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Domestic, Foreign Direct Investment and Economic Growth Nexus in Selected African Countries

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Abstract: We assessed the impact of investment on economic growth in Africa because extant studies generated mixed results, with the view that a negative relationship between investment and economic growth is peculiar to developing countries. We used data from the World Bank's WDIs and selected thirty African countries based on data availability and covering the period of thirty-four years starting from 1980. Pooled Panel Estimated Generalised Least Squares (EGLS) with the Cross-Section Seemingly Unrelated Regression (SUR) weight estimation was estimated. We found that domestic investment contributes 19.36 per cent to economic outputs, while foreign direct investment (FDI) and current account balances contribute 13.21 and 3.61 per cent respectively to economic outputs. We concluded that the investment in general and domestic investment, in particular, is very relevant to the economic growth in the continent, though the impact of the latter is greater by the former by approximately 6 percentage points, which is still very small. We recommend investment promotion strategies to enhance more local participation in investment processes and opportunities. Also, the principle of political stability and peaceful transition should be encouraged; and structural constraints should be effectively managed to enhance absorptive capacity and more foreign direct investment in the continent.

Keywords: FDI; Economic growth; Current Account; Panel data; Regional economics

JEL Classification: F21; F43; F32; C33; R11

1. Introduction

Investment is a necessity for growth. The countries of the world that have achieved sustainable high growth maintained the sustained drive for domestic investment (Levine & Renelt, 1992). Gaining a high level of domestic investment is an

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undoubtful means of promoting high growth. The importance of capital accumulation was emphasized especially in African, but the domestic saving rate is declining, in contraction to the domestic investment need of the continent and thus create a saving-investment gap (Afawubo & Mathey, 2017; Gidigbi & Donga, 2020). Savings and investment go hand in hand because saving is a feeder to investment, following the classical view of the circular flow of income. In addition, savings can serve as investment capital (Steinert *et al*., 2018). The shortage of the investible fund is one of the major factors that aided the categorisation of most African countries as developing countries. "Development countries by definition are countries almost short of capital. Most can attract some private capital inflow on internationally competitive terms. Meanwhile, the poorer ones depend largely on official development assistance on concessional or grant terms. But all capital inflow involves some cost, financial or political" (Arndt, 1991, p. 157).

Africa is the second-largest continent with the largest number of vulnerable and indigent populations in the world. It is in dire need of investible funds to lift its indigent population above the poverty threshold. There is every possibility that foreign direct investment (FDI) may not be flowing to the continent as expected as insecurity, political instability, corruption and unstable economic outlook overshadow the continent's economic and political space. FDI should have been a reliable means of checking the domestic saving-investment gap but most of the investors are very scared of the unpredictable political and economic atmosphere. More so, FDI is not a sufficient means of taking care of the investment need in the continent but a complement to domestic investment. Although, there is aid flowing into the continent but volatile and not sufficient. Any time the national election is going to place over 50 per cent of the investment fund in the capital market is usually withdrawn by the investors (Ejembi, 2015). Notwithstanding, the continent of Africa still relies heavily on foreign investment. Meanwhile, domestic investment is very important in creating wealth and investment capital. Investment is needed in creating social infrastructures and capital and as well as creating wealth for both the immediate and the future generations.

Pension funds have been one of the ways out in tackling investment shortage but unfortunately, some of the African countries do not have developed and well-structured universal coverage pension schemes, except Namibia and a few other countries. Namibia has some $10bn in pension assets representing 80% of GDP in the country compared to 170% of GDP in the Netherlands, 131% in the UK and 113% in America (Minney, 2015). The continent has so many countries like Nigeria when it comes to the pension scheme. Nigeria has a pension fund which is only 5 per cent of its GDP. This development signal so many bottlenecks around investment in Africa, despite all these, the continent still strives to raise investible fund that will be commensurate to economic growth. Results from the extant studies have shown mixed results. Some studies aligned with a positive relationship between investment

and economic growth (Balasubramanyam, Salisu & Sapsford, 1996; Basu & Guariglia, 2007; Caronell & Werner, 2018; Sarker & Khan, 2020), while many others contradicted the position – especially in the developing countries (Bornschier, Chase-Dunn & Rubinson, 1978; De Mello, 1999; Agosin & Machado, 2005; Herzer, 2012). Therefore, it is in the interest of this paper to assess the impact of domestic investment and foreign direct investment on economic growth despite the bottlenecks around investment and its shortage in the continents. Thereby, this paper seeks to answer the following question: What is the relationship and contribution of domestic and foreign direct investment on economic growth in Africa using the selected African countries?

2. Brief Review of Relevant Literature

2.1. Theoretical Review

The theoretical propositions about the essence of savings are in giving back to the national output started from the classical economists' theories down to the latest related theories. Foremost economic theories advocated for capital accumulation through savings, as a veritable need for economic progress (Harrod, 1939; Domar 1946). Meanwhile, it is a notable fact that the developing countries do face constraints in terms of the needed savings for the desired development. This signals the possibility from the foreign investible funds to bridge the gap between domestic savings and investment. Subsequent economic theories favoured the channelling of investible funds from developed countries to developing countries (Solow, 1956; Swan, 1956). More so, developing countries are plagued with low capital stock and the investment return on capital is higher, which makes it lucrative for foreign investors. Both parties enjoyed a symbiotic relationship, as the developing country benefitted from the provision of more investible funds and the foreign investors enjoyed high returns. Furthermore, the endogenous growth theory that emphasized the technology, opined that foreign investment could be a simple means of attracting the needed technology and/or encourage technological diffusion (Romer, 1986; Lucas, 1988; Barro, 1990).

2.2. Investment Concept

Investment in this paper refers to Gross Fixed Capital Formation (GFCF). According to the United Nations' System of National Accounts (2009), GFCF is measured by the total value of a producers' acquisition, fewer disposals, of fixed assets during the review period plus certain specified expenditure on services that adds to the value of non-produced assets. GFCF is thus not a measure of total investment because only the value of net additions to fixed assets is measured. However, it is still the most

reliable measure of investment because the GFCF of the business sector (non-financial and financial enterprises) is the largest single component of investment and its movement trigger off the beginning and end of economic cycles. It also determines the growth in apparent labour productivity (Lequiller & Blades, 2006).

Solow (1956) asserts that output did not just increase without an investment of capital accumulation, which means putting available investible funds into productivity is what endears output growth. Furthermore, any investment at home would either be financed by domestic savings or foreign capital (Ndikumana, 2014; Gidigbi, Donga, & Hassan, 2020). It was supported by the national accounting perspective that saving feeds investment (Gidigbi & Donga, 2020). Figure 1 gave insight into the relationship that exists between the investment-saving gap as the percentage of GDP and the two variables being boosted by possible equality of savings and investment. Even though the average level of gross domestic investment in the year 2000-12 was not up to that of 1980-89 but because more saving was absorbed, as indicated by the investment-saving gap between the two periods. The GDP growth and GDP per capita growth were increased.

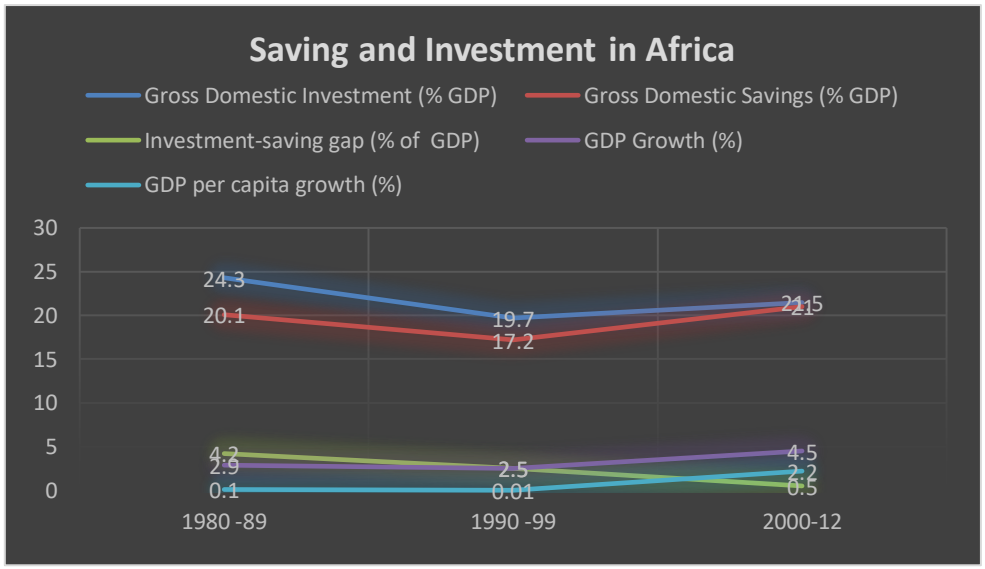

Figure 1. Savings and Investment in Africa
Source: Graph-based on data obtained from the World Bank, (2015).

2.3. Economic Growth Concept

Todaro and Smith (2011) termed development to be synonymous with rapid, aggregate economic growth. Economic growth was seen as the steps to development in which all countries must pass. They further asserted that: 'it was primarily an economic theory of development in which the right quantity and mixture of savings,

investment, and foreign aid were all that was necessary to enable developing nations to proceed along an economic growth path' (Todaro & Smith, 2011). According to Parkin, Powell and Matthews (2003, p. 684), 'most human societies have lived for centuries and even thousands of years, with no economic growth' simply because they lacked some fundamental social institutions and arrangements that are the basic precondition for economic growth. Markets, property rights and monetary exchange have been pinpointed as the basic precondition for economic growth. Having this basic precondition in place is not a sufficient condition, thereby, for growth to continue, three activities that generate economic growth must be encouraged (*Ibid.*). The three activities served as the source of extraordinary growth in productivity during the past 200 years. The three activities according to Parkin *et al.*, (2013) are Savings and investment in new capital; Investment in human capital; and Discovery of new technologies.

2.4. Empirical Review

Many studies confirmed the positive link between investment and economic growth. Caronell and Werner, (2018) confirmed a positive relationship between (foreign direct) investment to economic growth in Spain. Also, Balasubramanyam, Salisu and Sapsford, (1996) supported the position of a positive link between foreign direct investment and economic growth in export-oriented countries but obtained a contrary result in import-oriented countries. The study showed that foreign direct investment contributes to economic growth is higher, compared to the domestic investment contribution. Furthermore, Basu and Guariglia (2007) confirmed the positive link between foreign direct investments to economic growth when studied 119 countries. On the contrary, De Mello (1999) in the study on the non-OECD and OECD countries, concluded that foreign direct investment exhibited a negative relationship with economic growth, which is the opposite of the finding on the OECD countries. Also, Agosin & Machado (2005) asserted that foreign direct investment exhibited a negative relationship even with the domestic investment in Latin America. Furthermore, Herzer (2012) in the study on 44-developing countries using GETS methodology found a negative relationship between (foreign direct) investment and economic growth. These findings reinforced the finding of the earlier work by Bornschier, Chase-Dunn, and Rubinson, (1978), which found a negative relationship between (foreign direct) investment and economic growth.

Few other studies supported the positive relationship between the two main variables of interest, investment and economic growth. Aurangzeb and Ul Haq (2012) assess the impact of investment activities on the economic growth of Pakistan using a time series data spanning from 1981 to 2010. The study found that all the independent variables (public investment, private investment and foreign direct investment) included in the model have a positive relationship with economic growth.

Furthermore, the Granger causality test, found a bidirectional relationship between a gross domestic product with FDI and public investment, while the unidirectional relationship is established between GDP and private investment. The study concluded that the country should make stronger efforts to attract as much FDI as possible to the foreign exchange sectors in the short term (Aurangzeb & UlHaq, 2012).

Sala-i-Martins and Artadi (2003) investigated economic growth and investment in the Arab World over a period of forty years. The study is explorative in nature, and it relates to the poor performance of oil and non-oil producers in the economies over the period of investment. The study thereby concluded that the low quality of investment projects is the key determinant of growth (Sala-i-Martins & Artadi, 2003). The following factors had inhibited growth, the excessive reliance on public investment, the low quality of financial institutions, the bad business environment (due to political and social instability and excessive public intervention and over-regulation) and, thus, the low quality of human capital are an important determinant of systematically unproductive investment decisions (Sala-i-Martins & Artadi, 2003). Bisat, El-Erian and Helbling (1997) investigate the relationship that exists among growth, investment, and savings in the Arab economies spanning from the period of 1971 to 1996. The study pinpoints three findings in terms of policy implications, the Arab countries should provide for continued growth in the capital stock, ensure a more marked broad-based improvement in total factor productivity (TFP), and lastly, ensure a sufficiently high and stable source of funding for investment activities (in terms of both higher domestic savings and more sustainable external financing). The study thus concludes that taking the emerging factors identified earlier into account, investment and savings patterns in the Arab countries will have a tremendous impact on their growth outlook due to the manner the economies started (Bisat, El-Erian, & Helbling, 1997). In a nutshell, the relationship between (foreign direct) investment and economic growth has been mixed, the finding of the negative relationship seems to be particular to the developing countries.

3. Methodology

The study adopted experimental research, which investigates the cause-and-effect relationships between independent and dependent variables. Thereby, it assessed the relationship and contribution of the (foreign direct) investment on economic growth. Data were extracted from the World Bank's World Development Indicators covering the period of thirty-five years starting from 1980 for the 30 African countries[1] based

[1] Algeria, Benin, Botswana, Burkina Faso, Cameroon, Cape Verde, Congo Rep., Cote d'Ivoire, Ethiopia, Gabon, Gambia, Ghana, Guinea-Bissau, Guinea, Kenya, Liberia, Madagascar, Malawi,

on the consistent data availability.

We examined a potential relationship that exists between investment and economic growth using a panel regression for assessing the impact of investment on economic growth in Africa, and preferably, Seemingly Unrelated Regression (SUR) was used. Thereby, inefficiency as a result of Pooled Panel Regression was managed and the effect was silenced since the fixed effect was the appropriated effect envisaged. Gujarati (2009) put forward three point-arguments to justify one's choice between Fixed Effect Model (FEM) and ECM. Meanwhile, the first two of these were found relevant to justify the choice of effect for this study, which are:

i. If the time-series data is large and the number of cross-sectional units is small.

ii. If the individual error component and one or more regressors are correlated, then the estimators obtained from FEM are unbiased.

Based on the previous research work, such as Onafowara *et al*., (2011); and Arndt, (1991) the following model was employed in an attempt to determine the impact of investment on economic growth.

(1) Equation 1: economic growth and investment model

$$LGDP_{it} = \delta_0 + \delta_1 LGDI_{it} + \delta_2 LFDI_{it} + \delta_3 LCAB_{it} + \mu_{it} \quad (1)$$

Where:

$LGDP = Logarithms\ of\ Gross\ Domestic\ Product$

$LGDI = Logarithms\ of\ Gross\ Domestic\ Investment$

$LFDI = Logarithms\ of\ Foreign\ Direct\ Investments$

$LCAB = Logarithms\ of\ Current\ Account\ Balance$

$\mu = Error\ term$

$t = time\ trend\ identifier\ (= 1980, 1981, \dots, 2014).$

$i = cross\ sectional\ dimension\ identifier\ (= 1, 2, \dots, 30).$

Theoretical or a priori expectations for equation 1 are $\delta_1, \delta_2\ and\ \delta_3 > 0$. This implied that gross domestic investment (GDI), foreign direct investment (FDI) and current account balance (CAB) are expected to have a positive relationship with the gross domestic products (GDP) in the equation.

Table 1 showed variable definition in detail, that is, coding, proxy and definition, including the source, which is the source of the table.

Mali, Mauritius, Morocco, Mozambique, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, South Africa, Sudan, Togo.

Table 1. Variable Definition

Variable	Proxy	Definition
GDI	Gross Domestic Investment	Gross capital formation.
GDP	Gross Domestic Products	GDP is the gross domestic product based on PPP.
FDI	Foreign Direct Investment	Foreign direct investment.
CAB	Current Account Balance	Aggregation of net exports of goods and services, net primary income, and net secondary income.

All variables in monetary value are in US$.
Source: World Bank (2015)

4. Results and Discussions

The specified models were analysed to answer the question raised in this paper. The preliminary analyses such as descriptive statistics, unit-root tests, cointegration tests as necessary and effect selection tests were carried out before model estimations. Panel regression with Seemingly Unrelated Regression (SUR) was adopted in answering the concern of this paper.

4.1. Descriptive statistics

Table 2 shows the average of LGDP, LGDI, LFDI and LCAB with statistics' values of 9.63, 10.31, 7.27 and 0.39 respectively, to be very close to each of their middle value, which is 9.64, 10.96, 7.71 and 0, but with their middle value greater than their average value. Except for LCAB where the middle value, which is zero (0) is lesser than the average value of 0.39. LCAB's middle value points at the fact that the data value has a negative value as well as the positive value. LGDP has less variability among the variables as indicated by the standard deviation statistic of 1.04, and LGDI has the highest variability as shown by its standard deviation statistic of 2.76. The minimum value of zero for LGDP, LGDI and LFDI does not necessarily mean that the variables have negative values but there are one or more periods without value other than zero (0). The standard deviation statistics show that LGDP exhibited less variability. The Jarque-Bera statistics of 93324.52, 5496.38, 2472.59 and 16768.61 respectively for each of the LGDP, LGDI, LFDI and LCAB, with the probability value less than 5 per cent for each of the variables implies that they were not normally distributed. This equally informed the choice of the estimation method.

Table 2. Descriptive Statistics for Economic Growth and Investment Model

Variable	Mean	Maximum	Minimum	Std. Dev.	Jarque-Bera	Prob.	Obs.
LGDP	9.6362	11.7547	0	1.0495	93324.52	0	1050
LGDI	10.3147	12.8923	0	2.7681	5496.389	0	1047
LFDI	7.2767	9.9949	0	2.0882	2472.591	0	958
LCAB	0.3936	10.5626	0	1.8826	16768.61	0	848

Source: Authors' Computation using EViews 8.

4.2. Unit-root tests

In econometric methodology, it is assumed that stationary should be in existence. Even though the application of the unit root test on panel data is still an ongoing process, it was well important to see that the panel data passed the unit root test. The estimation procedure is more complex but what was essential was the degree of heterogeneity in the panel estimation. In addition, it was noted that not all the individuals in the panel might have the same property (Asteriou & Hall, 2007). We adopted Levin, Lin and Chu [LLC], (2002), panel unit root test, and other tests such as the Im, Pesaran and Shin [IPS], (2003) test.

Equation 2: Panel unit root test

Levin, Lin and Chu's panel unit root test specification can be written as below (Levin, Lin, & Chu, 2002): $\Delta X_{i,t} = a_i + \rho X_{i,\mathrm{t-1}} + \sum_{\mathrm{m=1}}^{n} \delta_m \Delta X_{i,t-\mathrm{m}} + \gamma_i t + \theta_t + u_{i,t}$ (2)

Whereby the null hypothesis of this test according to Asteriou and Hall, (2007) is:

$$H_o: \rho = 0$$

$$H_o: \rho < 0$$

With the expectation that the variables stated in the model should be $-1 \leq \rho \leq 1$ in order to disprove the issue of the unit root as it might be called; because the existence of unit root in the test would signify autoregressive estimation if there is no corresponding cancellation of stochastic trends among the variables in the model.

Table 3 shows the results of the unit-root tests as concerns the variables in the model. The test involved two processes; one assumed a common unit root test while the three other tests assumed individual unit root tests. The Levin, Lin & Chu t* revealed that $LGDP_{it}$ is stationary at first difference [that is I (1)] at 1 per cent statistical significance level with -16.5227 statistical value. The other statistics such as Im, Pesaran and Shin W-stat; ADF-Fisher Chi-square, and PP-Fisher Chi-square confirmed the individual stationary of the variable at the first difference (see Table 3). In addition, $LGDI_{it}$, LFDIit and $LCAB_{it}$ are stationary at first difference as indicated by the Levin, Lin & Chu t* statistical values of -121.580, -17.2090 and -4.60164, which was statistically significant at 1 per cent significance level respectively. Other statistics confirmed the individual stationary at first difference as

well.

Table 3. Unit-Root Tests for Economic Growth and Investment Model

Variable	Common unit root process		Individual unit root process						Level of Integration
	Levin, Lin & Chu t*		Im, Pesaran and Shin W-stat		ADF-Fisher Chi-square		PP-Fisher Chi-square		
	Stat	Prob.	Stat	Prob.	Stat	Prob.	Stat	Prob.	
$LGDP_{it}$	-185.37	0.00	-54.60	0.00	513.97	0.00	548.62	0.00	I(1)
$LGDI_{it}$	-121.58	0.00	-40.82	0.00	461.18	0.00	524.00	0.00	I(1)
$LFDI_{it}$	-17.20	0.00	-	-	324.79	0.00	326.56	0.00	I(1)
$LCAB_{it}$	-4.60	0.00	-5.15	0.00	30.23	0.00	30.23	0.00	I(1)

Source: Authors' Computation using EViews 8.

4.3. Cointegration Test

This cointegration test serves the purpose of pre-test to avoid spurious regression situations. Economically speaking, variables in the model should have a long-run, or equilibrium relationship. The variables involve were subjected to Pedroni (Engle-Granger based) Cointegration Tests to verify the existence of their long-run relationship by the way of testing whether the variables' linear combination would cancel out the stochastic trends in them.

Equation 3: Panel cointegration test

We adopted a co-integration test developed by Pedroni (1999, 2004) based on Engle-Granger (1987). In this instance, if the variables are cointegrated then the residuals should be I(0), and if not, the residuals would be I(1). $y_{it} = \alpha_i + \delta_i t + \beta_{1i} x_{1i,t} + \beta_{2i} x_{2i,t} + \cdots + +\beta_{Mi} x_{Mi,t} + e_{i,t}$ (3)

This specified model allowed for heterogeneous intercepts and trend coefficients across cross-sections. From the model y and x are assumed to be integrated of order one [I(1)]. The residuals from this equation would be obtained, and then test whether the residuals are I(1) or not by running the auxiliary regression thus:

$$e_{it} = \rho_i e_{it-1} + \mu_{it}$$

Furthermore, the Kao Residual Cointegration test was used in an instance when the Pedroni Cointegration test rejects the I(0) of the residual.

The cointegration test became feasible after ascertaining that the variables in the

model are stationary at first difference. $LGDP_{it}$, $LGDI_{it,}$ $LFDI_{it,}$ and $LCAB_{it,}$ exhibited a long-run relationship, which implies that the variables can be put together in a regression model. Table 4 shows the outputs of the Kao Residual Cointegration Test. The results in the table under Kao Residual Cointegration Test confirmed the existence of a long-run relationship among all the variables as indicated by the t-Statistic value of -6.73 with a probability value, which is statistically significant at a 1 per cent significance level.

Table 4. Cointegration Test for Economic Growth and Investment Model

Kao residual cointegration test			
Test	t-Statistic	Prob.	Decision
ADF	-6.73	0.00	There is cointegration

***Source**: Authors' Computation using EViews 8.*

4.4. Panel Regression Estimation

Fixed effects are the appropriate effects for the estimation. However, the descriptive statistics in table 2 showed that all the variables are not normally distributed as proved by the Jarque-Bera statistic and this may imply possible heteroskedasticity and wrong inference at the end. Thereby, it is fit to apply weight that will take care of the error components in the data structure. Thereby, Pooled cross-section SUR was found to be efficient in a way because it overrides the inefficiency in the pooled estimation without weight. We used Seemingly Unrelated Regression (SUR) because it is the appropriate weight when time-series data are stacked to make the cross-sectional feature and error components across period and cross-sections not constant. The generalized Least Squares (GLS) method with cross-section SUR was adopted to estimate the model. The adoption of Pooled Panel SUR weight in correcting the problem of heteroskedasticity and possible autocorrelation estimation overruled Fixed Effects.

The estimation had 35 years' period and 30 countries cross-sections, which amounted to 757 pooled data in an unbalanced instance. The constant is statistically relevant at a 1 per cent significance level. The probability value for each of the regressors in the model implies that the regressors are statistically significant at the 1 per cent significance level. LGDI has a coefficient of 0.19. This implies that a percentage increase in gross domestic investment would lead to a 19.36 per cent increment in gross domestic products. LFDI with a coefficient of 0.13 implies that a percentage change in foreign direct investment would lead to a 13.21 per cent rise in gross domestic products. Also, LCAB with a 0.03 coefficient implies that a percentage increment in current account balances would lead to a 3.61 per cent rise in gross domestic products. All the estimates have a very less likelihood of failure.

The R-squared of 0.93 implies that the regressors account for almost 93.20 per cent of the total variation in the dependent variable. The adjusted R-squared implies that

after adjusting for the degree of freedom the regressors would still account for 93.17 per cent of the total variation in the dependent variable. The F-statistic of 3443.27 implies that the variables in the model are jointly significant, and this is statistically significant at the 1 per cent significance level (see Table 6 for the estimated outputs). The Durbin-Watson Statistic of 1.20 suggested a positive autocorrelation, following these statistics dL= 1.87 and dU = 1.88 at 5 per cent critical values for Durbin-Watson statistic, with n=757 and k=3.

Table 1. Panel Regression Output for Economic Growth and Investment

Method: Panel EGLS with Pooled (Cross-section SUR)					Weighted			
Dependent: LGDP	LGDI	LFDI	LCAB	C	R^2	Adj-R^2	F-Stat	DW
Coefficient	0.19***	0.13***	0.03***	6.64***	0.93	0.93	3443.27	1.20
Std. Error	(0.00)	(0.00)	(0.00)	(0.04)	Unweighted			
t-Stat.	[61.73]	[31.89]	[11.02]	[161.78]	0.41			0.46

Source: Authors' Computation using EViews 8.

*** and ** Indicates that the p-value is statistically significant at a 1 and 5 per cent significance level respectively.

4.5. Findings and Discussion

Considering the economic growth and investment model, all the regressors, gross domestic investment, foreign direct investment and current account balance were positively related to gross domestic products. A percentage change in gross domestic investment would turn up outputs by 19.36 per cent, which is the highest contribution as per any variable in the model. While a similar change in foreign direct investment would increase outputs by 13.21 per cent. The current account balance would only influence outputs by 3.61 per cent if a similar change happened with it. Gross domestic investment contributed most than all the other variables in the specified model. In the economic growth and investment model, having domestic investment, foreign direct investment and current account balances as regressors, with the gross domestic product as a regressand gave another theoretical aligned result. The contribution of domestic investment to output was significantly high among the contributions of other variables. This disputes the finding of Agosin & Machado (2005) that asserted that foreign direct investment even crowds out domestic investment, though, in studied Latin America. Investment contributed 19.36 per cent to output as a percentage unit added. This finding is in line with Caronell and Werner, (2018), Aurangzeb and Ul Haq (2012), and Sala-i-Martins and Artadi (2003). While foreign direct investment contributed 13.21 per cent to output when a dollar is added to it, this is in tandem with Sarker and Khan (2020) in their study on Bangladesh, Aurangzeb and Ul Haq (2012) on Pakistan. The higher contribution of investment might be feasible because usually there are no bottlenecks in utilizing local resources

as it may apply to the foreign resources. More so, local resources were readily available and more realistic. Current account balances are yet to be fully utilised because much of the investment is not offshore of the continent, such is expected because the continent is yet to have enough investible resources to meet its needed developmental projects, talkless of exporting surpluses. However, there is a need to work hard, in ensuring more inflow of foreign direct investment and as well improve the structural basis for the utmost efficiency of the inflowed foreign direct investment in the continent considering the assertion of Borensztein, De Gregorio, and Lee (1998), and Hermes and Lensink (2003) that absorptive capacity of the foreign direct investment recipient matters.

5. Conclusion and Policy Recommendations

The study explored the impact of investment on economic growth using panel data. The data structure comprised thirty-five time-series features, on annual basis and 30 cross-sections, that is, thirty countries were involved in the sample based on the economic bloc and data availability for the country; making 1050 series per variable when stacked. The Panel Regression Method (EGLS) based on the Seemingly Unrelated Regression (SUR) was adopted for analysis purposely to correct for the likely heteroscedasticity problem in the estimation. There is a positive relationship between (foreign direct) investment and economic growth in Africa. Furthermore, domestic investment contribution to output was by far greater than foreign direct investment; this was in the right direction. Economic growth is better stimulated by domestic investment; therefore, it was imperative to improve domestic investment financing by improving on the provision of more investible funds in the economies. It is recommended that African countries should encourage political stability and peaceful transition as this may retain investment and resulted in economic progress which will in turn boost investment. Most of the countries in the continent usually experienced major capital flight whenever there is going to be a national election. Also, structural constraints that inhibit the further absorptive capacity of the foreign direct investment should be managed more properly for higher impact and more foreign direct investment.

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