Capital Flight, Measurability and Economic Growth in Cameroon: An Econometric Investigation

Njimanted Godfrey Forgha*

Sequel to the severity of the effects of capital flight on an economy and in an attempt to limit capital flight from the Franc Zone in August 1993, the convertibility between the Franc zone and Franc was suspended in 1994 between BEAO and BCEAO. This has come and gone yet capital flight prevails. This study therefore, made attempt to investigate into the determinants, measurement and the impact of capital flight on the real economic growth in Cameroon using two-stage least squares technique after the application of co-integration Error correction mechanism of Engle and Granger (1987), using time series data from 1970 to 2005. The quantitative results reveal that, Large capital outflows from Cameroon is accounted for by political instability, fiscal deficits, interest rate inflation differential, and external debt servicing GDP ratio. Capital flight also reported a negative impact on economic growth. Therefore, growth and development in Cameroon can be achieved and sustained through alleviation of capital flight. Hence, the combinations of good governance and its features, the establishment of fiscal discipline, tax and tariff adjustments etc are recommended.

1. Introduction

It is difficult for most Cameroonians to understand the paradox that Cameroon is blessed with numerous resources, yet their status get worse and worse year in, year out. To them, the more they work harder, the more hope fails promising. It is also noticed that, Cameroon has found it difficult to come out of the economic crisis that hits the country since 1986, inspite the fact that Cameroon is considered one of the most diversified economy in sub-Saharan Africa. Noted for the exportation of Cocoa and by – products, Palm products, Crude oil, Banana, Rubber and many agricultural and industrial products for domestic consumption and export, her circular flows of income seems to still be at its lowest ebb. That is why this group of Cameroonian seems to see no future in their own country. Hundred of them could be seen from Monday to Friday, January to December lined – up in foreign embassies for their visas.

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We were made to understand in 1986 that the economic crisis was worldwide and while other countries of the world have successfully come out of it, Cameroon level of unemployment remains consistently very high, poor rate of economic growth, high general price level and persistent balance of payments deficits are highly observed in the country. Should this situation continue to prevail in Cameroon? Therefore, this paper as its main objective is out to investigate into the impact of capital flight on the economic growth of Cameroon.

Looting funds to more advanced nation is one of the components of what is fastly assuming a disturbing politico-economic phenomenon in Africa and what is usually referred to in the economics literature as capital flight (Nyong, 2003). Walter (1987), Kindle Berger (1987), Ajayi (1992) and Razin (2001). Morgan Guaranty Trust Company (1986) provides a broader definition to capital flight. To them, it is “reported and unreported acquisition of foreign assets by non-bank’s sector”. For Cuddington (1986) it is short-term private capital outflow that responds not only to political crisis but also to economic policy failure. Nyong (2003) noted that although these definitions are informative, they fail to capture other aspect of the phenomenon. To him, 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 flows). This is abnormal because one expects capital to flow from resource surplus countries to capital scarce countries as suggested by the capital arbitrage theory, theory of the firm and the product cycle theory. To him, such abnormal capital outflows are responses to political pressures at home coupled with domestic economic policy distortions such as heavier taxes, capital control, and overvaluation of the exchange rates.

Capital flight is seen therefore to have taken various forms, including false bottom suit cases stocked with cash or travellers checks (currency smuggling), trade taking (over invoicing of imports and under invoicing of exports), electronic fund transfers from private banking services, declaring of unexisting foreign debts and commission and agents’ fees or kickbacks in foreign contracts fees. Other components of capital flight include overseas investments emanating from illegal activities like drug trafficking, corruption, illicit activities particularly those related to tax evasion and exchange rate controls. This is consistent with the view held by Husted and Melvin (1990) that the acquisitions of such foreign assets occur in response to political or economic crisis in the developing countries.

Findings have shown that most of the capital flights from the underdeveloped countries are held in Swiss Bank Accounts because the principle of national sovereignty, which includes domestic bank secrecy laws and blocking statute prevents disclosure, inspection, removal or copying of documents without official approval (Nyong, 2003). Nyong also affirms that these capital flights are held not only in bank deposits in these Swiss Banks, but also in treasury bonds, treasury certificates and bills, equities and physical assets abroad.

Capital flights for recent years have been seen as important impediments towards achieving external assistance or lending to developing countries. The IMF for example has made the adoption of policies for reversal (i.e. return) of capital flight a condition for its support of debt relief (Pastor 1989). Consequently, substantial debt relief from Paris club members had been difficult because of the size of capital flight from the debtors’ countries.

The adverse effects of capital flight in the development of developing countries are enormous and severe. For example, capital flight leads to reduction in growth potential through fall in investment. The transmission flow is that the fall in growth leads to fall in employment creating opportunities and the inability to service debt obligations.
Unemployment further leads to poverty, loss of self-eastern and death. Capital flight also leads to erosion of the tax base because funds taken outside the country cannot be taxed, thereby aggravating poverty and stimulating political – socio unrests and instability.

Given the pervasive influence of these illegal activities of capital flight in an economy such as Cameroon, this study in addition to its main objective, attempts to identify the measurability of capital flight, evaluate the magnitude of capital flight in Cameroon with history of dictatorial or totalitarian regime, high debt burden, several episodes of salary Frozen and the devaluation of franc CFA in 1994.

Therefore, the specific objectives of this study are to estimate the magnitude of capital flight in Cameroon between the period of 1970 and 2005, identify and estimate with econometric technique the economico – political determinants of the phenomenon and the macroeconomic consequences of capital flight particularly on growth. Given the magnitude of the level of unemployment in Cameroon, high prices, poor growth, high death rate, huge external debt and the possible impact of capital flight on her debt – servicing capacity, a study of capital flight is appropriate at the time.

So far, relative studies on capital flight have been carried out by the World Bank (1985) for Argentina, Brazil, Mexico, Portugal, South Korea, Turkey, Uruguay, and Venezuela, Rojas – Suare (1991) and Gulati (1985) but limited studies on the magnitude, measurability and the interrelationship between capital flight and economic growth have been carried out in Africa with completely none in Cameroon. Apart from the policy contents of such studies, a study on capital flight is challenging in its own right in the sense that it is like searching for the unknown and finding out what is supposedly lost by a country. This study should therefore, be seen as important attempt to fill the gap in the empirical literature, and to enhance economies of scale in the design of appropriate policies to address the problems of capital flight from Cameroon.

Having gone through this sub-section, the rest of this study is organised in four sections. Next to the introduction is section two, which is the presentation of the theoretical framework of the study. Section three deals with the measurability of capital flight and specification of the econometric model, section four presents the documentation of the empirical results and analysis. Lastly but not the least, is section five, which draws the study to an end through summary of major findings policy remarks and conclusion.

2.0 Literature Review and Theoretical Framework

2.1 Empirical Literature

Numerous studies have been conducted to identify the pivotal determinants of capital flight in different countries of the world. Dornbusch (1985), 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) examines the narrowness of the domestic money and capital markets in terms of their financial instruments and proclaims that narrow markets limit the availability of investment opportunities, which is further
compounded by financial regression, which renders investment in domestic economy less attractive. Thus, holding assets in foreign financial instruments provide a viable and profitable alternative.

According to Dornbush (1985), large fiscal deficit also provides attractive medium for capital out movement since it induces inflationary expectations. Similar to the exchange rate risks highlighted above, he noted that to avoid inflation, tax and the erosion of their money assets by inflation, domestic wealth owners' usually convert their domestic assets into foreign assets.

Outside domestic policy shortcomings as explained above, Walter (1987) looks at the external factors promoting capital flight in developing countries. His findings were that array of financial instruments, existence of political and economic stability in foreign countries as well as favourable tax climate are critical factors. Given the fact that the secrecy of accounts is attractive to wealth owners for the purpose of maintaining the privacy of their accounts, Ajayi (1992) insists, “it inadvertently favours, illegal transaction and tax evasion, both of which benefit from the secrecy”. Nyong (2003) observes that one of the factors in the capital flight literature is loan disbursement or debt service payment. Some economists have argued with him that loan disbursement is a major cause of capital flight in the sense that the availability of foreign exchange to pay for foreign debt obligations increases the potential for graft and corruption. Ajayi (1992) also noted that the abuse of office through the misuse of such funds could lead to capital flight. This is noted when highly placed public officials usually used the paraphernalia of their office to siphon public funds to foreign countries solely for their private use. Sequels to the fact that the above factors identified are important determinants of capital flight; the relative importance of these factors for Cameroon and their impacts on economic growth has not been adequately investigated. This might be the point of departure of this study and other related studies.

2.2 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. Starting with (1) above we have:

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 rates, 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 in employment, increase in dependency ratio and high death rate. These negative macroeconomic effects on these countries sometimes motivate the necessity to borrow from aboard 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). Attempts 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. By itself however, it provides only partial explanation of the consequences of capital flight on the economy.

Next in the list is 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 states that capital flight reduces the incentive to save and invest. The assumption here 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.

This is followed by the Tax-Depressing Thesis, which 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 reduction in revenue generating potential of government.

The complementary of this sub-section is the Austerity Thesis. This thesis views the poor in severely indebted situation 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 interests to flight capital 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 a la Mckinnon and Shaw (Ajayi, 1992). Thus, we can conclude that where there is heavy debt, capital flight increases, with capital flight also exacerbating and magnifying the debt problems of these countries (Glynn and Koening, 1984).

3.0 Analytical Methodology

3.1 Model specification

Under literature review we were able to identify a host of variables hypothesized to influence capital flight. However in this work, we do not intend to select any specific theory but we are out to consider the factors amongst the host, which are said to hold in the case of Cameroon. These factors are therefore incorporated in a model of capital flight determinants and their interactions with other macroeconomic variables. Our model therefore, consists of a system of two equations in two endogenous variables namely capital flight equation and economic growth equation.

The model is specified as;

**CAPITAL FLIGHT EQUATION**

\[
CAPFLt = a_0 + a_1 \Delta LRGDPt + a_2 \Delta POPISTAt + a_3 \Delta DEPRINt + a_4 \Delta FISDYt + a_5 \Delta LEXCHRt + a_6 \Delta LPMKPt + a_7 \Delta EDTYt + U_1
\]

**REAL GROWTH IN GROSS DOMESTIC EQUATION**

\[
\Delta LRGDPt = b_0 + b_1 \Delta CAPFLt + b_2 \Delta TDSYt + b_3 \Delta TOTt + b_4 \Delta POPGt + b_5 \Delta INFLAt + U_2
\]

A priori; \(a_1 < 0, \ a_2 > 0, \ a_3 > 0, \ a_4 > 0, \ a_5 > 0, \ a_6 > 0, \ a_7 > 0, \ b_1 < 0, \ b_2 < 0, \ b_3 < 0, \ b_4 > 0\) and \(b_5 < 0\).

Where:

- \(CAPFTt = \) Capital flight in U.S Dollar in current period.
- \(\Delta LRGDPt = \) Change in log of real Gross Domestic Product in current period.
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POPISTAt = Political instability as a dummy variable in current period.

ΔDEPRINt = Change in the difference between the domestic rate of inflation and interest rate in current period.

ΔFISDYt = Change in fiscal deficit in current period as a ratio of GDP.

ΔLEXCHRt = Change in log of a unit of domestic currency per U.S. Dollar in current period.

ΔLPMKPt = Change in log of parallel market premium in current period.

ΔEDTYt = Change in log of external debt / GDP ratio in current period to capture debt burden.

ΔTOTt = Change in terms of trade in current period.

ΔPOPGt = Active population growth rate used as proxy for labour force in current period.

ΔINFLAt = Inflation rate in current period.

a0 to a7 = Structural parameters for equation (3.1)

b0 to b5 = Structural parameters for equation (3.2)

U1 and U2 = Stochastic error terms with their usual normality properties.

3.2 Estimation and Validation

Based on the complexity of human behaviour, it is difficult to study the issues involving capital flight and economic growth with a single equation. This is why in this study; we have adopted the system estimation approach (SEA) as techniques of estimating the various parameters specified in equations (3.1) and (3.2). The above equations are going to be estimated using the two – stage least squares technique because: it is an estimated procedure by which ordinary least squares method is employed in the first stage and according to Gauss–Markov theorem, it is the best linear unbiased estimator (BLUE) in the sense that it has minimum variance (Koutsoyiannis, 1993). The application of the ordinary least squares in the first stage of the two–stage Least Squares also enables us to estimate the long–run equation to obtain the residuals which is then apply in the system to eliminate the effect of simultaneous equation bias. This refers to the existence of endogenous variables in the set of explanatory variables of a function. Such endogenous variables have a systematic component determined by predetermined (exogenous) variables of a model and a random component. The two stage techniques will also enables us to capture the feedback effects displaced by some of the macroeconomic variable specified in our models.
Furthermore, to examine the long–run characteristics of the time series data, we have applied the Co-integration Error Correction mechanism to correct the effects of “spurious regression” or “random walk” if any. Due to the absence of trend stationary processes micro fit or PCGIVE microprocessor, the approach employed to eliminate this spurious regression effect is indirect, that is by differencing the data. Spurious regression is a term describing the artificial and misleading results that Least Squares regression can produce when trended non-stationary economic time series is regressed on another one. Granger and Newbold (1974) coined the phrase “spurious regression” to describe regression results involving economic time series that “look good” in the sense of having high R² values and significant t–statistics, but which, in fact having no real meaning. In this case, the parameters’ matrixes do not converge to any limited values. This makes least squares estimator not consistent and the value usual inference procedures do not hold at times. Such econometric time series are said to be suffering from random walk. Therefore, a random walk refers to a smooth time series data that changes slowly so that the correlation is not correlated. Many macroeconomic time series data have the characteristics of a random walk.

A multiple regression stipulated in the formula \( Y = a_0 + a_1X_1 + a_2X_2 + a_3X_3 + a_4X_4 + U_1 \) might have the estimated coefficient of \( X_2 \) for example equal to 1. That is \( a_2 = 1 \). If this happens, then the process is called random walk. This random work is said to be displayed “drift” but if \( a_2 > 1 \), the process is called expulsive while if \( a_2 < 1 \) the process is said to be converging. Spurious regression can be tested and eliminated using cochrance, cultiliterative method or by conducting unit roots tests such as the weighted symmetric test, the Phillip Perron (PP) test, Dickey Fuller (DF) roughly test and the Augmented Dickey Fuller (ADF) tests. Further validation of our results will be based on; (a) econometric a priori theoretical expectation, (b) statistical or first order criteria (tests) and the econometric second order tests.

### 3.3 Measurability of Capital Flight

The estimation of the parameters of our model requires us to first of all measure the value of capital flight for Cameroon. This is actually problematic because those who engage in it do not normally make their intention known. However, studies by Erbe (1985), World Bank (1985), Morgan Gurantant Trust Company (1986), Cuddington (1986), and Pastor (1989, 1990) made attempts and are considered.

Four popular measures of capital flight therefore include:

1. \( \text{CAPFL} = A + B + C + D \) ................................................................. 3.3

   Where; \( \text{CAPFL} = \text{Capital flight}, A = \text{Current account balance}, B = \text{Net foreign direct investment}, C = \text{Changes in debt}, D = \text{Changes in reserves} \). This above measures of capital flight was adopted by World Bank (1985) and Erbe (1995).

2. For Morgan Guarantant Trust Company (1986), capital flight is measured as

   \( \text{CAPFL} = A + B + C + D + E \). .................................................. 3.4

   Where; \( E = \text{Bank system foreign assets} \), \( A, B, C \) and \( D \) are as in (3.3) above. This method of capital flight measurement as mentioned earlier is the reported and unreported acquisition of foreign assets by the public and non-bank private sector.
(3.a) Duwendag (1987) measures capital flight as

$$\text{CAPFL} = A + B + C + D + G + I + M$$ .................................................................3.5

Where; G = errors and omissions in the balance of payments statistics, I = IMF Credit, and M = Counterpart items. Under this measure, capital flight is considered as short-term speculative capital flows, or external assets by non-bank private sector plus the errors and omissions in the balance of payments account. Duwenday’s measure is what is referred to as “hot money flows” approach according to Ajayi (1992). This dimension of capital flight is expected to respond quickly to changes in expected returns.

(3.b) $$\text{CAPFL} = - (G + OI)$$ ................................................................. (3.6)

Where; G = Net errors and omission and OI = other assets / investment particularly net short-term private capital flows. This is also another version of the hot money but of a narrow approach by Cuddington (1986) and Ajayi (1996).

(4) $$\text{CAPFL} = (\Delta\text{DEBT} + \text{FDI}) - (\text{CA} + \Delta\text{FRS}) = (C + B) - (A + D)$$ ............ (3.7)

Where; \(\Delta\text{DEBT}\) = Changes in external debt, FDI = Foreign direct investment, CA = Current account balance net, \(\Delta\text{FRS}\) = Changes in foreign reserves.

The fourth measure is called the “sources and uses” approach, which was developed by Pastor (1989, 1990) to measure capital flight. This consists of changes in debt (C) plus foreign direct investment (B) less the sum of current account net (A) and changes in reserves (D). Based on Ajayi (1992) reports, the sources and the uses approach have been adopted by the Bank of England (1987) and Khan and Hague (1987) in estimating capital flight.

In this study, we have adopted the sources and uses approach not because it is widely use but because of the availability of data and also because it provides the largest estimates of the cumulative magnitude of capital flight in Cameroon.


4.0 Discussion of Econometric Results

4.1 Presentation of the Stationarity Co-integration Analysis Results.

A cursory perusal of the static two-stage Least squares regression results show that inconsistencies exist in some of the variables in our models. This is reported by the existence of high-adjusted \(R^2\) and low Durbin Watson statistic, which reflects the presence of high serial correlation among the variables. The admixture of low D.W. and high explanatory power of the parameters estimated under these conditions are not likely to be stable and thus, the results, even though consistent with economic theories, they are misleading and nonsensical (Engle and Granger, 1987). Based on the inconsistency
established, we proceed to confirm and correct the non-stationarity of the variables by conducting the unit roots test especially the Augmented Dickey Fuller (ADF) rule test. This is presented in table 4.1 below.

As shown in table 4.1 below, we are out to test the hypothesis that Ho: \( Y_t \sim (1) \) against H1: \( Y_t \sim (0) \). From the below results, we expect to reject the null hypothesis when the variables a: \( Y_t \) are stationary. It is therefore, established in table 4.1 that all the variables that suffer from spurious regression achieved stationarity in their first difference as such are integrated in order 1. That is they are \( 1 (1) \) variables. Thus:

**Table 4.1 Augmented Dickey Fuller (ADF) Rule Test.**

<table>
<thead>
<tr>
<th>Variable</th>
<th>t - value</th>
<th>p – value</th>
<th>Lag length</th>
<th>Order of integration</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAPFL</td>
<td>-1.52639</td>
<td>0.81993</td>
<td>2</td>
<td>1 (1)</td>
<td>stationary</td>
</tr>
<tr>
<td>LRGDP</td>
<td>-1.77430</td>
<td>0.76170</td>
<td>4</td>
<td>1 (1)</td>
<td>stationary</td>
</tr>
<tr>
<td>POPISTA</td>
<td>-2.00902</td>
<td>0.59651</td>
<td>8</td>
<td>1 (1)</td>
<td>“</td>
</tr>
<tr>
<td>DEPRIN</td>
<td>-1.47131</td>
<td>0.83875</td>
<td>2</td>
<td>1 (1)</td>
<td>“</td>
</tr>
<tr>
<td>FISDY</td>
<td>-3.46063</td>
<td>0.04379</td>
<td>2</td>
<td>1 (0)</td>
<td>“</td>
</tr>
<tr>
<td>LEXCHR</td>
<td>-1.55066</td>
<td>0.81116</td>
<td>10</td>
<td>1 (1)</td>
<td>“</td>
</tr>
<tr>
<td>LPMKP</td>
<td>-1.22300</td>
<td>0.90411</td>
<td>4</td>
<td>1 (1)</td>
<td>“</td>
</tr>
<tr>
<td>LEDTY</td>
<td>-4.36202</td>
<td>0.00255</td>
<td>10</td>
<td>1 (0)</td>
<td>“</td>
</tr>
<tr>
<td>TOT</td>
<td>-3.53081</td>
<td>0.03620</td>
<td>3</td>
<td>1 (0)</td>
<td>“</td>
</tr>
<tr>
<td>POPG</td>
<td>-1.57452</td>
<td>0.00000</td>
<td>6</td>
<td>1 (0)</td>
<td>“</td>
</tr>
<tr>
<td>INFLA</td>
<td>-2.85130</td>
<td>0.51728</td>
<td>8</td>
<td>1 (1)</td>
<td>stationary</td>
</tr>
</tbody>
</table>
Table 4.2 Presentation of Results Based on the Two-Stage Least Squares Co-Integration Error Correction Mechanism. Current Sample: 1970-2005

Equation 4.2.1 Capital Flight Equation

Dependent variable: capital flight ($\Delta$ LCAPFL).

<table>
<thead>
<tr>
<th>Variable</th>
<th>coefficient</th>
<th>Std-Error</th>
<th>t – value</th>
<th>p - value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>2.41302</td>
<td>0.001586</td>
<td>(1.16091)</td>
<td>0.6438</td>
</tr>
<tr>
<td>$\Delta$ LRGDP</td>
<td>-0.53469</td>
<td>0.00845</td>
<td>(-2.92936)*</td>
<td>0.0432</td>
</tr>
<tr>
<td>$\Delta$ POPISTA</td>
<td>0.59211</td>
<td>0.00373</td>
<td>(2.35733)*</td>
<td>0.0505</td>
</tr>
<tr>
<td>$\Delta$ DEPRIN</td>
<td>0.12068</td>
<td>0.01476</td>
<td>(2.53829)*</td>
<td>0.0734</td>
</tr>
<tr>
<td>$\Delta$ FISDY</td>
<td>0.68427</td>
<td>0.05992</td>
<td>(3.91755)*</td>
<td>0.0231</td>
</tr>
<tr>
<td>$\Delta$ LEXCHR</td>
<td>0.46735</td>
<td>0.11195</td>
<td>(4.53082)*</td>
<td>0.0061</td>
</tr>
<tr>
<td>$\Delta$ EHTY</td>
<td>0.41334</td>
<td>0.01994</td>
<td>(2.08024)*</td>
<td>0.0541</td>
</tr>
<tr>
<td>ECM (-1)</td>
<td>-0.89405</td>
<td>0.19654</td>
<td>(-4.57091)*</td>
<td>0.000</td>
</tr>
<tr>
<td>R² - Adjusted</td>
<td></td>
<td></td>
<td></td>
<td>0.8166</td>
</tr>
<tr>
<td>F – Statistic (7:29)</td>
<td>(33.4762)</td>
<td>0.0231</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.W Statistic</td>
<td></td>
<td></td>
<td></td>
<td>1.9248</td>
</tr>
</tbody>
</table>
Equation 4.2.2 e Economic Growth Equation

Dependent variable economic growth (\(\Delta \text{LGDP}\)).


<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t – value</th>
<th>p – value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>3.52914</td>
<td>0.23346</td>
<td>(15.11670)*</td>
<td>0.0000</td>
</tr>
<tr>
<td>(\Delta \text{CAPFL})</td>
<td>-0.06170</td>
<td>0.00072</td>
<td>(-9.22210)*</td>
<td>0.0021</td>
</tr>
<tr>
<td>(\Delta \text{EDEBTY})</td>
<td>-0.30903</td>
<td>0.02046</td>
<td>(-2.23210)*</td>
<td>0.0451</td>
</tr>
<tr>
<td>(\Delta \text{TOT})</td>
<td>0.08696</td>
<td>0.36810</td>
<td>(1.96144)**</td>
<td>0.0861</td>
</tr>
<tr>
<td>(\Delta \text{POPG})</td>
<td>0.45832</td>
<td>0.04632</td>
<td>(2.81129)*</td>
<td>0.0134</td>
</tr>
<tr>
<td>(\Delta \text{INFLA})</td>
<td>-0.50187</td>
<td>0.08374</td>
<td>(-5.99275)*</td>
<td>0.0012</td>
</tr>
<tr>
<td>ECM (-1)</td>
<td>-0.93436</td>
<td>0.17337</td>
<td>(-6.3423)*</td>
<td>0.0011</td>
</tr>
</tbody>
</table>

R\(^2\) - Adjusted 0.76811

F – Statistic (6:30) 42.8961 0.0432

D.W. Statistic 2.0016

Note:

The number in parentheses denotes the t – values. The asterisks marked against each coefficient indicates the level at which the coefficient is significant. * = significant at one percent level. ** = significant at five percent level. *** = significant at ten percent level ECM (-1): Error Correction Mechanism variable based on Engle and Granger (1987). The dependent and independent variables achieved stationarity when the coefficients of the ECM are less than unity.

4.2 Discussion of Results

In equation 4.2.1, we present the quantitative results of the capital flight. Capital flight is the case of Cameroon was specified as a function of real GDP, political instability, interest rate, inflation differential, fiscal deficit as a GDP ratio, exchange rate, and external debt servicing as a GDP ratio. The quantitative results show that within our period of study, capital flight is provoked out of Cameroon by political instability, inflation interest rate differential, fiscal deficit, over devaluation of the F CFA and external debt servicing.
Specifically, the results reveal that an increase in political instability, interest rate inflation differential, fiscal deficit and external debt servicing by one percent provoke capital flight by 59.211 million, 12.068 million, 68.427 million and 41.334 million respectively for each year they occur ceteris paribus. The above explanatory variables are statistically significant below 10 percent level of significance meaning that any policy measure to reduce capital flight from Cameroon must take into consideration those factors. These results are in lines with economic a priori theoretical expectation especially the investment – diversion thesis, tax – depressing thesis and debt overhang hypothesis or the debt – driven capital flight thesis.

The real output growth coefficient is negative meaning that there is a direct adverse relationship between real growth and capital flight in Cameroon. This further explains that any one percent increase in real economic growth will retard capital flight by 53.469 million each year it occurs all things being equal. The result is also statistically significant at one percent meaning that reducing capital flight from Cameroon must take into consideration the economic growth parameter. This result is also consistent with our theoretical a priori expectation and is in lines with findings in other developing African countries like Ghana, Nigeria, Morocco, Cote D’ivoire, Gabon, Zambia, Namibia and Angola.

Still in equation 4.1, after the application of the Engle and Granger (1987) co-integration error correction mechanism (that is, two-step procedure on the two-stage Least Squares results) using the TSP 4.5 Microsoft ware, we observe that the coefficient of the ECM is negative 0.89405 and is stable. This result is also statistically significant at more than 99 percent level of significance. The long – run stability and reliability of this result reveals that it could be used for forecasting and policy recommendation.

The coefficient of the adjusted R² or multiple determinations for equation 4.2.1 is 0.8166. This shows that the regression line captures more than 81 percent of the total variations in capital flight caused by the variables specified in the capital flight equation with less than 9 percent accounted for by the stochastic error term. The joint test of significance of all parameter estimates conducted using F – Statistic shows that our observed F- ratio is 33.4762 and greater than its theoretical value at one percent level. This explains that our findings are 99 percent reliable.

Based on the D.W. test for auto correlation or serial correlation, our empirical result is trapped in empirical Snarl and as such, we cannot establish clearly whether there is serial correlation or not. In other words, our test is inconclusive at both 5 and 1 percent levels. In equation 4.2.2, we specified economic growth as a function of capital flight, external debt, terms of trade etc. the quantitative results reveal that the links between growth and capital flight, external debt servicing as a ratio of GDP, and inflation rate in Cameroon are negative. This means that the above factors retard economic growth in Cameroon. Specifically the empirical findings are that one percent increase in capital flight, external debt GDP ratio, and inflation rate retard economic growth by 0.06170, 0.30903 and 0.50187 percent respectively ceteris paribus. These results are not only consistent with our theoretical a priori criteria; they are consistent with other findings. These results are also statistically significant at less than 5 percent meaning that any policy measure to improve on the growth situation in Cameroon must take into consideration the above factors.

Furthermore, in the same equation (4.2.2) terms of trade and active population growth rate are positively related to real economic growth. That is terms of trade and active population growth have the potentials of promoting economic growth in Cameroon. Precisely, one
percent increase in terms of trade and active population will increase real economic growth by 0.08696 and 0.45832 percent respectively all things being equal. The stimulating feature of these results is that the coefficient of active population growth is statistically significant at one percent level while that of terms of trade is only at 7 percent level, meaning that any measure to enhance real growth in Cameroon, should consider terms of trade and our active population growth.

The coefficient of ECM is negative 0.93436 meaning that long – run stability has been restored in the two-stage regression results as such the results are reliable and could be used for policy recommendation.

The coefficient of adjusted R² of 0.76811 shows that the regression line captured more than 76 percent of the total variation in real economic growth as caused by joint variations in the variables specified in real growth equation with less than 24 percent unexplained.

The F – statistic value of 42.8961 reveals that the results are 99 percent or more reliable.

The coefficient of serial correlation test using the D.W. criterion shows that the value of D.W. of 2.0016 falls within the region of no auto – correlation as such no auto – correlation exist.

5.0 Summary and Recommendations

5.1 Summary

Capital flight from Cameroon is becoming an epidemic, which needs to be treated with more heat than light. Sequel to its magnitude and direction, it has been described as an acute problem because of the implications of this resource out flows when the country is looking for financial resources for economic growth and development. Inspite the fact that capital flight has serious implications on external debt build–up, it also discourages private investment and threatens the prospects of any successful policy implementation.

This study in an attempt to provide insight in the situation of capital flight in Cameroon and its relationship or impacts on economic growth, enables us to specify two main equations namely; the capital flight equation and real growth equation. Our findings are that the large size of capital flight out of Cameroon is accounted for, by political instability, interest inflation rates differential, fiscal deficit as GDP ratio, exchange rate devaluation and external debt servicing as GDP ratio. It is therefore, a fact that capital flight out of Cameroon conspired with her heavy external debt burden to retard economic growth, which is established by the inverse relationship between capital flight and economic growth. Consequently the quantum effects are high level of unemployment and poverty. These findings are disturbing and call for Cameroon government to handle this area of thought with more heat than light. Efforts to reverse capital flight from Cameroon would not only sustain real growth, but also pave the way for resumption in employment, poverty reduction, private investment, price reduction and improvement in the balance of payments situation of the country. Therefore, the path of wisdom to stem the tide of capital flight from Cameroon requires that some policy measures should be put in place.
5.2 Policy Recommendations

- Cameroon must make up her mind on whether she genuinely wants to repatriate the stolen capital and other forms of capital resources back to Cameroon. If, then more importantly, 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 Cameroonians involved in capital flight before now to enable them repatriate this stolen money back home and invest them into the real sector of the economy. This will help to reduce the level of unemployment, poverty and improve upon the standard of living of Cameroonians. Political office holders must be selected based on thoroughly investigating into his/her previous records at all domains.

- Appropriate tax and tariff regimes must be developed. We are in this work aware of the situation of the Cameroon government as a member of the Central African Monetary Union (CAMU), which of course is questionable. The tax structure implemented in Cameroon recently is detrimental to its growth through private investment. In fact, considering the impact of indirect taxes to both producers and consumers, the incidence of such taxes as well as the elasticity of demand for goods produced in Cameroon by Cameroonians and the poverty level in Cameroon, the government of Cameroon stands the chance of realizing fall in her total revenue in the immediate future if the situations stand. This will be accomplished by high level of unemployment and more people falling below the core poverty line. Government is also advised to restore to guide trade protectionism than trade liberalization, which is practiced since 1990 when the government reduced her tariffs below the level agreed by the Central African Custom Union.

- The establishment of fiscal discipline in Cameroon. This should be done by government keeping to the budgetary provisions. Even when the government has budgeted for deficit expenditure, the excess of the government expenditure over her revenue should be directed towards the real sector and not the services sector. One of the greatest problems of the Cameroon economy is that, it is too static due to excessive control by forces of law and order that lack the basic macroeconomic knowledge and its operating principles. Cameroon, protect more than she produce. If you found yourself making a journey of 100km, be sure of being check not less than an average of 15 times by these forces of law and order asking for the same documents and particulars. This form of excessive control is detrimental to the growth and development of a nation. The truth of the matter is that these uniform officers are too many and their functions are conflicting. We therefore, here strongly call for the complete elimination of the Gendarme force in Cameroon with their functions merged with those of the police and the army. Special branch of the army should be created who should be in charged of any form of physical damaged in the public infrastructure such as road, water, electricity etc. In this case policy like road, electricity etc... Led-growth and development should be put in place.

- Positive real rate of interest should be maintained. The current rate of inflation in Cameroon induced by government taxation is not encouraging. Accepting the fact
that Cameroon has the problem of structural rigidity, all must be done to encourage supply over demand. So this system of fiscal driven economy, which is encouraged by the CAMU conditions, is not ideal for growth and development in Cameroon.

- Government should and must promote transparency, accountability and respect to the rule of law beyond the usual rhetoric.

Finally, there is need to emphasize that no amount of campaigns directed at the internal community can secure the return of capital flight to Cameroon. The solution lies in eliminating the politico-economic distortions in the economy so as to engender confidence among the citizenry. The suspension of the convertibility of Franc Zone and the French France between the BEAC and BCEAO is a partial solution and not holistic.

References


Ajayi, Ibi and Moshin Khan (2000), External Debt and Capital flight in Sub-Saharan Africa. IMF.


Anthony, A and H. Hallet (1990), Capital flight Estimates from Developing Countries Mimeo.


