E u r o E c o n o m i c a

Issue 3(39)/2020 *ISSN: 1582-8859*

Investors' Objectives and Foreign Direct Investment Inflows in African Regions

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Abstract: This study increases the frontier of FDI inflows literature by investigating the impact of investors' objectives on FDI inflow in the five (5) African regions between the periods 1996 to 2020. To achieve this aim, panel data techniques (system GMM, fixed effects and PMG) were employed on a sample of selected countries across the five (5) African regions. The empirical results showed that market seeking objective influenced FDI inflows activities in the selected countries across the five (5) African regions. Meanwhile, efficiency seeking objective also determined FDI inflows in the selected regions but with the elasticity of 0.09 that is less significant for specifications for the period of investigation with SGMM technique. Furthermore, the pooled mean group estimation technique confirmed the structural and behavioural differences in FDI inflows among the five (5) African regions when analyzed separately, FDI inflows in all African regions was market and efficiency seeking objectives determined. However, from the empirical findings, there are resultant policy implications. These policy implications include that, African regions should intensify efforts to engage in an integrated common market that is FDI inflow induced and ensuring evidence-based policies that are liberalization friendly such as reduction of taxes, licenses and insecurity.

Keywords: Foreign direct investment; Market seeking; Efficiency seeking

JEL Classification: F21; F68; O55

1. Introduction

Despite being large and an important source of investment financing, the empirical proof of Foreign Direct Investment (FDI) inflows in the five African regions as induced by investors' objectives remained dimly discernable in the extant literature for African countries. Foreign Direct Investment (FDI) as a growth-enhancing component has received considerable attention in developing economies and developed nations in general and its increase has been the objective of African countries in the pursuit of economic growth (Wolf, 2008). Foreign direct investment has been defined as the category of cross-border investment made by a resident in one economy (the direct investor) to establish a lasting interest in an enterprise at another economy (OECD - Organisation for Economic Co-operation and Development, 2002).

The demand for FDI is quite significant in Africa, due to high level of poverty prevalence, making it increasingly difficult or almost impossible to save (Rishi & Buchanna, 2012). Uneven, low and unreliable savings pattern coupled with rising population growth in African countries has left an enormous investment gap that gave strength to rising problems of unemployment, widening income inequality, problems of insecurity among many other deep-rooted issues (Loots & Kabundi, 2003).

Hence, it has been argued that FDI inflow is instrumental in bridging this huge investment gap in

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developing countries especially Africa (Hayami, 2001).

The potential for technology transfer, knowledge spillover, improved managerial skills, employee training and access to international production networks, host country markets and efficient production cost control, contributes to the potential to increase productivity and output, employment generation in the host country, assist in diversifying exports and transforming the economic structure of the host economy by motivating sustainable growth that would inform development.

However, considering this array of potential benefits, it becomes very crucial for developing countries not to only substantially reduce barriers to FDI inflow through host countries macroeconomic factors but also devised a means that would promote and attract FDI inflow induced by investors' objectives.

Recently, African countries were plagued with declined and unstable FDI inflow as foreign direct investment (FDI) inflows to Africa slumped to $42 billion in 2019, a 21% declined from 2019. North Africa FDI inflow dropped by 4% to $13 billion. Foreign investment in Egypt declined. Central Africa FDI inflow declined by 22% to $5.7 billion. FDI inflow to West Africa declined by 11% to $11.3 billion, while East Africa, the fastest-growing region in Africa, also had a decline of 3%, Ethiopia FDI inflow declined by 10% ranking it the second-largest recipient of FDI inflow in Africa. In Southern Africa, FDI inflow declined by 66% to $3.8 billion. FDI to South Africa fell by 41% to $1.3 billion (UNCTAD, 2019). This significant decline in FDI inflows to African countries has led to untold economic problems with developmental effect.

More so, there is uneven distribution of the little FDI inflow concentration in the five regions of African continent based on the average share percentage. However, during the period of 1996 through 2020, Southern African region received FDI inflow averaging 34%, Northern African region received 25%, and Western African region received 23%, while Central and Eastern African regions had 7% each of the total FDI inflow to Africa (UNCTAD, 2019). Consequently, these significant declined in FDI inflows to African countries has partly led to the increased in the problems of unemployment, rising inequality of opportunities at all levels, unimpressive economic growth, and in the most unobservable cases, it is not unconnected to the recruitment of personnel for banditry and terrorism which have dominated Africa today. Hence, knowing what determines the decisions of foreign investors into African countries, and how they change their behaviors over time; over the business cycle are important questions for policy and research. Therefore, it becomes imperative to address question like what is the impacts of investors' objectives on FDI inflow into Africa.

Several scholars have engaged in scholarly activities that involve the analysis of the determinants of foreign direct investment (FDI) inflows into Africa as it affects growth outcomes of various African countries. But little has been done as regards to the implications of investors' objectives as factors emanating from the home countries to African regions with a particular reference to its predictive capacity to determine foreign direct investment inflows (a growth-enhancing component). Hence, there is the need to investigate the puzzle of FDI inflows into African countries with the aim to determine the impacts of investors' objectives on FDI inflow into Africa such that we can quantitatively predict the increase or decline of FDI inflows that can engulf African regions. This study intends to fill this gap.

This paper therefore investigates the relationship between investors' objectives and FDI inflows in the five African regions using system GMM as the main estimation technique and other confirmatory test such as PMG techniques.

The paper is divided into five sections. Section 1 encompasses the introductory aspect, section 2 discusses the review of the literature, section 3 consist the methodology, section 4 presents results and discussions and section 5 contained conclusion and recommendations.

2. Literature Review

The concept of foreign directs investment inflow (FDII), or refers to as Multinational Companies

(MNCs) if the motive is a lasting investment interest which is financed and controlled by corporate entity or individuals. Foreign direct investment by International Monetary Fund (IMF) is an investment which accounts for at least 10 percent of the foreign firms voting stock of shares. Empirical evidence suggests that FDI has the potential to spur economic growth, and as such, increasing FDI inflows has become a high priority for African policymakers (UNCTAD, 2012; Bartels, Kratzsch & Eichler, 2008). Thus, the quest to improve the investment environment and stimulate growth in the African region, international development agencies and non-governmental organizations (NGOs) have been advocating for 'good governance' and institutional reforms (Thomsen, 2005).

Theoretically, Dunning, OLI eclectic paradigm (2001) gave clarifications on investors' objectives to locate abroad in his eclectic paradigm theory of FDI. He gave details on the determinants of FDI based on the following advantages; Ownership, Location and Internalization advantages which is referred to as OLI framework. These three advantages are expected to be achieved conjointly to attract FDI inflow.

First, firms have to acquire ownership advantages which facilitate their ability to thrive in the local market, for example, technical know-how, information, management skills, firm's production process and patents. Second, host countries ought to acquire locational advantages which attract international investors to serve domestic market directly rather than going for exports, for example, reduction in taxes and related charges, reduction in uncertainty and risk, low production and transportation cost and access to market. Finally, host countries should possess adequate incentives to serve foreign firms, for example, minimum technology cost, reduced transaction costs, efficient management.

Dunning (2001) states that these OLI advantages varies depending on a country's status in terms of been developed, developing, competitive or monopolistic, big or small, labour intensive or capital intensive. From the OLI eclectic paradigm theory, the following investors' objectives are decomposed for this paper; market seeking investors' and efficiency seeking investors' the market seeking investors' target and penetrate the domestic markets of host countries which is connected to: per capita income, access to regional and global markets, market growth, structure of domestic market and market size. While, efficiency-seeking investors are inspired through lower cost of production and establishing new sources of competitiveness for firms. However, these decomposed investors' objectives are microeconomic in nature in the home countries because they are definitely on individual firms' specific decision level of the home countries investors', but transformed into macroeconomic activities due to the aggregation of the value chain economic activities and the interactions among the individuals and firms in the host countries through the locational assumption channel of the eclectic paradigm theory of OLI framework which aggregated the home countries investors' objectives in the host countries. Also, the internationalization of enterprises discourse had provided theoretical descriptions of investors' objectives for engaging in FDI. These theories are entrenched in market imperfections theory, (Dunning, 1977; Buckley & Casson, 1988; Buckley, 1988). However, Root (1994) classified investors' objectives into two general groups: market seeking and factor seeking. Low-cost production-seeking objective do help investors in an overall global sourcing strategy (Brouthers et al., 1996) and increase their ability for exports (Phongpaichit, 1990). Dunning (1977, 1993) in his theory, points out that a major objective for FDI is the acquisition and internalization of assets and capabilities that can be exploited in the marketplace.

Studies in Central East Europe (CEE) for instance; OECD, 1994; Paliwoda, 1995; Svetlicic and Rojec, 1994 confirm that although there can be four main groups of investors objectives for FDI; they are generally dominated by market-seeking objective. Gatling (1993) reveals a clear pattern of investors' objectives across all CEE countries that include: establishing a market share in the host market; tapping into regional market; tapping into EU market and low-cost sourcing. Hence, Asiedu (2006) used a panel data analysis to examine the factors that drives FDI inflows in 22 Sub Saharan Africa countries from 1984 to 2000. The study found that countries with large market size and natural resource endowments attracted more FDI. Also, FDI inflows were sensitive to macroeconomic stability, good infrastructure,

an educated labour force, openness to FDI, an efficient legal system, less corruption and political stability.

Anyanwu (2012) adopted a panel analysis to investigate variables that caused the inflows of FDI in 53 African countries from 1996 to 2008. This study found that openness of the countries to foreign trade, market size, rule of law, foreign aid, natural resources, and past FDI inflows were the principal variables that caused inflows of FDI in Africa.

Accordingly, Aderemi, Olayemi and Olu-Young (2018) used a panel OLS to examine the determinants of FDI in the three largest economies in Africa from 1990 to 2017. This study found that, there is an active and passive determinant of FDI inflows in Africa. They concluded that the active determinants of FDI inflows into Africa are market size while the passive determinants are GDP per capita. Onyeiwu & Shresthe (2004) used Fixed and random effects models to investigate the impact of investors' objectives proxy with natural resources on FDI inflows into Africa. The finding of this study was that Investors' objectives (measured by natural resources) had positive relationship with FDI inflow into African countries.

Mottaleb and Kalirajan (2010) argued that there is a positive relationship between market size and FDI inflow to the economic growth potential. Asiedu (2006) found a positive relationship between market size and FDI in a sample of small, low income countries. Anyanwu (2012) argued that the export-oriented regimes pursued by the countries in their study have contributed to the positive relationship between trade openness and FDI. Masuku and Dlamini (2009) and Asiedu (2002) all showed positive relationships between trade openness and FDI due to lower transaction costs associated with liberalized trade regimes.

3. Materials and Methods

3.1. Theoretical Framework

The theory underpinning this study is John, Dunning eclectic OLI paradigm

$$FDI_{i,t} = F(\vartheta X_{i,t}) \quad (1)$$

$$X_{i,t} = F(MAS_{i,t}, EFS_{i,t})$$

Where FDI stands for foreign direct investment where X represent vector of investors' or MNCs objectives of investing abroad. Such as market seeking (*MAS*) proxy for GDP per capita while efficiency seeking (*EFS*) objective proxy for trade openness

$$FDI_{i,t} = F(\beta^i MAS_{i,t} + \vartheta EFS_{i,t}) \quad (2)$$

In addition, the two major variables of interest in this paper are investors' objectives and FDI. Hence, investors' objective is decomposed into market and efficiency seeking objectives which is further proxy for GDP per capital and trade openness respectively.

3.2. Data and Model Specification

Data for this study was sourced from World Bank's World Development Indicators (WDI) and World Bank's Governance Indicators. Annual data was used for the analysis covering the period from 1996 to 2020 in the five (5) African regions to include (**Northern African Region**; Egypt, Morocco, Tunisia, Algeria and Libya. **Southern African Region**; South Africa, Angola, Mozambique, Malawi and Lesotho. **Western African Region**; Nigeria, Ghana, Senegal, Mali and Cote-d-Ivoire. **Eastern African Region**: Ethiopia, Kenya, Uganda, Madagascar and Mauritius. **Central African Region**; Chad,

Republic of Congo, Cameroon, Equatorial Guinea and Gabon) total FDI inflow was used. Other variables used include market seeking objective proxy for per capita income measured as the ratio of Gross Domestic Product to population (GDP/PN) and efficiency seeking objective proxy for trade openness measured as the ratio of share of import and export to GDP. (X+M/GDP).

3.3. Modeling the impact of investors' objectives and foreign direct investment inflows in African Regions

$$Y_{it} = \alpha + \alpha_i Y_{it-1} + \beta_i MAS_{it} + \beta_2 EFS_{it} + \in_{it} \quad (3)$$

$$\Delta_{yi,t} = \alpha_0 + \omega \Delta ln_{yi,t-1} + \beta_i MAS_{it} + \beta_2 EFS_{it} + \in_{it} \quad (4)$$

However, this model is a prototype of Masron (2010) The significant departure from Masron work is that this study used a theoretical framework that explains the firms specific decision level analysed through the host countries locational assumption. We adapt the Dunning OLI eclectic paradigm (1993)

The *a priori* expectation in the FDI inflows equation is a positive or negative relationship between the coefficient of MAS and EFS.

4. Results and Discussions

This paper investigates the effect of investors' objectives on foreign direct investment inflow with specific focus on two key measures of investors' objectives that affects FDI inflows comprising of market seeking objective and efficiency seeking objective.

$$FDI_{it} = \alpha_i + \beta_1 MAS_{it} + \beta_2 EFS_{it} + \in_{it} \quad (5)$$

Where: $w_{i,t} = \mu_i + v_{i,t} i = 1 \ldots N;\ t = 1 \ldots T$ (6)

Where FDI is net foreign direct investment, MAS implies market seeking objective and EFS efficiency seeking objective.

4.1. Pre-Estimation Tests

As preliminary evaluation, normality test, multicolinearity test problem and unit root test was conducted to determine the nature of the distribution of the dataset.

4.2. Normality Test

Normality test was carried out to verify if the error terms are normally distributed. The Jacque-Bera (JB) test was employed to ascertain this assumption. The test also presents the descriptive statistics of the dependent variables and explanatory variables included in this paper. The result of the Jarque-Bera test is presented in Table 4.1 as follows;

Table 4.1. Descriptive Statistics

	FDI	MAS	EFS
Mean	4.393750	5422.909	69.98433
Median	2.189962	2750.000	65.10989
Maximum	161.8238	28880.00	165.6459
Minimum	-8.589432	0.000000	0.000000
Std. Dev.	10.07814	5872.937	33.96530
Skewness	8.783114	1.786850	0.215519
Kurtosis	118.0657	5.915077	3.312593
Jarque-Bera	310490.5	487.4148	6.497053
Probability	0.000000	0.000000	0.038831
Sum	2416.562	2982600.	38491.38
Sum Sq. Dev.	55761.33	1.894110	633349.1
Observations	550	550	550

Source: Author, 2021

The Jarque-Bera statistics presented in Table 4.1 above shows a P-value less than 0.05 for foreign direct investment (FDI), market seeking objective (MAS) and efficiency seeking objective (EFS). Hence the null hypothesis that the residuals of these variables are normally distributed is rejected at the 5% significance level. It can therefore be inferred from the result that all the variables in the dataset are not normally distributed around the mean. The implication of this result is that, over the time period covered in this study, the distribution in terms of the movement in the values of FDI, MAS and EFS across the selected countries in the five (5) African regions are significantly differs. The successive values of these variables over the period are different as such the estimation of the model requires an estimation technique that address the issue of normality problem. Meaning that, estimation techniques that do not assume normality are appropriate for the model.

4.3. Correlation Matrix

Table 4.1 is a correlation matrix table for the variables used in the analysis. The correlation coefficient indicates the strength of a linear relationship between two variables. The purpose of this test is therefore to check whether or not there is multicollinearity problem in the model.

Table 4.2. Correlation Matrix

	FDI	MAS	EFS
FDI	1.000000		
MAS	-0.084378	1.000000	
EFS	-0.040182	0.334024	1.000000

Source: Author, 2021

The test for multicollinearity among the variables is presented in Table 4.2 above. As a rule of thumb Bryman and Cramer (2001) stated that multicollinearity occurs when the value of the independent variables exceeds 0.90. The result of the correlation analysis for model two indicates that there is no multicollinearity among the explanatory variables since there is no explanatory variables with equal or greater than the value of 0.90 or higher correlation coefficients. Meanwhile, both market seeking objective and efficiency seeking objective are negatively related to foreign direct investment inflow in the selected countries in Africa.

4.4. Lag Order Selection

The results of lag-order selection criteria for the estimated model are presented in Table 4.3.

Table 4.3. Lag Order Selection

Lag	Lag L	LR	FPE	AIC	SC	HQ
0	-9221.020	NA	2.122112	36.89608	36.92137	36.90600
1	-8052.946	2317.457	2.063310	32.25978	32.36094	32.29948
2	-7974.656	154.3882*	1.562212*	31.98262*	32.15962*	32.05202*

** indicates lag order selected by the criterion, LR: sequential modified LR test statistic (each test at 5% level), FPE: Final prediction error, AIC: Akaike information criterion, SC: Schwarz information criterion, HQ: Hannan-Quinn information criterion*

Source: Author, 2021

Based on the result in Table 4.3, 2 lags is suggested by Sequential Modified LR test, Final prediction error (FPE), Akaike Information criterion (AIC) and Hannan-Quinn information criterion (HQ) as appropriate for the model.

4.5. Unit Root Tests

This section reports the results of unit root test. Given the possibility of zero mean in the dataset which is also depicted in the trend analysis as a result of the possibility of FDI inflow to be zero with market seeking and efficiency seeking objectives, the unit root test is computed without constant and trend (none). That is, the possibility of having intercept greater than zero as shown for all the variables in the trend analysis. However, the study did not capture estimates with intercept and trend because the dataset does not follow the same pattern. The study used the conventional Augmented Dickey-Fuller-Fisher (ADF-Fisher) and Levin, Lin & Chu unit root tests expressed in two model forms, without intercept and trend and with intercept for all the variables as reported in Table 4.4 below;

Table 4.4. Unit Root Test Results.

Levin, Lin & Chu t*					**Order**	**ADF - Fisher Chi-square**				
Variable	**Level**	**1st Difference**				**Level**		**1st Difference**		Order
	None	Constant	None	Constant		None	Constant	None	Constant	
FDI	-4.90383 (0.0000)	-2.98436 (0.0014)	-14.6066 (0.0000)	1.04283 (0.8515)	I(0)	88.4203 (0.0007)	84.3961 (0.0017)	282.385 (0.0000)	160.738 (0.0000)	I(0)
MAS	10.7332 (1.0000)	3.38701 (0.9996)	-3.74540 (0.0001)	-2.41033 (0.0080)	I(1)	3.28729 (1.0000)	7.13775 (1.0000)	91.5252 (0.0003)	92.7400 (0.0002)	I(1)
EFS	-0.48666 (0.3133)	-1.43846 (0.0752)	-17.9607 (0.0000)	-10.5685 (0.0000)	I(1)	29.7516 (0.9898)	49.1939 (0.5057)	337.419 (0.0000)	212.637 (0.0000)	I(1)

Source: Author, 2021

The result of the Augmented Dickey Fuller (ADF) unit root test in Table 4.4 indicated that, foreign direct investment inflows is stationary at level I(0) using both the Levin, Lin & Chu and ADF - Fisher Chi-square unit root tests. Conversely, market seeking objective and efficiency seeking objective were found to be stationary only at first difference I (1) at 5% levels based on the Levin, Lin & Chu and ADF-Fisher Chi-square unit root tests.

4.6. Empirical Results on the Impact of Investors' Objectives on FDI Inflows

Table 4.5 presents the result of the fixed and random effects (within) regression

Table 4.5. Static Panel Results

Random Effects Estimates				**Fixed Effects Estimates**		
variables→	**Coefficients**	**t-statistics**	**P-values**	**Coefficients**	**t-statistics**	**P-values**
MAS	-0.000407	-3.708946	0.0002	-0.000604	-4.584644	0.0000**
EFS	-0.031361	-1.968174	0.0496	-0.037305	-2.134313	0.0333**
C	8.795235	6.277749	0.0000	10.27769	8.636131	0.0000**
Hausman Test	b(fIxed eff.)	B (Random eff.)	(b-B) Var(diff.)	Prob.		
MAS	-0.000604	-0.000407	0.000000	0.0069		
EFS	-0.037305	-0.031361	0.000052	0.4080		
	$Chi^2(2) = 15.010458$, $Prob>chi^2 = 0.0006$					
F-statistic(prob) =13.38475 (0.00002), R-squared =0.846655, Adj R = 0.843170, DW=1.710810				F-statistic(prob) =7.105774(0.0000), R-squared =0.761039, Adj R =0.724302, DW=1.911230		

Note: Significant at 5% level (** P < 0.05)
Source: Author, 2021

The result of Hausman test in Table 4.5 suggests that both the fixed and random effects model are also appropriate model for preliminary test since the chi square probability ($Prob>chi^2$) value is less than the chosen 5% level of significance. Based on the random and fixed effect model, market seeking objective and efficiency seeking objective are statistically significant. Equally, the two variables exert a negative effect on foreign direct investment inflows across the selected countries in Africa. The result of the static panel models suggest that investors' objectives consisting of market seeking objective and efficiency seeking objective crowd-out foreign direct investment inflows in the selected countries in Africa. This implies that poor market environment and level of efficiency in the selected countries in Africa are capable of retarding foreign direct investment inflow if the static model result is to be followed. However, given the need to address country specific characteristics, time invariant and endogeneity problem the dynamic panel model estimate is considered.

4.7. System GMM Panel Results

The GMM estimation method has been identified as the method of estimation of dynamic panel models that provides consistent estimates (Roodman, 2006). However, in the analysis of dynamic panel models, there is a need to decide whether to use difference GMM or system GMM. System GMM has an advantage over difference GMM in variables that are random walk or close to being random-walk (Bond, 2002). Since the model for this study is random walk or close to being random-walk as indicated by the unit root test, the system GMM approach looks more appropriate for the analysis. The results from the system GMM dynamic panel data analysis is presented in Table 4.6.

Table 4.6. System GMM Panel Results

Variables→	**Coefficients**	**t-statistics**	**P-values**
FDI_{it-1}	-0.235318	-6.864630	0.0000
MAS	-0.000389	-2.035760	0.0423**
EFS	0.027327	1.679407	0.0937

Note: Significant at 5% level (** $P < 0.05$)
Source: Author, 2021

The results presented in Table 4.6 shows that the lag of foreign direct investment inflows, and market seeking objective are negatively signed while efficiency seeking objective is positively signed in the system GMM model estimation. It is notable that market seeking objective is negatively signed in both the static and the dynamic models. As additional information from the system GMM estimates, a significant relationship was established flowing from the lag of foreign direct investment inflows,

indicating that there is consistent relationship from the past period level of foreign direct investment inflows to the successive current level of foreign direct investment inflows. Market seeking objective shows a significant negative effect on foreign direct investment inflows in the selected countries in Africa while the effect of efficiency seeking objective is positive but less significant for specifications.

Thus, the result from the system GMM estimation and the fixed effect estimation of the static model produce the same outcome with regards to the relationship between market seeking objective and foreign direct investment inflows in the selected countries in Africa. It was revealed that market seeking objective crowd-out foreign direct investment inflows in the selected countries in Africa. Therefore, an essential consideration of investors' in terms of their objectives to invest in the selected countries in Africa is their market seeking objective.

4.8. Post Estimation Results

Table 4.7 presents the result of the test for over-identification serial correlation in the dynamic panel data as follows:

Table 4.7. Model Diagnostics

Number of Observations	500
Number of Groups	25
Number of Instruments	6
F-test of Joint Significance	F = 7.105774
Hansen J-test of Over identifying Restrictions	Chi^2 (2) = 455.4080; prob > chi^2 = 0.000000

Source: Author, 2021

The Hansen J-statistic tests (Chi^2 > 455.4080; prob = 0.000000) in Table 4.7 indicates that the model has valid instrumentation. Hence, we cannot reject the null hypothesis at any conventional level of significance. The F-statistic suggests that all the explanatory variables are jointly and significantly explained the model at 5% significance level. Roodman (2006) suggests checking for steady-state assumption which can be used to investigate the validity of the instruments. In other words, the estimated coefficient on the lagged dependent variable in the model should indicate convergence by having a value less than absolute unity; otherwise system-GMM is invalid. The estimated coefficient on lagged dependent variables is -0.235318, which means the steady-state assumption holds. According to Roodman (2007) there is also the need to report the number of instruments used in the dynamic panel, since they can generate potentially "weak" instruments that can cause biased estimates. First, the number of instruments should not exceed the number of observations, which is the case here (6 instruments < 500 observations).

4.9. Pooled Mean-Group

Table 4.8 presents the results of the parameter estimates of the short and long runs PMG. The study used the PMG estimator as a confirmatory test given its gains in consistency and efficiency over the other error-correction based estimations.

Table 4.8. Pooled Mean-Group Results

Pooled Mean Group			
Variables	**Coefficients**	**t-Statistic**	**Prob.**
Long-run			
MAS	-0.000282	-21.49877	0.0000**
EFS	0.055753	27.76354	0.0000**
Short-run			
COINTEQ01	-0.784329	-3.236651	0.0014
Δ(MAS)	0.017209	1.796927	0.0737
Δ(EFS)	0.068857	1.236763	0.2175
Intercept	-1.735871	-1.133430	0.2583

Note: Significant at 5% level (** P < 0.05)
Source: Author, 2021

Based on the result of the pooled mean group display in Table 4.8, market seeking objective has a significant negative impact on foreign direct investment inflows while efficiency seeking objective shows a positive impact on foreign direct investment inflows in the long run. Consistent with the static and dynamic panel models, market seeking objective have a significant negative impact on foreign direct investment inflows in the selected Africa countries in the long-run at 5% level of significance. Conversely, in the short-run both variables were not statistically significant on foreign direct investment inflows in the selected Africa countries. The estimated elasticity of market seeking objective (-0.000282) implies that a 1% decrease in market seeking objective is associated with a 0.0002 percentage point fall in foreign direct investment inflows in the selected Africa countries in the long run. Meanwhile, the elasticity of efficiency seeking objective with respect to foreign direct investment inflows is positive. The result implies that efficiency seeking objective crowd-in foreign direct investment inflows while market seeking objective crowd-out foreign direct investment inflows in the selected Africa countries.

The Pooled Mean Group estimator constrains the long-run estimates from being the same across countries and allows only the short-run estimates of individual countries. This allows for heterogeneity without imposing cross-sectional restrictions in the short-run. Hence, for clarity, it becomes necessary to ascertain the behavioural and structural pattern of these variables regionally for policy implications. Therefore, the short-run estimates of the selected African countries by regions are presented in Table 4.9. below.

Countries by Regions	**EC**	**Market seeking objective (MAS)**	**Efficiency seeking objective (EFS)**
Northern African Region			
Egypt	-0.146568 (0.0000)	0.014096 (0.0000)**	0.016792 (0.0000)**
Morocco	-1.697539 (0.0044)	0.000147 (0.0002)**	0.086386 (0.0000)**
Tunisia	-0.537722 (0.0020)	0.004459 (0.0000)**	-0.005682 (0.3307)
Algeria	-0.950016 (0.0041)	1.54405 (0.0000)**	-0.097477 (0.0000)**
Libya	0.143056 (0.0005)	-0.000222 (0.0000)**	0.087027 (0.0000)**
Southern African Region			
South Africa	-2.261084 (0.0004)	-0.005900 (0.0000)**	0.058855 (0.0000)**
Angola	-0.174875 (0.0033)	-0.020527 (0.0000)**	0.087476 (0.0000)**
Mozambique	-0.112492 (0.0020)	0.254086 (0.0000)**	0.087681 (0.0001)**
Malawi	-0.727505 (0.0037)	-0.018126 (0.0013)**	0.087681 (0.0005)**
Lesotho	-0.488486 (0.0000)	-0.018126 (0.0000)**	0.037999 (0.0000)**
Western African Region			
Nigeria	-0.224816 (0.0003)	0.001691 (0.0000)**	0.030096 (0.0000)**
Ghana	-0.198008 (0.0002)	0.008247 (0.0000)**	0.046679 (0.0000)**

Senegal	-0.229536 (0.0004)	-0.003887 (0.0000)**	0.027312 (0.0000)**
Mali	-0.758359 (0.0002)	0.013242 (0.0000)**	0.021754 (0.0000)**
Côte d'Ivoire	0.613896 (0.0000)	0.001502 (0.0000)**	0.028916 (0.0000)**
Eastern African Region			
Ethiopia	-1.019775 (0.0001)	0.018408 (0.0000)**	0.042307 (0.0000)**
Kenya	-0.613828 (0.0008)	0.010581 (0.0000)**	0.042307 (0.0007)**
Uganda	-2.552184 (0.0000)	0.040820 (0.0000)**	-0.409934 (0.0000)**
Madagascar	-0.104515 (0.0235)	0.005938 (0.0029)**	0.034312 (0.0029)**
Mauritius	-0.410712 (0.0002)	0.000659 (0.0000)**	-0.015378 (0.0000)**
Central African Region			
Chad	-0.102510 (0.5504)	-0.021295 (0.0000)**	0.425677 (0.0000)**
Congo Rep	-1.051316 (0.0009)	0.006501 (0.0596)**	0.560334 (0.0004)**
Cameroon	0.233708 (0.0014)	-0.024541 (0.0000)**	-0.090611 (0.0000)**
Equatorial Guinea	-0.019033 (0.1947)	-0.001829 (0.0000)**	-0.030199 (0.0000)**
Gabon	0.250266 (0.0066)	-0.002199 (0.0000)**	-0.026163 (0.0003)**

Note: Significant at 5% level (** $P < 0.05$)
Source: Author, 2021

The ECM coefficients for all the countries are correctly signed (negative) and statistically significant except for Libya, Côte d'Ivoire, Cameroon and Gabon. In Northern African region to be specific, investors' objectives were found to be core determinants of FDI inflows in this region as all the variables of investors' objectives are statistically significant.

Furthermore, in Southern African region, foreign investors' objectives were also found to be the major determinants of the volume and magnitude of FDI inflows in the region. However, Foreign investors' objectives were also confirmed from to be the core determinants of foreign investors to locate any country in Western African region for investment purposes.

Eastern African region confirmed those foreign investors' objectives which are the home countries investment phenomena as determinants of FDI inflow in the Eastern African region as evidenced in Table 4.9 above.

Finally, central African region like others also shows foreign investors' objectives as the core determinants of FDI inflows in this region. Hence, the above empirical proofs show that foreign investors' objectives are the core determinants of FDI inflow in the five (5) African regions.

5. Conclusion and Recommendations

The aim of this study was to examine the impacts of investors' objectives on foreign direct investment inflows in African regions. The result from the static panel, PMG and dynamic panel provides a clear indication of market seeking objective as a component of investors' objectives capable of crowding-out foreign direct investment inflows in the selected countries across the five (5) African regions when undermined. Nevertheless, pooled mean group estimation also confirmed the long-run levels of significant for market seeking objective and efficiency seeking objective. Hence, the findings of this study substantiated the studies of Paliwoda, 1995; Svetlicic and Rojec, 1994 which confirmed that although there can be four main groups of investors objectives for FDI; they are generally dominated by market-seeking objective. Also, for emphasis, the findings of this study supported the Dunning OLI eclectic paradigm theory used in this study who argued that the decisions to invest remains at the disposal of investors. Hence, we recommend that African regions should intensify more efforts to engage

in integrated common market that is FDI inflow induced and also design evidenced based policies that are liberalization friendly such as reduction of taxes, licenses and insecurity.

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