The Impact of Agency Banking on Financial Performance of Listed Deposit Money Banks in Nigeria

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Abstract: The study examined the impact of agency banking on the financial performance of listed deposit money banks in Nigeria for the period 2011-2020. The sample size of the study is 12 DMBs. Secondary data extracted from the financial reports and accounts of the DMBs that prepared the study sample were used. The study employed Random Effect as the best estimator of the regression model. One of the findings revealed volume of accounts opened by agent has significant positive impact on the financial performance of DMBs in Nigeria. Also, the study concluded that volume of electronic transfers positively increases banks financial performance. The study recommends that DMBs agent should encourage people to open accounts and carry out transaction with the accounts since account open by agent was found being among the factors that increase DMBs profitability. In addition, DMBs should put in place incentive that would encourage customers to reduce their level of withdrawals by giving out reward to customers that has not make withdraw for some period of time. Also, Regulators should increase the interest rate for customers saving which would encourage customer not to make withdraw frequently.

Keywords: Agency, Banking, Financial, Performance.

1. INTRODUCTION

One of the paramount goals of every profit-making organization is to increase the share wealth of the owners. In order to achieved this goal organization, put in place strategies how on to achieved the set goals. Firm can determine if the objective has been achieved or not through their financial performance. A company's financial success is an indicator of how well it has utilised its assets and other sources of income to grow its business (Tanko et al., 2021). Return on investment (ROI), residual income (RI), earnings per share (EPS), dividend yield, return on assets (ROA), and return on equity (ROE) are all ways to gauge a company's financial success

(Barbosa & Louri, 2005). Company performance affects management, suppliers, government, shareholders and creditors, among others. Firm can increase it performance through agency banking.

There have been a huge variety of remote access banking services outside of branches during the last ten years. These services have previously been offered via cell phones, ATMs, point-of-sale (POS) equipment, and bank correspondents (Kingori & Gekara, 2015). By addressing people who would not have been reached by conventional industry-based frameworks, these non-industry channels have significantly increased financial inclusion in many nations (Beck, 2007). Bank customers can now access banking services such as deposits, withdrawals, loan disbursement and repayment, bill payment, transfer of funds, account balance inquiry and issuance, and document collection related to account opening outside of the cash hall thanks to Agency Banking. Customers can also apply for credit and debit cards, and use agency mobile banking services (CBK, 2010).

David claims that Nigeria did not adopt electronic banking as quickly as other wealthy nations (2012). In the early 2000s, Nigeria introduced an electronic banking system. During the advent of electronic banking, the "cash and carry phenomenon," which some politicians typically equate with the swift movement of "Ghana must go" bags, was claimed to have fostered corruption due to the usage of unaccounted-for cash (David, 2012). Such bags are a key source of corruption, according to some analysts, since the author claims that "dubious persons try to bribe their way out of being scrutinized in critical locations or places in a corrupt culture."

Due to the increasing demand for customer deposits in the banking industry and corruption in the country, the issue of financial inclusion, which is enshrined in agent banking and mobile banking, has gained relevance. To do this, banks had to adopt agent banking, which required better merchandise, better customer service, and lower operating costs (Tanko & Bako, 2022). According to the Central Bank of Nigeria, agent banking is the practice of deposit-taking financial institutions and mobile banking service providers providing financial services to customers (2012). The promotion of financial inclusion is one of its other goals. The act of one bank acting in some capacity on behalf of another bank is known as agent banking. Agent banking, according to Tanko and Bako (2022), occurs when an underwriter is given instructions from a borrower to put together a syndicated loan. Agent Banking is advised due to the rising need for consumer deposits in Nigerian banks, particularly new generation banks.

Performance of a number of technologies, including point-of-sale (POS), card reader, mobile phone, payment transactions, and occasionally personal computers (PC), determines the issue of agent banking and consumer accessibility and profitability (CBN, 2012). Customer accessibility and profitability, on the other hand, refers to a bank customer's ability and potential to take use of all types of bank services, as well as all of the vital perks, and get the most out of them (Reed, 2008).

The issue of agent banking has been on high demand since the desire of every nations especially the developing nations to get financial institutions to remotes areas and other rural areas where there are no banking halls. However, banks are not operating as charity organisations. The questions that need to be address how will this agent banking contributes to Deposit Money Banks profitability since most of the remote areas are not into business and enterprises that will bring about high banking transactions that will enhance DMBs profitability. furthermore, Deposit Money Banks (DMBs) in Nigeria have faced issues of poor financial performance

which has resulted to collapsed of many banks in Nigeria such as Diamond bank, Skye Bank, Oceanic bank among others. From this it is important to investigates how agency banking would reduce this persist problem. In addition, study of this nature has been investigated in other nations however it is scanty in Nigeria (e.g., Chude & Chude, 2014).

Literature Review
Concept of Financial Performance
Financial performance analyses how growing market share rewards efficiency with higher profitability (Thomas & Ramaswamy, 1996). According to Mbugua and Omagwa (2017), Drago (1990) defined commercial bank financial success as a growth in revenues, return on investment (ROI), return on sales (ROS), return on equity (ROE), and earnings per share. Return on Asset (ROA), Return on Investment (ROI), Return on Equity (ROE), Return on Sale (ROS), Revenue Growth, Market Share, Stock Price, Sales Growth, Liquidity, and Operational Efficiency are some of the primary indicators used to measure an organization's success (Tanko & Dandago, 2019). Performance is the capacity of an organization to effectively and efficiently transform its own resources to achieve organizational goals (Mbugua & Omagwa, 2017).

Concept of Agency Banking
Agent banking is the practise of a bank acting on behalf of another bank. Banking agents can play a critical role in providing many low-income people with their first access to a range of financial services in such contexts by leveraging existing retail infrastructure and lowering set-up and operating costs (Kinyanjui, 2011). While agency banking has aided banks in increasing earnings and expanding the scope of financial services in Nigeria, one thing it has failed to do is decongest banking rooms. It was assumed that the majority of people would use agents to deposit cash, withdraw money, and open accounts, all of which are services that most people desire from banks. A quick check of various banks revealed that they are still jam-packed with people looking to deposit and withdraw money (Tanko & Bako, 2022). Furthermore, low-income customers prefer to bank at their neighbourhood store rather at a marble branch. Customers watch with bated breath as tellers struggle to accept deposits and disburse cash. As a result, several banks now only accept deposits of more than twelve dollars from their customers (Mas & Hannah, 2008).

Review of Empirical Studies
Munoru (2013) investigates how agency banking affects Kenya's level of financial inclusion. The study's foundation was secondary CBK data. As of December 2014, 13 banks out of Kenya's 44 commercial banks made up the sample size for the banking industry. We used inferential statistics, normality tests, correlation analysis, regression analysis, unit root tests, and error correction models to investigate the connection between financial inclusion and agency banking. The findings indicate that agent banking had a somewhat beneficial impact on financial inclusion. The variables were not related causally.

Mwando (2013) investigated how agency banking affected Kenyan commercial banks' financial results. In this investigation, a descriptive survey was used. The study was founded on first-hand information. The researchers employed multiple regression to evaluate the data. The analysis found that Kenya's commercial banks fared better financially as a result of the

central bank's move to regulate agency banking. The study found that Kenyan commercial banks' financial performance benefited from agency banking's low transaction costs as well.

Chude and Chude (2014) looked at how agent banking affected Nigerian deposit banks' performance. In order to conduct the research and analyze the work, the study used a descriptive survey. It was discovered that agent banking was crucial to raising bank profitability and customer happiness. Additionally, Kingori and Gekara (2015) evaluate the effect of agency banking on bank agents' performance in the Thika community of Kenya. The mean and standard deviation, as well as graphs, frequency percentage plots, and other descriptive statistical techniques, were used to examine the data. To examine the association between the independent and dependent variables, a linear regression model was utilized in the study. According to the study, a licensing advantage has led to a consolidated monopoly among rival banks, costing them business with other agents.

The effect of agency banking on the financial performance of banking institutions listed on the Nairobi Securities Exchange is also examined by Kanyore et al. (2017). Out of the 43 commercial banks in Kenya, the study's findings were based on a survey of the 11 listed on the Nairobi Securities Exchange. The research used secondary data. The study employed inferential statistics, correlation analysis, and a descriptive research methodology. Multiple linear regression models were employed to measure each variable in the model, and the findings were utilized to build a relationship between the dependent and independent variables. On the financial performance of listed banks, agency banking might have a favorable effect.

The effect of agency banking on the operating results of commercial banks in Embu County, Kenya, is also evaluated by Mbugua and Omagwa (2017). The survey covered all Banks branches in Embu County, Kenya. The study involved 69 senior, middle and junior managerial bank employees from Embu County, Kenya. The study relied on primary data collected through the use of questionnaires distributed via a drop-off/pick-up technique. For a descriptive analysis of the gathered data, descriptive statistics including mean, frequencies, standard deviation, and percentages were used. Multiple regressions and correlation analysis were also utilized to show how the study's dependent and independent variables related to one another. The research claims that agency banking has reduced the cost of banking and financial transactions. The study also discovered that the cost of agency banking had a considerable impact on the commercial banks' bottom lines in Embu County.

Nyota and Muturi (2019) use the equity bank, Kisii, Nyamira, and Keroka branches as examples to examine the effects of agency banking features on commercial banks' financial performance in Kenya. The study discovered a significant relationship between agency banking variables like market share, accessibility, and financial service costs and financial success. The inconsistent financial performance of Equity Bank is mostly explained by agency banking. Agency banking improves financial performance through increasing market share, cutting service costs, and increasing access to financial services.

The introduction of agency banking and its effects on Kenya's commercial bank withdrawals are evaluated by Kanyugie et al. (2019). An exploratory, non-experimental research design was used for the study. The study used secondary data, and the data was quantitative in nature. The information was aimed at 15 business banks. Using a data collecting worksheet and descriptive and inferential statistics, information was gathered from the annual reports of the CBK Banking Supervision and the financial reports of the 14 commercial banks. The event research served

as the foundation for the study's empirical model. According to the study, Kenyan commercial banks' financial performance is being impacted by the use of agency banking.

Alam et al. (2020) investigated how agent banking affected the financial success of Bangladeshi commercial banks. 19 commercial banks in Bangladesh were chosen as the study sample for this quantitative investigation. Secondary data for the years 2016 to 2019 was gathered from the balance sheets and income statements of the example banks and the Central Bank of Bangladesh. A multiple regression model is used to examine financial performance data. In spite of the volume of credit disbursements being statistically insignificant, the study reveals that the number of agents and the volume of deposits have a favorable and significant impact on financial performance, whereas the volume of withdrawals and loan disbursements has a negative impact.

2. METHODOLOGY

The research was conducted using a correlational research approach. The correlational research design is most appropriate since the study examined the relationship between agency banking and financial performance as well as it effect on financial performance. The study chose 12 DMBs from a total of 14 as a representative sample of the entire population. The data for the research was gathered from the audited annual financial statements of the selected banks for the years in question. Economic value added (EVA) was used to quantify financial performance in the study (Tanko 2020; Adesugba & Dotun, 2021).

The variables for the study were measured using the log of volume of accounts opened by agents to total accounts, log of volume of electronic transfers income by agents to total electronic transfer income, and log of volume of withdrawals through agents divided by total withdrawals were used as variables of Agency Banking Activities (Alam, 2020).

Method of Data Analysis
Descriptive statistics and econometric analysis utilizing the linear panel regression method with periodic and cross-sectional data were utilized in the methodology and analysis to establish the relationship between the two variables. Determine the centralization and dispersion of study variables using descriptive statistics. The mean, standard deviation, lowest and maximum values were used to present the data (Tanko, et al., 2022). The type of link between the independent factors and the dependent variable was examined using correlation. Multiple linear regression was used to establish the kind of the independent variable's causal influence on the dependent variable (Tanko et al., 2021).

This analysis was carryout within a panel data estimation framework. The basic models for panel data regression takes the form:

$$EVA_{it} = \beta_0 + \beta_1 VOAOA_{it} + \beta_2 VOETA_{it} + \beta_3 VOWA_{it} + \beta_4 FS_{it} + \beta_5 FA_{it} + \varepsilon_{it} ----- -1$$

Where;
EVA = economic value added;
VOAOA = volume of account open by agents;
VOETA = volume of electronic transfer by agents;

VOWA = volume of withdrawal through agents
FS=Firm size
FA = firm age;
i = firms $1 - 12$;
t = the financial years $2011 - 2020$;
$\beta 0$ = the intercept;
$\beta 1 - 5$ = the slope coefficient of explanatory variables; and
ε = error term.

3. RESULTS AND DISCUSSIONS

Table 1: Descriptive Statistics

Variables	Obs.	Mean	Std Dev.	Min.	Max.
EVA	120	0.0189	0.1199	0.5421	0.8873
VOAOA	120	0.1012	0.2117	0.0131	0.2147
VOETA	120	0.2401	0.3193	0.0117	0.3481
VOWA	120	0.2932	0.1431	0.0423	0.2821
FS	120	7.2149	0.8018	3.0037	9.8366
FA	120	23.00	14.7470	5.000	49.000

Source: STATA Output, 2021

According to Table 1, the sample DMBs' mean EVA over the course of the study was 0.0189 with a standard deviation (SD) of 0.1199. This is a sign that the data for the ROA are slightly off their mean and are hence off both sides of the mean. The minimum and maximum values of the ROA are 0.5421 and 0.8873, respectively. The volume of accounts opened by agents averages 10% and an SD of 0.3193, which means that the data for the volume of accounts opened by agents deviates significantly from either side of the mean because the standard deviation is larger than the mean. Also, 10% of account openings are done by agents, while 90% are done by bank employees. A minimum and maximum value of 0.0131 and 0.2147, respectively. The table also shows the mean of the volume of electronic transfers by agents during the period at a value of 0.2401 and a standard deviation (SD) of 0.3193. This indicates that there is a large variation in the volume of electronic transmission volume by the agents during the study period, as the mean is less than the standard deviation. This also shows that over 76% of bank customers used ATMs for money transfers, while 24% used bank agents. The minimum and maximum values of the volume of electronic funds transfer by agents were 0.0117 and 0.3481, respectively.
The study found that the mean of withdrawal volume by agents during the study period is 0.2932 and the standard deviation (SD) is 0.1431. This suggests that around 29% of customer withdrawals were made from bank agents, particularly via POS. Again, this indicates insignificant deviation about the mean, since the mean is greater than the standard deviation. The minimum and maximum value of the payout volume by agents was 0.0423 and 0.2821. The table also shows the average firm size (log total assets) of banks for the period as a mean of 7.2149 with a standard deviation (SD) of 0.8018. This shows that the data for company size (log of total assets) varied from either side of the 5.413 mean, meaning the data is widely

dispersed from the mean. In addition, FS also has a minimum and maximum of 3.0037 and 9.8367.

The data for FA, however, deviate by 8.253% from either side of the mean, as seen in Table 1, where the average company age of the DMBs analyzed was 23 years over the study period and had a standard deviation (SD) of 14.747. This demonstrates how closely the data are to the mean. The lowest and maximum values for the firm age data are 5 and 49, respectively.

Correlation coefficients

The connection or strength of link between the variables under research is described in this section. A summary of the correlation coefficients is provided in Table 2. To confirm their eligibility for the model, the data for this study were also put through a data normality test. The null hypothesis that the data for the research variables are normally distributed was tested using the Shapiro-Wilk test for data normality, with all variables having a significance level higher than 5%.

Table 2 Correlation Matrix

Variables	EVA	VOAOA	VOETA	VOWA	FS	FA	VIF
EVA	1.0000						
VOAOA	0.4138	1.0000					1.04
VOETA	0.0287	0.1871	1.0000				1.30
VOWA	0.5232	0.5454	0.2243	1.0000			3.18
FS	0.3341	0.1834	0.3410	-0.0993	1.0000		1.10
FA	0.1781	0.1134	0.1590	0.1045	0.3218	1.000	1.22

Source: STATA Output, 2021

Table 2 shows that there is positive correlation between volume of accounts opened by agents, volume of electronic transfer by agents, volume of withdraw by agent, firm size, firm age and EVA of the sampled DMBs during the period, which was explained by the 0.4138, 0.0287, 0.5232, 0.3341 and 0.1781 coefficient value respectively. This implies that as volume of accounts opened by agents, volume of electronic transfer by agents, volume of withdraw by agent, firm size, firm age increases EVA would equally increases. It also implies that volume of accounts opened by agents, volume of electronic transfer by agents, volume of withdraw by agent, firm size, firm age moved in same direction with EVA. However, the relationship between volume of account opened by agents, firm size and EVA is moderate while the relationship between volume of withdrawal through agents with EVA is high. Thus, the rest are weak relationship.

Diagnostic Tests

The variance inflation factor (VIF) test was used to determine if the study's explanatory variables were multicollinear. For all independent variables, a VIF of less than 10 was anticipated. The VIF test's findings are displayed in Table 2, where the greatest VIF is 3.18 and the lowest is 1.04. No VIF is greater than 10, hence this was interpreted as a lack of multicollinearity among the independent variables. In order to establish if heteroscedasticity existed or not, the Breusch-Pagan/Cook-Weisberg test was used. The 5% level of significance

was used to test the null hypothesis that there is no heteroscedasticity under the standard errors of the data variables. The results show that hettest has a Chi2 value of 5.93, which is significant with a p-value of 0.2334. The result shows that there is no heteroscedasticity between the values for EVA, VOAOA, VOETA, VOWA, FS and FA.

The study's use of panel data necessitated a more complex generalized least squares (GLS) regression approach that takes into account both fixed and random variables. In light of the p-value of 0.2731, the Hausman Specification test result displays a Chi2 of 15.39, which is unimportant. Given that the p-value is negligible, this suggests that the fixed effects regression analysis is inappropriate for the investigation. Random-effects regression, however, is more appropriate. More so, Breusch and Pagan's Langrangian Multiplier Test for Random Effects was used for this purpose, to choose between the random effect and OLS and the results reveal a Chi score of 9.45 with a significance level of 0.0000. Thus, fitted EVA values are more suitable for random effects regression analysis than the OLS. As a result, Table 3 displays the findings of the multiple GLS regression analysis with random effects.

Table 3: Summary of Random Effect Regression Result.

Variables	Coefficient value	Z-Value	p>/z/
Constant	0.8123	5.23	0.000
VOAOA	0.1235	4.38	0.000
VOETA	0.1132	1.98	0.043
VOWA	-0.2159	-4.55	0.000
FS	0.0821	3.87	0.000
FA	-0.0211	-1.21	0.243
Wald chi 2	22.88		
Prob.	0.0000		
Overall R^2	0.8729		

Source: STATA Output, 2021.

Table 3 shows that the model has overall R^2 of 0.8729. This indicates that 87% of variance in financial performance is caused jointly by the explanatory variables. This also indicates that the model is fit and the explanatory variables have been carefully selected, combined and estimated. The wald chi2 of the random effect value of 22.88 at 1% level of significance is a validation that the results are reliable, valid and generalizable. Furthermore, this implies that agency banking attributes has significant effect on DMBs financial performance.

The outcome of GLS multiple regression with random effects for ROA correction is presented in Table 3. When one of the independent variables increases or decreases by one unit while the other independent variables remain constant, the intercept coefficient (CONST), which determines the value of EVA, is found to be 0.8123. The CONST's z-score is 5.23, and it has a 1% significance level (p-value = 0.000). VOAOA has a 0.1235 coefficient, a z-value of 4.38, and a 0.000 p-value. This implies that, everything else being equal, VOAOA considerably and favorably influences EVA. According to the positive coefficient value, a 1% rise in VOAOA would result in a 12% increase in EVA. This implies that as bank agents increases and bank agent increase their level of accounts opening for customers and there is high level of

transaction carry out in those accounts the financial performance of DMBs in Nigeria would increase.

VOETA has a coefficient of 0.1132 at the z-value 1.98 and p-value of 0.043. This indicated that VOETA positively and significantly influence EVA. The positive coefficient indicates that all things being equal1 unit increase of VOETA would lead to 11% increase of EVA as other factors remain constant. This suggest that as bank agents carryout electronic transfer for customers it increased financial performance of DMBs in Nigeria. Also, the charges on electronic transfers are the indices that increase financial performance of DMBs. Additionally, with a coefficient value of -0.2159 and a p-value of 0.000, the results demonstrated a substantial and unfavorable impact of VOWA on EVA. A decrease in EVA of more than 21.59% would happen from every 1 unit rise in VOWA, according to this negative coefficient value. The results are in agreement with those of Alam et al (2020). The implication of the finding is that as customers keep on withdrawing money the financial performance of DMBs decrease.

The results also shows that firm size has positive and significant effect on EVA. This indicates that as firm size increase by 1% and other factor remain constants EVA will equally increase. The result also shows that firm age has negative and insignificant impact on EVA. This means that as firm age increases by 1% ROA will decrease.

4. CONCLUSION AND RECOMMENDATIONS.

In order to achieve optimal bank profitability and a sustainable way of life for Nigeria's listed deposit banks, the primary goal of this study is to evaluate the influence of agency banking on the financial performance of deposit banks in Nigeria. Sequel to the finding of the study, the study concluded that Volume of account opening by agent significantly increases financial performance Also, the variations on return on asset (ROA) are significantly explained by MO as adopted by listed deposit money banks in Nigeria. This implies that bank agent put effort to increase DMBs profitability because of they received commission from each account they opened for customers. In addition, since banks are close to customers in the remote area it encourages to open accounts through the agents.

Also, the study concluded that volume of electronic transfers has positively increases banks financial performance. This implies that the more bank agent carried out electronic transfer for customers the more financial performance of the DMB will increase. This also shows that the transfer and electronic charges on every transfer increase DMBs financial performance. The study also concluded that volume of withdrawal by agent has negative and significant effect on DMBs financial performance. This suggest that when customers withdraw their money it reduced the available funds DMBs have to invest in other business and provide lending to borrowers which would increase their performance.

Based on the findings and conclusions of the study on the impact of agency banking on the financial performance of listed deposit money banks in Nigeria, the study recommends that the DMBs in Nigeria should ensure that they have agent in strategies areas in Nigeria in order to bring banks close to the people since in general agency banking increase DMBs financial performance. Also, DMBs agent should encourage people to open accounts and carry out transaction with the accounts since account open by agent was found being among the factors that increase DMBs profitability.

DMBs should provide more POS and other electronic transfer gadgets for agents which would enable them to make electronic transfers in million. In addition, DMBs should put in place incentive that would encourage customers to reduce their level of withdrawals by giving out reward to customers that has not make withdraw for some period of time. Also, Regulators should increase the interest rate for customers saving which would encourage customer not to make withdraw frequently.

5. REFERENCES

1. Alam, M. M., Bhowmik, D., & Bhowmik, D. (2020). The impact of agent banking on financial performance of commercial banks in Bangladesh. IOSR Journal of Economics and Finance (IOSR-JEF), 11(3), 13–20. https://doi.org/10.9790/5933-1103051320
2. Central Bank of Kenya (2010). Guideline on Agent Banking - CBK/PG/15, Nairobi
3. Central Bank of Nigeria (2012). National financial inclusion strategy summary report. Abuja: CBN Publications.
4. Charles .M. Kanyore1, D. A. A. (2015). Effects of agency banking on Financial Performance of Banking Institutions Listed at Nairobi Securities Exchange. International Journal of Science and Research, 4(7), 931–938.
5. David, F. D. (2012). 'Perceived usefulness, perceived ease of use, and user acceptance of information technology'. MIS Quarterly, 13(3): 319-340.
6. Kanyugi, G. E., Gudda, P., Ombok, M., & Kibati, P. (2019). Banking agency adoption and its effect on banks deposits of commercial banks in Kenya. International Journal of Academic Research in Accounting, Finance and Management Sciences, 9(3), 1–10. https://doi.org/10.6007/ijarafms/v9-i3/6455
7. Kingori, E. & Gekara, M. (2015). Effects of agency banking on the performance of bank agents business in Thika municipality, Kenya. The strategic Journal of Business and Change Management, 2 (79), 940- 972.
8. Kingori, E. M. (2015). Effects of agency banking on the performance of bank agents business in Thika Municipality , Kenya. Journal of Management, The Strategic Business & Change, 2(79), pp.940-972. www.strategicjournals.com, ©strategic Journals
9. Margaret, K. G., & Ruth, N. K. (2019). The effect of banking services on the business performance of bank agents in Kenya. Cogent Business and Management, 6(1). https://doi.org/10.1080/23311975.2019.1684420
10. Mbugua, I. N., & Omagwa, J. (2017). Agency banking and financial performance of commercial banks in Embu County , Kenya. International Academic Journal of Economics and Finance, 2(3), 348–367.
11. Mwando, S. (2013). Contribution of agency banking on financial performance of commercial banks in Kenya. Issn, 4(20), 2222–1700. www.iiste.org
12. Ondara Nyota, J., & Muturi, W. (2019). Effect of agency banking features on the financial performance of commercial banks in Kenya: a Case of Equity Bank, Kisii, Nyamira and Keroka Branches-Kenya. International Journal of Economics, Commerce and Management United Kingdom, 07(11), 646–662. http://ijecm.co.uk/
13. Patricia-nezianya, N., & Izuchukwu, D. (2014). Impact of agent banking on performance of deposit money banks in Nigeria. Journal of Finance and Accounting, 5(9), 35–41.

14. Tanko, U.M, & Dandago, K.I (2019. How independence in fact assures audit quality in Nigerian banking industry. International conference of Accounting and Finance Research Association (AFRA).

15. Tanko, U.M**.,** & Saman, U.P. (2019). Audit quality, political connection and investors protection and how they affect Nigeria firms' performance. Journal of Internet Banking and Commerce, 24(3):364. www.icommercecentral.com/open-access/audit-quality-political-connection-and-investors-protection-and-how-they-affect-nigeria-firms-performance.php?aid=87687

16. Tanko, U.M**.,** & Ibrahim S.M. (2019). Audit committee and International financial reporting standards' compliance with disclosures in Nigerian firms. KSU Research Journal of Accounting and Finance, 2(2) 166-179.

17. Tanko, U.M., & Shishi S.S. (2020). Revenue generation and infrastructural development in Taraba State. International Journal of Business and Technopreneurship, 10(3), 379-392. https://ijbt.unimap.edu.my/index.php/volume-10-no-3-october-2020.

18. Tanko, U. M., Siyanbola, A. A., Bako, P. M., & DOTUN, O. V. (2021). Capital structure and firm financial performance: moderating effect of board financial literacy in Nigerian listed non-financial companies. Journal of Accounting Research, Organization and Economics, 4(1), 48–66. https://doi.org/10.24815/jaroe.v4i1.18322

19. Tanko, U.M., & Bako, P.M. (2022). Place of artificial intelligence in accounting field and the future of Accounting profession. Journal of artificial intelligence machine learning and neutral network 2(5), 15-21.