



EFFECT OF CAPITAL FLIGHT IN THE NIGERIAN ECONOMIC SECTOR (1981-2015)

¹Tony Ikechukwu Nwanji, ²Wilson Ozuem ³Kerry E. Howell, ⁴Sainey Faye, ⁵Adegbola
Olubukola Otekunrin, & ⁶Damilola Felix Eluyela

^{1,3,5,6}Department of Accounting and Finance, Landmark University, Nigeria

²University of Cumbria and University of Warwick UK

³School of Business, Teesside University, UK.

⁴Department of Accounting and Finance, New University, Buckingham, UK

Email: ¹nwanji.tony@lmu.edu.ng; ²wilson.ozuem@cumbria.ac.uk

³kerry.howell@northumbria.ac.uk; ⁴sainey, faye@bucks.ac.uk,

⁵otekunrin.adegbola@lmu.edu.ng, ⁶eluyela.damilola@lmu.edu.ng

ABSTRACT

This research paper deal with the effect of capital flight (here after referred as KF) in the Nigerian economic sector covering 35 years (1981-2015). The study recognized the extent to which KF affects growth in the economic sector of Nigeria. The study identifies the problems Nigeria as a country face as a result of KF and proffers feasible solution which could be adopted by policy makers in Nigeria. We used secondary data from the Central Bank of Nigeria statistical bulletin. The statistical bulletin covers the economic indicators including Gross Domestic Product (GDP), External Debt, Foreign Direct Investment (FDI,) KF, Current Account Balance (CAB) and Exchange Rates (EXCHRATE) which are the variables for the study. We also used data from the Annual Abstract of Statistic of the National Bureau of Statistics (here after referred as NBS). We employed a Time Series Quantitative method for the analysis. The study found that the number of financial resources transferred out of Nigeria as the KF is significant. Therefore, the government would try as much as possible to curb KF to enable the development of the Nigerian economy. The study adds to the existing literature and empirical knowledge of the impact of KF on the Nigerian economic sector. This study shed light on the current account balance of Nigeria. This study also found that Nigerian import outweighs export even with the government agricultural policy. This study identified the KF as one of the significant reasons, or over-import and under-export in Nigeria.

Keywords: Capital Flight, Foreign Direct Investment, Economic Sector, Economic Growth, Financial Resources Nigerian Economic and Quantitative Method.

INTRODUCTION

In this study, we focused on how KF affects the Nigerian economic sector. The study covers 35 years (1981-2015), period to enable us to examine the effect of KF on the economic growth in Nigeria. KF has been defined in diverse ways by different scholars; KF involves the outflows of resident capital which is motivated by economic and political uncertainties in the home country (Usman & Arene, 2014; Schneider, 2003). The World Bank (1985) defines KF as the change in a nation's foreign assets. Ajani (2012) defines KF as the illegal conveyance of capital aboard, which stays unrecorded in the national accounts of developing countries. KF as by note Ajani (2012) may be legal if the government approves it or illegal it without government approval. In a study conducted by Saheed and Ayodeji (2012) KF from seven sub-Saharan African countries namely; Nigeria, Ghana, Congo, Zaire, and Zambia from 1970 to 1992 was estimated at 91, 58, 49, 35, and 32% of external debt (hereafter referred as EXTDEBT) respectively (Nyatepe-Coo 1994; Saheed & Ayodeji, 2012). From this, it can be seen that the number of resources moved out of Nigeria is higher than that of any other Sub-Saharan Africa countries. Ajadi (2008) as cited by Saheed and Ayodeji (2012) stated that; reliable and comprehensive data does not exist on the magnitude of KF from countries of low-income Africa. However, research has shown that KF, mainly from Nigeria, has been substantial. Inflation reduces tax collection, cancels investment and undermines free Trade (Saheed & Ayodeji 2012). In Nigeria, agriculture remains the mainstay of the economy since it is the largest sector in terms of its share of employment, Agriculture financing is one of the most important instruments of economic policy for Nigeria, in her effort to

stimulate development in all directions (Obansa & Maduekwe 2013). Otene and Richard (2012) claimed that KF have made rational foreign lenders hesitant to increase credits to the debtor's countries.

Research Objectives

- To evaluate the extent to which KF affects economic growth in Nigeria.
- To determine the extent to which KF adversely affects the outflow of financial resources in Nigeria
- To examine whether the changes in the current account balance affects economic growth in Nigeria.

Research Questions

1. To what extent does KF affect economic growth in Nigeria?
2. Does KF affect the outflow of financial resources in Nigeria?
3. To what extent does the current account balance affect the economic growth in Nigeria?

Research Hypotheses

Hypothesis 1:

H0: KF does not affect the economic growth of Nigeria.

H1: KF affects the economic growth of Nigeria.

Hypothesis 2:

H0: There exists no significant relationship between the outflow of financial resources in Nigeria and KF.

H1: There is a significant relationship between the outflow of financial resources in Nigeria and KF.

Hypothesis 3:

H0: There exists no significant relationship between Current account balance and Nigeria economic growth.

H1: There is a significant relationship between Current account balance and Nigeria economic growth.

LITERATURE REVIEW

KF is where a large-scale exodus of the financial asset and capital from a nation due to events such as political or economic instability, currency devaluation or the imposition of capital controls. The mechanism for the transfer of assets is also stated explicitly in this study. The adverse effect of KF on the economy, the concept of agricultural and economic growth as the conceptual framework of KF, is reviewed. The theoretical framework explains the methods used to measure KF and related various theories of KF. The empirical framework outlines the empirical findings of different authors in relevant fields.

Conceptual Framework

There are many definitions of KF, and it means different thing to different scholars and authors both in theoretical terms as well as in terms of their coverage of sectors, assets and data availability, the difference in definitions of KF has also brought about disagreement in the way the term is used primarily by developed and developing countries. Ajani (1995) stated that KF is the outflow of capital from developed to developing countries in the form of foreign direct investment (hereafter referred as FDI). While the flow of capital from developing to developed countries is seen as KF (Maski, and Wahyudi, (2012) It is based on the belief that when investors from a developed country invest

abroad, it is because there is a much better opportunity they perceive elsewhere. However, when investors from a developing country invest overseas, it is because of a threat they see in their home country. KF is also deemed as an emotional concept aside from being controversial. Okoli (2008) stated that the combination of the phrases KF and money laundering fits in well with this conventional wisdom. (Francis, et al. 2014; Ramachandran, 2006).

Kindleberger (1987) opined that KF is the abnormal flows propelled from a country by anyone or more complicated lists of fears and suspicions. This definition is not comprehensive enough as it emphasizes the volatile nature of outflow and the standard component of the resident international activity is missing. (Makochekanwa 2007) stated that KF include private outflows of any kind motivated by the desire of members of a country to reduce the actual and potential level of government regulations (including the risk of expropriation) over such capital.

Gusarova (2009) defined KF as that

"Capital running away from the domestic financial market to guard losses which disagree with the aspirations and interests of the domestic environment. KF is also a mechanism used by investors to apply the discipline of the market to national economic policies. It is useful for tax evasion. KF is the part of private outflow capital which is motivated by economic and political uncertainty."

The transfer of human capital resources which accounted for in the balance of payments statistics is seen as brain drain. Schneider (2003; Paul et al.,2015). KF goes beyond fund transfer as a result of instability in the economy. It is in two forms, legal and illegal manifestations. Cardoso and Forbush, (1989) first

hinted at the possibility of dividing KF into legal and illegal types. However, Baker in (1999) split KF into legal and illegal types, thereby establishing the most reliable link between KF and political corruption (Adetiloye 2011).

Theoretical Framework

There are different methods of measuring KF; this is a result of the various definitions of KF, such as the direct, indirect approaches, as well as the extra measure. There are two approaches to the measurement of KF, namely direct and indirect method. The variable to measure direct method comes from the balance of payment statistics which includes hot money and trade mis invoicing. While the indirect approach on the other hand measure KF as a residual of increase in debt owed to foreign residents, net FDI, increase in foreign exchange (hereafter referred as EXCHRATE) reserves and deficit current account balance (hereafter referred as CAB), (Okoli, 2008). The World Bank developed another method of measuring KF called the extra measure. *The extra measure:* The World Bank developed this method with further modification by Morgan Guarantee Trust. These methods assume all capital outflow as KF, as there is no scientific basis for separating KF from the normal capital flow. The extra approach measure KF by making a comparison between capital inflow sources which include a net increase in EXTDEBT and, the net inflow of foreign investment, and the use of capital the deficit of current account building up of foreign reserve and private outflows of capital and additional reserves. This method of measuring KF is broad and in the literature.

Empirical Framework

Imeokparia (2013) pro-investment; and debt-equity swap option are necessary for an agricultural-led economic growth. Adedayo and Ayodele (2016) presented an empirical analysis of the impact of KF on Nigeria economy for a period of 1980-2014, with data collected from Central Bank of Nigeria's Statistical Bulletin of various issues and Annual Abstract of Statistic of NBS. We used Ordinary Least Square, Augmented Dickey-Fuller unit root test and Co-integration test. The study concluded that the variables used have a significant effect in the positive direction; this implies that as KF inflow increases into the economy, it, in turn, increases the EXCHRATE causing a positive influence on the Nigeria economy within the period considered. Ajani (2012) study on KF and Nigeria Economic Growth for forty years of 1970-2009 and found that, KF and its assessments are significant factors for explaining economic trends in Nigeria and that KF hurt the economy. Consequently, it is suggested that funds from foreign sources in the form of loans, gifts, grants and aids should be judiciously used for the economic development of Nigeria. The author also claimed that fiscal discipline, severe and commitment on the part of the government and its functionaries. Above all the government should ensure that a favourable environment for business to thrive is in place, thereby encouraging FDI and discouraging KF (Makova, et al. 2014).

Ndikumana and Boyce (2010) in their study titled *Measurement of KF: Methodology and Results for Sub-Saharan African Countries* made use of a methodology that calculates KF as the residual of the difference between inflows and outflows of foreign exchange recorded in the balance of payments, with corrections for the

magnitude of EXTDEBT, trade one invoicing, and unrecorded remittances. The findings made are that find that total KF from these countries in this period amounted to \$443 billion (in 2004 dollars) These numbers exceed these countries' EXTDEBT, which in 2004 amounted to \$193 billion, indicating that sub-Saharan Africa is a net creditor to the rest of the world (Hermes & Leinsink, 2000).

Francis and Chukwuemeka (2013) conducted a study on the Effects of KF and Its Macroeconomic Determinants on Agricultural Growth in Nigeria 1970 -2013. The study recommends that Nigeria's judicious use of the income accruing from loans and FDI is paramount if Agricultural growth is to be enhanced (Usman & Arene, 2014). In Saheed and Ayodeji (2012) study on KF indicates that KF has a positive impact on the EXCHRATE and a positive effect on economic growth in Nigeria. The authors suggest that there is a need for personnel of the Nigerian custom should be trained to improve their success in tackling cases of misinvoicing in import and export.

Research Design

We used secondary data and the analysis is both quantitative and qualitative techniques of research method (Eluyela et al., 2019a; 2019b; Folashade et al., 2016). The study covered the impact of KF on the growth in the agricultural and economical method for thirty-five years (1981-2015). The secondary data collected from Central Bank of Nigeria (CBN) statistical bulletin, Annual Abstract of Statistic of NBS and World Bank Digest of Statistics and from International Monetary Fund (IMF) statistics (Eluyela et al., 2018a; 2018b; Rahaj, 2018).

Model Specification

The model of this study encompasses macroeconomic variables such as EXTDEBT and External Reserve, CAB, FDI and EXCHRATE which affect economic growth. Therefore, we determine the effect of these variables on Nigeria economic growth introducing GDP as the dependent variable.

The model is functionally specified as follows:

$$GDP = f(\text{EXDEBT}, \text{FDI}, \text{CAB}, \text{KF}, \text{EXCHRATE}, \varepsilon)$$

Where:

GDP= Gross domestic product

EXDEBT= change in external debt

FDI= Foreign Direct Investment

CAB= Current account balance

KF=capital flight

EXCHRATE=Exchange rate

f =functional notation and,

μ = Stochastic Error term.

The Model specification therefore is:

$$\text{Specifically, } GDP = \beta_0 + \beta_1 \text{EXTDEBT} + \beta_2 \text{FDI} + \beta_3 \text{CAB} + \beta_4 \text{KF} + \beta_5 \text{EXCHRATE} + \varepsilon$$

Where

β_0 = Proportion of the variation in GDP that is not explained by changes in the explanatory variables.

β_1 = Slope of EXDEBT

β_2 = Slope of FDI

β_3 = Slope of CAB

β_4 = Slope of KF

β_5 = Slope of EXCHRATE

ε = Error term

A 'PRIORI' EXPECTATION

The 'apriori' expectations of the model are that:

EXTERNAL DEBT (EXTDEBT)

The a priori expectation is negatively related and is represented mathematically as $\partial GDP / \partial EXDEBT < 0$;

CAPITAL FLIGHT (KF)

The a priori expectation is negatively related and can be represented mathematically as

$$KF = \partial GDP / \partial KF > 0$$

FOREIGN DIRECT INVESTMENT (FDI)

The a priori expectation is positively related, and stated mathematically as $\partial GDP / \partial FDI > 0$;

FOREIGN RESERVE

The a priori expectation is positively related stated mathematically as $\partial GDP / \partial RES > 0$;

CURRENT ACCOUNT BALANCE (CAB)

The a priori expectation is negatively related; if the CAB is a deficit which is represented mathematically as $\partial GDP / \partial CAB < 0$;

CAPITAL OUTFLOW

The Apriori expectation is positively related, stated mathematically as $\partial FDI / \partial KF > 0$

Method of Data Collection

We collected the secondary data for this study from the Central Bank of Nigeria statistical bulletin concerning GDP, EXTDEBT, FDI, KF, CAB and EXCHRATE. Also, data from the Annual Abstract of NBS and the World Bank Digest of Statistics. We used Time Series data for the analysis (See Ademola et al., 2020a; Oladipo et al., 2019a; 2019b).

Method of Data Analysis

Ordinary least squares (OLS) or linear least squares is a method for estimating the unknown parameters in a linear regression model, to minimize the sum of the squares of the differences between the observed responses (value of the variable to predict) in the given dataset and those predicted by a linear function of a set of explanatory variables (Akintimehin et al., 2018; Adegboyegun et al., 2020a; 2020b). OLS would be used in this study to ascertain the relationship whether positive or negative between the independent variables which are EXTDEBT, CAB, FDI, KF, EXCHRATE and the dependent variable which is GDP (Nwanji et al., 2020; Okere et al., 2019; Otekunrin et al., 2019a; 2019b).

Cointegration test: Cointegration is an econometric technique for testing the correlation between variables. In this case, the variables would be Economic growth, KF, EXTDEBT, FDI and EXCHRATE. The existence of integration relates to the presence of a long-run equilibrium relationship among a set of variables which is what this study sets to look at, in this study, the Johansen test will be employ (Ademola et al., 2020b; Popoola, Asaleye & Eluyela, 2018; Lawal, Babajide, Nwanji & Eluyela, 2018).

Granger causality test: The granger causality helps in predictions; it is used to ascertain whether or not a time series data is of importance in evaluating or forecasting another; first proposed in 1969. Ordinarily, regression reflects "mere" correlations, but the granger causality method is tested for by measuring the ability to predict the future value of a time series.

Error correction mechanism: The Error Correction Mechanism or Model (ECM) is most commonly used for underlying data variables of long-run trends. It is similar to integration, but this approach can also be used for estimating both short-term and long-term effects of one-time series on another. The term error-correction relates to the fact that last-periods deviation from a long-run equilibrium, the error, influences its short-run dynamics. This would be used to estimate hypothesis two in this study (Engle & Granger, 1987; Al-Fayoumi, et al.2012; Martin et al. 2013; Ozordi et al., 2019a; 2019b; Vance et al.2013).

Analysis and Interpretation of Result

This section encompasses the analysis, presentation and interpretation of empirical findings. Cointegration test is used to ascertain the long-run relationship between variables to show whether variables are stationary or not in the long run. The ordinary least square analysis is used to prove whether there is a positive or negative relationship between the dependent variable and the independent variables (Umukoro, Eluyela, Ozordi, Inua and Balogun, 2020). Granger causality is used in this chapter to explain the causative relationship between variables and Error Correction model is used to describe the long-run relationship between variables and to correct short-run shocks (Oladipo et al, 2019c).

Cointegration Test

Below presents the result of Cointegration test for the dependent variable (GDP) and the independent variables (CAB, FDI, KF, EXTDEBT, EXCHRATE).

Table (1): Johansen Cointegration Rank Test Result

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.834565	167.7137	95.75366	0.0000
At most 1 *	0.690819	108.3409	69.81889	0.0000
At most 2 *	0.606894	69.60460	47.85613	0.0001
At most 3 *	0.591748	38.79332	29.79707	0.0035
At most 4	0.236890	9.229547	15.49471	0.3446
At most 5	0.009287	0.307893	3.841466	0.5790

Source: authors' computation from e views

Trace test indicates four cointegrating Eqn. (s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

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

The result of the Johansen Cointegration test shows that the hypothesis that none of the variables is integrated. Moreover, one of the variables is integrated a probability of 0.00 each, (Rejected at 1% level of significance). The hypothesis that: at most, 2 of the variables are integrated, and at most, 3 of the variables are also integrated was 0.0001, 0.0035. This is (rejected at 1% level of significance). The probability that: at most 4 of the variables are integrated, and at most 5 of the variables are integrated are 0.3446 and 0.5790 respectively thus indicating that the tests are not significant at the 5 % level. We may, therefore, conclude on the 99 % confidence levels that at most 4 or 5 of the variables are integrated. This further implies that on the long run, the dependent and independent variables will exhibit full properties of stationarity and are therefore amenable to time series analysis.

Test of Hypotheses: In this section, we present the results of the hypotheses of the study

Table (2) below shows the result of the analysis of hypotheses with dependent variable GDP (economic growth) and the independent variable (CAB, EXTDEBT, FDI, KF, EXCHRATE)

Table (2): Ordinary Least Square Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
CAB	-14.23069	3.946684	-3.605734	0.0011
EXTDEBT	5.904006	3.032255	1.947067	0.0609
FDI	14.73933	12.65914	1.164323	0.2535
KF	-6.825394	2.776337	-2.458417	0.0199
EXCHRATE	0.958757	0.396535	2.417838	0.0219

0.7644

R-squared 68

Adjusted R-0.7330

squared 63

Source: authors' computation from e views

The result in Table (3) shows that adjusted coefficient of determination (Adjusted R-squared) is 0.733 thus implying that 73.3% of the variation in the dependent variable (Economic Growth) can be explained by the explanatory variables (CAB, EXTDEBT, FDI, KF, EXCHRATE). Furthermore, the coefficient of the variables was -14.23, 5.9, 14.74, -6.83 and 0.96 for CAB, EXTDEBT, FDI, KF, EXCHRATE, respectively. Thus implying that GDP (Economic growth) is inversely related to CAB and KF. However, directly related to EXTDEBT, FDI, EXCHRATE the T-test for the significance of the coefficient of the explanatory variables showed -3.6[0.0011], 1.95[0.0609], 1.16[0.2535], -

2.46[0.0199] and 2.42[0.022] for CAB, EXTDEBT, FDI, KF and EXCHRATE respectively. The implication is that there is a significant relationship between GDP (Economic Growth) and CAB, KF as well as EXCHRATE. In contrast, the relationships between GDP and EXTDEBT as well as that between GDP and FDI are not significant. We may thus conclude at the 99% confidence levels that GDP is negatively or inversely related to CAB. Therefore, we may conclude that with 95% confidence levels that GDP is negatively related to KF and positively related to EXCHRATE.

Hypothesis 1:

H0: KF does not affect the economic growth of Nigeria.

H1: KF affects the economic growth of Nigeria.

The result of the least square analysis shows a negative relationship between c KF and GDP (economic growth) as the KF has a coefficient of -6.825394; the t-statistics show a result of -2.458417 at a probability of 0.0199. At 0.05 % level of significance, the null hypothesis should be accepted since the likelihood of KF about GDP is 0.0199 then the null hypothesis is rejected, and the alternative hypothesis accepted thus implying that KF affects economic growth in Nigeria.

Hypothesis 2:

H0: There exists no significant relationship between the outflow of financial resources in Nigeria and KF.

H1: There is a significant relationship between the outflow of financial resources in Nigeria and KF.

The result of the Granger causality test shows that FDI does not granger cause KF, but KF granger causes FDI. The FDI in this study is used to measure the outflow of financial resources; this

thus implies that there is a significant relationship between the outflow of financial resources in Nigeria and KF. Therefore, the null hypothesis is rejected, and the alternative hypothesis is not rejected.

Hypothesis 3:

H0: There exists no significant relationship between Current account balance and Nigeria economic growth.

H1: There is a significant relationship between Current account balance and Nigeria economic growth.

The least-square result shows that there is a negative (inverse) relationship between CAB and GDP and the negative correlation is significant at one %level. The T-test for the significance of the coefficient of the explanatory variable CAB showed at-statistics of -3.605734 at a probability of 0.0011. Since the probability is less than 0.05, the null hypothesis should, therefore, be rejected, and the alternative hypothesis is not rejected.

PAIRWISE GRANGER CAUSALITY TEST

Below presents the result of Pairwise Granger Causality Test for the dependent variable(GDP)and the independent variables (CAB, FDI, KF, EXTDEBT, EXCHRATE).

Table (3): Pairwise Granger Causality Test

NULL HYPOTHESIS	F-STATISTICS	PROB.
CAB does not Granger Cause GDP	2.29571	0.1193
GDP does not Granger Cause CAB	0.85902	0.4344
EXTDEBT does not Granger Cause GDP	0.56654	0.5739
GDP does not Granger Cause EXTDEBT	2.89219	0.0721
KF does not Granger Cause GDP	2.85115	0.0746
GDP does not Granger Cause KF	0.10732	0.8986

FDI does not Granger Cause GDP	18.1992	9.E-06
GDP does not Granger Cause FDI	10.5475	0.0004
EXCHRATE does not Granger Cause GDP	4.07797	0.0279
GDP does not Granger Cause EXCHRATE	0.32133	0.7278
EXTDEBT does not Granger Cause CAB	0.52193	0.5990
CAB does not Granger Cause EXTDEBT	2.47999	0.1020
KF does not Granger Cause CAB	0.58881	0.5617
CAB does not Granger Cause KF	2.27775	0.1212
FDI does not Granger Cause CAB	0.79749	00.4604
CAB does not Granger Cause FDI	6.53655	0.0047
EXCHRATE does not Granger Cause CAB	1.18960	0.3193
CAB does not Granger Cause EXCHRATE	2.11212	0.1398
KF does not Granger Cause EXTDEBT	2.79057	0.0785
EXTDEBT does not Granger Cause KF	0.94782	0.3997
FDI does not Granger Cause EXTDEBT	1.82945	0.1792
EXTDEBT does not Granger Cause FDI	0.94564	0.4005
EXCHRATE does not Granger Cause EXTDEBT	2.93406	0.0697
EXTDEBT does not Granger Cause EXCHRATE	0.60930	0.5508
FDI does not Granger Cause KF	2.72106	0.0832
KF does not Granger Cause FDI	4.40653	0.0217
EXCHRATE does not Granger Cause KF	2.90394	0.0714
KF does not Granger Cause EXCHRATE	1.82008	0.1807
EXCHRATE does not Granger Cause FDI	2.28659	0.1203
FDI does not Granger Cause EXCHRATE	0.06927	0.9332

Source: authors' computation from e views

The Result of the Granger causality test in Table (3) shows that FDI granger causes GDP at 1% level and GDP granger causes FDI at 1% level. CAB granger causes FDI at 1% level, but FDI does not granger causes CAB, also KF Granger causes FDI at 5% level of significance, but FDI does not granger cause KF, EXCHRATE granger causes GDP at 5% level, but GDP does not granger cause EXCHRATE. We may thus conclude at the 99% confidence level that fluctuations in FDI and vice versa explain fluctuations in GDP. Furthermore, fluctuations in FDI are accounted for by variations in CAB (at 99% confidence level). In the same vein, we may conclude at the 95% confidence level that changes in GDP are explained by fluctuations in EXCHRATE and variations in FDI are explained by differences in KF.

Table (4): Error Correction Model

Vector Error Correction Estimates

Date: 03/29/17 Time: 11:10

Sample (adjusted): 1984 2015

Included observations: 32 after adjustments

Standard errors in () & t-statistics in []

Integrating Eq:	CointEq1	CointEq2
GDP(-1)	1.000000	0.000000
CAB(-1)	0.000000	1.000000
EXTDEBT(-1)	9.256196 (7.98050) [1.15985]	-4.579859 (2.77154) [-1.65246]
EXCHRATE(-1)	-2.819995 (1.02329) [-2.75582]	0.800433 (0.35538) [2.25235]
FDI(-1)	215.9161 (43.4229) [4.97240]	-79.85525 (15.0803) [-5.29533]
KF(-1)	0.553848 (5.03003) [0.11011]	1.663194 (1.74688) [0.95210]
C	-758.3625	266.4128

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Error Correction:	D(GDP)	D(CAB)	D(EXTDEBT)	D(EXCHRAT E)	D(FDI)	D(KF)
CointEq1	-0.293855 (0.11987) [-2.45155]	-0.052912 (0.02524) [-2.09647]	0.002854 (0.02417) [0.11807]	0.021560 (0.06358) [0.33908]	-0.012824 (0.00276) [-4.65134]	0.052032 (0.05169) [1.00664]
R-squared	0.704681	0.601368	0.282933	0.292694	0.805478	0.485012
Adj. R-squared	0.461477	0.273083	-0.307594	-0.289794	0.645284	0.060903
Sum sq. residues	16422.67	728.1003	667.9594	4621.067	8.688673	3053.880
S.E. equation	31.08118	6.544420	6.268311	16.48719	0.714911	13.40299
F-statistic	2.897492	1.831846	0.479119	0.502489	5.028125	1.143604
Log likelihood	-145.2569	-95.40128	-94.02190	-124.9684	-24.54658	-118.3410
Akaike AIC	10.01606	6.900080	6.813869	8.748022	2.471661	8.333809
Schwarz SC	10.70312	7.587144	7.500932	9.435086	3.158725	9.020873
Mean dependent	14.32339	-0.347094	-0.197347	6.017347	0.094861	-0.632280
S.D. dependent	42.35410	7.675889	5.481686	14.51732	1.200360	13.83077
Determinant residue covariance (dofadj.)		1.58E+08				
Determinant residue covariance		3543545.				
Log-likelihood		-513.7264				
Akaike information criterion		38.48290				
Schwarz criterion		43.15493				

Source: e views output

Table (4) presents the results of the error correction model

Part A represents the long-run equilibrium relations; the first integration equation, Equation is estimated as: $GDP - 758.3625 + 9.2562 EXTDEBT - 2.82 EXCHRATE + 215.9165 FDI + 0.5538 KF = 0$

Thus, $GDP = 758.3625 - 9.2562 EXTDEBT + 2.82 EXCHRATE - 215.9165 FDI - 0.5538 KF$

The second integration equation, Equation 2, is estimated as:

$CAB + 266.4128 - 4.5798 EXTDEBT + 0.8004 EXCHRATE - 79.8553 FDI + 1.6632 KF = 0$

I.e. $CAB = -266.4128 + 4.5798 EXTDEBT - 0.8004 EXCHRATE + 79.8553 FDI - 1.6632 KF$

Following the long-run coefficients of the integral equations, we can estimate short-run coefficients through the Error correction model (ECM) component of table 4.5. As usual, the ECM has two essential parts. First, estimated short-run coefficients and second, error correction term (ECT) that provides the feedback or the speed of adjustment whereby short-run dynamics converge to the long-run equilibrium path in model. The ECM Estimations in integration equation 1 show that the coefficients of all the regressors have the hypothesized (Apriori) signs and two of the variables (CAB and FDI) are statistically significant. At the same time, three (EXTDEBT, EXCHRATE and KF) are not significant. While the coefficient of FDI is significant at (1%) level, the coefficients of the CAB is significant at the 5% level.

Furthermore, the results of ECM show that the coefficients of some of the explanatory (CAB and FDI) are negative while those of EXDEBT, EXCHRATE and KF are positive, except. The coefficients of the error correction terms (ECT) is -0.2939; thus, the speed of adjustment after short-run fluctuations is 29.39%. The value indicates the rate at which the previous period

disequilibrium of the system is being corrected. The implication is that the system corrects its previous period disequilibrium at a speed of 29.4% between the explanatory variables CAB, EXTDEBT, EXCHRATE, FDI and KF.

Lastly, results of the error correction model show that that the explanatory variables CAB, EXTDEBT, FDI, EXCHRATE and KF explain about 46.15% of the variation in the dependent variable (Economic growth). The adjusted R-square (coefficient of variation) obtained in the error correction model is smaller than that obtained from the ordinary least squares test (73.31%) is the result of the adjustments made by the error correction model to the initial data.

Discussion of Findings

The result of the Granger causality test shows that FDI does not granger cause KF, but KF Granger causes FDI. Thus we may conclude at the 95% confidence level that KF causes fluctuations in GDP (Economic Growth), this is consistent with theory as the apriori expectation is positive for the coefficient of KF. Furthermore, the results of the integration test show that there is a long-run relationship between FDI and KF. The results are consistent with theory as well as with Otene and Richard (2012). The result of the Granger causality test shows that FDI does not granger cause KF, but KF granger causes FDI. The least-square result indicates that there is a positive (direct) relationship between FDI and GDP. Thus we may conclude that variations in FDI significantly affect changes in Economic Growth (GDP). The results of the vector error correction and integration tests show that there is a long-run relationship between FDI and GDP, thus

indicating that variations in GDP occasioned by short-run fluctuations in FDI tend to stabilize on the long run. The result is consistent with Otene and Richard(2012).The results of the Granger causality test show that CAB does not support granger because GDP and GDP does not granger cause CAB. The least-square result indicates that there is a negative (inverse) relationship between CAB and GDP and the negative correlation is significant at one %level. This is inconsistent with the theory because the CAB of a less developed country like Nigeria is supposed to be surplus so that the apriori expectation ought to be favourable to help offset a deficit in the country's capital account. However, the negative relationship observed between CAB and GDP in this study may be indicative of unfavourable terms of invisible trade, which is currently tilted in favour of industrially advanced countries. Thus we may conclude at 95% confidence levels that variations in CAB trigger variations in GDP.

CONCLUSION AND RECOMMENDATIONS

This study examines the impact of KF on the economic growth of Nigeria for 35 years (1981-2015). This chapter would take into cognizance the findings conclusion and of course, the recommendation the study has to offer. This study seeks to ascertain the impact of KF on the Nigerian economic growth using economic tools. The result of the integration test shows the long-run relationship between the variables show that the effect of four or five of the variables are integrated into the long run. The ordinary least square analysis is used to prove whether there is a positive or negative relationship between the variables and it shows that there is a positive relationship between GDP and EXTDEBT, FDI and EXCHRATE and a negative correlation

between GDP and CAB as well as KF. The Granger causality is used to explain the causative relationship between variables. The result shows that CAB does not Granger cause GDP and vice versa, EXTDEBT does not Granger cause GDP and vice versa, KF does not granger cause GDP and vice versa, FDI granger causes GDP and vice versa, EXCHRATE granger causes GDP, but GDP does not granger cause ACCURATE. Then finally, the error correction model is used to correct short-run shocks.

Theoretical Findings

This study examines the impact of KF on the economic growth of Nigeria using GDP as the dependent variable and EXTDEBT, FDI, KF, CAB and EXCHRATE as the independent variables. The findings from this study are in two-parts the theoretical and empirical findings. We found that KF does harm Nigeria's economic growth. Our result shows that EXTDEBT is one of the reasons for KF in Nigeria which follows the debt drove KF theory which assumes that as EXTDEBT increases the will for residence to move their resources and hold them outside also increases. Also in Nigeria political and economic uncertainty which can be manifested by fluctuations in EXCHRATE among various other ways which are an incentive for KF affects the economic growth of Nigeria this supports the investment diversion theory, Ajani (1992) opined that EXTDEBT and dependency on it might lead to depreciation of the domestic currency especially in a country operating the floating EXCHRATE system

Empirical Findings

The research findings are: KF harms economic growth, and this is in line with most existing literature, and this result also aligns

with the apriority expectation. KF also affects outflow of financial resources from a country; there are various reasons for flow of funds from one country to another and KF is one primary reason for this, especially in less developed countries. Otene and Richard (2012). The CAB, shows Nigeria's trade balance situation and maybe deficit or surplus balance from the country's imports and export. In Nigeria, more import than export move funds out of the country, while more export moves more capital into the Nigerian economic growth.

CONCLUSION

Firstly, the conclusion of this study that KF affects the economic growth of Nigeria negatively; KF has been opposition to further growth of the country and is one of the reasons that the decline in Nigeria's growth rate is an attribute to. Second, KF is one dominant medium through which financial resources is moving from Nigeria to other countries; the rate of increase in the rate of KF is not only alarming. However, it has been detrimental to Nigeria's economic growth. Third, the CAB affects the economic growth in Nigeria due to the deficit balance of payment. The discrepancy of export over import is attributed to KF as one of the primary reasons for this, and the economic growth of Nigeria, which can be measured by GDP is affected adversely by KF.

RECOMMENDATIONS

With the problems defined in this study and the research objectives, the following are the suggestions recommended for the issue of KF can be controlled.

- Increased checks and balances so that bureaucrats, technocrats and all others in power would not have the

autonomy to siphon fund from Nigeria to other countries in an attempt to conceal the fund.

- Trade misinvoicing, which is a mechanism for KF should be controlled by the government strictly by training Nigerian custom personnel and also putting in place measures that reduce corruption and other illegal practices in the Nigerian custom. Corruption reduction can be achieved by selecting sincere and honest individuals into the regulatory board.
- The government should create a favourable environment for investment and business, thus reducing the incentive for a KF while increasing the number of foreign investment in Nigeria.

Suggestion for Further Studies

The following are the suggestions made for others interested in carrying out a study on this project from the limitations of this study:

- A survey of this type may make use of data of about fifty years or more on the dependent and independent variables resulting in a consistent and significant result.
- The researcher can visit the CBN and IMF if possible, to obtain a more reliable and relevant data on variables used to measure changes in GDP as this would give the assurance of reliable data.

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