing financial performance of banks. On the other hand, internet banking found to be statistically insignificant with financial performance of banks, implying that they are weak factor enhancing financial performance of banks in Nigeria.

Methodology

Research Design

This research utilized an ex-post facto research design, which is implemented after events have occurred and the data are already available. This design is chosen when the researcher lacks control or the ability to manipulate the variables under investigation due to the events having already taken place.

Ex-post facto research is employed to establish cause-and-effect relationships between variables by analyzing previous events or data. It is a method used to identify elements associated with a specific occurrence, situation, event, or behavior by examining earlier events or data for potential causal factors.

Area of Study

The study was conducted in Nigeria, primarily emphasizing deposit money banks within the nation.

Sources of Data

This study employed secondary source of data collection which were extracted from the audited financial statements of various firms covering the years 2018 to 2022. The rationale for selecting this timeframe is the prevalence of numerous fraudulent incidents within the Nigerian banking sector during this period.

Population and Sample Size of the Study

The population of this study comprises 14 Banks that were listed on the Nigerian Exchange Group as at 31st December, 2022, and they were chosen because of their classification as Deposit Money Banks by the Central Bank of Nigeria. All the 14 banks are used as the sample size.

Model Specification

The Multiple Regression Model (MRM) was used in this study to determine the effect of the explanatory variables on the focal variable and make predictions as they relate to the variables. The Multiple Regression Model was represented as:

$EPSG = \beta 0 + \beta_1 ATM_{it} + \beta_2 POS_{it} + \varepsilon_{it}$ ……....i

Where:

ATM = Automated Teller Machine

POS = Point of Sale

β = Coefficient

ε = Error term

Results

Summary of Multiple Regression Result

Table 1: Multiple Regression Result of Industry-Level Panel Data

Dependent Variable: EPSG
Method: Panel Least Squares
Date: 12/04/23 Time: 11:08
Sample: 2018 2022
Periods Included: 5
Cross-sections Included: 14
Total Panel (balanced) observations: 70

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ATM	0.010219	0.057393	0.178050	0.8592
POS	0.049602	0.042153	1.176724	0.2432
C	-0.110905	0.102510	-1.081894	0.2829
R-squared	0.123403	Mean dependent var		0.110769

Adjusted R-squared	0.062528	S.D. dependent var	0.070005
S.E. of regression	0.067781	Akaike info criterion	-2.471265
Sum squared resid	0.330787	Schwarz criterion	-2.289980
Log likelihood	102.3793	Hannan-Quinn criter.	-2.398693
F-statistic	2.027155	Durbin-Watson stat	0.547198
Prob(F-statistic)	0.084929		

Source: E-view 10.0 Statistical Output, 2023

Table 1 revealed that the Automated Teller Machine (ATM), coefficient is positive and insignificant in achieving Earnings per share Growth (EPSG) of listed deposit money banks in Nigeria. The EPSG= -0.11+0.01ATM which indicates that the EPSG of listed deposit money banks in Nigeria will increase by 1% for every 1% increase in Automated Teller Machines. The p-value of 0.85 is more than the t-statistic value of 0.17 and the standard error value of 0.05 is less than the t-statistic value. This implies that there is a positive and insignificant effect of Automated Teller Machines on the Earnings per share growth of listed deposit money banks in Nigeria.

The coefficient of Point of Sale (POS) is positive and insignificant in achieving Earnings per share Growth (EPSG) of listed deposit money banks in Nigeria. The EPSG = -0.11+ 0.04POS which indicates that the EPSG of listed deposit money banks in Nigeria will increase by 1% for every 1% increase in Point of Sale. The p-value of 0.24 is less than the t-statistic value of 1.17 and the standard error value of 0.04 is less than the t-statistic value. This implies that there is a positive and insignificant effect of Point of Sale on the Earnings per share growth of listed deposit money banks in Nigeria.

Summary of Findings

Findings arising from this research were summarized as follows:

i. Automated Teller Machine (ATM) usage has a positive but insignificant impact on Earnings per Share Growth (EPSG) for listed deposit money banks in Nigeria.

ii. Point of Sale (POS) transactions demonstrate a positive but insignificant influence on Earnings per Share Growth (EPSG) for listed deposit money banks in Nigeria.

Conclusion

In conclusion, this study examined the impact of diverse electronic transactions on the financial growth of listed deposit money banks in Nigeria. The findings indicate that both ATM usage and POS transactions have a positive but insignificant influence on EPSG. For ATM usage, the coefficient suggests a positive relationship with EPSG, indicating that an increase in ATM usage may contribute to a slight increase in EPSG. However, the p-value exceeding the significance level indicates that this relationship is statistically insignificant. Similarly, for POS transactions, the coefficient also suggests a positive relationship with EPSG, but the p-value indicates statistical insignificance.

These findings imply that while ATM usage and POS transactions may have some positive impact on the financial growth of listed deposit money banks, their influence on EPSG is not statistically significant. It is important to note that other factors beyond the scope of this study may be more influential in driving EPSG for these banks.

Therefore, deposit money banks in Nigeria should consider these findings as part of a broader assessment of their business strategies. While ATM and POS services remain important for customer convenience and service delivery, they should explore additional avenues to enhance financial performance, such as optimizing operational efficiency, expanding product offerings, and adopting innovative technologies.

Recommendations

Based on the findings of this study, the following recommendations are proposed:

i. Given the insignificant impact of ATM usage and POS transactions on Earnings per Share Growth (EPSG), deposit money banks in Nigeria should focus on diversifying their revenue streams. This could involve expanding their product offerings, exploring new markets or customer segments, and developing innovative financial services beyond traditional banking channels. By diversifying revenue streams, banks can reduce their reliance on specific transactional services and potentially achieve more substantial financial growth.

ii. While ATM usage and POS transactions may not have a significant impact on EPSG, deposit money banks should continue to embrace technological advancements in their service delivery. This includes investing in modern and secure ATM systems, enhancing the functionality and user experience of POS terminals, and exploring emerging technologies such as contactless payments and mobile banking. By leveraging technology, banks can enhance customer satisfaction, attract new customers, and potentially drive incremental revenue growth.

References

Adaramola, A. O., & Kolapo, F. T. (2019). Assessment of Bank Technology Machine and Mobile Banking as Market Strategies to Raising Performance of Banks in Nigeria. Journal of Economics and Behavioral Studies, 11, 108-115. https://doi.org/10.22610/jebs.v11i3(J).2873

Agwu, M. E., & Carter, A. L. (2014). Mobile phone banking in Nigeria: benefits, problems, and prospects. International Journal of Business Communication, 3(6), 50-70. Available at: http://www.ijbcnet.com

Agwu, M. E., & Murray, P. J. (2014). Drivers and inhibitors of e-Commerce adoption among SMEs in Nigeria. Journal of Emerging Trends in Computing and Information Sciences, 5(3), 192-199. http://www.cisjournal.org/

Agwu, M. E., & Murray, P. J. (2015). Empirical study of barriers to electronic commerce adoption by small and medium scale businesses in Nigeria. International Journal of Innovation in the Digital Economy (IJIDE), 6(2), 1-19, April-June 2015. http://www.igiglobal.com/journal/international-journal-innovation-digitaleconomy/1133

Auwal, M., & Abubakar, A. (2015). The effects of electronic banking on the growth of deposit money banks in Nigeria. European Journal of Business Management, 6(33), 79–89.

Bureau of Statistics Report (2011). Economic Survey.

Chemtai, F. (2016). The effects of electronic plastic cards on the firm's competitive advantage: A case of selected commercial banks in Eldoret town, Kenya. International Journal of Scientific Education Studies, 2(2), 29-39.

Ekwueme, C. M., Egbunike, P. A., & Okoye, A. (2012). An empirical assessment of the operational efficiency of electronic banking: Evidence of Nigerian banks. Review of Public Administration and Management, 1(2), 76-110.

Hoseini, A., & Dangoliani, S. K. (2015). Investigating the effect of electronic banking services quality on customer satisfaction. Journal of International Economics and Business, (1), 37-42.

Karjaluoto, H., Jarvenpaa, L., & Kauppi, V. (2019). Antecedents of online banking adoption''. Academy of Marketing Studies Journal, 14(1), 2-11.

Kondabagil, J. (2017). Risk Management in Electronic Banking: Concepts and Best Practices. Singapore: John Wiley and Sons Pte Ltd, pp. 10-18.

Kujur, T., & Shah, M. A. (2015). Electronic banking: Impact, risk, and security issues. International Journal of Engineering Management Research, 5(5), 207-212.

Mawutor, J. K. M. (2014). Impact of E-banking on the profitability of banks in Ghana. Research Journal of Finance and Accounting, 5(22), 53 – 63.

Nwakoby, N. P., Okoye, J. N., Ezejiofor, R. A., Anukwu, C. C., & Ihediwa, A. (2020). Electronic Banking and Profitability: Empirical Evidence from Selected Banks in Nigeria. Journal of Economics and Business, 3, 637-649. https://doi.org/10.31014/aior.1992.03.02.227

Nwankwo, S. N., & Agbo, E. I. (2021). Effects of Electronic Banking on Commercial Bank Performance in Nigeria. European Journal of Accounting, Finance and Investment, 7, 68-81.

Oni, A. A., & Ayo, C. K. (2010). An empirical investigation of the level of users' acceptance of e-banking in Nigeria. Journal of International Banking and Commerce, 15(1), 1-13.

Onodugo, I. C. (2015). Overview of electronic banking in Nigeria. International Journal of Multidisciplinary Research and Development, 2(7), 336 -342.

Salehi, M., & Alipour, M. (2010). E-banking in an emerging economy: Empirical evidence of Iran. International Journal of Economics and Finance, 2(1), 201-209.