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THE IMPACT OF RULE OF LAW ON FDI INFLOW: A POOLED MEAN GROUP ANALYSIS OF SELECTED SSA COUNTRIES

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Abstract

Purpose of the study: The main objective of this study is basically to investigate the impact of rule of law on FDI inflow for a panel of six selected SSA countries comprising, Ethiopia, Tanzania, Senegal, Nigeria, Congo Republic, and Sudan.

Methodology: The study utilized the Pooled Mean Group (PMG) dynamic heterogeneous panel approach covering the period 1996 – 2017.

Main Findings: The results indicate that adherence to the rule of law is directly related to the inflow of FDI in the selected countries in the long-run, whereas its impact is insignificant on FDI during the short-run.

Applications of this study: The study is useful to SSA countries since it will provide policymakers with the necessary insight to formulate appropriate policies to effectively promote adherence to the rule of law with a view to boost foreign investors' confidence in the economies and stimulate the inflow of FDI.

Novelty/Originality of this study: This paper is amongst the first to utilize the PMG dynamic heterogeneous panel approach to explore the relationship of rule of law with the inflow of FDI in the six SSA countries.

Keywords: FDI, PMG, Panel Approach, Rule of Law, SSA.

INTRODUCTION

Foreign direct investment (FDI) is basically an investment in tangible assets undertaken by an investor in another country different from that of the investor. Such investment usually relates to a huge commitment of resources involving long term relationships with the host country. These imply that FDI is not undertaken by Multinational Corporations (MNCs) without significant consideration. FDI is generally regarded as a major source of augmenting domestic capital by developing countries to meet their gross investment requirement. Consequently, attracting FDI is considered an integral part of the economic development agenda and strategies pursued by emerging and developing economies (UNCTAD, 2014). The significance of FDI is inherently connected to economic development through the deepening of capital, technology spillover, employment generation, human capital development, access to international markets and enhanced international trade (Javorcik, 2004; Aziz et al., 2019; Lipsey, 2002; Jalil et al., 2012). As such, FDI plays an essential role in developing economies by bridging three key developmental gaps involving investment gap, tax revenue gap and foreign exchange gap (Epaphra & Massawe, 2017).

The critical role of FDI in the economic development process has compelled several developing economies desirous of FDI inflow to pursue numerous policies and strategies through various incentives and adjustments of their macroeconomic environment in a bid to entice FDI. Though, UNCTAD statistics reveal a substantial increase in global FDI flow from USD13.3 billion in 1970 to USD54.4 billion in 1980, USD204.9 billion in 1990 and USD 1,429.8 billion in 2017 with the corresponding rise in FDI inflow to developing economies including Sub-Saharan Africa (SSA) economies. However, the actual performance of SSA in the enticing inflow of FDI is not encouraging considering the fact that the percentage of global FDI attracted to the region declined from 6.3 percent in 1970 to 3.1 percent in 1982, 2.4 percent in 2010 and 2.1 percent in 2017. This dwindling performance is attributed to several a factor among which is the weak institutional environment in SSA countries (Rodríguez-Pose & Cols, 2017).

Although scholars have been exploring to identify key determinants of FDI, the focus has been mainly on economic factors such as exchange rates, economic growth, market size, infrastructure and labour costs, among others (<u>Grosse & Trevino, 1996</u>; <u>Majid et al., 2019</u>; <u>Dunning, 1980</u>; <u>Caves, 1974</u>). However, the influential work of <u>North (1990)</u> has largely influenced the focus of researchers towards scrutinizing the role of institutional environment in attracting FDI inflow (<u>Globerman & Shapiro, 2002</u>; <u>Gastanaga et al., 1998</u>; <u>Loree & Guisinger, 1995</u>). Accordingly, it is widely believed that institutional factors are of great concern to foreign investors since they affect the costs, operational efficiencies and risks of conducting business in host locations (<u>Wei, 2000</u>; <u>Hassan et al., 2014</u>). Hence, several scholars argued that on the whole, MNCs are disposed to a conducive environment for FDI activities (<u>Gani & Al-Abri, 2013</u>; Globerman & Shapiro, 2003).

Nonetheless, most of the prior works that interrogated the relationship of the institutional environment and FDI concentrated on composite institutional quality with few focusing on specific factors such as corruption and political stability (<u>Cuervo-Cazurra, 2006</u>; <u>Nasir et al., 2020</u>; <u>Kim, 2010</u>; <u>Godinez & Liu, 2015</u>). Against this background and considering the inability of SSA countries to draw the anticipated inflow of FDI after decades of concerted efforts



through various incentives and adjustments of their macroeconomic environment, this study explores the impact of rule of law on FDI inflow in a panel of six selected SSA countries comprising three from the low-income countries, Ethiopia, Tanzania and Senegal and three from lower-middle-income countries consisting of Nigeria, Congo Republic, and Sudan during the long-run (LR) as well as short-run (SR).

Rule of law (ROL) involves the citizens and residents abiding by the law of the society which regulates and guides their conduct. It is the framework for ensuring the security, safety, and peace required to guarantee reasonable transaction costs and sustain economic activities (Fogel, 2006). The sustenance of the rule of law requires an effective crime control mechanism and an efficient court system to safeguard life and properties as well as the rights of citizens. Globerman and Shapiro (2003) argued that an impartial, transparent and effective legal system encourages FDI since it is a major consideration for an investment decision. However, it is widely believed that the application of rule of law is poor in most of the SSA countries, due to weak institutional environment which has been affecting the ability of the countries to attract FDI inflow. This is evidently reflected in the scores of the selected SSA countries in the World Bank ROL index as reflected in Table 1:

Year Ethiopia Tanzania Senegal Nigeria Congo Sudan Average Republic 2004 -0.86 -0.36 0.00 -1.41 -1.19 -1.54 -0.89 -0.28 2005 -0.94 0.01 -1.35 -1.47 -0.94 -1.63 2006 -0.66 -0.44 -0.22-1.07 -1.27-1.36 -0.842007 -0.65 -0.37-0.24 $-1.\overline{07}$ $-1.\overline{24}$ -1.40 -0.83 2008 -0.70 -0.35 -0.28 -1.20 -1.42-0.83 -1.042009 -0.83 -0.48-0.37-1.15 -1.22-1.24-0.88-0.49 -0.40 -1.22-1.31 2010 -0.80-1.16 -0.902011 -0.74 -0.51 -0.46 -1.18 -1.20 -1.28 -0.90 2012 -0.68-0.53-0.29-1.15 -1.14 -1.23-0.842013 -0.65 -0.47-0.24-1.11 -1.11 -1.27 -0.81 2014 -0.47-0.40-0.08 -1.05 -1.11 -1.17 -0.712015 -0.51 -0.37-0.14 -0.96 -1.21-0.71-1.082016 -0.49-0.38-0.11-1.02-1.10 -1.26-0.732017 -0.45-0.45 -0.15 -0.87-1.10 -0.69 -1.11-0.67-0.42-0.21-1.11 -1.18 -1.31 -0.82 Average

Table 1: Rule of Law Indicator of the Selected SSA Countries, 2004 – 2017

Source: World Bank, 2018

The ROL index in Table 1 which is measured on a scale of -2.5 to 2.5 reveals that all the selected SSA countries have not done well from the assessment of the application of rule of law. The index indicates that all the countries score below the average of 0.00 between 2004 and 2017, except Senegal which scores 0.00 and 0.01 in 2004 and 2005, respectively. Furthermore, the cumulative average score of -0.82 for the six countries during the period is far below average performance. Accordingly, the general performance of the selected countries clearly shows that observance of the rule of law is a major challenge in the countries. This is believed to be part of the obstacles inhibiting FDI inflow to the economies since foreign investors are apprehensive of arbitrariness in policy decisions which makes investment environment unpredictable. Moreover, it has been shown that effective judicial system and rule of law stimulates FDI inflow (Jadhav, 2012; Büthe & Milner, 2014). Accordingly, the abysmal performance of the selected countries on the rule of law index could be partly responsible for the inability of the countries to entice substantial inflow of FDI as reflected in Table 2.

The performance of the six selected SSA countries in attracting FDI inflow between 2004 and 2017 in Table 2 depicts that all the countries witnessed a relative increase in FDI inflow despite the fluctuations observed during the period. Though, the FDI inflow of USD1,065 million received by Sudan in 2017 is lower than the USD1,511 million recorded in 2004. Nevertheless, the cumulative average inflow of FDI for all the countries increased by only 23.6 percent from USD1,404 million in 2005 to USD1,838 million in 2017. This implies that SSA countries are having difficulties enticing the desired inflow of FDI after concerted efforts. Considering such a circumstance, there is a need for more robust investigations.

Table 2: FDI Inflow (USD Million) of the Selected SSA Countries, 2004 – 2017

Year	Ethiopia	Tanzania	Senegal	Nigeria	Congo Republic	Sudan	Average
2004	545	331	77	2,127	-8,000	1,511	-568
2005	265	936	45	4,978	585	1,617	1,404
2006	545	403	220	4,898	554	1,842	1,410

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2007	222	582	297	6,087	1,468	1,504	1,693
2008	109	1,383	398	8,249	2,032	1,653	2,304
2009	221	953	320	8,650	1,273	1,726	2,191
2010	288	1,813	266	6,099	928	2,064	1,910
2011	627	1,229	338	8,915	186	1,734	2,172
2012	279	1,800	276	7,127	-283	2,311	1,918
2013	1,344	2,087	311	5,608	609	1,688	1,941
2014	1,855	1,416	403	4,694	1,659	1,251	1,880
2015	2,627	1,561	409	3,064	3,802	1,728	2,199
2016	3,989	1,365	472	4,449	3,565	1,064	2,484
2017	3,586	1,180	532	3,503	1,159	1,065	1,838

Source: UNCTAD, 2018

There are several theoretical exploits providing explanations on FDI and the behaviour of MNCs. However, the famous eclectic theorem of Dunning (1977) has provided an elaborate theoretical framework for understanding the dynamics of FDI, due to its ability to relate ownership, location as well as internalization (OLI) factors as specific attributes that tend to guide investment decisions of MNCs. Dunning (2001) argued that a firm needs three key conditions to be regarded as MNCs. The first being the ownership advantage which relates to the ownership of certain specific assets that enable MNC to have an advantage over local firms in the host location, such that the advantage would compensate for additional costs of operating in a foreign location. The second condition involves the internalization advantage where the firm is able to internalize the benefits of FDI to reduce transaction costs, curtail technology imitation and use effective management to safeguard the reputation of the firm. The third condition is the location advantage which involves certain attributes in a location which could affect the operations and profitability of MNC such as quality of infrastructure, cost of labour, market size, investment incentives, institutional quality, availability of natural resources and any other feature which could serve as an advantage in the host country that MNCs could explore to enhance their efficiency and profitability (Dunning, 1988; Ajide & Raheem, 2016).

Within the framework of location advantages of the eclectic paradigm, several empirical exploits were undertaken to scrutinize the role of institutional factors in stimulating inflow of FDI in different contexts. Recently, some studies have specifically focused on the connection of rule of law with FDI inflow, though there is no unanimity on the nature of the nexus. For instance, Staats and Biglaiser (2012), Gammoudi and Cherif (2015), Büthe and Milner (2014), Jandhyala, (2013), Al-Khouri (2015), Jadhav (2012), Anyanwu (2012), Azam et al. (2012), Karim et al. (2012), Rodríguez-Pose and Cols (2017), Jeong (2014), Osabutey and Okoro (2015), Ahmad and Ahmed (2014), Gangi and Abdulrazak (2012), Hoa and Lin (2016), Lee et al. (2014), Nnadi and Soobaroyen (2015), Fung and Garcia-Herrero (2012), De Beule and Duanmu (2012), Ferreira and Ferreira (2016), Różański and Sekuła (2016) and Osabuohien and Efobi (2013) have documented from their studies in various contexts that the relationship of rule of law with FDI is positively significant, insisting that improvement in the level of adherence to the rule of law stimulates FDI inflow.

On the contrary, <u>Bellos and Subasat (2012)</u> and <u>Subasat and Bellos (2013)</u> reported from their analysis of selected transition economies and countries of Latin American, respectively that rule of law has an inverse relationship with FDI, arguing that lack of observance of rule of law is not an impediment, but a means of encouraging FDI inflow. On their part, <u>Khan and Akbar (2013)</u>, <u>Al-Khouri and Khalik (2013)</u>, <u>Gobinda and Haider (2014)</u>, <u>Bannaga et al. (2013)</u>, <u>Kurul and Yalta (2017)</u> and <u>Saidi et al. (2013)</u> concluded from their various empirical investigations that ROL has insignificant influence on the inflow of FDI.

Accordingly, there seem to be limited empirical works on the nexus of the ROL with FDI inflow in SSA countries. Though the majority of the prior investigations have validated the positive bearing of rule of law on FDI inflow from different empirical investigations that are mostly outside the SSA, there appears to be no consensus. In response to these conflicting outcomes and since most of the previous studies utilized static panel estimation technique in their analysis (Kurul & Yalta, 2017), this study adds to the prevailing literature by employing Pooled Mean Group (PMG) model offered by Pesaran et al. (1997, 1999) to explore the relationships between the rule of law and FDI over the LR as well as SR in the selected SSA countries.

The remaining parts of the paper are organized thus: Section two describes the data as well as the methodological framework of the study, while Section three showcases and discusses the results. Finally, Section four concludes the paper.

METHODOLOGY

The model for examining the effect of the rule of law on FDI inflow is specified in Equation (1):

$$FDI_{it} = \alpha_{it} + \rho_1 ROL_{it} + \rho_1 REG_{it} + \rho_2 INFL_{it} + \rho_3 NATR + \rho_4 OPEN_{it} + \varepsilon_{it}$$
(1)





where FDI is as previously reflected and ROL is the rule of law. REG is regulatory quality and INFL is the inflation rate, whereas NATR and OPEN are natural resources availability and trade openness, correspondingly. In addition, α is constant and ρ is the coefficient, while i denote the country subscript, t signifies a period of time and ε is basically the error term. Following Gani and Al-Abri (2013), Asiedu (2002) and Nnadi and Soobaroyen (2015), the measurement of FDI is the rate of annual FDI inflow to GDP. The data of FDI is obtained from the UNCTAD database. The key variable of concern is the ROL and the range of the index is -2.5 through 2.5 with -2.5 signifying absence of ROL and 2.5 denoting total observance of ROL. The index has been widely used in numerous related works (Bannaga et al., 2013; Gani & Al-Abri, 2013; Ajide & Raheem, 2016).

In line with existing literature (Epaphra & Massawe, 2017; Asiedu, 2006; Chakrabarti, 2001), some variables that could have an influence on FDI (REG, INFL, NATR & OPEN) are included as control variables in the model. Regulatory quality reflects the quality of the country's regulatory framework and the index is measured on a range of -2.5 to 2.5. Inflation reflects macroeconomic stability and its measurement is the annual percent change in the CPI. The NATR is the proportion of annual rents realized from natural resources in relation to GDP, whereas trade openness is the rate of total annual import and export to GDP.

The data for this study consists of an annual time series data set of the six SSA countries from 1996 to 2017. The period of the study is selected based on data availability for the variables. The data for ROL and REG were obtained from Worldwide Governance indicators Index, while the data for the remaining variables were accessed from World Development Indicators.

This study utilizes the PMG dynamic heterogeneous panel approach proposed by Pesaran et al. (1997, 1999). In panel data econometric techniques, the accommodation of individual heterogeneity can be achieved through the estimation of individual equations in respect of each cross-section and obtaining average of the parameter estimates. This can be achieved with the Mean Group (MG) estimation model advanced by Pesaran and Smith (1995). Although, MG could be a consistent estimator, but may not necessarily be efficient with regards to averaging heterogeneous parameters. On the other hand, the cross-sections could be pooled with the application of the Dynamic Fixed Effects (DFE) model proposed by Weinhold (1999). This method provides for different intercepts, but the slope parameters of all cross-sections would be identical. However, this assumption could be highly restrictive which may produce potentially misleading estimates in respect of parameters' average values in the dynamic model, except the slope coefficients are actually identical (Simões, 2011).

The PMG as an intermediate estimator provides a balance between the two varying approaches by exploring the advantages of the two methods. The PMG estimator enables the coefficients of the SR to vary across the countries or cross-sections which are similar to the MG estimator, whereas the coefficients of the LR are constrained to be the same in respect of all cross-sections, which is similar to DFE model. Also, the PMG estimator assumes the error terms to be serially uncorrelated and distributed independently, thereby treating explanatory variables as exogenous. In addition, there is the assumption of LR relationships amongst the dependent variable(DV) and regressors. Another interesting feature with regards to the model is that it can be applied regardless of variables' integration order whether I(0), I(1) or mixed. The Hausman test can be employed to determine the suitability of the estimators between PMG and MG and also between DFE and MG based on the consistency as well as the efficiency of their properties (Pesaran et al., 1999; Simões, 2011).

The estimations of LR, as well as SR coefficients of PMG model, are specified in Equation (2) and Equation (3):

$$FDI_{i,t} = \lambda_{0} + \lambda_{1}FDI_{i,t-1} + \lambda_{2}ROL_{i,t} + \lambda_{3}REG_{i,t} + \lambda_{4}INFL_{i,t} + \lambda_{5}NATR_{i,t} + \lambda_{6}OPEN_{i,t} + \varepsilon_{i,t} (2)$$

$$\Delta FDI_{i,t} = \beta_{0} + \sum_{k=1}^{p} \beta_{1}\Delta FDI_{i,t-k} + \sum_{k=0}^{q_{1}} \beta_{2}\Delta ROL_{i,t-k} + \sum_{k=0}^{q_{2}} \beta_{3}\Delta REG_{i,t-k} + \sum_{k=0}^{q_{3}} \beta_{4}\Delta INFL_{i,t-k} + \sum_{k=0}^{q_{4}} \beta_{5}\Delta NATR_{i,t-k} + \sum_{k=0}^{q_{4}} \beta_{6}OPEN_{i,t-k} + \nu_{2}ECT_{i,t-1} + \varepsilon_{i,t} (3)$$

where λ and β are the coefficients, whereas p denotes the lag of the DV and q stands for the lag of explanatory variables. In addition, ECT is the error correction term, while ν_2 is the coefficient of ECT and adjustment speed approaching LR equilibrium. The rest is as described in the preceding Equation.

RESULTS/DISCUSSION

This section involves data analysis as well as the results of empirical analysis and findings. The summary of descriptive statistics is provided in Table 3, whereas the correlation matrix is reflected in Table 4.



Table 3: Descriptive Statistics

Variable	Mean	Standard Deviation	Minimum	Maximum
FDI	4.021	6.224	-2.071	45.833
ROL	-0.848	0.494	-1.709	0.066
REG	-0.863	0.433	-1.560	-0.048
INFL	9.956	14.230	-8.484	132.824
NATR	18.023	15.739	0.184	61.945
OPEN	0.760	0.581	0.179	2.511

Table 4: Correlation Matrix

Variable	FDI	ROL	REG	INFL	NATR	OPEN
FDI	1.000					
ROL	-0.166	1.000				
	(0.057)					
REG	-0.201	0.868	1.000			
	(0.021)	(0.000)				
INFL	-0.158	-0.317	-0.301	1.000		
	(0.070)	(0.000)	(0.001)			
NATR	0.280	-0.519	-0.501	-0.167	1.000	
	(0.001)	(0.000)	(0.000)	(0.056)		
OPEN	0.294	-0.099	-0.253	-0.296	0.578	1.000
	(0.001)	(0.261)	(0.003)	(0.001)	(0.000)	

According to <u>Hassan et al. (2014)</u>, the process of panel data analysis essentially commences with a stationary test to detect the presence of unit roots in respect of the series. Accordingly, the series of stationary properties were examined with <u>Im et al. (2003)</u> IPS unit root test of the panel. The results in Table 5 show that FDI, REG and INFL are stationary at level, while ROL, NATR, and OPEN are stationary at first difference. These imply a mixed order of integration not exceeding I(1), which is ideal for the PMG model.

Table 5: Unit Root Test Results

	IPS			
Variable	Level		First Difference	;
	W-statistic	Probability	W-statistic	Probability
FDI	-4.471	0.000*	-12.344	0.000*
ROL	-0.448	0.327	-13.156	0.000*
REG	-1.803	0.036**	-12.774	0.000*
INFL	-8.562	0.000*	-8.774	0.000*
NATR	-0.348	0.364	8.884	0.000*
OPEN	-0.213	0.416	-7.703	0.000*

To select the appropriate model and avoid cross-sectional dependence, the process of ascertaining the suitability of PMG, MG or DFE model for the panel analysis involves the conduct of the Hausman test with the estimated parameters of the models. Table 6 showcases the estimated results with respect to the models and Hausman test results.

Table 6: Selection among the Three Dynamic Panel Data Methods

	Pooled Mean (PMG)	Group	Mean Group (MG)		Dynamic Fixe (DFE)	ed Effect
	Long-Run Est	imations				
Variable	Coefficient	Probability	Coefficient	Probability	Coefficient	Probability
ROL	-1.886	0.023**	-0.254	0.933	-2.677	0.661
REG	0.524	0.501	-2.993	0.393	-5.465	0.441
INFL	-0.052	0.032**	0.082	0.250	-0.096	0.348
NATR	0.031	0.027**	-0.204	0.285	-0.412	0.001*
OPEN	-1.108*	0.091***	-2.095	0.552	2.515	0.309
Short-Run l	Estimations					
Variable	Coefficient	Probability	Coefficient	Probability	Coefficient	Probability
ECT	-0.646	0.000*	-0.966	0.000*	-0.597	0.000*



3.042	0.147	2.964	0.376	6.277	0.150
0.698	0.505	-0.422	0.871	2.388	0.569
-0.059	0.394	-0.023	0.455	0.024	0.574
-0.092	0.301	0.057	0.379	-0.005	0.953
1.078	0.489	-2.810	0.160	-1.700	0.665
2.145	0.000*	11.185	0.236	2.080	0.623
ests					
n		Probability		Choice	
PMG/MG		0.189	0.189		
	•	0.123		DFE	
	0.698 -0.059 -0.092 1.078 2.145	0.698 0.505 -0.059 0.394 -0.092 0.301 1.078 0.489 2.145 0.000*	0.698 0.505 -0.422 -0.059 0.394 -0.023 -0.092 0.301 0.057 1.078 0.489 -2.810 2.145 0.000* 11.185 ests Probability 0.189	0.698 0.505 -0.422 0.871 -0.059 0.394 -0.023 0.455 -0.092 0.301 0.057 0.379 1.078 0.489 -2.810 0.160 2.145 0.000* 11.185 0.236 ests Probability 0.189	0.698 0.505 -0.422 0.871 2.388 -0.059 0.394 -0.023 0.455 0.024 -0.092 0.301 0.057 0.379 -0.005 1.078 0.489 -2.810 0.160 -1.700 2.145 0.000* 11.185 0.236 2.080 ests n Probability Choice 0.189 PMG

Note: *, ** and *** signify significance at 1%, 5% and 10% level of significance, correspondingly

The Hausman test result between PMG and MG reveals a probability value of 18.9 percent, which implies that PMG is the most suitable model over MG since the probability value from the test result is above five percent (<u>Blackburne & Frank, 2007</u>). Likewise, the Hausman test result between DFE and MG indicates a probability value of 12.3 percent which is above five percent. Hence, DFE should be selected over MG. However, since the Hausman test result between PMG and MG is in favour of PMG, there will be no need to consider the test result between DFE and MG. Overall, PMG is the selected model.

Having ascertained the stationary properties of the series and the selection of PMG as the appropriate model, what follows is the estimation of the model's coefficients. Table 7 and Table 8 depict the results of the LR as well as SR relationships estimated with the model (5, 1, 1, 1, 1, 1) selected by Akaike Information Criteria (AIC).

 Table 7: Results of LR Estimation. Dependent Variable: FDI

Variable	Coefficient	Standard Error	t-statistic	Probability
ROL	1.783	0.727	2.452	0.017**
REG	-2.298	0.684	-3.360	0.001*
INFL	-0.100	0.012	-8.027	0.000*
NATR	0.035	0.011	3.121	0.003*
OPEN	-0.262	0.155	-1.691	0.096***

Note: *, ** and *** signify significance at 1%, 5% and 10% level of significance, correspondingly

The results of the LR estimation depicted in Table 8 show that the coefficient of *ROL* is positive and also statistically significant at the 5% significance level. This signifies that the ROL has a positive association with *FDI* inflow in the selected SSA countries during the long-run. It denotes that an increase in the degree of adherence to the ROL by one unit in the rule of law index causes *FDI* inflow to increase by 1.78 percent of GDP in the selected countries over the long-run. This implies that on average, an improvement in adherence to the rule of law will strengthen the framework of undertaking business activities in the countries, thereby boosting the confidence of foreign investors to invest in the economies. In the same vein, a decline in the degree of observance of rule of law and arbitrariness in policies application tend to weaken investors' confidence and their willingness to invest in the economies. The result of this study follows the outcome of the works of Lee et al. (2014), Karim et al. (2012), Azam et al. (2012), Hoa and Lin (2016) and Rodríguez-Pose and Cols (2017)which have concluded that ROL is significant for stimulating FDI inflow. The coefficients of all the control variables are significant. Natural resources availability has a direct association with FDI, whereas regulatory quality, inflation, as well as trade openness, have an inverse relationship with FDI during the long-run.

Table 8: Results of SR Estimation. Dependent Variable: FDI

Variable	Coefficient	Standard Error	t-statistic	Probability	
ECT	-0.803	0.319	-2.518	0.015**	
∆FDI (-1)	0.283	0.321	0.884	0.380	
△FDI (-2)	0.363	0.243	1.495	0.140	
△FDI (-3)	0.434	0.211	2.052	0.044**	
∆FDI (-4)	-0.067	0.144	-0.461	0.647	
ΔROL	-8.197	5.486	-1.494	0.140	
$\triangle REG$	2.490	1.632	1.526	0.132	
$\Delta INFL$	0.067	0.036	1.880	0.065***	
$\Delta NATR$	-0.114	0.135	-0.847	0.401	
△OPEN	3.198	6.729	0.475	0.636	
C	3.932	2.002	1.964	0.054***	

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Note: *, ** and *** signify significance at 1%, 5% and 10% level of significance, correspondingly

Furthermore, the estimated short-run results in Table 8 depict that the coefficient of ECT which measures adjustment speed approaching long-run equilibrium is negative, less than one as well as statistically significant at a 5% significance level. These signify a model fit and the presence of LR relationships amongst the DV and the explanatory variables. In addition, the speed of adjustment is very fast at 80.3% annually. The results also show that INFL and the lag value of FDI exert positive significant influence on FDI during the SR, whereas ROL and the remaining control variables are insignificant, implying that the rule of law does not impact FDI in the short-run, it requires time instead.

CONCLUSION

The enormous benefits connected with FDI have prompted developing economies to implement several reforms and pursue policies that are aimed at encouraging the inflow of FDI. However, the ability of various countries to attract the desired FDI inflow differs considerably. In this regard, SSA countries have been finding it difficult to attract the required FDI inflow after decades of concerted efforts, prompting various empirical exploits targeted at unraveling the key determinants of FDI in the region. This study, therefore, contributes to these drives by engaging PMG dynamic heterogeneous panel procedures to empirically explore the LR as well as the SR association between the ROL and FDI inflow in the six selected SSA countries over the period of 1996 to 2017. The study found that ROL has a significant direct influence on FDI inflow over the long-run in the selected countries, thereby supporting the dominant findings from prior studies. However, the relationship in the short-run appears to be insignificant. The study recommends that the SSA countries should strengthen their law enforcement mechanism and justice delivery system to enhance the level of observance of the rule of law. This will reduce the risks as well as uncertainties associated with the business environment and boost the confidence of foreign investors to invest in their economies.

LIMITATION AND STUDY FORWARD

In spite of the attempt to make some contributions, this study is, however, not without limitations. The study covers only six countries from the low income and lower-middle-income countries in the panel analysis out of the several economies in the SSA region, due to data availability involving all the variables employed in the study. Future studies could expand the scope of the SSA countries to cover more economies including upper-middle-income countries. Furthermore, future investigations could involve time series analysis to examine the relationship of ROL with FDI inflow in the context of a specific country as more data becomes available.

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AUTHORS CONTRIBUTION

The two authors contributed in conducting the study and preparing the paper. The first author prepared the Abstract, Introduction and Methodology sections of the paper, whereas the second and corresponding author worked on the Analysis, Results/Discussion, Conclusion and Limitation/Study Forward sections of the paper.

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