

# Private Sector Debt and Economic Development in Nigeria

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**Abstract:** The study examined the nexus between private sector debt and economic development in Nigeria using the historical data sourced from the central bank of Nigeria statistical bulletin between the periods 1981 to 2020. The study proxied private sector debt using the commercial bank loans to production sector, commercial bank loan to services sector and commercial bank loan to general commerce sector where human development index is used as measure of economic development. The study employed Unit Root Test, Johansen Co-Integration Test and ordinary least square. Due to absent of co-integration among the series, we resolve to the use of ordinary least square for the study discussion. Findings shows that commercial bank loan to general commerce significantly contributed to economic development in Nigeria, Commercial bank loan to services sector and Commercial bank loan to production sector does not significantly promote economic development in Nigeria. Since study shows that loan to general commerce sector which comprises of loans to domestic trader, exporter and importer significantly promote economic development in Nigeria, we recommend that more loan be given to this sector as this will help boost local manufacturers and aid their operation towards meeting international standard and thus establishes favorable balance of payment.

## 1.0 Introduction

Private sector debt profile has maintained an increasing pace while the expected level of development is far from being attained. Nominal DMBs' credit to the private sector since 1980 to 2020 had been on the increase, with the highest growth for this period largely due to the deregulation of the financial sector in the 1990s and the implementation of indirect control monetary policy regime. Under this regime, the market is left to determine interest rates and allocate credit, while market instruments are used to limit banks' credit creating capacity (Aimola & Odhiambo, 2019). Hence, the three highest nominal growth rates for DMBs' credit to the private sector were recorded during this regime in 1992, 1994, and 2007 at 75.3%, 76.0% and 84.8% respectively (CBN, 2001, 2019). The total credit to the private sector increased from ₦8.57 billion in 1981 to ₦10,660.07 billion in 2011 and in the

span of another eight years, the credit increased by about 121% to stand at ₦24,922.94 billion in 2019 (CBN, 2019). This implies that private sector credit is also swelling. The proportion of private sector contribution to GDP increased from 8.2% in 1981 to 16.93% in 2011. By 2016, the private sector credit to GDP spilled to 20.77% but declined to 17.28% by this end of 2019 due to economic imbalances not too far from economic recession that affected the operation of the private sector through the windows of high interest rate inflationary pressure thus declined their profitability.

The problem before the study is that, with the amount of funds borrowed in an economy that is rich in human and natural resources, and a promising market potential; no meaningful development has been recorded as larger percentage of the citizens still wallow in abject poverty, high level of unemployment, citizens in different sectors are underpaid, high inflation rate, huge cost of governance and so on Isah (2017) and Akinmulegun (2016). To this end, one begins to wonder if the private sector borrowing is a thing of value to the populace. More pronounced among those factors that bereaved effective utilization of private sector borrowings in Nigeria as reported by (Momodu & Monogbe, 2017), (Adepoju, Salau & Obayelu 2017), (Afonso & Alves, 2018) includes fund diversion, fund mismanagement, misappropriation of borrowed fund and fund embezzlement.

Theoretically, when private sector initiates a project and the internally generated fund is not sufficient in sponsoring the project, there are three major ways of financing such project and prominent among them is through borrowing. Most times, private sectors in developing countries prefer borrowing to other options due to their ripple effect on macroeconomic stability (Folahan, Mogalu & Thomson (2019); (Falana, Obamuyi & Ojo 2020). Quite a few empirical studies have been done in the Nigerian context on the extent to which national debt promote economic development and they provided mixed results, while some authors reported a positive contribution, others explained that over time, private sector borrowing has not positively promoted economic development in Nigeria, rather it has enriched the purse of the selected few who are in power. Those who are of the positive opinion are Monogbe, Achugbu, Uzowuru & Edori (2019), Ogunbiyi & Monogbe (2018), Ogunbiyi & Monogbe (2017), Balago (2014), Sunday, Ngozi, Michael, & Ogochukwu (2016). They reported that private sector debt significantly contributed to economic growth in Nigeria. However, Fapetu & Obalade (2016), report that negative relationship transpired between private sector debt and economic development.

Obviously, disagreement prevail in the literature based on different scope of studies and different in tools of analysis, given this level of inconsistency in the literature and mixed reaction, this study set out to investigate the extent to which private debt contribute to economic development in Nigeria.

## **2.0 Theoretical and Empirical Review**

### **Lazy Bank Theory**

The lazy bank theory was propounded by Stiglitz & Weiss (1981). Lazy bank theory argues that the access to safe government assets allows the banks to take more risk and thus increase their lending to the private sector. The alternative hypothesis is that it may create

moral hazard and thus discourage the banks from lending to the risky private sector and stifle their incentives to seek out new profitable investment opportunities in the private sector. Banks are supposed to be the middle person between savers and people who needs credit. However, off late most Nigerian banks instead of lending money invests depositor's money in Government bonds and treasury bills because of low returns at negligible risk. This definition comes from a theoretical study of Manove, Padilla & Pagano (2001), where safer borrowers post more collateral than riskier ones in order to give a positive signal when they are evaluated by a bank and thus avoiding paying screening costs for bad borrowers, whenever creditor rights are ensured by strong law enforcement.

### **Safe Asset Theory**

Safe asset theory was originally proposed by Knut (1898), and it has been formalized in the context of modern macroeconomics by Woodford (2003). The theory established that banks are in the business of producing safe liabilities, and they use public debt as an input to their safety production function. This means that the output of banking is on their liability side, and that their asset side is merely a juxtaposition of inputs that maximize the safety output. This interaction between public debt and private debt, the former being an input to the production of the latter, has crucial positive and normative implications related to the macroeconomic shortage of safe assets. The theory argues that the economic role of banks is to multiply safety, and their holdings of public debt help them achieve that goal. Private safety creation requires banks to hold on their balance sheets government bonds, whose returns are negatively correlated with macroeconomic shocks. For example, a common argument is that when the banks have excess liquidity, a higher lending to the government may not result in any significant reduction of CPS. It has also been argued that government borrowing might actually induce the banks to undertake relatively more risky private lending, because the safe government assets in a bank's portfolio allow it to bear more risk.

### **Rostow's Five Stages of Growth Theory**

#### **Stage 1. Traditional Society**

The economy is dominated by subsistence activity where output is consumed by producers rather than traded. Any trade is carried out by barter where goods are exchanged directly for other goods. Agriculture is the most important industry and production is labour intensive using only limited quantities of capital. Resource allocation is determined very much by traditional methods of production.

#### **Stage 2. Transitional Stage (The Preconditions for Take-off)**

Increased specialization generates surpluses for trading. There is an emergence of a transport infrastructure to support trade. As incomes, savings and investment grow, entrepreneurs emerge. External trade also occurs concentrating on primary products

#### **Stage 3. The Take-off**

Industrialization increases, with workers switching from the agricultural sector to the manufacturing sector. Growth is concentrated in a few regions of the country and in one or two manufacturing industries. The level of investment reaches over 10% of GNP. The economic transitions are accompanied by the evolution of new political and social

institutions that support the industrialization. The growth is self-sustaining as investment leads to increasing incomes in turn generating more savings to finance further investment.

**Stage 4. Drive to Maturity**

The economy is diversifying into new areas. Technological innovation is providing a diverse range of investment opportunities. The economy is producing a wide range of goods and services and there is less reliance on imports

**Stage 5. High Mass Consumption**

The economy is geared towards mass consumption. The consumer durable industries flourish. The service sector becomes increasingly dominant. According to Rostow, development requires substantial investment in capital. For the economies of LDCs to grow, the right conditions for such investment would have to be created. If aid is given or foreign direct investment occurs at stage 3, the economy needs to have reached stage 2. If the stage 2 has been reached then injections of investment may lead to rapid growth.

**Review of Related Literature**

Monogbe, Achugbu, Uzowuru & Edori (2019) investigated the extent to which deposit money banks credit has help in alleviating poverty line in Nigeria using time series data. The study considered deposit money bank credit to agricultural sector, manufacturing sector and the small medium scale enterprises. Findings shows that credit allocated to the selected sectors are not significant enough to transform the economy from the level state to the developed stage, hence there is need for sufficient volume of credit.

Ogunbiyi & Monogbe (2018) examine the contributive quadrant of micro finance credit to SME's and deposit money bank credit to SMEs with the intension of determining which of these credits significantly stimulate economic growth in Nigeria. In an attempt to actualize this, Micro Finance Credits to the Small and Medium Scale Enterprises was proxy for micro finance operation while Deposit Money Banks credit to SME's was proxy for conventional operation utilizing the Real Gross Domestic Product of the nation to measure economic growth between the period 1992 to 2015. Study employed error correction model and granger causality test to examine their direction of causality. Study report that microfinance institution credit to SMEs displayed a significance nexus to the current growth trend in the nation's output showing that the Microfinance credits have achieved their expected aim at contributing to economic output. Therefore, the study concluded that the micro finance credit significantly contributed to economic growth while deposit money bank credit to SMEs is parasitic to economic growth in the Nigerian context. On this premises, study recommend that the public authorities and relevant monetary institutions should foster the activities of the Microfinance banks and enlarging the purse of the Deposit Money banks towards funding Small and Medium Scale Enterprise activities.

Ogunbiyi & Monogbe (2017) examined the role of sectoral lending in the economic development process of Nigeria between the period 1981 to 2015 using time series data exploit from the apex bank published bulletin. Study considers sectoral loan to production, commerce, services and other sectors and their various contribution to economic development in Nigeria accordingly. Result of the Cointegration test provide evidence of three co-integrating equation while government expenditure on commercial services exhibited a significant relationship on economic development between the periods under

investigation as reported by the result of the multiple regression model. Study thus concludes that sectoral loans and advances to the preferred sector of the economic (production and general sector) has significantly stimulate economic growth while loans and advances allocated to other sectors is relegating economic growth. This result however, corroborate the report of Balago (2014) whose study suggest that increase in government allocation on production and manufacturing is capable of promoting economic growth. As such, the study thus recommends that more credit be allocated to the sector with higher contribution to economic growth in Nigeria.

Stephen & Obah (2017), analyzed the impact of national savings on economic growth in Nigeria over the period 1990-2015 with the applications of descriptive statistics analysis and Ordinary Least Square (OLS). The variables utilized in the investigation were the gross domestic product (GDP) and national savings. The result indicated that national savings had a positive and significant impact on gross domestic product (economic growth) in Nigeria.

Sunday, Ngozi, Michael, & Ogochukwu (2016) carried out research on the impact of private sector borrowings on interest rates, prices, and output in Nigeria. Vector Autoregressive (VAR), Granger causality test, impulse response, and variance decomposition of the various innovations were engaged in the analysis to study the impact of the variables. The variables specified in the model of the study include real gross domestic product (RGDP), prime lending rate, external debt, domestic debt, and composite consumer price index. The estimation results showed that shock to external debt stock raises the prime lending rate. The results indicated that external and domestic debts had an insignificant impact on the output and general price level.

In another related studies, Fapetu & Obalade (2016) investigated private debt taking a sectoral allocation of bank credit to the active sector of the economy as a dimension. Private debt to the manufacturing sector, general commerce and services sector where considered and findings shows that none of the private debt has contributed significantly to economic growth in Nigeria. The insignificant contribution of this credit to economic growth was attributed to malicious practices identified in the sectors, hence the economy being at the receiving end suffers the brunt.

Uzomba, Chukwu, Jumbo & Nwankwo (2016) investigate the impact and the determinants of Deposit Money Banks' loans and advances granted to agricultural sector in Nigeria from 1980 to 2011. Multiple OLS regression, Stationarity Test, Co-integration test, Parsimonious Error Correction Mechanism and Granger Causality Test are employed. The study concludes that there is positive impact of deposit money banks' loans and advances on the agricultural sector.

Akujuobi & Chimaijemr (2015) examine the effect of commercial bank credit to the sub sectors of the production on growth between 1960 and 2008. The study confirms long run relationship and while credits to agriculture, forestry and fishery, manufacturing, mining and quarrying and real estate and construction are negative and insignificant, credit through the mining and quarrying sub-sector have significant positive contribution on growth. From the inferential results, it is evident that a significantly weak and strong



correlation exists between commercial bank and merchant bank lending respectively and agricultural sector's contribution to GDP.

Toby & Peterside (2014) in a study covering 1980 to 2010 use descriptive and inferential statistics. The descriptive results show that Nigeria's commercial and merchant banks are more active in financing manufacturing than agriculture even though the latter contribute more to GDP. Investigating intermediation role of banks on economic growth in Nigeria, Ogege & Boloupremo (2014) employ ADF, johansen cointegration and ECM. The study concludes that only credit allocated to production sector is having a significant positive effect on growth even though the report shows the variable is not significant but credits to other sectors are.

The empirical study of Ismihan & Ozkan (2010) examined the role of public debt on private sector credit. The study found that in countries where the banking sector extends substantial credit to government, public debt is likely to harm credit to the sector. The study also showed that the lower the financial depth, the greater the adverse effects of public borrowing on CPS and macroeconomic outcomes. Riccardo (2010) studied the determinants of the quantity of the bank loans and investigates the role of the government debt on the size of loans. The results of the analysis showed that there are mainly two channels which the credit size is affected by the government debt. First, government debt reduces the size of the credits to private sector because banks find investing in government bonds more attractive. Likewise, De-Bonis and Stacchini (2010) investigated the role of total government debt on the size of bank loans to the private sector in 20 emerging economies. The study found that government debt reduces the size of private sector credit and low private credit is associated with a large size of government activities.

## **Methodology**

The expo-factor causal comparative research design is used in this study where private sector debt is measured using deposit money banks loan to production sector, general commerce and loans to transportation and communication sector. The study period covers from 1981 to 2020 where data were sort from the CBN statistical bulletin, various issues.

## **Operational Measures of Variables**

**Human Development Index:** This is a composite statistics of life expectancy at birth, level of education and income level of a nation. This is used and agreed upon by the association of world economist as a measure of economic development of a nation. This is conceptualized in rate as reported in the World Bank data base.

**Commercial Bank Loan to Production Sector:** This is the quantum of commercial bank loan allocated to the production sector. The production sector comprises the manufacturing sector, agricultural sector, mining sector, construction sector and real estate. This will be conceptualized as the aggregate of commercial bank loans allocated to these sectors. On apriori, we expect a direct relationship between the series.

**Commercial Bank Loan to General Commerce:** This is the amount of commercial bank loan to general commerce in Nigeria. General commerce comprises of domestic trade,

export and import. The amount of loan allocated to this sector will be conceptualized as loan to general commerce as reported in the Nigeria statistical bulletin. On apriori, a direct relationship is expected between commercial bank loan to general commerce and human development index such that increase in the loan to general sector will bring about increase in the index thereby reflecting increase in economic development.

**Commercial Bank Loan to Services Sector:** This is the composite statistics of loans to transportation and communication sector, financial institution, oil & gas, education, power and energy sector. This will be conceptualized in Billions of Naira as reported in the Central Bank of Nigeria statistical bulletin. Although, we will also convert the values to rate to ensure uniformity of measurement. On apriori, we expect direct relationship between loan to the services sector and human development index such that increase in the loan will bring about increase in the index accordingly.

### **Model specification**

**Inline, with the classical linear regression assumption, we formulate our model accordingly**

$$\text{HDI}_t = f(\text{CBLGS}_t, \text{CBLSS}_t, \text{CBLPS}_t) \dots\dots\dots (1)$$

We transform the above model into an econometrics model by introducing coefficient and error term accordingly

$$\text{HDI}_t = \alpha_0 + \alpha_1 \text{CBLGS}_t + \alpha_2 \text{CBLSS}_t + \alpha_3 \text{CBLPS}_t + Q_t \dots\dots\dots (2)$$

Since the causal comparative research design is proposed in this study, we sort to introduce the grange causality model accordingly,

$$\Delta \text{HDI}_t = \sum_{i=1}^n g_t \text{CBLGS}_{t-i} + \sum_{i=1}^n c_t \Delta \text{HDI}_{t-i} + \sum_{i=1}^n h_t \text{CBLSS}_{t-i} + \sum_{i=1}^n i_t \Delta \text{CBLPS}_{t-i} + \gamma_t \quad (3)$$

### **Where**

**HDI** = Human development index

**CBLGS** = Commercial bank loans to general commerce

**CBLSS** = Commercial bank loan to service sector

**CBLPS** = Commercial bank loan to production sector

$\alpha_0$  = Constant

$\mu_t$  = Error term

$Q_t$  = Error term

$\alpha_1 - \alpha_3$  = Coefficient of the explanatory variables

$\Delta$  = Change

$t - i$  = Lag value of the explanatory metric

$b_t$  = Coefficient of the causal explanatory variables

$y_t$  = Error term

$$\alpha_1, \alpha_2, \alpha_3, > 0 \dots\dots\dots(2)$$

### Estimation Tool for Analysis

#### Test of Stationarity (Root Unit)

To avoid having spurious result, we subjected our data set to stationarity test as this will allow us identify the reliability of the data set.

#### Co-integration Test of Johansen:

After we must have ascertain stationarity, the data set is therefore cleared to proceed to other forms of statistical analysis. Co-integration test of Johansen is a long run test that set out to ascertain if there exist any long run or futuristic relationship among the studied variables. The object of this estimation tool is to help establish the long run nexus among the variables under investigation Johansen 1995.

#### Vector Error Correction Model:

This is otherwise called structural analysis; it seeks to correct the error in the model. The aim of this estimation tools is to check the speed at which the long run nexus identified in the co-integration test is corrected and returns to equilibrium after a change in an independent variable Kortsoyanis (2010). This estimation tool will be used if co-integration is ascertained and if otherwise, vector auto regressive (VAR) estimation tool will be used.

### 4. Result and Discussion

**Data presentation. Where Human Development Index (HDI) Commercial Bank Loans to General Commerce (CBLGS), Commercial Bank Loan to Service Sector (CBLSS), Commercial Bank Loan to Production Sector (CBLPS) in Nigeria for the Periods 1981 to 2020.**

YEARS	HDI%	CBLGS %	CBLSS %	CBLPS %
<b>1981</b>	0.397	0.16	2.15	1.9
<b>1982</b>	0.356	0.24	0.13	0.18
<b>1983</b>	0.325	-0.05	0.31	0.06
<b>1984</b>	0.363	0.06	-0.01	0.05
<b>1985</b>	0.423	0.13	-0.1	0.09
<b>1986</b>	0.393	0.34	0.18	0.29



1987	0.38	0.1	0.19	0.13
1988	0.371	0.19	-0.37	0.18
1989	0.378	0.17	0.12	0.1
1990	0.322	0.07	0.25	0.15
1991	0.328	0.1	0.13	0.28
1992	0.348	0.34	0.31	0.36
1993	0.389	1.03	0.6	0.5
1994	0.384	0.69	0.56	1.58
1995	0.453	1.55	0.55	0.21
1996	0.393	0.7	0.65	-0.05
1997	0.456	-0.5	0.59	0.09
1998	0.439	0.82	0.68	0.12
1999	0.455	-0.37	0.71	0.17
2000	0.462	0.35	0.76	0.25
2001	0.46	0.36	0.8	0.55
2002	0.466	-0.23	0.78	0.09
2003	0.445	0.29	0.8	0.24
2004	0.463	-0.09	0.79	0.17
2005	0.477	-0.16	0.57	0.08
2006	0.477	0.99	0.77	0.3
2007	0.481	0.26	0.32	0.51
2008	0.492	-0.43	0.33	0.67
2009	0.492	-0.59	0.1	0.23
2010	0.5	-0.02	-0.16	-0.01
2011	0.507	-0.19	-0.06	0.13
2012	0.514	0.81	-0.24	0.21
2013	0.521	-0.93	0.55	0.17
2014	0.525	429.33	0.58	-0.03
2015	0.527	0.07	-0.04	0.08
2016	0.53	0.23	0.09	0.41
2017	0.526	0.03	-0.07	0
2018	0.534	-0.02	-0.11	0.01
2019	0.532	0.12	0.23	0.06
2020	0.564	0.02	0.12	0.08

Source: Extraction from CBN Bulletin

**Table 2: Presentation of Unit Root Test Result**

Variable	ADF T-statistics	Mackinnon's test critical values @			Probability Level	Order of Integration	Decision
CBLGS	-7.139798	-	-	-	0.0000	i(1)	Stationary

CBLSS	-11.43552	-	-	-2.609066	0.0000	i(1)	Stationary
CBLPS	-9.006536	-	-	-2.609066	0.0000	i(1)	Stationary
HDI	-8.724172	-3.61558	-	-2.609066	0.0000	i(1)	

Source: Researcher Computation

Having justified the absent of unit root, we thus conclude that all-time series became stationary at 1<sup>st</sup> differencing in the order of i(1) integration. The uniformity order of stationarity i(1) thus meet the condition for co-integration, hence, we proceed to test if there exist a long run relationship among the study variable using Johansen co-integration test.

### Table 3: Presentation of Johansen co-integration Test Result

Date: 10/26/21 Time: 22:09

Sample (adjusted): 1983 2020

Included observations: 38 after adjustments

Trend assumption: Linear deterministic trend

Series: HDI CBLGS CBLSS CBLPS

Lags interval (in first differences): 1 to 1

#### Unrestricted Cointegration Rank Test (Trace)

Hypothesize		d			
No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**	
None	0.498365	44.44329	47.85613	0.1010	
At most 1	0.314106	18.22778	29.79707	0.5493	
At most 2	0.086949	3.900572	15.49471	0.9114	
At most 3	0.011615	0.443959	3.841466	0.5052	

Trace test indicates no cointegration at the 0.05 level

\* denotes rejection of the hypothesis at the 0.05 level

\*\*MacKinnon-Haug-Michelis (1999) p-values

Result presented above provided an evidence of absent of long run relationship among the series. This is identified from their trace statistics that is higher than the critical value at 5 percent level of significant thus suggesting that long run relationship does not exist among the series. Based on this assertion, we resolve to short run relations estimation tools of ordinary least square.

**Table 4: Presentation of Ordinary Least Square Result**

Dependent Variable: HDI

Method: Least Squares

Date: 10/26/21 Time: 23:03

Sample: 1981 2020

Included observations: 40

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.453356	0.014456	31.36139	0.0000
CBLGS	4.558705	0.176894	25.77087	0.0000
CBLPS	-0.029795	0.035892	-0.830122	0.4119
CBLSS	-0.003013	0.030810	-0.097793	0.9226
R-squared	0.666640	Mean dependent var	0.446200	
Adjusted R-squared	0.611140	S.D. dependent var	0.067896	
S.E. of regression	0.068273	Akaike info criterion	2.435952	
Sum squared resid	0.167805	Schwarz criterion	2.267065	
Log likelihood	52.71905	Hannan-Quinn criter.	2.374888	
F-statistic	0.856776	Durbin-Watson stat	1.786387	
Prob(F-statistic)	0.002298			

Source: Extraction from E-views

From the global statistics, the study has an adjusted R-square of 0.61114 thus suggesting that variation in private sector debt contributed to change in human development index in Nigeria to the tune of 61 percent. However, 0.85677 F-statistics alongside a significant P-value of 0.00229 prevail thus suggesting the overall significance of the model. Further, the Durbin Watson statistic coefficient of 1.7863 shows that the study model is free from auto correlation.

From the three proxies of private sector debt considered in this study, only loan to the general commerce sector is rightly signed with a coefficient of 4.5587 with a significant P-value of 0.0000. The general commerce sector comprises the domestic trade, imports and exports of goods and services and this result supports the notion of the country that is mostly involved in trading activities of buying and selling. Majority of the businesses in the country are import dependent and practically most goods in Nigeria are imported which justifies the impact of this sector to economic development. With the result of this study, the deposit money banks should increase the volume of debt to this sector to enable the participants expand their businesses and thereby generate more employment which will effectively increase employment of the citizens thereby improving their standard of living

which will eventually lead to improvement in the economic wellbeing of the citizens. The implication of this result is that loans to general commerce significantly contribute to economic development in Nigeria to the tune of 5 percent.

Further, loan to production sector and services sector exhibited a negative coefficient of -0.0297 and -0.0030 respectively. The identified coefficient is not in consonant with our a priori expectation and this implies that increase in this loan will further deepens economic underdevelopment in Nigeria accordingly. These two sectors comprise the real subsectors of the economy which include the manufacturing, agriculture, power, oil & gas etc. These are sectors that are capital intensive and are also dependent on certain infrastructure to thrive and lending to the sectors by deposit money banks are low considering the level of losses the industry generates and most often the lending are inadequate and are also at high interest rate. The costs of production are very high and thereby not returning the expected income which are commensurate with the investments made. To make this sector vibrant and significant in economic development, the loan to deposit ratio instituted by the central bank of Nigeria should be further decomposed to reflect allocations of loans to different sectors in percentages and the regulators should enforce such allocation. The allocations of loan to these two sectors should be increased and compel the banks to comply. This will help increase funding and monitoring in the sectors and the desired outcome will be achieved since these two sectors are capable of increasing output of goods and services in the country and thereby bring out the expected contribution to the economic wellbeing of the country.

## **Discussion of Findings**

### **Commercial Bank Loan to Production Sector and Human Development Index in Nigeria**

From the private debt, we found that commercial bank loan to production sector exhibited a negative coefficient of -0.02979 alongside an insignificant P-value of 0.4119 thus suggesting that increased in commercial bank loan to production sector will further deepens economic underdevelopment in Nigeria to the tune of 0.0297. The result is not in line with our a priori expectation and common reasoning. Commercial bank loan to production sector is expected to contribute to economic development in Nigeria, but result is showing otherwise. The direct and insignificant contribution of commercial bank loan to economic development could be attributed to private sector misappropriation of borrowed funds, fund mix-match on projects and fund diversion.

### **Commercial Bank Loan to General Commerce and Human Development Index in Nigeria.**

Result from this study provided us with evidence to assert that increase in commercial bank loan to general commerce significantly contribute to economic development in Nigeria to the tune of 4.15587 percent accordingly. The result also shows that increase in commercial bank loan to general commerce sector will bring about corresponding increase in economic growth in Nigeria. The result is also in line with our a priori expectation and

also with the study of Ogunbiyi and Monogbe (2017) who postulated that of all the credits allocated by commercial banks in Nigeria, credit to the general commerce significantly contribute more to economic development in Nigeria.

#### **Commercial Bank Loan to Services Sector and Human Development Index in Nigeria**

From the result presented above, we found that commercial bank loan to services sector exhibited an insignificant P-value of 0.9226 alongside a negative coefficient of -0.0030 which is not in support with our apriori expectation. The result suggests that increase in commercial bank loan to services sector will reduce economic development to the tune of 0.0030 percent. From the report presented by the central bank of Nigeria statistical bulletin, commercial bank loan to the services sector has the lowest loan allocation when compared to other sectors of the economy. Therefore, the insignificant contribution of commercial bank loan to services sector and economic development could also be attributed shortage of loan allocated to this sector which makes it difficult for the sector to have contributed significantly to economic development in Nigeria.

#### **5.0 Conclusion and Recommendation**

The study examined the nexus between private sector debt and economic development in Nigeria using the historical data sourced from the central bank of Nigeria statistical bulletin between the periods 1981 to 2020. The study proxied private sector debt using the commercial bank loans to production sector, commercial bank loan to services sector and commercial bank loan to general commerce sector where human development index is used as measure of economic development. The study employed Unit Root Test, Johansen Co-Integration Test and ordinary least square. Due to absent of co-integration among the series, we resolve to the use of ordinary least square for the study discussion. Findings shows that

- From the private sector debt, commercial bank loan to general commerce significantly contributed to economic development in Nigeria
- Commercial bank loan to services sector does not significantly promote economic development in Nigeria.
- Commercial bank loan to production sector does not significantly promote economic development in Nigeria.

Since study shows that loan to general commerce sector which comprises of loans to domestic trader, exporter and importer significantly promote economic development in Nigeria, we recommended that more loan be given to this sector as this will help boost local manufacturers and aid their operation towards meeting international standard and thus establishes favorable balance of payment.

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