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Credit Creation and Financial Stability of Banks: Evidence in Nigeria

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ABSTRACT: The study examined how bank credit creation affects financial stability in Nigeria from 1981 to 2020. We obtained the data for the study from the Central Bank of Nigeria and World Bank statistical bulletins. Our research looked specifically at how credit creation to the agricultural (LnCCAS), manufacturing (LnCCMS), transport and communication (LnCCTC), and mining and quarrying (LnCCMQ) sectors affects financial stability (FS) of banks in Nigeria. We used descriptive statistics, unit root, Johansen co-integration, VECM, and Granger Causality techniques at the 5% level to investigate this. The unit root demonstrates that all variables were stationary at first differences, requiring the Johansen co-integration, which reveals the presence of long-run form. The VEC model reveals that LnCCAS and LnCCMS are positive and significant; LnCCMQ is negative and insignificant; while LnCCTC is positive but insignificant to FS in Nigeria. For the Granger causality, there is no directional relationship between each of LnCCMS, LnCCMQ, LnCCTC, and LnCCAS to FS. We conclude that credit creation by banks affects their financial stability in Nigeria. On recommendation, we advocated for the continuous provision of credit to the manufacturing and agricultural sectors of the economy, as these sectors significantly promote financial stability. Furthermore, banks should prioritise the economy's transportation and communication sectors because they have the potential to stimulate financial stability among Nigerian banks. As a result, banks should limit the amount of credit available to the mining and quarrying sectors of the economy.

KEYWORDS: Loans, Formation, Instability, VECM, Economy, Commercial Banks

1.0 INTRODUCTION

The financial sector's actions are intended to support economic growth in any economy. These activities are more effectively carried out in an economy with a stable financial system, as stated in the finance-led hypothesis (Taivan, 2018; Kumar, 2014; Bist, 2018; Mahran, 2012). However, in Nigeria, the issue of financial stability has frequently been a problem, prompting the Central Bank of Nigeria (CBN) to keep a close eye on bank activity in order to ensure that stability is achieved. For example, the CBN periodically determines banks' capital-base and uses it as one of the criteria to determine whether a bank should be granted a licence or have its existing licence revoked (Ozili, 2018; Igbinosa & Naimo, 2020; Ikue & Nkoro, 2019). This aids in evaluating the stability and soundness of banks' finances.

Given the current situation, areas of weak resilience in the Nigerian financial sector have remained present much too often, which has inexorably led to the takeover or eventual dissolution of some banks. Commercial banks, for instance, increased from 20 in 1981 to 65 in 1991, decreased momentarily to 64 in 1997, but then exorbitantly increased to 90 in 2001, remained the same in 2002, but historically declined to 25 in 2005 and 22 in 2020. (CBN, 2019). Additionally, the CBN Financial Stability Report (2018) condemned Nigeria's banking sector for its subpar asset quality, frailty, and illiquidity, which gave rise to genuine concerns about its capacity to create credit. Credit thus stands for the supply side of financial intermediation and has a significant impact on the economy. Additionally, it is a financial market activity in which financial institutions with credit functions are authorised by legislation to provide credit facilities to economically deficient units (Akani & Onyema, 2017). According to Timsina (2014), it is the total amount of money given by financial institutions having access to credit to people, businesses, and the government (Timsina, 2014). As a result, the majority of an institution's assets are in the form of credit, while the majority of its income comes from interest on that credit. In order to ensure financial stability, banks have enlarged their credit capacity as a significant income source.

Here, we defined credit creation as the total amount of credit that banks make accessible inside an economy. Monetary policy, macroeconomic factors, and global factors all influence credit creation. The growth in the stock of bank credits to the private sector can be used to measure credit creation. The likelihood of an asset bubble increases when bank credit expands more quickly (Aduda & Gitonga, 2011). As a result, the quick increase in bank credit as a percentage of GDP, the increase of bank lending, and the high quality of loan applications all contribute to the production of new credit. However, if these functions are absent, the health of the banks' credit is likely to deteriorate. Poor credit creation is probably associated with difficulty in obtaining loans for firms. Credits to the private industry should ideally increase, but not disproportionately, to provide adequate financing for investment and prevent the creation of bubbles in asset values. Increases in the money supply have the potential to extend bank credit and cause a rise in non-performing loans (NPLs), while moral pressure from the monetary authorities has the potential to persuade banks to invest in credit-risky industries. Compared to short-term loan, long-term credit is more vulnerable to credit risk and bank difficulties. Even while bank lending is important to the economy and financial institutions, excessive credit growth is frequently viewed as dangerous. In fact, during credit booms, banks frequently shifted their staffing priorities to prioritise making new loans at the expense of credit development, supervision, and risk assessment. Credit booms have therefore been linked to potential increase in NPLs and issues with the banking industry. Higher loan growth is thought to be a sign of potential issues in the banking system in the future (Fan & Yijun, 2014).

As a result, according to Gieseche (2004) and previous studies (Demirgüc-Kunt & Detragiache 1997, Kaminsky & Reinhart 1999), the expansion of bank lending to the private sector at a rapid rate is a common factor contributing to financial crises. Approximately 75% of loan booms in emerging nations, according to the IMF (2004), end in banking crises. Usually, overly optimistic predictions of future asset and income prices, along with financial liberalisation and capital inflows, are what drive credit growth. In turn, a drop in income or asset values causes a rise in NPLs and defaults. In contrast to the Nigerian financial system, where the degree of market imperfection is almost unitary, the aforementioned example may be evaluated more effectively in the established financial market where there is less information asymmetry and the level of market inefficiency is minor.

The majority of research on credit creation has focused on how commercial bank credit influences economic growth (Okafor et al. 2015; Okwu et al. 2012; Sassi 2014; Adenugba & Adesoji, 2015). This study differs from others in that it focuses on how banks create financial stability through credit. In addition, we try to focus on the sectorial provision of bank credits and their impact on the financial stability of Nigerian banks. Umoru and Aghedo (2017), on the other hand, examined how financial stability affects banks' ability to create credit in Nigeria from 1990 to 2016. This study differs from others in that it uses a longer time period, namely 1981 to 2020, to conduct a thorough analysis. As a result, we propose to investigate the relationship that exists between bank credit creation and financial stability in Nigeria from 1981 to 2020. To carry out this study as efficiently as possible, we divided our paper into five sections: introduction, review of literature, methodology, presentation of results and discussion, and conclusion and recommendations.

2.0 LITERATURE REVIEW

Theory of Buffer Capital Adequacy

Making sure that bank capital is sufficient has the goal of allowing it to resist and integrate monetary and macroeconomic disruptions, to which bank operations are extremely vulnerable. But if their capital adequacy ratio is highly volatile, banks could opt to retain a reserve of surplus capital to lessen the profitability of failing to meet the lawful financing needs (Ikpefan, 2013). In recent years, capital adequacy has evolved from a tool for banking monitoring to a monetary policy means of assuring financial health. According to BOFIA's Section 7(2), any banks that don't meet the capital adequacy requirements within the time frame that the CBN specifies would have their licences revoked. According to Section 13, the bank must always retain capital funds that are unaffected by losses in a ratio to its total assets, the entirety of its obligations, or a combination of its liabilities and assets as determined by the CBN, at all times. Following the restructuring and recapitalization laws, certain banks had their licences revoked in 2005 (Akani & Lucky, 2015). According to Calem and Rob's (1996) buffer hypothesis, a bank that is close to meeting the statutory minimum regulatory capital ratio may be enticed to increase capital and lower risk in order to avoid the fines that would result from exceeding the funding requirements. A combination of extreme risk-taking and inadequate capitalization has been blamed for the demise of some Nigerian banks.

Bank Run Theory

In their work, Diamond and Dybvig (1983) make the point that making a company investment often necessitates making current expenses in order to reap future benefits. As a result, they choose loans with limited liquidity and extended maturities. The same rule is applicable to anyone looking for finance to buy expensive products like homes or cars. However, due to unplanned expenses, individual savers in both households and businesses may experience sudden, unforeseen cash needs. They therefore

expect liquid accounts that provide them recourse to their deposits right away. In the approach, banks serve as middlemen between depositors who favour making deposits in accessible accounts and borrowers who favour taking out long-term loans. Under normal conditions, banks can offer a helpful service by directing money from several private deposits toward credit for borrowers. Private savers are unlikely to make these loans on their own since they are aware that they might unexpectedly need quick access to their money, whereas the investments made by corporations will only be profitable in the long run. Banks assist depositors in saving on the transaction fees they would have to pay if they were to lend directly to businesses by pooling funds from numerous different depositors. The long-term loans that businesses need and the accessible accounts that depositors want are both provided by banks, who also benefit from the fact that they may charge greater loan interest rates than they do on deposits and hence make money from the differential.

As depositors' requirements are a reflection of their unique circumstances, Diamond and Dybvig (1983) noted that under normal circumstances, savers' erratic wants for cash are likely to be random. Despite the fact that all savers have the option of withdrawing their whole deposit at any moment, the bank only anticipates a small portion of outflows in the near term because savers' demands for cash are unlikely to appear at the same time. A bank can thus provide loans with a lengthy time horizon while holding just modest sums of cash on hand to cover any depositors who request withdrawals. Individual outflows are mainly independent, and because of the law of big numbers, banks anticipate a consistent volume of payments every day.

On empirical grounds, Umoru and Aghedo (2017) investigate how financial stability affects banks' ability to create credit in Nigeria from 1990 to 2016. The study confirms that credit financing promotes financial stability using the error correction technique. Binuyo and Ocharive (2017) investigate how credit generation in Nigeria fuels bubbles. Using the ECM technique, the authors show that while lending rates have a negative impact on credit creation in Nigeria, money supply has a favourable impact. Okafor et al. (2015) examined the relationship between bank loans and economic growth in Nigeria and discovered that the Nigerian banking sector adheres to the supply-leading hypothesis. Using the OLS technique to analyze the impact of banks credit on economic growth, Okwu et al (2012) discovered a positive relationship between bank credit and economic growth using the OLS technique. According to Sassi (2014) research on the impact of enterprise and household credit on economic growth in EU countries, enterprise and household credit have a positive impact on economic growth in Nigeria. Adenugba and Adesoji (2015) investigate how banking system credit effects economic in Nigeria from 1983 to 2012. The study's findings support the notion that deposits and savings are inextricably linked to banks' ability to create credit.

Ordinary least squares (OLS) analysis conducted by Malede (2014) in the context of Ethiopia shows that, for the period 2005–2011, credit risk, bank size, GDP, and liquidity ratio affect bank lending, whereas interest rates, deposits, cash reserve and investments are not statistically significant. Uyagu and Osuagwu's (2015) study looks at how monetary and macroeconomic policies have affected loans and advances made by banks in Nigeria between 1994 and 2013. The study's findings indicate that interest rates have a bad impact on loans and advances, but this effect is not statistically significant. Using the generalised method of moments, Pham (2015)'s study examines factors that affect bank loans in 146 different nations between 1990 and 2013. (GMM). It demonstrates that a high level of interest rates and domestic liquidity boost bank credit. The study also shows that the exchange rate, capital requirements ratio, NPLs, bank concentration, and the KAOPEN index have a negative correlation with credit supply. In their study, Olaoluwa and Shomade (2017) look at the effects of monetary policy on bank lending practises in Nigeria between 1980 and 2014. It demonstrates that monetary policies have significant effects on the lending practises of Nigerian commercial banks. Adding to the discussion, Kim and Sohn's (2017) study of insured US deposit money banks shows that bank capital has a considerable beneficial impact on lending after large banks have retained enough liquid assets. Matousek and Solomon (2018) used aggregated data from 23 Nigerian banks to examine the bank lending network in Nigeria from 2002 to 2008 (during the era of reorganization). It shows that during this time, factors such as bank size, capitalization and had a substantial impact on the availability of loans. Additionally, Ebire and Ogunyinka (2018) look at factors that affect the supply and demand of bank credits in Nigeria from 2002Q1 to 2017Q1. The analysis demonstrates that real GDP and loaning rate have a bad association with bank credits on the demand side. The link between bank loans and inflation is favourable, nevertheless.

3.0 METHODOLOGY

We choose the ex-post facto research design because we cannot modify the data we collected from secondary sources (Central Bank of Nigeria and World Bank Statistical Bulletins). The time period covered by this study is 1981–2020, or 40 observations. The study also used descriptive analysis, unit root, Johansen co-integration, VECM, and Granger Causality methods at the 5% level. We modify the model from Umoru and Aghedo (2017) to more effectively examine this subject.

$$FS = f(F, M) \quad 3.1$$

Where, FS = Financial stability, F = credit creation of banking sector, M = ratio of money supply to GDP.

For our analysis, we modify the model as:

FS = f(CCMS, CCAS, CCMQ, CCTC) 3.2

The mathematical and econometric forms are;

$FS_t = \beta_o + \beta_1 LnCCMS_t + \beta_2 LnCCAS_t + \beta_3 LnCCMQ_t + \beta_4 LnCCTC_t$ 3.3

$FS_t = \beta_o + \beta_1 LnCCMS_t + \beta_2 LnCCAS_t + \beta_3 LnCCMQ_t + \beta_4 LnCCTC_t + \varepsilon_t$ 3.4

$\beta_1, \beta_2, \beta_3$, and $\beta_4 > 0$

Where, FS = Financial stability (ratio of bank capital to asset), CCM = Credit creation to manufacturing sector, CCAS = Credit creation to agricultural sector, CCMQ = Credit creation to mining and quarrying sector, CCTC = Credit creation to transportation and communication sector, β_o = Intercept, β_1, β_2, β_3, and β_4 = Constant parameters, Ln = Natural logarithm, ε_t = Error term

The Johansen co-integration model is given as;

$$\Delta Y_t = \curlywedge Y_{t-k} + T_1 \Delta Y_{t-1} + T_2 \Delta Y_{t-1} + - - - + T_k - I\Delta Y_t - (k-1) + \in_t \quad 3.5$$

Where,

$$\curlywedge = \left(\sum_{i=1}^{k} \beta_i\right) - I_g \; and \; T_i = \left(\sum_{i=1}^{i} \beta_i\right) - I_g \quad 3.6$$

The Error Correction Model (ECM) is given as;

$$\Delta POR_t = \beta_1 + \sum_{i=1}^{p} \beta_2 POR_{t-i} + \sum_{i=1}^{q} \beta_3 \Delta LnGIE_{t-i} + \sum_{i=1}^{q} \beta_4 \Delta LnGIH_{t-i} + \sum_{i=1}^{q} \beta_4 \Delta LnLIT_{t-i} + \sum_{i=1}^{q} \beta_4 \Delta GER_{t-i} + \alpha ECM_{t-i} + e_t \quad 3.7$$

The Granger Causality model is given as;

$$Y_t = \alpha + \sum_{k=1}^{k} \beta_k Y_{t-1} + \sum_{k=1}^{i} \delta_k X_{t-1} + \epsilon_t \ldots \quad 3.8$$

$$X_t = \alpha + \sum_{k=1}^{k} \beta_k X_{t-1} + \sum_{k=1}^{k} \delta_k Y_{t-1} + \epsilon_t \quad 3.9$$

4.0 DATA ANALYSIS AND DISCUSSION OF FINDINGS

4.1 Data Analysis

Table 4.1: Descriptive Summary

	FS	LNCCTC	LNCCAS	LNCCMS	LNCCMQ
Mean	0.084448	3.699351	3.350912	4.545421	3.225322
Median	0.076003	3.710394	3.520978	4.989241	2.467828
Maximum	0.198963	8.266459	6.956239	8.068206	7.073008
Minimum	0.025537	-0.493805	-0.526616	0.978251	0.978251
Std. Dev.	0.052777	3.918177	2.695407	2.914082	2.182385
Skewness	0.392295	0.020009	-0.057839	-0.042981	0.948025
Kurtosis	1.834484	1.051677	1.302130	1.128983	2.336945
Jarque-Bera	2.138509	4.114027	3.137490	3.800435	4.370865
Probability	0.343264	0.127835	0.208306	0.149536	0.112429
Sum	2.195657	96.18312	87.12370	118.1810	83.85838
Sum Sq. Dev.	0.069634	383.8028	181.6305	212.2968	119.0702
Observations	26	26	26	26	26

Source: E-views Output

Table 4.1 displays the logarithm mean values of FS, LNCCTC, LNCCAS, LNCCMS, and LNCCMQ as 0.084448, 3.699351, 3.350912, 4.545421, and 3.225322 respectively. The level of variability from average for FS, LNCCTC, LNCCAS, LNCCMS, and LNCCMQ are 0.052777%, 3.918177%, 2.695407%, 2.914082%, and 2.182385% respectively. For skewness, all the variables in exception of LNCCAS and LNCCMS are skewed to the left while the kurtosis shows that they are all platykurtic since their values are below 3 and normally distributed with Jarque-Bera p-value of above 5% level.

Table 4.2: Stationarity Result

Variables	ADF T-Stat @ Level	T-Critical @ level	P-value @ level	ADF T-Stat @ 1st Diff.	T-Critical @ 1st Diff.	P-value @ 1st Diff.	Order of Integration
FS	--2.394983	-2.938987	0.1497	-7.142196	-2.941145	0.0000	I(1)
LnCCAS	-1.006956	-2.938987	0.7414	-7.120005	-2.941145	0.0000	I(1)

LnCCMQ	-1.490784	-2.938987	0.5277	-5.273151	-2.941145	0.0001	I(1)
LnCCMS	-0.873167	-2.938987	0.7862	-4.960645	-2.941145	0.0002	I(1)
LnCCTC	-0.181376	-2.991878	0.9285	-3.678081	-3.065585	0.0159	I(1)

Source: E-views Output

As shown by table 4.2, all the variables are stationary at the first difference at the 5% level. This indicates that all of the variables currently have ADF t-stat. values greater than their t-critical values, which correspond to p-values less than 5%. We use the Johansen co-integration method in our analysis to determine whether long-run form is present as a result of this.

Table 4.3: Co-integration Result

Series: FS LNCCTC LNCCAS LNCCMS LNCCMQ
Lags interval (in first differences): 1 to 1

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.924026	87.10095	69.81889	0.0011
At most 1	0.580504	30.39902	47.85613	0.6984
At most 2	0.364411	11.28758	29.79707	0.9539
At most 3	0.057918	1.317104	15.49471	0.9996
At most 4	0.000205	0.004516	3.841466	0.9455

Trace test indicates 1 cointegrating eqn(s) at the 0.05 level

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.924026	56.70193	33.87687	0.0000
At most 1	0.580504	19.11145	27.58434	0.4059
At most 2	0.364411	9.970474	21.13162	0.7474
At most 3	0.057918	1.312588	14.26460	0.9991
At most 4	0.000205	0.004516	3.841466	0.9455

Max-eigenvalue test indicates 1 cointegrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

Source: E-views Output

Both Trace and Max-Eigen test results indicate one co-integrating equation at the 95% confidence level. This indicates that they are both consistent with the variables having long-run form. Based on the results of table 4.3, we used the VECM technique to ascertain the long-term impact of each predictor variable on the criterion variable as well as the rate at which distortions are corrected.

Table 4.4: VECM Result

Vector Error Correction Estimates
Included observations: 28 after adjustments
Standard errors in ( ) & t-statistics in [ ]

Cointegrating Eq:	Coefficients	Standard Errors	t-Statistics

FS(-1)	1.000000		
LNCCAS(-1)	0.081714	(0.00992)	[8.24061]
LNCCMQ(-1)	-0.002369	(0.00193)	[-1.22490]
LNCCMS(-1)	0.091723	(0.00921)	[9.96430]
LNCCTC(-1)	0.002231	(0.00143)	[1.55974]
C	0.039559		

Error Correction:	D(FS)	D(LNCCAS)	D(LNCCMQ)	D(LNCCMS)	D(LNCCTC)
CointEq1	-0.414545	-5.123321	-3.684382	4.121886	25.07385
	(0.15794)	(2.15880)	(7.38477)	(1.03111)	(7.10808)
	[-2.62470]	[-2.37322]	[-0.49892]	[3.99751]	[3.52751]
R-squared	0.611723	0.388060	0.153172	0.604848	0.695538
Adj. R-squared	0.440881	0.118806	-0.219433	0.430981	0.561575
Sum sq. resids	0.020916	1.465103	17.14414	0.334238	15.88354
S.E. equation	0.028925	0.242083	0.828110	0.115627	0.797083
F-statistic	3.580635	1.441243	0.411084	3.478799	5.192006
Log likelihood	85.84540	7.235638	-38.26939	34.57543	-36.85648
Akaike AIC	-3.991643	0.257533	2.717264	-1.220294	2.640891
Schwarz SC	-3.469183	0.779993	3.239724	-0.697834	3.163351
Mean dependent	0.001724	0.189667	0.036722	0.187893	0.232364
S.D. dependent	0.038683	0.257886	0.749910	0.153283	1.203804

Source: E-views Output

Table 4.5 shows that LNCCAS and LNCCMS are both positive (0.081714 and 0.091723) and significant (8.24061 and 9.96430) to FS. This means that every unit increase in LNCCAS and LNCCMS increases FS by 0.081714 and 0.091723 units, respectively. Despite being positive (0.002231), LNCCTC is insignificant (1.55974) to FS. This means that a percentage increase in LNCCTC causes FS to rise by 0.002231 percent. LNCCMQ has a negative (-0.002369) and insignificant (-1.22490) relationship with FS. This shows that a unit increase in LNCCMQ causes FS to decrease by 0.002369 unit.

The independent variables (LNCCTC, LNCCAS, LNCCMS, and LNCCMQ) were able to explain changes in the dependent variable (FS), as evidenced by the Adj. R-squared of 0.6117. As a result, LNCCTC, LNCCAS, LNCCMS, and LNCCMQ account for 61.17 percent of changes in FS, with other factors accounting for 38.83 percent of the variation.

The long-term rate of distortion adjustment is negative (-0.414545) and significant (-2.62470). This suggests that short-term disequilibrium is corrected over the long term at a speed of 41.45%. The direction of the relationship between the variables was then examined.

Table 4.5: Granger Casualty Result

Pairwise Granger Causality Tests

Lags: 2

Null Hypothesis:	Obs	F-Statistic	Prob.
LNCCTC does not Granger Cause FS	22	1.62512	0.2260
FS does not Granger Cause LNCCTC		0.35950	0.7032
LNCCAS does not Granger Cause FS	38	1.35274	0.2725
FS does not Granger Cause LNCCAS		0.27426	0.7618
LNCCMS does not Granger Cause FS	38	1.01652	0.3729
FS does not Granger Cause LNCCMS		1.85750	0.1720

LNCCMQ does not Granger Cause FS	38	1.45362	0.2483
FS does not Granger Cause LNCCMQ		0.91367	0.4110

Source: E-views Output

The Granger causality lag 2 result revealed that there is no directional relationship between LNCCTC, LNCCAS, LNCCMS, and LNCCMQ and FS at the 5% level. Following that, we run the post estimation test to determine the residuals' overall utility.

Table 4.6: Serial Correlation Test

VEC Residual Serial Correlation LM Tests

Null hypothesis: No serial correlation at lag h

Lag	LRE* stat	df	Prob.	Rao F-stat	df	Prob.
1	26.17920	16	0.0516	1.788607	(16, 61.7)	0.0535
2	17.77562	16	0.3372	1.138738	(16, 61.7)	0.3419
3	19.42459	16	0.2473	1.260070	(16, 61.7)	0.2517

Source: E-views Output

The lag 1, 2, and 3 values of the VEC serial correlation test are 0.0535, 0.3419, and 0.2517, which are all greater than 5%. As a result, we conclude that there is no serial correlation in the residual at the 95 percent confidence level.

Table 4.7: Heteroskedasticity Test

VEC Residual Heteroskedasticity Tests (Levels and Squares)

Joint test:

Chi-sq	df	Prob.
193.8569	180	0.2274

Source: E-views Output

The joint p-value of the heteroscedasticity statistics is 0.2274 in Table 4.7, which is greater than the 5% level. As a result, at the 95% confidence level, we say that the residual is homoscedastic.

4.2 Discussion of Findings

Bank credit to the agricultural sector contributes significantly to Nigeria's financial stability. This demonstrates the high level of priority given by government at all levels, as well as the growing need for agricultural investment by both private and institutional investors. This is consistent with the findings of Umoru and Aghedo (2017), Okafor et al. (2015), Okwu et al. (2012), Sassi (2014), and Adenugba and Adesoji (2015) that bank credit has a positive impact on financial stability. However, unlike Binuyo and Ocharive (2017) and Ebire and Ogunyinka (2018), bank credit is negatively related to financial stability.

Bank credit to the manufacturing sector significantly boosts financial stability. This means that growth in the manufacturing sector has the potential to instil financial stability through banks' ability to create credit. We attributed this to the fact that the manufacturing sector is a significant borrower of funds from banks. As a result, their financial stability can be affected by their soundness. This is consistent with the findings of Umoru and Aghedo (2017), Okafor et al. (2015), Okwu et al. (2012), Sassi (2014), and Adenugba and Adesoji (2015) that bank credit has a positive impact on financial stability. However, unlike Binuyo and Ocharive (2017) and Ebire and Ogunyinka (2018), bank credit is negatively related to financial stability.

Bank credit creation in the transportation and communication sectors contributes to financial stability, but only marginally. This is comparable to a small proportion of bank credits allocated to the economy's transportation and communication sectors. This is consistent with the findings of Umoru and Aghedo (2017), Okafor et al. (2015), Okwu et al. (2012), and Sassi (2014) that bank credit has a positive impact on financial stability.

Bank credit to the mining and quarrying industries is negative and insignificant in terms of financial stability. This implies that the amount of loans made available to the mining and quarrying sector may cause financial instability; however, the impact will be minor. According to Binuyo and Ocharive (2017) and Ebire and Ogunyinka (2018), bank credit is negatively related to financial stability. However, Umoru and Aghedo (2017), Okafor et al. (2015), Okwu et al. (2012), Sassi (2014), and Adenugba and Adesoji all disagree (2015).

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Conclusions

The study's goal is to examine how credit creation affects the financial stability of Nigerian banks over a 40-year period, from 1981 to 2020. The variables investigated are credit creation to the agricultural, mining and quarrying, manufacturing, transportation and communication sectors, as well as the capital-to-asset ratio of banks. At the 5% level, we used descriptive analysis, unit root, Johansen co-integration, VECM, and Granger Causality techniques. According to the findings of the study, credit creation to the agricultural and manufacturing sectors is the primary sectorial allocation of funds by banks that triggers financial stability in Nigeria. This is similar to the findings of Umoru and Aghedo (2017), Okafor et al. (2015), Okwu et al. (2012), Sassi (2014), and Adenugba and Adesoji (2015). This is due to the high priority given by government at all levels, as well as the growing need for agricultural investment by both private and institutional investors. Furthermore, we liken it to the fact that the manufacturing sector is a significant borrower of bank funds.

5.2 Recommendations

Based on our findings, we advocated for the continuous provision of credit to the manufacturing and agricultural sectors of the economy, as these sectors significantly promote financial stability. Furthermore, banks should prioritise the economy's transportation and communication sectors because they have the potential to stimulate financial stability among Nigerian banks. As a result, banks should limit the volume of credit available to the mining and quarrying segments of the economy.

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