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INSTITUTIONAL QUALITY AND FOREIGN CAPITAL FLOWS IN NIGERIA

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Abstract

The study examines the relationship between institutional quality and foreign capital flows in Nigeria for a period of twenty five (25) years (1996-2020). The cointegration econometric technique and Error Correction Model (ECM) were employed in the analysis of the data. Preliminary tests such as the unit root tests were conducted both at levels and at first difference to ascertain the stationarity status of the data. The results from the empirical analysis revealed that rule of law has significant positive relationship with foreign capital flows both at the short run and in the long run; in the short run, control of corruption has significant negative impact on foreign capital flows; political stability and government effectiveness have significant negative relationship with foreign capital flows, and the quality of regulatory system in Nigeria does not have any significant relationship with foreign capital flows both at the short run and in the long run. The study recommends among others that, Nigerian government should initiate appropriate policy that would ensure implementation of rule of law, strong democratic institutions and good governance, because they effectively facilitate and attract foreign investment and enhance capital accumulation. Weak democratic and institutional structures (where rule of law are not strictly observed) discourages foreign capital flows. Therefore, for Nigerian economy to continue to attract huge foreign capital flows that will enable her guarantee sustainable growth, strict adherence to rule of law by all a sundry and government readiness to implement same is very imperative.

Keywords: Institutional Quality, Foreign Capital Flows, FDI, FPI, Econometric and Statistical Methods.

JEL Classification: K4, F2, O16, C4.

1. Introduction

The role of institutional quality in attracting foreign capital inflows to a country cannot be underestimated. These institutions established by government are basically the rules of the game in an organized society which helps to structure incentives in human exchange politically, socially and economically. The most explicit formal institutions are the formal rules and regulations such as the constitution of a country, the extant laws relating to the rule of law and enforcement of contracts, political and economic equality, rights to acquire legitimate property, pecuniary rights and other related property rights (Avellaneda, 2006; Bonnie, Quan & Meenakshi, 2012). Positive improvements in institutional quality helps to determine the way firms and society evolve through time, and, hence, the level of economic growth and development. A growing number of literatures argue in support of sound institutional quality for sustaining economic growth and development (Kaufmann & Kraay, 2000; Avellaneda, 2006).

In the extant literature, several studies like Ghura and Godwin (2000) and Bayraktar and Fofack (2007) examined the determinants of capital flow using macroeconomic variables without considering institutional quality factors. Recently, few studies such as Alfaro, Kalemli-Ozcan and Volosovych (2004), Bonnie, Quan and Meenakshi (2012), Zühal and Yasemin (2017), Ntim and Emilia (2014), Ade, Babatunde and Awoniyi (2011) studied the relationship between institutional

quality and foreign capital flows. Most of them concentrated in other countries other than Nigeria. Besides, to the best knowledge of the researcher, only few Nigerian specific studies such as Ntim and Emilia (2014), Kazeem (2013), Ozekhome (2017) among other few studies were conducted in relation to institutional quality and capital flow within Nigeria. Hence, given this paucity of studies in the country, the researcher attempts to investigate this relationship in the Nigerian context using Nigerian institutional quality-specific data, and to see the extent to which institutional factors have influenced foreign capital inflows to Nigeria over time.

Again, some previous empirical studies likeMouna and Mondher(2015), Bounoua and Matallah (2014), and Kersan-Škabić (2013) all employed OLS, GMM, Panel Data Analysis and VECM; while few others like Kahsai1, Hailu, Nondo and Schaeffer (2011), and Jude and Levieuge (2013) used cointegration econometric technique. Although the GMM is a good technique for analyzing data of this nature, however, this study differs from other studies in that it will make use of cointegration technique in its analysis of data. The reason being that cointegration technique also entails conducting ECM and as such, enable one to effectively examine the long and short run dynamics or relationship among institutional quality and the various forms of foreign capital flows in Nigeria overtime.

Furthermore, from a careful observation of previous empirical studies (Bonnie, Quan & Meenakshi, 2012; Ntim & Emilia,2014; Zühal & Yasemin, 2017), it appears that majority of them used cross-countries data, which may not be suitable or appropriate to formulate policy for individual country specific level due to the differences in cross cultural context. Beside this, most studies only focused on the impact of institutional quality on one component of foreign capital flows which is foreign direct investment, thereby neglecting foreign portfolio investment, foreign remittances, foreign aids and credits amongst others. Also, while Nigeria has made several polices over the years to strengthen its institutional capacities and governance, the extent to which this institutions have affected the inflows of foreign capital in the country is yet to gain much empirical attention. In the light of the above gaps, this study is an attempt to empirically investigate the impact of institutional quality on foreign capital inflows with specific emphasis on foreign portfolio investment (FPI) and foreign direct investment (FDI) in Nigeria.

The rest part of the paper is structure as follows; section two covers literature review, section three is on methodology, section deals with analysis of data and interpretation of results and while conclusion and recommendations are addressed in section five.

2. Literature Review

2.2.1 Concept of Foreign Capital Flows

Foreign capital inflow as cross border capital that is usually transmitted into the domestic economy in the form of FDI's, FPI's, foreign reserves draw-down, multilateral and bilateral loans and related credit facilities, foreign aids and foreign remittances. It is transfer of ownership of financial asset from one country to another. These assets are usually shown in the balance of payments of the recipient country. According to Nkoro andUko (2015), foreign capital flow is the movement of capital from one economy to the other. Along this line, (Obadan, 2008) argues that FCFare often transmitted into the domestic economy in the form of FPI, FDI, foreign external loans and credits, multilateral or bilateral aids and foreign remittances in order to facilitate investment, portfolio acquisition and engage in development and non-developmental projects in the recipient country.

Historically, the concept of foreign capital flow is dated as far back as 1945 during the world war era when America was sending financial aids and technical assistance which included machinery and equipment to some European countries that were affected by war (Adams-Kane& Lim, 2014). According to Adams-Kane and Lim (2014), the post-war era of financial globalization was characterized by a strong upswing in foreign capital flows. But these flows were mainly among advanced economies, until early mid-2000s when a number of developing countries begun to experience substantial net flows of foreign capital (Adams-Kane& Lim, 2014).

Drivers of Foreign Capital Flows

Foreign capital inflow has remained the most dramatic feature of the global economy (Obadan, 2004). Since year 2000, foreign capital flows to emerging markets have gained historical heights (Agrawal & Agrawal, 2013). The greatest factor responsible for the upsurge in foreign capital inflows has been attributed to the increasing levels of financial integration amongst nations and tremendous improvement in electronic transactions worldwide (UNCTAD, 2015). Other factors in this direction among others includes liberalization of financial markets, internationalization of stock exchanges, trade openness, adoption of automated trading floor, establishment of the legal framework for investment inflows, improvement in judicial processes as well as import duty exemptions for foreign investors, tax holidays, free trade zones, "improved remittances of dividends and profits abroad and security of foreign investment through Multilateral Investment Guarantee and the investment Promotion Protection Agreements have engender a surge in foreign capital flow into Nigeria (UNCTAD, 2015)".

Obiechina and Ukeje (2013) also added that the pull and push factors were also responsible for the increased inflows of foreign capital to the country over the years. According to him, the Pull factors includes sound economic indices relating to growth and development, improvement in fiscal and monetary policies, development of the two segments of the aggregate financial markets and several structural reforms in Nigeria: while the push factors include weak economic indices relating to growth and development, high levels of liquidity, and low level of yields in financial markets (Olotu & Jegbefume, 2011).

Indicators of Institutional Quality

(a) Quality of Regulation

Quality of regulation captures the ability of the government through its agencies to effectively regulate business (Kaufmann, Kraay& Mastruzzi, 2010). It is the extent to which regulatory policy and environments help or hinder private businesses (Busse & Groizard, 2008). It entails regulation in capital markets which include proportion of time spent in completing forms and dealing with the requirements imposed by government regulatory agencies. It also explains cost of licensing and registering business and the manner at which stock market operations are controlled through sanctions and incentives (World Bank, 2015). Since, quality of regulation often differs across countries (Busse & Groizard, 2008), the better the regulatory environment of a given country the more foreigners may like to invest in the country which may increase its foreign capital flows (Heritage Foundation, 2015; UNCTAD, 2015).

(b) Control of Corruption

The level of corruption is an institutional phenomenon which occurred from institutional failure. It is difficult to define and can exist in numerous forms and conditions. World Bank Group (2014) and United Nations Global Programme against Corruption (GPAC)(2014) defined it as the utilization of position power for personal financial and nonfinancial gains. Transparency International (2015) sees it as the abuse of position of power for personal gains while the World Bank (2014) see it as misuse of power for self-gains. These international bodies believe that corruption is simply the use of position of authority for personal gains at the expense of the entire society.

Many studies on effects of corruption have showed that corruption increase business uncertainty (Adiya & Alexander 2015). Corrupt practices cause an ambiguity on return predictability and decreases investor's confidence on their business protection and general economic systems Méon & Sekkat, 2005). Corruption fends off external investors as it leads to operational inefficiency and deter efficiently functional markets (Morrissey & Udomkerdmongkol, 2012). On the contrary, several studies indicates that corruption can also prove to be beneficial to external investors or even serve as a means of attracting them (Méon & Sekkat, 2005). These studies opine that bribery is the quickest means to get things done in the hand of the government's officials without the need for officials to conduct the required prudential regulation.

(c) Political Stability

Political stability has been defined as the degree to which a country is free from internal conflicts like ethnic violence and religious tensions (Kahsai, Hailu, Nondo & Schaeffer, 2011). It denotes the extent to which a country

is absent from terrorism, free from frequent (or violent) changes in political power and have low probability of military gaining power or even as low likelihood of politically-motivated violence (Komlan & Kodjo, 2015).However, in Nigeria, there are fears or subconscious notions of possible future civil wars, violence amongst the political class, and ethnic violence, militancy in the Niger delta, kidnappers and the activities of the Boko Haram terrorist Sect. All these indicators of political instability are by products of bad governance and institutional failure which creates high business uncertainties and risks.

(d) Quality of Law and Order

This refers to the capacity of the judiciary, police force and related agencies to discharge their responsibilities in a timely and fair manner (Thomas & Christoph, 2003). It anchors on timeliness, credibility, fairness of justice and impartiality of the judiciary in the delivery of their services (Bouras, 2014; Yusuf, 2014). However, the quality of law and order in Nigeria seems to be poor as observed in numerous delays, untimely and unfair manners in the way the judiciary discharges its responsibilities (World Bank, 2015). Many Nigerians do not have confidence in the law court as legal systems in the country are perceived to be ineffective in protecting business against undue losses (International Business Intelligence, 2015). There is little or no independence of the judiciary in Nigeria, thus justice delivery in Nigeria appears to be perverted and untimely. The delivery of justice appears to be unfair and partial. Similarly, police and other law enforcement agencies are beclouded with ineffectiveness in maintaining order and several of the laws that have been enacted (Kaufmann, Kraay& Mastruzzi, 2010).

(e) Government Effectiveness

Kaufmann *et al* (2010) posits that government effectiveness is the extent to which government and its agents are committed to formation of quality policies and how they ensure that such policies are fully implemented; while Busse and Groizard(2008) sees it as the degree to which government is committed to provide roads, rail, power, and other physical and institutional infrastructure to ease business transactions. Applying the above definitions to the Nigerian settings, it is obvious that capacity of governments and its agencies to design, formulate, and implement policies and discharge functions in a most effective manner is very low (World Bank, 2015). This is evidence in quality of education systems, electricity, roads and so many others social amenities that ought to promote the survival and legitimacy of an organization in Nigeria. Even the poor credibility and commitment of the Nigeria's successive governments to provide electricity over the years may have affected the growth performance of businesses, industrialization and even stock market efficiency (Ernest & Young, 2015; (Mouna & Mondher, 2015).

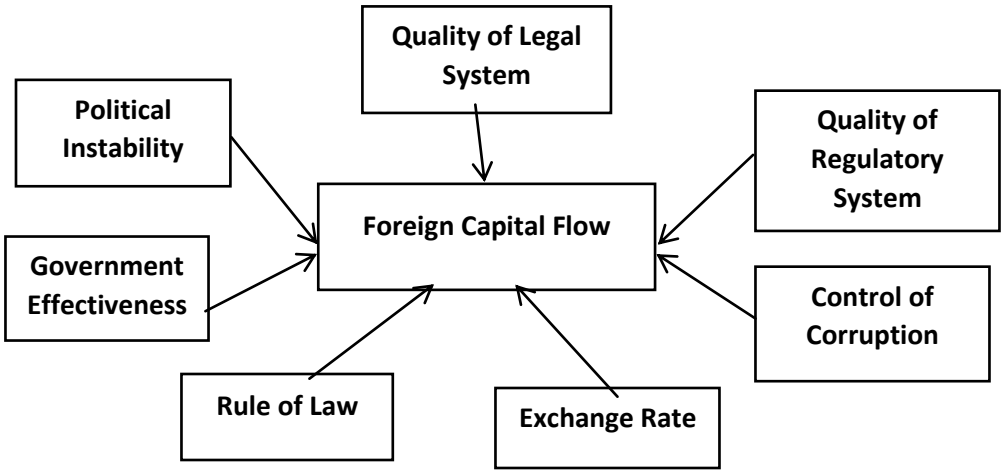

Figure 1:Schematic Diagram of Variables and Relationship
Source: Author's Design 2021.

2. Empirical Literature

Table 1: Summary Table of Empirical Literature

S/N	Author/Year	Country	Methodology	Period of Study	Findings
1	Alfaro et.al (2004)	East Asian, Russian crises and Turkey	OLS	1970−2000	"Institutional quality influences the volume of FDI and FPI in a country
2	Matthias and Carsten (2005)	83developing countries	VECM	1984-2003	Government stability, the absence of internal conflict and ethnic tensions, basic democratic rights and ensuring law and order are highly significant determinants of foreign investment inflows; it further showed from a cross-country analysis covering a period of 20 years, that government stability, law and order, and quality of the bureaucracy were closely associated with FDI
3	Meon and Sekkate (2007)	Belgium	OLS	1992-2005	Stable democratic institutions devoid of ethnic tensions and religious conflicts, rule of law and entrenched fundamental human rights significantly accounts for high foreign financial inflows into the sampled countries
4	Ade, Babatunde and Awoniyi (2011)	Nigeria	OLS	1990-2009	corruption and weak institutions reduces the volume of foreign capital flows into the country
5	Kahsai, Hailu, Nondo and Schaeffer (2011)	Sub-Saharan Africa	Cointegration and ECM	1996-2007	That institutional quality does not matter, rejected the effect of law and order, ethnical tensions, political stability and corruption on attracting FDI
6	Ourvashi (2011)	45 developing countries in the African	Panel data analysis	1980-2009	control of corruption,rule of law, political stability, freedom of expression havesignificant impact on inward FDI
7	Bonnie, Quan and Meenakshi (2012)	164 countries	Panel Data Analysis	1996-2006	The results also provide evidence that institutional quality has a positive and significant effect on FDI
8	Kazeem (2013)	Nigeria	Bound Test	1970-2010	Sound institutional quality greatly and significantly affects FDI and FPI inflow into the country
9	Kersan-Škabić (2013)	Eight countries in Southeast Europe	Panel Data Analysis	2001-2010	Institutional quality factors of which a drop in corruption level along with other institutional factors like privatization and rule of law have a positive significant impact on foreign capital flows in the sampled

					countries covered by the study
10	Komlan (2013)	30 African Sub-Saharan countries	panel regression	1984-2007	high level of institutional quality accounts for massive inflow of foreign capital flows into the sampled Sub-Saharan countries
11	Jude and Levieuge (2013)	94 developing countries	Cointegration and ECM	1984-2009	The impact of various factors of institutional qualities had a positive and significant effect on FDI growth effect were widely rejected
12	Bouras (2014)	Tunisia	OLS	1990-2010	the effectiveness of public policy, political stability, quality of law and procedure, the voice of expressions and control of corruption have no impact on attractiveness of FDI in Tunisia
13	Mamta and Chowdhury (2014)	156 developed and developing countries	OLS	1996-2011	Corruption decreases foreign capital flows in a significant manner while strong institutional quality enhances the inflow of foreign capital flows into the countries that were sampled
14	Ntim and Emilia (2014)	Nigeria	VECM	1980-2011	Political stability, corruption, human capital and trade openness are major determinants of FDI inflows to Nigeria
15	Choromides (2015)	Greece, Bulgaria and Romania	OLS and GMM	1996-2013	Regulatory institutions have a statistically significant relation with FDI in the three South East Europe (SEE) economies; the effect of the institutional and regulatory quality on FDI is much higher for Greece than the 2 other SEE economies; Rule of Law and Regulatory Efficiency have the highest significant and negative effects on FDI
16	Kariuki (2015)	35 African countries	OLS	1984 to 2010	Weak institutions and tribal and religious tensions created risks which significantly dampened the inflow of foreign capital flows into many of the sampled countries
17	Mouna and Mondher (2015)	MENA Region	GMM	1985-2009	Political stability, rule of law and a climate devoid of religious and ethnic acrimony along with sound institutions and other factors of institutional quality significantly accounted for the massive inflow of foreign capital flows into many of the MENA countries that was sampled in the study
18	Mouna and Mondher (2015)	MENA Region	OLS	1995-2012	Corruption significantly decreases FDI inflows

19	Iheonu, Ihedimma and Onwuanaku(2017)		Panel Data Analysis	1996-2015	Institutional quality positively and significantly influences the volume and value of foreign capital flows in the country
20	Ozekhome (2017)	Nigeria	GMM	1981-2015	Stable democratic institutions, high levels of institutional quality and rule of law impacts upon foreign capital flows in the country and vice versa
21	Zühal and Yasemin (2017)	113 developing countries	Panel Data Analysis	2002–2012	Show evidence that some institutional factors matter more than others in attracting more FDI flows".

Source: Author's Compilation, 2021

3. Methodology

The longitudinal survey (ex-post facto) research design which involves employment of existing data to study some phenomenon over a period of time, and in which the researcher has no ability to alter the data because they already occurred was adopted in this study.

3.1 Population and Sample

The population of the study is the Nigerian economy. The sample size focuses on workings of the institutional framework and foreign capital inflows to the economy (external and domestic sector). These are believed to have strong impact on the level of foreign capital flows to the country. The study involves the utilization of the census approach as aggregate data on the population, rather than a sample, was utilized in the analysis

3.2 Sources of Data

The data were sourced from Worldwide Governance Indicators, UNCTAD statistics and it covered a period of twenty four (25) years (1996 -2020).

3.3 Theoretical Framework and Model Specification

The theoretical framework for this study hinges on the institutional theory developed by North (1990) as it is still relevant today. According to the theory, institutions exist due to the uncertainty involved in human interactions. They are constrained devised to structure those interactions. They are less formal shared interactions derived from professions, scripts, and other societal and cultural practices that organizations and individuals are expected to follow (Tridico, 2011). Thus, "rules derived from institutions like court and regulatory agencies set market rules, structure interactions among economic actors, where adherence to or congruence with the rules may serves not only to protect firms from formal, economic penalties, but also to create legitimacy, which serves to advance the firm's current and future performance (Tridico, 2011)". Hence, the study hypothesized that improvements in the institutional quality enhances foreign capital flows into developing countries like Nigeria. Specifically, increase in corruption control, improvement in financial regulation, stability in the political environment, improvement in government effectiveness, quality of legal system and quality of regulatory system leads to increase in foreign capital flows into Nigeria.

Model Specification

Thus, the model for this study is slightly modified, and it flows from the institutional theory of North (1990) which is still accepted today. It is stated in its functional form as follows:

FCF = f(ROL, QRG, POS, GOE, COC……(1)

However, the econometric form of the model is stated thus:

$$FCF = \alpha_0 + \alpha_1 ROL_t + \alpha_2 QRG_t + \alpha_3 POS_t + \alpha_4 GOE_t + \alpha_5 COC_t + u_t \text{……...(2)}$$

Where:

FCF = Foreign capital flows proxy using FPI and FDI;

ROL = Rule of Law

QRG = Quality of regulatory system

POS = Political stability

GOE = Government effectiveness

COC = Control of corruption

$u_{t = Is}$ the error term;

t = 1996-2020

The Apriori expectations of the model are $\alpha_1, \alpha_2, \alpha_3, \alpha_4, \alpha_5 > 0$

3.4 Method of Data Analysis

Two main methods are proposed in the analysis. These are unit root test, correlation coefficient, Johansen Co-integration econometric technique and Error Correction model (ECM). The descriptive statistics help to provide the background characterization of the data that are analyzed. The co-integration focuses on the long run (steady state) effects of institutional quality on foreign capital flow in Nigeria. The methodology was also used by Baboo and Odit (2009) on stock market development and growth in Mauritius.In this regard, the unit root tests are conducted to determine the stationarity property of data set in order to avoid spurious regression results (Engel& Granger, 1987).

3.5 Measurement of Variables

Table 2: **Measurement of Variables**

S/N	Variables	Definition	Type of Variable	Measurement	Source	Apriori sign.
1	FCF	Foreign Capital Flows	Dependent Variable	"FDI and FPI net flows in Nigeria (i.e Inflows less Out flows)	Worldwide Governance Indicators (WGI), Choromides (2015)	+
2	ROL	Rule of Law	Independent	"Reflects perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence"	Worldwide Governance Indicators (WGI)	+
3	QRG	Quality of Regulatory System	Independent	"Reflects perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development	Worldwide Governance Indicators (WGI), Choromides (2015)	+
4	GOE	Government Effectiveness	Independent	Reflects perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation,	Worldwide Governance Indicators (WGI), Iheonu, Ihedimma & Onwuanaku (2017)	+

				and the credibility of the government's commitment to such policies		
5	POS	Political Stability	Independent	measures perceptions of the likelihood of political instability and/or politically-motivated violence, including terrorism	Worldwide Governance Indicators (WGI)	+
6	COC	Control of Corruption	Independent	Reflects perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests".	Worldwide Governance Indicators (WGI)"	+

Source: Author's Compilations, 2021.

4. Data Analysis and Interpretation

In this section, we bring to bear the methods of analysis earlier stated in section three and which entails unit root test, correlation coefficient, cointegration and error correction model.

4.1 Correlation Analysis

We present the ordinary correlations matrix to examine the background behavioural patterns in the data set. The result of the correlation tests is shown in Table 3 as follows:

Table 3: Pairwise Correlation Matrix

	FCF	ROL	COC	GOE	POS	QRG
FCF	1					
ROL	0.77134	1				
COC	0.39894	0.66793	1			
GOE	-0.30929	-0.20401	-0.23664	1		
POS	-0.60796	-0.48398	-0.23838	0.09966	1	
QRG	0.36987	0.55101	0.56466	-0.25507	-0.27704	1

Source: Author's compilations (2021).

The results of the correlation matrix in table 3 above show that foreign capital flows (FCF) has a significant positive correlation value of 0.77134 with rule (of law (ROL), and a significant negative correlation value of -0.60796 with Political stability (POS). It is also seen that foreign capital flows (FCF) has a rather weak positive correlation with control of corruption (COC), quality of regulatory system (QRG) and weak negative correlation government effectiveness (GOE). On the other hand, rule of law (ROL), control of corruption (COC) and quality of regulatory system (QRG) are highly correlated. However, a strong positive correlation value of 0.56466exist between quality of regulatory system (QRG) and control of corruption (COC).Thus, we conclude that, the correlation matrix results above indicate the absence of multicolinearity among the hypothesized variables in the model.

4.2 Unit Root Tests

The Augmented dickey Fuller (ADF) test was employed in this regard. The results are presented in levels and first difference; and Table 4 presents results of ADF test in levels without taking into consideration the trend in variables. A close examination of the table shows "that

all the variables have ADF values that are less than the 95 percent critical ADF value of -2.998064 (in absolute values), except that of GOE;in all, we can say that variables are non-stationary in their levels".

Table 4: Unit Root Test for Variables in Levels

Variable	ADF Test Statistic	95% Critical ADF Value	Remark
FCF	0.653657	-3.004861	"Non-Stationary
ROL	-1.336464	-2.998064	Non-stationary
QRG	-2.596247	-2.998064	Non-stationary
POS	-1.687719	-2.998064	Non-stationary
GOE	-3.820558	-2.998064	Stationary
COC	-1.933220	-2.998064	Non-stationary"

Source: Author's Compilation 2021.

Thus, "the result of the unit root test on the variables in first differences is reported in table 4; from the result, it is seen that the ADF test statistic for each of the variables is greater than the 95 percent critical ADF values (in absolute values)". With this result, the variables are adjudged to be stationary after their first differences. For this reason, we would accept the hypothesis that the variables possess unit roots. Indeed, the variables are integrated of order one (i.e. I[1]).

Table 5: Unit Root Test for Variables in First Difference

Variable	ADF Test Statistic	95% Critical ADF Value	Remark
ΔFCF	-10.22101	-3.004861	Stationary
ΔROL	-4.389335	-3.004861	Stationary
ΔQRG	-5.353743	-3.004861	Stationary
ΔPOS	-5.305669	-3.012363	Stationary
ΔGOE	-6.534141	-3.004861	Stationary
ΔCOC	-4.676455	-3.004861	Stationary

Source: Author's Compilation 2021.

4.3 Cointegration Analysis

The Johansen system of cointegration method was employed and in Table 5 the maximum eigenvalue test (λ-max) and the trace test statistics both indicate that there are more than two significant cointegrating vectors between institutional quality and FCF variables in Nigeria. This implies that a long run relationship exists among the variables.

Table 6: Johansen Multivariate Cointegration Tests Results

Trace Test				***Maximum Eigenvalue Test***			
Null Hypothesis	Test Statistic	Critical Value	Prob.	Null Hypothesis	Test Statistic	Critical Value	Prob.
r = 0*	121.8900	95.75366	0.0003	r = 0*	44.60624	40.07757	0.0144
r ≤ 1	77.28373	69.81889	0.0112	r ≤ 1	30.31814	33.87687	0.1255
r ≤ 2	46.96560	47.85613	0.0605	r ≤ 2	22.93510	27.58434	0.1763
r ≤ 3	24.03050	29.79707	0.1991	r ≤ 3	14.74057	21.13162	0.3075
r ≤ 4	9.289931	15.49471	0.3393	r ≤ 4	9.285964	14.26460	0.2631
r ≤ 5	0.003967	3.841466	0.9485	r ≤ 5	0.003967	3.841466	0.9485

Source: Author's compilations 2021.

4.4 The Error Correction Model (ECM)

The ARDL approach is used for the ECM and the R-Bar squared criterion was used for the selection of the parsimonious equation. In Table 7 the results showed a very good diagnostic outcome; the R-squared value of0.57 is high and it indicates that over 57 percent movement in FCF over the short term is explained by short term movements in the explanatory variables including the ECM. The R-Bar squared value of 0.46 is moderate and the F-values of 2.339168 passed the significance test at the 1 percent levels. In order to determine the individual roles of each of the institutional quality factors in relation to foreign capital flows in Nigeria, attention is given to the coefficients of each of the variables in terms of their signs and significance level. In the models, the results showed that all the coefficients are correctly signed and are in line with the a-priori determination except control of corruption (COC) that was negatively signed.

Table 7: Short Run institutional quality and foreign capital flows in Nigeria

Variables	Coefficient	T-Ratio	Prob.
Constant	44372957	0.694745	0.4972
DROL	2.54E+09	2.979611	0.0088**
DQRG	1.48E+08	0.350640	0.7304
DPOS	4.10E+08	1.269806	0.2223
DGOE	1.03E+08	0.158949	0.8757
DCOC	-2.20E+09	-2.260895	0.0381*
ECM(-1)	-0.705371	-3.119195	0.0066**
$R^2 = 0.57$	$\bar{R}^2 = 0.46$	F = 2.339168	D.W. = 2.10

Source: Author's computations 2021: Note: ** sig at 1% level; * sig at 5% level.

A close examination of each of the coefficient of the variables in terms of their significance level reveal that, the coefficients of rule of law (ROL) has significant positive relationship with foreign capital flows in Nigeria. It significant at the 1 percent level. The implication of this is that a unit increase in the rule of law (ROL) in Nigeria, increases foreign capital flows by 2.54E+09 percent. Those of control of corruption (COC) are negative and passed the 5 percent level of significance. This means that as control of corruption (COC) increases, foreign capital flows to Nigeria decreases by approximately -2.20E+09 percent. This finding agree with those of Meon and Sekkate, (2007) who found that ensuring law and order and control of corruption are highly significant determinants of foreign investment inflows. But it disagreed with study of Kahsai1, Hailu, Nondo and Schaeffer (2011) who could not found significant evidence of the impact of institutional quality on FDI inflow. However, those of Quality of regulatory system (QRG), Political stability (POS) and Government effectiveness (GOE) failed the 5 percent significance level, meaning that they do not have any significant relationship with foreign capital flows in Nigeria within the period of investigation. This finding is in line with those of Jude and Levieuge (2013) who submitted a non-significant relationship between institution of institutional quality variables such as political risk, internal and external conflicts, democratic accountability and bureaucracy quality on FDI growth. In all, the results above imply that, short term movements in foreign capital flows in Nigeria can only be effectively predicted by the level of rule of law (ROL) and control of corruption (COC) and not quality of regulatory system, political stability and government effectiveness.

The coefficient of the error correction (ECM) term has the correct negative sign and is also significant at the 1 percent level. "This goes to show that any short-term deviation of the hypothesized institutional quality variables from equilibrium in the short-run, can be restored in the long run; the high value (-0.705371) of the error correction term means that adjustment to equilibrium in the long run is slow: the ECM term shows

that about 70 percent of long run adjustment to equilibrium is made during the first year". The DW statistic value of 2.10 shows the absence of autocorrelation problem in the model.

4.4 The Long Run Relationship

The results of the long run behaviour of capital flows in Nigeria is presented in Table 8 with an impressive goodness of fit of R squared value of 0.84 percent showing that the dependent variables effectively tract the long run movement in the dependent variable. Even the adjusted R squared value of 0.77 percent is also high, indicating that the model possesses a very high predictive ability.

Table 8: The Long Run Model of Institutional Quality and Foreign Capital Flows in Nigeria

Variables	Coefficient	T-Ratio	Prob.
Constant	-6.14E+08	-0.551578	0.5889
LROL	2.10E+09	2.745408	0.0144*
LQRG	-6.26E+08	-1.198373	0.2482
LPOS	-5.61E+08	-2.087447	0.0532*
LGOE	-1.58E+09	-2.480253	0.0246*
LCOC	-1.75E+08	-0.248679	0.8068
AR(11)	-0.700021	-2.429871	0.0272
SIGMASQ	5.73E+16	1.380736	0.1863
$R^2 = 0.844$	$\bar{R}^2 = 0.78$	F = 12.39924	D.W. = 1.93

Source: Author's Compilations 2021: Note: * sig at 5% level.

The particular relevance of each variable in the model can be considered by looking at the significance of the individual coefficient. The results above show that the coefficients of rule of law (ROL) passes the 5 percent level of significance, meaning in the long run, the extent to which rules and regulations in the country is been observed significantly determines the level of foreign capital flows to the country. This result also align with the short run result, and it goes to demonstrates that both at the short run and long run, rule of law (ROL) is an indispensable factor for attracting foreign capital into Nigeria. Therefore, the government must pay special attention to this all important factor by ensuring strict compliance to subsisting rules and regulations by the citizens. Law enforcement officers must up their game by ensuring all citizens, irrespective of their status in society must play by the music of the game; and where anyone is found culpable, appropriate sanctions should be melted without fear or favour. This will definitely go long way to attracting the much needed foreign capital into the country to spur rapid economic growth. Indeed, the findings above agrees with those of Matthias and Carsten (2005), Bonnie, Quan and Meenakshi (2012), Iheonu, Ihedimma and Onwuanaku (2017) who found significant positive relationship between rule of law and foreign capital flows. It however disagreed with those of Jude and Levieuge (2013), Bouras (2014), Kahsai1, Hailu, Nondo and Schaeffer (2011) who did not found any significant relationship between rule of law and foreign capital flows.

The coefficient of Political stability (POS) is negative and passes the 5 percent significant level. It means that in the long run, political stability has significant negative relationship with foreign capital flows in Nigeria. Theoretically, stability in a country's political environment should encourage and positively attracts huge foreign capital flows. But in this case, the opposite is the case. The implication of this result is that as the level of Political stability increases in the country, it reduces total foreign capital inflow to the country by -5.61E+08 percent in the long run. This result is rather surprising; however, it probably suggests that other than stability in the country's political environment, foreign investors look out for other salient favourable factors (rule of law, safety of investment and political "will" on

the part of government to enforce laws) that will enable bring in their hard earned money. The result aligns with the studies of Kariuki (2015) and Kazeem (2013) who submitted significant negative relationship between political stability and foreign capital flows. The findings however, disagreed with those of Meon Sekkate, (2007), Matthias and Carsten (2005) who concluded significant positive relationship, as well as those of Jude and Levieuge (2013) and Bouras (2014) who could not found any relationship between political stability and foreign capital flows.

The long run result with respect to the coefficient of government effectiveness (GOE) also indicates significant negative relationship with foreign capital flows in Nigeria, suggesting that effectiveness of governance is not sufficient to guarantee positive impact of foreign capital flow to a country, rather, there could be other silent underlying factors responsible. This also proves that attracting foreign capital flow to a country is quite different from ensuring that the capital so attracted has the expected positive impact on the common man in the street. Thus, the essence of governance is to provide enabling environment for businesses and investment to strive. No matter the amount of crusades, travels overseas wooing of foreign investors carried out by government, if it is not effective in terms policies initiations and implementations, foreign investors will not come. It is a common theoretical parlance in finance that "capital will definitely flow to the direction where security of investment is guaranteed". This result disagree with those of Bounoua and Matallah (2014) who found significant positive relationship between government effectiveness and foreign capital flows; and also those of Jude and Levieuge (2013) and Bouras (2014) who did not found any significant relationship between government effectiveness and foreign capital flows.

Surprisingly, the quality of regulatory system (QRG) and control of corruption (COC) are negatively signed but also failed the 5 percent level of significance; meaning that, in the determination of foreign capital flows, quality of regulatory system as well as the level at which corruption is placed under control are not relevant factors to be considered. The finding agrees in all respect with the study of Jude and Levieuge (2013) who submitted a non-significant relationship between quality of regulatory system and foreign investment flows. It however disagreed with those of Mouna and Mondher (2015), Mamta and Chowdhury (2014) who concluded that the quality of regulatory system decreases foreign investment flows.

5. Conclusion and Policy Recommendations

The study empirically investigates the relationship between institutional quality and foreign capital flows in Nigeria for a period of twenty five (25) years (1996 - 2020).The cointegration econometric technique and Error Correction Model (ECM) were employed in the analysis of the data andthe results generally indicate that rule of law has significant positive relationship with foreign capital flows both at the short run and in the long run; in the short run, control of corruption has significant negative impact on foreign capital flows; political stability and government effectiveness have significant negative relationship with foreign capital flows, and the quality of regulatory system in Nigeria does not have any significant relationship with foreign capital flows both at the short run and in the long run. The study concludes that Nigeria government and policy makers should evolve a new policy that will simultaneously address corruption within the context of political stability. If the issue of corruption is seriously dealt with, political stability will then bring about positive impact of foreign capital flows on the economy at large.

The general and particular findings in this study have necessitated some salient policy recommendations which may be useful to the government and policy makers.

First, Nigerian government should initiate appropriate policy that would ensure implementation of rule of law, strong democratic institutions and good governance, because they effectively facilitate and attract foreign investment and enhance capital accumulation. Weak democratic and institutional structures (where rule of law are not strictly observed) discourages foreign capital flows. Therefore, for Nigerian economy to continue to attract huge foreign capital flows that will enable her guarantee sustainable growth, strict adherence to rule of

law by all a sundry and government readiness to implement same is very imperative.

Secondly, Nigerian government should be very effective in the management of foreign capital flows by ensuring that they are properly directed at the right productive and asset yielding investment. Doing so will definitely attract more foreign capital into the country for more productive investment.

Thirdly, appropriate policies should be put in place by the government to guarantee and enhance quality of regulatory system in Nigeria that will strengthen current level of control of corruption. The reason being that, foreign investors and capital will only flow to where the quality of regulatory system is strong and where higher income are guaranteed.

Lastly, since the finding of this study has shown that political stability has significant negative relationship with foreign capital flows in Nigeria, therefore, government and policy makers in the country must evolve a new policy that will simultaneously address corruption within the context of political stability. If the issue of corruption is seriously dealt with, political stability will then bring about positive impact of foreign capital flows on the economy at large.

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