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Institutional quality, foreign direct investment, and economic development in sub-Saharan Africa

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Foreign direct investment (FDI) is regarded as a critical determinant in the concept of development for Africa. However, institutional quality in the recipient countries is considered an essential factor that can be used to drive FDI flows inward. The study aims to establish the effect of institutions' challenges on the FDI inflow and how it impacts on economic development for host selected countries in sub-Saharan Africa (SSA). The study employed pooled data for 30 SSA countries for the period within the years 2000 and 2018. The analysis method used was the fixed and random effect regression model utilized to estimate the effect of foreign capital on economic development with considerations for the quality of institutions for developing SSA sub-region of Africa. This study reveals that foreign capital inflow is crucial for economic development in the SSA sub-region of Africa. Quality of institutions as determining factors also affected the level of inflow of FDI to the host SSA sub-region, which resulted in the underutilization of domestic resources and hence abnormal development of domestic sector investment. The study recommends that the government of host SSA sub-region needs to consider the degree of institutional quality to encourage further FDI inflows. To afford the maximal benefit of FDI in the development of the host domestic sector and to guard the industry that foreign investment flows into carefully. It is expedient, thereby, that the domestic investment is enhanced to ensure that dependence on foreign capital inflow continues to decline as income increases. Until domestic investments are sufficient to generate advancement in technology and desired economic development for the selected countries, in the SSA sub-region.

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Introduction

The FDI-economic growth relationship raises important institutional issues on the recipient economy (Adegboye et al., 2020c; Ogundipe et al., 2020). Considering the capital-deficient nature of sub-Saharan African (SSA) economies overtime and the accruable benefits from external investor's activities, FDI is recognized as an essential factor in Africa's growth as well as development. Consequently, there has been a shift of emphasis and efforts by successive governments in the region to globally integrate their countries to increase the inflow of capital through FDI in their respective countries. In turn, it will help the economic recovery of the continent and keep African countries in good shape to achieve sustainable development goals (SDGs), after previous attempts at millennium development goals (MDGs).

Meanwhile, the level of institutional quality for the recipient economies is considered an essential factor that can be used to drive FDI in every country. It measures the amount of FDI inflow that can benefit the economy. On the one hand, recent evidence shows that more companies are growing via FDI in several industries in African countries. It is evident from the relatively increased level of FDIs seen in SSA countries over the preceding years. But, conversely, foreign investments by multinational companies in most SSA economies usually rely on natural resources of host countries, particularly agriculture, manufacturing, and oil production (Adegboye et al., 2020b).

The inflow of foreign capital plunged in 2017 with about 23%, from $1.87 trillion in 2016 to about $1.43 trillion. The World Investment Report specifies that the downturn is contrasting to other macroeconomic factors, which substantially improved in 2017 (Osabohien et al., 2020). The downhill trend on FDI and the deceleration in the global value sequence pose a significant challenge for policymakers globally, particularly in developing countries, especially Africa (UNCTAD, 2018; Osabuohien et al., 2018). It further was observed that the declining flow of FDI is primarily due to a decline in the rates of return on investment. Globally, the average return rate on foreign investment currently stands at 6.7 percent, downward from 8.1 percent in the year 2012. Investment returns are declining across all regions with the steepest decline in Africa, the Caribbean, and Latin America. It has resulted in the investment decline, and the growth rate of international production is also decelerating. The justification in output globally and cross-border trade of production factors are changing from tangible to intangible types. It may adversely impact the potential opportunities available to the developing countries for attracting foreign investment in dynamic capacity (UNCTAD, 2018).

Certain determining factors establish the trend of FDI inflow, such as policies, political, and institutional variables. Asiedu (2006) asserted that in SSA, FDI inflows are ascertained by good quality infrastructure (INFSR), the endowment of natural resources, the availability of substantial local markets, and minute operationalism, an ethical framework, and an obsolete legal system on investment. It further elucidated that accountability (ACC) challenges and political instability scare investments. Cleeve (2008) found that economies that have a steady macroeconomic and political environment tend to attract FDI in other sectors and not only in endowed natural resources. Could we then say that the pertinent challenges of institutional quality in the SSA as in other developing regions results in the repulsion of the needed foreign investment? The picture of Africa at the moment for attracting FDI has not been helpful. It was not so earlier in the 1980s when Africa attracted more FDI than many other emerging regions like Asia, Latin America, and the Caribbean. It became more evident during the 1990s as FDI inflow to developing regions have sidestepped the African region.

FDI projects an impact on growth and hence, development in host economies. Why then is FDI doing otherwise for host economies of SSA and Africa as a whole despite the relative rise of the capital inflow? A pertinent challenge is that FDI could displace domestic investment, a requirement for the development of the host economy. FDI should boost local firms' activities, to avoid competition with more foreign firms that are more proficient and have access to more resources (UNCTAD, 1999). There is also the apprehension that foreign investment could offer their host economies with inadequate or improper technological potential (Ayanwale, 2007). If FDI has indeed been impactful, why are there incessant earnings flowing out from the capital inflow resulting in the decline in the host's payment balance (Gropp and Kostial, 2000; Adegboye et al., 2020a)?

In 2016, over 40% of the nearly $1.75 trillion of global flows of FDI flowed to developing economies, harnessing the much-anticipated private capital, which has bypassed the African region unlike it obtained at prior times (Osabohien et al., 2020). Despite this, the investment needed to achieve the SDGs lingers in a precluded manner enormously insatiable by recent inflows of FDI, particularly in fragile and conflict-affected situations (FCS). There is a need to expand the unexploited private investment into sectors to take full advantage of the development impact of FDI, despite the related risks (GICR, 2018). The SSA region has enormous oil reserves, gold, diamonds, and metals, which create a center of attention for investors. In developing countries, foreign capital inflow in the primary sector is propelled mainly by the extractive industry. Around 2014, the worth of developing economies' Greenfield foreign investment ventures in extraction, quarry, and petroleum rose by 60 percent, from US$25 billion to US$40 billion. The major part of the increase was accounted for in Africa, with a 450 percent increase of the entire worth of the Greenfield projects from US$4 billion to US$22 billion (Bolwijn et al., 2015).

The proportion of inflow of foreign capital to the SSA countries has perpetually been on the decline. The limited share of FDI flows primarily into the extractive sector. The impact of these flows would likely not be significantly felt on the DOMINV as required for developing economies that have typical characteristics of gaps of savings and investment (Adegboye, 2014; Adegboye et al., 2020a). The persistent images of challenges of quality of institutions, social instability, poverty, deadly infections, and economic instability are often associated with the SSA, the most impoverished region in the world, and the entire African region. In several countries, especially the developing economies, the frail rule of law permits harmful social outcomes associated with resource misappropriation through inducement, corruption, and opportunistic attitude. Nonetheless, a negative relationship does exist amid challenges of institutional quality and the rate of FDI inflows that countries receive, implying that, the weaker the problems of institutional quality detected, the lesser the likely inflow of FDI the economy will possibly receive (Chand, 2014; Adegboye et al., 2020a).

Developing economies like the SSA, are characterized by a lack of the relevant determining factors that should attract FDI. Elements like; effective policies, institutional quality, and standard INFSR which will enhance low cost of production, flexible institutions, and favorable tax incentives. It would also aid the distortions of the free market, which destroys motivation, misappropriate resources, and evens out the extent of generating a market place filled with uncertainty. The challenges of quality of institutions, ACC, and transparency are determinants that dampen FDI in addition to growth and development in emerging economies.

Challenges such as a misuse of public authority for private gain often do not occur at any collaboration amid the public and private segments. Consequently, the continuous occurrence for developing economies is the characterization of the government sector having a significant conscientiousness of the terms of civil service or the position of particular guidelines (Rose-Ackerman, 1997; Beecroft et al., 2020). In line with the definition of the World Bank, ACC dwells on issues bothering on misuse of public authorities for private gain. At the same time, political instability refers to the predisposition to the breakdown of leadership due to consistent clashes and widespread opposition among the political groups. In summary, it is a significant hurt and deterrent to growth in the economy and development. It results in the decline of FDI inflow, hence the country's growth and development (Mauro, 1995; Adegboye et al., 2020c).

Inward FDI is regarded as a critical enhancement that engenders employment prospects, creates capital, enhances management proficiency, boosts technology improvement, and improves production efficiency. Thus, it contributes significantly to the growth of the economy and development (Blomstrom and Kokko, 1997; Markusen and Venables, 1999; Dinko et al., 2011; Azam and Ahmad, 2013). FDI inflows should create high-quality employments equally for employees and the nation alike. The employment would create higher salaries for indigenous employees and hence, higher income, thereby complementing what is available via indigenous organizations. Also, along with higher income comes enhanced and more effective training; thus, integrating what is available via the indigenous organizations. On the whole, it increases domestic savings and investment and hence, boosts the collective productive efficiency of the host economy (Javorcik, 2012; Adegboye, 2014).

The classifications of FDI inflow determinants are supply and demand. The demand category is common factors assembled in three major groups, which are political, economic, and social. The requisites for pooling FDI are clarified adequately in the OLI theory by Dunning (1988) in the eclectic method. It established that to embark on FDI; organizations require precise advantage implying the ownership advantage of the location to pool together the firms' specific advantage, and location. Alongside the motivation to internalize activities that are external being the internalization concept (Ejemeyovwi and Osabuohien, 2020). The foreign investment focuses on the advantage of the opportunities available in the host economy in terms of precise locations. Majorly due to host economies' sturdy primary economic factors such as its vast size of the market, steady macroeconomic variables, skillful labor force and substantial infrastructural facilities that persuades the country's ability to attract inflows of FDI (Dunning, 1993; Globerman and Shapiro, 1999; Ejemeyovwi and Osabuohien, 2020).

The aim of the analysis was basically to measure the impact of institutional quality on foreign investment inflows and how it impacts on economic development of host selected SSA countries. The study tested the effect of institutional quality on determining the FDI inflow and impact on economic development. The research work utilized cross country panel data from 39 SSA countries.

Extant literature

Empirical review. Despite the considerable high volume of research studies on FDI–growth nexus on developing economies, there is still an abundance of contradictory evidence in the literature on the economic growth impact of FDI. This literature connects economic growth and FDI, where FDI has shown to improve recipient economies' economic growth. FDI tends to increase capital accumulation in the receiving country, boosts local businesses' productivity by contracting and exposing them to healthy competition, technological transition, and human capital increase, thereby increasing exportation of goods. FDI is a significant investment inflow that can complement DOMINV, generate more new job opportunities, improve technology transfer, and economic growth (Akinlo, 2004; Ejemeyovwi and Osabuohien, 2020; Adegboye et al., 2020c).

The rate at which FDI can boost the economy's growth, however, depends mainly on the host economy's social and also economic environment (Buckley et al., 2002; Adegboye et al., 2020a; Matthew et al., 2020; Osabohien et al., 2020). In the same vein, there is evidence in some empirical studies that FDI boosts economic growth (Dike, 2018; Nuzhat, 2009; Ayanwale, 2007; Hein, 1992; Singh, 1998). Dees (1998) study submits that FDI is a crucial variable in explaining economic growth for China. It is also the argument of De Mello (1999), who records a positive correlation for a selected Latin American country. Similarly, Blomstrom et al. (1994) found that foreign capital inflow had a direct effect on growth economically. However, they report that there is an income limit beyond which foreign capital inflow has a direct impact on economic growth. In Nigeria, Ayanwale (2007) says that non-extractive investment positively impacts on economic growth, whereas the overall effect is negligibly positive.

Nuzhat (2009) considers that foreign investment inflow can directly impact the growth of an economy by increasing capital formation domestically, promoting domestic savings, and enabling the transfer of technology in the host developing economies. In more recent studies, Osabohien et al. (2020), using the fully modified ordinary least squares (FMOLS) posited that FDI positively impacts on employment level and economic growth. The finding of Osabohien et al. (2020), validated by Adegboye et al. (2020a) using the fixed and random effects regression analysis, shows that challenges of governance and ACC have negatively affected the inflow of FDI and economic growth in Nigeria. Aside from the positive interaction between foreign capital inflow and economic growth, quite many research works have shown that foreign capital inflow affects economic growth in developing economies.

For developing economies, in a research of 73 least developed economies, Singh (1998) finds that foreign investment affects economic or industrial development with little or no impact. The same applies to a sample of 41 developing countries; Hein (1992) estimates that foreign capital inflow has an insignificant effect on medium-term economic growth per capita. While, Herzer et al. (2008) considered foreign investment-driven growth hypotheses by applying in the study of 28 developing countries, the Engle-Granger Co-Integration Test and ECM to short-run dynamics. The study found no long-run or short-run association amid inflow of foreign capital and economic growth in many other least developed economies. Ojewumi and Akinlo (2017) reveal that FDI could adversely affect a recipient economy's growth prospects. Large reverse flows such as profit remittances especially transferred resources through transfer prices and dividends or where the host country receives significant or other concessions from transnational corporations (TNCs).

Theoretical framework. Various theories have illustrated why firms are engaged in transnational development, a consequence of FDI. Nevertheless, the determinant of FDI flows does not occur in particular in emerging countries. Similarly, over the years, ' conventional development theories' emphasizing international trade and capital exchange, have been heavily criticized. The neoclassical microeconomic theory is the first of these theoretical assertions, up until the 1960s, it was the prevailing theory used to describe how inflows of FDI occurred (Dunning, 1993; Adeleye

et al., 2017). The neoclassical microeconomic theory accedes to the flow of investments triggered by variations in the rate of interest among economies. Capital is a commodity from the perspective of this neo-classical theory; its price determines its demand, supply, and allocation.

Among this instance, conceding to the neo-classical theory, the rate of interest influences capital (Aggarwal, 1980; Mankiw, 2015). Therefore, under perfect competition, capital would flow freely from low-return countries to those with relatively high return rates. The drawback of this theory is its failure to understand the responsibility of TNCs in the inflow of investment. Since it is limited to understanding the means and location that the companies resolve to procure the resources required to finance their overall strategy, experts also argue about the silence on capital intention. It could be for managerial influence or the capacity of production. Recently, their responsibility is, therefore, only appropriate for justifying portfolio investments rather than FDI.

The approach to intangible capital is another theory of FDI. In line with this theory, the influence of certain ' monopoly benefits ' or ' assets that are not tangible' for a company is imperative for its production from foreign countries (Lall, 1980; Bajrami and Zeqiri, 2019). The benefits could be the comprise of production procedures, industrial management, managerial skills, product knowledge, and factor of production markets. The theory highlights three (3) essential functions to support such an advantage. First, these benefits must be provided to the company concerned with a competitive edge and probably outweigh the foreign competitors, like those in the potential country, it is planning to invest. Secondly, the company's monopolistic advantage must be transferable internationally and effectively at international locality. Finally, the organizations on its own should use these tools rather than renting or selling them to an independent company. Rugman (1986) suggested another interpretation based on internalization theory. This theory explored FDI from the perspective of the requirement to adopt the cost of transactions to increase profit and describes the rise of foreign investment performance (Banga, 2003; Vasyechko, 2012).

New growth theory enthused by Romer (1986); it featured mainly the subject of progression in technology as a product of the rate of investment, as well as the degree of capital stock and human capital (Neeliah and Seetanah, 2016). There were two main subjects of consideration in assessing the economy; primarily, technological progress was a result of engaging in economic obligations, while despite the contrary tangible entities' information, technology resulted in growth advancement. The theory brought back the prior traditional thought of the effect of an increase in returns, in the framework of both practical and theoretical concepts (Buchanan and Yoon, 2000; Dang and Pheng, 2015). Furthermore, there was more development on the model of increase in returns, with assumptions of diminishing returns, with the aid of a thoroughly evaluated standard presentation (Arthur, 1990).

As a result, a significant rise in FDI has become more and more incorporated into the economy over the past decade (Busse, 2004; Adegboye et al., 2020a). However, such theories have not been able to explain to some degree why FDI investors have to invest in one country instead of another and, in general, the African continent's marginalization. Also, this literature established multiple determinants, one primarily distinguishes conventional determinants, including economic factors, while the other identifies social determinants such as human capital factors. Recent studies have demonstrated the need for the incentive role that their governments play to enhance and sustain the host countries. Thus, the debate on the choice of FDI establishment is now beginning to emerge around the value of institutions (Adeleye et al., 2017).

Methodology

Empirical model. Globally, regions are heading towards the attainment of development economically, and this aims at achieving the United Nation (UN) SDGs no later than 2030 (Ejemeyovwi et al., 2018). The attainment of sustainable development is realizable in SSA countries through the building of efficient human capital and good institutional framework/(good governance) (Osabuohien et al., 2018). Thus, with the creation of more INFSR, adoption of information and communication technology (ICT), embracing research and development for sustainable growth, creating a peaceful environment through political stability and absence of violence (PSAV) to attract foreign investors and enhancement of DOMINV (Ejemeyovwi et al., 2018). In SSA countries, the level of human development index (HDI), which can be achieved through the building of a robust institutional framework to attract foreign capital inflow in the quest for the attainment of economic development have scanty input in literature; thus, this forms the motivation for this study.

However, a significant impact is exerted on the economy by human capital, developed through good governances and ACC. From various theories reviewed, this research work has a premise on the new growth theory. The rationale for adopting the new growth theory as a baseline theory hinges on the fact that the approach focuses on the man's want and infinite needs in promoting economic development. It also argued that innovation and technological advancement usually do not emanate fortuitously. Relatively, it relies on the prevalence of demand for current changes or technological advancement and their level of determination. Also, persons as well could dominate the extent of human capital. If the level of returns determinant is sufficient, people would rather be content about growing knowledge capital and pursuing current innovations much firmer, which would promote economic development (Hulten, 2001). According to Hulten (2001), new growth theories are based mainly on more current hypotheses that capitals' marginal product is more stable rather than decreasing as it obtains in the Neoclassical growth model. Generally, in new growth theories, capital comprises of investment components, INFSR, and human development necessary to attain economic development (Table 1).

Therefore, the implicit function of the model is as follows:

$$\text{HDI}_{it} = f(\text{FDI}_{it}, \text{DOMINV}_{it}, \text{INFR}_{it}, \text{PSAV}_{it}, \text{GE}_{it}, \text{ACC}_{it}) \tag{1}$$

The explicit form of Eq. (1)

$$\text{HDI}_{it} = \alpha_0 + \alpha_1 \text{FDI}_{it} + \alpha_2 \text{DOMINV}_{it} + \alpha_3 \text{INFSR}_{it} + \alpha_4 \text{PSV}_{it} + \alpha_5 \text{GE}_{it} + \alpha_6 \text{ACC}_{it} + e_t \tag{2}$$

From above, HDI means the human development index, which is the dependent variable and proxy for economic development. FDI represents FDI, DOMINV represents domestic investment, and INFSR represents infrastructure. PSAV represents political stability and absence of violence, GE represents government effectiveness, and ACC represents accountability. This empirical model of the research work is similar to the study of Ejemeyovwi et al. (2018).

The study aims at examining how an excellent institutional framework will initiate a permissive condition for the inflows of foreign capital, which will invariably lead to economic development for the SSA countries. The major rationale for the selection of variables is hinged on the fact that for economic growth to be attained in SSA, institutional framework, investment components (FDI inflows and local investments), and INFSR should be present in the model. It is the gap in literature; this study aimed at filling.

From the model, 'i' and 't' represent entities as well as time in respective order. Entities in this research work represent the 39 SSA countries selected from four regions which make up the

Table 1 Data sources and measurements.

Data	Identifier	Source	Definition	Measurement
Human development index	HDI	WDI	The Human Development Index proffers an aggregate dimension of development using measures of education registration, the expectancy of life, literacy, and gross domestic product (GDP) per capita to determine economic development (UN, 2018)	a, b, c, d
Foreign direct investment	FDI	WDI	Foreign direct investment, net inflows	% GDP
Domestic investment	DOMINV	WDI	Gross fixed capital formation is a marginal investment. It is an element of the expenditure procedure of computing GDP	% GDP
Infrastructure	INFSR	WDI	Access to electricity	% Population
Political stability and absence of violence	PSAV	WGI	Political stability and absence of violence/terrorism capture assessments of the probability of political instability inspired violence and terrorism	Estimates
Government effectiveness	GE	WGI	Government effectiveness is policy formulation, integrity, and the loyalty of government to these policies	Estimates
Accountability	ACC	WGI	Accountability indicates the concept of the extent to which the citizenry of a country is capable of participating in selecting their leadership. In addition to civil liberty, civil right of association, and freedom of speech	Estimates

a = expectancy of life at birth (to estimate a long and healthy life), b = adolescent literateness (the populace's ratio of ages above 15 years that are literate). c = education registration estimate (the ratio of the populace in the appropriate age band registered in primary, high school, and university education); and d = domestic gross product (GDP) per capita (to estimate the living standards).
Source: Authors.

Table 2 Summary statistics of variables.

Variable	Full sample		East Africa		Central Africa		Southern Africa		West Africa	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Human development	0.46	0.10	0.45	0.11	0.46	0.12	0.57	0.07	0.44	0.07
Foreign direct investment	34.00	20.00	89.00	34.00	4.80	9.41	3.89	2.89	17.00	73.00
Domestic investment	20.00	15.00	18.27	12.42	10.00	33.00	22.92	6.72	25.64	19.57
Infrastructure	34.30	24.72	26.94	27.35	40.41	26.08	45.63	21.00	33.56	20.59
Political stability and absence of violence	−0.44	0.83	−0.53	0.79	−0.71	0.76	0.35	0.52	−0.49	0.82
Government effectiveness	−0.71	0.59	−0.61	0.57	−1.18	0.33	−0.05	0.57	−0.79	0.47
Accountability	−0.53	0.69	−0.52	0.62	−1.20	0.32	−0.01	0.76	−0.40	0.62

Source: Researchers.
SD standard deviation.

SSA: East Africa (13), Central Africa (7), Southern Africa (4), and West Africa (15); considered in this study, which are: East Africa (Burundi, Comoros, Djibouti, Ethiopia, Kenya, Madagascar, Malawi, Mauritius, Mozambique, Rwanda, Tanzania, Uganda, and Zambia); Central Africa (Angola, Cameroon, Central Africa Republic, Chad, Congo Republic, Equatorial Guinea, and Gabon); Southern Africa (Botswana, Eswatini (Swaziland), Namibia, and South Africa); and West Africa (Benin, Burkina Faso, Cape Verde, Cote d'Ivoire, Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Mauritania, Nigeria, Senegal, Sierra Leone, and Togo); while time represents the years of study (2000–2016). The rationale for the country selection is because of data accessibility.

The main variables that are germane in this research work are: 'FDI inflows' and the institutional or governance variables (GE, political stability, and ACC). The study intended to include other institutional variables such as control of corruption, the rule of law, and regulatory quality. The model ousted them, as a result of the high incidence of multicollinearity. The main objective of the study is to examine how the quality of institution creates an enabling environment to attract foreign capital inflow. The secondary aim is to investigate how investment components (FDI and DOMINV) enhance economic development.

Hence, the 'a priori' expectation of the main variables holds that their respective coefficients should have a significant effect on human development. It merely means that an increase in investment components and quality of institutions could explain the tangible and substantial rise in human development, which is economic development.

Results

This section emphasizes the analysis and the interpretation of the results obtained in the course of this study, which was to examine how effective the quality of institution had encouraged the inflow of FDI towards achieving economic development in the SSA economies. The presentation of results in this section are in two-folds: the descriptive or the summary statistics (section "Descriptive statistics") and the econometric result from the fixed and random effects model (section "Econometric result").

Descriptive statistics. The descriptive statistics show the data characteristics, and it summarizes and interprets the data for the selected variables. These descriptive or summary of statistics shows the analytical test of the variables included in the model. They are economic development proxied by HDI, foreign direct investment (FDI), domestic investment (DOMINV), Infrastructure (INFSR), political stability and absence of violence (PSAV), government effectiveness (GE), and ACC. The standard error shows the positive squared root of the variance, the minimum value the lowermost figure in the data set, and the maximum value the uppermost number in a data set, as shown in Table 2.

Table 2 presents the variables' statistic summary. The presentation for the full sample and the various regions in SSA: East Africa, Central Africa, Southern Africa, and West Africa. For the entire sample, the HDI had a mean value of 0.46. The mean for East Africa is 0.45, Central Africa, with the mean value of 0.46, Southern Africa 0.57, and West Africa 0.44 during the study period. The dispersion of HDI around the mean value for the full sample was 0.10, while for East Africa, it is 0.11, Central Africa 0.12, Southern and West Africa 0.07. It implies that the Southern African sub-region for the African region has the highest degree of human development. In contrast, West African countries have the smallest possible degree of human development.

For the full sample, FDI had a mean of 34.0, while the mean for East Africa 89.0, Central Africa 4.80, Southern Africa 3.89, and West Africa 17.0. FDI's dispersion around the mean for the full sample was 20.0, while for East Africa, it is 34.0, Central Africa 9.41, Southern Africa 2.89, and West Africa 73.0. It implies that for the African region, the East African countries have the highest FDI net inflow and Southern Africa the least. The average value of DOMINV for the full sample was 20.0. For East Africa, the means value was 18.27, Central Africa 10.0, Southern Africa 22.92, and West Africa 25.64 for the study period. The result shows the dispersion of DOMINOV around the mean value for the full sample as 15.0, while for East Africa, it was 12.42, Central Africa 33.0, Southern Africa 6.72, and West Africa 19.57.

For the full sample, Infrastructure had a mean value of 34.3, while the mean value for East Africa is 26.94, Central Africa 40.41, Southern Africa 45.63, and West Africa 33.56 for the study period. The result also indicated the dispersion of Infrastructure for the full sample around the mean value was 24.72. For East Africa, it was 27.35, Central Africa 26.08, Southern Africa 21.00, and West Africa 20.59. The average value for political stability and absence of violence (PSAV) for the full sample is −0.44 for the selected study period. For East Africa, the mean value was 0.53, Central Africa −0.71, Southern Africa 0.35, and West Africa −0.49. The outcome also shows the variation of the PSAV about the average level for the full sample as 0.83, while for East Africa, it was 0.79, Central Africa 0.76, Southern Africa 0.52, and West Africa 0.82.

Government effectiveness had an average value of −0.71 for the full sample during the study, while for East Africa, it was −0.61, Central Africa −1.18, Southern Africa −0.05, and West Africa −0.79. The dispersion of government effectiveness for the full sample around the mean value was 0.59, the East African region was 0.57, Central Africa 0.33, Southern Africa 0.57, and West Africa 0.47. For the full sample, ACC had a mean of −0.53 during the period of study, while for East Africa, the average value was −0.52, Central Africa −1.20, Southern Africa 0.01, and West Africa −0.40. ACC full sample dispersion around the mean was 0.69, while for East Africa, it was 0.62, Central Africa 0.32, Southern Africa 0.76, and West Africa 0.62. It implies that the Central African countries had the highest challenges of ACC for the African region, whereas the Southern African countries had the least.

Econometric result. This sub-section of the research work shows the result realized from the econometric analysis using the fixed and random effects regression model for the sample of 39 SSA countries between 2000 and 2016 shown in Table 3. Table 3 contains the estimated parameter and the t-statistic obtained from the regression of Eq. (2), using the HDI as a representation for economic development and the dependent variable. The Hausman test's execution was to decide the suitability of the fixed-effect model and the random effect model. It checked for heterogeneity of each entity, to prevent any distortion in the result estimates.

Table 3 Results from fixed and random analysis.

Variable	Full sample		East Africa		Central Africa		Southern Africa		West Africa	
	Fixed effect	Random effect	Fixed effect	Random effect	Fixed effect	Random effect	Fixed effect	Random effect	Fixed effect	Random effect
Human development index	0.34*(0.08)[0.00]	0.35*(0.01)[0.00]	0.32*(0.02)[0.00]	0.39*(0.02)[0.00]	0.32*(0.03)[0.00]	0.33*(0.03)[0.00]	0.38*(0.02)[0.00]	0.38*(0.02)[0.00]	0.30*(0.01)[0.00]	0.31*(0.01)[0.00]
Foreign direct investment	0.04*(0.01)[0.00]	0.04*(0.01)[0.00]	0.04*(0.01)[0.00]	0.05*(0.01)[0.00]	−0.01*(0.03)[0.00]	−0.01**(0.05)[0.04]	0.01(0.01)[0.52]	−0.06(0.01)[0.64]	0.03(0.04)[0.42]	0.02(0.04)[0.54]
Domestic investment	0.01(0.01)[0.36]	0.01(0.01)[0.25]	0.05(0.02)[0.83]	0.01(0.02)[0.58]	−0.01(0.01)[0.40]	0.03(0.02)[0.85]	0.03*(0.07)[0.00]	0.03*(0.01)[0.00]	0.07*(0.02)[0.00]	0.07*(0.02)[0.00]
Infrastructure	0.03*(0.02)[0.00]	0.03*(0.01)[0.00]	0.01*(0.06)[0.00]	0.02*(0.03)[0.00]	0.03*(0.07)[0.00]	0.03*(0.03)[0.00]	0.02*(0.02)[0.00]	0.02*(0.02)[0.00]	0.03*(0.02)[0.00]	0.03*(0.02)[0.00]
Political stability and absence of violence	0.01*(0.03)[0.00]	0.01*(0.03)[0.00]	0.01(0.01)[0.00]	0.06(0.09)[0.94]	0.04*(0.07)[0.00]	0.04*(0.07)[0.00]	−0.04(0.01)[0.71]	0.03*(0.03)[0.00]	−0.05(0.04)[0.14]	−0.04(0.03)[0.24]
Government effectiveness	0.07(0.07)[0.92]	0.06(0.07)[0.38]	0.03***(0.02)[0.06]	0.05**(0.01)[0.00]	0.01(0.02)[0.94]	−0.02(0.02)[0.47]	0.02(0.02)[0.44]	0.06*(0.01)[0.00]	−0.03(0.09)[0.73]	−0.08(0.08)[0.33]
Accountability	−0.03(0.07)[0.65]	0.01(0.06)[0.98]	−0.02(0.01)[0.10]	−0.01(0.01)[0.92]	−0.08(0.02)[0.73]	−0.01(0.02)[0.80]	−0.08**(0.03)[0.01]	−0.02**(0.01)[0.02]	0.02**(0.09)[0.01]	0.02**(0.01)[0.01]
Apriori expectation	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No
Countries uummies	No	No	No	No	No	No	No	No	No	No
P—a value	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Observation	489	489	142	142	96	96	61	61	190	190
Adj. R Sq.	0.6629	0.6819	0.6839	0.7585	0.8962	0.9032	0.7312	0.8872	0.6535	0.6569
Hausman test	0.00		0.00		0.00		0.00		0.00	

Note: *, ** and *** means that the significance of the variables at 1%, 5%, and 10%, respectively. Yes, associated with the 'Apriori' expectations and No otherwise. Yes, associated with the 'Apriori' expectation means that variables conform to the 'Apriori' expectations and No otherwise.
Source: Author's Computation, 2019.

As stated earlier, the Hausman inquiry's execution was to decide the appropriate estimation technique of the regression model amid the fixed effects and the results of the random effects, as presented in Table 3. The outcome as shown in Table 3, stated that the fixed effect is considered the most suitable method of estimation. From the result of the Hausman inquiry performed, it showed a *p*-value of 0.00, which is lower than the chosen significance level for this research work.

The model observed political stability (enabling environment) enhances both foreign capital inflow and DOMINV, as a unit rise in FDI will increase economic development by at least four units. It is similar to the findings of Asiedu (2006), Baltabaev (2013), Sarode (2012), Adegboye (2014), and Adegboye et al. (2017), Adegboye et al. (2020a), Osabohien et al. (2020), Egbetokun et al. (2020) confirming a significant direct association amid foreign capital inflow and economic development for host recipient economies. The regions that have lesser flows, mostly the Central and Eastern sub-regions have a considerable impact on economic development via the inflow of FDI; this bolstered by the findings of Prasad et al. (2007), Szkorupova (2015), and Carbonell and Werner (2018). Regions that accessed lesser flows of foreign investment have depended less on the foreign capital and instead engaged the host economy's DOMINV tangibly to determine development economically.

Similarly, a 1 unit rise in infrastructure, would lead to about 0.03 unit rise in economic development. It is similar to the findings of German-Soto and Bustillos (2014), Malikane and Chitambara (2017), and Marozva and Makoni (2018), which posited that the more enhanced the infrastructural development of a country, the better the development prospects of such country economically. Also, they supported that higher economic rates of growth relate to tangible infrastructural advancement. Political stability and absence of violence, moreover, would result in a 0.01 increase in economic development. It is supported by the findings of Bissoon (2011) and Kurecic and Kokotovic (2017) of a long term and stable relationship amid FDI and political stability, as well and economic development. It validates that political stability and institutional quality generally combined enhances the strength of the inflow of FDI and consequently, development for host economies.

This analysis aims to determine the association amid the variables and ascertain the presence of multicollinearity. Multicollinearity occurs if two or higher numbers of variables are strongly associated. In agreement with Tabachnick and Fidell (2007), correlation value 0.8 and above could influence the precision of the regression analysis outcome. In this research work, the highest correlation is amid the HDI and infrastructure, which is 0.7880; this shows that multicollinearity would not influence the outcome. The overall assessment of the pairwise correlation shows that multicollinearity is absent in the model, which implies that no unhealthy association amid the variables in the model. It hence was suitable for executing the regression model's analysis for analyzing the hypotheses, ensuring a biased or specious result, was not generated.

Conclusion

The study established the effect of challenges of institutional quality on the inflow of foreign capital and how it impacted on economic development of host selected SSA economies. From the results of this research work, it found that; political stability and absence of violence enhances both the inflow of FDI and DOMINV, as inflow foreign capital leads to economic development in the developing sub-Saharan region of Africa. It further bolstered by the research work of Asiedu (2006), Baltabaev (2013), Sarode (2012), and Adegboye et al. (2017), which found

that institutional and political factors affect the inflow of foreign capital in SSA countries. Furthermore, the presence of ACC challenges and political stability issues would scare away foreign investment as this does not depict an enabling investment thriving environment (Cleeve, 2008; Bissoon, 2011; Kurecic and Kokotovic, 2017). However, for the selected SSA countries, human development is at a low rate as well as infrastructure. It shows that FDI has not enhanced investment domestically and, hence, explains the low rate of economic development for the selected countries in the sub-region (Adegboye, 2014).

The study recommends that, as FDI flows are embraced by developing SSA countries, the government of host developing regions needs to ensure stability and the quality of their institutions. Primarily political stability and enhancement of infrastructural facilities to further attract and retain the inflow of FDI to attain desired economic development (Mauro, 1995; Chand, 2014; Malikane and Chitambara, 2017; Marozva and Makoni, 2018). In furtherance, governments should ensure the sectors of the economy that foreign capital flows in, like the real sector and not just extractive, to enhance DOMINV for the sub-region, as this is required for the selected SSA countries to boost economic development. It will also invariably bring about a turnaround from the minimal level of contributions of FDI necessary for a sustainable economic development desired by the selected countries (Adegboye, 2014). Favorable policies hence need to be introduced by the government of these countries to enhance effectiveness and level of stability in the countries, which would thus, improve the participation of foreign investors in augmenting DOMINV of host SSA economies.

The research work concludes that institutional quality, political stability, and an enabling environment of the developing SSA countries are requirements in harnessing the inflow of FDI, which will invariably result in economic development in the sub-region. As policies are put into place by host countries governments, to enhance the political stability, institutional quality, and encourage more foreign investors to develop the host economies' domestic sector investment. They should, with this, take advantage of the foreign capital inflow with the development aim. Also, salient strategies by the government should focus on the enhancement of infrastructural facilities, which as well would boost DOMINV performance and economic development. It will enable them to rely gradually less on foreign capital as their domestic sector investment appreciates, resulting in the desired economic development and a better standard of living for the citizens of the developing host SSA region.

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