

Analysis of the Effects of Capital Flight on Economic Growth: Evidence from Nigerian Economy (1980 – 2011)

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Abstract

Sequel to the severity of the effects of capital flight on an economy and in an attempt to limit capital flight from the Niger Delta region of Nigeria and considering the monoculture nature of the economy in 2008, an amnesty programme between the Federal Government of Nigeria and the Niger Delta Militant was signed in 2009. This has come and gone yet capital flight prevails. This study therefore, made attempt to investigate into the determinant, measurement and impact of capital flight on the economic growth in Nigeria using ordinary least square technique, multiple regression and descriptive statistics. Time series data from 1980 to 2011 were also employed. The quantitative results reveal that, large capital outflows from the Nigerian Niger Delta Region is accounted for by political instability, high fiscal deficits, high interest rate and high profile external debt servicing GDP ratio, therefore, economic growth and development in Nigeria can be achieved and sustained through alleviation of capital flight. We recommend for good governance, full implementation of fiscal discipline, attitudinal change in the management of National economy and enactment of law-protecting Nigerian involved in capital flight before now to enable them repatriate their stolen money back home and investment them in the real sector of the economy.

Keyword: Capital flight, Economic growth, attitudinal change

Introduction

Historically, all over the globe including Nigeria, just as the dreaded Acquired Immune Deficiency Syndrome (AIDS) and cancer constitute serious problems for the medical science and scientists, so does capital flight constitute a problem not only to economist, policy decision-makers, government, financial analyst but the social sciences, Momodu, Akani, Uzobor (2009). Judging from the past, since 1960 when Nigeria got her independence, successful government have tried to put in place laudable economic reforms, policies, programmes and initiative's such as National Council on Privatization (NCP), the indigenization decree as amended 1999, the Nigeria Investment Promotion Commission (NIPC), the bureau of public enterprises (BPE), the Economic and Financial Crime Commission Act of 2004 (EFCC), the independent and other offences related commission (ICPC) and the National Economic Empowerment and Development Strategies (NEEDS) etc are aimed at attracting the free flow of foreign capital across national frontiers which in turn allow capital to attain the highest rate of returns on investment. Indeed, Nigeria with abundant human and natural resources, the sixth largest oil producer with over 3.5 million barrels of crude oil output per day and currently with a foreign reserve of over \$46 billion is deemed to be one of the most corrupt and poorest nations in the world according to Transparency International (2010). Precisely in July 2012, according to a survey by transparency international, Nigeria occupies 128 positions in corrupt list out of a total of 186 countries scoring a total of 2.71%. Nigeria is also one of the nations in the world were oil producing communities lack infrastructural and social amenities such as good schools, affordable health care facilities, roads, good pipe borne water and high rate of unemployment. Similarly, the Nigeria economy has no doubt, undergone various changes; socio -political and economical as well as in its financial structure as a result of variation in government macroeconomic activities. Compared with past years, it is difficult to state categorically that macroeconomic environment of Nigeria is stabilizing – judging from the rate of corruption, upward movement of inflation resulting in high cost of goods and services, low level of technological advancement poor human development indices, low investment/ GDP rates, low standard of living resulting to low per capital income, youth social vices, militancy in the Nigeria's Niger Delta region, overdependence on foreign institutions, poor infrastructural facilities, erratic power supply and above-all low level of capital inflow. Hence it is believed to be at high risk market for investment due to the mono-culture nature of the Nigerian economy. Akani, Uzobor and Madume (2009). Therefore, all these were as a result of capital outflow which represent a lost of potential for economic growth and development in the contemporary literature of economics, there has been increasing attention to the notion of capital flight. Many analysts have attributed sluggish economic growth and persistent balance of payment deficits in most developing countries to capital flight, Ajayi (1996).

In addition, capital flight has adverse consequences for developing countries. First, the loss of capital through capital flight erodes the domestic tax base and therefore affects income redistribution. Secondly, it reduces a

bank's ability to create money for investment projects. Most importantly, capital flight contributes to the distribution of income from the poor to the rich. Pastor (1990), Ajayi (1997). That is, capital flight is viewed as diversion of domestic savings away from financing domestic real investment and in favour of foreign financial investment. As a result, the pace of growth and development of the economy is retarded from what it otherwise would have been. Capital flight is defined as a short term private capital outflow that responds not only to political crisis but also to economic policy failure. Nyong (2003) noted that, capital flight should be seen as any form of abnormal capital outflows from a developing country by economic agents (private or public with the intention of concealing such flow). This is abnormal because one expects capital to flow from resource surplus to scarce countries as suggested by capital arbitrage theory. Theory of the firm and product cycle theory; such abnormal capital outflow are responsive to political pressures at home coupled with domestic economic policy distortions such as heavier taxes, capital control and overvaluation of the exchange rate. Capital flight is seen therefore to have taken various forms, including false bottom suitcases stocked with cash or travelers cheques (currency smuggling), trade taking (over invoicing of imports and under invoicing of exports). Electronic fund transfers from private banking services, declaring of un-existing foreign debts and commission and agents' fee. Other components of capital flight include overseas investment, emanating from illegal activities like drug trafficking, corruption, illicit activities particularly those related to tax evasion and exchange rates controls. However, in Nigeria, since the 1980's, 1990's and 2000's the problem of capital flight has received substantial attention given the downward side of the economy and with the global financial crisis during the period, in March 2010 capital outflow from the Nigerian economy rose to \$1.740 billion, also this year alone by records available to CBN (2010) between January 22nd to 5th May 2010 the total of \$1.383 billion went out in a week as capital flight and in 2013.

Statement of the Problem

Over the years, there has been an increasing concern for capital flight in Nigeria in relation to economic growth and development, and general research work has been carried out on this problem. At the same time the prospect for solving this problem remain grim. Poor level of capital inflows reduces the level of economic growth and would be said to be a disincentive to economic development in any economy, High level of capital inflows encourages capital formation, which is very essential for economic growth, which enhances substantial level of investment and in turns encourages high level of returns. When there is capital outflow, it is money that is "fleeing" from the country. In fact, increase capital outflow implies a potential lost for economic growth and development especially in a country that is heavily dependent on external financing and / or international aids or support.

The Nigerian government in the past has initiated policies and programmes aimed at boosting foreign capital inflows and harness its proper contribution to the overall economy. These includes, the establishment of Nigerian Investment Promotion Commission (NIPC), the establishment of the Bureau of Public Enterprises (BPE), the setting up of National Council on Privatization (NCP), Economic and Financial Crime Commission (EFCC) and other anti-regulatory agencies and economic / budgetary reforms are also targeting at promoting inflows of capital for economic growth and development of the nation's economy. Yet these lofty objectives have turned out to be a mirage. The problem is even more severe today as attention has shifted in favour of mono-cultural economy based on oil. It is against this backdrop that this study sets to find out the macroeconomic effects of capital flight within the context of economic, socio-economical and other functions. On the Nigerian economy and also proffering workable solution inspite of several government efforts in attracting foreign capital inflows has not played its expected role in economic transformation in particular and economic development of the nation in general.

Objectives of the Study

The overall objective of this research is to critically examine the impact of capital flight on economic growth in Nigerian Economy. Specifically, the other objectives include;

1. To analyze the economic and other factors responsible for capital flight;
2. To identify the major consequences of capital flight on the domestic economy;
3. To examine the linkage between capital flight and the Nigerian economy.
4. To identify the financial implications of persistence capital flight in the nation's macro economy.

Research Questions

In the course of the research, we shall answer the following questions.

1. What are the Economic and other factors responsible for capital flight in Nigeria?
2. What are the consequences of capital flight in the Nigerian economic growth?
3. What are the linkage if any between capital flight and the Nigerian economy?
4. Are there any financial implications of persistence capital flight in the Nigerian economic growth?

Research Hypotheses

To have an effective research, a test will be carried out in order to give the research work a clear understanding.

The following hypotheses shall be tested:

Ho₁: There is no significant relationship Economic and other factors responsible for capital flight and the Nigerian economy.

Ho₂: There is no significant relationship between consequences of capital flight and growth in the Nigerian economy.

Ho₃: There is no significant relationship between persistence financial capital flight and economic growth in Nigerian Economy.

Ho₄: There is no significant relationship between linkages in capital flight and Nigeria economic growth.

Review of Empirical Literature

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.

Theoretical Literature

Four main theories have been identified in the area of capital flight. These include;

- (1) The investment diversion thesis
- (2) Debt – driven capital flight thesis also called debt-overhang thesis
- (3) Tax – depressing thesis and
- (4) Austerity generating thesis.

The 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 out come 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

reduction 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.

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. This is the so-called residual method. It has been the most widely used measure in the available literature. The method acknowledges the difficulties of separating abnormal from normal capital flight. Several variations on the measure have appeared in the literature, among them World Bank (1985), Morgan Guaranty (1986).

Second, some authors measure capital flight by adding up net errors and omissions and non-bank private short-term capital outflows Gibson (1993) as cited in Isu (2002). This measure reflects the idea that capital flight goes unrecorded, due to the illegal nature of these capital movements. It is argued that the unrecorded capital movements appear in the net errors and omissions. Moreover, by concentrating on short-term flows, medium and long-term outflows are excluded, which according to the author are more normal in character Gibson (1993). This measure is referred to as the **hot money method**. Capital flight measured in this way refers to short-term movements of capital, whereas the residual method additionally takes into account capital outflows that are more long-term in nature.

Third, the capital flight measure proposed by Dooley (1986) also aims at measuring abnormal or illegal capital outflows. Dooley defines capital flight as all capital outflows based on the desire to place assets beyond the control of domestic authorities, excluding normal outflows. Consequently, this measure includes all capital outflows that do not receive and/or register interest payments. However, Sheets (2005) shows that the calculation of capital flight as proposed by Dooley (1986) is partly based on the residual approach, although he uses a different concept of capital flight. Therefore, the Dooley method gives rather identical magnitudes of capital flight as compared to those for the residual method.

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 favourable 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. The sale values of these are usually high in foreign currency. Usually, governments tend to restrict or prohibit imports and exports of any such items. Such international transfers therefore usually involve smuggling, with its inherent risks.

The fourth mechanism of transfer is through false invoicing of trade transactions, where export and import invoices are either issued that are either different from agreed prices or faked. Estimates of this type of transfer are known to have been undertaken by Naya and Morgan (1974). Recent analysis by Sheets (2005) shows that there can be systematic over-invoicing and under-invoicing of exports or imports. The expectation in the case of capital flight is that exporters will systematically engage in under-invoicing while importers over-invoice and in the process derive foreign exchange that is outside the control of the foreign exchange authority. The procedure for doing this is that the foreign supplier issues an invoice that is greater than the agreed price of the product. The importer on receipt of the necessary foreign exchange remits it to the foreign supplier who then keeps the difference in a bank for the use of the importer. On the export side, the invoice issued is for an amount in foreign currency that is less than the agreed price. The foreign buyer places the difference between the invoice price and the agreed price in a foreign bank account of the exporter and remits the invoice amount. It is the amount of money that is surrendered to the Central Bank for local currency at the prevailing official exchange rate. To measure the magnitude of invoice faking, partner country analysis is generally undertaken. Capital flight through false trade invoicing is generally applicable to the local affiliates of multinational companies, and owners of business engaged in international trade. It is known in some cases that false invoicing can be multiplied through practice called round tripping. The process is one in which foreign currency assets are accumulated abroad at the official exchange rate via trade mis-invoicing (via, over or under-invoicing). Some of the assets are repatriated in the form of cash or other monetary instruments, which are converted to local currency at a premium in the local parallel market. Whatever gain is made in local currency can then form the basis for further false-invoiced transactions. This in effect is arbitrating the official and parallel-market exchange rate Walter (1986).

A fifth method of transferring money abroad is through the black market, until recently a thriving source of transferring funds abroad. The amount of money transferred this way is difficult to estimate.

A sixth vehicle through which capital can be transferred overseas is through commissions and agents' fees, which are paid by foreign contractors into the foreign bank accounts of residents.

The Determinants of Capital Flight

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 apart 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. Although a multitude of determinants are found in literature, the following main factors will be discussed: (i) external debt; (ii) macroeconomic instability; (iii) political instability; (iv) rate of return differentials; (v) capital inflows; (vi) stock of capital flight; and (vii) public policy uncertainty. These determinants have a direct influence on portfolio decisions of individuals and most of them are closely interwoven.

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, (i) debt-driven capital flight; (ii) debt fuelled capital flight; (iii) flight-driven external borrowing; and (iv) flight fuelled external borrowing. Conesa (2008) 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.

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.

Measures of Economic Growth

Knowledge of five measures of economic growth is needed for our purposes:

1. Gross national product (GNP) equals total national consumption or production (C) of all final goods and services plus gross Investment (I_G).

$$GNP=C+I_G$$

2. Net National product (NNP) equals GNP minus depreciation (D).

$$NNP=C+I_G - D.$$

(Depreciation is the loss in value of all equipment and buildings due to wearing out and form obsolescence during a time period, such as a year; it is subtracted from GNP to provide a more valid measure of economic growth.)

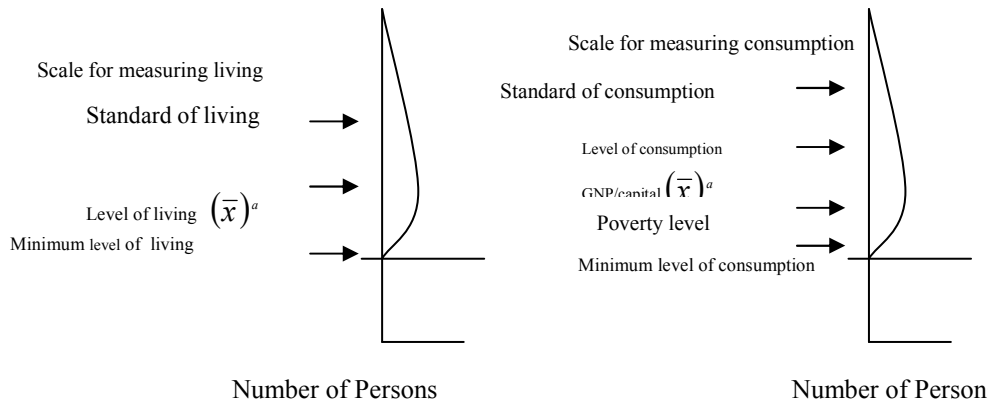
3. Per capita income equals GNP divided by population.
4. Disposable personal income equals NNP minus personal and corporate taxes and minor adjustments.
5. Personal consumption expenditure equals disposable personal income minus savings.

Gross national product is obtained by estimating for one year either all final goods and services produced in each sector or the total consumption of these goods and services by final purchasers, plus all investment (gross investment) made in each- sector of the economy. Recall that the term investment refers to additions to the capital stock of an economy that are used to increase production and consumption in later time periods. Investment consists of such things as new machinery and equipment for farms and factories, and new buildings for industry and consumers. Gross national product, although commonly used to estimate an economy's performance, overstates increases in production, for the value of the stock of national capital (past investment) declines as it becomes worn out. Therefore, an estimate of the annual depreciation in the value of the national capital stock is required to obtain a measure of net change in the stock of capital in a nation. When gross investment is adjusted for depreciation, net national product is obtained. Per capita income is often calculated by dividing -gross national product by population, because gross national product is a more commonly available figure. This rate of per capita income change is approximately the same as the rate of change of net national product per capita, a more accurate estimate of per capita income. Both gross and net national products include consumption expenditures of government units and private citizens. To obtain an estimate of the resources controlled by individuals in the private sector, two measures are useful. One, disposable personal income, is an estimate of the resources controlled by private consumers. It is calculated by subtracting personal and corporate taxes and minor adjustments from net national product. Personal taxes plus corporate taxes in market economies provide a measure of the amount of resources used by the public sector for government functions such as social services, police, judicial services, defense, and transfers like old age pensions. The fifth measure, personal consumption expenditure, estimates what individuals spend after they have put aside savings.

Measures of Development

Many people are uncomfortable with measures of human welfare that are limited to the consumption of goods and services. "Ideally one would like some overall index (or measure) of human well-being which would overcome the weighting problem implicit in partial indexes". This measure would indicate the quality of life experienced. Davis (1945) has illuminated the issues in the measurement of human welfare by comparing two scales of measurement, one for the "level of living" and the other for the "level of consumption".

Figure 1.1: Relations between Standard of Living, Level of Living, Standard of Consumption, and Level of Consumption



Source Based on Davis 1945.

The levels of consumption and living are averages of what is actually experienced. These measures can include a factor describing the shape of the distribution. Level of consumption is often estimated by GNP/capita income or by NNP/capita income. Level of consumption is the amount of goods and services in the public and private sectors plus savings, which people experience as estimated by GNP or NNP per capita. The standard of consumption, in contrast, is the level of consumption earnestly desired and eagerly striven for by a social group, such as the Consumption level achieved by the upper- middle class. This level can be considered a target of consumption of the society. The parallel scale measures quality of life. Hence level of living is the ideal that would provide an overall per capital index of “the whole of human activity as actually experienced by the individual or group”. In a similar fashion, standard of living is understood of a content of living which an individual or group earnestly seek and strives to obtain;... to preserve, if threatened; to regain, if lost.

The apriori expectation is that all the variables would be inversely correlated because increase in independent variable will naturally be expected to lead to decrease in the dependent variable.

Data Presentation, Analysis and Discussions

In this study, effort will be made to present, analyzed and discuss the data collected in order to ascertain, if there is relationship between the dependent variable, Gross Domestic Product (GDP) and independent variables, Capital flight represented by total outflows and errors and omissions. This research work will examine the standard error of the intercept and parameters, the determination of the ordinary least square regression line. The multiple regression (R^2), T-Test and F*- ratio distribution will be used to determine its goodness to the study which will automatically aid in explaining the data characteristics.

Data Presentation

The researcher employed secondary data obtained from Central Bank of Nigeria Statistical Bulletin, below is a tabular presentation of the data from 1980 – 2011 and we begin with descriptive analyses of the data in respect to GDP, Capital Flight represented by total outflows, Errors and omissions using Line graph and Bar chart.

Fig. 1 Graph showing the relationship between Gross Domestic Product, Outflow and Error & Omission (1980 – 2011)

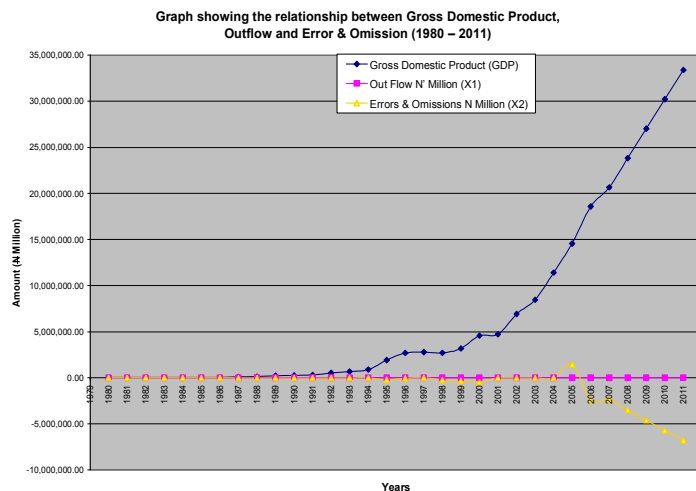
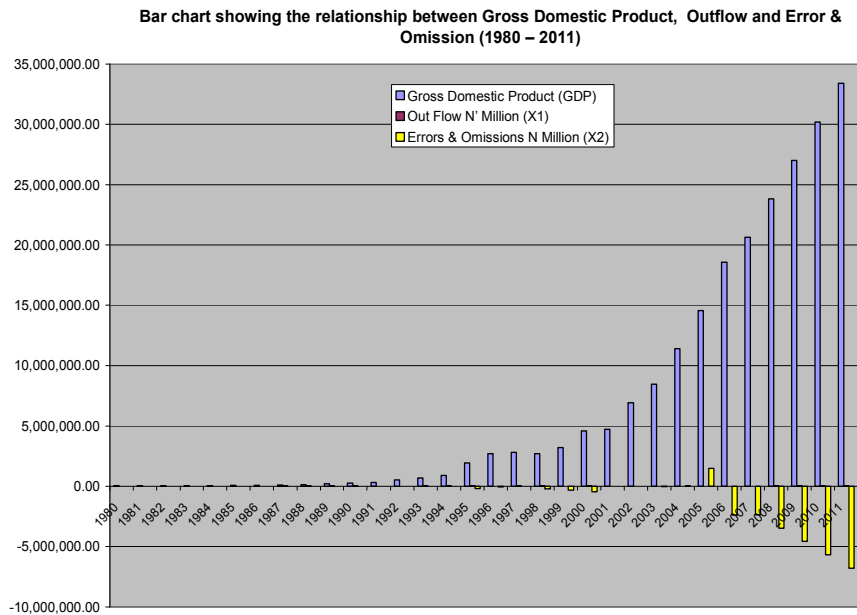


Fig. 2



From the line graph and bar chart shown above, which represents the Gross Domestic Product (GDP), capital flight represented by outflows, Errors & Omission over a period of 33 years (1980 – 2011), it can be observed that the value of GDP at current market price stood at 49,632.3, 49,619.7, 49,069.3, 53,107.4 and 59,622.5 for 1980, 1981, 1982, 1983 and 1984 respectively. Also in 2004, 2005, 2006, 2007 and 2008, the values of the GDP show an increase from 11,411,066.9, 14,572,239.1, 18,572,239.1, 20,657,317.7 and 23,842,170.7 accordingly. The values for capital flight represented by outflows which shows a higher figure of 13,106.0, 10,914.5, 9,630.5 and 8,355.6 in 2000, 1990, 1993 and 1998. The Errors & Omission values fluctuate between -50.5, 48.1, 100.3, 100.9 and 138.9 in 1980 to 1985. It also shows a sharp drop to -3,482,276.4 in 2008, also in 2010 and 2011, it values stood at 8396.2, 12429.9, respectively. The increases in GDP, may be attributed to several economic regulatory and budgetary reforms implemented in the country within the period under study, while drops in outflow in 2003, 2004, 2005, 2006 and 2007 which stood at 475.1, 155.7, 202.4, 263.1 and 328.8 may be attributed to the campaign for promotion of foreign direct investment, also the debt relieved and forgiveness anchored by former president Olusegun Obasanjo to ensure the Nigeria exist from Paris club may also be immensely relevant and in 2010 and 2011 the value of GDP rose to 30,211,876.7 and 33,396,729.7 which may be as a result of economic transformation agenda and the amnesty programme of the Federal Government of Nigeria in 2008 and 2009 respectively.

In line with our hypotheses, the model is mathematically specified in the following functional form.

$$Y = f(X_1, X_2) \dots \dots \dots \text{Eqn (1)}$$

Where Y = Gross Domestic Product (GDP) at current market prices

X₁ = OutFlow

X₂ = Errors & Omission

f = Functional Notation

Transforming eqn (i) into a testable form, we obtained the following regression equation;

$$Y = b_0 + b_1 X_1 + b_2 X_2 + u \dots \dots \dots \text{Eqn (2)}$$

Where b's = Regression coefficients

U = unexplained variation (Error term)

The data on which our analysis is based is presented in table 1 above.

Multiple Regression Model Summary

$$\text{GDP} = b_0 + b_1 \text{outflow} + b_2 \text{Err\&Om} + U \dots \dots \dots \text{Eqn. (3)}$$

$$\text{GDP} = 101508.01 + 25.394 + 3.187 + U \dots \dots \dots \text{Eqn. (4)}$$

Std Error = 1893.07 11.705 0.097

(t*) = 0.536 2.170 32.762

R = 0.995 ⇒ 99.5%

R² = 0.990 ⇒ 99.0%

\bar{R} = 0.989 ⇒ 98.9%

F* = 828.317

Hypotheses Testing (T-Test)

$$H_0: \hat{\beta}_0, \hat{\beta}_1 = 0$$

$$H_1: \hat{\beta}_0, \hat{\beta}_1 \neq 0$$

For ($\hat{\beta}_0$) $t_{cal} = 0.536$, t_{tab} at 5% = 2.048

Since $t_{cal} < t_{tab}$, we accept the null hypotheses, that is β_0 is not statistically significant at $n = 30$ and 5% level of significance.

For ($\hat{\beta}_1$) $t_{cal} = 2.170$, t_{tab} at 5% = 2.0484

$$t_{cal} = 32.762, t_{tab} \text{ at } 5\% = 2.0484$$

$$t_{cal} = 7.949, t_{tab} \text{ at } 5\% = 2.0484$$

Therefore, since $t_{cal} > t_{tab}$, we reject the null hypotheses, that is, β_1 is statistically significant at $n = 30$ and 5% level of significance

For F^* -ratio = $F^*_{cal} = 828.317$, $t_{tab} = 2.56$ at 5%, $n = 30$.

Therefore, since the $F^*_{cal} > F^*_{tab}$, we reject the null hypothesis, that is, there is a significant relationship between capital flight and gross domestic product (GDP) at $n = 30$ and 5% significant level.

Finding and Discussion of Results

From the results, the coefficient of multiple determinations R^2 is 0.990 implying that, Out flows and Errors & Omissions representing capital flight, explained about 99.0% of the total variation in the gross domestic product (GDP), while the remaining 1% is explained by other variables not included in the model. This is also confirmed and supported by a higher coefficient of capital flight representing the marginal rate of the gross domestic product (GDP) at 0.995 implying that the variation is explained at 99.5% while the remaining 0.5% is explained by other variables not included in the regression model. Also, the t-test of significance revealed that coefficient of Outflows; Errors & Omission are statistically significant as its value (2.170 and 32.765) is greater than the theoretical value (2.0484) obtained from the t-table. The result of the F^* -test indicates that the overall model is statistically significant as the calculated F^* -value (828.317) is greater than the theoretical F^* -value (2.56), obtained from the F^* -table at 5% level of significance. The "apriori" economic criteria proved valid as the signs of all the hypothesized variables turned out as expected. Thus, outflow and Errors & Omission representing capital flight, had an inverse relationship with the gross domestic product (GDP) representing the overall economic growth in the Nigeria Economy.

Therefore, in this study the following fact were discovered.

Capital flight represented by outflows, and Errors & Omissions manipulations through the mechanism of international trade exerts a great influence on the level of economic growth in the Nigeria Economy within the period under review. Though as important and effective as it ought to be, other variables are of immense important in determining the level of growth in the Nigeria Economy. They are:

- 1) **Change in Exchange rate movement/fluctuations or overvaluation:** Overvalued exchange rate as often found to be an important variable on 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 overvaluations is foreign exchange black market premium. The presence of high black market premium is normally interpreted as a symptom of sick economy.
- 2) **Inflation:** High inflation directly erodes the real value of domestic assets, stimulating residents to hold assets outside the country. Moreover, inflation rates and exchange rate are closely connected since high inflation may be increasing expectations of depreciation in the future.
- 3) **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 asset. In these cases, perceived political instability may generate capital flight.

Summary of Findings

This study has considered the place of capital flight on economic growth in Nigeria Economy. It has unraveled the following;

- Capital flight manipulation through the mechanism of international trade represented by Outflow and Errors & Omissions exerts a great influence on the level of economic growth in Nigeria Economy within the period under review.
- Change in exchange rate overvaluation resulting from Errors & Omissions may also result in intense capital flight.
- Inflation in the economy may "overheat" or caused capital flight.

- Political instability and uncertainty in the macro economic environment may also result to capital flight.

Conclusion

From the findings of the research, we conclude that the level of economic growth in Nigeria economy within the period under review from the result of our analysis showed an inverse relationship between capital flight represented by total outflow and Errors & Omission. Therefore, Capital flight from Nigeria is becoming an epidemic, which calls for a comprehensive dynamic approach. Over the years, so many scholars have described it as an acute problem because of the implications of this resource outflows when the country is looking for financial resources for economic growth. However, the fact that capital flight has serious implications on external debt build-up; it also discourages private investment and threatens the prospects of a successful policy implementation.

This study is an attempt to critically evaluate and provide an insight in the situation of capital flight in Nigeria and its relation or impacts on economic growth. Thus, from our analysis, it was observed that, the large size of capital flight out of Nigeria economy is accounted for by political instability, high external debt, poor macroeconomic instability, dwindling external reserves, exchange rate overvaluation/fluctuations, upward movement in inflation, dwindling Gross Domestic Growth Rate (GDP), rate of return differentials such as capital inflows/FDI and public policy uncertainty.

Recommendations

Thus, we recommend the establishment of full fiscal discipline in applying fiscal policy aggregate (fiscal rule) in order to discourage waste, there is need for attitudinal change from those holding public offices and have access to both public and private funds. Government need to enact law – protecting Nigerians involved in capital flight before now to enable them repatriate there stolen money back home and investment them into the real sector of the economy. This will help to reduce the level of unemployment, poverty and improve the standard of living of Nigerians. Therefore, there is need to put in place effective cost cutting measures by maintaining a positive real rate of interest and more importantly the country needs to revisit the imperative of economics of oil revenue investment schemes and formulate policies for industrial competences. To achieve this, there is need to deepen the anti-regulatory agencies, economic and budgetary reforms with coordinated and harmonized strategies, anchored on structural transformation, promote transparency, accountability and respect to the rule of law. The government should as a matter of urgency, judiciously use the revenue on oil effectively and efficiently to reduce over-dependence on crude oil and pay more attention to economic diversification – real sector

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