Published by *ECRTD-UK*

Print ISSN: 2052-6350(Print), Online ISSN: 2052-6369(Online)

THE ROLE OF INSTITUTIONAL QUALITY IN BOOSTING TOTAL EQUITY INVESTMENT IN NIGERIA

Dennis Brown Ewubare¹ and Johnbosco Chukwuma Ozigbu¹

1. Rivers State University, P.M.B. 5080, Port Harcourt, Nigeria

ABSTRACT: This study explores the link between institutional quality and total equity investment in Nigeria with the years under consideration spanning from 1981 to 2016. The specific objectives focused on the impact of impact of economic, political and social institutions as well as information flows on total equity investment. The datasets for each of the variables were obtained from various sources comprising World Bank, World Development Indicators, International Monetary Fund Annual Report, KOF indexes on social, economic and political institutions based on data adapted from United Nations Conference on Trade and Development Statistics, International Telecommunication Union, the United Nations Commodity Trade Statistics Database and the CIA World Factbook (various years). Combinations of Dynamic Least Squares (DOLS) based cointegrating regression methodology and Error Correction Model were utilized as analytical techniques. The KPSS stationarity test results indicate that the variables are mixed integrated with combinations of I(0) and I(1). The Johansen cointegrating test result validated the KPSS stationarity result as it evidenced four cointegrating equations. This suggests that the variables have long run relationship. The cointegrating regression result shows that the coefficients economic institutions, political institutions and index of information flows appear with the hypothesized positive signs and statistically significant at 5 percent level. A percentage change in index of economic institutions stimulates total equity investment by 2.8 percent while 1 percent increase in political institution and index of information inflows robustly boost total equity investments by 4.4 percent and 4.8 percent respectively in the long run. The parsimonious ECM reveals that the cotemporaneous values of economic and political institutions have positive and significant impact on total equity investment in the short run. The Granger causality test results show that on individual basis, economic institutions and information flows cause total equity investment in Nigeria while collectively all the explanatory variables have predictive power for total equity investment in Nigeria. Thus, it is recommended among others that policy makers should prioritize improvement of the requisite economic institution by continuously promoting sound financial system and investment-friendly tariff, exchange rate and trade policies amongst others in order to improve Nigeria's position as a viable destination for total equity investment.

KEYWORDS: institutional quality, equity investments, economic institution, social institution, political institution and Nigeria.

INTRODUCTION

In recent years, one of the core objectives in the agenda of international organisations and local governments has been to identify policies that reduce poverty, improve the quality of life of

Published by *ECRTD-UK*

Print ISSN: 2052-6350(Print), Online ISSN: 2052-6369(Online)

citizens around the world, promote growth and economic development. In the light of this ambitious goal, globalization and technological innovations are considered critical issues because they create new and more investment opportunities for enterprises and at the same time increase the competition by countries to attract external resources. Therefore, firms pursuing international business opportunities usually analyse a number of factors regarding investment decisions. With respect to the debate on the determinants of capital flows, recent empirical studies (IMF report, 2003, World Bank, 2000, Alesina and Dollar, 2000) suggest that the quality of domestic governance has a quantitatively important impact on a country's ability to attract foreign investors who prefer to invest in countries with good governance

In the light of this debate, governments, academic studies and international agreements have increasingly come to recognize that strong interrelationships exist between macro policies and micro foundations. For example, corporate governance is considered in this context as a key element affecting countries' and firms' economic performance. Kogut and Zander (2003) views corporate governance as one possible conduit for first attracting and then retaining capital flows and therefore affecting countries' economic performance. In this context, corporate governance is expected to boost the development process in two crucial ways: raising the degree of transparency of internal financial markets, increasing a country's political credibility abroad and verifying whether corporate governance is a determinant of long-term growth.

As a result of the role played by institutional quality to enhance and motivate investors, especially foreign investors inform of capital flows, in the developing nations, there is a growing concern that this has continue to create fear in the growth and development process of Nigeria since institutions seems to be relegated to the background. Lack of reforms in the political system as an institutional reform may have the tendencies of retarding capital flows. Political situation in the would be capital flows destination is among the important capital flows determinants. This includes political stability and democratic system. Amongst the investors' measurement of this is to look on whether a country has functional multiparty or single party democracy and how practical is this in the country. Trade liberalization as an integral part of economic institutions is one of the important capital flows enablers. Among other things, it increases the possibility of smooth and convenient availability of imported factor inputs and export of capital flows produced goods and services. Uncertainty on liberalized exchange- and interest rates and inefficient informational infrastructures are major concern to capital flow in Nigeria. It is based on the foregoing that this paper explores the empirical link between institutional quality and total equity investments in Nigeria.

LITERATURE REVIEW

Institutional Theory

According to North (1990), institutions are those "humanly devised constraints that shape human interaction, establish a society's working rules, its ability to uphold the rule of law, and the actions that it allows or discourages (North 1990; Ostrom, 1990; Scott 1995). Whether and how entrepreneur's access venture funding in developing countries matters in the first instance for how much they can rely on well-functioning formal institutions related to law and regulation. Ramamurti (2003) describes this as an institutional design challenge requiring the right combination of substantive rules in law and regulation, related processes for applying them, and well-trained, well-resourced officials to run such processes and apply the substantive rules. In this context, it may not be surprising that recent entrepreneurship research in developing country contexts has documented links between higher levels of more entrepreneurial activity, including more venture funding activity and stronger political, economic, legal and regulatory institutions (Li and Zahra, 2012). That strength matters for formal institutions related to tax policy and contract enforcement (Lerner, 2009), and it matters for law and legal professionals, politics and elected

officials and financial markets (Straub, 2005). By implication, less venture funding flows into economies where formal institutions provide weaker protection to investors, particularly when those investors are well-educated and technically-oriented (Guler and Guillen, 2010).

Khoury *et al.* (2012) observe that investors in these environments often have to commit more resources to compensate for the possibility of costly contractual transgressions, and may instead opt not to invest at all. Surveying 119 venture capitalists from three different institutional settings, Zacharakis *et al.* (2007) hold that venture capital markets in emerging and transitional economies pose greater challenges for entrepreneurs, because they cannot rely on legal and regulatory institutional safeguards to protect the terms of their initial venture investment agreements from opportunistic renegotiation by local creditors and governments. If informality denotes the absence of such important legal and regulatory institutional capacity, then informality also undermines the assurances critical to the creation and transfer of venture capital to new and growing businesses. Less oversight and accountability is a small consolation for the absence of predictably protective legal and regulatory institutions.

Institutions in the form of formal rules, informal constraints and the enforcement characteristics of both have both positive and negative influences and effects on behaviour. Institutions govern and influence behaviour in economic activities. They will spell out what is fair, legal, wrong or right in a society. Institutions do liberate behaviour and provide order in an economy. They make behaviour for parties in a transaction predictable thereby reducing mistakes, conflicts and transaction costs. The existing and non-existing institutions may have profound effects on economic performance. Change in rules, laws and regulations (institutional change) intends to influence behaviour change. Institutional reforms are aimed at creating opportunities and agents in an economy are expected to respond positively to these reforms so as to maximise the opening opportunities.

Institutional reforms tend lead to a change in the existing laws, rules and regulations that govern and influence capital inflows. The new rules, laws and regulations are expected to create a better investment climate in an economy by reducing transaction costs. They create new opportunities hitherto unavailable under the old institutions. Most institutional reforms to attract more capital flows are aimed at reducing transaction costs incurred by investors, whether local or foreign. Rational as they are supposed to be, investors are expected to be cost-conscious. This is because they are profit maximising agents in the economy. Institutions therefore are among the important capital flows determinants. In order to attract more capital flows (and local investments too) there is a need of reforming institutions so that they reflect the prevailing investors' needs and social, political, economic and technological realities of time. The reforms should first and foremost reduce investors' transaction costs, now that they operate in an extremely competitive global market place.

Empirical Literature

A large body of literature has offered some insights into the link between institutional quality and equity investments with mixed outcomes. The review of some of the earlier studies are provided below:

Stein and Daude (2001) examined the relationship between institutions and FDI find that the quality of institutions using a panel of 63 host countries and 28 OECD source countries. The study specifically analyzed the impact of institutional variables on bilateral foreign direct investment flows. The econometrics techniques of regression analyzes formed basis for the estimation of the model and it was found that institutional quality has a positive effect on foreign direct investment flows. In view of the findings, the study recommends that countries that want to attract foreign investor should improve the quality of their institutions.

In a set of cross-country regressions, Aizenman and Spiegel (2004) investigated the implications of institutional quality on inflows of foreign investments with the application of descriptive and inferential statistics. It was found from the results that the share of FDI to gross fixed investment as well as the ratio of FDI to private domestic investment is negatively and significantly correlated with the level of corruption, and FDI is more sensitive than domestic investment to the level of institutional quality. The study therefore, recommends for improved institutional quality that allows for rapid and increased mobility of foreign capital.

Print ISSN: 2052-6350(Print), Online ISSN: 2052-6369(Online)

Rodrick *et al.* (2002) estimate the respective contributions of institutions, geography, and trade in determining income levels around the world, using instruments for institutions and trade. Their results indicate that, once institutions are controlled for, measures of geography have at best weak direct effects on incomes, although they have a strong indirect effect by influencing the quality of institutions. Similarly, once institutions are controlled for, trade is almost always insignificant, and often enters the income equation with the wrong sign, although trade too has a positive effect on institutional quality. The study however, concludes that institutions play an important role in driving the income level in the recipient economies.

Bonnie *et al.* (2012) examine the impact of institutional quality of 164 countries from 1996 to 2006 on foreign direct investment (FDI) levels. The outcomes of the investigation provide evidence that institutional quality has a positive and significant effect on FDI. Their results suggest that, if there are institutional determinants of FDI volatility, and if such volatility is associated with lower economic growth, then the usual policy prescription of attracting FDI into countries by offering the "correct" macroeconomic environment would be ineffective without an equal emphasis on institutional reform. Globerman and Shapiro (2002) estimate the impact of governance indicators developed by Kaufman et al. (1999) on both inflows and outflows of FDI. They find that, good governance impacts positively on both FDI inflows and outflows, although the latter effect is only significant for relatively big and developed countries.

MATERIALS AND METHODS

Data Required and Sources

Year-end time series data which encompasses inflows of total equity investment in Nigeria as dependent variable and the independent variables include economic, political and social institutions. Specifically, country-specific time series data spanning from 1981-2015 were adapted from the World Bank World Development and utilized in the process of analysis. **Model Specification**

The partial equilibrium analysis was prompted following the focus of attention on inflows of total equity investment as the most stable form of capital flows to the Nigerian economy. The key institutional variables such as economic, political and social institutions were introduced in the model as explanatory variables. The functional relationships between the dependent variable and regressors are formalized as:

$$TEIN = f(ECGO, PLGO, OSGO, INFI)$$
(1)

Where: TEIN = inflows of total equity investment in Nigeria

Published by *ECRTD-UK*

Print ISSN: 2052-6350(Print), Online ISSN: 2052-6369(Online)

ECGO = Economic factor, PLGO = political factor, OSGO = other indicators of social factor excluding information flows, INFI = information flows

Equation (1) is expressed as a dynamic cointegrating regression equation as follows:

$$InTEIN_{t} = h_{0} + \lambda_{1}ECGO_{t} + \lambda_{2}PLGO_{t} + \lambda_{3}OSGO_{t} + \lambda_{4}INFI_{t} + \sum_{j=-y}^{b} \phi_{1}\Delta ECGO_{t-y} + \sum_{j=-y}^{b} \phi_{2}\Delta PLGO_{t-y} + \sum_{j=-y}^{b} \phi_{3}\Delta OSGO_{t-y} + \sum_{j=-y}^{b} \phi_{4}\Delta INFI_{t-y} + \mu_{t}$$
(2)

Where: TEIN, ECGO, PLGO, OSGO and INFI are as earlier defined in equation (1), h_0 is the constant term, $\lambda_1 - \lambda_4$ are long run multipliers which captures long run effects of variations in the regressors on the dependent variable, b and y are the maximum lag and lead lengths respectively, and μ_t is random error term.

The a priori expectations of the require that: $\lambda_1 > 0$, $\lambda_2 > 0$, $\lambda_3 > 0$, $\lambda_4 > 0$.

The error correction model is formalized as:

$$\Delta InTEIN_{t} = \alpha_{0} + \sum_{i=1}^{m} \alpha_{1} \Delta InTEIN_{t-1} + \sum_{i=1}^{m} \alpha_{2} \Delta InECGO_{t-1} + \sum_{i=1}^{m} \alpha_{3} \Delta InPLGO_{t-1} + \sum_{i=1}^{m} \alpha_{4} \Delta InOSGO_{t-1} + \sum_{i=1}^{m} \alpha_{4} \Delta InINFI_{t-1} + \Phi ECM_{t-1} + v_{t}$$

$$(3)$$

Where: TEIN, ECGO, PLGO, OSGO and INFI are inflows of equity investment, economic factor, political factor, other sub-indexes of social factor excluding information factor and information flows respectively.

 α_0 = Constant parameter, $\alpha_1 - \alpha_4$ = dynamic coefficients of the regressors

m = lag length, $\phi = Coefficient$ of ECM lagged for one period, which captures the speed of adjustment and v_t = Random variable.

Data Analysis Method

The Dynamic Least Squares (DOLS) methodology credited to Stock and Watson (1993) is employed in this paper to estimate the cointegrating regression model. The choice of this estimation approach stems from its efficiency to produce robust estimates for both small datasets and relatively large sample. Additionally, the DOLS is described as having the potential of producing optimal estimates of cointegration regressions and corrects for endogeneity usually associated with explanatory variables by adding lags and leads of the first differences of the explanatory variables. Additionally, error correction mechanism (ECM) is applied in this study to indicate the speed of adjustment from the short-run equilibrium to the long-run equilibrium state. The greater the error correction coefficient, the faster the model adjusts from the short-run disequilibrium position to the long-run equilibrium position. In addition, to other pre-estimation tests, this study employs Kwiatkowski, Phillips, Schemidt and Shin, KPSS (1992) stationarity test

Published by *ECRTD-UK*

Print ISSN: 2052-6350(Print), Online ISSN: 2052-6369(Online)

to determine whether or not each of the series is stationary. The KPSS has advantage over the Augmented Dickey Fuller approach as the latter tends to be associated with low power and inefficient in the evident of structural break in the series. The null hypothesis of stationarity is tested against the alternative hypothesis of no stationarity at 5 percent level. This general form of the unit root test model with a constant and trend is formalized below:

$$\Delta Z_{t} = \eta_{0} + \eta_{1} Z_{t-1} + \sum_{i=1}^{f} c_{i} \Delta Z_{t-i} + \mu_{t}$$
(3.1)

Where: $Z_t = \text{Economic time series under consideration}$, η_1 and $c_i = \text{parameter estimates}$, f = lag length, $\Delta = \text{First}$ difference operator and $\mu_t = \text{Random disturbance term}$.

RESULTS AND DISCUSSION

Multicollinearity Test

This paper employed correlation matrix to check whether severe multicollinearity exists in the model which Gujarati (2004) describes as very detrimental to an estimated model. It mainly helps to determine whether or not the explanatory variables can be regressed together. The correlational matrix is presented in Table 1.

	TEIN	ECGO	PLGO	OSGO	INFI
TEIN	1				
ECGO	0.5886	1			
PLGO	0.360	0.400	1		
OSGO	-0.755	-0.812	-0.324	1	
INFI	0.772	0.427	0.205	-0.754	1

Table 1: Correlation matrix of the series

Source: Researchers' estimation using software

This study correlation matrix presented is utilized for the multicollinearity test as gives better insight into the extent of association between each of the regressors in the model. The result shows that the correlation coefficient depicting the relationship between each of the explanatory variables is below 0.84 which Gurati (2004) describes as evidence of severe multicolinearity. Hence, the variables can be regressed together without the problem of multicollineary.

Unit Root Test

Published by **ECRTD-UK**

Print ISSN: 2052-6350(Print), Online ISSN: 2052-6369(Online)

The unit root test is utilized to test the null hypothesis of stationarity against the alternative of nonstationarity in each of the series at 5 percent level. The KPSS unit root tests results are reported in Table 2.

Variable	Levels test		First Difference test			
	KPSS LM stat.	Test critical value (5%)	KPSS LM stat.	Test critical value (5%)	Order of integration	
Log (TEIN)	0.183	0.146	0.070	0.146	I(1)	
ECGO	0.151	0.146	0.035	0.146	I(1)	
PLGO	0.138	0.146	0.082	0.146	I(0)	
OSGO	0.114	0.146	0.114	0.146	I(0)	
INFI	0.138	0.146	0.125	0.146	I(0)	

Table 2: KPSS unit root test results

Source: Researchers' estimation using E-views software

NB: LM implies Lagrange multiplier, I(0) and I(1) denote integrated of order zero and one respectively.

The unit root test is based on the KPSS methodology. It was uncovered from the KPSS stationarity test results that PLGO, OSGO and INFI do not have unit root, indicating that they are stationary at levels. This is because their respective LM statistics are less than the corresponding asymptotic 5 percent critical value (0.146) critical value at the levels test. On the other hand, TEIN and ECGO are stationary non-stationary at levels, but they became stationary upon first differencing as their respective LM statistics became less than the corresponding asymptotic 5 percent critical value (0.146) critical value at the first difference test. This finding suggests that data transformation is helpful in achieving stationarity in macroeconomic time series. It therefore follows that PLGO, OSGO and INFI are integrated of order zero [I(0)] while TEIN and ECGO are [I(1)].

Cointegration Test

The Johansen Maximum Likelihood (JML) cointegration approach for multivariate system is used to examine whether the variables have long run relationship at 5 percent level. The result is showed in table 3.

Published by *ECRTD-UK*

Print ISSN: 2052-6350(Print), Online ISSN: 2052-6369(Online)

Table 3: Johansen cointegration test result

Series: LOG(TEIN) ECGO PLGO OSGO INFI

		Trace test		
Hypothesized	Eigenvalue	Trace	0.05	Prob.**
No. of CE(s)		Statistic	Critical Value	
None *	0.947699	187.8021	69.81889	0.0000
At most 1 *	0.790823	93.37863	47.85613	0.0000
At most 2 *	0.535099	43.31223	29.79707	0.0008
At most 3 *	0.441468	18.80243	15.49471	0.0153
At most 4	0.005119	0.164217	3.841466	0.6853
		Max-Eigen t	est	
Hypothesized	Eigenvalue	Max-Eigen	0.05	Prob.**
No. of CE(s)		Statistic	Critical Value	
None *	0.947699	94.42348	33.87687	0.0000
At most 1 *	0.790823	50.06640	27.58434	0.0000
At most 2 *	0.535099	24.50981	21.13162	0.0161
At most 3 *	0.441468	18.63821	14.26460	0.0095
At most 4	0.005119	0.164217	3.841466	0.6853

Source: Researchers' estimation using E-views software

NB: * indicates rejection of the null hypothesis at 5 percent level

The Trace and maximum Eigenvalue statistics is utilized for this test and it was evident from both test statistics that four cointegrating equations exist in the model. This is because the computed values of these test statistics are more than their corresponding critical values at 5 percent level. This finding necessitates the rejection of the null hypothesis of no cointegration between the series

at 5 percent levels. Hence, long run relationship exists between the variables and this prompts the estimation of cointegrating regression model to mirror the long run behavior of the regressors.

Estimation of Cointegrating Regression Model

The cointegrating regression model which depicts the long run behavior of the regressors is estimated using Dynamic Least Squares (DOLS) and the result is reported in Table 4.

Table 4. Connegrating regression resul	Table 4:	Cointegrating	regression	result
--	----------	---------------	------------	--------

Dependent Variable:	LOG(TEIN)
----------------------------	-----------

Method: Dynamic Least Squares (DOLS)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ECGO	0.028777	0.008709	3.304289	0.0045
PLGO	0.044530	0.011180	3.982985	0.0011
OSGO	-0.018161	0.018913	-0.960263	0.3512
INFI	0.048487	0.010551	4.595652	0.0003
С	15.82898	1.101692	14.36789	0.0000
R-squared	0.912268	Mean depende	ent var	21.65330
Adjusted R-squared	0.824536	S.D. dependen	t var	1.083758
S.E. of regression	0.453969	Sum squared r	esid	3.297411
Durbin-Watson stat	2.137467	Long-run varia	ance	0.036440

Source: Researchers' estimation using E-views software

The estimated cointegrating regression model reported in Table shows that the coefficients economic institutions, political institutions and index of information flows appear with the hypothesized positive signs and statistically significant at 5 percent level. A percentage change in index of economic institutions stimulates total equity investment by 2.8 percent. Similarly, a 1 percent increase in political institution and index of information inflows robustly boost total equity investments by 4.4 percent and 4.8 percent respectively. These findings authenticate previous findings by Stein and Daude (2001), Globerman and Shapiro (2002); and Rodrick *et al.* (2002) that strong institutions are panacea for mobilizing foreign investments. However, the result shows that other indicators of social institution other than information flows, especially personal

contacts and cultural proximity are not significant in explaining changes in total equity investment. The coefficient of determination (0.912) suggests that the explanatory variables jointly explained 91.2 percent of the sample variations in total equity investments. This is pointer the regressors have high explanatory power and by extension the model is a good fit. The Wald test for coefficient restrictions indicates that the explanatory variables jointly significant in explaining changes in the dependent variable. This further attests to the overall significance of the entire model at the conventional 5 percent level. The Durbin-Watson statistic (2.13) suggests that the model is free from positive first order serial correlation. Thus, the residuals are not serially dependent.

Estimation of Dynamic Regression Model

The general-to-specific approach is employed in estimating the dynamic regression model to capture the short run behavior of the reggressors. The parsimonious form of the estimated overparameterized ECM is reported in table 5.

Dependent Variable: DLOG(TEIN)					
Variable	Coefficient	Std. Error	t-Statistic	Prob.	
DLOG(TEIN(-2))	-0.090147	0.118909	-0.758121	0.4564	
D(ECGO)	0.064812	0.020614	3.144045	0.0047	
D(ECGO(-1))	-0.022163	0.019135	-1.158231	0.2592	
D(PLGO)	0.012332	0.005326	2.315327	0.0303	
D(PLGO(-1))	0.010237	0.006912	1.481082	0.1528	
D(PLGO(-2))	0.008026	0.008448	0.949965	0.3524	
D(OSGO)	0.026751	0.041388	0.646355	0.5247	
D(INFI)	0.017822	0.025016	0.712442	0.4837	
D(INFI(-2))	0.044744	0.023985	1.865491	0.0755	
ECM(-1)	-1.626132	0.217363	-7.481180	0.0000	
С	0.044326	0.084044	0.527418	0.6032	
R-squared	0.797863	Mean depender	ıt var	0.080090	

Table 5: Parsimonious ECM Result

Published by ECRTD-UK

	1 11110 1,	00111 2002 0000(111110); 0111110 1	
Adjusted R-squared	0.705982	S.D. dependent var	0.675457
S.E. of regression	0.366256	Akaike info criterion	1.090231
Sum squared resid	2.951150	Schwarz criterion	1.589067
Log likelihood	-6.988811	Hannan-Quinn criter.	1.258074
F-statistic	8.683701	Durbin-Watson stat	2.311502
Prob(F-statistic)	0.000014		

Print ISSN: 2052-6350(Print), Online ISSN: 2052-6369(Online)

Source: Researchers' estimation using E-views software

In exploring the dynamic short run dynamics of the relationship between institutional qualities and total equity investment, the general-to-specific modeling strategy is applied by gradual elimination of insignificant variables to achieve parsimonious ECM. The parsimonious ECM indicates that the cotemporaneous values of economic and political institutions have positive and significant impact on total equity investment in the short run. 1percentage increase in index of economic institutions drives total equity investment by 6.4 percent. Also, total equity investment increases by 1.2 percent following a percentage increase in political institutions index in the short run. The result further shows that index of information flows is not significant at 5 percent level, but not at 10 percent significance level. Therefore, information flows is significant in bolstering total equity investments in Nigeria at 10 percent level. The R-squared (0.797) reveals that the taken together, the regressors collectively explained 79.7 percent of the sample variations in total equity investments in the short run. This is a confirmation of goodness of fit of the parsimonious ECM. The error correction coefficient is well-behaved as it appeared with the hypothesized negative sign and highly significant at 1 percent level. Thus, long run equilibrium position can be achieved instantaneously in the case of short run disequilibrium in the system as depicted in the estimated error correction parameter.

Diagnostics Tests

The diagnosis tests are employed to examine the reliability of the estimated model for prediction or policy purposes. Specifically, the Breusch-Godfrey (B-G) Lagrange Multiplier (LM) test for serial correlation, Autoregressive Conditional Heteroskedasticity (ARCH) and cumulative sum (CUSUM) stability tests were applied as diagnostics or post-estimation tests. The results of these tests are reported as follows:

Global Journal of Arts, Humanities and Social Sciences

Vol.7, No. 10, pp.99-113 December 2019

Published by *ECRTD-UK*

Print ISSN: 2052-6350(Print), Online ISSN: 2052-6369(Online)

Table 6: Breusch-G	odfrey test f	or serial correlation L	M test result
F-statistic	1.4000	Prob. F(2,20)	0.2697
Obs*R-squared	4.0528	Prob. Chi-Square(2)	0.1318

Source: Researchers' estimation using E-views software Table 7: Heteroskedasticity test result based on ARCH

Heteroskedasticity Test: ARCH				
F-statistic	7.73E-05	Prob. F(1,30)	0.9930	
Obs*R-squared	8.24E-05	Prob. Chi-Square(1)	0.9928	

Source: Researcher's estimation using E-views 9



Figure 6: CUSUM plot for stability test Source: Researchers' estimation using E-views software

The Breusch-Godfrey serial correlation test LM test result indicates that serial correlation is not a problem in the parsimonious ECM up to order two. This is because the corresponding probability value (0.1318) of the chi-square statistic exceeds 0.05. Additionally, the probability value (0.9928) of the chi-square statistic in the autoregressive conditional heteroskedasticity (ARCH) test result is greater than 0.05. This is indicative that heteroscedasticity is in actual fact not a problem in the parsimonious ECM. This finding suggests that the variance of the residual is homoscedastic over the sampled period. The CUSUM plot for stability shows that the parameters of the explanatory variables in the short run dynamic model are stable over the study period.

CONCLUSION

This study examined the link between institutional quality and total equity investments in Nigeria. The economic, political and social institutions formed basis for the measurement of institutional quality in Nigeria. The results of DOLS and ECM are very revealing as they indicate that, on balance, the underlying measures of institutional quality are helpful in influencing the promoting total equity investments in Nigeria. Given the findings, this paper concludes that economic and political factors are important aspects of institutional quality which provide opportunity for long term growth of total equity investment. Another conclusion drawn from the result is that economic institutional provides pathway for short term growth of total equity investments. Based on the findings, it is recommend that policy makers should prioritize improvement of economic institutions by continuously promoting sound financial system and investment-friendly tariff, exchange rate and trade policies amongst others in order to adequately mobilize total equity investments to the Nigerian economy.

REFERENCES

- Aizenman, J. and M. M. Spiegel. (2003). Institutional efficiency, monitoring costs, and the investment share of FDI," Working Paper Series 2003-06, Federal Reserve Bank of San Francisco.
- Alesina, A., & Dollar, D. (2000). Who gives foreign aid to whom and why?. *Journal of economic* growth, 5(1), 33-63.
- Globerman S. and D. Shapiro (2002). Global foreign direct investment flows: the role of governance infrastructure. *World Development 30 (11). 1899-1919.*
- Guler, I., & Guillén, M. F. (2010). Institutions and the internationalization of US venture capital firms. *Journal of International Business Studies*, *41*(2), 185-205.
- Kogut, B., & Zander, U. (2003). Knowledge of the firm and the evolutionary theory of the multinational corporation. *Journal of international business studies*, *34*(6), 516-529.
- Kwiatkowski, D., Phillips, P. C., Schmidt, P., & Shin, Y. (1992). Testing the null hypothesis of stationarity against the alternative of a unit root: How sure are we that economic time series have a unit root?. *Journal of econometrics*, *54*(1-3), 159-178.
- Lerner, J. (2009). The empirical impact of intellectual property rights on innovation: Puzzles and clues. *American Economic Review*, 99(2), 343-48.
- Li, Y., & Zahra, S. A. (2012). Formal institutions, culture, and venture capital activity: A crosscountry analysis. *Journal of Business Venturing*, 27(1), 95-111.
- North, D. (1990), Institutions, Institutional Change and Economic Performance, Cambridge: Cambridge University Press.
- Ramamurti, R. (2003). Can governments make credible promises? Insights from infrastructure projects in emerging economies', *Journal of International Management*, 9 (1), 253-269

Published by *ECRTD-UK*

Print ISSN: 2052-6350(Print), Online ISSN: 2052-6369(Online)

- Rodrik, D., A. Subramanian and F. Trebbi. (2002). Institutions rule: The primacy of institutions over geography and integration in economic development. NBER 9305.
- Scott, W. R. (1995). Institutions and Organizations. Thousand Oaks, CA, SAGE.
- Stein E. and Daude C. (2001). Institutions, integration and the location of foreign direct investment. *Inter American Development Bank, Washington, DC*.
- Stock, J. H., & Watson, M. W. (1993). A simple estimator of cointegrating vectors in higher order integrated systems. *Econometrica: Journal of the Econometric Society*, 783-820.
- Zacharakis, A. L., McMullen, J. S., & Shepherd, D. A. (2007). Venture capitalists' decision policies across three countries: an institutional theory perspective. *Journal of International Business Studies*, 38, 691-708. <u>http://dx.doi.org/10.1057/palgrave.jibs.8400291</u>