



Examining The Effect Of Selected Macroeconomic Variables On Domestic Private Investment In Nigeria, 1986-2018

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EXECUTIVE SUMMARY, JULY 2020

Developing Countries, including Nigeria, were goaded to adopt economic adjustment programmes to restructure their economies. The World Bank, International Monetary Fund (IMF) adopted the Mckinon/Shaw Hypothesis (1973) which states that economies should operate on free market basis. They said governments should stop participating in economic activities of producing and selling goods and services. Rather, governments should provide enabling environment and leave the private sector to drive the economy. Based on this, the private sector of a nation is required to take over economic activities while the public sector takes the back seat. This has given rise to the domestic private investment assuming a crucial role in the economy. With this, developing countries adopted various forms of restructuring. Nigeria in 1986 adopted its own version of Structural Adjustment Programme (SAP). This involved Liberalization of almost all aspects of the economy. Ever since, the role of the private sector has become paramount. This study has examined the factors that drive the domestic private investment in Nigeria, A number of factors or variables are relevant but a detailed study of five variables have been selected for the study. They are Foreign Direct Investment, Government (Federal) fiscal deficit, Banks' lending interest rate, Foreign exchange rate (US Dollar/Naira) and Bank's Credit to the private sector. This study adopted survey research design (primary data) and ex-post facto research design (secondary data). In conclusion, a comparative analysis of primary and secondary data shows that four of the variables-foreign direct investment, Government fiscal deficit, Bank lending interest rate and bank credit to the private sector-have significant effect on the dependent variable, Domestic private investment. One variable-foreign exchange rate (US \$ to #) – has insignificant effect on domestic private investment in Nigeria. The government is advised to pursue or continue to pursue measures to advance the importance of the domestic private sector to achieve economic growth and development.

SECTION (a)

INTRODUCTION:

The Structural Adjustment Programme (SAP) was introduced in Nigeria in 1986. Since SAP was introduced, it has been conceived that Domestic Private Investment (DPI) has a powerful role to play in tackling various economic problems bedeviling the country. It has been stated severally that the private sector should serve as the engine of growth for developing economies. The conception has become common to developing countries, including Nigeria. The Structural Adjustment Programmes foisted on them by the World Bank and the International Monetary Fund (IMF). According to Frimpong and Marbuah (2010), domestic private investment has become crucial for developing countries to achieve economic development and growth as well as improve utilization of available resources. Since SAP was introduced, market forces have become dominant. With it, there is the emergence of domestic private investment as a driver of economic growth. The implication is the reduction in the dominance of the government and public sector. The belief then emphasizes that the public sector should provide enabling environment and support the private sector led growth (Afoyebi, Adekunjo and Falana, 2012).

From political independence (1960) up to the introduction of SAP (1986), the business of government (public sector) was very large as the government was prominently involved in economic activities. In other words, the government ran the ministries and large collection of public enterprises. The main argument centered on the belief that the government possessed enormous resources to support the large public sector to achieve economic development and growth. The private sector was encouraged to assist the nation while the public sector remained the engine of growth. According to Akpokodijie (1998) the private sector contributed less than 10% of the Gross Domestic Product (GDP).

Before the Structural Adjustment Programme was introduced in 1986, a debate had been going on as to whether the public sector or private sector should be in dominance. According to Nwabuzor (1990), one group argued that the government and the public sector should dominate the economy. The main reasons adduced by the group were that the economy is characterized by imperfections and structural rigidities that necessitated the indispensability of the government. Moreover, the government has enormous resources that were required in some sectors such as Iron and Steel. Some are strategic to the nation such as defense industries. In pursuit of these ideas, the government carried out large scale indigenization of categories of some sectors in 1972 and 1977. However, with the emergence of SAP and liberalization of the economy, the Indigenization Acts of 1972/1977 have seen extensively amended.

A second group, believing in the tenets of market capitalization, argued that the government should hand off direct participation in economic activities. It should maintain the ministries and leave most productive activities to the private sector. It should also provide infrastructural and enabling environment to assist the private sector operate effectively. (Nwabuzor, 1990).

A third group stands in the middle and argues that a mixed economy is ideal where the public sector and private sector interface. It is noteworthy that with the introduction of SAP, the private sector has become dominant. In the light of this, the public sector took the back seat in economic policies and activities in developing countries inclusive of Nigeria. Mutenyo et al (2010) in their study of sub-Saharan African countries, stressed the importance of domestic private investment which needs to be developed to increase economic growth, provide employment and improvement in living standards. Frimpong and Marbuah (2010) in their own study, support this view. They add that domestic private investment allows entrepreneurs to set up economic activities by utilizing resources to produce goods and services for the society.

In effect, it is evident that pure market economy of perfect competition according to Adam Smith and Classical Economists is not possible today. Similarly pure socialism and Communism of Marx, as practised in former Soviet Union, cannot exist now. Varying degrees of mixture of both systems are what are practised today in different nations.

Problem Statement/Justification of the Study

The foregoing paragraphs have pointed to the need for domestic private investment to be encouraged and preponderance of the public sector to be reduced. The focus of this study, therefore, is to investigate the factors that affect the domestic private investment in Nigeria. Many variables or factors come to mind but some variables have been selected for the study. The variables selected are: Foreign Direct Investment (FDI), Government Fiscal Deficit, Bank lending interest rate, foreign exchange rate and Bank credit to the private sector. The study covers over a period of thirty two years, 1986-2018. The government considered is the federal while excluding subnational governments (states and local governments).

Objective of the Study

The main objective of the study examines the variables or factors that have affected domestic private investment in Nigeria since the adoption of the Structural Adjustment Programmes and liberalization. The period chosen starts with the introduction of SAP in 1986 to 2018. The economic liberalization which started in 1986 has continued in various forms. We need to find out some important factors that act as drivers of domestic private sector investment. The study x-rays how government's control has distorted the economy and stifled initiative.

The objective is more specifically addressed by specific objectives evidenced by some research questions such as:

- (i) To what extent does foreign direct investment affect domestic private investment in Nigeria?;
- (ii) How does government fiscal deficit affect domestic private investment in Nigeria?;
- (iii) How far does commercial banks' lending interest affect domestic private investment in Nigeria?;
- (iv) To what extent does foreign exchange rate (mainly US dollar rate) affect domestic private investment in Nigeria? and
- (v) How does commercial banks credit to the private sector affect domestic private investment in Nigeria?

Following from these questions and specific objectives these hypotheses in null form have been formulated to guide the study.

Ho₁: Foreign direct investment does not have positive and direct effect on domestic private investment in Nigeria.

Ho₂: Government fiscal deficit does not have direct and positive effect on domestic private investment in Nigeria.

Ho₃: Commercial bank's lending interest rate does not have direct and positive effect on domestic private investment in Nigeria.

Ho₄: Foreign exchange rate (US\$) does not have direct and positive effect on domestic private investment in Nigeria.

Ho₅: Commercial Banks' credit to the private sector does not have direct or positive effect on domestic private investment in Nigeria.

The alternative hypotheses in the five cases are silent. They are assumed as opposite of the Null.

The paper is organized in five sections viz: Section (a) consists of the introduction in various aspects as discussed so far. Section (b) is the review of related literature; Section (c) deals with the methodologies of the study together with models specification. In Section (d) we have data presentation, data analyses and testing of the hypotheses. In Section (e) we summarize the findings, draw conclusion and make recommendations.

SECTION (b)

LITERATURE REVIEW

Domestic private investment refers to capital formation. It includes net changes in the level of capital accumulation of inventories of private sector firms (Bakare, 2011). Various theories have been propounded to deal with the investment behaviour of firms in the private sector. The study has considered the Keynesian model of the National Income identity where we have

$Y = C + I + G + X - M$ where;

Y = National income which is often proxied by Gross Domestic Product (GDP)

C = Consumption expenditure of Households

I = Investment expenditure of domestic private firms

G = Government expenditure in capital and recurrent items

X and M stand for exports and imports respectively. Both make up the external sector of an open economy.

This National Income identity model implies that changes in any of the independent variables affect the dependent variable, that is GDP represented by Y. The effect of the changes is amplified by the multiplier. Domestic Private Investment represented by I in the Keynesian model is crucial for economic growth (Frimpong and Marbuah, 2010). The theoretical framework on which this study is hinged is the Tobin's q theory and Clark's Accelerator theory. The Acceleratory theory states that a society's current net investment is a function of income. More capital formation takes place as income increases. More capital formation increases investment and leads to increased productivity and consequently national income. In other words more stock of capital accumulated leads to increase in the domestic private investment in the economy. The Tobin's q theory is based on the premise that investment decisions depend on the ratio of Market value of Financial Assets (MVA) of a firm to the Cost of Replacement Assets (CRA) (Ibenta, 2005). That is to say that $q = \frac{MVA}{CRA}$ where q is the firm's capital requirements. All these point to the effect of domestic private investment in the economy of a nation.

Let us now look at the literature of the variables of the study. Foreign direct investment (FDI) has been fingered as having very important effect on the domestic private investment. Foreign direct investment stimulates the domestic economy indirectly but positively affects the domestic private investment. According to Wai-mun et al (2008), foreign direct investment provides much needed capital inflow in developing countries.

Furthermore, Saqib et al (2013) and Osunibi and Amaghionyeidiwe (2010) observed that Foreign Direct Investment (FDI) provides much needed inflow of capital in developing countries. In the same vein, Welfure and Abu, (2010) opine that FDI results in capital inflow to complement domestic capital investment, enhance job creation, transfer of technology and contribute to economic growth and development. Borenstein et al (1995), in earlier study of how FDI affects the domestic economy of developing countries, observed that FDI has positive and significant effect on domestic private investment of the recipient countries. They recommended that the governments of developing countries should pursue policies that encourage inflow of FDI.

Amassouna and Ogbuagu (2015) used VAR to estimate the FDI on domestic private investment in Nigeria. They concluded that there is no long-run relationship between FDI and domestic private investment in Nigeria. They opine that this suggest that FDI is neither a complement for domestic private investment nor a substitute for domestic public investment in Nigeria. They state that FDI in the country has not been targeting the real sector of the economy but rather more intensely in telecommunication and oil sectors.

Amassouna and Ogbuagu (2015) observe that African countries, Nigeria inclusive, attach a lot of importance to FDI and ostensibly make efforts to encourage inflow of FDI. However, as they observe, there is veiled hostility often resulting from political, religious and ethnic factors. They add that these non-quantifiable factors may be responsible, to some extent, for the inability of FDI to positively and significantly boost domestic private investment in Nigeria. They recommend that the government should improve the business environment to enable the domestic private sector to perform. This can be achieved by improving on the physical infrastructure, fiscal deficiencies with macroeconomic stability.

Earlier studies by Oyaide (1979) reported that the effect of FDI on domestic private investment could be positive or negative or even non-determinate, depending on the economic climate of the country receiving the FDI. On Nigeria, for example, he opined that there is absence of consensus on the effect of FDI on domestic private investment. On the other hand, Olaniyi (1988) report that there is growing belief that FDI complements domestic private investment leading to increase in domestic capital formation available for economic activities. FDI also results in increase in domestic savings and capital formation for domestic investment. We note, however, that these two studies are over three decades with prior assumptions. Another study by Uremadu (2006) opined that FDI has significant negative effect on domestic private investment in Nigeria. The reason is connected with volatility of capital flights that follow repatriation of capital, interest and profit. To a large extent, FDI crowds out domestic private investment capital flights that result from FDI often exacerbate recession as in the case of 2016 recession.

Aigheyisi (2017) did a recent study on the relationship between FDI and domestic private investment in Nigeria. Using Engle-Granger-Causality methods he showed that there is long run positive but statistically insignificant relationship between foreign direct investment and domestic private investment Nigeria. The causative factors he suggests include inadequate inflow of FDI into key sectors of the economy. He observed that his finding agrees with that of Dantama and Usman (2012).

Government fiscal deficit has been fingered as having serious effect on domestic private investment in Nigeria. Easterly and Schmid-Hebbel (1993) in their study, report the view of how government fiscal deficit affects domestic private investment. They opine that the effect depends on how domestic private investment and public investment complements or substitutes for each other. If government deficit complements domestic private investment, it will crowd-in (enhance) domestic private investment. But if government deficit substitutes domestic private investment, it will most likely crowd-out (damage) domestic private investment.

Altunic and Sentunk (2010) used Auto Regression Distributed Lag (ARDL) to study the economy of Turkey as regards to government deficit and expenditure. They report that domestic private investment of Turkey is stimulated by government's infrastructural and non-infrastructural investment. The implication is that one can conclude that government fiscal deficit is complementary and crowds-in domestic private investment especially in the short run. But it may crowd-out in the long run.

Mitra (2007) studied the effect of government fiscal deficit on domestic private investment in India. He reported that government fiscal deficit crowds-in domestic private investment in India.

Looney (1995) examined the effect of fiscal deficit on domestic private investment in Pakistan. His study showed negative effect of government fiscal deficit on domestic investment. That means that there was crowding-out effect. He further observed that government fiscal deficit escalates more deficits and more public borrowing in the domestic money and capital markets of Pakistan.

Here in Nigeria, Paiko (2012) used Ordinary Least Squares (OLS) to estimate the effect of government fiscal deficit spending on the domestic private investment. He reported that government fiscal deficit has a strong and significant adverse effect on domestic private investment in Nigeria. The negative impact supports the existence of crowding-out hypothesis in the country.

In another study by Ezeabasili and Nwakoby (2013), on fiscal deficits and private investment in Nigeria, reported that a long run negative relationship exists between the two. They observed that 1% increase in fiscal deficit led to 0.26% decline in private investment. They further added that Nigeria's annual deficits, has had strong and negative impact on domestic private investment in Nigeria.

In a more recent study by Datama, Gatawa and Galli (2017) they observed that there exists positive but insignificant relationship between government fiscal deficit and domestic private investment in Nigeria. They also opined that prolonged annual fiscal deficit of the government may not be the cause of crowding-in and crowding-out of private investment in Nigeria. Rather they suggested that government revenue appears to have positive significant relationship with private investment indicating crowding-in effect on domestic private investment.

Another very important factor affecting domestic private investment is the interest rate. Here we refer to that interest rate of bank lending to the domestic private sector firms. According to Karagoz (2010), theoretically a negative relationship should exist between bank lending interest rate and domestic private borrowing. This is so because an

increase in lending interest rate will make borrowing more expensive for private sector borrowers and vice versa for a fall in the lending interest rate. However, Karagoz (2010) called attention to the possible existence of Mckinnon-Shaw (1973) Hypothesis which suggests possible positive relationship between investment and real interest rate. According to Mckinnon-Shaw (1973), if financial repression is removed (that is interest rate control is removed), there would be increased domestic savings. There will be more funds available for bank credit to the private sector. Of course, Nigeria's experience since liberalization of SAP has not justified this proposition. George-Anokwuru (2017) investigated the effect of interest rate on domestic private investment in Nigeria for the period 1981-2015. She used Ordinary Least Square (OLS) and discovered that there exists an inverse relationship between domestic private investment and interest rate in Nigeria. The study concludes that variations in the domestic private investment are explained by interest only to the extent of 23%. Among other things the study recommends that the financial institutions should be reorganized and restructured to make them play more effective role in private sector funding. The government should also ensure political and economic stability to improve the performance of domestic private investment in the country.

A similar study was done by Inimino, Abuo and Bosco (2018) on interest rate and domestic private investment in Nigeria. Auto Regressive Distributed Lag (ARDL) method of analysis was used. The study disaggregated interest rate into monetary policy rate, prime rate and bank lending rate. The results reveal that monetary Policy Rate has negative and significant effects on domestic private investment. Prime lending rate has negative but insignificant effect on domestic private investment. Bank lending rate, according to the study, has positive significant effect on domestic private investment in Nigeria. This third finding is more in the area of dispute by other researchers.

Extant studies have identified foreign exchange rate as another important factor that affect domestic private investment in Nigeria and other developing countries. Nigeria, for example, is heavily dependent on foreign inputs of machinery, raw materials, technology as well as finished products. Karagoz (2010) emphasized imports and may as well affect real income of developing nations.

Frimpong and Marbuah (2010), from their study of Ghana, opined that real exchange rate negatively affect domestic private investment in Ghana. The main reason is because exchange rate remains a crucial component of cost of imports in Ghana. Volatility of exchange rate produces devaluation and or depreciation of the local currency. This, in turn, leads to rise in cost of imports of inputs used by the productive private sector. The extension is reduction in the productive capacity of private sector firms.

Banks credit to the domestic private sector is another crucial factor affecting private sector firms. Frimpong and Marbuah (2010) in their study, referred to earlier, noted the importance of banks credit to the private sector firms. They added that this is most likely applicable to developing countries. This view is corroborated by Manga and Edriss (2012) in their study of the economy of Malawi. They concluded that bank's credit to the private sector affect domestic private investment positively and increase the level of capital formation by the private sector.

In their study Onodogu, Anowor, Ukwenu and Ibiam (2014) used Ordinary Least Square (OLS) to examine the effect of bank's credit to the private sector in Nigeria. They concluded that bank's loans and advances have positive effect on the domestic private sector in Nigeria. The positive effect will spur private investment. They recommended that the government should devise means of getting banks to give more credit to the productive sector. This should include getting banks to give the credits at reasonable charges.

Adelegan (2018) examined Private domestic Private Investment and Bank Credit to the Private Sector. He used Vector Auto Regression (VAR) for the period 1970-2015. He found that banks' credit and domestic private investment have positive but insignificant relationship. He advocates further deepening of the financial sector. Such financial deepening will most likely improve the contribution of banks' credit to the performance of the domestic private sector investment.

SECTION (c)

METHODOLOGY

The study adopted a research design that has two methods – survey method (primary data) and ex-post facto method (secondary data).

- (1) The survey involved designing and distribution of a Questionnaire (see Appendix 1; pages 18-19) to obtain subjective responses from qualified respondents. The nature of the study involves respondents from people who are knowledgeable in Economics, Finance and Management. They are selected randomly from bank staff, post graduate students and staff ministries of Finance and Budget Offices. Five towns were purposively selected and Questionnaires distributed and responses collected. The five selected towns are Abuja, Lagos, Enugu, Port Harcourt and Kaduna.

The population is indeterminate so that the researcher used purposive sampling method of distributing a total of 240 Questionnaire papers. A total of 202 valid responses were received. The difference of 38 were either not returned or improperly completed. They constitute invalid responses. The valid responses are analyzed in tables using percentages. See Tables of Appendix 2 (pages 20-25).

(2) The second method is ex-post facto, research design. Secondary data relating to the variables are collected from the Central Bank of Nigeria (CBN) Statistical Bulletin (various volumes). The data are presented in table form (Appendix 3; page 26). They are analyzed with econometric method. The econometric model used is

$$DPI = F(FDI, GFD, CBLR, EXR \text{ and } CBCR). \text{ The model is put in econometric equation as: } DPI = a_0 + a_1 FDI + a_2 GFD + a_3 LINT + a_4 FER + a_5 BCR + \sum$$

Where DPI = Domestic Private Investment as dependent variable. Independent variables are:

FDI = Foreign Direct Investment

GFD = Government (Federal) Fiscal Deficit

CBLR = Banks Lending Interest Rate

FER = Foreign Exchange Rate (US Dollar)

CBCP = Banks Credit to the Private Sector

a_0 = The Intercept

$a_1 - a_5$ = Coefficients of Independent Variables

\sum = Stochastic Error Term

The regression analysis is done using Ordinary Least Squares (OLS). The dependent variable (DPI) is regressed on the independent variables.

SECTION (d)

DATA PRESENTATION, ANALYSIS AND TESTING OF HYPOTHESES AND DISCUSSION

Primary data collected through Questionnaire presented in table form on Appendix 2 (pages 20-25). Each table shows frequency, valid percentage and cumulative percentage.

Secondary data for the variables are presented on Appendix 3 (page 26). Analyses of the data presented are analyzed. The primary data are analyzed by SPSS tool on the Questionnaire. Univariate analysis is involved. Let us look at the objectives/hypotheses and analysis first of primary data based on questionnaire of Appendix 1 (pages 18-19).

Primary Data Analysis

Ho1: The Effect of FDI on DPI

The objective 1 which is ‘to investigate the extent to which foreign direct investment affect domestic private investment in Nigeria is of concern. The variables were aggregated to form a composite variable for FDI and DPI and they were of interval variable category. Therefore, Pearson’s product moment correlation analysis tool was used to test the significance of relationship. The result from the analysis carried out indicated a Pearson’s correlation coefficient value of 0.168, with a significance probability point of 0.018. The implication of this is that a weak relationship exists between the two variable tested and this significance probability point of 0.018 indicates it is significant at 5% (95% compliance). It consequently means that the relationship is weak but significant. The null hypothesis is thus, rejected and the alternate hypothesis accepted; which is that: *‘foreign direct investment has positive and direct effect on domestic private investment in Nigeria’*. The results are presented in Table 1.

Table 1: Pearson’s product moment correlation analysis result of relationship between FDI and DPI

		DPI
FDI	Person correlation	.168
	SIG. (2-tailed)	.018
	N	202

Source: Fieldwork, 2020.

Ho2: The effect of GFD on DPI

The two variables in focus were of interval variable scale, consequently, Pearson’s product moment correlation analysis tool was applied in examining the significance of relationship. The result of the analysis indicated a correlation coefficient value of 0.281 with a significance probability point of 0.037. The implication is that a moderate relationship exists between the two examined variables. It therefore means that the relationship between them is moderate and the significance probability point of 0.037 indicates significance. Conclusion can then be

reached that there is significant relationship between the two examined variables, hence the null hypothesis is rejected. The alternative is accepted. It states that *'government fiscal deficit has positive and direct effect on domestic private investment in Nigeria'*. Table 2 illustrates this result.

Table 2: Pearson's product moment analysis of relationship between GFD and DPI

		DPI
GFD	Pearson Correlation	.281
	Sig. (2-tailed)	.037
	N	202

Source: Fieldwork, 2020.

Ho3: The Effect of CBLR on DPI

The variables-conditions for securing loans, willingness of commercial banks to give out single interest digit loan, spread of loan repayment and interest rate charged on mortgage facilities by commercial banks were aggregated into a composite variable as 'commercial bank lending rate' on the one hand and on the other hand, 'volume of external reserves and level of public investment were aggregated into a composite variable 'domestic private investment,'. The two variables were of interval variables category. Therefore, Pearson's product moment correlation analysis tool was used to test the significance of relationship. The result of the analysis showed a Pearson's correlation coefficient value of 0.268 having a significance probability point of 0.010 and Table 3 shows the results. This infers that there is a moderate relationship existing between the two variables; also, the significance probability point of 0.010 indicates significance. For that reason, it can be established that a moderate relationship exists between the two variables and which is also significant. The null hypothesis is therefore rejected and the alternate hypothesis Accepted. This states that 'commercial banks' lending interest rate has positive and direct effect on domestic private investment in Nigeria'.

Table 3: Pearson's product moment correlation analysis result of relationship between FOPS and LSWS

		DPI
CBLR	Pearson Correlation	.268
	Sig. (2-tailed)	.010
	N	236

Source: Fieldwork, 2020.

Ho4: The Effect of FER on DPI

Pearson's product moment correlation analysis tool was applied towards examining the significance of the relationship/effect between the two variables. After the analysis, the result indicated a correlation coefficient value of 0.216 with a significance probability point of 0.081. This indicates that a moderate relationship exists between the two variables. This implies consequently that the relationship is moderate and the significance probability point of 0.081 indicates no significance. Conclusion can then be drawn that there is no significant relationship/effect between the two variables; thus, the null hypothesis is therefore accepted. This is that *'foreign exchange rate does not have positive and direct effect on domestic private investment in Nigeria'*. The results are presented in Table 4.

Table 4: Pearson's product moment correlation analysis of relationship between FER and DPI

		DPI
FER	Pearson Correlation	.216
	Sig. (2-tailed)	.081
	N	202

Source: Fieldwork, 2020.

Ho5: The Effect of CBCP on DPI

The two variables examined were of interval variables category. Accordingly, Pearson product moment correlation analysis tool was applied to test the significance of the relationship. The outcome of the analysis revealed a correlation coefficient value of 0.032 with a significance probability point of 0.031. This implies a relationship may exist but it is a weak relationship as shown in Table 5. Furthermore, the significance probability point of 0.031 indicates significance of the relationship. Inference can therefore be made that there is a weak relationship between the two variables, but the relationship is significant. The null hypothesis is therefore rejected and the alternate accepted. This is that *'commercial banks' credit to the private sector firms have positive and direct effect on domestic private investment in Nigeria'*.

Table 5: Pearson’s product moment correlation analysis result of relationship between CBCP and DPI

		DPI
CBCP	Pearson Correlation	0.032
	Sig. (2-tailed)	0.031
	N	202

Source: Fieldwork, 2020.

Secondary Data Analysis

Data for the analysis is presented on a Table in Appendix 3 (Page 26)

The Method of Data Analysis is Ordinary Least Square regression technique, which has properties of Best linear unbiased estimates (), is applied. Data for the study are time series for the period 1986 to 2018 as on Table on Appendix 3. However, before secondary data are used for analysis they are subjected to some preliminary tests to ensure validity. The first preliminary test is Unit Root which is to determine the order of integration of the selected variables. Augmented Dickey-Fuller (ADF) tests are performed assuming intercept and no trend in ADF specification. The results are shown in table6 below:

Variable	ADF Statistic	Order of integration	Significance
DPI	-4.810181	1(1)	1%
GFD	-6.036700	1(1)	1%
FDI	-6.079742	1(1)	1%
CBLP	-4.253273	1(1)	1%
CBLR	-4.925941	1(1)	1%
F	-5.241265	1(1)	1%

From Table 6 it can be seen that the variables are stationary at first differences.

Cointegration test is carried out after establishing that the variables are integrated at order1(1). One of the known approaches is by Johansen’s cointegration method. Johansen’s cointegration is to establish that long run relationship exists between the variables. This is necessary because if the data relating to the variables are not cointegrated, their analysis may most likely, produce spurious results. The cointegration results are shown in the table 7 below:

Table 7: Co-intergration Results Unrestricted Cointegration Rank Test (Trace)

Ho	Hi	Trace statistics	0.05	Maxi Eigen	0.05
r=0	r=0	156.7114	95.75366	73.56641	40.07757
r≤1	r>1	83.14500	69.81889	37.86636	33.87687
r≤2	r>2	45.27864	47.85613	21.27057	27.58434
r≤3	r>3	24.00806	29.79707	19.19848	21.13162
r≤4	r>4	4.809587	15.49471	4.808713	14.26460

Both the trace test and max-Eigen values indicate three cointegrating equations at 5% level of significance.

Presentation of Regression Results

The diagnostic test or key statistics for the variables are shown in Table 8 below:

Table 8

Variable	Coefficient	Std Error	T -test	Prob.
C	5.042405	3.251750	1.550674	0.1341
GFD (-1)	-4.690008	9.650008	-0.485591	0.6317
LFDI (-1)	-0.576898	0.534801	-1.078715	0.2914
LCRLP(-1)	1.590504	0.481070	3.306183	0.0030
CBLR(-1)	0.055722	0.049514	1.125367	0.2718
FER(-1)	-0.001101	0.007168	-0.153615	0.8792
ECM (-1)	-0.036537	0.207386	-0.176181	0.8616

R-Squared (R²)

0.897713

Adjusted R ²	0.872141
F -statistics	35.10563
Prob. (F-statistics)	0.00000
Durbin-Watson (D-W)	2.326678

Interpretation of Regression Result

From Table 8 above, we see R² as 87.77% which means that independent variables explained approximately 88% of variations in the dependent variable. That means that about 12% are explained by factors not captured by the model. The adjusted R2 is 0.872 by indication that about 87% of variations dependent variable are still explained by the independent variables.

The F-statistics is used to test for overall significance of the model. In Table 8, F-statistics is 35.10563 while probability is 0.0000 (10%). Since it is not up to 5% level of significance, we state that there is a significant relationship between the variance of the estimates and the independent variables. The implication is that the parameters are statistically significant in explaining the relationship between the dependent variable and independent variables.

From the regression result, it is observed that government fiscal deficit (GFD) is negative with a value of -4.960008 indicating government fiscal deficit has negative effect and its reduction will increase domestic private investment by 4.69%. It is expected that reduction in fiscal deficit will reduce government borrowing and leave more room for private sector to borrow.

Foreign Direct Investment (FDI) has a negative sign with value at -0.576898. This implies that FDI is not as popularly as expected to increase the domestic private economy. Rather its decrease will increase domestic private investment by 0.57%. It is also not significant at Prob. of 0.2914.

Bank credit to the private sector increases domestic private investment by 1.5%. This conforms to the theoretical expectation. The probability of 0.0030 means significant at 5% level.

Interest rate (bank lending interest rate) has a positive sign with a value of 0.55722. This implies that increase in interest rate increases domestic private investment by some 0.56%. This may not be strange because interest charges are added to amount borrowed to get total liability. The prob. of 0.2718 indicate non-significance level.

Exchange rate has negative sign with the value of -0.001101 implying that reduction in exchange rate will increase domestic private investment. This conforms with the aprior expectation. The prob. of 0.8792 implies it is not significant.

The t-test is normally used to measure the individual statistical significance of the explanatory variables in the model. In the Table 8 above government fiscal deficit is -185591 which is statistically insignificant. This suggests that government fiscal deficit does not encourage domestic private investment in Nigeria. Similarly foreign direct investment with the negative value of -0.078715 has insignificant effect on domestic private investment. Bank credit to the private sector has a value of 3.307183 with p-value of 0.0030. This indicates that it is statistically significant and contributes significantly to domestic private investment in the nation. Interest rate has a value of -0.125367 with p-value of 0.2716 showing that it is statistically insignificant with negative contribution to the domestic private investment. Similarly exchange rate has negative insignificant effect on domestic private investment.

The Durbin-Watson (D-W) has a value of 2.326678 which is above the accepted standard value of 2. This is indicative of the absence of auto-correlation hence the variables can be used for predictive purposes.

Finally, the negative coefficient of the ECM (-1) confirms that the variables in the model are cointegrated and indicates a stable long run equilibrium relationship between the variables. The coefficient for ECM of 0.036537, indicates the speed of adjustment of previous year's equilibrium to current year.

SECTION (e)

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATION

We, through comparative analyses, summarize our findings by looking at the findings of primary data and secondary data analyses.

1. Effect on FDI on DPI

Here under primary data analysis the Null hypothesis stating that foreign direct investment (FDI) does not have positive and direct effect on domestic private investment in Nigeria is rejected. Similar finding is also found in the case of secondary data analysis.

2. Effect of GFD on DPI

In this under primary data, Null hypothesis is rejected. Under secondary data government fiscal deficit (GFD) significant effect indicating also rejection of Null hypothesis.

3. Effect Of Bank Lending Interest Rate

In the primary data test, Null hypothesis is rejected. Under secondary data, Null hypothesis is also rejected.

4. Effect Of Foreign Exchange Rate (FER) On DPI

Here under primary data, the Null hypothesis is accepted. Under secondary data there is insignificant relationship. Thus the Null hypothesis is accepted.

5. Effect Of Bank Credit To The Private Sector And DPI

Under primary data, the Null hypothesis is rejected. Under secondary data, Null is rejected.

In conclusion, we state that all the variables of the study except effect of foreign exchange on domestic private investment imply the rejection of Null hypothesis. In other words, the variables-foreign direct investment, government fiscal deficit, bank lending interest rate and bank credit to the private sector– have significant effect on domestic private investment in Nigeria. Only one factor foreign exchange rate has insignificant on domestic private investment.

RECOMMENDATION

The study recommends that the government should adopt policies that favour the operation of the private sector. Foreign direct investment should be encouraged, fiscal deficit reduced. Commercial bank lending interest rate should be reduced and credits to the private sector increased. The volatile foreign exchange rate should be controlled because the productive private sector depends heavily on import of input.

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Appendix 1

Questionnaire

Instruction: Please tick (√) or fill as appropriate.

1. Sex (i) Male [] (ii) Female []
2. What is your age range? (i) 23yrs-30yrs [] (ii) 31yrs-45yrs [] (iii) 46yrs-50yrs [] (iv) 51yrs-60yrs []
3. Organization where you work? (i) Financial Institutions [] (ii) Academia [] (iii) MDAs [] (iv) Investors [] (v) Others []
4. What is the level of your education attainment? (i) OND/NCE [] (ii) HND/B.Sc. [] (iii) Masters degree [] (iv) Ph.D [] (v) professional []
5. The market size in Nigeria affects domestic private investment. (i) Disagree [] (ii) Not sure [] (iii) Agree []
6. The ratio of exports and imports affects investment domestically. (i) Disagree [] (ii) Not sure [] (iii) Agree []
7. Labour costs determine the level of domestic private investment. (i) Disagree [] (ii) Not sure [] (iii) Agree []
8. Political risk/instability is a very important factor affecting domestic private investment. (i) Disagree [] (ii) Not sure [] (iii) Agree []
9. The state of public infrastructure in the country affects the level of domestic private investment. (i) Disagree [] (ii) Not sure [] (iii) Agree []
10. Different tax programmes affect domestic private investment. (i) Disagree [] (ii) Not sure [] (iii) Agree []
11. Budget deficit by government affects the level of domestic private investment. (i) Disagree [] (ii) Not sure [] (iii) Agree []

12. The percentage charged as VAT affect domestic private investment. (i) Disagree [] (ii) Not sure [] (iii) Agree []
13. Tax charged on land as a factor of production determines the level of domestic private investment. (i) Disagree [] (ii) Not sure [] (iii) Agree []
14. Government consumption in excess of taxes affects the level of domestic private investment. (i) Disagree [] (ii) Not sure [] (iii) Agree []
15. Government's fiscal policy affects domestic private investment. (i) Disagree [] (ii) Not sure [] (iii) Agree []
16. The state of stock market affects domestic private investment. (i) Disagree [] (ii) Not sure [] (iii) Agree []
17. There are stringent conditions for granting/securing loans for investments in the economy. (i) Disagree [] (ii) Not sure [] (iii) Agree []
18. Commercial banks are willing and ready to give out single interest digit loan for domestic private investments. (i) Disagree [] (ii) Not sure [] (iii) Agree []
19. The spread for the repayment of the loan affect domestic private investment. (i) Disagree [] (ii) Not sure [] (iii) Agree []
20. Interests charged on mortgage facilities by commercial banks affect domestic private investment. (i) Disagree [] (ii) Not sure [] (iii) Agree []
21. Official exchange rate of US dollars encourage domestic private investment. (i) Disagree [] (ii) Not sure [] (iii) Agree []
22. Terms of trade is a factor to be considered in domestic private investment. (i) Disagree [] (ii) Not sure [] (iii) Agree []
23. Nominal interest or return rate is higher than the national inflation rate. (i) Disagree [] (ii) Not sure [] (iii) Agree []
24. Effective yield rate higher than the national inflation rate. (i) Disagree [] (ii) Not sure [] (iii) Agree []
25. Inflation rates in the country affect domestic private investment. (i) Disagree [] (ii) Not sure [] (iii) Agree []
26. Economic recession affects domestic private investment. (i) Disagree [] (ii) Not sure [] (iii) Agree []
27. Commercial banks' credits determine the number of private investors listed on the stock exchange. (i) Disagree [] (ii) Not sure [] (iii) Agree []
28. Non-performance loans in commercial banks affect domestic private investment. (i) Disagree [] (ii) Not sure [] (iii) Agree []
29. Ratio of capital to total assets in the country affects domestic private investment. (i) Disagree [] (ii) Not sure [] (iii) Agree []
30. Commercial banks' credits determine the percentage of firms that use loans from bank. (i) Disagree [] (ii) Not sure [] (iii) Agree []
31. Volume of external reserves affects domestic private investment. (i) Disagree [] (ii) Not sure [] (iii) Agree []
32. The level of public investment affects domestic private investment. (i) Disagree [] (ii) Not sure [] (iii) Agree []

Appendix 2

Frequency Table

Sex	Frequency	%	%
Male	133	65.8	65.8
Female	69	34.2	100.0
Total	202	100.0	
Age	Frequency	%	%
22yrs-30yrs	57	28.5	28.5
31yrs-45yrs	107	53.5	82.0
46yrs-50yrs	17	8.5	90.5
51yrs-60yrs	21	9.5	100.0
Total	202	100.0	

Organization	Frequency	%	%
Financial institution	64	31.7	31.7
Academia	63	31.2	62.9
MDAs	38	18.8	81.7
Others	37	18.3	100.0
Total	202	100.0	

Qualification	Frequency	%	%
OND/NCE	69	34.5	34.5
HND/B.Sc.	63	31.5	66.0
M.Sc.	29	14.5	80.5
Ph.D	13	6.5	87.0
Professional	28	13.0	100.0
Total	202	100.0	

Market Size	Frequency	%	%
Disagree	30	14.9	14.9
Not sure	33	16.3	31.2
Agree	134	68.8	100.0
Total	202	100.0	

Radio of Exports and Imports	Frequency	%	%
Disagree	23	11.6	11.6
Not sure	12	6.0	27.7
Agree	164	82.4	100.0
Total	199	100.0	

Labour Cost	Frequency	%	%
Disagree	30	14.9	14.9
Not sure	26	12.9	27.7
Agree	146	72.3	100.0
Total	202	100.0	

Political Risk	Frequency	%	%
Disagree	16	7.9	7.9
Not sure	18	8.9	16.8
Agree	168	83.2	100.0
Total	202	100.0	

State of Public Infrastructure	Frequency	%	%
Disagree	30	14.9	14.9
Not sure	34	16.8	31.7
Agree	138	68.3	100.0
Total	202	100.0	

Tax Programmes	Frequency	%	%
Disagree	18	8.9	8.9
Not sure	33	16.3	25.2
Agree	151	74.8	100.0
Total	202	100.0	

Budget Deficit	Frequency	%	%
Disagree	26	12.9	12.9
Not sure	76	37.6	50.5
Agree	100	49.5	100.0
Total	202	100.0	

VAT	Frequency	%	%
Disagree	24	11.9	11.9
Not sure	28	13.9	25.7
Agree	150	74.3	100.0
Total	202	100.0	

Tax	Frequency	%	%
Disagree	50	24.8	24.8
Not sure	41	20.3	45.0
Agree	111	55.0	100.0
Total	202	100.0	

Government Consumption	Frequency	%	%
Disagree	56	27.7	27.7
Not sure	39	19.3	47.0
Agree	107	53.0	100.0
Total	202	100.0	

Fiscal Policy	Frequency	%	%
Disagree	22	10.9	10.9
Not sure	34	16.8	27.7
Agree	146	72.3	100.0
Total	202	100.0	

Stock Market	Frequency	%	%
Disagree	36	18.2	18.2
Not sure	37	18.7	36.9
Agree	125	63.1	100.0
Total	198	100.0	

Granting Loans	Frequency	%	%
Disagree	21	10.5	10.5
Not sure	36	18.0	28.5
Agree	143	71.5	100.0
Total	200	100.0	

Single Interest Digit Loan	Frequency	%	%
Disagree	78	38.6	38.6
Not sure	37	18.3	56.9
Agree	87	43.1	100.0
Total	202	100.0	

Spread of Loan Repayment	Frequency	%	%
Disagree	33	16.5	16.5
Not sure	34	17.0	33.5
Agree	133	66.5	100.0
Total	200	100.0	

Interest on Mortgage Facilities	Frequency	%	%
Disagree	20	9.9	9.9
Not sure	40	19.8	29.7
Agree	142	70.3	100.0
Total	202	100.0	

Official Exchange Rate	Frequency	%	%
Disagree	62	31.3	31.3
Not sure	32	16.2	47.5
Agree	104	52.5	100.0
Total	198	100.0	

Terms of Trade	Frequency	%	%
Disagree	12	5.9	5.9
Not sure	53	26.2	32.2
Agree	137	67.8	100.0
Total	202	100.0	

Nominal Interest	Frequency	%	%
Disagree	50	24.8	24.8
Not sure	127	62.9	87.6
Agree	25	12.4	100.0
Total	202	100.0	
Effective Yield Rate	Frequency	%	%
Disagree	37	18.3	18.3
Not sure	110	54.5	72.8
Agree	55	27.2	100.0
Total	202	100.0	

Inflation Rate	Frequency	%	%
Disagree	27	13.4	13.4
Not sure	12	5.9	19.3
Agree	163	80.7	
Total	202	100.0	

Economic Recession	Frequency	%	%
Disagree	29	14.4	14.4
Not sure	26	12.9	27.2
Agree	147	72.8	100.0
Total	202	100.0	

Commercial Bank's Credit	Frequency	%	%
Disagree	50	24.8	24.8
Not sure	60	29.7	54.5
Agree	92	45.5	100.0
Total	202	100.0	

Non-Performance Loans	Frequency	%	%
Disagree	22	10.9	10.9
Not sure	48	23.8	34.7
Agree	132	65.3	100.0
Total	202	100.0	

Ratio of Capital to Total Assets	Frequency	%	%
Disagree	25	12.4	12.4
Not sure	63	31.3	43.8
Agree	114	56.2	100.0
Total	202	100.0	

Banks' Credits	Frequency	%	%
Disagree	19	9.5	9.5
Not sure	57	28.6	38.2
Agree	123	61.8	100.0
Total	199	100.0	

Volume of External Reserve	Frequency	%	%
Disagree	33	16.3	16.3
Not sure	82	40.6	56.9
Agree	87	43.1	100.0
Total	202	100.0	

Level of Public Investment	Frequency	%	%
Disagree	33	16.3	16.3
Not sure	31	15.3	31.7
Agree	138	68.3	100.0
Total	202	100.0	

Location	Frequency	%	%
Abuja	42	20.8	20.8
Enugu	39	19.3	40.1
Kaduna	36	17.8	57.9
Lagos	45	22.3	80.2
Port Harcourt	40	19.8	100.0
Total	202	100.0	

SOURCE: Field Survey – Questionnaire Responses, 2020.

Appendix 3

	LDPI	LFDI	LBCPS	INT	GFD	FEXR	ECM
1986	4.592085	7.674153	2.724580	10.5	-6104.1	2.02	-0.286408
1987	5.215479	7.922043	3.048325	17.5	-3364.5	4.02	-0.556850
1988	5.230039	7.991051	3.307985	16.5	-2660.4	4.54	-0.692756
1989	7.021263	8.089360	3.414443	26.8	-3039.7	7.39	0.171042
1990	7.437324	8.450477	3.513037	25.5	-8245.3	8.04	0.979950
1991	7.644536	8.349437	3.722072	20.01	-5889.7	9.91	0.979950
1992	7.910114	8.515451	4.062510	29.8	-12160.9	17.3	0.141017
1993	7.132737	8.584665	4.845131	18.32	-15134.7	22.05	-0.384956
1994	9.275003	10.04742	4.965777	21	-22116.1	21.89	0.896311
1995	8.866271	10.05739	5.192957	20.18	-35755.2	21.89	0.370440
1996	8.990342	10.28067	5.474789	19.74	-39532.5	21.89	0.225000
1997	9.827702	10.43618	5.756407	13.54	-107735.3	21.89	1.260857
1998	6.974292	9.877806	5.863518	18.29	-70270.6	21.89	-1.828333
1999	10.14916	10.11952	6.066503	21.32	-133389.9	92.69	0.710779
2000	10.00487	10.24027	6.273575	17.98	-1000	102.11	0.613866
2001	10.53298	11.45881	6.639823	18.29	-32049.5	111.94	0.345892
2002	10.60315	11.45928	6.835711	24.85	-5000	120.97	-0.262031
2003	9.900599	11.63788	6.999915	20.71	-285104.7	129.36	-0.882333
2004	9.260367	11.57078	7.259581	19.18	-296105.7	133.5	-1.588336
2005	9.944874	11.80257	7.516645	17.95	-103777.3	132.15	-1.073897
2006	11.47871	12.20236	7.736578	17.26	-202724.7	128.65	0.188154
2007	12.28553	12.44076	8.210692	16.94	-301401.7	125.83	0.557958
2008	12.59531	12.60046	8.845256	15.14	-172601.3	118.57	0.483240
2009	11.68435	12.91375	9.232038	18.99	-161406.3	148.88	-1.207086
2010	11.73546	13.11757	9.193229	17.59	-101397.5	150.3	-1.091827
2011	13.91383	13.07341	9.559841	16.02	-17723.5	153.88	0.942853
2012	11.71363	13.11543	9.625872	16.02	-17723.5	150.3	-1.091827
2013	14.38624	13.12924	9.692240	16.72	-810008.5	157.31	1.052039
2014	14.29322	13.11543	9.805105	16.55	-1105440	158.55	0.958594
2015	14.29870	13.12924	9.837375	16.85	-11300388	193.28	-0.163090
2016	14.29870	13.17443	9.997986	17.08	-1238364	253.49	0.544219
2017	14.30686	13.18486	10.01192	17.78	-1153.5	305	0.498091
2018	14.2993	13.15099	9.9130965	17.07	-3411336	350.00	0.459454