# THE IMPACT OF CAPITAL FLIGHT ON EDUCATIONAL DEVELOPMENT IN NIGERIA

#### **Abstract**

The progress of a nation is a function of the level of the resourcefulness of the people which to a great extent relates to the level of training and purposeful educational development. Such progress or development could only occur when funds (capital) are made available towards it. The recommended 26% of macroeconomic policy (budget) by UNESCO and United Nation (UN) for education is a welcome development. The paper therefore examines empirically the consequences of capital flight on the Gross Domestic Product (GDP) and educational development. The variables for the study include interest rate, exchange rate, balance of payment and GDP. The finding shows that capital flight impact adversely on the educational system in Nigeria and other sectors of the economy. Thus there is the need to strengthen financial controls, capital outflows and financial crime laws which can stimulate investment for an overall education and economic growth and development in Nigeria.

Keywords: Capital Flight, Educational Development, Budget, Exchange Rate, Interest Rate, Balance of Payment.

### Introduction

Capital flight connotes illegal movement of capital from one country to another. This connotation implies that there may be normal or legal and abnormal or illegal flows (Kindleberger, 1987). Normal capital flows are those which are not sanctioned by the government. Capital flight occurs through illicit bank transfers embezzlement of exports of minerals and other natural resources, misinvoicing of exports and imports. Capital flight is caused by economic and non economic factors. The economic factors include declining terms of trade, exchange rate over valuation, fiscal deficit, financial depression and constraints, and increasing foreign real interest rate. The non economic factors are the corruption of political leaders and lack of accountability (Ajayi, 1992). In corroboration, (Onimode, 2002) posits that foreign debt service payments, current account deficit balances, legitimate capital leaving Nigeria in order to earn higher yields abroad over petroleum earnings, stolen or looted funds are often taken to secret foreign banks or investments and trade-faking adjustments like over invoicing of import and under invoicing of exports to avoid local taxation like transitional profits. One important consequences of capital flight is the massive out flow of capital which affects investment, industrialization and further cause economic disequilibrium (unemployment). Thus the outflow of funds negates the domestic economy from paying teachers remuneration, and further impact on the existing academic infrastructures.

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Thus, this paper in its refinement instends to empirically assess the implication of capital flight on the economic and educational sector, assess the determinants of capital flight based on the variables of the research and make recommendations.

## Objective of the Study

The intention of this research is to x-ray consequences of capital flight as it affects educational and economic development in Nigeria and by extension the sub-saharan countries. This is important because capital flight have caused myriad of problems poverty, economic backwardness, stunted growth low infrastructural development and brain drain. These problems have not yet been surmounted therefore, the research will analyzed the impact of capital flight on educational development and then make recommendations and conclusion based on the available data.

### Literature Review

Capital flight is important because it can have significant social cost, it is also a barometer of the sovereignty of government policy versus that of class privilege and it relates to the impacts of economic policies such as financial liberalization. Capital flight has been regarded as a major factor contributing to the mounting foreign debt problems and inhibiting development efforts in the third world (Cuddington, 1986). External debt in Nigeria has being increasing despite the debt relief in 2005. Ajayi (1997) posits that outflow of capital is the major causes of currency overvaluation, excessive fiscal deficit and high inflationary tendencies in the domestic economy. Dooley (1987) corroborated this statement that capital flight stimulates poor private domestic investment, it significantly fuel financial repression and risk premium. According to Gordon and Levine (1989) capital outflow stimulate low investment returns and public sector foreign liability; given that private sector liability increases as national output falls. This hitherto stimulates high taxation as individuals tend to divert their funds for investment overseas.

Mariana (2006) analyzed the effect of capital flight on long-term economic growth using different methodologies for a set of seventy five countries. The analysis depicts that countries with higher capital flight to GDP ratio experienced stunted growth of GDP per capital Ajadi (2008) asserts that capital flight is caused by the interest rate differential both in the short and in the long-run. To also exchange rate depreciation significantly increases capital flight in Nigeria. Output growth which measures the domestic opportunity cost of flight in Nigeria is negative and indicating that non performance of domestic resources can trigger capital flight. Agu (2006) analyzed capital flight on growth of real GDP and domestic macroeconomic policy respectively.

## Theoretical Underpinning

Three main approaches to the measurement of capital flight suffices. These include balance of payment accounts approach, the residual approach and the bank deposits approach. In the balance of payment approach, (Cuddington, 1986) posits that capital flight is measured as the sum of recorded short term capital outflows (K) and unrecorded net flows or net errors and omissions which is denoted as (M). KF (BOP) = K + M where KF (BOP) is capital flight measured by the balance of payments approach, K and M capital outflows and unrecorded net flows. Private short-term capital movement is either imprecisely reported or not reported at all especially in countries which impose capital controls.

The residual approach posits that capital flight is measure as;

KF-WB = EDEBT + G + F - N (2) where

EDEBT is change in external debt;

G is foreign direct investment,

F is current account balance and

N is increase in reserves. Positive values of KF – WB represents capital flight while negative values are capital re-flows or the reverse capital flight.

The Bank Deposit Approach involves measuring the increase in recorded foreign bank deposits of a country's residents.

Capital flight can also be effected by under-invoicing exports or over invoicing imports (Gulati, 1987). By under invoicing exports, exporters avoid surrendering the full value of their exports to the domestic authorities and hence build up foreign exchange holding which may be deposited abroad. Similarly when importers over-invoiced imports, they receive more foreign exchange than they need to pay for their import bills. The importer can then use this excess foreign exchange to add to their foreign assets.

Capital flight is caused by political factors, macro-economic mismanagement and policy distortions that serve as incentive for residents to take their assets out of the country. The economic mismanagement in the form of expansive fiscal and monetary policies, and exchange rate over valuation create uncertainty and make the domestic environment unattractive for investment. Since expansive monetary and fiscal policies are inflationary, while exchange rate overvaluation creates condition for expected devaluation, residents in such situations usually have confidence in announced policies to deal with the economic problem, preferring instead to take their assets out of the country. This macroeconomic environment is influenced by economic and non economic variables as well as internal and external factors. The economic factors include declining terms of trade, exchange rate over valuation, fiscal deficit, financial repression and constraints and increasing foreign real interest rate. Non economic variables factors are the corruption of political leaders, business-men and lack of accountability (Ajayi, 1997).

Decline terms of trade lead to a contraction in economic activity. This occurs when there is a reduction in investment, exchange rate over valuation and thus the fears of expected devaluation. Since declining terms of trade leads to a fall in government revenue, and government can no longer meet its obligations without an increase in taxes. In anticipation of higher taxes, investors usually divert their investment abroad (Gordon and Levine, 1989). This movement of capital also includes assets which are done to avoid capital loss. Foreign borrowing also contributes to capital flight. Since most developing nations suffer from foreign exchange constraints, capital is needed to finance imports which are usually sourced from external sources. However, no sooner have small

amounts of foreign exchange trickled in, that a large part sets off on return journey back to banks in donor countries without being used in any way for domestic production (Agu, 2006). This two way flow led to round tripping in which the publicly contracted loans eventually found its way back to foreign countries in the private bank account of some citizens of developing countries. External factors such as rising foreign real interest rate, economic stability and diversified investment opportunities all contribute to attract capital from developing countries. Rising foreign real interest rates facilitates capital flight by changing the relative returns in investment, as foreign real interest rate rises, public sector foreign liability increase. Also, private sector liability increases as national output falls. Most resident who expect increase in taxes divert their investments abroad. In addition to that, in some of these countries secret bank accounts are permitted. People from developing countries put their money there, where it is considered safe since their government cannot have access to the accounts held abroad (Ajayi, 1997).

Furthermore, some political office holders in Nigeria usually abuse their offices. They use their position in government to demand kick backs from government contractors. In some cases, they simply embezzled government funds at their disposal. Since such funds are acquired illegally, it is usually kept abroad. Thus the amount of this private wealth kept abroad is equivalent to the external debt of their countries which would have been used to revitalize ailing sectors of the economy and hitherto bring about growth and development. The loss of scarce capital and foreign exchange potentially leads to a loss of investment in countries that are in great need of more infrastructure, plant and equipment and human capital. It is also very important to note here that capital flight accompanies increases in foreign borrowing. This is to say that the nation is incurring foreign debt not to increase domestic investment which could create jobs, raise productivity, create educational infrastructures, develop human talent, skills and potentials but rather, so enrich foreign countries economy.

Capital flight has damaging consequences on the economy. For example, capital that is transferred abroad from the country cannot contribute to domestic investment and other productive activities. This capital would rather be productive in the foreign destined country. Ajayi (1997) observed that Nigeria is prominent among African countries that have achieved very rudimentary investment as a result of persistent and perpetual outflow of capital across its borders. This precarious outflow has contributed immensely in the perennial unemployment problem which has multiplier effect on the economy. It is germane to state here that capital outflow is a cause and symptom of weak investment performance in Nigeria. Eneji (2011) posit that capital flight has caused massive exodus (brain drain) of Nigerian scholars. Suffice it to say that Nigeria and Ethiopia produce the best Engineers and Doctors respectively. Unfortunately most of these experts have left the shores of their countries for greener postures. Thus the availability of capital would have been used to pay their remunerations and cater for the welfare through infrastructural provisions. Again capital flight has impeded infrastructural provisions in the Nigeria educational system which has reduced the tearing process its attendant outcome.

Onimode (2002) asserts that foreign debt service payments and current account deficit balances are the major areas of financial capital flight. He further stressed that the growth of the educational sector based on the availability of capital and that education system must not outstrip economic expansion. Equilibrium must be reached in such a way that the economy creates jobs based on the available manpower.

# Hypotheses

The hypotheses for this research are state below:

- H<sub>o</sub>: Capital flight has no implication on educational development in Nigeria.
- $H_1$ : Capital flight has implication on educational development in Nigeria.
- $H_o$ : Interest rate, exchange rate and balance of payment have no implication on gross domestic product in Nigeria.
- H<sub>1</sub>: Interest rate, exchange rate and balance of payment have implication on gross domestic product in Nigeria.

## Methodology

The study made used of empirical techniques and hypothesis to test for the significance or otherwise, of the impact of capital flight on the Nigerian Economy and the educational sector. The multiple regression analysis is used to explain changes in the dependent variables, Gross Domestic Product (GDP), other variables for the study includes Interest Rate (INS), Exchange Rate (EXD) and Balance of Payment (BOP).

## **Model Specification**

Table 1: The data for this analysis are presented in table 1

	Year	GDP@	Interest Rate %   Exchange Rate \(\frac{\text{\text{N}}}{4}\)		Balance of
		Factor Cost		-\$	Payment
1980		100.36	11.21	0.3164	6.01
1981		119.62	12.68	0.4666	7.62
1982		128.60	12.86	0.4961	8.90
1983		130.40	13.00	0.5123	10.20
1984		136.20	13.80	0.5445	16.20
1985		138.31	15.6	0.6369	16.80
1986		139.59	7.70	0.6702	19.90
1987		102.15	5.40	0.7486	18.20
1988		101.80	13.40	0.8083	19.80
1989		96.30	11.80	0.9996	20.63
1990		91.42	10.20	3.3166	31.64
1991		100.00	38.30	4.192	31.79
1992		103.14	40.90	5.3530	27.60
1993		102.65	29.30	7.650	36.40
1994		112.82	15.40	7.94	30.73
1995		121.15	15.90	9.91	67.89
1996		131.09	11.12	17.30	97.63
1997		137.29	10.90	20.06	100.11
1998		141.38	20.90	22.07	121.64
1999		145.13	17.30	21.89	120.67
2000		147.03	19.80	81.20	121.93

2001	150.20	13.40	82.00	116.40
2002	155.29	11.70	84.40	106.66
2003	160.19	48.40	91.80	200.40
2004	163.89	28.40	101.65	196.75
2005	184.50	32.10	108.24	200.82
2006	212.30	36.10	115.08	206.94
2007	260.60	4.60	130.98	303.74
2008	232.80	44.20	144.63	276.00
2009	271.70	53.80	147.04	286.65
2010	282.11	60.10	150.08	291.44
2011	260.03	60.20	152.10	294.99
2012	290.14	63.68	154.60	304.06

Sources: (i) CBN Annual Report (Various Issues).

- (ii) CBN Major Economic and Banking Indicators.
- (iii) Budget Office, Federal Ministry of Finance and Economic Development.

The econometrics tool used for the analysis of the data presented in the above table is a multiple regression model. The Gross Domestic Product (GDP) which is a dependent variable is specified as a function of interest rate, exchange rate and balance of payment. That is GDP = F (INS, EXD, BOP).

Where:

INS = Interest Rate EXD = Exchange Rate BOP = Balance of Payment

The econometric tool used for the analysis of the above data is a multiple regression model. This was to investigate capital flight impact on the economy with particular reference to education. This involves the testing of hypotheses which are stated here as

 $H_{\circ}$ : Capital flight has no implication on educational development in Nigeria.

 $H_1$ : Capital flight has implication on educational development in Nigeria.

 $H_o$ : Interest rate, exchange rate and balance of payment have no implication on gross domestic product in Nigeria.

H<sub>1</sub>: Interest rate, exchange rate and balance of payment have implication on gross domestic product in Nigeria.

The impact of the four explanatory variables (INS, EXD and BOP) on the dependent variable is captured by slope  $b_1$ ,  $b_2$ , and  $b_3$  and  $b_4$  respectively. The apriori sign for  $b_1$ ,  $b_2$  is negative (–),  $b_3$  is positive ( $\pm$ ). The unexplained variation is captured by a random (stochastic) error term "u" when estimated. That is

GDP=F (INS, EXD, BOP)

Equation (1) takes the form
$$Y-b_0-b_1 INS+b_2 EXD+b_3 BOP+U - - - - (2)$$

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Where

 $b_0$  = Intercept of the model

 $b_1, b_2, b_3 = parameters$  (slopes) to be estimated

U = stochastic error term

As stated earlier, the impacts of the explanatory variables on the dependent variable are captured by the slopes  $b_1 - b_3$  respectively. While the influence of less important variables that might possibly influence the dependent variable (unexplained variation) in any particular way are taken into account by the random (stochastic) error term 'U' when estimated. The estimate equation becomes

The values in parenthesis are the standard error of coefficient.  $R^2$  is the coefficient determination;  $R^2$  is the adjusted  $R^{-2}$ . DW is the Durbin Watson test for the presence of Serial Correlation (S.C) S.E is the standard error of regression and F-Statistic refers to the Fisher's Correlation Coefficient. The F-Statistics with K-1 and N-K degrees of freedom tests the significance of  $R^2$ , either to accept or reject the null hypothesis ( $H_0$ ) that none of the explanatory variable helps to explain the variations of Y about the mean. Evaluation of the parameter estimates was carried out by testing the hypothesis. Using the test of statistical significance at 5% level of significance.

From the result of the analysis, the standard error estimates help us to determine whether the estimates  $b_0 - b_4$  are significantly different from zero. From our regression result, we obtained  $S(b_1) = 0.465$ ,  $S(b_2) 0.187$  and  $S(b_3) 0.330$  for variables  $X_1$ ,  $X_2$  and  $X_3$  respectively. This shows that  $X_1 > X_2 > X_3$ . We therefore accept  $(H_0)$  because the parameter estimate  $b_1$  falls in the critical region, we then reject  $(H_0)$  and accept the alternate hypothesis  $(H_1)$  which is statistically significant. However the standard error of estimate  $b_0$  indicate that the parameter estimate  $b_0$  is statistically significant since the coefficient of the constant term is 9.627 > 2.

The  $R^2$  = 0.933 indicates a better goodness of fit couple with the f-statistic of 16.654 which makes the equation significantly different from zero, given the level of significance and confidence interval earlier mentioned. Our 't' is defined by the ratio of the parameter estimates with that of its standard, that is

T = Estimate of the Parameter Standard Error of the Parameter Thus the Standard Error Estimate (SEE) and the t – statistic indicate that the parameter estimate  $b_1$  –  $b_4$  are statically significant. This means that they are statistically different from zero. A basic assumption of the Ordinary Least Square (OLS) is that the successive values of the random variables U are correlated leading to the problem of serial or autocorrelation. Thus the DW test (Durbin Watson) is equal to 0.858 which falls within the critical region of 0 < DW < DL. We therefore reject  $H_0$  and accept  $(H_1)$  there is the presence of positive serial correlation.

Table 2: Trend of Capital Flight from Nigeria

	YEAR	NET FLOWS IN	YEAR	NET FLOWS IN	YEAR	NET FLOWS IN
		MILLIONS		MILLIONS		MILLIONS
1980		52	1991	669	2002	806
1981		40	1992	221	2003	1362
1982		68	1993	901	2004	2666
1983		92	1994	503	2005	3357
1984		50	1995	10,002	2006	5536
1985		60	1996	708	2007	6511
1986		94	1997	531	2008	4817
1987		163	1998	4385	2009	2450
1988		288	1999	203	2010	1369
1989		563	2000	134	2011	465
1990		501	2001	-53	2012	1076

Source: CBN Statistical Bulletin. Holden Jubilee Edition 2012.

From the above table, with the exception of 1981, 1980, 1982 and 1983 recorded an increase in the outflow of capital. A systematic outflow of capital was recorded between 1984–1991. It fluctuates in 1992, 1999, 2000, 2001 and 2011. An unprecedented outflow was recorded in the years preceding and post election (1998 – 4385 M, 2003 – 1362 M, 2004 – 2008) an imaginable proportion. It is clear here that capital flight sums are inturned used in Nigeria for political purposes. This trend Jeopardizes manpower development and increase poverty situations in the country. Thus in the coming years, we would be without the good which the capital would have been used to empower our people. And our prophesied breakup by the west would be fulfilled, because by failing to attend to the needs of the present, we endangered the future.

# Discussion of Result/Findings

In examining the determinants of capital flight, the researcher discovered that external borrowing is positively and significantly related to capital flight. This underscores to a large extent that capital flight is debt-fueled. Similarly countries like Nigeria with high corruption, bad governance and political instability profile are prune to capital flight. Capital flight also puts pressure on the exchange rate by increasing the demand for foreign currency to funnel wealth abroad. It constitutes a drain on national resources and thus reduces the current and future growth potential of the country. Furthermore, it contributes to increasing macro-economic uncertainty which depresses lending and investment. Market participants may interpret a high level of capital flight as a signal of loss of control of economic activities.

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The result of the analysis depicts that the explanatory variable determines the extent to which capital flight increases. In essence the explanatory variable is negatively related to GDP. This reveals that the increases in the explanatory variables fuels capital flight which affects the domestic economy.

The DW test reveals that there is no serial correlation and as such there exist a negative relationship between the variables of the research. Furthermore, the result of the analysis depicts that capital flight affects the Nigerian economy. This gives a false impression of the realities obtained in the economy as the explanatory variables have an inverse relationship with the GDP of a nation. From the above therefore, it can be deduced that capital flight has impacted negatively on the Nigerian economy and educational system. Thus it is unhealthy for the education and economy situation.

## Recommendation and Conclusion

Nigeria as a nation needs to design strategies to attract foreign private capital to compensate for the recent decline in official lending. This presupposes the fact that private capital flows are responsive to the macro-economic policy environment. Financial market constitutes an enormous constraint on private capital inflows into the country especially because of the lack of opportunities for portfolio diversification. Therefore there is the need for a reform aim at enforcing creditor and investor rights and improving the efficiency of the clearing system. This measure would both facilitate financial development and encourage capital inflows. Thus borrowing which later results into indebtedness should be desist or carried on viable and investment expenditure projects.

Rapid capital flight has reduced educational and economic growth in Nigeria. Capital flights have undermined and endanger production, self sufficiency and fueled brain drain of the Nigeria people. The Keynesian model of stemming capital flight has not worked successfully in Nigeria. Fluctuations are often the result of exogenous factors over which domestic policies have no control, leading to intractable and unpredictable capital outflows. What is needed in Nigeria to propel all the sectors is capital (investment capital) through international financial transactions. To curb capital flight, there is the need for a reform in our legal system and struck implementation of our antigraft laws. Furthermore collaboration in form of bilateral and multilateral financial agreement or arrangement is made where in which stolen and looted funds can be traced and repatriated back home. Also the electoral processes in the country need to be strengthening to ensure transparency, fair play and truthfulness.

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