



## CAPITAL FLIGHT AND INVESTMENT IN NIGERIA

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### ABSTRACT

*The study examines the nexus between capita flight and investment in Nigeria. The data series employed for the study were gathered from various sources such as the Central Bank of Nigeria statistical bulletin, Economic and financial Review, monthly and annual reports and statement of accounts of various years of CBN . The study made use of Auto – regressive distributed lag (ARDL) approach to Co-integration and error correction mechanism (ECM). The version of the ARDL model to determine the short run and long – run relationship between capital flight and investment in Nigeria. The findings from the study reveals that there is significant negative relationship between investment and some explanatory variables such as capital flight (CFL), Real Exchange Rate (REXR) and Inflation rate (INF) which implies that capital flight affect domestic investment negatively in Nigeria during the study period. However, the result of the study also shows that there is significant positive relationship between investment and other regressors like real interest rate (RINT) and real Gross Domestic Product (RGDP). The overall result of the reveals existence of long – run relationship between dependent variable and independent variables. Based on the findings, the study recommends that, government should work out holistic policy measures that will make the economy competitive and more stable exchange rate which will allow foreign capital inflow so as to boost private domestic investment.*

## **INTRODUCTION**

Capital flight is the outflow of capital in form of massive transfer of money from one country to another. Capital flight could be legal or illegal. Legal capital flight is recorded on the books of the entity or individual making the transfer and earnings from interest, dividends and realized capital gains normally return to the country of origin. While illegal capital flight also known as illicit financial flows, is intended to disappear from all records in the country of origin.

Over the years, the issue of capital flight from developing countries, including Nigeria has received appreciable attention not only from academic from researchers also from policy makers in both developing and developed countries. The attention of these writers have expressed concern over the magnitude causes and the consequences.

Capital flight reduces the investible capital in the domestic economy. Investments that lead to increase in capital formation for the economy and act as the foundation for infrastructure or framework for the development of the country. The continuous campaign for foreign investors to invest capital in the domestic economy becomes meaningless when encouragements to domestic investors are not yielding results. This raises concern on issues of domestic investment and capital flight. Domestic investment is only possible with aggregated domestic savings which itself is a function of the level of income. However, the role of investment vis-a-vis growth has proved to be negligible. The importance of investment has been realized by successive administrations long time ago, especially for Foreign Direct Investment (FDI). Various governments have encouraged the inflow of foreign investment through policies enunciations rather than concrete steps to implement policies formulated and establish a culture to encourage domestic investments by residents. In addition, laws have been enacted to establish institutions and special units (such as Nigeria investment promotion commission) that should foster economic and investment growth among many other steps taken to encourage investments.

## **CONCEPTUAL BACKGROUND**

### **2.1a(i) CAPITAL FLIGHT**

The use of the term capital flight arouses strong emotions. Some analysts view it as a symptom of a sick society. Some observers see capital flight as the cause of the heavily indebted countries' inability to recover from their debt problems. The controversy surrounding the term is due partly to the absence of a precise and universally accepted definition for it and partly because

of the way the term is used between developed and developing countries. It is usual among some economists to refer to capital outflows from developed countries as foreign investment while the same activity when under taken by the residents of a developing county is referred to as capital flight.

A distinction is often made also between legal and illegal transactions to distinguish between capital flight and so-called normal capital. Since illegal transactions are not reported to the compilers of the balance of payments statistics, it is difficult to know the extent to which they therefore constitute capital flight. Capital flight is capital that flees (Walter, 1986, Kindleberger, 1987). Alternatively, capital outflows in response to economic or political crisis are capital flight (Husted and Melvin, 1990). Normal capital flows on the other hand, refer to flows that correspond to ordinary portfolio diversification of domestic residents.

### **2.1a(ii) CAUSES OF CAPITAL FLIGHT**

The causes of capital flight as discussed in the literature are many. The various factors can be grouped under relative risks, exchange rate misalignment, financial sector constraints, fiscal deficits and external incentives (Khan, 1989) and disbursement of new loans to LDCs (Cuddington, 1987). These are, no doubt, economic factors. There are, however, other noneconomic factors which, though important, are often ignored. These include corruption of political leaders and extraordinary access to government funds.

### **INVESTMENT**

Contemporary macroeconomic interest in investment and its functions tilts towards Foreign Direct Investment (FDI). Unlike the previous and immediate post-Keynesian era, there is paucity of current literature on domestic investment, which makes availability of empirical results difficult, though the understanding that investment as the key driver of business cycles and employment is still respected. That capital flight and outflows reduce the available investable capital in the economy is uncontroverted. Investment is first seen as savings, and then as postponed consumption. The Keynesians term investment as additions to capital, which works to increase the level of income and production, by increasing production and the purchase of capital goods (Thingan, 2003). An investment is the purchase of goods that are not consumed today but are used in the future to create further capital (wealth). Investment can also be referred to as the production of capital goods (Heim, 2008), In finance, an investment is a monetary asset

purchased with the idea that the asset will provide income in the future or appreciate and be sold at a higher price. Gross private domestic investment is the measure of investment used to compute GDP. This is an important component of GDP because it provides an indicator of the future productive capacity of the economy. It includes replacement purchases plus net additions to capital assets plus investments in inventories. Net investment is gross investment less depreciation.

### **2.2.1 CAPITAL FLIGHT AND INVESTMENT LINKAGE**

The economic mis-management in the form of expansive fiscal and monetary policies, and exchange rate overvaluation create uncertainty and make the domestic environments unattractive for investment. This will reduce the rate of investment in countries such as Nigeria. Since expansive monetary and fiscal policies are inflationary while exchange rate overvaluation creates condition for expected devaluation, residents in such situation usually have no confidence in announced policies to deal with the economic problems. preferring instead to take their assets out of the country. This macroeconomic environment is influenced by economic and non-economic factors include declining terms of trade, exchange rates over valuation, fiscal deficit, financial repression and constraints, and increasing foreign real interest rate. Non-economic factors are the corruption of political leaders and lack of accountability (Ajayi, 2001).

## **SECTION III**

### **THIS SECTION PRESENTS THEORETICAL ISSUE AND METHOD**

#### **3.1 THEORETICAL ISSUE**

This study employs the Portfolio Choice Model as her theoretical framework. This is fundamentally based on various economic risk and returns in different countries. Portfolio choice framework is an integration of two-way flows which equally involves relative risk incentive and return differential incentives. The first incentives implies that, capital flight emanates owing to determinants that raise the relative riskness of the domestic economy such as inflation, exchange rate fluctuation and interest rate. The second incentive deals with factors that affect the macro-economic environment adversely and that reduce returns to domestic assets such as political instability, poor investment climate and others. Therefore, Portfolio approach is the flow of capital that is accumulated into stock and expressed as ratio of private stock of real wealth (Ajayi

1997). Portfolio Choice theory is to optimize returns to their exogenously given wealth (W). The equation is expressed as below:

$$\text{Max } W_t E \varepsilon_t^\alpha = \beta^t \mu(w_t) \dots \dots \dots 3.1$$

$$\text{Subject to: } W_t = (1+r^h)I_t^h + (1+r^f)I_t^f - I_{t+1}^h + 1 - I_{t+1}^f \dots \dots \dots 3.2$$

$W_t$  is normalize to unity,  $I_t^h$  is fraction of W invested within a risky environment at time t. This generate random return equal to  $r^h - \chi(\mu, \delta^2)$  due to weak financial institution, political instability and poor domestic investment climate. Agents also invest the remaining fraction  $I_t^f$  in a developed country, which pays a known risk free time investment ( $r^f$ ). This theory generalizes the risk – return characteristics. The theory captures the optimal determinants of assets to acquire within a risky environment which determine level of capital flight.

**MODEL SPECIFICATION**

The model specification used in this study follow the work of Ajayi (2005) which took its root from Portfolio choice model which is the basis of Cuddington’s (1986) with modification. Dooleys (1986) focuses on different tax treatment for residents and non – residents and the uncertainty of future deficit which leads to two-way flows of capital. The explanatory variables are capital flight, real interest rate, real exchange rate, real inflation rate, and real gross domestic product in which capital flight is calculated as “change in debt plus net foreign investment minus (Current A/C balance plus change in Reserves) while investment will be the dependent variable. Thus, the model is specified below:

$$\text{INV} = f(\text{CFL}, \text{RINT}, \text{REXR}, \text{INF}, \text{RGDP}) \dots \dots \dots 3.3$$

This can be restated in an explicit form

$$\text{INV}_t = \alpha_0 + \alpha_1 \text{CFL}_t + \alpha_2 \text{RINT}_t + \alpha_3 \text{REXR}_t + \alpha_4 \text{RINF}_t + \alpha_5 \text{RGDP}_t + U_t \dots \dots \dots 3.4$$

This model was log-linearised below so as to convert the research data from rate and absolute terms into the same numerical structure.

$$\text{LNINV}_t = \alpha_0 + \alpha_1 \text{LNCFL}_t + \alpha_2 \text{LNRINT}_t + \alpha_3 \text{LNREXR}_t + \alpha_4 \text{LNINF}_t + \alpha_5 \text{LNRGDP}_t \dots \dots \dots 3.5$$

Where:

INV = Investment

CFL = Capital Flight

RINT =Real Interest Rate

REXR = Real Exchange Rate

INF = Inflation Rate

RGDP = Real Gross Domestic Product

LN = Natural Logarithm

$U_t$  = Stochastic Variables

$\alpha_0$  = Intercept

$\alpha_1 - \alpha_5$  = coefficients or parameters estimates.

## DATA SOURCES

The data for this paper were sourced from various publication of Central Bank of Nigeria statistical Bulletins and also from Federal Bureau of statistics..

## SECTION IV

## RESULTS AND DISCUSSION OF FINDINGS

This section presents results and interpretation

**Table 4.1: Unit Root**

Variable	AT LEVELS			1ST DIFFERENCE			Level of Integration
	ADF-Test	1% C. V.	5% C. V.	ADF-Test	1% C. V.	5% C. V.	
LNINV	-0.11621	-3.59662	-2.93316	-4.87863	-3.60099	-2.935	1(1)
LNCFL	-0.85211	-3.60559	-2.93694	-6.77328	-3.60559	-2.93694	1(1)
LNINT	0.485596	-3.59662	-2.93316	-7.63572	-3.60099	-2.935	1(1)
LNEXR	-0.13537	-3.59662	-2.93316	-5.21433	-3.60099	-2.935	1(1)
LNINF	-3.01433	-3.59662	-2.93316	-7.0683	-3.60559	-2.93694	1(0)
LNGDP	-8.51887	-3.64634	-2.95402	-6.80882	-3.60099	-2.935	1(0)

**Source:** Author's computation from Data, 2015.

From the above table, it is obvious that the variables of interest are integrated of difference order. The implication of this is that the variables can not have long-run relationship and this calls for auto-regressive distributive lag cointegration.

## ARDL MODELLING

**Table 4.2: Vector Autoregressive Estimates**

	LNINV
LNINV(-1)	0.614638
	-0.11965
	[ 5.13704]
LNINV(-2)	-0.05065
	-0.10301
	[-0.49174]
C	5.284099
	-0.83119
	[ 6.35727]
LNCFL	0.095599
	-0.03172
	[ 3.01374]
LNINT	-0.62187
	-0.13389
	[-4.64483]
LNEXR	0.439505
	-0.07718
	[ 5.69427]
LNINF	0.286805
	-0.05807
	[ 4.93889]
LNGDP	-0.10354
	-0.02126
	[-4.86987]
R-squared	0.997052
Adj. R-squared	0.996427
Sum sq. resids	2.399506
S.E. equation	0.269652
F-statistic	1594.397
Log likelihood	0.00886
Akaike AIC	0.389812
Schwarz SC	0.724167
Mean dependent	14.30239
S.D. dependent	4.510891

Figures in bracket are in standard form.

Based on this confirmation, the ARDL which is also known as the “unrestricted ECM” model is estimated.

### Results of the ARDL Lag Length Selection

The result of Table 4.3 below shows that all the lag length selection criteria suggest a maximum of one lag for the ARDL model in this study. To implement the information criteria for selecting the lag-length in a time-effect way, the lag structure was estimated. The appropriate lag length is determined by using one or more of AIC, SC and HQ. The result is presented below

**Table 4.3: Lag Length Selection Criteria**

VAR Lag Order Selection Criteria						
Endogenous variables: LNINV						
Exogenous variables: C LNCFL LNINT LNEXR LNINF LNGDP						
Date: 01/31/15 Time: 05:55						
Sample: 1970 2012						
Included observations: 39						
Lag	LogL	LR	FPE	AIC	SC	HQ
0	-11.19339	NA	0.141748	0.881712	1.137645	0.973539
1	5.461461	27.33104*	0.063606*	0.078899*	0.377487*	0.186030*
2	5.590609	0.205312	0.066642	0.123559	0.464802	0.245994
3	6.161676	0.878564	0.068299	0.145555	0.529454	0.283295
4	7.623883	2.174566	0.066916	0.121852	0.548406	0.274896
* indicates lag order selected by the criterion						
LR: sequential modified LR test statistic (each test at 5% level)						
FPE: Final prediction error						
AIC: Akaike information criterion						
SC: Schwarz information criterion						
HQ: Hannan-Quinn information criterion						

By iteratively increasing the lag length to about four lags and beyond to where there seems to be no improvement in the choice of lag length, the result in Table 4.3 was generated. The result shows that all the criteria suggest a maximum of two lag for the ARDL model.



**Table 4.4: VAR Residual Serial Correlation Langrange Multiplier**

Lags	LM-Stat	Prob
1	0.014378	0.9046
2	2.356414	0.1248
3	0.646124	0.4215
4	3.744837	0.053
5	0.772953	0.3793
6	0.077553	0.7806
7	0.910043	0.3401
8	2.551336	0.1102
9	6.83E-05	0.9934
10	1.134373	0.2868
11	1.606606	0.205
12	0.12333	0.7255
Probs from chi-square with 1 df.		

A key assumption in the ARDL/Bound Testing methodology of Peseran et al. (2001) is that the errors of the equation must be serially independent. We use LM to test this hypothesis. The LM test of serial correlation in Table 4.4, conducted on ARDL showed no traces of serial correlation at one lag at 1% and 5% level of significance. To avoid multicollinearity a maximum of one lag is selected. The ARDL(LNINV,LNCFL,LNRINT,LNREXR, LNINF,LNRGDP), therefore ARDL(1,,1,1,1,0,0) was preferred.

### Results of Over-Parameterized ARDL Model

**Table 4.5 : Unrestricted ARDL Model**

*Dependent Variable: D(INV)*

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LNCFL)	-0.050131	0.034416	1.456625	0.1646
D(LNINT)	0.150004	0.147077	-1.0199	0.323
D(LNEXR)	-0.192457	0.111296	1.729242	0.103
D(LNINF)	-0.164413	0.060206	2.730865	0.0148
D(LNGDP)	0.216964	0.031128	-6.970064	0
LNINV(-1)	-0.367906	0.11161	-3.296364	0.0046

LNCFL(-1)	-0.046587	0.060619	0.76852	0.4534
LNINT(-1)	0.385831	0.204124	-1.890182	0.077
LNEXR(-1)	-0.430976	0.083926	5.135175	0.0001
LNINF(-1)	-0.113602	0.121371	0.935994	0.3632
LNGDP(-1)	0.044562	0.028432	-1.567333	0.1366
D(LNINV(-1))	0.043174	0.210967	0.204647	0.8404
D(LNINV(-2))	0.195316	0.162279	1.203578	0.2463
D(LNCFL(-1))	-0.0223	0.031311	-0.71221	0.4866
D(LNCFL(-2))	-0.013767	0.021787	-0.631904	0.5364
D(LNINT(-1))	0.039745	0.252394	0.157471	0.8768
D(LNINT(-2))	-0.178768	0.162435	-1.100551	0.2874
D(LNEXR(-1))	-0.21782	0.107428	-2.027599	0.0596
D(LNEXR(-2))	-0.148217	0.139835	-1.059938	0.3049
D(LNINF(-1))	0.131444	0.076622	1.715485	0.1056
D(LNINF(-2))	-0.029118	0.053663	-0.542615	0.5949
D(LNGDP(-1))	-0.029903	0.063917	-0.467839	0.6462
D(LNGDP(-2))	0.03813	0.049054	0.777298	0.4483
C	4.566944	1.192233	3.83058	0.0015
R-squared	0.963199	Mean dependent var		0.329834
Adjusted R-squared	0.910298	S.D. dependent var		0.467602
S.E. of regression	0.140048	Akaike info criterion		-0.809951
Sum squared resid	0.313816	Schwarz criterion		0.203377
Log likelihood	40.19902	Hannan-Quinn criter.		-0.443564
F-statistic	18.20754	Durbin-Watson stat		2.221935
Prob(F-statistic)	0			

The ARDL in Table 4.5 portrays both the short-run and long-run analyses. The major hypotheses of this study were stated as follows:

*H<sub>0</sub>: There is no significant relationship between capital flight and investment in Nigeria.*

*H<sub>1</sub>: There is significant relationship between capital flight and investment in Nigeria*

The ARDL test therefore established that there is a significant negative short-run relationship between capital flight and investment at 5% level; REXR is statistically significant at 5% level; RINF is negatively but insignificantly related to investment. This implies that the following variables tend to decrease investment in the short run. RINT and RGDP are both positively related to the investment in the short run but only RINT is statistically significant this implies that both real interest rate (RINT) and gross domestic product (RGDP) tends to increase the level of investment. The  $R^2$  which is the coefficient of determination and also measure the goodness of fit records 0.963 This means 96% of the total variation in investment is been explained by other variables. But because of the insignificance of some of the explanatory variables and also to be able to know which of the variables that is most relevant in the model, we therefore conduct a parsimonious autoregressive distribution lag.

### Results of Parsimonious ARDL Model

**Table 4.6 : Unrestricted ARDL Model**

*Dependent Variable: D(INV)*

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LNCFL)	-0.039924	0.015413	2.590182	0.0149
D(LNEXR)	-0.240236	0.090534	2.653534	0.0128
D(LNINF)	-0.201083	0.041413	4.855583	0
D(LNGDP)	0.224346	0.02297	-9.767021	0
LNINV(-1)	-0.336514	0.046976	-7.16348	0
LNINT(-1)	0.425228	0.090622	-4.692325	0.0001
LNEXR(-1)	-0.432586	0.050922	8.49506	0
LNINF(-1)	-0.238395	0.044665	5.337439	0
LNGDP(-1)	0.066557	0.011544	-5.765519	0
D(LNINT(-2))	0.22706	0.097344	-2.332548	0.0268
C	4.575258	0.629901	7.263453	0
R-squared	0.927789	Mean dependent var		0.329834
Adjusted R-squared	0.902889	S.D. dependent var		0.467602
S.E. of regression	0.145717	Akaike info criterion		-0.78588
Sum squared resid	0.615772	Schwarz criterion		-0.32144
Log likelihood	26.71762	Hannan-Quinn criter.		-0.61795
F-statistic	37.26023	Durbin-Watson stat		1.575135
Prob(F-statistic)	0			

From the result, capital flight(LNCFL), inflation(LNINF) and real exchange rate (LNEXR) maintain a significant negative relationship with investment and also the only most

relevant variable that relates with investment on the short run without a lag while other variables are dropped due to their insignificance. The coefficient of determination is still high as it record approximately 92% of the systemic variation in investment which is accounted for by other independent variables.

As regard the long run, the coefficient of  $INV(-1)$  is significant at 5% level. This suggests there is a long run relationship among the variables. The Bound test is conducted on the unrestricted ECM to test for the presence of co integration by conducting the F statistics of the hypothesis,  $H_0 : \theta_0 = \theta_1 = \theta_2 = 0$  against the alternative. As a check we perform a “Bounds” t-test” of  $H_0 = 0$ , if the t-statistic for  $INV_{t-1}$  in our equation is greater than the “I (1) bounds” tabulated by Pesaran et al., this would support the conclusion that there is a long-run relationship between the variables.

Pesaran et al. supplied bounds on the critical values for the asymptotic of the F – statistics. If the computed F – statistics falls below the lower bound we would conclude that the variables are  $I(0)$ , so no cointegration is possible, by definition. If the F- statistics exceeds the upper bound, we conclude that we have cointegration. Finally if the F – statistics falls between the bounds, the test is inconclusive, we may rely on the result of Granger causality and/or the short-run analysis. The result of the Wald Test is presented in Table 4.7

**Table 4.7: Over Parameterized Error Correction Model**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LNCFL)	-0.077745	0.026854	2.895113	0.009
D(LNINT)	0.114548	0.145094	-0.789476	0.4391
D(LNEXR)	-0.102149	0.104815	0.974564	0.3414
D(LNINF)	0.219237	0.048349	4.53442	0.0002
D(LNGDP)	0.193674	0.027574	-7.02381	0
D(LNINV(-1))	0.352254	0.167328	2.105173	0.0481
D(LNINV(-2))	-0.369207	0.142029	2.599513	0.0171
D(LNCFL(-1))	-0.040069	0.020681	-1.937417	0.0669
D(LNCFL(-2))	-0.01714	0.02028	-0.845174	0.408
D(LNINT(-1))	0.391252	0.208364	1.87773	0.0751
D(LNINT(-2))	-0.035777	0.13432	-0.266355	0.7927
D(LNEXR(-1))	-0.169088	0.105016	-1.610109	0.123

D(LNEXR(-2))	-0.022579	0.112751	-0.200257	0.8433
D(LNINF(-1))	0.107799	0.052238	2.063602	0.0523
D(LNINF(-2))	-0.074714	0.05495	-1.359671	0.1891
D(LNGDP(-1))	0.039847	0.052082	0.765069	0.4532
D(LNGDP(-2))	0.082882	0.045629	1.816408	0.0843
LNINV(-1)	-0.009218	0.007312	-1.260739	0.2219
C	0.309493	0.144192	2.146394	0.0443
ECM(-1)	-0.470753	0.10586	-4.44693	0.0002
R-squared	0.940348	Mean dependent var		0.329834
Adjusted R-squared	0.883678	S.D. dependent var		0.467602
S.E. of regression	0.159481	Akaike info criterion		-0.526935
Sum squared resid	0.508682	Schwarz criterion		0.317504
Log likelihood	30.53871	Hannan-Quinn criter.		-0.221613
F-statistic	16.59346	Durbin-Watson stat		1.860264
Prob(F-statistic)	0			

The result in Table 4.10 is the over-parameterized error correction mechanism. It is the dynamic adjustment to the disequilibrium in the short run. The coefficient of most importance is the ECM coefficient. From the result the ECM term is well defined, that is negative and statistically significant at 5% level. The coefficient is -0.470753 which indicates approximately 47% of the previous year's disequilibrium in investment. This also shows the speed at which the model converges to equilibrium. The magnitude of this coefficient implies that nearly 47% of any disequilibrium in INV is corrected by the independent variables within one period (one year).

The interpretation of the INV equation is further explained as follows. The presence of cointegration between INV and explanatory variables show that there exists a long run equilibrium relationship in the model. The negative value of the ECM coefficient (-0.4707) confirms that there is disequilibrium in the short run which the set of variables in the model are trying to correct in the long run.

That is there is change in the level of investment,  $\Delta INV \neq 0$ , if either there was a disequilibrium last period ( $ECM \neq 0$ ) in which case some changes in all the exogenous variables

are necessary to restore equilibrium, or there was a change in the exogenous variables in the current period which because of the equilibrium condition ( as shown in the cointegrating equation), implies that INV should also change.

The rule of thumb is that if the coefficient of ECM is greater than zero it means there is a surplus of the dependent variable, which is investment, is in surplus, a reduction in the level of capital flight estimate is therefore required to restore equilibrium in the long run. But if otherwise the coefficient is less than zero as it is in Table 4.10, there is deficiency in investment and increase is required through the set of exogenous variables to restore equilibrium in the long run. In other to ascertain the significance of the variables, parsimonious result gives details as presented below

**Table 4.8: Parsimonious Error Correction Model**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LNCFL)	-0.093422	0.023765	3.931073	0.0005
D(LNINF)	0.24347	0.042834	5.683975	0
D(LNGDP)	-0.168981	0.025467	-6.635391	0
D(LNINV(-1))	0.688856	0.082732	8.326361	0
D(LNINV(-2))	-0.377406	0.089959	4.19532	0.0002
D(LNCFL(-1))	-0.046591	0.018689	-2.492911	0.0186
D(LNINT(-1))	0.524822	0.146134	3.591367	0.0012
D(LNINF(-2))	-0.117896	0.042473	-2.775801	0.0095
D(LNGDP(-1))	0.153553	0.025555	6.008769	0
D(LNGDP(-2))	0.120297	0.031223	3.852902	0.0006
ECM(-1)	-0.520219	0.091978	-5.655892	0
R-squared	0.900465	Mean dependent var		0.329834
Adjusted R-squared	0.866143	S.D. dependent var		0.467602
S.E. of regression	0.171079	Akaike info criterion		-0.464964
Sum squared resid	0.848775	Schwarz criterion		-0.000522
Log likelihood	20.29928	Hannan-Quinn criter.		-0.297037
Durbin-Watson stat	1.988258			

The results in Table 4.11 thus show that there is disequilibrium in economic investment in the short-run which the set of independent variables tend to be correcting. The speed at which this adjustment is made in the short run is captured by the magnitude of the ECM coefficient. The speed here is -0.520219 and also significant at 5%. That means that variables like LNCFL, LNINF and LNGDP have significant influence on investment than other variables in the model. This means improved measure of reducing capital flight in the short run can correct about 52% of the deficiency in investment in the long run

## **SECTION V**

### **CONCLUSION AND RECOMMENDATIONS**

#### **CONCLUSION**

As far as the study is concerned, the following conclusions are drawn:

Firstly, there is significant relationship between investment and capital flight. Escalation of capital flight indicates a reduction in the domestic investment. The findings of the study also revealed negative relationship between investment and some independent variables like capital flight, real exchange rate and real inflation rate.

Secondly, the study showed positive relationship between investment and interest rate which inferred that interest rate is significant in investment and insignificant in capital flight.

Thirdly, the findings also revealed that there is direct relationship between investment and real gross domestic product which inferred that there is an improvement on fiscal management in the country.

#### **5.3 RECOMMENDATIONS**

Based on the findings, the following recommendations are raised:

Government should work out holistic policy measures that will make the economy more competitive and stable exchange rate which will allow foreign capital inflow so as to boost private domestic investment such as stabilization policy and other economic reforms.

There is urgent need for government to put in place suitable and more stable macro – economic environment that is capable of improving Gross Domestic Product and to enhance investment so that capital flight is reduced to the barest minimum in the country if not totally eliminated.

Government should create an enabling environment devoid of political and economic instability and to provide infrastructural facilities such as portable water, good roads, electricity e.t.c to attract foreign investors.

Central Bank of Nigeria needs to target the interest rate for now as one of its main control variables to influence Nigerian economic indices and also adopt the more control of inflation as a medium term measure.

There should be proper awareness, public lectures on danger of capital flight and the issue of patriotism should be encouraged. Besides, good governance should be put in place and enlightenment campaigns on the corruption cankerworm that has eaten deeply in our society should be seriously hammered for re – branding and re – positioning of economy.

### REFERENCES

- Adesoye A. B., Maku O.E. and Atanda, A.A. (2012). “Capital Flight and Investment Dynamics in Nigeria”. *Datatric Research Consulting, Nigeria, Globafrique Consulting, UK*.
- Adetiloye K. A (2012). “Capital Flight versus Domestic Investment in the Developing Countries: An Empirical Analysis from Nigeria”. *International Journal of Economics and Finance*, Vol. 4 No. 2.
- Adetiloye, K. A (2011). “Capital Flight and investment in Nigeria in the Era of Financial Globalisation”. Department of Banking and Finance, School of Business, College of Development Studies, Covenant University, Ota, Ogun State.
- Ajayi, S. Ibi (2000). “External Debt and Capital flight in Sub – Saharan Africa”. *IMF Publications*.
- Bakare, A.S. (2012). “The Determinants and the Roles of Capital Flight in the Growth Process of Nigeria Economy”. *British Journal of Management and Economics*.
- Bahmani M. O. and Nasir ABM (2014). Productivity Bias Hypothesis and The Purchasing Power Parity; a review article.
- Cornesa, E.R. (1987). *The Causes of Capital Flight from Latin America*, Inter-American Development Bank, Washington.



- Cuddington, J.T (1987). “Macroeconomics determinants of capital flight: An econometric investigation”. In, D. Lessard and J. Cuddington (ed),” Capital Flight and Third World Debt”. Washington: Institute for International Economics. 85-96.
- Dornbush, R. (1985).”External Debt, Budget Deficit and Disequilibrium Exchange Rates, in Smith G.W. and J.T. Cuddington (ed.), International Debt and the Developing Countries. World Bank, Washington DC.
- Econometric Analysis of Capital Flight in Developing Countries”. *A Case Study of Nigeria, Department of Economics, University of Lagos, 8th Global Conference of Business and Economics.*
- Gujarati and Dawn C. Porter (2009). Basic Econometrics. New York: McGraw-Hill, Fifth ed.
- Gulati, S.K., (1987). “A Note on Trade Misinvoicing” in Lessard and Williamson (ed) Capital Flight and Third World Debt. Washington, D.C.: *Institute for International Economics.*
- Heim, J.J. (2007). “Does a Strong Dollar Increase Demand for both Domestic and Imported Goods?”. *Journal of International Business and Economics, Gale Group / Thomson Publishing, Vol. VII (3) Oct.*
- Hermes, N, Robbert, L. and Murinde, V. (2002). “Flight Capital and its Reversal for Development Financing”. *UN-WIDER, Discussion Paper No. 99.*
- Joaquin, L.V. (2009). “Capital Flight, Saving Rate and Golden Rule Level of Capital policy Recommendations for Latin American Countries”. *American Review of Political Economy, Vol. 6(2), pp. 1-5.*
- Kban, M. S. and Haque, M. U. (1985). “Foreign Borrowing and Capital Flight”: A Formal Analysis. *International Monetary Fund Staff Paper, Vol. 32, No. 4.*
- Khan, M. S. (1989). “Flight of Capital from Pakistan”, *World Financial Markets.*
- Kolapo, F.T and Oke, M.O (2012). “Nigerian Economic Growth and Capital Flight Determinants”. *Asian Journal of Business and Management Science Vol. 1 No. 11(76-84).*

Lessard D.R. and John Williamson (1987). "Capital Flight and Third World Debt". Washington DC: *Institute for International Economics*.

Newcomb, D. and Kohler, A. (1983). "Coping with Secrecy and Blocking Laws".

Oke. M.O (2012). "Nigerian Economic Growth and Capital Flight Determinants". *Asian Journal of Business and Management Science* Vol. 1 No. 11 (76-84).

Pastor, M.O. (1989)." Capital Flight and the Latin American Debt Crisis". Washington, D.C.: *Economic Policy*.