

## ILLICIT CAPITAL STREAMS ON NIGERIAN ECONOMIC GROWTH

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### Abstract

This study examined the impact of illicit capital streams on Nigerian economic growth from the period of 1991 to 2021 (30years). Specifically, the measures of illicit capital streams, namely; Trade Mispricing (TM), Revenue from Illegal Resource Exploitation (RIRE), Net Proceed of Corruption (NPC), International Crime (IC), Tax Evasion (TE) and Money Laundering (ML) were analyzed in relation Nigerian economic growth proxied Real Gross Domestic Product (RGDP). The data was collected from the Global Financial Integrity annual statistics data base for the period 1991-2021 (30years). The data were analyzed using descriptive statistics, followed by the correlation analysis in bids to ascertained the co-movement of the measures illicit capital streams; TM, RIRE, NPC, IC, TE and ML in relation to the Nigerian economic growth proxied with RGDP and several diagnostics tests conducted in the bids to ascertain if the data are suitable for regression analysis with the aid of E-VIEW version 9.0. The findings showed that the measurements of illegal capital streams used in this research have conflicting implications on the RGDP in Nigeria. However, RIRE and ML, have a considerable impact on RGDP in Nigeria, even if while TM, NPC, IC and TE have an insignificant impacts. Therefore, the study came to the conclusion that illicit capital streams have an inconsiderable effect on the Nigerian economy. It is recommended that the government should set a strong independent body that cannot be influenced by the government, government officials (serving and retired), rich multinational corporations with sole responsibility to tackle the menace of illicit financial flows in the country.

***Key Words: Illicit capital, Trade Mispricing, International Crime, Tax Evasion and Illegal Resource Exploitation***

### Introduction

The international development community often focuses on the amount of aid and investment that enters the African continent, the other part of the balance sheet (i.e the funds exiting the continent) has often been overlooked (Osei-Assibey, Domfeh & Danquah, 2018). Sub-Saharan Africa received approximately \$2 trillion in FDI and ODA between 1980 and 2018, but emitted over \$1 trillion in illegal wealth. These illicit flows, which drain domestic resources needed for

the continent's economic development, continue to hinder development (Landry, Mariama & Payce, 2020).

Illicit capital streams are not well-defined. Illicit capital streams are defined by Global Financial Integrity, a non-profit research and advisory organisation in Washington, D.C. This restrictive definition of illicit capital streams includes hiding crime proceeds, funnelling funds to criminals, and dodging tariffs and taxes by misreporting transactions (Orji, Ogbuabor, Kama & Anthony-Orji, 2020). Wider definitions typically include tax avoidance practises like strategic transfer pricing that lower tax collections but are not unlawful (Forstater, 2018).

Trade misinvoicing is a common way to launder money for illicit transfer abroad (World Customs Organization, 2018). It occurs when exporters understate exports and importers overstate imports to avoid trade restrictions and custom tariffs by illicitly moving earnings between countries (Cobham & Jansky, 2017). Trade misinvoicing is one way multinationals avoid taxes in underdeveloped countries.

Illicit money flows harm developed and poor nations. However, developing country IFFs cannot be quantified. According to Global financial integrity study, the value has exceeded official development support from OECD donor countries (Orimolade & Olusola, 2018). All nations engage in these activities, which harm social and economic life, but poor nations with limited resources suffer the most. Thus, IFFs are prominent in development policy discourse of states seeking better national rules, proper implementation, and worldwide best practises (Amah & Okezie, 2017).

Corruption, fraud and other related crimes are responsible for mismanagement and misappropriation of the huge fund generated as has been widely reported by organizations and researchers. Transparency International (2019) revealed that Joint Task Force (JTF) comprising personnel from the Nigerian Army, Air Force, Navy and Police, has been deployed in the Niger Delta region since the early 2000s. The JTF is tasked with tackling the militant threat in the region and protecting its oil from theft. However, some JTF members have been implicated in and benefit from the illicit oil sector, which they are supposed to suppress (Joseph & Omodero, 2019). According to research, Nigerian military personnel have aided and profited from the unlawful trade. Often this benefit comes from providing “protection” – both ensuring military

officials turn a blind eye to illegal activity and protecting oil thieves“ access to extraction points from rivals – in exchange for financial bribes”. It can be observed that the Nigerian army officials are corrupt and therefore compromise their core mandate (Joseph, et al, 2019).

Using calculations for trade misinvoicing and balance of payments discrepancies to generate estimates for illicit financial flows, we find that, as expected, larger economies have higher levels of illicit financial flows (Badwan & Atta, 2019). Thus, greater taxes and inflation increase illegal financial outflows, showing that corporations choose fiscally stable or favourable conditions for their capital. Emerging and rising economies in Nigeria have become important destinations for illicit cash flows from Africa (Abdou, 2021). While part of this shift can be explained by the reduction in trade levels with developed economies, the large upsurge of illicit capital streams to these economies cannot solely be explained by increased trade values. Hence, this thesis will examine the impact of illicit capital streams on Nigerian economic growth.

### **Statement of the Problem**

There is another mysterious means through which Nigeria loses huge resources financially and otherwise that appears not popular among average Nigerians. It is through what is referred to as capital flight perpetrated by developed countries through their Multinational Corporations (MNCs). The impact of this is enormous. Capital flight is aided and abated by Nigeria corrupt politician and foreigners who have the monopoly of the technology to tap into these natural resources. The MNCs carry out these acts via tax avoidance, transfer pricing and involvement in banking secrecy. It appears that corruption and fraud among the political class have distracted attention from capital flight to the extent that majority of Nigerians, even among the scholars report less on the dangers it portends to the nation.

According to literature, illegal capital streams involve money laundering, transnational company bribery, tax evasion, and trade mispricing. Illicit money flows deprive developing nations of resources that could fund vital public services like security, justice, health, and education, hurting their financial systems and economic potential. This drains foreign reserves, raises inflation, lowers tax collection, cancels investment, and inhibits free trade, notably in Africa and Nigeria.

Illicit capital flows and Nigeria's economic woes will also drive this investigation. Nigeria has tremendous resources, thus unemployment, poverty, excessive income disparity, stunted economic growth, etc. should be a thing of the past. Unemployment causes capital flight, social marginalisation, unrest, crime, disease, income inequality, and poverty. Nigeria's inequality grows.

Finally, there are scarcity of studies on the impact of illicit capital streams on Nigerian economic growth, apart from the studies of Joseph and Omodero (2019) and Amah and Okezie (2017), despite the fact that illicit capital streams is been perpetuated heavily in Nigeria on daily basis, hence, this call for investigation, which is the basis of this study. Hence, this study is timeous in providing solutions to illicit capital streams in Nigeria by investigating the impact of illicit capital streams proxied with Trade Mispricing (TM), Revenue from Illegal Resource Exploitation (RIRE), Net Proceed of Corruption (NPC), International Crime (IC), Tax Evasion (TE) and Money Laundering (ML) while Nigerian economic growth is proxied with Real Gross Domestic Product (RGDP).

## **Review of Related Literature**

### **Conceptual Framework**

#### **Illicit Capital Streams**

Despite the fact that economists and international organisations have studied and discussed capital flight for decades, interest in illicit money flows is more recent. Some people view the term "illicit capital streams" as being ambiguous and imprecise, and the topic as being contentious. Lack of terminological clarity, which might occasionally prevent the creation of viable policy solutions, characterises the term (ECA, 2017; Ritter, 2017). Furthermore, Chowla and Falcao (2018) noted that there is still no consensus on the conceptual and definitional challenges around the phrase "illicit financial flows." In light of the agency's priorities, definitions of illegal financial flows have changed over time. We take a look at a couple definitions here.

Illicit capital flows refer to the portion of illicit finance that travels across borders or is transferred outside of a nation because not all illicit finance does. Thus, approaches to combat domestic illegal finance will be different from those to combat illicit capital flow. Illicit capital

streams have continued to expand quickly as a result of globalisation and the simplicity of sending money across borders (through electronic transfers). Illicit financial flows have also been characterised by a number of international organisations, including the World Bank (2017), the OECD (2017), and the UN (2017, 2018). Illicit financial flows were characterised in the AU/ECA High Level Panel's Report of 2017 as "money illegally earned, moved, or utilised." This term was borrowed from the Global Financial Integrity. In contrast, the AU/ECA HLP Report (2017) widened its definition of illicit financial flows by defining them as including acts "that, while not legally illegal in all situations, go against established laws and conventions, including legal duties to pay tax." As a result, it does not just include unlawful behaviour but also conduct that is objectionable in light of unwritten laws, the intent of the laws, or their intended outcomes. (Institute for Austrian and International Tax/African Tax Institute/UNODC, 2017) This term encompasses all flows, whether they are authorised or not. The following actions were typically included in definitions of illicit financial flows/transfers: tax evasion, bribery, and money laundering. According to ECA and AU/ECA/2017, the following are the major elements of illegal capital streams and transfers.

### **Economic Growth**

According to this study, economic growth is defined as an increase in a person's income per unit of capital within the economy. When a country's capital dividend multiplied by its entire population rises sustainably, it is said to have experienced economic growth (Akintoye & Olowulajo, 2018). When a country's per capita income fluctuates within a short time frame, it may not be prudent to assume that the economy of that country is growing. According to Khan and Senhadji (2017), the GDP of an economy can be used to gauge its economic growth. An economy's GDP growth is taken as evidence of increased economic growth. Additionally, there are components of economic growth if the total amount of products and services consumed by each individual over a sufficient period of time, say 5 years and above, increases. According to Anyawoncha (2019), a country's per capita income and the overall amount of products and services produced in that country during a specific time period can be used to gauge its economic growth.

## **Theoretical Review**

In any typical economy, there is no well-known theory to account for illicit capital flows. The capital flight ideas and how they impact economic growth will serve as the foundation for this. Hence, this paper is based on investment diversion theory, also known as the debt overhang thesis. Below, we'll talk about the theory.

### **The Investment Diversion Theory**

This theory contends that because developing countries experience macroeconomic and political instability while advanced nations offer better investment opportunities due to factors like high foreign interest rates, a variety of financial instruments, political and economic stability, a favourable tax environment, and account secrecy (Ehijiele, Mustapha and Ogungbenle, 2021). Some dishonest, dishonest administrators and politicians sometimes embezzle scarce capital resources from developing nations to wealthy ones. Therefore, these funds are not accessible for investment at home, which causes a reduction in total investment, slow economic growth, which in turn causes a decline in employment, an increase in the dependence ratio, and a high death rate (Ehijiele, et al, 2021).

These harmful macroeconomic repercussions on these nations can drive the need for borrowing from abroad to revive the domestic economy, which is sometimes further syphoned by doing so, thereby promoting foreign dependency and indebtedness. If the authorities are running a floating exchange rate system, the liquidity constraint or crowding - out effect could cause the indigenous currency to depreciate. International reserves are lost in an effort to defend the exchange rate at this time. One of the well-known unfavourable effects of capital flight in the concerned nations is provided by the investment diversion theory (Adebayo, Danladi, Falaye & Oyinemi, 2021).

According to the investment diversion theory, the existence of macroeconomic and political unpredictability in emerging nations at the same time as the existence of greater investment prospects elsewhere is what causes capital flight. Higher interest rates, a greater range of available financial instruments, political and economic stability, better tax rates, and the ability to keep money hidden in accounts are just a few of the better chances that may be available. Some of the dishonest and corrupt politicians who hold positions of power frequently divert the already meagre capital from their nations to the more developed ones. These money stop being available

to fund investment projects in the nations where they live, which reduces investment spending, slows economic growth and, as a result, reduces employment, raises the dependence ratio, and increases the death rate (Orji, Ogbuabor, Kama & Anthony-Orji, 2020).

In order to strengthen the domestic economy, these variables frequently result in the requirement for obtaining outside finance. These borrowed monies can occasionally be wasted, which increases reliance on other nations. If a floating exchange rate system is in operation, the liquidity restriction (crowding-out effect) may also have a negative impact on the local currency. Any efforts to maintain the exchange rate result in a reduction in foreign exchange reserves. Hence, this idea explains one of the well-known drawbacks of capital flight.

### **Empirical Review**

Abdou (2021) examined how illicit financial flows affect government income in West African Economic and Monetary Union countries. The analysis uses 1996–2013 data from 8 nations. The study indicated that illicit financial flows reduced government revenues and were linked to per capita income, corruption, and governance using instrumental factors. It underscored the importance of per capita income in illicit financial flows and government revenues. Thus, to detect and deter illicit financial flows-related crimes, governments should improve tax collection.

Ehijiele, Mustapha, and Ogungbenle (2021) said capital flight hurt Nigerian economic progress. The 1981–2019 CBN Statistical Bulletin tested hypotheses. OLS was used. Capital flight hurts Nigerian economic growth, according to the rule of thumb. Capital flight hurts growth. External debt hurts Nigeria's economy, the study found. External debt will harm economic growth. The research encouraged the government and policymakers to limit debt borrowing due to rising interest rates and currency rate differentials. Reserves promote macroeconomic stability.

For 1981–2019, Adebayo, Danladi, Falaye, and Oyinemi (2021) evaluated capital flight's impact on Nigeria's macroeconomic performance. The 1981–2019 capital flight determinants in Nigeria were also examined. This study used the error correction model because the unit root test showed all variables were stationary at initial difference. This analysis used World Bank secondary data. Capital flight in Nigeria is influenced by external debt in the present period and the first lag, foreign direct investment, current account balance, interest rate, and reserves. Capital flight hurts Nigeria's economy and investment, the report found. The paper suggests using external debt and

foreign direct investment for productive objectives to prevent capital flight from foreign funds and adopting stable currency rate policies to avoid devaluation, which causes capital flight in Nigeria.

Amadi, IHEMEJE, HANSON, OBIOMA, and OGBONNA (2021) examined Nigeria's economic growth and capital flight. Five hypotheses and CBN Statistical Bulletin data achieved study goals. OLS regression, Augmented Dickey Fuller (ADF) unit root test, Auto-Regressive Distributed Lag (ARDL) model, C-integration and Bounds (long-run) tests, and Granger Causality tests were utilised in the study. Capital flight and foreign direct investment hurt the economy, but external borrowing helped it. Finally, current account balances and foreign reserves positively and non-significantly associated with Nigerian economic performance. According to the findings, capital flight drains much-needed financial resources, reducing economic activity and growth; external borrowing and foreign direct investment are important determinants of economic growth; current account balances benefit the economy, but their impact is minimal; and finally, a stable political/economic environment, government encouragement of foreign direct investment, healthy and stable foreign reserves balances to

Orji, OGBUABOR, KAMA, and ANTHONY-ORJI (2020) examined Nigeria's economic growth and capital flight. 1981–2017 CBN statistical bulletin data was analysed. The study used ARDL bounds tests. According to the study, capital flight reduces long-term and short-term economic growth. Money supply, private sector lending, and domestic investment affect economic growth. The paper recommended proactive policies to limit capital flight and make the economy competitive and attractive for domestic investment, which enhances economic growth. Expand monetary policy to increase money supply.

Akinwale (2020) investigated capital flight and economic progress in Nigeria. The null hypothesis was that capital flight does not affect Nigerian economic progress. Capital flight and economic progress in Nigeria were examined using the auto regressive distributed lag (ARDL) approach on data from the Central Bank of Nigeria and the World Bank for 1986–2018. Data cointegration and unit root problems were examined. The enhanced ADF and Phillips–Perron (PP) tests detected the unit root problem. Capital flight, real exchange rate, and economic



progress were inversely related by ARDL. The variables reduced economic growth during the study period. Economic progress and adult literacy in Nigeria were positively correlated.

Using the ARDL model, Effiom, Achu, and Edet (2020) explore how capital flight affected domestic investment in Nigeria from 1980 to 2017. Capital flight negatively impacted Nigerian domestic investment in the long run.

Joseph and Omodero (2019) analysed illegal financial flows and Nigerian economic growth. Global Financial Integrity and UNCTAD's FDI/MNE database ([www.unctad.org/fdistatistics](http://www.unctad.org/fdistatistics)) provided GDP and illicit capital flow data (The World Development Indicators). The investigation used E-View version 9 and Ordinary Least Square Statistical tool. Illicit financial flows from illegal commercial operations have a -0.006832 link with Nigeria's economic growth. Illicit money flows generated by corruption negatively affect Nigerian economic growth with a correlation coefficient of -0.043301. Nigeria's economic growth is negatively correlated with international crime-related illicit finance flows (-0.006675).

## **RESEARCH METHODOLOGY**

The research design that was adopted in this study is the Ex-post facto. The ex-post facto research design was used because this type of data is one that takes place after the event or the fact had taken place. In this circumstance, the research has no control over the variable of interest as and therefore cannot manipulate them because the variables are verifiable.

The data on illicit capital streams and RGDP was obtained from the databases of Global Financial Integrity and CBN Statistical Bulletin. The choice of secondary data is faster, reduces time wastages in data gathering, it is non-reactive, often available for re-analysis, it also provides a broad background and readily improves one's learning curve. These various sources of data and information for the study will be use because they are considered reliable and authentic.

The statistical technique of data analysis adopted in this study. The descriptive statistics was used to determine the nature of independent {Trade Mispricing (TM), Revenue from Illegal Resource Exploitation (RIRE), Proceed of Corruption (PC), International Crime (IC), Tax Evasion (TE) and Money Laundering (ML)} and dependent {Real Gross Domestic Product (RGDP)} variables. This was followed by unit root test for the time series data in order to

ascertain if they are stationary or not and Johansen co-integration was used to ascertain the long integration in the data set. The correlation analysis was used to ascertain if there is multicollinearity in the data set. In view of the hypothesis formulated for this research, the method of data analysis chosen were the multiple regression analysis which was used through the Regression model, using the computer software, E-VIEWS 9.0. This is the appropriate measures taken to analyze data as regards the study in question.

The model for this study was adopted from the work of Joseph & Omodero (2019), titled; Illicit Financial Flows and the Growth of Nigerian Economy. This model was modified to suit the variables of this study. The model which specified that Nigerian economic growth [proxy by Real Gross Domestic Product (RGDP)] will be significantly influence by illicit capital streams measures {Trade Mispricing (TM), Revenue from Illegal Resource Exploitation (RIRE), Net Proceed of Corruption (NPC), International Crime (IC), Tax Evasion (TE) and Money Laundering (ML)} will be formulated as follows;

$$\mathbf{RGDP = f(TM, RIRE, NPC, IC, TE, ML)}$$

$$\mathbf{RGDP = \beta_0 + \beta_1 TM + \beta_2 RIRE + \beta_3 NPC + \beta_4 IC + \beta_5 TE + \beta_6 ML + U}$$

**Where:**

**RGDP** = Real Gross Domestic Product

**$\beta_0$**  = Constant Term

**$\beta_0, \beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6$**  in Equation 2 are the parameters.

**TM** = Trade Mispricing

**RIRE** = Revenue from Illegal Resource Exploitation

**NPC** = Net Proceed of Corruption

**IC** = International Crime

**TE** = Tax Evasion

**ML** = Money Laundering

**U** = Disturbance Term (other variable not mentions in the model)

The a priori expectation is  **$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6 > 0$**

## Result and Discussions

Under this sub-heading, various analyses was conducted, this was done below;

**Table 4.2: Descriptive Statistics**

|              | LOGRGDP   | LOGTM    | LOGRIRE  | LOGNPC   | LOGIC    | LOGTE    | LOGML     |
|--------------|-----------|----------|----------|----------|----------|----------|-----------|
| Mean         | 4.262358  | 4.321814 | 5.192438 | 5.013822 | 4.405895 | 4.469385 | 5.494166  |
| Median       | 4.423271  | 4.258476 | 5.164137 | 4.960334 | 4.308134 | 4.376068 | 5.867285  |
| Maximum      | 5.188232  | 4.905066 | 5.995451 | 5.621765 | 5.098886 | 5.052005 | 6.827622  |
| Minimum      | 2.770896  | 3.783625 | 4.579592 | 4.500323 | 3.977445 | 3.938159 | 3.091568  |
| Std. Dev.    | 0.717786  | 0.287502 | 0.424275 | 0.287202 | 0.358532 | 0.308644 | 1.079095  |
| Skewness     | -0.469103 | 0.552854 | 0.221815 | 0.700335 | 0.703678 | 0.575877 | -0.881108 |
| Kurtosis     | 2.050833  | 2.660556 | 1.857203 | 2.745420 | 2.248481 | 2.250344 | 2.759804  |
| Jarque-Bera  | 2.226433  | 1.672267 | 1.878490 | 2.533361 | 3.181792 | 2.360652 | 3.953875  |
| Probability  | 0.328501  | 0.433383 | 0.390923 | 0.281765 | 0.203743 | 0.307179 | 0.138493  |
| Sum          | 127.8707  | 129.6544 | 155.7731 | 150.4147 | 132.1768 | 134.0815 | 164.8250  |
| Sum Sq. Dev. | 14.94128  | 2.397058 | 5.220269 | 2.392069 | 3.727815 | 2.762569 | 33.76897  |
| Observations | 30        | 30       | 30       | 30       | 30       | 30       | 30        |

**Source: EVIEW, 9.0 Outputs, 2022.**

The format of the descriptive data is shown in Table 4.2 above. A mean value of 4.2624 and a standard deviation of 0.7178 were reported for the RGDP. Additionally, TM recorded a mean of 4.3218 and a standard deviation of 0.2875; RIRE recorded a mean of 5.1924 and a standard deviation of 0.4243; NPC recorded a mean of 5.0138 and a standard deviation of 0.2872; IC recorded a mean of 4.4059 and a standard deviation of 0.3585; TE recorded a mean of 4.4694 and a standard deviation of 0.3086; ML with an average of 5.4942 and standard deviation of 1.0791. The fact that all of the variables' standard deviations are lower than their corresponding means demonstrates that the data are not wildly skewed.

The normal distribution has a three-point kurtosis, which means that neither its fat nor thin tails are present. Hence, as compared to the normal distribution, an observed distribution has heavy tails if the kurtosis is greater than three. When compared to the normal distribution, RGDP, TM, RIRE, NPC, IC, TE, and ML have thin tails since several of the kurtosis values in Table 4.2 are less than or equal to 3 for the variables.

**Table 4.3: Correlation Matrix**

|         | LOGRGDP  | LOGTM    | LOGRIRE  | LOGNPC   | LOGIC    | LOGTE    | LOGML    |
|---------|----------|----------|----------|----------|----------|----------|----------|
| LOGRGDP | 1.000000 |          |          |          |          |          |          |
| LOGTM   | 0.522769 | 1.000000 |          |          |          |          |          |
| LOGRIRE | 0.598768 | 0.642547 | 1.000000 |          |          |          |          |
| LOGNPC  | 0.571316 | 0.862405 | 0.753270 | 1.000000 |          |          |          |
| LOGIC   | 0.584454 | 0.883303 | 0.856289 | 0.951238 | 1.000000 |          |          |
| LOGTE   | 0.506529 | 0.657852 | 0.896779 | 0.787837 | 0.839274 | 1.000000 |          |
| LOGML   | 0.540702 | 0.464356 | 0.791372 | 0.636573 | 0.707990 | 0.766540 | 1.000000 |

**Source: EVIEW, 9.0 Outputs, 2022.**

Since the correlation values are less than 0.7, the correlation test, which is shown in Table 4.3, demonstrates the lack of multi-co linearity among the variables. Additionally, the results indicate that the explanatory variables TM, RIRE, NPC, IC, TE, and ML have positive strong correlations with RGDP in Nigeria, indicating that they are suitable indicators of illegal capital streams.

**Table 4.4: Variance Inflation Factors (VIF) Multicollinearity Test**

| Variable | Coefficient Variance | VIF      |
|----------|----------------------|----------|
| LOGTM    | 0.222458             | 6.542910 |
| LOGRIRE  | 0.142292             | 9.114178 |
| LOGNPC   | 0.449744             | 8.320030 |
| LOGIC    | 0.689206             | 7.352450 |
| LOGTE    | 0.185194             | 6.277483 |
| LOGML    | 0.007561             | 3.132741 |

**Source: EVIEW, 9.0 Outputs, 2022.**

The results of the multicollinearity test, which was used to determine whether the data were multicollinear, are shown in table 4.4 above. The variance inflation factor (VIF) was determined as described in Table 4.4 in order to guarantee the validity of the study's findings. Additionally, for TM, RIRE, NPC, IC, TA, and ML, the Centered Variance Inflation Factor (CVIF) values for all the independent variables consistently fall within 6.542910, 9.114173, 8.320030, 7.352450, 6.277483 and 3.132741. The cut-off value of VIF is 10, which implies that there are no issues with multicollinearity among the variables under examination. VIF values greater than 10 are frequently thought to indicate multicollinearity.

**Table 4.5a: Breusch-Godfrey Serial Correlation LM Test:**

|               |          |                     |        |
|---------------|----------|---------------------|--------|
| F-statistic   | 17.83420 | Prob. F(2,21)       | 0.0768 |
| Obs*R-squared | 18.88269 | Prob. Chi-Square(2) | 0.6721 |

**Source: E-VIEW, 9.0 Outputs, 2022.**

The residuals of the variables were determined in order to rule out serial correlation before the models were estimated. The serial correlation LM test was used to accomplish this. Because the p-values of the f-statistics are insignificant at the 5% level of significance, the serial correlation LM test in Table 4.5a shows that there is no element of serial correlation in the models.

**Table 4.5b: Heteroskedasticity Test: Breusch-Pagan-Godfrey**

|                     |          |                     |        |
|---------------------|----------|---------------------|--------|
| F-statistic         | 3.640136 | Prob. F(6,23)       | 0.6110 |
| Obs*R-squared       | 14.61223 | Prob. Chi-Square(6) | 0.7235 |
| Scaled explained SS | 17.38197 | Prob. Chi-Square(6) | 0.5080 |

**Source: E-VIEW, 9.0 Outputs, 2022.**

Heteroskedasticity is a problem that arises when a variable's variability is unevenly distributed across the range of values of a second variable that predicts it. The Breusch-Pagan-Godfrey heteroskedasticity test was used to check for homoscedasticity in the model estimate. As a result, the models don't have a heteroskedasticity issue because the p-values for the f-statistics are negligible at the 5% level of significance.

**Table 4.5c: Ramsey RESET Test**

Equation: UNTITLED

Specification: RGDP C TM RIRE NPC IC TE ML

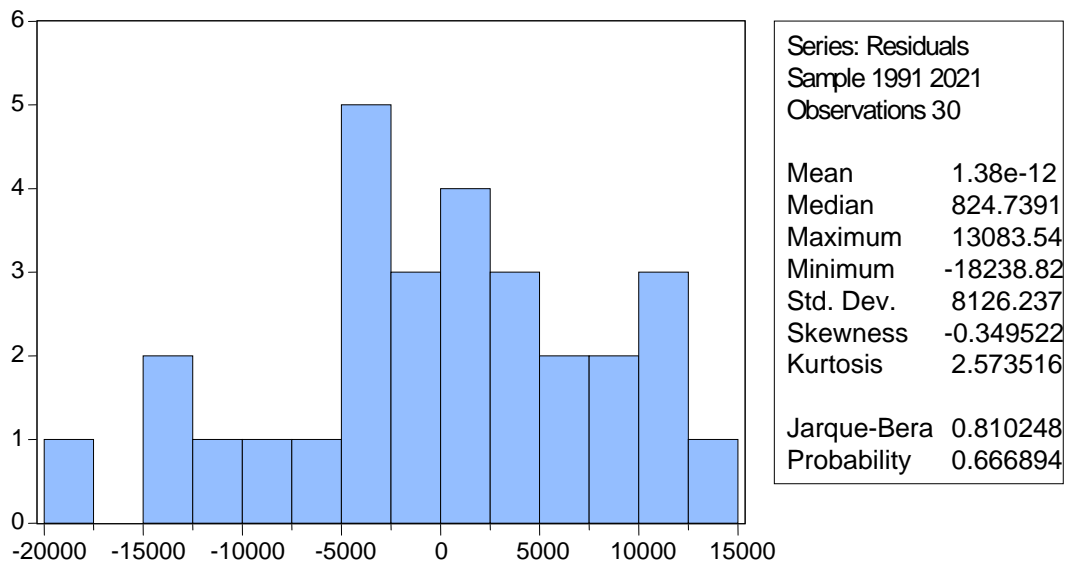
Omitted Variables: Squares of fitted values

|                  | Value    | Df      | Probability |
|------------------|----------|---------|-------------|
| t-statistic      | 1.717562 | 22      | 0.0999      |
| F-statistic      | 2.950021 | (1, 22) | 0.0999      |
| Likelihood ratio | 3.774966 | 1       | 0.0620      |

**Source: E-VIEW, 9.0 Outputs, 2022**

Table 4.5.1c above demonstrates that our data does not exhibit any autocorrelational characteristics, supporting the Durbin Watson statistic. shows that the model is homoskedastic since three of its parameter probabilities have significance levels greater than 0.05. Our model is correctly described and stable for regression analysis, according to the Ramsey test result.

**Table 4.5d: Normality Histogram Test**



**Source: E-VIEW 9.0 Output, 2022.**

To evaluate the distribution normality of the model residuals, the residuals test for normality was carried out. The presence of significant outliers in the data, which have an impact on the standard errors and subsequently the significance levels of the coefficients, is indicated by residuals that are not normally distributed. As the histogram assumes a bell-shaped shape and the J-B statistic probability value is 0.666894, which is greater than 0.05(5%), the test result suggests that the residuals are normally distributed. This supports rejecting the null hypothesis that the residuals are not normally distributed.

**Table 4.7: Multiple Regression Analysis**

Dependent Variable: LOGRGDP  
 Method: Least Squares  
 Date: 01/19/23 Time: 20:57  
 Sample: 1991 2020  
 Included observations: 30

| Variable | Coefficient | Std. Error | t-Statistic | Prob.  |
|----------|-------------|------------|-------------|--------|
| C        | -0.224790   | 1.520497   | -0.147840   | 0.8838 |
| LOGTM    | -0.743206   | 0.471654   | -1.575743   | 0.1287 |
| LOGRIRE  | 0.839526    | 0.377216   | 2.225585    | 0.0361 |
| LOGNPC   | -0.729614   | 0.670630   | -1.087953   | 0.2879 |
| LOGIC    | 1.493420    | 0.830184   | 1.798902    | 0.0852 |
| LOGTE    | -0.144943   | 0.430342   | -0.336810   | 0.7393 |
| LOGML    | 0.194036    | 0.086952   | 2.231526    | 0.0357 |

|                    |           |                       |          |
|--------------------|-----------|-----------------------|----------|
| R-squared          | 0.874543  | Mean dependent var    | 4.262358 |
| Adjusted R-squared | 0.841815  | S.D. dependent var    | 0.717786 |
| S.E. of regression | 0.285481  | Akaike info criterion | 0.531683 |
| Sum squared resid  | 1.874490  | Schwarz criterion     | 0.858629 |
| Log likelihood     | -0.975243 | Hannan-Quinn criter.  | 0.636276 |
| F-statistic        | 26.72159  | Durbin-Watson stat    | 1.798472 |
| Prob(F-statistic)  | 0.000000  |                       |          |

**Source: EVIEW, 9.0 Outputs, 2022.**

According to Table 4.7 above, which shows the results of multiple regressions, the TM coefficient is -0.7432, with a t-value of -1.5757 and a corresponding p-value (sig. value) of 0.1287. This implies that TM does not have major detrimental impact on RGDP. Given that the p-value for this association is more than 0.05 (5%) level significance, the alternate hypothesis is rejected and the null hypothesis is accepted, which states that TM has no discernible impact on the RGDP in Nigeria. The TM coefficient is -0.7432, indicating that there is a deteriorating relationship between TM and RGDP. The RGDP in Nigeria would decline by 74.32% for every one percent (1%) movement in the TM. This finding conflicts with those of Abdou (2021) but is in agreement with Joseph and Omodero (2019).

Additionally, Table 4.7 above' results for multiple regression show a RIRE coefficient of 0.8395, a t-value of 2.2256, and a corresponding p-value (sig. value) of 0.0361. This implies that RIRE positively and significantly affect RGDP in Nigeria. The null hypothesis, which states that RIRE does not have a significant effect on RGDP in Nigeria, is rejected in favour of the alternative hypothesis because this association is significant at the p-value of 0.0361 is less than 0.05 (5%) level significance. The RIRE coefficient is 0.8395, suggesting that RIRE and RGDP are positively related. The RGDP in Nigeria would rise by 83.95% for every one percent (1%) change in RIRE. The finding is contrary to the findings of Joseph and Omodero (2019) but concurs with those of Abdou (2021).

Furthermore, the coefficient of NPC is -0.7296 with a t-value of -1.0880 and an associated p-value (sig. value) of 0.2879 in the multiple regression results in Table 4.7 above. This shows that the impact of NPC on RGDP is negligible. The null hypothesis, which states that NPC does not have a significant effect on RGDP in Nigeria, is accepted while the alternative hypothesis is rejected because this association is insignificant at the p-value of 0.2879, greater than 0.05 (5%) level significance. The NPC coefficient is -0.7296, suggesting an inverse relationship between

NPC and RGDP in Nigeria will decline by 72.96% for every one percent shift in NPC. The result concurs with those of Joseph and Omodero (2019).

The coefficient of IC is 1.4934 with a t-value of 1.7989 and a corresponding p-value (sig. value) of 0.0852, this implies that IC has a negligible impact on RGDP. The null hypothesis, according to which there is no significant link between IC and RGDP in Nigeria, is accepted, while the alternative hypothesis is rejected. This relationship is not significant because the p-value of 0.0852 is more than 0.05 (5%) level significance. The IC coefficient is 1.4934, indicating a positive trend between IC and RGDP. The RGDP in Nigeria would increase by 149.34% for every one percent (1%) change in IC. This finding contrasts with the findings of Joseph and Omodero (2019) and Badwan & Atta (2019) but is in agreement with those of Abdou (2021).

In addition, Table 4.7 above' multiple regression findings showed TE coefficient of -0.1449 with a t-value of -0.3368 and a corresponding p-value (sig. value) of 0.7393. This shows that TE has an impact on RGDP that is unfavourable and inconsiderable. The null hypothesis, which states that TE does not have a significant effect on RGDP in Nigeria, is accepted and the alternative hypothesis is rejected because this association is insignificant and the p-value of 0.7393 is more than 0.05 (5%) level significance. The TE coefficient is -0.1449, which indicates that there is a negative association between TE and RGDP. A change of one percent (1%) in the TE will result in a decrease of 14.49% in the RGDP in Nigeria. The results concur with those of Joseph and Omodero (2019), although they are at odds with those of Abdou (2021)

The coefficient of ML is 0.1940 with a t-value of 2.2315 and an associated p-value (sig. value) of 0.0357 in Table 4.7 above, which summarises the findings of the multiple regressions. This implies that ML has a major positive impact on RGDP. The alternative hypothesis is accepted and the null hypothesis is rejected, which states that ML does not have a significant influence on RGDP of in Nigeria, is rejected because the association is significant and the p-value of 0.0357 is lesser than 0.05(5%) level significance. The ML coefficient is 0.1940, suggesting a positive trend between ML and RGDP. The RGDP in Nigeria would increase by 19.40% for every one percent (1%) change in ML. This finding conflicts with those of Badwan & Atta (2019) but is in agreement with those of Joseph and Omodero (2019).



## Conclusion and Recommendations

The results show that the measurements of illegal capital streams used in this research have conflicting implications on the RGDP in Nigeria. However, the half of the independent variables, including RIRE and ML, have a considerable impact on RGDP in Nigeria, even if while TM, NPC, IC and TE have an insignificant impacts. Therefore, the study came to the conclusion that illicit capital streams have an inconsiderable effect on the expansion of the Nigerian economy is mixed. In line with the findings, we recommend that:

1. The study suggests that the government establish a powerful independent authority that cannot be influenced by the government, government officials (serving and retired), or big multinational firms to combat illicit financial flows in the country.
2. The government should create and pass legislation to stop this monster that has impoverished the economy and society through illicit capital flow.
3. Increase revenue and tax base. The Federal Ministry of Finance's Whistle Blowing Policy and the July 1, 2017, Voluntary Assets and Income Declaration Scheme (VAIDS) were prompted by the tax amnesty and whistle blowing.
4. VAIDS is to provide taxpayers with undisclosed income and assets, the opportunity to regularize their tax status.
5. Tax reforms should enhance and diversify government revenue, simplify tax payment and business, and stimulate micro, small, and medium firms (MSEs). This will eliminate outdated, unclear, and contradictory laws.

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