



FEDERAL UNIVERSITY OTUOKE

JOURNAL OF MANAGEMENT SCIENCES

INCOME DIVERSIFICATION AND PERFORMANCE OF QUOTED DEPOSIT MONEY BANKS IN SELECTED SUB-SAHARA AFRICAN COUNTRIES

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ABSTRACT

This paper sought to empirically investigate the influence of income diversification on performance of quoted deposit money banks in selected Sub-Sahara African countries. By way of judgmental sampling and availability of data we selected Botswana, Ghana, Kenya, Malawi, Mauritius, Namibia, Nigeria, South Africa, Uganda, Zimbabwe and Zambia. The nature of the study necessitated the use of secondary data which was collected from quoted deposit money banks annual audited financial statements over the period 2007-2017. The technique adopted include: panel unit root analysis, co-integration test and the system- GMM. In achieving the objective, using dependent variables (Returns on Asset and Tobin Q), explanatory variable of income diversification then foreign diversification, subsidiary diversification, bank's size and bank's age respectively were used as control variables. The findings reveal that income diversifications exert positive and significant effect on all the performance indicators (ROA and TOBIN Q) respectively. On account of the major findings, we recommend, amongst others, that banks should consider income diversification as a long run strategy for promoting growth and other forms of expansions. This can be achieved by promoting more non interest earning income businesses and regional banking integration within the sub-region. This outcome calls for policy options that are capable of facilitating entry and establishment within economies in the regional blocs, because diversification in this direction has the tendency to involve less institutional obstacles.

Keywords: Income diversification, system-GMM, bank performance, co-integration

INTRODUCTION

The fundamental purpose of financial intermediation of funds transfer from the surplus unit of the economy to the deficit unit still revolves and resides in the banking sector of every economy all over the globe. Lending of funds to the deficit unit of the economy remains the highest earning asset of deposit money banks in sub-Sahara Africa and other climes around the world. The era of banking sector deregulation in most economies

changed the face of traditional banking, which solely main source of income was lending. The observation of Gurbuz, Yanik and Ayturk (2013) revealed that the conventional profit channel of banks is interest income, they have involved intensively in non-interest income spawning activities mainly in advanced nations after the commencement of financial deregulation period. Deposit money banks extended their operations to other segments of the economy just to expand their sources of income. The operations cut across different segments like – Real estate, Agriculture, Oil and gas, Logistics and Insurance etc. The essence is to diversify their income means and not to rely mainly on lending.

There are different variants and shades of corporate diversification. Corporate diversification can take the form of product, geographical, operational, subsidiary, income, foreign, sectorial and industrial. Multiple motives prompt firms to invest in different assets and incomes activities. The paramount set of motivation compasses what are conventionally characterized as “push factors” which include risk reduction, feedback to diminishing factors returns in any given reaction to crises or liquidity squeeze, amplified transaction costs that induce firms to self-provision in several goods and services. The second set of motivation embraces “pull factors” recognition of strategic complementary activities according to proportional benefit accorded by superior know-hows, abilities or talents (Davis & Pearce, 2001).

Firm’s performance stimulation has always been germane in private as well as in public sectors, because of its direct association with the value creation of entity. Firms (Deposit Money Banks inclusive) are persistently motivated for superior results, influence and competitive advantage (Arasa, 2014). Brealey, Myers and Marcus (2009) view firm’s performance as a gauge of how well an organization transforms its assets from its central processes and generates revenues over a given period of time. Profitability is the main measure of a bank performance and just like any other business; profitability is measured conventionally as (Returns on Asset and Returns on Equity) are used in performance determination of deposit money banks in different countries all over the globe. Hence, the frequently used measure of performance in extant literatures are returns on asset (ROA), returns on equity (ROE), returns on investment (ROI) and net interest margin (NIM). These aforementioned are largely accounting measures of performance. Another measure of firms’ performance that is appealing to researchers (Chen & Ho, 2000; Lang & Stulz, 2004; Doaei & Shavazipour, 2013; Berg, 2016; Manyuru, Wachira & Amata, 2017.) of late is Tobin Q which is market measure of performance. It is expressed as the ratio between the summation of market value of equities and book value of liabilities to book value of total assets. This study will deviate from the norm by using both accounting base measure of performance (ROA) and market base measure of performance (Tobin Q). The use of these varying performance measures would in no doubt give clearer and robust results and provides strong basis for comparative analysis between the various measures, which will greatly improve on past studies.

It is in the light of the above that the paper sought to examine the effect of income diversification on the performance of quoted deposit money banks in selected countries in Sub-Sahara Africa. The rest of the paper is thus sub-divided into: section 2, which presents the review of extant literature and followed by section 3, which presents the methodology and model specification, thereafter section 4 discusses empirical results and lastly section 5 presents the concluding remarks and recommendations.

LITERATURE REVIEW

Income diversification denotes the deliberate proliferation of sources of income available to firms with deposit money banks inclusive. Income diversification is broadly assumed to be a means of self-insurance, and it seems not to be an ephemeral occurrence or one just associated with survival and competitive advantage as noted by Barret, Reardon and Webb (2001). Organizations offering financial services in modern times have progressively been making revenue (income) from “off-balance sheet” business and fee income. The position of Uzhegova (2010) is that the deficiency or reduction in interest margins, made most(compelled)deposit money banks to discover other income channels, giving rise to diversification operations, other services and non-traditional financial activities. Income diversification idea is in line with the concept of portfolio theory which is of the view that firms and organizations can decrease firm-unique risk by spreading their portfolios.

Organizational performance is likewise a portion of organizational effectiveness that incorporates three regions of performance which incorporate financial, market performance and shareholder value. Kirkendall (2013) attests that there are several diverse measures for organizational performance valuation. One of these measures incorporates the utilization of financial measures, for example, profitability of the organization. Under this measure the result to input proportion is resolved utilizing ratio, for example, the Return on Assets (ROA), Return on Equity (ROE), Return on Investment (ROI) and Tobin’s Q.

Returns on Assets (ROA) measures the overall efficiency with which banks resources are used to churn out net income from diverse activities (Oladutire, 2011). It is ratio of profit after tax to total assets, that it is the generally accepted measurement of ROA. It shows the management’s efficiency and effectiveness in ordering capital, (Oladutire, 2014). In literature, ROA is probably one of the absolute gauge of operational performance. It links the results of activities with the means applied to produce such results (Orji, 2011). In all, it is moderately easy to interpret.

The Tobin Q is a market base performance measurement. First of all, Tobin Q, which is measured as the ratio of market capitalization plus total liabilities minus net cash flow to total assets. Berg (2016) posits that it is a revolutionary gauge that delivers sufficient evidence about an organization’s performance which reflects investors’ estimations of assets either tangible or intangible. Tobin’s Q is a healthy measurement when equating different businesses because the ratio symbolizes the net present value of future cash flows divided by the replacement costs of tangible assets (Lien & Li, 2013).

The study carried out in the US by Oweis (2012) on the influence of corporate diversification on financial profitability of Banks in United States of America, Pre and Post the Financial Services Modernization Act of 1999. Data covering 1990 – 2011 was used while GMM technique was employed to analyze the data. The outcome reveals a strong association between income diversification and profitability was positive which connotes profitability premium, rather than discount.

Brighi and Venturelli (2013) examine the effect of revenue and geographic diversification on performance of banks in Italy for a period of 2006-2011. The analysis of the data was carried out via a panel regression econometric technique. The central results from the study reflect that revenue and geographical diversification have played a positive

role in determining bank performance within the period of study. Lukmawijawa and Kim (2010) investigate Banks corporate diversification effects on performance and risk profile of banks using Indonesia bank data for the period of 2009-2013. The study used Tobin Q to capture bank performance and the result showed that bank non-interest income diversification has a positive influence on its franchise value however there is no strong evidence that diversification can reduce bank's risk profile. Ismail, Hanif, Choudhary and Ahmad (2015) in their study carried out in Pakistan to examine Income-diversification in the banking sector of Pakistan: a 'Blessing' or 'Curse'? The study covered a period of 2006-2013 and panel data of fourteen banks from Pakistan were used for the study. Pooled Ordinary Least Squares estimation technique was used to examine the relationship between income diversification and performance of banks operating in Pakistan. The study revealed an affirmative influence of income diversification on profitability of commercial banks in Pakistan.

Focused and diversified business models of foreign banks in Luxembourg from 1995 to 2009 were carried out by Curi, Lozano-Vivas and Zelenyuk (2015). The paper examines measurements of bank diversification (assets, funding, and income) and measured efficiency using Data Envelopment Analysis (DEA). The outcome of the paper reveals that income diversification amongst other diversification variables impacted negatively on bank efficiency. Mulwa, Tarus and Kosgei (2015) in their study examine commercial bank diversification, they concluded that the prevalent methods by which deposit money banks advance corporate diversification are income diversification, assets diversification, credit diversification, geographical diversification and international diversification because of their tendencies to impact on performance of corporate firms.

Muneer, Jahanzeb and Suwandi (2016) in their paper examine income diversification and performance, within the scope of 2007-2013. The study used a total of 25 banks (20 commercial banks and 5 Islamic banks) in Pakistan and the study was estimated via simple regression model. The findings show that the impact of income diversification on performance of commercial banks and that of Islamic banks was neither a premium nor discount. Using an ex post facto explanatory design, Mulwa and Kosgei (2016), investigate whether bank diversification affects financial performance and whether this effect is moderated by solvency and credit risk based on panel data from 34 deposit money banks in Kenya for nine years. The researchers found that income and asset diversification negatively and significantly affect commercial bank returns on asset while geographical diversification significantly – positively affect both returns on asset and returns on equity. They also find a significant positive moderation effect of credit risk on relationship between income diversification and returns on asset but a significant negative effect on relationship between asset diversification and geographical diversification with both returns on asset and returns on equity. On solvency risk a significant positive moderate effect exist on relationship between geographical diversification and returns on equity.

Ekanayake and Wanamalie (2017) in their study investigate income diversification and bank risk-returns trade-off, considered eleven banks for the period of 2002-2015 in Sri Lanka. The study employed simple regression model and the findings reveal that interest income has a significant negative relationship with risk-adjusted returns on equity which is an indication that increase in interest income is associated with worsening the risk returns tradeoff for investors. In Malaysia, Brahmana, Kontesa, and Gilbert (2018) examine income diversification and bank performance, using data covering a period of 2005-2015. Using a

fixed effects panel regression analysis technique, the findings show that income diversification increases bank's performance confirming risk reduction hypothesis and resource-based view theory. Nisar, Peng, Wang and Ashraf (2018) applied the difference and system-GMM to ascertain the influence of income (revenue) diversification on bank profitability and stability amongst South Asian banks. The scope of the study was fifteen years (2000-2014) and the sample of two hundred commercial banks was analyzed in the data set. The findings of the study revealed that earnings diversification into non-interest income impacted positively on the performance and stability of South Asian commercial banks. They observe that diverse variants of non-interest revenue-earning activities have different influences on bank performance and strength.

Theoretical Considerations

The theoretical considerations underpinning this paper is modern portfolio theory (MPT) propounded by Markowitz (1952). The theory is founded on the premise on how risk adverse investors can build their collection of assets or investment in order to maximize their expected returns and minimize risk by diversifying their numerous investments. The deposit money banks relying on this theory will invest in order areas outside the core banking business to increase their income and reduce the risk profile of the organization. This theory is of great relevance to this study because deposit money banks are faced with different unsystematic risk elements. The beauty of this modern portfolio theory is that it recommends diversification in reducing unique risk within organizations. Thus, MPT is viewed as a form of diversification theory which explains the method of finding the best possible diversification strategy. In fact, diversification is the core concept of modern portfolio theory and directly relies on the conventional wisdom of "never putting all your eggs in one basket" (Fabozzi, Gupta & Markowitz, 2002; Veneeya, 2006; McClure, 2010). Hence, this theory is apt for this study.

It is expected that income diversification, foreign diversification and subsidiary diversification are expected to have positive impact on firm performance. Again, from theory firm age is expected to have a positive relationship with performance output of firms. Theory of structural inertia it is expected that as firms grow larger complacency and resistance to change which can lead to decrease in performance.

METHODOLOGY

The nature of this study necessitates secondary data sourced from the various audited financial statements of sampled deposit money banks in the selected countries and Bloomberg over the period 2007 – 2017. A total of fifty (50) deposit money banks across eleven (11) Sub-Sahara African countries were used in this study.(see appendix one). The choice of the eleven countries is based on their vibrant stock exchanges and compliant to voluntary sustainability report guidelines of the selected bourses.

This study adopts panel unit root analysis, co-integration test and the system- GMM to ascertain the stationarity and normality of the data in the variables in the specified model. Justification for the test of stationarity is to ensure that the data are reliable for the system-GMM application. The system Generalized Method of Moments became necessary to resolve the drawbacks of endogeneity of independent variables with dependent variable, omitted variables, measurement biases and heterogeneity problems associated with cross-country data.

The nature of this study necessitates secondary data sourced from the various audited financial statements of sampled deposit money banks in the selected countries and Bloomberg over the period 2007 – 2017. A total of fifty (50) deposit money banks across eleven (11) Sub-Sahara African countries were used in this study.(see appendix one). The choice of the eleven countries is based on their vibrant stock exchanges and compliant to voluntary sustainability report guidelines of the selected bourses.

Model Specification

The two models were anchored on the theoretical framework of modern portfolio theory (MPT) as earlier stated. In order to examine the impact of income diversification on performance of quoted deposit money banks in selected sub-Sahara African countries, the model was adapted from Olarewaju, Migiro and Sibanda(2017) by incorporating a market base performance measure (Tobin Q).

The functional form of the models are stated below;

$$ROA_{it} = f[IND, FD, SD, BSIZE, BAGE] \dots \dots \dots (1)$$

$$TOBINQ_{it} = f[IND, FD, SD, BSIZE, BAGE] \dots \dots \dots (2)$$

The econometric form of the models are stated below as;

$$ROA_{it} = \beta_0 + \beta_1 IND_{it} + \beta_2 FD_{it} + \beta_3 SD_{it} + \beta_4 BSIZE_{it} + \beta_5 BAGE_{it} + U_t \dots \dots \dots (3)$$

$$TOBINQ_{it} = \beta_0 + \beta_1 IND_{it} + \beta_2 FD_{it} + \beta_3 SD_{it} + \beta_4 BSIZE_{it} + \beta_5 BAGE_{it} + U_t \dots \dots \dots (4)$$

Where:

IND = Income diversification is measured as the ratio of net interest income minus other operating income to total operating income deducted from one (1)

FD = Foreign diversification measured as $\ln [1 + \text{number of foreign subsidiaries}]$

SD = Subsidiary diversification measured as $\ln [1 + \text{number of foreign subsidiaries} + \text{domestic subsidiaries}]$

BSIZE = Size of the Bank measured as $\log (\text{market value})$. Where market value is share price x number of shares outstanding

BAGE = Age of the Bank is measured as the number of years from the day the firm was established till 2017

ROA = Return on Asset is measured as a ratio of profit after tax to total asset

TobinQ = Tobin Q is measured as the summation of market capitalization and total liabilities minus the net cash flow to total asset

Where i represent countries in all sample and t represents the scope or period of study.

$\beta_0 - \beta_5$ are parameters to be estimated and U_t is the error term.

ANALYSIS OF RESULT

Table 1: Panel Unit root test result

Variables	Homogeneous Unit Root Process				Heterogeneous Unit Root Process			
	Level		1 st Diff		Level		1 st Diff	
	LLC	Breitung	LLC	Breitung	IPS	ADF-Fisher	IPS	ADF-Fisher

<i>ROA</i>	-5.84**	-1.36	15.5**	-3.4**	-2.45**	144.6**	-7.07**	234.9**
<i>Tobin_Q</i>	-2.39**	-0.94	13.96**	-4.32**	-2.39**	148.3**	-7.84**	247.3**
<i>IND</i>	-6.75**	-1.08	-15.4**	-3.22**	-2.42**	151.2**	-7.56**	247.9**
<i>FD</i>	-13.8**	-1.13	-7.49**	-5.01**	-2.18**	51.1**	59.9**	97.9**
<i>SD</i>	-0.99	-0.51	-7.95**	-4.18**	1.75	51.7	-3.27**	109.6**
<i>SIZE</i>	-8.11**	-1.02	-6.48**	-3.00**	-0.89	117.5	-2.96**	166.6**

Note: * and ** indicate significance at 5 and 1 percent respectively.

From Table1 above, the levels variables (except SD-subsidary diversification) are all significant in terms of the test statistics at either the 1 percent levels based on the LLC, IPS and ADF-Fisher tests. Only the Breitung test reports non-significant tests values for all the variables in levels. This shows that for all the variables (except SD) the null hypothesis of the stationarity cannot be rejected in levels, suggesting that the variables among the firms do not follow a defined pattern of movement over any given period. The variables are apparently not time dependent. However, the result also shows that for the first difference variables, all the test statistics are significant, thereby leading to the rejection of the null hypothesis of no unit roots in the first differences. These outcomes intensely show that most of the variables are stationary both in level and at first differences. This outcome is reinforced by both the homogenous and heterogeneous panel unit root tests. Subsequently the variables are also stationary after first difference hence the need to establish their long run relationship became imperative.

Cointegration Test Results

Table2below shows the outcomes of Pedroni's and Kao panel cointegration tests on the series that is between the dependent variable and the explanatory variables for the two models specified for the analysis. The columns labeled within-dimension contain the computed value of the statistics based on estimators that pool the autoregressive coefficient across different countries for the unit root tests on the estimated residuals. The columns labeled between-dimension report the computed value of the statistics based on estimators that average individually calculated coefficients for each country. The result shows that there is no cointegration among the variables.

Table 2: Cointegration Test Results

Pedroni Residual Cointegration Test					Kao Residual Test
	Statistic	Weighted Statistics		Statistics	
ROA equation					
Panel v	-13.64**	-16.37**	Group rho	10.72**	-2.67**
Panel rho	21.71**	17.78**	Group PP	-12.90**	
Panel PP	-3.12**	-11.41**	Group ADF	-2.46**	
Panel ADF	-1.91**	-4.50**			
Panel ADF	-4.38**	-5.34**			
Tobin Q Equation					
Panel v	5.12**	-9.01**	Group rho	12.06**	-3.07**

Panel rho	2.62**	7.34**	Group PP	-11.52**	
Panel PP	-8.37**	-9.21**	Group ADF	-0.57**	
Panel ADF	3.55**	-3.19**			

Note: * and ** indicate significance at 5 and 1 percent respectively.

From the tests results, all variables indicate significance at the 1% level for both the grouped and ungrouped tests. All test processes, including rho, PP and ADF are significant for both the within and between tests (at the 1 percent level). Thus, the null hypothesis of no co-integration is rejected for the combination of the variables.

Table 3: Sys-GMM Results for ROA

Variable	1	2	3	4	5
<i>ROA(-1)</i>	-0.038** (0.001)	-0.312** (0.000)	-0.271** (0.000)	-0.061** (0.003)	-0.048** (0.002)
<i>Income diversification</i>	0.814** (0.000)	-	-	0.808** (0.000)	0.830** (0.000)
<i>Foreign diversification</i>	-	2.047** (0.000)	-	0.968** (0.000)	0.863** (0.000)
<i>Subsidiary diversification</i>	-	-	1.015** (0.000)	-0.985** (0.000)	-1.144** (0.003)
<i>SIZE</i>	0.091* (0.041)	-2.447** (0.000)	-1.896** (0.000)	-	0.406** (0.002)
<i>BAGE</i>	0.008** (0.004)	0.062** (0.004)	0.083** (0.003)	-	-0.005 (0.102)
<i>Overidentifying restriction (Hansen J-prob)</i>	0.302	0.231	0.453	0.305	0.192
<i>Arrelano-Bond AR(1)</i>	-1.98*	-2.01*	-1.97*	-1.92*	-1.99*
<i>Arrelano-Bond AR(2)</i>	-1.51	-1.22	-1.36	-0.98	-1.44
<i>No. of observations</i>	540	540	540	540	540

Note: * and ** indicate significance at 5 and 1% respectively. T-probabilities in parentheses below each coefficient

The appropriate application of the results of the estimates to empirical tests and policy directions are based on the outcomes of the estimated coefficients of the explanatory variables especially in terms of signs and significance. From the results in above table, the coefficients of the lagged dependent variable are all significant at the 1% level, confirming the presence of a dynamic structure of the relationship between ROA and the explanatory variables. The coefficients of the ROA_{t-1} variable are however all negative for each of the estimates in the results. This reflects long run instability in the estimated equations and shows that any short term variation in the performance indicator will likely lead to further self-reinforcing disequilibrium in the system.

For the explanatory variables, the result shows that income diversification have unambiguous positive coefficient which is robust across each of the estimation structure.

These coefficients are all significant at the 1% level. This implies that income diversification exhibit strong positive impacts on ROA among the banks, irrespective of the factors that are controlled in the model. Indeed, the values of the coefficients are similar in each of the estimation. Also, the coefficient of foreign diversification is significant in each estimation and indicates that foreign diversification improves banks' ROA unambiguously across the countries. The coefficient of foreign diversification is smaller when other diversification variables are controlled for in the estimation. This indicates that foreign diversification has stronger impacts on firm performance when other diversification aspects are not taken into cognizance. Apparently, banks that focus only on foreign diversification tend to have higher ROA reports than those that are involved in all the forms of diversification. This could be as a result of efficiency losses that may result from running foreign subsidiary in combination with domestic expansion. Apparently (in terms of growing the ROA), it pays to decouple foreign aspects of diversification from the domestic diversification dimension.

Similar results are manifested by the results of the coefficient of subsidiary diversification. Although all the coefficients of the variable are significant at the 1% level for each of the estimation output, only the coefficient of the estimate without other diversification aspects is positive. When other diversification are included in the estimates, the coefficient becomes negative, even though the size and age are controlled for. The results suggest that subsidiary diversification only improves ROA (internal efficiency) when other diversification aspects are not involved in the banks. Indeed, with involvement with other diversification among banks, subsidiary diversification begins to exert negative effects on ROA among the banks.

While bank age has positive and largely significant impacts on ROA, bank size only has positive effects on ROA under certain conditions. From the results, larger banks are more likely to improve ROA when income is taken into cognizance. Thus, the size of the bank will only exert significant positive impact on ROA for banks with more income diversification. On the other hand older banks are shown in the result show have significant positive impacts on ROA among the countries.

Table 4: Sys-GMM Results for Tobin's Q

<i>Variable</i>	1	2	3	4	5
<i>TOBIN_Q_{t-1}</i>	-0.031** (0.000)	-0.014** (0.000)	-0.066** (0.000)	-0.095** (0.000)	-0.055** (0.000)
<i>Income diversification</i>	-0.044** (0.002)			-0.424** (0.000)	0.447** (0.000)
<i>Foreign diversification</i>		-0.808** (0.000)		1.031** (0.000)	-2.325** (0.000)
<i>Subsidiary diversification</i>			-0.941** (0.000)	-0.675** (0.002)	-9.423** (0.002)
<i>SIZE</i>	1.667** (0.001)	2.169** (0.003)	2.205** (0.001)		2.418** (0.001)
<i>BAGE</i>	-0.156** (0.000)	-0.194** (0.000)	-0.189** (0.000)		-2.028** (0.004)
<i>Overidentifying restriction</i>	0.387	0.461	0.424	0.491	0.302

(Hansen J-prob)

Arrelano-Bond AR(1)	-2.03*	-1.94*	-2.00*	-1.83	-1.91*
Arrelano-Bond AR(2)	0.73	-0.74	-0.80	0.92	-0.77
No. of observations	540	540	540	540	540

Note: * and ** indicate significance at 5 and 1% respectively. T-probabilities in parentheses below each coefficient

The measure of bank performance in the analysis using Tobin's Q relates to the performance in terms of the stock market. The diagnostic tests in the results are also impressive based on the Hansen J-test and the Arrelano-Bond AR tests. The coefficient of the over-identifying restriction test statistic for the GMM estimates possess the expected values (i.e. greater than 0.1), indicating that the instruments used in the estimation are valid. The Arrelano and Bonds first and second order serial correlation tests also possess the expected outcomes. The tests show that the first order statistic is statistically significant and has the expected negative sign. The second order statistic is not significant (in line with *a priori* expectation), suggesting that the model error terms are serial uncorrelated in levels. This provides additional support for the instruments validity test indicated by the Hansen J-statistic.

From the result, income diversification has a unique pattern of effects on firm performance in terms of Tobin Q. On its own, the effect is negative but with other diversifications, the effect is positive (with no control for size and age) and positive (with control for size and age). This implies that income diversification will only have positive impact on Tobin Q when the banks also have foreign and subsidiary diversification and for older and larger banks. Since income diversification tends to improve the performance of the banks in the stock market through expanding financial capacities of the banks, other forms of expansion are likely to make these effects more realistic. The coefficient of foreign diversification is essentially negative for the results with control or without control for other diversification factors. This implies that foreign diversification actually leads to reduction of the banks' Tobin Q value across the countries under reference. This result is actually surprising since increased foreign participation in the foreign sector should boost investors' confidence among the banks. What the results reveal however is that with increased foreign participation, banks tend loose competitive advantage in terms of improving market value. The coefficient of bank size was significant in each of the estimates, suggesting that larger banks have better higher market value than smaller banks. On the other hand, older banks do not have higher market value than younger counterparts as demonstrated by the negative coefficients of the BAGE variable.

On this note, using system GMM model, income diversification positively and significantly impact on performance of deposit money banks in among Sub-Sahara African countries as measured by ROA and Tobin Q. This is an indication that an increase in income diversification will also lead to a positive and significant increase in deposit money banks performance in the region. This implies that deposit money banks in the Sub-Sahara region can improve their performance from different income earning ventures they involve in by value creation and risk reduction for the stakeholders. This outcome is in line with Nisaret *et al* (2018), Nguyen (2018), Ismail *et al* (2015) and Sufian and Chong (2008) who both find a

positive and significant effect of income diversification on performance of firms in their various studies.

CONCLUDING REMARKS AND RECOMMENDATIONS

This study examines the effect of income diversification on performance of quoted deposit money banks in selected Sub-Sahara African (SSA) countries. With continuous financial development in the SSA region, more and more participants are being brought into the financial markets leading to creation of more financial instruments, expansion in banks and operational activities. The focus has been on improvements and enlargements of technology application in the banking sector, especially with the goal of increasing the share of banks in the region within more globalised markets. From the study, it is evident that income diversification has a significant impact on performance of quoted deposit money banks in selected Sub Sahara African countries. The effects were found to be unambiguous, irrespective of the performance measure adopted and the factors that are controlled in the model used in the study. The results also reflect long run instability in both ROA and Tobin Q as performance measures among the banks, showing that any short term variation in the performance indicator will likely lead to further self-reinforcing disequilibrium in the system, especially when the banks engage in diversification.

Income diversification of deposit money banks has been embraced by most banks and has taken the center stage of most economies in the world. This is so because it helps in building a virile, efficient and robust banking system which can spark the performance of the individual banks and lead to the overall growth of the various national economies. In order to gain extensively from the gains of corporate diversification, regulatory authorities of SSA countries should put in place different institutional reforms that will help in carrying out banking activities within the SSA regions with little or no stringent rules that can help deposit money banks to operate in the different financial markets.

This study therefore recommends amongst others that because there is a long run relationship exists between income diversification and bank performance among the banks in SSA region. Thus, banks need to consider diversification as a long run strategy for promoting growth and other forms of expansions. This can be achieved by promoting more regional banking integration within the sub-region. Given that formalities are already on the ground to facilitate entry and establishment within economies in the regional blocs.

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