INSTITUTIONAL QUALITY MATTER: AN EMPIRICAL INVESTIGATION OF FOREIGN DIRECT INVESTMENT IN NIGERIA

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ABSTRACT
This study examines the institutional influence as a determinant of foreign direct investment (FDI) focusing on Nigeria, applying autoregressive distributed lag (ARDL) cointegration technique. The conclusion signifies that institutional qualities utilize long-run sway in determining FDI inflows. This study opined that institutional quality is an essential factor in determining FDI in Nigeria. Also, the combined impact of institutional quality and trade openness is momentous and also contribute positively in attracting FDI both in the short and long run. Addition to this, this study is found to affirm the hypothesis that said that the simultaneous implementation of policy mix; that is, minimizing trade barriers and improving institutional quality plays a noteworthy role in enticing FDI in a developing country like Nigeria.

Keywords: Nigeria, Institutions, Foreign Direct Investment, ARDL approach, Development.

1. Introduction
There is extant in the literature, the perception that strong institutions drive economic growth and development. Consequently, an economy with weak institutions would not grow sufficiently to experience economic development. In a seminal paper, Wolf (1995) argued that institutions must be part of the production possibility frontier for any economy that intends to develop and that too much emphasis is placed on technology and labor. However, what is left out is that institutions are built by human beings. Hence, if developing countries like Nigeria can build stronger institutions, then growth and development would occur. Another position is that developing countries consciously or otherwise build strong personalities rather than institutions.

Peradventure the strong individual leaves the institution due to unforeseen circumstances, the so called institution latter withers away (Ekpo, 2013). There is another contention that the nature and pattern of colonialism matters when examining the present state of institutions in developing countries. In Nigeria, the colonialist (Britain) was not planning to settle hence strong institutions were not built or even allowed to develop. In Zimbabwe, Kenya, Senegal etc. where the colonialists wanted to settle and/or in the case of the French colonialists (assimilation principle), durable institutions were built and inherited by the indigenous after independence. However, what happened to those institutions after independence? Are they still strong? Do they still exist? As reported by Ekpo (2013), that, the Breton-woods institutions which for long, never believed in the importance of institutions began to postulate that its reforms and programs were not yielding the desired results because of weak institutions. Institutions became a ‘punching bag’ for failure of World Bank and IMF pieces of advice and reform programs in developing countries.

Apart from the issue of institutions, other reform pillars include the following; maintenance of macroeconomic stability, Poverty reduction, Public sector reforms, privatization of public sector enterprises, entrenchment of probity and accountability in the management of public funds and enhancing public service delivery (Olomola, 2010). The ongoing federal government Transformation
Agenda (2011-2015) also emphasizes the importance of institutional and governance reforms (see Ajayi, 2002; Ohiorhenuan; 2003; National Planning Commission; 2011). The federal government budget of 2012 was the first budget under the federal government Transformation Agenda. The budget has identified four main strategies to achieve its objectives. These include governance and institutional transformation, macroeconomic stability, structural reforms and investing in real sector of the economy which has to do with Foreign Direct Investment. (see Federal Government, Budget, 2012).

This paper contributes to the literature on the association between institutional quality and foreign direct investment (FDI), the Nigerian case. It is of importance to know that FDI has been widely known as a factor influencing growth in developing countries, specifically the third world countries like Nigeria (Khan and Ahmad, 2008). In fact, FDI inflows have emerged as the most important source of external financial inflows to the developing nations in general. Even the inflow is small compared to the rate at which this finance is needed globally (Kumar and Pardhan, 2011). In these economies, reliance on FDI is one of the main source of development finance required to drive sustained growth in developing nations in general and Nigeria in particular. This issue is vital due to three considerations made by Kazeem, Adeniji & Raheem (2014); the persistent financing gap occasioned by saving-investment divergences; benefits of FDI confer on the recipient country and lastly, the decline in official lending and other financial aid to developing countries. As a consequence, there is growing demand for FDI by developing countries within the sub-Saharan Africa (SSA) region in general and Nigeria in particular.

A number of studies have shown that quality institutions transcend to support private investments, progress the overall proficiency of the economic system and expressively contribute to the economic growth and development of the domicile countries (Acemoglu, Johnson & Robinson, 2005; Hall & Jones, 1999; Rodrik, Subramanian & Trebbi, 2002). It is known facts that, the hypothetical literature supports the role of quality institutions as they restrain the behavior of economic agents and enforce rules and regulations that bound opportunism and build transactional trust in pecuniary trades, and eventually heighten self-confidence of foreign investor and FDI inflows. As a result of the role played by institutional quality to enhance and motivate investors, especially foreign investors inform of FDI, in the developing nations, there is a growing research interest among researchers on this issue. Enormous numbers of empirical investigations ascertain and affirm institutional quality as a vital and necessary determining factor of FDI (Ahmad & Ahmed, 2014; Ali, Fiess & MacDonal, 2010; Globerman & Shapiro, 1999, 2002).

Foreign direct investment (FDI) serve as element catalyzing growth, has acknowledged great awareness of both developed and in developing nations in particular in the early 1990s, between the year 1990 to 2008 it is noted that FDI growth increase geometrically for about tenfold from 200 billion to 2trillion within this period (UNCTAD, 2010). During this period, developing nations get a “better cuts” and by the year 2011, around 45% of global FDI is to their advantage. Nigeria has great prospects for FDI but lagged at the back in exploiting the opportunities like many other developing countries in attracting FDI in relationship to other developing countries and has received only minima per cent of total world FDI in 2011.

It is a known fact that most of the investment hurdles in ECOWAS countries where Nigeria is a part are deep-rooted in administrative lapses with high level of corruption, weak social, political and institutional quality that creates gap between policies and their implementations in these countries (Sahoo, 2006). In the preceding research most of them are based on cross-country analysis. And cross-country regression investigations are based on assumptions of homogeneity in the nature and quality of data that is a very restrictive assumption. However, institutional aspects are distinctive for different countries and eventually the validity of the results from cross-country study becomes distrustful (Deaton, 1989). In a new case, it may be meaningful to offer a solid basis for a policy
formulation through exploring the affiliation between FDI and institutions based on country specific analysis.

Nigeria is a very interesting case study, because it is one of those countries which have experienced political disorder in one form or the other, wide spread insecurity, corruption, poverty, worse rule of law and bureaucratic disorder in virtually all aspects of human existence. This has been an impediment in attracting FDI in Nigeria. In many developing countries like Nigeria, the lack of an independent judiciary, secure property rights, and the rule of law is creating obstacles for private investment (Kumssa & Mbeche, 2004). The main objective of this research is to assess the short-run and the long-run impact of institutional quality on FDI for Nigerian economy by using Autoregressive Distributed Lag (ARDL) cointegration technique.

Beyond this introductory discussion the rest of the article, is structured as follows: Section 2 contains the theoretical and empirical literature on institutions and FDI. Data sources and description of variables are discussed in section3. Econometric methodology is explained in section4 and empirical results are reported in section 5, while the conclusion of the study appears in section 6.

2. Review of Theoretical and Empirical Literature

In this section, the researcher will try as much as possible not to reproduction the numerous literatures on the impact of FDI inflows on institutions quality but present discourse on the strand as mentioned above. Examining the impact of FDI on institutional quality has attracted considerable research interests among economists, policy makers and researchers alike. In spite of this spurt in research efforts, the issue on FDI inflows nexus is largely contentious and somewhat inconclusive. However, the review will be in two categories namely theoretical and empirical as explained below.

3. Institutions and FDI: Theoretical Review

The issue of institutional quality’s role as a determinant of FDI inflows is very vital to economic growth and development especially in a country like Nigeria. However, it is likewise imperative to ascertain the linkages between institutions and economic growth as inspiring factors behind FDI inflows. The grouping of Dunning’s eclectic paradigm with Douglas North’s approach of the institution’s role in enriching economic growth and investment provides such a link. The dunning’s paradigm is focused to find out the logical justification of the question that why the local firm’s own production facilities beyond the borders and become multinational enterprises (MNEs). According to Dunning (1993, 2001), a firm has to meet three preconditions to successfully engage in international activity: (a) Ownership advantage, (b) Internalization advantage and (c) Location advantage.

Among the prominent studies is that of North (1990) echoing the functions of institutions in creating incentives for fiscal activities and for also for the outlay. In his study, he argues that firms influence commercial activities by means of production and trade cost. Trade cost is interconnected with commercial transaction which includes the amounts expense of measuring the estimations of what is being traded, expenses of securing and implementing property rights. There would be considerable vulnerabilities connected with monetary trades without well-working organizations.

Organizations, both formal and informal, give tenets and strategies that minimize instabilities included in monetary trade. Informal organizations, for example, sets of accepted rules or traditions can trim down these inconsistencies. While formal establishments through principles and regulations, laws, successful legal systems and different organizations can minimize the instabilities and give viable authorization minimize Institutions, both formal and casual, give tenets and strategies that lessen vulnerabilities included in financial trade. Informal establishments, for example, sets of accepted rules or traditions can reduce these uncertainties. Formal foundations by means of principles and
regulations, laws, compelling legal systems and different establishments can diminish the vulnerabilities and give viable authorization. Organizations can also enhance fiscal activities by minimizing production cost.

North (1990) argues that inefficient institutions can raise production costs by disrupting the supply chain and excessive formalities in obtaining permits can significantly increase production costs. Moreover, if property rights are not protected, there are two kinds of risks that are associated with foreign investment. First, political hazards which create hurdles in attracting FDI and second, local partners may be able to influence and convince their government to support them at the cost of foreign investors due to their active involvement in political processes (Henisz, 2000; Henisz & Williamson, 1999). It has been observed that gradually priority of foreign investors has changed and they assign more importance to creative location advantages which comprise of knowledge-based assets and institutions than traditional location advantages (Bevan, Estrin & Meyer, 2004; Narula & Dunning, 2000).

The importance of institutions in an ongoing process of integration of the world economy has led to a significant change in the attitudes of the foreign investors with respect to FDI because they represent the major immobile factor in this era (Mudambi & Navarra, 2002). Political and economic institutions promote investment by resolving dynamic inconsistency problems, which arise due to changing leverage that states and firms experience before and after the investment commitments (Neumeyer & Spess, 2005). The next is the empirical review.

4. Institutions and FDI: Empirical Review

Past literatures investigating the linkage between institutional quality and FDI postulate that institutional quality has both direct and indirect effects. As it is concluded, direct effects are said to be concomitant with risk and profitability of foreign capital, while indirect effects are caused by other factors example of which are tariff and tax policies, infrastructure, demography, income and growth that might stimulate inflows of FDI.

Several studies affirm the important relationship between institution quality and FDI. Studies by Gastanaga et al. (1998) concludes that poor institutional policies such as “corruption, bureaucratic delays and worse rule of law situation” are the main factors that limits FDI in emerging economies. Similarly, Globerman Shapiro (1999, 2002) argued that better institutions may have a positive impact on FDI inflows because they generate auspicious environments for multinational companies to materialize and invest abroad. More to their findings, they found that diverse procedures of governance quality have little influence on encouraging inflows of FDI. According to the study of Stein & Daude (2001), it is observed that institutional variables are significantly related to inward flow of FDI.

In the same way, Wei (2000) pronounces the concerns of poorly regulated institutions or complete privation of institutional quality appears to substitute for tax on foreign investor on bilateral FDI flows. According to Campos, Lien and Pradhan (1999), corruption is the most important cause to constrain foreign investment; this is similar to conclusion made by Brunetti et al. (1998). Findings by Meon and Sekkat (2004) opined that institutional quality is significantly allied to FDI in MENA nations. Adding to this, Lambsdorff (2003) concluded that distinctive level of corruption affect FDI inflow. Studies by Kostevc, Redek & Sus Jan (2007) concludes that inflow of foreign investment will move to different economy if property right are threatened, excluding fear of nationalization. Whereas in the ASEAN region study conducted by Masron, Ariffin and Nor (2013) suggests that diverse institutional quality measures have tangible positive results on inflows of FDI.

However, some studies failed to affirm strong relationships between institutions and FDI. Starting with Wheeler & Mody (1992) which failed to establish a solid relationship between the two
variables; also, Aisedu (2002) reports that neither political risk nor expropriation risk has strong impact on FDI; Harms and Ursprung (2002) signaled that political and civil freedoms matter in enticing FDI while other institutional aspects have no hearty influence on FDI. Similarly, Jun and Singh (1996) concludes that institutions has no significant effect on FDI promotion. Institutional quality has also an indirect effect on FDI flows through the other variables such as human capital, healthy labor force and the quality of public facilities to promote FDI (Globerman & Shapiro, 2002; Mody & Srinivasan, 1998).

In a similar study by Raheem and Oyinlola (2013) employed ordinary least squares (OLS) and Threshold Auto Regressive (TAR) models to examine “the impact of FDI and governance on growth for seven ECOWAS countries” over the period 1996 to 2010. Their findings show that FDI and governance are positively related to growth in the linear form (OLS). For the non-linear model (TAR), the result revealed that the positive effect(s) of FDI would be noticeable once governance attains a threshold of level of -1.2. They also reported the significance of sound macroeconomic policies in conditioning the benefits of FDI. The scarcity of empirical studies of institutional quality on Nigeria in particular gives a clear indication of the gap filled by the present study. To the best of my knowledge, empirical works of this nature is scarcely available in Nigeria.

5. Data Description and Source

5.1 Institution Variables

To investigate the linkage between institutions and FDI in Nigeria, this study utilizes Nigeria economic data obtain from the year 1980 to 2012. For on near to accurate insight institutional quality (INS), data set were retrieved from three secondary sources, namely: (World Bank, 2012; International Country Risk Guide (ICRG) and Heritage (2013). This data reveals some special features of institutions (Glaeser, LaPorta, Lopez-de-Silanes & Shleifer, 2004). For empirical analysis, variable of constraints is employed. The variable of constraints relates to the magnitude in which institutions limit decision-making control of the person in charge, whether as individuals or as collective, there is nothing different from the definition of institutions given by North (1990).

As for this study, measure of the INS has been discussed from the data set above and series of institutional quality for Nigerian economy has been generated. The important facet of this single measure of institutional quality is that it oversees diverse dimensions of institutions. From the original data set, various scales were employed as indicators on institutions example of which is time variant. To ensure compliance between diverse measures, all indicators were rescaled from 0 – 1; such that higher values represent strong institutions. Using transformation, institutional quality’s indicator befit time variant that is more suitable for time series empirical analysis. The major component of analysis is used to define the weight given to each element in the edifying of the institutional quality measure.

5.2 Other Variables

FDI conveyed as “foreign direct inflows, net inflows as percentage as of GDP” is used as dependent variable. The other vibrant variables incorporated in the model are adopted from empirical literature of FDI determinants. Endogenous growth theory discloses that “economies with a larger market size are expected to grow faster because of the benefits of the scale of economies”. Consequently, it is believed that inward FDI will tend to drift into nations that have larger market size. Chakrabarti (2001) concludes that the only variable that passes the robustness test is the market size of the host nation measured by GDP per capita.

Furthermore, this study also considers real GDP per capita as an indicator of market size for empirical analysis. Inflation rate (IF) which is quantified by the annual percentage variation in the consumer price index, denotes as a proxy measure of macroeconomic constancy. The predilection of foreign investors permanently remains towards those nations which facilitate them in terms of both infrastructure and constructive rules for investments. The number of telephone lines (IR) is used as
deputation for infrastructure facilities. There is an association between trade openness and FDI, depending on the type of foreign investment (Asiedu, 2002). In general, free market may be confidential or inversely related to FDI, contingent on the country sample. Different measures of open trade are employed in the empirical studies, and trade, share as percentage of GDP (TO) in the real term is used as proxy of the trade openness in this article. Data of these variables are obtained from World Development Indicator (WDI), Central Bank of Nigeria (CBN).

6. Econometric Methodology

6.1. Econometric Model for Institutions and FDI

We use the following empirical model to investigate long- and short-run impact of institutional quality on FDI.

\[
(1) \quad \text{FDI}_t = c_1 + c_2 \text{INS}_t + c_3 \text{ONS}_t + c_4 \text{GPC}_t + c_5 \text{OP}_t + c_6 \text{IR}_t + U_t
\]

Where in the model INS represents the measure of institutional quality, ONS indicates the interaction term (INS*OP) which is used to apprehend the joint role of institutions and trade openness to attract FDI. The connotation of the complementary association between institutions and trade openness is acknowledged by (Bhattacharyya, Dowrick & Golley 2009).

The present study investigates both the long and short-run dynamic correlation between FDI and institutional quality by applying ARDL technique of cointegration. ARDL cointegration technique was established by (Pesaran & Pesaran, 1997; Pesaran & Shin, 1999; Pesaran, Shin & Smith 2001). Erstwhile to testing the long-run cointegration relation, it is mandatory to create the order of absorption between variables because in the presence of I(2) or above variables, the computed F-statistics are not valid (Ouattara (2004)). For this stance, Augmented Dickey–Fuller (ADF) test is use to test the stationary assumption for all variables under concern. The ARDL technique can be used regardless of whether the underlying variables are stationary at a level I(0), first distinction I(1) or a blend of both. Furthermore, the bias rectification term can be effortlessly gotten from simple linear transformation (Banerjee et al. (1993)). In addition, the other most important points of interest of the ARDL methodology are that it can likewise be employed in those studies that have a relatively little sample size. This approach for investigation is more powerful when contrasted with Johansen & Juselius’ (1990) cointegration system for few samples furthermore gives the short-run adjustment without losing the long-run data (Pesaran and Shin, 1999). To evaluate the effect of institutional quality as a determinant of FDI, ARDL representation of Equation (1) is figured as follows:

\[
(2) \Delta \text{FDI}_t = \theta + \sum \phi_1 \Delta \text{FDI}_{t-1} + \sum \phi_2 \Delta \text{INS}_{t-1} + \sum \phi_3 \Delta \text{ONS}_{t-1} + \sum \phi_4 \Delta \text{GPC}_{t-1} + \sum \phi_5 \Delta \text{OP}_{t-1} + \sum \phi_6 \Delta \text{IR}_{t-1} + \sum \phi_7 \Delta \text{IF}_{t-1} + \sum \phi_8 \Delta \text{IF}_{t-1} + \sum \phi_9 \Delta \text{IF}_{t-1} + \mu_t
\]

Where \( \delta \) is drift component, \( \mu_t \) is the white noise residuals and \( D \) denotes the first difference operator.

Whereas \( w, y, a, b, g, f \) and \( j \) are short-run estimates.

To find out the long-run relationship among the variables, bound testing procedure is used. The bound testing procedure is based on the Wald-test (F-statistic). The Wald test (F-statistic) is a test of the hypothesis of no cointegration among the variables against the existence or presence of cointegration among the variables, denoted as:

\( H_0: \lambda_1 = \lambda_2 = \lambda_3 = \lambda_4 = \lambda_5 = \lambda_6 = \lambda_7 = 0 \) that is, there is no cointegration among variables

\( H_1: \lambda_1 = \lambda_2 = \lambda_3 = \lambda_4 = \lambda_5 = \lambda_6 = \lambda_7 \neq 0 \) that is, there is cointegration among variables
Two critical values (lower and upper) are given by Pesaran et al. (2001) for the cointegration test. When the calculated $F$-statistic is higher than the upper bound critical value, then the $H_0$ is rejected (the variables are cointegrated). If the estimated $F$-statistic is below the lower bound critical value, then the $H_0$ cannot be rejected (there is no cointegration among the variables). When the computed $F$-statistics falls between the lower and upper bound, then the results are inconclusive. When the long-run relationship exists among the variable, then there is error correction representation. Thus, Equation (2) in the ARDL version of the error correction model can be expressed as:

$$ (3) FDI_t = \beta + \sum \Delta FDI_{t-1} + \sum \Delta INS_{t-1} + \sum \Delta ONS_{t-1} + \sum \Delta GPC_{t-1} + \sum \Delta OP_{t-1} + \sum \Delta IR_{t-1} + \sum \Delta IF_{t-1} \\
+ \sum \Delta IR_{t-1} + \lambda_1 FDI_{t-1} + \lambda_2 INS_{t-1} + \lambda_3 ONS_{t-1} + \lambda_4 GPC_{t-1} + \lambda_5 OP_{t-1} + \lambda_6 IF_{t-1} + \lambda_7 IR_{t-1} + \mu_t $$

Where $q$ is speed of adjustment parameter and ER is the residuals that obtained from estimated Equation (2). The coefficient of error correction term (ER) in the model indicates the speed of adjustment back to long-run equilibrium after a short-run shock. To ensure the goodness to fit of the model, the diagnostic and stability tests have also been conducted. The diagnostic tests examine the serial correlation, functional form, normality and heteroscedasticity associated with estimated model. In order to select optimal lag length for each variable, the ARDL approach estimates $(p + 1) k$ number of regressions, where $p$ is the maximum number of lags and $k$ is the number of variables in the model. The number of lags is selected on the basis of Akaike’s Information Criteria (AIC).

### 7. The Empirical Results

The results are given in Table 1 which show a mixed order of integration I(0) or I(1) for different series. The variables OP, IF, IR, and ONS are non-stationary at level, whereas FDI, GPC and INS are stationary at level.

In as much as all variables are integrated order I(0) or I(1) and none of the variables is integrated of I(2) or above, which support the ARDL estimation procedure rather than other alternative cointegration methods.

Focusing on the presence of steady long-run association between institutions and FDI, F-test is applied. Mathematical equation (2) is surveyed utilizing "ordinary least square method and estimated $F$-statistic (10.13)"), which significance at 1 percent is more noteworthy than upper bound discriminating esteem as finished up by (Narayan, 2005; Pesaran et al., 2001). In entirety, the non-hypothesis of non-preservation of a stable, long-run relationship is estimated; exact decision reveals that there is a solid connection of a long-run relationship amongst the basic components. The prime request of ARDL is discovered to be (0, 0, 1, 0, 1, 1) and slacks are deliberately picked on the premise of AIC.

### Table 1. Test of the Unit Root Hypothesis

<table>
<thead>
<tr>
<th>Variables</th>
<th>Level</th>
<th>First Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$t$-statistics</td>
<td>$K$</td>
</tr>
<tr>
<td>FDI</td>
<td>$-3.37^*$</td>
<td>0</td>
</tr>
<tr>
<td>GPC</td>
<td>$-5.65^*$</td>
<td>1</td>
</tr>
<tr>
<td>INS</td>
<td>$-3.55^*$</td>
<td>0</td>
</tr>
<tr>
<td>OP</td>
<td>$-1.89$</td>
<td>1</td>
</tr>
<tr>
<td>IF</td>
<td>$-2.55$</td>
<td>1</td>
</tr>
</tbody>
</table>

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Notes: The optimal lags (k) for conducting the ADF test were determined by AIC (Akaike Information Criteria).

** and * indicate significance at the 5% and 1% levels, respectively

Table 2. ARDL Long-run Estimates

<table>
<thead>
<tr>
<th>Regressors</th>
<th>Estimated Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-23.64*</td>
</tr>
<tr>
<td>INS</td>
<td>0.52*</td>
</tr>
<tr>
<td>GPC</td>
<td>1.29*</td>
</tr>
<tr>
<td>OP</td>
<td>0.67*</td>
</tr>
<tr>
<td>IF</td>
<td>-0.06**</td>
</tr>
<tr>
<td>IR</td>
<td>0.07***</td>
</tr>
<tr>
<td>ONS</td>
<td>0.89**</td>
</tr>
</tbody>
</table>

Diagnostic Tests

| Serial Correlation | 0.68 |
| Heteroscedasticity | 1.54 |
| Functional For     | 0.46 |
| Normality          | 0.33 |

Note: ***, ** and * indicates significance at the 10%, 5% and 1% level respectively.

The table 2 illustrates long-run appraisals of the ARDL modus operandi. Diagnostic tests serial correlation, functional form specification, normality and heteroscedasticity were used in analyzing the estimated model. It is observed that all variables have the anticipated sign and are statistically momentous at all the 1 percent, 5 per cent and 10 per cent level. Table 2 illustrates that institutional quality (INS) has considerable positive impact in determining inflows of FDI. The long-run coefficient of institutional quality advocates that 1 percent improvement in the institutional quality (INS) produces 0.52 per cent surge in FDI. This study also surveyed the joint effect of institutions and trade openness (ONS) also found their combined impact on FDI. The long-run estimate of interaction term institutions and trade openness (ONS) indicates that 1 percent increase in ONS proliferates FDI by 0.89 per cent. Partial effect of trade openness (OP) uses a positive and significant impact on FDI. This validates the value of a liberal trade regime to entice FDI. Correspondingly, GDP per capita (GPC) and physical infrastructure (IR) also appear to be significantly positive correlated to FDI. Our results indicate that 1 per cent increase in OP, GPC and IR will lead to 0.67 per cent, 1.29 per cent and 0.07 per cent increase respectively in FDI in the long run. Inflation rate (IF) as a measure of the macroeconomic stability is inversely and significantly associated with FDI.

In table 3, reports the short-run dynamics of the estimated ARDL model. The coefficient of error–correction term (ER) is correct sign (negative) and statistically significant at 1 per cent. This suggests that the error–correction term (ER) is valid but also that there is significant conservative force tendency to bring the model back into equilibrium whenever it strays too far. The short-run estimates of
Table 3. Error Correction Model (ECM) Estimates

<table>
<thead>
<tr>
<th>Regressors</th>
<th>Estimated Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>–12.22*</td>
</tr>
<tr>
<td>DINS</td>
<td>0.65</td>
</tr>
<tr>
<td>DGPC</td>
<td>3.19*</td>
</tr>
<tr>
<td>DOP</td>
<td>0.63*</td>
</tr>
<tr>
<td>DIF</td>
<td>–0.16</td>
</tr>
<tr>
<td>DIR</td>
<td>0.17</td>
</tr>
<tr>
<td>DONS</td>
<td>0.69**</td>
</tr>
<tr>
<td>ER(–1)</td>
<td>–0.38*</td>
</tr>
</tbody>
</table>

Diagnostic Tests

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Serial Correlation</td>
<td>0.14</td>
</tr>
<tr>
<td>Heteroscedasticity</td>
<td>1.15</td>
</tr>
<tr>
<td>Functional Form</td>
<td>0.49</td>
</tr>
<tr>
<td>Normality</td>
<td>0.16</td>
</tr>
</tbody>
</table>

Note: ** and * indicate significance at the 5% and 1%, respectively.

ARDL method reveals that ONS, OP and GPC have substantial results on FDI while factors such as “institutional quality, physical infrastructure and inflation” are no longer significant in short-run dynamic analysis. The most fascinating discovery is that joint impact of interaction term institutions and trade openness (ONS) is positive and significant at the 1 per cent or 5 per cent level in short-run likewise, in the long-run. However, institutional quality (INS) is significant only in the long-run.

8. Conclusions and Policy Implications

Foreign direct investment is an attractive form of inflow of capital to emerging and developing economies. FDI is considered as one of the most constant components of capital flows to developing states. The objective of this work has been to explore the long- and short-run dynamic association between institutional quality and FDI for Nigeria’s economy.

Overall, the results strongly support the hypothesis that the institutional quality exerts long-run impact in determining FDI inflows. The findings further demonstrate that the joint impact of institutions and trade openness exerts long-run as well as short-run impact to attract more FDI inflows. This finding suggests that simultaneous implementation of the policy mix, that is, reducing trade barriers and improving the quality of institutions that would attract more FDI in short-run as well as in long-run. Hence, complementary institutional and trade reforms are crucial to attract more FDI in short-run as well as in long-run. The conclusion compiled and analyzed, advocate that policies designed at spiraling the safeguard of property rights, minimizing corruption, ever-increasing
government stability, high administrative quality and a better rule of law ought to be the main concern for policymakers trying to lure more FDI in Nigeria. Multidimensional firms example of which is the IMF and the World Bank should play their part in smoothing FDI by encouraging good institutions in developing states like Nigeria.

Although this reason alone is not enough in enticing the inflow of FDI in Nigeria, but there are other important factors of FDI that materialize from this study for example, “trade openness policies, market size, physical infrastructure and macroeconomic stability”. The significant message of this research is that nations with high institutional quality tend to be more attractive for foreign investors to invest in these economies. The robust institutions improve private investors’ confidence to invest in long-term projects and export-oriented industries, which is vital for economic development and improvement (Ejuvbekpokpo, 2012).

In a nutshell, prior empirical research correlated with institutional variables that impact FDI, are confronted with some challenges which have to do with data on FDI and institutional quality. Nevertheless, their effect on FDI may differ across countries (Busse, 2004). For that reason, it would be advisable to carry out studies that have to do with the sector by sector approach in relationship with their impact of institutional quality on FDI in future investigations.

References


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