

CAPITAL FLIGHT AND GROWTH OF NIGERIA FINANCIAL MARKET

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ABSTRACT

This study examined the effect of capital flight on the growth of Nigeria financial market. The objective was to investigate the effect of capital flight indicators on the growth of financial market. Time series data were sourced from Central Bank of Nigeria Statistical bulletin and publications of Nigeria Bureau of Statistics. Financial market growth was the dependent variable while debt servicing, net official financing, depreciating naira exchange rate, net private investment and Nigeria investment abroad were proxies for independent variables. Ordinary least square methods of cointegration, granger causality test, unit root test and Vector error correction model. The study found that 70.9 percent variation on the growth of Nigeria financial market can be traced to variation on the capital flight indicators. Exchange rate variation has positive and significant effect; debt servicing has positive and no significant effect; net official financing has positive and no significant effect; Nigeria foreign investment abroad has positive and no significant effect; while net foreign private investment has negative and no significant effect on growth of Nigeria financial market. From the findings the study concludes that there is significant relationship between capital flight and growth of Nigeria financial market. The study recommends that government should always engage in the borrowing of funds for capital investments that are expected to help the countries long term vision. there is need to ensure that the stock market is sound by promoting stability in the macroeconomic environment to enhance investors' confidence and attract both domestic and foreign investors to hold their equity investments in the Nigerian stock market. There is need to improve the infrastructural facilities in the Nigerian stock market to match or even beat what is obtainable abroad.

Keywords: Capital Flight, Growth and Financial Market

INTRODUCTION

The Nigerian financial system comprises of several financial institutions, instrument and operators. The financial system regulators include the Central Bank of Nigeria (CBN), the Federal Ministry of Finance (FMF) and the Securities and Exchange Commission (SEC), these are the major regulating agencies in Nigeria. Others are Commercial Banks, Development Banks, such as Federal Mortgage Bank of Nigeria (FMBN), the Nigeria Bank of Industry (BOI), the Nigeria Agriculture and Co-operative Bank (NACB), the Nigeria Industrial Development Bank (NIDB) and specialized banks. Other institutions and funds include the National Pension Commission (PENCOM), insurance companies, the National Economic Reconstruction Fund (NERFUN) finance houses, Bureau De Change and the Nigeria Deposit Insurance Corporation (NDIC).

The Nigerian financial system has evolved over the last few decades from a rudimentary to a more sophisticated one with numerous institutions and operators that facilitate the performance of the primary role of the system savings, mobilization and allocation of resources among competition units within the system. Capital flight refers to part of domestic savings sent abroad. The ongoing debate on capital flight emanates from its numerous long-term adverse effects as scarce economic resources lost through capital flight do not contribute to enhance social welfare of residents (Škare and Sinkoviã, 2013). The

long-term adverse effects of capital flight include worsening capital scarcity and further reductions in resources available for domestic investment, leading to a fall in the rate of capital formation. Given the investment-growth nexus, capital flight has contributed to the sluggish growth in affected economies. It also reduces government tax revenue and its debt servicing capacity, since income earned abroad cannot be taxed. Capital flight has adverse implications on balance of payment, exchange rate, and it can compound the foreign finance problems of heavily indebted countries if creditors refuse to give further assistance as a result of capital outflows (Ajayi, 1995; Ndikumana and Boyce, 2008; Ngeno, 2000).

Nigeria losing more resources via capital flight than through debt servicing, capital flight in Nigeria is more severe than it is elsewhere in other Sub-Saharan African countries. In Nigeria, one of the unresolved and perturbing macroeconomic problems for the past two decades is the growing rate of capital flight. The global financial crisis and its generated problem of massive

movement of funds massively out of the country has undoubtedly contributed to the regeneration of the growth of capital flight and present consolidation crisis threatening the development of the banking subsector. There is no doubt, that capital flight has damaging consequences on the economy. For instance, capital that is transferred abroad from the country cannot contribute to domestic investment and other productive activities.

Capital flight is therefore, both a cause and symptom of weak investment performance in Nigeria. Deppler and Williamson (2017) also clearly stated the problems with capital flight as giving rise to a net loss in the total resources available for domestic savings and investments in an economy. Since domestic savings and investment are so important to growth, such an economy is retarded from what it would otherwise have been. The outflow of capital may augment foreign finance problems of heavily indebted poor countries if potential creditors like IMF and other donors are demotivated to give further assistance as a result of capital outflow. That is to say, the damaging effects of capital flight have made rational foreign lenders hesitant to increase credits to the debtor's countries. There are many studies on the effect of capital flight, significant proportion of the studies focused on capital flight and economic growth (Akani, 2013; Cervena, 2006; Gusarova, 2009; Olawale & Ifedayo, 2016) , others have equally focused on what drives capital flight (Dim & Ezenekwe, 2014; Harrigan, Mavrotas, & Yusop, 2002; Raheem, 2015). From the above problems and knowledge gap this study examined the effect of capital flight on the growth of Nigeria financial market.

LITERATURE REVIEW

Capital Flight

Generally, there is no one accepted definition for capital flight, even though its activities have been identified for periods dating back to the late 1970s and 1980s. The definitions associated with the concept of capital flight are many with different meanings implied. From a wider perspective, it has been characterized to incorporate every private capital outflow from developing countries (Khan, 1989), while, from a narrow perspective, it encapsulates only illegal capital exports (Lessard & Williamson, 1987).

The broad extreme takes into account all private capital outflows from a developing economy. Based on this definition, every private capital outflow from developing countries, either long-term or short-term, portfolio or equity investments, could be termed capital flight. The reason is that developing

countries, generally, are seen to be short of capital and, hence, should be net borrowers in the development process, supplementing domestic savings with external finance. In consonance with the above difficulties in defining capital flight, Walter (1987) defined capital flight as all capital that “flees” regardless of the motive. The consequences of capital flight on the Nigerian economy are numerous to such a level that a paper of this nature may not be able to capture all of them. However, the most salient ones that cannot be ignored are highlighted in this paper. Capital flight constitutes a drain on the resources of the country that is available for domestic investment. A loss in investment translates into a loss in economic growth and development in the country.

Besides, capital flight tends to restrict the capacity and ability of the affected countries like Nigeria, to mobilize domestic resources and access foreign capital necessary to finance economic growth and development and thereby alleviate poverty in the land (Ayodele, 2014). Deppler and Williamson (1987), Mohamed and Finnoff (2004) stated that capital flight has the potential of giving rise to a net loss in the total resources available for domestic savings and investments in any economy. Since domestic savings and investments are very important in the growth and development process, an economy experiencing huge capital flight is retarded.

Measurement of Capital Flight

Capital Flight Is a Rather Slippery Concept

Several interpretations have been given of what exactly is meant by the term. Usually, capital flight is related to the existence of high uncertainty and risk with respect to returns on domestically held assets. Residents take their money and run in order to avoid extremely high-expected losses on their asset holdings. It is sometimes argued that capital outflows based on this consideration should be viewed as abnormal, and should therefore be distinguished from normal capital outflows, since normal outflows are based on considerations of portfolio diversification of residents, and / or activities of domestic commercial banks aiming at acquiring or extending foreign deposit holdings Williamson, (1987).

Yet, when measuring capital flight it appears to be very difficult to empirically distinguish between normal and abnormal capital outflows. Therefore, as no surprise that several different capital flight measures are available in the existing literature inevitably; these measures lead to differences in capital flight estimates. However, the following three main methods of measuring capital flight can be distinguished in the literature. First, several studies have measure capital flight indirectly from balance of payments statistics by comparing the sources of

capital inflows (Net increases in external debt and the net inflow of foreign investment) with the use of these inflows (the current account deficit and additions to foreign reserves). If the sources exceed the uses of capital inflows, the difference is termed as capital flight.

Mechanism of Capital Flight

There are many ways in which capital flight can occur. Transfer is a form of capital flight, which can take place through cash or monetary instrument. These are usually in the form of either foreign or domestic currency, traveler's cheques or other cheques. In the early 1970s, stories abounded about Nigerian currency being carried out of the country and exchanged in big financial centres like London and New York to be exchanged legally for other currencies at current market rates. In spite of the present economic predicament, there are still some African countries where the naira is exchanged for other currencies in the course of trade. Second, capital flight can take place through bank transfers from a local affiliate of a foreign institution to a designated recipient abroad. This is possible at the market rate where no constraints to a designated recipient abroad. This is possible at the market rate where no constraints or restrictions are in place.

Transfers can still be possible in the face of exchange controls but possibly at a less favorable rate. The history of the development of banking institutions in Nigeria shows the existence of local affiliates of foreign banks. That transfers of the type mentioned have been taking place in Nigeria cannot be in doubt. It is reasonable to claim, however, that such transfer may not be available for incomes that are illegally generated. Another method of transfer is through precious metals and collectibles, including works of art. Local currency is converted into gold, silver or other precious metals, precious stones, jewelry and similar assets that cannot only be aboard but that will also be able to retain their value.

Determinants of Capital Flight in Nigeria

Based on the existing literature, the determinants of capital flight are many. These various causes can be grouped under relative risks, exchange rate misalignment, financial sector constraints and/or repressions, fiscal deficits and external incentives (Khan *et.al* 1987) and disbursement of new loans to LDCs (Cuddington 1987). These are no doubt economic causes of capital flight. There are, however, other non-economic causes which though important are often ignored. These include the corruption of political leaders. The study of Ajayi in 2005 affirmed that the determinants of capital flight in Nigeria which in turn impact economic growth include varying risk perception, exchange rate misalignment, financial sector constraints and repression, fiscal deficits, weak

institutions, macroeconomic policy distortions, corruption and extraordinary access to government funds among others.

Capital flight is directly related to the behaviour of a risk-averse individual who diversifies his wealth in order to maximize asset returns. This emphasizes the decision to hold assets abroad as a part of the process of portfolio diversification Gibson (1998). Differences in rate of return between domestic foreign asset holdings, the amount of wealth, and risk and uncertainty aspects normally influence this decision.

External Debt

The causality between external debt and capital flight has many facets, though all the possible relationships results in capital flight. Ajayi (1995) and Boyce (1992) as cited in sheet (2005) distinguish for possible linkages between the two

- Ø Debt-driven capital flight
- Ø Debt fuelled capital flight
- Ø Flight-driven external borrowing
- Ø Flight fuelled external borrowing.

Conesa (1987) analyzed the relationship between the two using what he termed 'revolving door model'. Beja's model posits direct and indirect linkages between external debts provide the fuel and /or motivation for capital flight, and vice versa. Thus, external borrowings are transformed – sometimes instantaneously from capital inflow to capital flight, ultimately ending up abroad, usually in a private foreign account. Hence a positive relationship between the two variables is expected.

Determinants of Capital Flight

Macroeconomic Instability

Macroeconomic instability occurs when there is a mismatch between aggregate domestic demand and aggregate domestic supply. The causes of this instability may be diverse, for example, political tensions and instability, wrong or lacking incentive structures and institutions to let markets efficiently coordinate demand and supply, and heavy government involvement, which may put markets at the sideline. The symptoms of macroeconomic instability thus may become manifest in a number of ways: budget deficit will raise, current account deficits increase, exchange rate overvaluation occurs and inflation is growing. Variables describing such factors are often found in studies on the determinants of capital flight.

Exchange Rate Overvaluation

Overvalued exchange rate is often found to be an important variable in studies of capital flight and its underlying determinants. An overvalued exchange rate leads to increasing expectations of depreciation in the near future. Thus to avoid impending future welfare losses, residents will be motivated to hold at least part of their assets abroad. Another offshoot of exchange rate overvaluation is foreign exchange the black market premium. The presence of high black market premium is normally interpreted as a symptom of 'sick' economy. Nigeria is one of the countries whose domestic currency has been overvalued for nearly the whole duration since her independence in 1960 and black market premium has also been very high since 1986.

Inflation

High inflation directly erodes the real value of domestic assets, stimulating residents to hold assets outside the country. Moreover, inflation rates and the exchange rate are closely connected, since high inflation may lead to increasing expectations of depreciation in the future. Inflation can also be perceived as a signal for how much the government has resorted to taxing domestic financial assets through money creation (inflation tax). For Nigeria, the higher inflation has also resulted in the vicious circle of money printing and further increase in inflation. In this case, higher inflation will result increased capital flight although, recently in the south Africa precisely 7th May 2012, the coordinating minister for finance and economy in Nigeria announced the reduction in inflation rate in Nigeria economy to a single digit of 7.0 to 8.0 percent.

GDP Growth Rate

GDP growth is normally used as a barometer for inferring economic performance as well as a measure for real of return of the economy. A negative correlation is therefore expected between capital flight and domestic GDP growth rate. The minister for finance and economy also stated that the Nigerian economy is one of the fastest growing economy in Africa with GDP growth rate of 7.6 to 8.3 percent.

Political Instability

Perceived ill institutional variables in any economy may give rise to capital flight. Public sector behaviour may have an impact on the risks and uncertainty regarding the policy environment and its outcomes. More specifically, residents may decide to hold their assets abroad based on lack of confidence in the domestic political situation, perceived high levels of corruption, and the consequences of these factors for the future value of the assets. In summary,

perceived political instability may generate capital flight. In the Nigeria context, political instability has been very tense since before 29th May 1999 to date. However, it has now regenerated to insecurity commonly called Boko haram.

Rate of Return Differentials

Relatively low and unattractive domestic real interest rates can be a reflection of domestic financial repression that can stimulate outflows, especially when they are at levels that create significant interest rate differential (after making adjustments for exchange rate changes and taxes). In this case capital flight may occur simply because the returns on assets are higher abroad as compared to assets held domestically.

Capital inflows/FDI

This simultaneous occurrence of capital inflows and capital outflow has caused some authors to argue that capital inflows in the form of aid disbursements/FDI to developing countries are a major cause of capital flight Ajayi (1995). If the case involves public sector borrowing, the availability of foreign exchange increases the potential for draft and corruption. Anecdotal evidence shows that over the years, significant proportions of aid inflows which were managed by Nigeria government ended up roughly half the aid amounts reaching the intended beneficiaries while the other portion was 'lost' within the government structures.

Public Policy Uncertainty

An environment where the content and direction of current and future public policies are uncertain and / or unstable, domestic investors will be uncertain about the impact of these policies on the real value of domestically held assets in the future. This uncertainty may stimulate investors to sell their domestic and buy foreign assets. Sheets (1995) present a theoretical analysis of policy uncertainty and its influence on capital flight. The study argues that the shock therapy implemented by some transition economies led to substantial capital flight, since the policy reforms initially generated increased uncertainty about policies and their outcomes. Uncertainty has been the environment under which economic activities in Nigeria has been operating especially since 1973 when government started the compulsory land reform programme. Most government policies since then have driven by some 'gimmicks' which have been intended to ameliorate the economic meltdown trend as well as voter 'buying' among other objectives.

Interest Rate Differential

Interest rate differentials have been used in some studies to measure the relative attractiveness of domestic assets as compared to foreign assets. In most cases, researchers have calculated some kind of exchange rate differential between the domestic interest rate on deposits and a foreign deposit rate, normally the US deposit rate. Another measure representing the attractiveness of different assets used is the growth rate of GDP or GNP. Nevertheless, measures of the interest rate differential do not always have a statistically significant relation to capital flight. This may indicate that other determinants, such as macroeconomic and political instability, are more important to explain capital flight.

Financial Sector Growth

Conceptually, financial sector growth is often understood to mean that; sectors and agents are able to use a range of financial markets for savings and investment decisions. Encompassing long maturities; financial intermediaries and markets are able to deploy larger volumes of capital and handle larger turnover, without necessitating large corresponding movements in asset prices (market liquidity); and the financial sector can create a broad menu of assets for risk-sharing purposes (hedging or diversification). In other words, deep markets allow savers to invest in a broad range of quality investment and risk-sharing instruments and allow borrowers to likewise tap a broad range of financing and risk management instruments (Goswami and Sharma, 2011). Financial sector growth is widely believed to confer important stability benefits to an economy, albeit with caveats. For instance, by increasing transaction volumes, it can enhance the capacity to intermediate capital flows without large swings in asset prices and exchange rates. But it can also attract volatile capital inflows, complicating macroeconomic management IMF (2011).

Theoretical Framework

The Residual Process of Capital Flight Estimate

The residual approach was developed by the World Bank, (1985) and Erbe (1985). It was further modified by Morgan Guaranty Trust (1986). In the World Bank (1985) and Erbe (1985) version of the residual approach, capital flight is calculated as the difference between sources and uses of capital inflows. The source of capital inflows are increases in external debt and foreign direct investment. These capital inflows are used to finance either current account deficits or increase in official reserves. The inflows that finance neither current account deficits nor increases in reserve constitute capital flight.

In essence, capital flight in the World Bank (1985) version of the residual

approach is measure as:

$$F(WB) = EBEFT + G + F - N \quad (1)$$

Where:

G is foreign direct investment; F is current account balance and N is increase in reserves. Positive value of KF-WB represents capital flight while negative value is capital re-flows or the reserve capital flight. Morgan Trust (1986) adjusted the World Bank (1985) measure for changes in foreign assets held by domestic agents other than the banking system. According to Morgan Trust (1986) capital flight is measured as:

$$KF(MORG) = EDEBT + G + F - N - 1 \quad (2)$$

Where:

KF (MORG) is the Morgan Trust (1986) measure of capital flight; 1 is increase in foreign assets of the domestic banking system; G, F and N are as defined above. As usual in residual measures of capital flight, negative values of KF-M or G are capital reflows while positive values are capital flight.

Dooley process of Estimating Capital Flight

The Dooley method defines capital flight as illegal capital outflows, or all capital outflows based on the desire to place assets beyond the control of domestic authorities. Following this concept of capital flight, the Dooley method considers all outflows that do not receive register interest payment as illegal capital outflows. The Dooley measure incorporates the net errors and omissions, as well as the difference between the World Bank data on the annual change in the stock of external debt and debt flows as reported in the balance of payments statistics. In its simplest form, capital flight magnitude is measure as the excess of total capital outflows over the stock of registered interest receipt external assets. The total capital outflow is computed as:

$$Co_t = Debt_t + Fit_t - CAD_t - FRS_t - x_t - y_t$$

Where:

CO denotes total capital outflows; y_t is net errors and omissions, and x_t represents the different the World Bank and IMF debt statistics. The stock of total external assets (STK) is computed as:

$$STK_t = (1 + r_w) R_t$$

Where:

r_w stands for internationally realistic interest rate, and R_t is the registered receipts. From equations 2 and 3 the Dooley measure of capital flight (CFd) is calculate as:

$$Cf_t^d = CO_t - STK \quad (4)$$

According to Eryar, capital flight seems to be affected by loss of confidence in overall economy. In essence, if the residents of the country sees the macroeconomic instability as a threat to their holding domestic assets, then, they tends to switch to foreign assets so as to protect the value of their assets from any sudden changes. These changes can be in the form of a freezing on assets in banking system or a postponement of interest payments on public debts. Numerous studies have been conducted to identify the pivotal determinants of capital flight in different countries of the world. Pastor (1989), Pasto (1990) and Ajayi (1992, 2001) found that exchange rate misalignment is a critical determinant of capital flight. To them, if a currency were overvalued, economic agents would expect the currency to be devalued in future, and in order to protect their assets against exchange rate risk, domestic wealth holders would shift out the domestic assets into foreign assets to avoid potential capital loss. Ajayi (1992) also examines the narrowness of the domestic money and capital markets in terms of their financial instrument and proclaims that narrow markets limit the availability investment opportunities. Thus holding assets in foreign financial instruments provide a viable and profitable alternative.

Investment Diversion Theory

This theory postulates that due to the macroeconomic and political uncertainty in developing country and the simultaneous existence of better investment opportunities in advanced countries like high foreign interest rate, wide array of financial instruments, political and economic stability, favourable tax climate and secrecy of accounts. Some, unscrupulous, corrupt leaders and bureaucrats usually siphon scarce capital resources from their countries to advanced countries. These funds are therefore, not available for investment at home leading to decline in aggregate investment, low economic growth, hence declining the employment, increase in dependency ratio and high death rate.

These negative macroeconomic effects on these countries sometimes motivate the necessity to borrow from abroad to reactivate the domestic economy, which is sometimes further siphon thereby perpetrating external dependency and indebtedness. The liquidity constraint or crowding out effect may result to depreciation of the domestic currency if the authorities are operating a floating exchange rate system (Ayayi, 1992). An attempt to defend the exchange rate at this time leads to loss of international reserves. The investment diversion thesis provides one of the well-known negative consequences of capital flight in the countries involved.

The Debt Driven Capital Flight Thesis

This is the continuation of the investment diversion thesis. This thesis postulates that given the heavy external debt of a country, residents of these countries are motivated to move their resources outside the country to foreign countries. Borrowed money is sold to domestic economic agents who transfer these funds partly or completely abroad. According to this thesis, external debt is one of the propellants or fuel to capital flight.

The Debt-Driven Thesis also Called Debt Overhang Thesis

This thesis states that capital flight reduces the incentive to save and invest. The assumption there is that with large foreign debt, there are the expectations of exchange rate devaluation, fiscal crisis, and the propensity of the crowding out of domestic capital and expropriation of assets to pay for the debt. The debt-driven thesis and the investment driven thesis taken together suggest interdependency between capital flight, growth and external debt with the linkages being mutually reinforcing. Capital flight leads to poor growth, which calls for the necessity to borrow in order to promote growth. Further borrowing or indebtedness promotes capital flight, which in turns leads to poor economic growth, and the cycle continues.

The Tax-Depressing Thesis

This thesis postulates that capital flight leads to potential revenue loss because wealth held abroad are outside the control of the domestic government and cannot therefore be taxed. The fall in government revenue complicated the task of politico-economic engineering to promote growth and development. The outcome of this is the reduction in debt-servicing capacity of the government. This in turns increases the debt burden, which constrains economic growth and development. Thus, a direct resultant of capital flight is the European education in revenue generating potential of government.

The Austerity Thesis

This thesis views the poor in several indebted situations due to capital flight. They suffer more because they are exposed to excruciating austerity measures by government to pay for debt obligations to international banks that in turns pay interest to capital flight from residents in these countries (Pastor, 1989).

Poverty in developing countries reduces them to hewers of wood and drawers of water while perpetrating international inequality and dependency and widening the gap between the rich countries and poor countries. Furthermore, the tax that the poor may pay is small, which again constrains the ability of government to

muster enough resources to promote growth and development with poverty alleviation. Thus, a vicious circle of external debt, capital flight, poor growth, poverty and external debt is created. From the above, capital flight destroys the domestic macroeconomic environment and enhances the absence of transparency and accountability. These distortions manifest themselves in weak governance, large government deficits, overvalued exchange rate, high and variable inflation coupled with financial repression Ajayi (1992). Thus, we can conclude that where there is a heavy debt, capital flight increases, with capital flight also exacerbating and magnifying the debt problems of these countries.

Empirical Review

Data from African Security Exchange Fact Book, (2013) revealed a staggering level of foreign participation in the sub-Saharan African emerging markets. Out of fourteen (14) countries sampled only six countries (6) had foreign investors participation ratio of above 40% and out of 23 sampled nations in Africa, twelve of them had neither foreign nor local investors' presence in equity trading as at December, 2012 implying the total absence of developed capital market facilities. ASE also revealed that Lusaka Stock Exchange recorded the highest foreign investors' participation as at 2012 with a ratio of 78.9%: 21.1% while Bourse de Tunis had the least rate of 6.3% (foreign) against 93.7% (local) investors.

Fiador and Asere, (2012) noted that Ghana's Financial Market Landscape had witnessed the emergence of various collective investment schemes mainly dominated by overseas stocks which have significantly aided in mobilization of savings. The trend recorded indicating overseas investors' dominance of Ghana's Databank Epack investment fund was due to illiquidity of the Ghanaian stock market coupled with limited stocks in the market. Egyptian, equity markets have become significantly more globalized with significant dominance by foreign investors since the early 1990 due to government policies to encourage foreign participation.

Onuoha, (2013) examined the impact of macroeconomic indicators on foreign portfolio investment in Nigeria between the period 1980 and 2010 using Ordinary Least Square Estimation methods and found that there is inverse relationship between GDP, Money Supply and foreign portfolio investment only while disclosing a direct relationship among other variables. It was also revealing that macro-economic variables do not granger cause foreign portfolio investment in Nigeria.

Alfayoumi, Alzoubi and Abuzayed (2012) found that previous year capital flight have spillover effect. This implies that amount of capital flight in previous year

influence capital flight in the current year. The reviewed literature shows that determinants of capital flight are numerous, however, their significance varies across countries and therefore this study proceeds to identify what determines capital flight in Ghana.

Boyrie (2011) in his study of the determinants of capital flight and capital movement through trade mispricing in African countries attempts to accomplish two things. First, it tries to establish the determinants of capital flight and capital movement through trade misinvoicing from selected African countries in order to ascertain whether the same factors could explain both types of capital movement. Second, it attempts to determine whether Granger causation exists between capital movement through trade misinvoicing and capital flight. Data for selected countries were combined into geographical, economic, and monetary regions using 21 explanatory variables, the results showed that variables that explain capital flight do not always explain capital movement and vice versa. The independent variables tended to explain the dependent variables in a few cases, implying that the reason for capital flight and capital movement was other than for investment purposes. Overall causality was found to exist between the dependent variables, mostly in the form of feedback. Yet, the relationship was mostly transitory with a long-term relationship existing in only few cases.

Ali and Walters (2011) investigated the causes of capital flight from Sub-Saharan Africa. The study drawing on insights from portfolio theory, presents empirical evidence that links capital flight to the domestic investment climate. Using a panel data set for 37 African countries over the 1980-2005 periods, the study discovered that once account is taken of the region's structural and institutional features, private capital outflows from Africa are explained by policy distortions along with the relative riskiness and poor profitability of investments. In addition, the study discovered evidence that the type and composition of resource flows to the region are important for capital flight: foreign aid generally discourages capital flight while short term borrowing and FDI contribute to it. The findings of the paper are robust to endogeneity, outliers, sub-samples, and to different econometric methods. The poor results of empirical studies on capital flight from African may not be unconnected to the use of estimated statistics of capital flight as a dependent variable. Attempts to empirically determine the factors that affects an estimated statistics on capital flight is suspect and is bound to produces spurious results, as none of the methods of estimation discussed can capture the very nature and character of the developing countries including Nigeria. The relative under developed nature of statistical gathering as well as the very nature of the applied concept of capital flight makes the adoption of any model

developed for the industrial economies for the purpose of measuring capital flight in the developing country like Nigeria, irrelevant.

METHODOLOGY

This study adopted the ex-facto research design to study the relationship between capital flight and growth of Nigeria financial market. The major sources of our data are from publications of authorized, designated and delegated authorities such as the CBN statistical bulletin, Bureau of statistics and the Ministry of finance.

Model Specification

$$M2/GDP = f(NO, DS, NFPI, EXR, NFIA) \quad (5)$$

$$RGDP = a_0 + a_1 NO + a_2 DS + a_3 NFPI + a_4 EXR + a_5 NFIA + e_t$$

Where;

M2/GDP = Growth of Nigeria capital market proxy by percentage of broad money

supply to GDP

NO = Net Official Financing as percentage of GDP

DS = Debt Servicing as percentage of GDP

NFPI = Net Foreign Private Investment as percentage of GDP

EXR = Exchange Rate

NFIA = Nigeria foreign investment abroad proxy by external reserve to GDP

a_0 = Intercept
 a_1, a_2, a_3, a_4, a_5 = coefficient of independent variables to the dependent variable

e_t = Error term

Data Analysis Method

The technique used in this study is the Ordinary Least Square (OLS) estimation technique. The test instruments in the OLS are the T-statistics and F-test which were used to test the significance of variables and the overall significance of the regression respectively. Other test instruments that will also be employed are the Durbin Watson test which will be used to test the presence or absence of auto correlation between and among the explanatory variables and the adjusted R square to test the percentage variation of the dependent and the independent variables.

i. Coefficient of determination (R^2) test

This measures the explanatory power of the independent variables on the dependent variable. To determine the proportion of real sector into our model we use the coefficient of determination, which varies between 0.0 and 1.0.

ii. F-test. This measures the overall significance:

Decision Rule (F-Test) If $f^* > f_{0.05}$ we will reject the Null hypothesis and accept the alternative. But If $f^* < f_{0.05}$ we will accept the null hypotheses.

iii. The beta also known as the standardized coefficient: Is used to measure the individual contribution of the independent variables to variation in the dependent variable.

iv. Student T-test

This measures the individual statistical significance of the estimated independent variables. At 0.05 level of significance, we reject null hypotheses for tests with probability estimates lower than 0.05 and conclude that they are statistically significant. On the other hand, we accept when probability estimates are above 0.05 and we conclude that there is no overall statistical significance.

Unit Root Test for Stationarity of Series

The most accepted method for the testing for unit root is Augmented Dickey-Fuller (ADF) test due to Dickey and Fuller (1979, 1981), and the Phillip-Perron (1988) and Phillips (1987). The tests are to be conducted with and without a deterministic trend (t) for each of the series. For the purpose of this study, the ADF unit root will be adopted and the general form of ADF test to be estimated by the following regression:

$$y_t = a_0 + a_1 y_{t-1} + \sum_{i=1}^n a_i \Delta y_i + e^t \quad (6)$$

$$\Delta y_t = a_0 + a_1 y_{t-1} + \sum_{i=1}^n a_i \Delta y_i + d_t + e^t \quad (7)$$

Where Y is the time series, t is the linear time trend, Δ is the first differential operator, a_0 is the constant, n is the number of lags in the dependent variable and e_t is the random error term.

Cointegration Test

For the cointegration test, the maximum likelihood test procedure established by Johansen and Juselius (1990) and Johansen (1991) will be used. In the test, if Yt is a vector of n stochastic variable then there exist a P-lag vector auto regression with Guassian errors. Johansen methodology takes its starting point in the vector auto regression (VAR) of order of P given by;

$$y_t = m + D y_{t-1} + \dots + D P y_{t-p} + e_t$$

Where y_t is an (nX1) vector of variables that are integrated of order commonly denoted (1) and is an e_t (nx1) vector of innovations. In order to determine number of co-integration vectors, Johansen (1989) and Johansen

and Juselius (1990) suggested two statistic tests, the first one is the trace test (trace). It tests the null hypothesis that the number of distinct cointegrating vector is less than or equal to q against a general unrestricted alternatives q=r the test calculated as follows:

$$| \text{trace} (r) = T \hat{\alpha} (\ln 1 - | \lambda_r) \tag{9}$$

$I = R + 1$

T is the number of usable observations, and the λ_r is the estimated eigenvalue from the matrix. The second statistical test is the maximum eigenvalue test (λ_{max}) that is, calculated according to the following formula; $\max(r, r+1) = T \ln (1 - \lambda_r + 1)$. The test concerns a test of the null hypothesis that there is r of co-integrating vectors against the alternative that r +1 co-integrating vector.

Granger Causality Test

The test of cointegration ignores the effect of the past values of one variable on the current value of the other variable. Granger causality test whether lagged values of one variable predict changes in another, or whether one variable in the system explains the time path of the other variables (Granger, 1969). The test for Granger causality is performed by estimating equations of the following form;

$$Dy_t + a_0 + \sum_{i=1}^m \hat{a}_{1,i} Dy_{t-i} + \sum_{i=0}^m \hat{a}_{2,i} Dx_{t-1} + dECM_{t-1} + e_t \tag{10}$$

$$Dy_t + b_0 + \sum_{i=1}^m \hat{b}_{1,i} Dy_{t-i} + \sum_{i=0}^m \hat{b}_{2,i} Dy_{t-1} + lECM_{t-1} + m_t \tag{11}$$

Where e_t and m_t are white noise disturbance terms (normally and independently distributed), m is the number of lags necessary to induce white noise in the residuals, and ECM_{t-1} , is the error correction term from the long-run relationship. x_t is said to Granger-cause y_t if one or more $a_{2,i}$ ($i = 1, \dots, m$) and d are statistically different from zero. Similarly, y_t is said to Granger cause x_t , if one or more $B_{2,i}$ ($i=1, m$) and l are statistically different from zero. A feedback or bi—directional causality is said to exist if at least $A_{2,1}$ and $B_{2,i}$ ($i=1, m$) or and B are significantly different from zero. If on the other hand, $A_{2,0}$ and $B_{2,0}$ are statistically significant.

DATA ANALYSIS AND RESULTS

Table 1: Presentation of Unit Root Test Results

Variable	ADF Statistic	MacKinnon	MacKinnon	MacKinnon	Prob.	Decision	Summary
Unit Root At Level							
M2_GDP	-0.582844	-3.646342	-2.954021	-2.615817	0.8612	1(0)	Not stationary
NFIA	-1.570171	-3.646342	-2.954021	-2.615817	0.3121	1(0)	Not stationary
NFPI	-1.710894	-3.646342	-2.954021	-2.615817	0.2672	1(0)	Not stationary
NOF	-1.231381	-3.646342	-2.954021	-2.615817	0.3281	1(0)	Not stationary
EXR	-0.454211	-3.646342	-2.954021	-2.615817	0.9823	1(0)	Not stationary
DS	-0.484090	-3.653730	-2.957110	-2.617434	0.8817	1(0)	Not stationary
Variable	ADF statistic	MacKinnon	MacKinnon	MacKinnon	Prob.	Decision	Summary
M2_GDP	-5.490029	-3.653730	-2.957110	-2.617434	0.0001	1(I)	Stationary
NFIA	-6.428630	-3.653730	-2.957110	-2.617434	0.0000	1(I)	Stationary
NFPI	-7.844886	-3.661661	-2.960411	-2.619160	0.0000	1(I)	Stationary
NOF	-10.37910	-3.653730	-2.957110	-2.617434	0.0000	1(I)	Stationary
EXR	-4.953322	-3.653730	-2.957110	-2.617434	0.0003	1(I)	Stationary
DS	-7.931302	-3.670170	-2.963972	-2.621007	0.0000	1(I)	Stationary

Source: Extracts from E-view

The time series properties of our data were examined by conducting the unit root test of stationarity using the Augmented Dickey-Fuller (ADF) test and co-integration test using Engle Grange co-integration procedure. The results for the stationarity test using Augmented Dickey-Fuller (ADF) test. For the variables to be stationary, it is expected that the T-ADF is greater than the chosen critical values. As it is shown in the table 4.2, all the variables are not stationary at level of differencing. However, at levels of the differencing shows that all the variables are stationary which led to the rejection of null hypotheses and the acceptance of alternate hypotheses, this implies that the variables are integrated in the order of

1(I).

Table 2: Presentation of Level Series Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
EXR	0.043279	0.013102	3.303320	0.0026
DS	0.005960	0.019541	0.305001	0.7626
NFIA	0.674047	1.797741	0.374941	0.7105
NFPI	-0.051413	0.147276	-0.349093	0.7296
NOF	0.101286	0.088485	1.144673	0.2620
C	9.131658	5.282836	1.728552	0.0949
R-squared	0.753514	Mean dependent var		15.81735
Adjusted R-squared	0.709498	S.D. dependent var		5.307990
S.E. of regression	2.860911	Akaike info criterion		5.098942
Sum squared resid	229.1747	Schwarz criterion		5.368300
Log likelihood	-80.68202	Hannan-Quinn criter.		5.190801
F-statistic	17.11933	Durbin-Watson stat		0.510064
Prob(F-statistic)	0.000000			

Source: Extracts from E-view

Interpretation of Results

From the result, the constant term is positive, this means that if other variable that contribute to the increase in financial market growth is zero, there are other variables that can contribute in a positive or negative way to the growth of Nigeria financial market. The adjusted R^2 shows that 70.9 percent variation on the growth of Nigeria financial market can be traced to variation on the capital flight indicators. The F-statistics and the probability indicate that the model is statistically significant which implies that the independent variables can predict changes on the dependent variable. The Durbin Watson statistic proved that presence of serial autocorrelation among the variables in the time series. Beta coefficient of the variables indicates that exchange rate variation have positive and significant effect on growth of Nigeria financial market, debt servicing have positive and no significant effect on growth of Nigeria financial market, debt servicing have positive and no significant effect on growth of Nigeria financial market, net official financing have positive and no significant effect on growth of Nigeria financial market, Nigeria foreign investment abroad have positive and no significant effect on growth of Nigeria financial market while net foreign

portfolio investment have negative and no significant effect on growth of Nigeria financial market.

Table 3: Unrestricted Cointegration Rank Test (Trace)

Hypothesized		Trace	0.05		
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**	
None *	0.791705	127.3437	95.75366	0.0001	
At most 1 *	0.681977	77.14209	69.81889	0.0116	
At most 2	0.473507	40.48190	47.85613	0.2057	
At most 3	0.347356	19.95332	29.79707	0.4260	
At most 4	0.178567	6.298192	15.49471	0.6603	
At most 5	0.000113	0.003621	3.841466	0.9509	
Normalized cointegrating coefficients (standard error in parentheses)					
M2_GDP	EXR	DS	NFIA	NFPI	NOF
1.000000	-0.210450	0.253164	23.31605	-1.438133	0.066975
	(0.02603)	(0.03946)	(3.14685)	(0.57103)	(0.18252)

Source: Extracts from E-view

From the unit root test in tables above, we noticed that return on equity, which is the dependent variable in the specified equations have the same order of integration with other independent variables, we then estimated their linear combination without the constant term and obtain their residual which was tested for unit root test of stationary using Augmented Dickey Fuller. From the tables above, the result shows the existence of co-integration among the variables because the residual obtained from the linear combination of none stationary series is stationary at both 5% and 1% critical values. Hence there is necessity to estimate an Error Correction Model (ECM) that is the model in equation number.

Table 4: Error Correction Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.520871	0.443352	1.174846	0.2563
D(M2_GDP(-1))	0.235196	0.282921	0.831312	0.4173
D(EXR(-1))	0.008270	0.022110	0.374015	0.7130
D(DS(-1))	-0.014479	0.014967	-0.967385	0.3469
D(NFIA(-1))	-1.997410	1.587384	-1.258303	0.2253
D(NFPI(-1))	-0.008904	0.164111	-0.054253	0.9574
D(NOF(-1))	0.050621	0.060791	0.832715	0.4166
D(M2_GDP(-2))	0.011402	0.322838	0.035319	0.9722
D(EXR(-2))	0.005996	0.024079	0.249009	0.8063

D(DS(-2))	-0.043268	0.018782	-2.303655	0.0341
D(NFIA(-2))	-0.294940	1.981601	-0.148839	0.8834
D(NFPI(-2))	0.003585	0.111980	0.032013	0.9748
D(NOF(-2))	0.060361	0.058907	1.024676	0.3199
ECM(-1)	-0.119418	0.167030	-0.714950	0.4843
R-squared	0.834855	Mean dependent var		0.380000
Adjusted R-squared	0.702685	S.D. dependent var		1.927762
S.E. of regression	1.925173	Akaike info criterion		4.450360
Sum squared resid	63.00692	Schwarz criterion		5.097967
Log likelihood	-54.98058	Hannan-Quinn criter.		4.661464
F-statistic	8.006212	Durbin-Watson stat		2.061523
Prob(F-statistic)	0.000015			

Source: Extracts from E-view

The Parsimonious error correction model shows that the independent variable can explain 83.4 % variation on the dependent variable, the model summary shows that the model is significant. However, the Durbin Watson statistics justifies that there is no autocorrelation problem among the variables in the time series. Also the ECM (-1) coefficient shows that 11.9 percent of the error produced in the previous period are corrected in the current period. The error term however is not statistically significant ECM (-1) is speed of adjustment towards equilibrium or error correction term. The independent variables can explain 70.2 percent variation on the dependent. The signs of the beta coefficient indicate the direction and the extent to which the independent variables affect the dependent variable.

Null Hypothesis:	Obs	F-Statistic	Prob.
EXR does not Granger Cause M2_GDP	32	0.91474	0.4127
M2_GDP does not Granger Cause EXR		0.97796	0.3890
DS does not Granger Cause M2_GDP	32	0.18653	0.8309
M2_GDP does not Granger Cause DS		3.70033	0.0380
NFIA does not Granger Cause M2_GDP	32	3.86985	0.0333
M2_GDP does not Granger Cause NFIA		0.40502	0.6709
NFPI does not Granger Cause M2_GDP	32	0.02586	0.9745
M2_GDP does not Granger Cause NFPI		2.21543	0.1286
NOF does not Granger Cause M2_GDP	32	0.21443	0.8084
M2_GDP does not Granger Cause NOF		1.43817	0.2550

Source: Extracts from E-view

In the granger causality test, the result shows that there is no causal relationship that exists between the dependent and the independent variables or the independent to the dependent variable except uni-directional causality from growth of Nigeria financial market to debt servicing and Nigeria investment abroad and the growth of Nigeria financial market. We therefore accept the null hypothesis, this contrary to the expectation of the result.

DISCUSSION OF FINDINGS

From the first variable which was established to examine the relationship between net official financing and the growth of Nigeria capital market. The estimated model found that net official financing from Nigeria balance of payment have positive but no significant effect on the growth of Nigeria financial market. The beta coefficient of the variable justifies that a unit increase on the variable can positively affect the growth of Nigeria capital market by 0.1 percent. The positive effect of net official financing on the growth of Nigeria capital market contradict our a-priori expectation. Theoretical, it is expected that capital flight have a negative effect on the outflow country. The positive effect of the variable can be traced to management of the Nigeria financial market such as various reforms and policies directed towards increasing the growth of Nigeria capital market. The positive effect of the variable contradicts the findings of African Security Exchange Fact Book, (2013) that Lusaka Stock Exchange recorded the highest foreign investors' participation as at 2012 with a ratio of 78.9%: 21.1% while Bourse de Tunis had the least rate of 6.3% (foreign) against 93.7% (local) investors, the findings of Fiador and Asere, (2012) found that due to illiquidity of the Ghanaian stock market coupled with limited stocks in the market. Ekineh (2003) observed the volatility of investment climate in Nigeria within the period of 1987 to 1998 which was highly unfriendly, leading to a spate of divestment even by the nation's traditional and long standing investors, who perhaps have moved to more favourable environment. Although the Nigerian capital market was completely deregulated in 1993, foreign portfolio inflow displayed adverse net flow up to 1998 with a reversal in 1999.

From the second variable which was established to examine the relationship between debt servicing and the growth of Nigeria capital market. The estimated model found that debt servicing has positive but no significant effect on the growth of Nigeria financial market. The beta coefficient of the variable justifies that a unit increase on the variable can positively affect the growth of Nigeria capital market by 0.005 percent. The positive effect of debt servicing on the growth of Nigeria capital market contradict our a-priori expectation. Based on

theories, it is expected that debt servicing have a negative effect on the outflow country. The positive effect of the variable can also be traced to management of the Nigeria financial market such as various reforms and policies directed towards increasing the growth of Nigeria capital market. The positive effect of the variable contradict the findings of Ozurumba, (2012) that a robust, positive and significant relationship exist among these variables and unidirectional causality running from stock market returns to foreign portfolio investment, Adenuga, (2010) that measures of real capital flight from Nigeria based on the portfolio choice approach and was subsequently subjected to econometric tests and the findings of Ayadi (2008) that capital flight is driven by the interest rates deferential both in the short and in the long run and that, exchange rate depreciation significantly increases capital flight in Nigeria.

From the third variable which was established to examine the relationship between net foreign private investment and the growth of Nigeria capital market. The estimated model found that net foreign private investment has negative but no significant effect on the growth of Nigeria financial market. The beta coefficient of the variable justifies that a unit increase on the variable can negatively affect the growth of Nigeria capital market by 0.05 percent. The negative effect of net foreign private investment on the growth of Nigeria capital market confirms our a-priori expectation. The negative effect of the variable confirm the findings of Ozurumba, (2012) that a robust, positive and significant relationship exist among these variables and unidirectional causality running from stock market returns to foreign portfolio investment, Adenuga, (2010) that measures of real capital flight from Nigeria based on the portfolio choice approach and was subsequently subjected to econometric tests and the findings of Ayadi (2008) that capital flight is driven by the interest rates deferential both in the short and in the long run and that, exchange rate depreciation significantly increases capital flight in Nigeria.

From the fourth variable which was established to examine the relationship between Nigeria naira exchange rate depreciation and the growth of Nigeria capital market. The estimated model found that Nigeria naira exchange rate depreciation has positive and significant effect on the growth of Nigeria financial market. The beta coefficient of the variable justifies that a unit increase on the variable can positively affect the growth of Nigeria capital market by 0.4 percent. The positive effect of the variable can be traced to effect foreign exchange management strategies. It could be recalled that Nigeria has over 10 exchange rate policies within the period of 20 years. Some are re-introduced after being abolished for few years. The positive effect of net foreign private investment on the growth of Nigeria capital market confirms our a-priori expectation. The

positive effect of the variable contradict the findings of Ozurumba, (2012) that a robust, positive and significant relationship exist among these variables and unidirectional causality running from stock market returns to foreign portfolio investment, Adenuga, (2010) that measures of real capital flight from Nigeria based on the portfolio choice approach and was subsequently subjected to econometric tests and the findings of Ayadi (2008) that capital flight is driven by the interest rates deferential both in the short and in the long run and that, exchange rate depreciation significantly increases capital flight in Nigeria.

From the fifth variable which was established to examine the relationship between Nigeria investment abroad and the growth of Nigeria capital market. The estimated model found that Nigeria investment abroad has positive and significant effect on the growth of Nigeria financial market. The beta coefficient of the variable justifies that a unit increase on the variable can positively affect the growth of Nigeria capital market by 0.6 percent. The positive effect of Nigeria investment abroad on the growth of Nigeria capital market confirms our a-priori expectation. The positive effect of the variable contradict the findings of Ozurumba, (2012) that a robust, positive and significant relationship exist among these variables and unidirectional causality running from stock market returns to foreign portfolio investment, Adenuga, (2010) that measures of real capital flight from Nigeria based on the portfolio choice approach and was subsequently subjected to econometric tests and the findings of Ayadi (2008) that capital flight is driven by the interest rates deferential both in the short and in the long run and that, exchange rate depreciation significantly increases capital flight in Nigeria.

CONCLUSION AND RECOMMENDATIONS

Conclusion

This study examined the effect of capital flight on the growth of financial market, time series data were sourced from the publications of Central Bank of Nigeria. The estimated model proved that 70.9 percent variation on the growth of Nigeria financial market can be traced to variation on the capital flight indicators. The study conclude that exchange rate depreciation have positive and significant effect on the growth of Nigeria financial market. That debt servicing has positive and no significant effect on the growth of Nigeria financial market. That net private investment has negative and no significant effect on the growth of Nigeria financial market. That net official financing has positive and no significant effect on the growth of Nigeria financial market while Nigeria investment abroad have positive and significant effect on the growth of Nigeria financial market. Thus the study recommends as follows:

1. The existence of debt in a country that is trying to realize improved levels of capital investment will always be a reality. Debt is crucial in stimulating the economy in the event of shocks to the domestic economy. The inability of a country to pay off debt sets off a chain of events that send a country into economic turmoil, a good reference in this case may be Nigeria. The government is therefore recommended to always be engaging in the borrowing of funds for capital investments that are expected to help the country's long term vision.
2. To effectively hold up capital flight from Nigeria, there is a need to ensure that the stock market is sound by promoting stability in the macroeconomic environment to enhance investors' confidence and attract both domestic and foreign investors to hold their equity investments in the Nigerian Stock Market.
3. With the long run shock to the all share index exerting a high level of influence on capital flight from Nigeria, it is needful to moderate share prices to soothe the investment preferences of investors in the stock market as this will help accelerate investment inflow and mitigate the rate of capital flight from Nigeria.
4. There is a need to improve the infrastructural facilities in the Nigerian Stock Market to match or even beat what is obtainable abroad. As such, foreign investors will be attracted to the Stock Market and the incidence of capital flight will be drastically reduced.
5. The research recommends that the government should provide an attractive and conducive environment for investors who will enable them to stay back in Nigeria and invest more. It is more important to make the domestic economy more attractive for the investors by creating a wider menu of domestic financial assets on which domestic capital can be assessed and invested at a lower rate compared to foreign financial instruments.

REFERENCES

- Adenuga, A. O. (2010). Stock market development indicators and economic growth in Nigeria (1990- 2009): Empirical investigations. Central Bank of Nigeria Economic and Financial Africa. Institute of developing economics V.R.F series (382).
- African Security Exchange Fact Book (2013). Available at <[https://www.proshareng.com/report/Regulators/African-Securities-Exchanges-Association-\(ASEA\)---2013-Year-Book/5776](https://www.proshareng.com/report/Regulators/African-Securities-Exchanges-Association-(ASEA)---2013-Year-Book/5776)> Retrieved on 20 May 2021.
- Ajayi, S. I. (1992). *An economic analysis of capital flight from Nigeria (1993)*. World Bank.
- Ajayi, S. I. (1995). Capital flight and external debt in Nigeria. Research Paper 35, African Economic Research Consortium (AERC), Nairobi, Kenya.
- Ajayi, S. I. (2005). Managing capital flight: Issues and challenges. A paper presented at a Seminar on Capital Flows and Economic Transformation in Nigeria, at the Central Bank of Nigeria (CBN's) 5th Annual Monetary Policy Conference. CBN Conference Hall, Abuja, November 10-11.
- Akani, W. H. (2013). Analysis of the effects of capital flight on economic growth: Evidence from Nigerian economy (1980 – 2011). *European Journal of Business and Management*, 5(17), 21-32.
- Ayadi, F. S (2008). Econometric analysis of capital flight in developing country. 8Th Global Conference on Economics 978-09742114-5-9.
- Ayodele, T. D. (2014). Capital flight and the Nigerian economy: An empirical reassessment. *Information and Knowledge Management*, 4(4), 7-13.
- Al-Fayoumi, N. A., Al Zoubi, M. S. & Abuzayed, B. M. (2012). The determinants of capital flight: evidence from MENA countries. *The International Business & Economics Research Journal (Online)*, 11(1),34-51.
- Ali, A., & Walters, B. (2011). On the Causes of Capital Flight from Sub Saharan Africa. In Central ForThe Study of African Economies. *The International Business & Economics Research Journal (Online)*, 1(1),44-61.
- Boyce, J. K., & Ndikumana, L. (1992). Capital flight from Sub-Saharan African countries: Updated Estimates, 1970-2010. Political Economy Research Institute University of Massachusetts, Amherst October 2012.
- De Boyrie, M. (2011). Money laundering and income tax evasion: The determination of optimal audits and inspections to detect abnormal prices in international trade. *Journal of Financial Crime*, 12(2), 123–130.
- Cervena, M. (2006). The measurement of capital flight and its impact on long-

- term economic growth: Empirical Evidence from a Cross-Section of Countries. Bratislava.
- Conesa, E. R. (1987). The causes for capital flight from Latin America. Inter-American Development Bank.
- Cuddington, J. T. (1986). Capital flight: Estimates, issues, and explanations. International Finance Section, Department of Economics, Princeton University Princeton.
- Deppler, M. & Williamson, M. (1987). Capital flight: Concept, measurement and issues. In *Staff Studies for the World Economic Outlook*. Washington: International Monetary Fund.
- Dickey, D. W & Fuller, W. A. (1981). Distribution of the estimator for autoregressive time series with a unit root. *Journal of the American Statistical Association*, 74(366a), 427-431.
- Dim, C., & Ezenekwe, U. (2014). Capital flight to savings gap in Nigeria: an assessment of the socio-economic determinants. *International Journal of Economics and Finance*, 6(2), 75.-98.
- Ekineh, D. (2003). *Deepening the Nigerian Capital Market: Regulatory, Supervisory and Operational Imperative in a Global Financial Environment*. Abuja: Security and Exchange Commission.
- Erbe, S. (1985). The flight of capital from developing countries. *Intereconometrics*, 6(6), 268–75.
- Fiador, V. O. & Asare, F. J. (2012). Cross-border investments, currency risks and portfolio returns: The case of Epack – Ghana international business research. *Canadian Center of Science and Education*, 6(1), 609-626.
- Gibson, (1993). Testing a flow model of capital flight in five European countries, *The Manchester School*, 61(2), 144-66.
- Granger, C. W. (1969). Investigating causal relations by econometric models and cross-spectral methods. *Econometrica*, 37(3), 424-438.
- Goswami, M. & Sharma, S. (2011). The development of local debt markets in Asia: An assessment. [IMF Working Papers](#) 11(132).
- Gusarova, V. (2009). The impact of capital flight on economic growth. Kyiv school of economics. Retrieved from http://www.kse.org.ua/uploads/file/Thesis_Gusarova.pdf (18 February, 2020).
- Harrigan, J., Mavrotas, G. & Yusop, Z. (2002). On the determinants of capital flight: A new approach. *Journal of the Asia Pacific Economy*, 7(2), 203–241.
- Johansen, S. & Juselius, K. (1990). The full information maximum likelihood procedure for inference on cointegration with application to the demand. *Oxford Bulletin of Economics and Statistics* 52, 168-210.

- Juselius, K. (1990). Maximum likelihood estimation and inference on cointegration – with applications to the demand for money. *Oxford Bulletin of Economics and Statistics*, 52(2), 169–210.
- Khan, M. S. & Hague, U. N. (1987). Foreign borrowing and capital flight: A formal analysis. *IMF Staff Paper*, 32(4), 606 – 28.
- Khan, M. (1989). Flight of capital from Pakistan. *Pakistan and Gulf Economist*, 3(6), 21–27.
- Lessard, D. R., & Williamson, J. (1987). Capital flight and Third World debt (Washington, DC, Institute for international Economics). *Journal of International Money and Finance*, 19(1), 73–92.
- Mohamed, S. & Finnoff, K. (2004). Capital flight from South Africa, 1980 to 2000. Prepared for the TIPS/DPRU Conference: The Challenge of Growth and Poverty: The South African Economy Since Democracy, 8-10 September 2003, Indaba Hotel, Johannesburg.
- Morgan Guaranty Trust Company. (1986). LDC capital flight. *World Financial Markets*, 4(6), 13–15.
- Ndikumana, L. & Boyce, J. K. (2003). Public debts and private assets: explaining capital flight from Sub-Saharan African countries. *World Development*, 31(1), 107–130.
- Ngeno, N. K. (2000). Capital flight in Kenya. In Ajayi, I. & M. Khan (eds). *External Debt and Capital Flight in Sub-Sahara Africa*. Washington, D. C.: The IMF Institute, 300-321.
- Olawale, O., & Ifedayo, O. M. (2016). Impacts of capital flight on economic growth in Nigeria. *International Journal for Innovation Education and Research*, 3(8), 560-670.
- in Nigeria. *Journal of Business and Management*, 2(4) 10-19.
- Onuorah, A. C. (2013). Impact of macroeconomic indicators on the performance of foreign portfolio investment in Nigeria. *European Journal of Business and Management*, 8(60), 890-99.
- Ozurumba, A. B. (2012). The impact of stock market returns on foreign portfolio investment in Nigeria. *Journal of Business and Management*, 2(4) 10-19.
- Pastor, M. (1990). Capital flight from Latin America. *World Development*, 18(1), 1–18.
- Perron, P. (1997). The great crash, the oil price shock, and unit root hypothesis. *Econometrica*, 57(6), 1361-140.
- Raheem, I. D. (2015). Re-examining the determinants of capital flight and the potential benefits of capital flight repatriation for SSA. *African Journal of Business and Economic Research*, 10(1), 55–94.
- Sheets, N. (1995). Capital flight from the countries in transition: Some theory

- and empirical evidence. *International Finance Discussion papers*, 514. Washington, DC: Board of Governors of the Federal Reserve System.
- Škare, M., & Sinkovi , D. (2013). The role of equipment investments in economic growth: a co-integration analysis. *International Journal of Economic Policy in Emerging Economies*, 6(1), 29–46.
- Walter, I. (1987). The mechanisms of capital flight. Donald R. Lessard and J. Williamson, *Capital Flight and Third World Debt*. Washington, DC: Institute for International Economics.
- World Bank. (1985). World Bank Report, Washington, DC: World Bank. *Journal of Business and Enterprise Development*, 7(17), 67-89.