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IMPACT OF FINANCIAL INTERMEDIATION ACTIVITIES ON ECONOMIC OUTPUTS IN NIGERIA, 1981-2021

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Article Info

Keywords: Financial intermediation in Nigeria, Economic Growth and Economic output, gross domestic product in Nigeria.

Abstract

Research purpose: The study examines the impact of financial intermediation activities on economic outputs in Nigeria, 1981-2021. Specifically the study was to: measure the impact of total domestic credit to private sector on Gross domestic product in Nigeria, determine the impact of total commercial bank loans and advances on Gross domestic product in Nigeria. Investigate the impact of total insurance income on Gross domestic product in Nigeria, find out the impact of total annual stock market capitalization on Gross domestic product in Nigeria.

Design/methodology/approach: A special type of model that is superior to ordinary least square called Auto regressive distributed lag (ARDL) model was used for this study.

Findings: Result reveals that Total domestic credit to private sector positively and non-significantly impacted on real Gross domestic product in Nigeria within the period of the study. Total commercial bank loan and advances positively and significantly impacted on real Gross domestic product in Nigeria within the period of the study. Total insurance premium income positively and non-significantly impacted on real Gross domestic product in Nigeria within the period of the study.

Implication: The study concludes that banking intermediation series exert more positive influence on the Nigeria economy than insurance and capital market intermediation as used in the context of this study.

Originality/value added: Government should aggressively embank on providing credit to private sectors or small and medium enterprise to improve productivity and economic growth and adequate management of commercial bank loan through sectional means so as to ensure that such loan reach the targeted audience which will be encouraged to enhance improvement on economic performance in Nigeria

Introduction

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Over the years, the nexus between financial development and economic growth, has received remarkable attention in the literature, with a very great number of empirical evidences supporting the existence of a positive link between financial intermediation and economic growth (Levine and Zervos, 1996, Levine, 1997).

Financial Intermediaries are the institutions which help in the transfer or channeling of funds from those who have surplus funds to those who are in need of it. They act as a middleman in connecting the surplus parties to the deficit ones. Well documented studies also suggest that financial intermediation is a catalyst for economic growth and development (Schcempeter 1911, Goldsmith, 1969, Mckinon 1973, Shaw 1973, King and Levine 1993, Odedokun 1996, Kargbu and Adamu, 2009, Hassan, Iwedi and Igbanibo, 2015 among other). Based on this, Aziakpono (2005) asserts that financial intermediation plays a pivotal role in promoting economic growth activities in the economy through the different means. Firstly, it acts as a conduit for channeling funds from surplus economic unit to deficit economic unit by mobilizing resources and ensuring an efficient transformation of funds into the real productive sector of an economy. Secondly, it also leads to the transformation of the maturity of savors and investor portfolio, thus providing sufficient liquidity to the system as the need arises. Thirdly, it plays the role of risk reduction from the system through diversification and techniques of risk sharing pooling. (Nzotta and Okereke, 2009).

However, despite the existence of a vast global pool of empirical work on this subject, very few studies have been conducted on the impact of financial intermediation and economic growth in Nigeria. Notably among others are Igbanibo, (2015). The results of these studies remained mix and divergent.

The mix result from these studies seems to emanate from the various parametric and non-parametric estimation techniques utilized in the studies, data and proxies used for financial intermediation. Also, Most of these previous studies have mainly utilized ordinary least square and co-integration test (Johansen 1998, Johansen and Juselius, 1990, Engle and Granger, 1987) fully knowing well that these econometric techniques are not suitable for small sample size and do not have high predicting power, as such there exist a knowledge gap which need to be bridged. It is against this backdrop that this study is carried out to fill the gap in literature by examining modeling financial intermediation activities; it's implications on economic outputs in Nigeria, 1981-2021.

Statement of the Problem

The vital question in economic growth that has preoccupied researchers over the years is why countries grow at different rates. The empirical growth literature has come up with numerous explanations of cross-country differences in growth, including factor accumulation, resource endowments, the degree of macroeconomic stability, educational attainment, institutional development, legal system effectiveness, international trade and ethnic and religious diversity and the extent of regulated financial intermediation activities. The list of possible factors continues to expand, apparently without limit.

One critical factor that has begun to receive considerable attention more recently is the role of financial development through financial intermediation in the growth process especially in the wake of the recent global economic crises and financial meltdown caused by the COVID 19 pandemic. The positive link between the financial depth and economic growth is in one sense fairly obvious. That is, more developed countries, without exception, have more developed financial markets and more developed financial intermediation process.

Therefore, it would seem that policies to develop the financial sector would be to raise economic growth. Indeed, the role of financial intermediation process is considered by many to be the key to economic development and growth. While economists have generally reached a consensus on the central role of financial development in economic development theoretically; empirical works supporting this concept are conflicting. One school of thought asserts that financial intermediation process plays a limited role in accompanying the

development of real activity because of the level of regulation in the sector; the second school of thought accords a crucial role to financial intermediation process in boosting the processes of growth, innovation and economic development; while for another group of scholars, the financial market promotes growth, with growth, in turn, comes market formation. It is against this backdrop that this study is carried out to fill the gap in literature by modeling financial intermediation activities; it's implications on economic outputs in Nigeria, 1981-2021.

Objective of the Study

The broad objective of the study is to model financial intermediation activities; it's implications on economic outputs in Nigeria, 1981-2021. While the specific objectives are to:

i) Measure the impact of total domestic bank credit to private sector on Gross domestic product in Nigeria.

ii) Determine the effect of total commercial bank loans and advances on Gross domestic product in Nigeria.

iii) Investigate the impact of total insurance income on Gross domestic product in Nigeria.

Statement of Hypotheses:

As a follow up to these research questions raised above, the following Null hypotheses are formulated for this research.

i) Total domestic bank credit to private sector does not impact positively and significantly on Gross domestic product in Nigeria.

ii) Total commercial bank loans and advances does not effect positively and significantly on Gross domestic product in Nigeria.

iii) Total insurance income does not impact positively and significantly on Gross domestic product in Nigeria.

REVIEW OF RELATED LITERATURE

2.1 Conceptual Review

2.1.1 Financial Intermediation Process: The financial system consists of various financial institutions, operators and instruments that operate in an orderly manner to ensure the smooth flow of funds and thus accord the system its character and uniqueness (Nzotta, 2004). It is a well-known fact that financial system is made up of both bank-based, non-bank based and market-based segments. CBN (1993) opines that the financial system refers to the set of rules and regulations and the aggregation of financial arrangements, institutions, agents, that interact with each other and the rest of the world to foster economic growth and development of a nation. From the forgoing, the financial system is a prime mover of economic development.

2.1.2 Domestic credits to private sector: Iwedi and Igbanibo (2015) opined that Domestic credit to private sector by banks refers to financial resources provided to the private sector by other depository corporations (deposit taking corporations except central banks), such as through loans, purchases of no equity securities, and trade credits and other accounts receivable, that establish. *D*omestic credit to private sector refers to financial resources provided to the private sector by financial corporations, such as through loans, purchases of non-equity securities, and trade *credits* and other accounts receivable, that establish a claim for repayment. Domestic credit refers to lending or credit that a country or territory's central bank makes available to borrowers within the same territory. This may include commercial banks and even involve the government itself.

2.1.3 Commercial bank loans and advances: Nzotta and Okereke (2009) expressed that a commercial bank is a financial institution which accepts deposit from the public and gives loans for the purposes of consumption and investment to make profit. It can also refer to a bank, or a division of a large bank, which deals with

corporations or large/middle-sized business to differentiate it from a retailed bank and an investment bank Commercial banks include private sector bank and public banks. The general role of commercial banks is to provide financial services to the general public and business, ensuring economic and social stability and sustainable growth of the economy. In this respect, credit creation is the most significant function of commercial banks. While sanctioning a loan to a customer, they do not provide cash to the borrower. Instead, they open a deposit account from which the borrower can withdraw. In other words, while sanctioning a loan, they automatically create deposits.

2.1.4 Total Insurance income: Ezema, (2018) stated that the importance of insurance in modern economies is unquestioned and has been recognized for centuries. Insurance is practically a necessity to business activity and enterprise. But insurance also serves a broad public interest far beyond its role in business affairs and its protection of a large part of the country's wealth. It is the essential means by which the disaster to an individual is shared by many, the disaster to a community shared by other communities; great catastrophes are thereby lessened, and, it may be, repaired.

2.1.5 Real GDP and GDP Growth Rate: To get the real GDP, the monetary authorities removes the effects of inflation. The real GDP allows economists to compare figures from different years. Otherwise, it might seem like the economy is growing when it's actually suffering from double-digit inflation. The monetary authority calculates real GDP by using a price deflator, which tells you how much prices have changed since a base year. Incomes from Nigerian companies and people from outside the country are not included, which removes the impact of exchange rate and trade policies. Real GDP is lower than nominal GDP, and at the end of the first quarter of 2021, it was #18.988 trillion (CBN, 2020)

2.2 Theoretical Review

Economic Growth Rate Theory: This study is anchored on the theory of Economic Growth Rate developed by Paul Romer and Robert Lucas in 1949. It placed greater emphasis on the concept of human capital. How workers with greater knowledge, education and training can help to increase rates of technological advancement. They place greater importance on the need for governments to actively encourage technological innovation. They argue in the free market classical view, firms may have no incentive to invest in new technologies because they will struggle to benefit in competitive markets.

The model Places emphasis on increasing capital and labour productivity which States that increasing labour productivity does not have diminishing returns, but, may have increasing returns .Levine ((1997) argued that increasing capital does not necessarily lead to diminishing returns as Solow predicts. They say it is more complicated; it depends on the type of capital investment. Increased importance of spillover benefits from a knowledge-based economy. Emphasis is placed on free-markets, reducing regulation and subsidies. The argument is that we need to keep economies open to the forces of change. Joseph Schumpeter argued that an inherent feature of capitalism was the creative destruction allowing inefficient firms to fail was essential for allowing resources to flow to more efficient channels.

2.3 Empirical Review

Ullah, and Ahsan (2020) examined the impact of *intermediation functions of banks on economic* growth in Bangladesh using data spanning (1970-2018). Credit to private sector (CPS) as a ratio of GDP, banks deposit liabilities (DLS) as a ratio of GDP, and money supply (MOS) as a ratio of GDP were used as proxy for bank financial intermediation functions while gross domestic product represents economic growth. Ordinary least square regression analysis and co integration test were used. The analysis revealed that bank intermediation had a positive but non-significant impact on economic growth output in Bangladesh. However, the analysis revealed

a long run relationship between bank financial intermediation indicators and gross domestic product in Bangladesh.

Onodugo, Kalu and Anowor (2018) studied financial intermediation and private sector investment in Nigeria. They adopted private investment (PRIVET) as the regressed and financial savings as a ratio of real gross domestic product (FS/RGDP), credit extended to private sector by deposit money banks (CEPS), prime lending rate (PLR) & real gross domestic product (RGDP) as the repressors. The study employed econometric method to construct a multiple regression model to analyze the long-run relationships among variables. The results showed that three out of the five coefficients are statistically significant at 5% level. CEPS and PLR conformed to the theoretically expected signs of positive apporrari.

Rexiang and Rathanasiri (2017) examine whether financial intermediation leads to economic growth in Sri Lanka from the period 1977-2016. Credit to private sector (CPS) as a ratio of GDP, banks deposit liabilities (DLS) as a ratio of GDP, and money supply (MOS) as a ratio of GDP and insurance intermediation proxies by insurance premium income were used as proxy for financial intermediation functions while gross domestic product represents economic growth. Ordinary least square regression analysis and co integration test were used. The analysis revealed that bank intermediation had a positive but non-significant impact on economic growth output in Sri Lanka. However, the analysis revealed a long run relationship between bank financial intermediation indicators and gross domestic product in Sri Lanka.

METHODOLOGY

Research Design

This study adopted the *ex-post-factor* research design. The *ex-post-facto* research design is described as after-the-fact research using time series data (Onwumere, 2009). This is suitable for the work given that it is based on an already completed event and the researcher is meant to analyses the outcomes of the already completed event and draw reasonable conclusions.

Nature and Sources of Data

All the data employed for this work were time series, secondary and purely quantitative. They are drawn from sources such as statistical bulletins of Central Bank of Nigeria and the World Bank Development Indicator. They are annualized time series data because they have a nature time is a period of 40 years.

Model Specification

The study used a regression model. It follows the model used by Ullah, and Ahsan (2020) who examined the impact of intermediation functions of banks and economic growth in Bangladesh employed using OLS for 1970-2018. Hence, this model was used as thus;

GDP=*f* (CPS, BDL and M2), Where, CPS = bank credit to private sector, TDL= Total deposit liability and M2 = money supply from banks as a measures of bank financial intermediation activities.

This study deviated from bank specific financial intermediation to have a wider scope covering financial system intermediation, thus:

GDP=*f* (TDCPS, TCBLA, and TINSPI),

Where, TDCPS = total domestic credit to private sector, TCBLA= total commercial bank loans and advances, TINSPI= total insurance Premium income. Hence, this study is anchored on the above model used by Ullah, and Ahsan (2020) by modifying it to accommodate financial intermediation specifics order than only bank intermediation activities. Also, a special type of model that superior to ordinary least square called Auto regressive distributed lag model is used for this study.The mathematical expression for this model is written th*us*

$GDP_t = \beta_o + \beta_1 TDCPS_t + \beta_2 TCBLA_t + \beta_3 TINSPI_t + \text{----------} + E_t$*:* ……(1)

Where, RGDP = Real Gross domestic product, TDCPS = total domestic credit to private sector,
TCBLA= total commercial bank loans and advances, TINSPI= total insurance Premium income
et = Error term, β_o = Center of origin, $\beta_1 = \beta_3$ = Coefficient of estimation.

Description of Model Variables

The following model variables were used in this study

1) **Gross Domestic product:** Gross Domestic Product (*GDP*) is the monetary value of all finished goods and services made within a country during a specific period. *GDP* provides an economic snapshot of a country, used to estimate the size of an economy and growth rate. *GDP* can be calculated in three ways, using expenditures, production, or incomes.

2) **Total domestic credit to private sector:** *D*omestic credit to private sector refers to financial resources provided to the private sector by financial corporations, such as through loans, purchases of non-equity securities, and trade *credits* and other accounts receivable, that establish a claim for repayment.

3) **Total commercial bank loans and Advances:** Commercial banks provide loans and advances of various forms, including an overdraft facility, cash credit, bill discounting, money at call, etc. They also give demand and term loans to all types of clients against proper security. They also act as trustees for wills of their customers etc. The function of credit creation is generated on the basis of credit and payment intermediary. Commercial banks use the deposits they absorb to make loans..

4) **Total insurance premium income:** Insurance Premium is an amount paid periodically to the insurer by the insured for covering his risk. In an insurance contract, the risk is transferred from the insured to the insurer. For taking this risk, the insurer charges an amount called the premium. The premium is a function of a number of variables like age, type of employment, medical conditions, etc.

3.5 Techniques of Analyses

The study made use of ARDL regression analysis method. The analytical procedures involved are; first, unit root test which was carried out for each of the variables so as to ascertain the time series properties of the data set and obtain the stationary status. The augmented dickey-fuller (ADF) test was ditched in favour of the dynamic Philip and Peron Stationary Test Statistics where the critical; value at 5% the variables is said to be stationary; Descriptive statistics test was used in this study to measure the normality distribution of the variables using Jacque –Bera normality of skweiness and kwortosis tending towards 3

DATA PRESENTATION AND ANALYSIS

4.1 Data Presentation

The table below contains data involving financial intermediation variable and economic growth in Nigeria such as bank intermediation, capital market intermediation and insurance intermediation and as well economic growth rate. Data collected from the central bank of Nigeria statistical bulletin covering the period of 1981-2021. The variable of RGDP is log transformed to bring down the data size and ensure linearity, and also to be consistent with unit root diagnostic test.

Table 4.1

YEAR	LNRGDP	LNTDCPS	LNTCBLA	LNTINSPI
1981	9.6328	2.1482	2.1497	5.4834
1982	9.6148	2.3672	2.3297	5.5587
1983	9.5360	2.4568	2.4063	5.4321
1984	9.5309	2.5227	2.4426	5.4705
1985	9.6127	2.5703	2.4989	5.3234
1986	9.6315	2.7244	2.7537	5.5747

1987	9.6332	3.0484	2.8640	6.0401
1988	9.6937	3.3078	2.9735	6.2278
1989	9.7581	3.4149	3.0914	6.5538
1990	9.8681	3.5129	3.2581	6.9550
1991	9.8626	3.7221	3.4438	7.1961
1992	9.8843	4.0625	3.7550	7.8311
1993	9.8998	4.8451	4.1845	8.6829
1994	9.9024	4.9658	4.5452	9.5936
1995	9.9209	5.1924	4.9737	9.5879
1996	9.9607	5.4747	5.1324	9.4842
1997	9.9891	5.7563	5.9546	9.7122
1998	10.0138	5.8635	5.6090	9.7899
1999	10.0194	6.0664	5.7769	9.5917
2000	10.0727	6.2735	6.2310	10.0226
2001	10.0190	6.6398	6.6798	10.2744
2002	10.2735	6.8357	6.8613	10.5391
2003	10.3643	6.9999	7.0984	10.6906
2004	10.4636	7.2595	7.3259	10.8296
2005	10.5314	7.5166	7.5891	11.1235
2006	10.5965	7.7365	7.8338	11.3188
2007	10.6671	8.2075	8.4791	11.5653
2008	10.7366	8.8428	8.9618	11.9653
2009	10.8168	9.1162	9.0951	12.1545
2010	10.9080	9.2259	8.9498	12.2079
2011	10.9597	9.2742	8.8973	12.3620
2012	11.0009	9.5921	9.0057	14.0541
2013	11.0543	9.6647	9.2108	14.0410
2014	11.1147	9.7486	9.4641	14.0266
2015	11.1422	9.8349	9.4793	14.0147
2016	11.1262	9.9562	9.6876	13.9961
2017	11.1344	10.0029	9.6693	13.9716
2018	11.1535	10.0222	9.6620	13.9388
2019	11.1627	10.0656	9.6693	13.8991
2020	11.1737	10.0999	9.6543	13.9961
2021	11.1737	10.0999	9.6543	13.9961

SOURCES: CBN and World Bank 1981-2021

RGDP = Real Gross domestic product, TDCPS = total domestic credit to private sector, TCBLA= total commercial bank loans and advances, TINSPI= total insurance Premium income

4.2 Data Analysis

4.2.1 Tests of Unit Root using Philip and Peron

In an attempt to confirm the order of integration of the series under study thereby confirming their suitability for a linear combination in the form of a model, the unit root test following the form specified as Philip and Peron Test was used. Table 4.2 below represents a summary of the unit root result that was stationary.

Table 4.2: Summary of Unit Roots Test Results

Variable	PP Statistic	Critical Values	Probability	Inference

		@ 5%	Value	
LNRGDP	-5.1674	-3.5330	0.0008	I(1)
TDCPS	-4.0448	-3.5330	0.0154	I(1)
TCBLA	-5.2300	-3.5330	0.0007	I(1)
TINSPI	-5.0334	-3.5330	0.0012	1(0)

Source: Author's e-view 10 output, 2021

From the result of Philip and Peron unit root test contained in table 4.2, Real Gross Domestic Product, TDCPS, TCBLA, are all integrated of order 1(1). On the other hand, TINSPI is integrated at 1(0) meaning that is stationary at level order Given this different orders of integration, the Ordinary Least Square Regression Method was given up in preference for the Autoregressive Distributed Lag Model which tolerates such stationary property combination.

4.2.2 Basic Descriptive Statistics/ Standard tests for Normality

Table 4.3

	LNRGDP	LNTDCPS	LNTCBLA	LNTINSPI
Mean	10.31095	6.423479	6.241246	10.02705
Median	10.04588	6.456703	6.455441	10.14854
Maximum	11.17373	10.09994	9.687642	14.05414
Minimum	9.530920	2.148274	2.149772	5.323429
Std. Dev.	0.582761	2.765825	2.730394	3.032533
Skewness	0.261329	-0.088759	-0.130415	-0.169841
Kurtosis	1.518979	1.578533	1.485842	1.771519
Jarque-Bera	4.110991	3.420137	3.934508	2.707583
Probability	0.128029	0.180853	0.139840	0.258259
Sum	412.4379	256.9392	249.6498	401.0822
Sum Sq. Dev.	13.24481	298.3418	290.7470	358.6540
Observations	40	40	40	40

Source: Author's e-view 10 output with data in Appendix One.

Table 4.3 contains the basic measures of central tendency, spread and variations calculated on the different series of the dataset. All the variables are negatively skewed to the left showing the degree of their departure to the line of symmetry. Also, the Kurtosis of the distribution is less than 3 meaning that they are leptokurtic and are not peaked. Of particular interest is the Jacque-Bera (JB) statistics which is a test for normality. It is a combined test of Skewness (S) of zero (0) and a kurtosis (K) of three (3), which are signs of a Mesokurtic distribution. In this case, however, the JB statistics shows that the variables are tending to 3 which are signs of Mesokurtic. The assumption of normality is accepted by the JB statistics, as well as the (K) and (S) figures. This, however, does not affect the goodness of the data for the estimation in this study as the kurtosis of all the variables are between 2 and 3 and the Skewness above 0-1 which is consistent with the properties of most financial time series.

4.3 Testing of Hypotheses

4.3.1 Test of Hypothesis One

Step 1: Restatement of the hypotheses in null and alternate form.

H_{O1}: Total domestic credit to private sector does not impact positively and significantly on Gross domestic product in Nigeria

$H0_2$: Total domestic credit to private sector impact positively and significantly on Gross domestic product in Nigeria

Step II: Presentation and discussion of the results arrived at using the estimation technique

Table 4.4

Dependent Variable: LNRGDP
Method: ARDL
Date: 05/01/21 Time: 16:07
Sample (adjusted): 1982 2021
Included observations: 39 after adjustments
Maximum dependent lags: 2 (Automatic selection)
Model selection method: Akaike info criterion (AIC)
Dynamic regressors (2 lags, automatic): LNTDCPS
Fixed regressors: C @TREND
Number of models evalulated: 6
Selected Model: ARDL(1, 0)
Note: final equation sample is larger than selection sample

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
LNRGDP(-1)	0.821423	0.067504	12.16849	0.0000
LNTDCPS	0.037301	0.023953	1.557285	0.1284
C	1.618860	0.622490	2.600618	0.0135
@TREND	0.000715	0.006085	0.117522	0.9071

R-squared	0.993122	Mean dependent var	10.32833
Adjusted R-squared	0.992532	S.D. dependent var	0.579774
S.E. of regression	0.050102	Akaike info criterion	-3.052602
Sum squared resid	0.087857	Schwarz criterion	-2.881980
Log likelihood	63.52574	Hannan-Quinn criter.	-2.991384
F-statistic	1684.510	Durbin-Watson stat	1.792446
Prob(F-statistic)	0.000000		

*Note: p-values and any subsequent tests do not account for model selection.

From the table above, Total domestic credit to private sector is represented with the coefficient of positive 0.037301 which is positive and probability value of 0.13% which is non-significant.

Step III: Statement of Decision criteria.

Accept H_O if the sign of the coefficient of the parameter estimates is negative, otherwise reject H_0 and accept H_1 when the coefficient of the parameter estimates is positive, or Accept H_1 if the sign of the coefficient is positive, otherwise reject H_0.Given the coefficient of the parameter estimates of TDCPS is 0.037% and the probability of t-statistics of 0.13>0.05 which is non-significant, it shows that it is positively signed and statistically non-

significant, the study rejected the Null hypothesis and accepted the alternate hypothesis thereby concluded that Total domestic credit to private sector impact positively and non-significantly on real Gross domestic product in Nigeria

4.3.2 Test of Hypothesis two

Step 1: Restatement of the hypotheses in null and alternate form.

H_{O1}: Total commercial bank loans and advances do not impact positively and significantly on Gross domestic product in Nigeria.

$H0_2$: Total commercial bank loans and advances impact positively and significantly on Gross domestic product in Nigeria.

Step II: Presentation and discussion of the results arrived at using the estimation technique

Table 4.5

Dependent Variable: LNRGDP
Method: ARDL
Date: 05/01/21 Time: 16:15
Sample (adjusted): 1982 2021
Included observations: 39 after adjustments
Maximum dependent lags: 1 (Automatic selection)
Model selection method: Akaike info criterion (AIC)
Dynamic regressors (2 lags, automatic): LNTCBLA
Fixed regressors: C
Number of models evalulated: 3
Selected Model: ARDL(1, 0)
Note: final equation sample is larger than selection sample

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
LNRGDP(-1)	0.847449	0.052083	16.27111	0.0000
LNTCBLA	0.035407	0.011125	3.182711	0.0030
C	1.384382	0.468265	2.956404	0.0055

R-squared	0.993237	Mean dependent var	10.32833
Adjusted R-squared	0.992862	S.D. dependent var	0.579774
S.E. of regression	0.048985	Akaike info criterion	-3.120816
Sum squared resid	0.086382	Schwarz criterion	-2.992849
Log likelihood	63.85590	Hannan-Quinn criter.	-3.074902
F-statistic	2643.645	Durbin-Watson stat	1.893737
Prob(F-statistic)	0.000000		

*Note: p-values and any subsequent tests do not account for model selection.

From the table above, total commercial bank loan and advances is represented with the coefficient of positive 0.0035407 which is positive and probability value of 0.003% which is significant.

Step III: Statement of Decision criteria.

Accept H_O if the sign of the coefficient of the parameter estimates is negative, otherwise reject H_0 and accept H_1 when the coefficient of the parameter estimates is positive, or Accept H_1 if the sign of the coefficient is positive, otherwise reject H_0.Given the coefficient of the parameter estimates of TCBLA is O.0035% and the probability of t-statistics of 0.003<0.05 which is significant, it shows that it is positively signed and statistically significant, the study rejected the Null hypothesis and accepted the alternate hypothesis thereby concluded that total commercial bank loans and advances impact positively and significantly on real Gross domestic product in Nigeria under the scope of the study,.

4.3.3 Test of Hypothesis three

Step 1: Restatement of the hypotheses in null and alternate form.

H_{O1}: Total insurance premium income does not impact positively and significantly on Gross domestic product in Nigeria.

$H0_2$: Total insurance premium income impact positively and significantly on Gross domestic product in Nigeria.

Step II: Presentation and discussion of the results arrived at using the estimation technique

Table 4.6

Dependent Variable: LNRGDP
Method: ARDL
Date: 05/01/21 Time: 16:16
Sample (adjusted): 1982 2021
Included observations: 39 after adjustments
Maximum dependent lags: 1 (Automatic selection)
Model selection method: Akaike info criterion (AIC)
Dynamic regressors (2 lags, automatic): LNTINSPI
Fixed regressors: C
Number of models evalulated: 3
Selected Model: ARDL(1, 0)
Note: final equation sample is larger than selection sample

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
LNRGDP(-1)	0.921823	0.052899	17.42600	0.0000
LNTINSPI	0.017140	0.010173	1.684780	0.1007
C	0.670006	0.446435	1.500793	0.1421

R-squared	0.991968	Mean dependent var	10.32833
Adjusted R-squared	0.991521	S.D. dependent var	0.579774
S.E. of regression	0.053385	Akaike info criterion	-2.948771
Sum squared resid	0.102598	Schwarz criterion	-2.820805
Log likelihood	60.50104	Hannan-Quinn criter.	-2.902858
F-statistic	2222.951	Durbin-Watson stat	1.678694
Prob(F-statistic)	0.000000		

*Note: p-values and any subsequent tests do not account for model selection.

From the table above, total insurance premium is represented with the coefficient of positive 0.017140 which is positive and probability value of 0.10 which is non-significant.

Step III: Statement of Decision criteria.

Accept H_O if the sign of the coefficient of the parameter estimates is negative, otherwise reject H_0 and accept H_1 when the coefficient of the parameter estimates is positive, or Accept H_1 if the sign of the coefficient is positive, otherwise reject H_0. Given the coefficient of the parameter estimates of LNINSPI is 0.017% and the probability of t-statistics of 0.10>0.05 which is non-significant, it shows that it is positively signed and statistically non-significant, the study rejected the Null hypothesis and accepted the alternate hypothesis thereby concluded that total insurance premium income impact positively and non-significantly on Gross domestic product in Nigeria under the scope of the study,

4.4 Discussion of Findings

The broad objective of the study is to model financial intermediation activities; it's implications on economic outputs in Nigeria, 1981-2021. The pursuit of this broad objective led to theoretical reviews, conceptual investigation and empirical analyses. Several findings were recorded and the alignment of these findings to the specific objectives represents the focus of this section.

Objective one measured the impact of total domestic credit to private sector on Gross domestic product in Nigeria.

Total domestic credit to private sector with a coefficient value of 0.037 and associated probability value of 0.128 which indicates that Total domestic credit to private sector is positive and non-significantly impacted on Gross domestic product in Nigeria within the context of the specified model. The result further revealed that 1 percent changes in Total domestic credit to private sector will bring about 0.037% increase in real Gross Domestic Product in Nigeria Given the coefficient as 0,037 and the probability of t-statistics of 0.128 > 0.05 which is non-significant and that is positive signed

Objective two determined the impact of total commercial bank loans and advances on real Gross domestic product in Nigeria.

Total commercial bank loans and advances with a coefficient value of 0.035 and associated probability value of 0.0030 which indicates that total commercial bank loans and advances positively and significantly impacted on real Gross domestic product in Nigeria within the context of the specified model. The result further revealed that 1 percent changes in total commercial bank loans and advances will bring about 0.0035% increase in real Gross Domestic Product in Nigeria. Given the coefficient as 0.0035 and the probability of t-statistics of 0.003 < 0.05 which is significant and that is positively signed we reject the null hypothesis and conclude that total commercial bank loans and advances positively and significantly impacted on real Gross domestic product in Nigeria .

Objective three investigated the impact of total insurance premium income on real Gross domestic product in Nigeria.

Total insurance premium income with a coefficient value of 0.017 and associated probability value of 0.1007 which indicates that total insurance premium income positively and non-significantly impacted on real Gross domestic product in Nigeria within the context of the specified model. The result further revealed that 1 percent changes in total commercial bank loans and advances will bring about 0.0035% increase in real Gross Domestic Product in Nigeria Given the coefficient as 0.0017 and the probability of t-statistics of 0.1007 > 0.05 which is non-significant and that is positively signed we reject the null hypothesis and conclude that Total insurance premium income positively and non-significantly impacted on real Gross domestic product in Nigeria

SUMMARY OF FINDINGS, CONCLUSSION AND RECOMMENATIONS

5.1 Summary of Findings

The findings from the specific objective of this study are as follows:

1) Total domestic credit to private sector positively and non-significantly impacted on real gross domestic product in Nigeria within the period of the study

2) Total commercial bank loan and advances positively and significantly impacted on real gross domestic product in Nigeria within the period of the study

3) Total insurance premium income positively and non-significantly impacted on real gross domestic product in Nigeria within the period of the study.

5.2 Conclusions

The study has examined the impact financial intermediation activities on economic growth in Nigeria using annual time series data spanning the period 1981-2020 by employing the autoregressive distributed lag (ARDL) bound test approach.. The results indicate that there is a presence positive and significant impact of financial intermediation activities on economic growth in Nigeria. This implies that both indicators impact Nigeria economy the short run. Also lagged values the variable once or twice significantly especially in the case of total domestic credit to private sector to GDP coefficient which did not show the expected sign. A possible explanation for this is that credits to private sector are not channeled to productive uses but are diverted to other personal uses. The study concludes that banking intermediation series exert more influence on the Nigeria economy than insurance and capital market intermediation as used in the context of this study

5.3 Recommendation

In line with the specific objective of the study, the following are the recommendations.

1) Total domestic credit to private sector positively and non-significantly impacted on real Gross domestic product in Nigeria within the period of the study It was advised that the government should aggressively embank on providing of credit to private sector or small and medium enterprise to improve productivity and economic growth

2) Total commercial bank loan and advances positively and significantly impacted on real Gross domestic product in Nigeria within the period of the study. Financial development such as adequate management of commercial bank loan through sectional means so as to ensure that such loan reach the targeted audience which will be encouraged to enhance improvement on economic performance in Nigeria

3) Total insurance premium income positively and non-significantly impacted on real Gross domestic product in Nigeria within the period of the study. Nation insurance commission (NAICOM) and Monetary authorities should endeavor to combat constructively the effect of various unethical practices in the insurance industry such as rate cutting, round tripping, insider abuse and other businesses that affects the image of insurance industry.

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