Impact of governance on fiscal discipline and illicit financial flows in Nigeria

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ABSTRACT

This research was conducted to investigate the impact of governance on fiscal discipline and illicit financial flows in Nigeria. The study employed time series data for the period of twenty-nine years (1990-2018). Pre-estimation tests were conducted to examine the stationarity of the time-series data. Thereafter, the Autoregressive Distributed Lag Model (ARDL) was adopted on the basis of the order of integration of the variables adopted. This study employs the ARDL as a dynamic causal model for its analysis. It has a finite number of lags in the explanatory variables. The adoption of the lag form of the model lies in the fact that variables, such as corruption, foreign debt, foreign direct investment and budget deficits have lagged impacts, we do not only intend to analyze their current effects but also their distributed or accumulated impact in the previous periods. The coefficients of the ARDL model show that there exists a positive relationship between governance, fiscal discipline and illicit financial flows in Nigeria. The study thus, recommends the strengthening of rule of law, institutions of participation and accountability, including access to public services, state intervention and policy reforms against corruption to ensure transparency and accountability in public service in Nigeria. Also, there should be effective management, control and monitoring of allocation to the electricity sector in order to ensure judicious use of government resources.

Keywords: Governance, illicit financial flow, foreign debts, financial discipline.

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INTRODUCTION

The development of every society in the world lies in the ability of governance and fiscal discipline. Most developing nations of the world are said to be where they are today as a result of bad governance and mismanagement of state resources which has led to huge financial outflow from their economies. The situation is rather pathetic as these resources are moved to the developed nations of the world thereby creating job opportunities and raising their living standards there, but resulting in job drain, poverty and underdevelopment in the source country. For instance in Nigeria, bad governance and fiscal indiscipline have led to the underdevelopment of the country which has abundant human and natural resources (Dhikru and Adeoye, 2019). Nigeria is severally referred to as the poorest oil-rich nation. The incidence of bad governance and fiscal indiscipline has amounted to huge debt and embezzlement of public funds in Nigeria during and after military rule. The problem of illicit financial flows ranks top on the international agenda, affecting both industrialized and developing countries (Dahida, 2013; Imhohopi and Urim, 2013).

More specifically, over the years, the fiscal position of some developing countries like Nigeria has deteriorated, resulting in rising public debt and illicit financial flows which has raised concerns about debt sustainability. Hence fiscal policy in developing countries is affiliated with budget deficits, increased public debt due to bad governance thereby leading to illicit financial flows. However, the problem of illicit financial flows is associated with distortionary domestic policies and political instability mainly in developing nations (Global
The current scale of illicit financial flows originating in developing countries like Nigeria cannot be measured (Kurebwa, 2018). The estimated volume of illicit flows has been staggering. It ranged between US$2 trillion and US$3.5 trillion in 2014. Illicit outflows from developing countries to the advanced world alone were estimated to be US$620 billion in 2014 in the most conservative calculation, while illicit inflows from the developed countries into the developing world totaled more than US$2.5 trillion. The total IFFs are estimated to have grown at an average annual rate of between 8.5 percent and 10.4 percent a year over the period 2010 to 2020. Outflows were estimated to have risen between 7.2 percent and 8.1 percent a year, while inflows rose at an even higher rate between 9.2 percent and 11.4 percent annually. By comparison, inflation in developed countries averaged only 1.4 percent a year over that ten-year period (GFI, 2017). Narayan (2005) said losses traced to illicit financial flows cost Africa an estimated $50 billion annually. Research data showed losses have continued to grow mainly due to trade malpractices, abusive transfer pricing schemes, criminality, corruption and outright theft of the continent’s natural resources (AfDB et al., 2012).

Nigeria has experienced different military and democratic regimes which were accompanied by huge financial recklessness and a lack of due process. The military regimes had no regard for rule of law as most of the administrators were dictators which further enhanced fiscal indiscipline and illicit financial flow from the country. Consequently, the Nigerian economy has witnessed huge financial outflows such as USD322 million from late General Sani Abacha’s loots and USD 85 million from the controversial USD 1.3 billion Malabug oil deal. Mohammed and Zadek (2017) posit that finance has been linked with governance challenges, with corruption and illicit financial flows further limiting the availability of public finance. Based on bad governance and fiscal indiscipline in Nigeria, the overwhelming bulk of this loss in capital through illicit channels is mainly driven by official corruption. On average, crude oil exporters including Nigeria lost capital at the rate of nearly USD10 billion per year, far outstripping the USD2.5 billion lost by non-fuel primary commodity exporters per year (GFI, 2017). These outflows are facilitated by the establishment of shadow financial systems such as tax havens, secrecy jurisdictions, disguised corporations, anonymous trust accounts and fake foundations, as well as trade mispricing and money laundering techniques, which enrich certain individuals at the expense of the greater majority (Ndikumana and Boyce, 2011). Illicit financial flows seem to be undermining the dynamics of macroeconomic components such as domestic savings, hard currency reserves and tax collection in African countries. This has adversely affected Nigeria’s structural transformation and led to a cycle of external borrowing and debt service payments (Economic Commission for Africa (ECA), 2017). It has also perpetuated the continent’s dependence on external aid. Indeed, illicit financial flows seem to be a catalyst for increased external borrowing, creating more scope for further debt, thereby limiting public expenditure (NEPAD, 2013).

The general objective of this study is to examine the impact of governance on fiscal discipline and illicit financial flows in Nigeria. The specific objectives include:

1. To measure the impact of governance on illicit financial flows in Nigeria.
2. To estimate any causal relationship between fiscal indiscipline and illicit financial flows in Nigeria
3. To identify the challenges of good governance and fiscal discipline in Nigeria.

**Statement of the problem**

Nigeria is a rich and blessed nation with abundant human and natural resources. However, the question of poverty, unsustainable borrowing and loan servicing is begging for answers. Although, the period of this study ranges from 1990 to 2018, the spillover effect of fiscal indiscipline during the study period is still having implications or a spell on the economy to date. In the first quarter (Q1 of 2021), Nigeria had used 1.02trillion naira to service debts, the equivalent of 83% of government revenue. N3.12 trillion is allocated to servicing debt in 2021. Debt service burden and subsidies are pushing up government deficits. In July 2021, as the economy is badly hit by the Covid-19 pandemic and the lock-down in 2020, the national assembly has approved fresh loans of USD8.325 billion, 480 million Euros for president Buhari, another debt hung for future generations. The country’s development seems to have been hampered by an increasing incidence of bad governance and attendant fiscal indiscipline which has led to huge illicit financial outflows involving the following practices: money laundering, bribery by international companies, tax evasion (the case of multi-choice international and multi-choice Nigeria in 2021) and trade mispricing. Illicit financial flows seem to rob developing Nigeria of resources that could be used to finance essential public services ranging from security, infrastructure, agriculture, industry, and justice to basic social services such as health and education thus, weakening Nigeria’s fiscal viability and economic potentials. Consequently, this has led to the draining of the country’s foreign reserves, high inflation, narrow tax base collection, de-investment, unemployment, poverty, economic racketeering and a threat to national security. Besides removing resources
that could otherwise be used for poverty alleviation and economic growth (for example, Abdurrasheed Maina's pension fraud of stealing ₦14 billion in fictitious accounts), it tends to restrict Nigeria's capacity and the ability to mobilize domestic resources and access foreign capital necessary to finance economic growth and development. The gap exists in other literature as they tend to discuss either illicit financial flow or fiscal discipline separately in relation to economic growth. This present study combines the two in a coherent and detailed empirical analysis. It is against this backdrop that this study seeks better ways of tackling illicit financial flows through good governance and fiscal discipline in Nigeria.

Research questions

Based on the statement of the research problem, the following research questions will be answered by this study:

1. What is the impact of governance on illicit financial flows in Nigeria?
2. Does any significant relationship exists between fiscal indiscipline and illicit financial flows in Nigeria?
3. Are there significant challenges confronting good governance and fiscal discipline in Nigeria?

LITERATURE REVIEW

Governance refers to the quality of participation necessary to ensure that political, social and economic priorities are based on a broad consensus in society and that the voices of the excluded, poorest and most vulnerable are heard in decision-making (UNDP, 2014). Ayogu and Gbadebo-Smith (2014) defined governance as a composite of the structured arrangements between government and the different spheres of society and institutions, including public policies that affect the well-being of society. Halfani et al. (1994) highlighted governance as a system of government concentrating on effective and accountable institutions, democratic principles and electoral process, representation and responsible structures of government in order to ensure an open and legitimate relationship between the civil society and the state. Governance is simply defined as the exercise of power or authority by political leaders for the well-being of their country’s citizens or subjects (Tamayao, 2014).

Based on the different definitions, this study adopts the Halfani et al. (1994) definition as its operational definition for the work. This is because it emphasizes the basic principles inherent in any governance process.

Hou (2003) defined fiscal discipline as the capacity of a government to maintain smooth financial operation and long-term fiscal health. He maintained that it branches into a multi-year perspective on budgeting and mechanisms to maintain fiscal health and stability over business cycles. Musgrave (1989) sees fiscal discipline as part of the budgetary control process, ‘insuring that enacted budgets are implemented and preserving the legality of agency expenditures’ in intent and amount. Dechery (2018) sees fiscal discipline as the ability of the government to balance revenues and expenditures, to achieve development. World Bank (2005) defined fiscal discipline as pertains to all key measures of fiscal performance which include total revenue, the financial balance and the public debt, in addition to total spending.

Epstein (2005) defined Illicit Financial Flows as capital taken abroad in a hidden form, perhaps because it is illegal, perhaps because it goes against social norms, or perhaps because it might be vulnerable to economic or political threats. These are illegally earned money, transferred or used. As such, these flows of money are in violation of laws of their countries of origin, or during their movement or use, and are therefore considered illicit (Kurebwa, 2018).

GFI (2013) defined illicit financial outflows as, all unrecorded private financial outflows involving capital that is illegally earned, transferred or utilized, generally used by residents to accumulate foreign assets in contravention of applicable capital controls and regulatory frameworks. According to Organization for Economic Co-operation and Development (OECD) (2013), Illicit Financial Flows are cross-border capital transactions either concealing illegal activities or facilitating them. The emphasis on criminal, corrupt, and commercial activities of illicit financial flows underlines a policy response that encourages a more active role for the State and that highlights the need for a better regulatory environment through the enforcement of national and global standards of financial transparency and democratic accountability (Haken, 2011).

The term illicit financial flows reflect a more narrow definition that focuses on unrecorded capital flows that are derived from criminal, corrupt (bribery and theft by government officials) and commercial activities (Baker, 2005; Kurebwa, 2018). The focus on hidden resources and their potential impact on development place the issue of capital flight firmly in the broader realm of international political economy which emphasizes the role of governance at both origins as well as at the destinations.

Dave and Freitas (2011) empirically examined the amount of illicit financial flows from developing countries over the decade ending 2009. The study provided estimates of illicit financial flows (IFFs) from developing countries over the decade 2000-2009 based on the balance of payment (BOP), bilateral trade and external debt data reported by member countries. They used the residual model approach in doing the work. Their findings are that in 2009 IFFs from developing countries led by the top ten exporters of illicit capital, most of which are in Asia and the Middle East and North Africa region have declined by 41% between 2008 and 2009. They also
found out that this was due to the 2008 global economic crisis which tended to reduce the source of funds (New external loans and net foreign direct investments).

Ndikumana (2012) investigated Illicit Financial Flows as a constraint on poverty reduction in Africa. In his analysis, he concluded that if Africa is to successfully fight against its high level of poverty, it will need to mobilize more resources to invest in poverty-reducing programs. He was of the opinion that to fight this ugly trend African leaders need a strong political will to move forward and having known the amount of capital that has left this continent over the years, it will be important to find ways of attracting them back.

Acha et al. (2013) examined the problem of illicit capital transfers from Africa to the developed economies of the world. Relying on Nigerian experience, the study employed line graphs to assess variables’ trends, correlation and multiple regression analyses using the ordinary least square technique of analysis. The findings showed that illicit financial transfers from Africa to developed economies of the world are statistically significant. The study argues that money laundering seen from the perspective of developed economies as the laundering of proceeds of organized crime, trade-in psychotropic drugs and terrorist financing is grossly deficient as it does not accommodate the transfer of illegally acquired resources from Africa and other developing countries.

Similarly, Quentin and Alessandra (2011) examined corruption and illicit financial flows; they said that illicit financial flow is clouded by a lack of terminological clarity, which obstructs the effective policy debate emerging in response to the financial crises, as the accepted wisdom of the deregulated global financial market. They assert that illicit financial flow is intimately linked to large-scale corruption and the acknowledgement of this is important in order to clarify the extent and ways in which corruption may be tackled via policies thereby stopping illicit flows. Finally, policy should go beyond anti-money laundering policies and embrace more fully other policies to tackle illicit funds, but also more decisive efforts by rich countries that shelter secrecy havens or the proceeds of grand corruptions.

In the same vein, Kurebwa (2018) examined the effect of Illicit Financial Flows (IFFs) on democratic governance in Africa for the period 2005 and 2014. The study employed a descriptive method of analysis. The study found that illicit financial flows have a direct impact on a country’s stability to raise, retain and mobilise its resources to finance sustainable economic development. The study further revealed that over the period between 2005 and 2014, IFFs on average accounted for between 14.1 percent and 24.0 percent of the total developing country trade, while outflows were estimated at 4.6 percent to 7.2 percent of total trade and inflows were between 9.5 percent and 16.8 percent.

Ndikumana and Sarr (2016) delved more deeply into the relationship between capital flight and foreign direct investment (FDI) inflows in Africa by applying dynamic panel methods to 32 African countries between 1970 and 2013. They do not find evidence that annual FDI inflows drive capital flight, though a positive relationship exists between FDI stocks and capital flight. The authors also find that natural resource endowments, especially oil, are positively related to capital flight and FDI stock. Institutional quality is found to have an important ameliorating effect on capital flight. They concluded that institutions play a key role in combating high levels of capital flight.

Orkoh, Blaauw and Claassen (2018) examined the effect of corruption control and political stability on illicit financial outflows in Sub-Saharan Africa. The study employed the use of balanced panel data for the period 2005 to 2014. The regression estimates reveal that a unit increase in political stability and corruption control reduce illicit financial outflow due to mis-invoicing in merchandise trade by an average of US$ 20.5 million and US$ 44.3 million respectively. The results also show that high trade rating, financial sector rating and exchange rates reduce illicit financial outflows while an increase in foreign direct investment and inflation increase illicit financial outflow.

Amah and Okezie (2017) assessed the impact of illicit financial flow on economic growth and development in Nigeria for the period 1980 to 2015. The study employed the use of unit root and co-integration tests. The result showed a long-run relationship existed among the variables. The results further indicated that illicit financial flows had a significant impact both on economic growth and development. The study concluded that the government of Nigeria and indeed other African countries must lobby developed nations to adopt control so that individuals who move funds out of Nigeria into tax havens and secrecy jurisdictions can be exposed.

Following the review literature, most of the studies focused on the relationship between illicit financial flows with economic growth and development. However, little or nothing has been done to establish the relationship between governance, fiscal discipline and illicit financial flows in Nigeria which this study has attempted to fill the gap in the literature.

Theoretical framework

This study reviewed many theories in the field, but it is anchored on three; the investment diversion theory, the World Bank Residual Model and Wiseman and Peacock’s Displacement theory.

Investment diversion theory

Investment diversion theory was propounded by Jorgenson (1967). The theory holds that capital flight is
occasioned by two sets of forces—macroeconomic and political uncertainty in developing countries and better investment opportunities in advanced nations. The better investment opportunities in developed nations are the outcome of high-interest rates, a variety of financial instruments, political and economic stability, the nature of the tax policy and the keeping of secret accounts (Vukenkeng and Mukete, 2016). These two sets of conditions make it such that different categories of persons, for various reasons move resources from less developed countries to advanced countries. The absence of these funds from less developed countries culminate in a fall in investments, low economic growth, increased unemployment, increased dependency ratio and increased death rate (Orkoh, Blaauw and Claassen, 2018). These two sets of conditions serve as motivation factors for investors to move their investment or resources mostly illegally from less developed countries to advanced countries. Political instability and poor governance contribute to a domestic environment that deters investment and induces capital flight (Le and Rishi, 2006). Based on this theoretical perspective, we expect corruption control and political stability to have a negative association with illicit financial outflows. A high rating of a country’s political stability should significantly reduce illicit financial outflows.

The World Bank (2005) asserts that in many developing economies, corruption works like a regressive tax which leads to instances where the poor pay a disproportionate share of their income in the form of bribes to secure access to public services. Corruption has contributed to the failure of many aid-funded projects and it has the potential to weaken younger democracies (Kaufmann, 2003). Extant studies suggest that bribes and official extortion act as an extra tax that deters potential foreign direct investment into developing countries. Corruption also contributes to macroeconomic vulnerability and lower economic growth (Wei, 2002; Wei and Wu, 2002). We, therefore, expect a negative relationship between corruption control and illicit financial outflow, and a positive relationship between corruption and illicit financial outflows.

The theory further posits that with huge external debt in a country, people tend to transfer funds to foreign countries. Here, borrowed funds are even moved out of the country which reduces the desire to save and invest because of the expectation of exchange rate devaluation, fiscal crisis and expropriation of assets to pay the debt. This also reduces the debt servicing capacity of the home government thereby constraining economic growth and hence, poverty in these countries. As a result of this, effective governance and fiscal discipline are not guaranteed. In this case, the severity of poverty is increased by increased taxation or other severe measures adopted by the government to service international debts in banks in foreign countries which offer high-interest rates to curb capital flight (Vukenkeng and Mukete, 2016).

**World bank residual model**

The World Bank Residual model compares a country’s source of funds with its recorded use of funds. Sources of funds—the countries inflows of capital—include increases in net external indebtedness of the public sector and the net inflow of foreign direct investment. The net external indebtedness is derived by calculating the change in the stock of external debt which was obtained from the World Bank’s Global Development Finance database. Use of funds includes financing the current account deficit and additions to central bank reserves. Both these data series along with data on foreign direct investment were obtained from the IMF Balance of Payments database. According to the model, whenever a country’s source of funds exceeds its recorded use of funds, the residual comprises unaccounted-for, and hence illicit, capital outflows. However, the weakness of this model is that not all the illicit funds’ transfers pass through official sources to be captured.

**Wiseman and Peacock’s displacement theory**

Wiseman and Peacock in their study of public expenditure in the UK for the period 1890-1955 revealed that public expenditure does not increase smoothly and continuously but in a jerk or step-like fashion. At times, some social or other disturbance takes place creating a need for increased public expenditure which the existing public revenue cannot meet. While earlier, due to insufficient pressure for public expenditure, the revenue constraint was dominating and restraining an expansion in public expenditure, now under changing requirements such restraint gives way. They founded their analyses upon a political theory of public determination namely that governments, like to spend more money and citizens, do not like to pay taxes, and governments need to pay some attention to the wishes of their citizens. However, this case applies to Nigeria as citizens are always in one way or the other avoiding or evading tax which has compelled the government in its quest to spend more money on borrowing to finance the wishes of the citizens. The duo saw taxation as setting a constraint on government expenditure.

As the economy and thus incomes grew, tax revenue at a constant tax rate would rise, thereby enabling public expenditure would show a gradual upward trend even though within the economy there might be a divergence between what people regarded as being a desirable level of public expenditure and the desirable level of taxation. During the periods of social upheaval, however, this gradual upward trend in public expenditure would be disturbed. The public expenditure increases and makes
the inadequacy of the present revenue quite clear to everyone. Thus, this serves as justification for the increase in government expenditure in Nigeria as insecurity tends to distort the revenue generation process. The movement from the older level of expenditure and taxation to a new and higher level is the displacement effect. The inadequacy of the revenue as compared with the required public expenditure creates an inspection effect. The government and the people review the revenue position and the need to find a solution to the important problems that have come up and agree to the required adjustments to finance the increased expenditure.

They attain a new level of tax tolerance. They are now ready to tolerate a greater burden of taxation and as a result, the general level of expenditure and revenue goes up. In this way, the public expenditure and revenue get stabilized at a new level till another disturbance occurs to cause a displacement effect. Thus each major disturbance leads to the government assuming a larger proportion of the total national activity. In other words, there is a concentration effect. The concentration-effect also refers to the apparent tendency for central government economic activity to grow faster than that of the state and local level governments.

Having reviewed the above theories; the study adopts the investment diversion theory. The justification of the theory adoption lies in the economic realities of Nigeria where illicit financial flows are considered by the public and private actors as a norm. The diversion of investment funds into the private pockets of public officials has led to the slow pace of growth and development in the economy thereby leading to widened poverty and unemployment rate in the economy. Since the inception of independence in Nigeria, the country has faced a myriad of challenges in governance due to a lack of fiscal discipline thereby leading to embezzlement and mismanagement of public funds and hence, capital flight from the country as well as a huge debt burden on the economy.

**Trend analysis of illicit financial flows from Nigeria**

The scale and regional composition of IFFs out of developing countries with particular reference to Nigeria is a matter of controversy. In Organization for Economic Cooperation and Development (OECD), there is a consensus that these flows not only surpass official development assistance but even the sum of those aid flows and foreign direct investment (OECD, 2013; 2014). Worthy of note is the marked growth in IFFs in all developing regions to date, though at different rates. For the 2002 to 2011 period, GFI concludes that the Middle East and North Africa (MENA) region registered the fastest trend rate of growth in illicit outflows (31.5 percent per annum) followed by Africa (19.8 percent), developing Europe (13.6 percent), Asia (7.5 percent), and the Western Hemisphere (3.1 percent) (Kar and LeBlanc, 2013; Dhikru and Adeoye, 2013). Existing research shows that African countries have experienced massive outflows of illicit capital mainly to Western financial institutions. In a GFI report, it was shown that over a 39-year period between 1970 and 2008, Africa lost an astonishing US$854 billion in cumulative capital flight—enough to not only wipe out the region's total external debt outstanding of around US$250 billion (at end-December, 2008) but potentially leave US$600 billion for poverty alleviation and economic growth. Instead, cumulative illicit flows from the continent increased from about US$57 billion in the decade of the 1970s to US$437 billion over the nine years 2000-2008.

Ajayi (2005) identified the causes of capital flight to include "varying risk perception, exchange rate and misalignment, financial sector constraints and repression, fiscal deficits, weak institutions, macroeconomic policy distortions, corruption and extraordinary access to government funds. UNDP (2011) classified these causes into three categories – macroeconomic, structural and governance-related. It has been pointed out that macroeconomic factors that drive capital flight are fiscal deficits, high and variable rates of inflation, exchange rate over-valuation, negative real rates of return on assets, etc. Illicit capital outflows according to UNDP (2011) are more likely to be driven by structural factors like "rising income inequality, faster rates of (non-inclusive) economic growth, increasing trade openness without adequate regulatory oversight, etc." It further pointed out that economic growth is non-inclusive that income distribution is skewed leading to an increase in the number of high net worth individuals who may wish to evade taxes if governance is deficient. In this light, different tax treatment for domestic and foreign capital has also been identified as an enhancer of capital outflows.

The magnitude of illicit outflows from Africa with Nigeria at the forefront strongly suggests that the region can boost the effectiveness of the external aid and other transfers that it receives by curtailing the leakage of illicit capital. The continent should adopt a range of policy measures to counter this phenomenon that is sequenced and implemented in a manner best suited to the nature and sources of each country's illicit flows. Carefully designed measures to strengthen governance, transparency and regulatory oversight can significantly reduce the volume of illicit outflows. With the right reforms, Africa and indeed Nigeria are poised to see an increase in government revenue generation and effectively allowing additional resources to be devoted to poverty alleviation and improving the business climate for sustainable economic growth. (Table 1 and Figure 1)

In 1990 illicit financial flow was $7191.4, but declined to $10.8 million. The figure rose to $6335.8 million in 2000. In the years 2003, illicit financial flow increased to $9750.6 million. More so, 2005 recorded $18662.7 billion
Table 1. Illicit financial flow from Nigeria.

<table>
<thead>
<tr>
<th>Year</th>
<th>IFF($’million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>7191.4</td>
</tr>
<tr>
<td>1995</td>
<td>10.8</td>
</tr>
<tr>
<td>2000</td>
<td>6335.8</td>
</tr>
<tr>
<td>2003</td>
<td>9750.6</td>
</tr>
<tr>
<td>2005</td>
<td>18662.7</td>
</tr>
<tr>
<td>2008</td>
<td>51694.6</td>
</tr>
<tr>
<td>2010</td>
<td>20.00</td>
</tr>
<tr>
<td>2015</td>
<td>22.1</td>
</tr>
<tr>
<td>2018</td>
<td>3.5</td>
</tr>
</tbody>
</table>

Sources: Global Financial Integrity (2017)
International Monetary Fund (various issues)
World Development Indicator (various).

in illicit financial flow from Nigeria representing a marginal increase of $8912.1 in the same year. This trend in illicit financial flow has continued in an upward trend since 1990 but stood at $51694.6 in 2008. This further rose to $3.5 billion in 2018, indicating a high outflow of financial resources from Nigeria.

**METHODOLOGY**

The time-series data for this study were sourced from secondary sources such as the Central Bank of Nigeria statistical bulletin, annual reports of CBN, National Bureau of Statistics, the World Bank, Global Financial Integrity reports, textbooks, seminar papers and journals (Dhikru and Adeoye, 2019; Dahida, 2013).

To analyze the impact of governance on fiscal discipline and illicit financial flows in Nigeria, a multiple linear regression model was formulated. In this case, illicit financial flow is used as the dependent variable, while net external indebtedness, foreign direct investment, budget deficit and corruption index are used as independent variables. The theoretical foundation of the econometrics model formulated for this study is based on the World Bank's research on the relationship between governance and economic performance.
Bank Residual Model and Wiseman and Peacock’s Displacement theory reviewed earlier. The functional form of the model is expressed as:

$$\text{IFF} = f(\text{NEXD}, \text{GEE}, \text{BDF}, \text{CI})$$  \hspace{1cm} (1)

Where

- IFF = illicit financial flow
- NEXD = net external indebtedness
- GEE = government expenditure on electricity
- BDF = budget deficit
- CI = corruption index

The econometric form of the model is as follows:

$$\log\text{IFF} = \beta_0 + \beta_1\log\text{NEXD} + \beta_2\log\text{FDI} + \beta_3\log\text{BDF} + \beta_4\log\text{CI} + \mu_i$$  \hspace{1cm} (2)

Government expenditure on electricity (GEE) and corruption index (CI) are proxies for governance. Based on equation two, this study employs Autoregressive Distributed Lag as a dynamic causal model for its analysis. It has a finite number of lags in the explanatory variables. The adoption of the lag form of the model lies in the fact that variables, such as corruption, foreign debt, foreign direct investment and budget deficit have lagged impacts, we do not only intend to analyze their current effects but also their distributed or accumulated impact in the previous periods. This is because of the distributive impact of an increase in the explanatory variables on the dependent variable. Foreign debt for instance seems to have lagged impact on Nigeria in terms of debt servicing. However, in the ARDL model, the dependent variable is expressed by the lag and current values of an independent variable and its lag value (Ghouse et al., 2018). The ARDL approach follows a general to a specific approach, that’s why it could be possible to tackle many econometric problems like misspecification and autocorrelation, and come up with a most appropriate interpretable model and hence, the need for this lag model. The estimation problem caused by the estimation of a distributed lag is multicollinearity, and too little or no degree of freedom. However, these have been taken care of by the method of Almon (1962), to have a long-run response with unbiased, consistent and efficient results. The log form of the model was also adopted due to the different unit of measurement of the variables. Hence, the transformed ARDL model is expressed as:

$$\log\text{IFF}_t = \beta_0 + \beta_1\log\text{IFF}_{t-1} + \beta_2\log\text{NEXD}_{t-1} + \beta_3\log\text{GEE}_{t-1} + \beta_4\log\text{BDF}_{t-1} + \beta_5\log\text{CI}_{t-1} + \mu_{i-1}$$  \hspace{1cm} (3)

Where:

- $\log\text{IFF} = \text{Natural Log of illicit financial flow}$
- $\log\text{NEXD} = \text{Natural Log of net external indebtedness}$
- $\log\text{GEE} = \text{Natural Log of government expenditure on electricity}$
- $\log\text{BDF} = \text{Natural Log of budget deficit}$
- $\log\text{CI} = \text{Natural Log of corruption index}$
- $t-i = \text{Lag term transformation of the variables}$
- $\mu_{i-1} = \text{Error Term}$
- $b_1 - b_5 = \text{Slope of the independent variables in the past time (t-i) corresponding to ARDL model}$
- $t-5 = \text{Slope of the independent variables in the current time (t)}$

### DATA ANALYSIS AND RESULTS

#### Descriptive statistics of the variables

Proceeding to econometric estimation, this study conducts a statistical pre-test or exploratory analysis in terms of descriptive statistics of the variables. The skewness is an indicator of the asymmetry or deviation of the variables from a normal distribution with an expected value of zero. The kurtosis defines the degree of flattening or peakedness of distribution with an expected value of three. Jarque-Bera statistic determines the normally or otherwise of a distribution. The summary of the descriptive statistics of the variables is presented in Table 2.

<table>
<thead>
<tr>
<th>Table 2. Descriptive statistics of the variables.</th>
</tr>
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<tbody>
<tr>
<td><strong>LOG(IFF)</strong></td>
</tr>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>Median</td>
</tr>
<tr>
<td>Maximum</td>
</tr>
<tr>
<td>Minimum</td>
</tr>
<tr>
<td>Std. Dev.</td>
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<tr>
<td>Skewness</td>
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<tr>
<td>Kurtosis</td>
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<tr>
<td>Jarque-Bera</td>
</tr>
<tr>
<td>Probability</td>
</tr>
<tr>
<td>Observations</td>
</tr>
</tbody>
</table>

Note: St. Dev. = Standard Deviation. Source: Author’s computation (2020).
Table 2 summarizes the descriptive statistics of the variables namely, average values, maximum values and minimum values. Log of illicit financial flow (IFF) had an average value of 9.98 in the sample with a variation of between 4.08 and 14.05 during the period under study.

Net external indebtedness (NEXD) has an average value equal to 7.36, varying between 6.08 and 8.96. The coefficient of Skewness is equal to 0.06, positive and different from zero, hence the distribution of this variable is asymmetric on the right, then characterized by a slight spread on the right. Government expenditure on electricity (GEE) averaged 0.65, fluctuating in a range between 0.02 and 7.10. The Skewness coefficient is equal to 3.43, greater than zero; hence its distribution is characterized by a high spread to the right compared to the normal distribution. The Kurtosis value is greater than 3, hence its distribution has a density with a larger peak than the normal law. Furthermore, the corruption index (CI) has a mean average of 20.80 which varies between 7 and 28. The skewness coefficient is negative and different from zero. Therefore, the distribution is asymmetric on the left, characterized by a spread on the left.

**Unit root test**

Prior to the estimation of economic data, it is imperative to first test whether the variables are stationary and to determine their orders of integration. The study variables consist of the mixed outcome. This means that the variables have a mix of $I(0)$ and $I(1)$ as outcomes. To determine the stationarity of the time series data used, Augmented Dickey-Fuller (ADF) unit root test techniques were used and the result is presented in Table 3. Based on the result of the unit root, the autoregressive distributed lag technique was employed to capture the different stationarity levels of the variables and the small sample size of the data. The unit root result is presented in Table 4.

**Table 3. ARDL estimation result.**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.*</th>
</tr>
</thead>
<tbody>
<tr>
<td>D(LOG(IFF(-1)))</td>
<td>0.051909</td>
<td>0.408620</td>
<td>0.127034</td>
<td>0.9050</td>
</tr>
<tr>
<td>D(LOG(IFF(-2)))</td>
<td>1.066743</td>
<td>0.385720</td>
<td>2.765593</td>
<td>0.0506</td>
</tr>
<tr>
<td>D(LOG(NEXD))</td>
<td>-4.384229</td>
<td>1.313111</td>
<td>-3.338811</td>
<td>0.0289</td>
</tr>
<tr>
<td>D(LOG(NEXD(-1)))</td>
<td>3.732122</td>
<td>0.956176</td>
<td>3.903176</td>
<td>0.0175</td>
</tr>
<tr>
<td>D(LOG(NEXD(-2)))</td>
<td>0.771237</td>
<td>0.689079</td>
<td>-1.119228</td>
<td>0.3257</td>
</tr>
<tr>
<td>D(BD)</td>
<td>0.026973</td>
<td>0.004343</td>
<td>-6.210939</td>
<td>0.0034</td>
</tr>
<tr>
<td>D(BD(-1))</td>
<td>0.014226</td>
<td>0.008401</td>
<td>-1.693333</td>
<td>0.1656</td>
</tr>
<tr>
<td>D(BD(-2))</td>
<td>0.002127</td>
<td>0.008388</td>
<td>0.253636</td>
<td>0.8123</td>
</tr>
<tr>
<td>D(GEE)</td>
<td>0.523123</td>
<td>0.324305</td>
<td>1.613063</td>
<td>0.1820</td>
</tr>
<tr>
<td>D(GEE(-1))</td>
<td>0.064804</td>
<td>0.439144</td>
<td>-0.147570</td>
<td>0.8898</td>
</tr>
<tr>
<td>D(GEE(-2))</td>
<td>0.792647</td>
<td>1.261702</td>
<td>0.628236</td>
<td>0.5639</td>
</tr>
<tr>
<td>D(CI)</td>
<td>0.074967</td>
<td>0.266520</td>
<td>0.281281</td>
<td>0.7924</td>
</tr>
<tr>
<td>D(CI(-1))</td>
<td>0.621099</td>
<td>0.311325</td>
<td>1.995014</td>
<td>0.1168</td>
</tr>
<tr>
<td>D(CI(-2))</td>
<td>0.552180</td>
<td>0.168038</td>
<td>3.286044</td>
<td>0.0303</td>
</tr>
<tr>
<td>ECT(-1)</td>
<td>-1.524474</td>
<td>0.523236</td>
<td>-2.913547</td>
<td>0.0435</td>
</tr>
<tr>
<td>C</td>
<td>0.732033</td>
<td>0.723981</td>
<td>-1.011121</td>
<td>0.3692</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.856300</td>
<td>Mean dependent var</td>
<td>0.227917</td>
<td></td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.792424</td>
<td>S.D. dependent var</td>
<td>2.218475</td>
<td></td>
</tr>
<tr>
<td>S.E. of regression</td>
<td>1.010748</td>
<td>Akaike info criterion</td>
<td>2.849821</td>
<td></td>
</tr>
<tr>
<td>Sum squared resid</td>
<td>4.086450</td>
<td>Schwarz criterion</td>
<td>3.646407</td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-12.49821</td>
<td>Hannan-Quinn criter.</td>
<td>3.005323</td>
<td></td>
</tr>
<tr>
<td>F-statistic</td>
<td>5.835516</td>
<td>Durbin-Watson stat</td>
<td>1.178364</td>
<td></td>
</tr>
<tr>
<td>Prob(F-statistic)</td>
<td>0.050331</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Authors computation (2020).

The result in Table 4 shows that IFF, NEXD, BD and CI were not stationary at level, that is, they contained unit-roots, while GEE was stationary at level. This means that the data in their raw forms had no constant variance and means, except for GEE. However, with their first differences, IFF, NEXD, BD and CI became stationary,
that is, they are I(1) since the ADF value of each of these variables was greater than the critical values at 5% level of significance. Therefore, after taking the first difference of the variables, their means and variances became stationary or integrated at the order I(1) for the study period 1990 to 2018.

The elasticities of illicit financial flow with respect to the independent variable (NEXD) in the short run portray a significant relationship. The coefficient of NEXD in the short run is -4.38. This means that the variable (NEXD) in the short run conformed to a priori expectation. This implies that a 1% increase in NEXD would lead to a 4.38% reduction in illicit financial flow. The variable plays a significant role in the changes in illicit financial flow.

The variable budget deficit has a negative coefficient of 0.03. The coefficient showed a significant relationship with the illicit financial flow where its probability value of 0.0034 is less than the 0.05 significance level. The negative coefficient of the variable denotes a situation where a 1% increase in the budget deficit would lead to a 0.03% reduction in illicit financial flow. This means that the variable has a significant relationship with the illicit financial flow in Nigeria in the short run in Nigeria.

Furthermore, government expenditure on electricity short run also exhibits a positive relationship with the illicit financial flow. This is denoted by the coefficient of 0.52 with the probability value of 0.1820. This means that illicit financial flow is insignificant relative to illicit financial flow in Nigeria. Therefore, a 1% increase in government expenditure on electricity would lead to a 0.52% increase in illicit financial flow in Nigeria.

In addition, the coefficient of corruption index has a positive and insignificant relationship with the illicit financial flow. The sign is consistent with a priori expectation, implying that a 1% increase in the corruption index would result in an increase of 0.07% in illicit financial flow in Nigeria. Therefore, the corruption index has an insignificant effect on the illicit financial flow in Nigeria. This is confirmed by the probability value of 0.7924. In this case, the corruption index has an insignificant effect on the illicit financial flow in the short run in Nigeria.

Nonetheless, the coefficient of the error correction term [ECT(-1)] is significant and it has the correct sign. This supports the finding of a stable long-run relationship among the variables. Therefore, it can be noted that the system adjusts towards long-run equilibrium at the speed of 152.45% after a shock. This means that departure from long-run equilibrium is corrected in the short run at the speed of 152.45%. The high speed of adjustment to long-run equilibrium depicts how fast the disequilibrium is adjusted back in the short run and as such, the sign of the ECT(-1) confirms the existence of a co-integrating relationship.

This study also found that the coefficient of determination (R²) showed the percentage of variations in the dependent variables that can be explained by the independent variables. The R² of 0.856300 shows that 85.63% variation in illicit financial flows in Nigeria is determined or can be explained by changes in the explanatory variables used in the model while the remaining 14.37% is explained by other factors outside the model. This shows the goodness of fit of the model. Also, the overall model was statistically significant at a 5% level of significance based on the empirical values of the F-statistic and the probability of the F-statistic of 5.84 and 0.05033, respectively.

### DISCUSSION

The findings of this study show that a significant relationship exists between governance, fiscal indiscipline and illicit financial flow in Nigeria from the period 1990 to 2018. The study revealed that net external indebtedness in Nigeria has a positive and significant relationship with the illicit financial flow in Nigeria. This is not in conformity with a priori expectation. The significant positive impact of net external indebtedness on illicit financial flow could be attributed to bad governance and gross financial indiscipline by successive administrations. However, recently, there seems to be improved management of debt as seen in transport infrastructure and electricity supply which has reduced the rate of illicit financial flow in Nigeria, but the lagged impact of fiscal indiscipline outweighs. Thus, the significant effect could also be attributed to the efficient utilization of borrowed funds for capital projects which reduces the illicit financial flow of resources in Nigeria. Soludo (2003) argued that when debt reaches a certain level, it begins to have adverse effects.

### Table 4. Results of unit root test. Augmented Dickey Fuller

<table>
<thead>
<tr>
<th>Variable</th>
<th>Level</th>
<th>ADF critical value</th>
<th>1st difference</th>
<th>ADF critical value</th>
<th>Order</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOG(IFF)</td>
<td>-2.485716</td>
<td>-2.971853</td>
<td>-5.007085</td>
<td>-2.976263</td>
<td>I(1)</td>
<td>Stationary</td>
</tr>
<tr>
<td>LOG(NEXD)</td>
<td>-1.872177</td>
<td>-2.976263</td>
<td>-3.622093</td>
<td>-2.976263</td>
<td>I(1)</td>
<td>Stationary</td>
</tr>
<tr>
<td>BD</td>
<td>-2.241446</td>
<td>-2.971853</td>
<td>-5.063820</td>
<td>-2.976263</td>
<td>I(1)</td>
<td>Stationary</td>
</tr>
<tr>
<td>GEE</td>
<td>-6.267218</td>
<td>-2.976263</td>
<td>-7.339779</td>
<td>-2.981038</td>
<td>I(0)</td>
<td>Stationary</td>
</tr>
<tr>
<td>CI</td>
<td>-2.281232</td>
<td>-3.004861</td>
<td>-6.185790</td>
<td>-3.012363</td>
<td>I(1)</td>
<td>Stationary</td>
</tr>
</tbody>
</table>

Note: 5% critical value is used for ADF test. **Source**: Author's computation (2020).
effects, debt servicing becomes a huge burden and countries find themselves on the wrong side of the debt-laffer curve, with debt crowding out investment and growth. This problem is considered by this study to be worse in Nigeria and other developing countries where borrowed funds are looted and channeled through illicit means as capital flight.

The findings indicated that the budget deficit has also contributed positively and significantly to illicit financial flow in Nigeria. This could be emanating from huge budget deficits in Nigeria. More also, the positive relationship could be attributed to insufficient funds left to finance capital projects in Nigeria. This huge budget deficit may be attributed to corrupt practices, lack of transparency in budget implementation, inadequate internal revenue generation resulting from a narrow tax revenue base and a large informal sector that limits the fiscal viability of the three tiers of government, thereby facilitating illicit financial flow in Nigeria. However, this finding is not consistent with the study of Ogumnuyiwa (2011).

Furthermore, this study also revealed a positive and significant relationship between corruption and illicit financial flow in Nigeria. The positive and significant relationship aligned with the study of Quentin and Alessandra (2011). They assert that illicit financial flow is intimately linked to large-scale corruption and the acknowledgement of this is important in order to clarify the extent and ways in which corruption may be tackled via policies thereby stopping illicit flows. The significant relationship could also be attributed to the inefficiency of anti-corruption agencies such as the Economic and Financial Crime Commission (EFCC) and the Independent Corrupt Practices and Other Related Offences Commission (ICPC) in Nigeria which have not significantly minimized the rate of illicit financial flow from Nigeria.

In addition, the coefficient of government expenditure on electricity indicated a direct and significant positive relationship with the illicit financial flow in Nigeria. This is not consistent with a priori expectation, implying that an increase in the illicit financial flow should have an inverse relationship by reducing government expenditure on electricity. This shows that there has been something suspicious about the huge money sunk into electricity projects over the years by successive governments. This is worth investigating by further studies. This could be a result of siphoning/embezzlement and mismanagement of government expenditure on electricity in Nigeria. This finding conformed to the results obtained by Adetula and Ikpesu (2009) who observed that government expenditure on infrastructure has a positive impact on illicit financial flow in Nigeria. The embezzlement of funds has militated against Nigeria’s rapid economic development and worsened the social problems (Audu, 2004).

However, it is worth noting that, few studies have been carried out on this area in Nigeria, the uniqueness of illicit financial flow has slowed down the growth rate of the economy. Also, governance and fiscal indiscipline has contributed significantly to illicit financial flow in Nigeria. Therefore, the economy relies solely on revenue generated from the sales of crude oil which is not transparent and also volatile in the international market and hence, limits the revenue-generating capacity of the economy towards economic growth in Nigeria. This situation has led to the diversion of the limited resources for productive activities into short-term recurrent expenditures and consumption purposes.

SUMMARY

This study examined the impact of governance on fiscal discipline and illicit financial flows in Nigeria for the period 1990 to 2018. This study employed net external indebtedness (NEXD) as an indicator for fiscal discipline, government expenditure on electricity (GEE), the budget deficit (BDF) and corruption index (CI) as indicators or proxies for governance, while illicit financial flows (IFF) as the dependent variable. An autoregressive distributed lag technique of analysis was adopted for the study to determine the impact of governance on fiscal discipline and illicit financial flows in Nigeria. Based on the result of the study, the findings revealed that:

1. The result showed that net external indebtedness and budget deficit have a positive and significant impact on illicit financial flow in Nigeria within the period of analysis (1990-2018). This is shown by both short and long-run coefficients of 2.94%, 4.38% and 0.02%, 0.03% for net external indebtedness and budget deficit respectively. The results also reveal that government expenditure on electricity infrastructure has a positive impact on illicit financial flow in both short and long-run with coefficients of 0.21% and 0.52%. In addition, the corruption index has a positive relationship with illicit financial flow both in the short-run and the lagged impact respectively. This is shown by the coefficients 0.07 and 0.17%, respectively.

2. The explanatory variables jointly are significant in explaining illicit financial flow in Nigeria. This is shown by the short and long run F-values of 5.84 and 4.89 respectively. The variables showed that both in the short and long run, the explanatory variables accounted for 85.63 and 83.02% variation in illicit financial flow in Nigeria.

CONCLUSION

This study examined the impact of governance on fiscal discipline and illicit financial flows in Nigeria for the period 1990 to 2018. In line with the three research questions: what is the impact of governance on illicit financial flows
in Nigeria? From the empirical results presented, governance has not significantly reduced illicit financial flow in Nigeria, so it is negative. The study specifically revealed the extent to which governance has contributed to fiscal discipline and illicit financial flows in Nigeria. The study concludes that governance had a significant negative impact on fiscal discipline and a positive impact on illicit financial flow. However, the apriori expectations were positive for fiscal discipline and negative for illicit financial flows which were all violated by the findings of this study. The result of government expenditure on electricity indicated a positive relationship with the illicit financial flow in Nigeria, indicating that there is official corruption in the sector. Also, there exist positive relationships between net external indebtedness, budget deficit, corruption and illicit financial flow in Nigeria. This answers the second research question: does any significant relationship exist between fiscal indiscipline and illicit financial flows in Nigeria? These show that there are significant challenges confronting good governance and fiscal discipline in Nigeria and that there is yet an effective control system to curtail the number of resources that go out of the country. The mobilization and proper utilization of domestic resources rely on good governance and fiscal discipline. Bad governance and fiscal indiscipline are identified by this study as the major causes of illicit financial flow from Nigeria. The resource allocation to electricity and corrupt practices of government officials drains Nigeria’s economic growth and development through illicit financial flow. This poses a threat not only to Nigeria but to Africa as a whole. In conclusion, governance has a significant impact on fiscal discipline and illicit financial flows in Nigeria.

**RECOMMENDATIONS**

Sequel to the discussions of the findings of this study, the following recommendations are made, geared toward curtailing illicit financial flows:

1. Strengthening of rule of law, institutions of participation and accountability, and establishing a citizens’ charter of basic legal rights, including access to public services standards and limiting state intervention and policy reforms should be part of this package to ensure equality of treatment and accountability in public service in Nigeria.

2. There should be clarification of roles and responsibilities of various organs of government, transparency and introduction of performance-based accountability to hold the government to account for performance.

3. The third order of priority should be implementing policies dealing with the detection and punishment of corruption.

4. Pursue automatic cross-border exchange of tax information on personal and business accounts, ideally on a multilateral basis.

5. Efficiency and effective management of allocation to the electricity sector and other public utilities should be monitored and evaluated to ensure judicious use of government resources.

6. Net external debt and budget deficit should be efficiently managed to ensure economic growth and development of the economy. The government at all levels should avoid unsustainable debt with overhung debt servicing.

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