The controversies that trailed whether direct impact of Foreign Direct Investment (FDI) on growth are conditional on a certain intermediating links or not, has made an inquiry into the likely mediating links in the FDI-growth space a recurring subject of discourse. While the importance of institution has prominently featured as playing a vital role on the one hand, economic freedom (a key institutional component) has consistently been elected, as a good candidate surrogate on the other hand. It is against this backdrop this study examines the effect of FDI inflow on economic performance in the SSA region giving prominence to economic freedom. The results support the view that economic freedom is germane in influencing the economic-wide performance in the region but have insignificant effects on the different sector performances. It is recommended that economic freedom be given priority in the region and FDI should be attracted to other sectors other than the primary sector, as it is the case.

Key Words: FDI inflow, economic freedom, economic performance, panel data analysis

JEL Classification: C33, H7, H30, F21

Introduction

One of the most highly researched subjects in the development finance literature focuses on what constitutes the key determinants of foreign direct investment (FDI), and the channels through which FDI impacts are transmitted to growth trajectory. While the ensuing arguments on the former seemed to be fading out rather quickly on the one hand, that of the latter, on the other hand, kept waxing stronger and gaining more momentum, particularly within the folds of academic and policymaking bodies alike. The seeming rationale for the sustained attention can
be premised on three major considerations. First, the impacts of FDI on growth have, controversially been argued, not to be directly correlated, thus suggestive of some missing intermediating links in FDI-growth relations. There exists a broad consensus that a country is predisposed to attracting and reaping the benefits associated with FDI but subject to the country’s initial conditions. Such conditions have been linked to absorptive capacity of a country in the literature. Azman-Saini, Baharumshah, and Law (2010) submitted that the growth effect of FDI might not be strong in countries with low (or poor) absorptive capacity. In other words, host countries must have certain qualities that allow them to absorb the benefits linked to FDI flows. Second, the nature of intricacies involved in the conjecture underpinning bivariate-multivariate frameworks existing in FDI-growth space. Lastly, the need to seek further clarification into the real causes of growth reinvigorates the debate.

Needless to say, the mechanism through which FDI impacts are transmitted still remains open for further discourse and research. Noteworthy however, is the growing interests on the role of institutions on economic outcomes. The seminal contribution of Douglas North (1990) has greatly stimulated research interests on institutions, which by extension, affects FDI. His epoch-making input marked the beginning of additional strand of knowledge into FDI-growth repository. Recent empirics in the development finance literature have recognized the useful role of institutions as crucial in mediating in FDI-growth interactions. Of institutional qualities however, the useful role of economic freedom (EF)² has been found critical as constituting one of the reasons that could attract the attention of foreign investors. It has been widely acknowledged among growth analysts that a country, which enjoys more EF, tends to attract more FDI inflows and growth faster than country that is being denied enjoying same freedom (see Ayal and Karras (1998), Cebula and Mixon (2012) and Ajide (2013) for more narratives). Nonetheless, the role of EF has, thus far, been less recognized or at best receives limited consideration in the empirical literature. The only exceptions in this regard are studies by Bengoa and Sanchez-Robles (2003), Azman-Saini, Baharumshah, and Law (2010) and Tiwari (2011).

It is against this background that the paper is interested in uncovering the tripartite relationship between FDI-economic performance and EF for SSA region. Undertaking the study for the region seems reasonable for the following reasons: (i) The region is beset with poor institutional frameworks and policies as compared with other competing continents;
(ii) the proponents of Washington Consensus have attributed the poor growth records and weakness of the private sectors of some economies to lack of economic freedom and (iii) there are a prevalence of excessive government interference in the level of economic activities; this typically characterizes the mode of governance of most countries within the region. Arguably, the overbearing influence of government is capable of stifling growth potentials inherent in the private-led economy. Thus, attracting FDI inflows under these circumstances may be somewhat difficult if not impossible, as FDI seems to thrive on free competitive environment. The conjecture perhaps meaningless, and hence, lack objectivity if not subjected to empirical verification.

The rest of the paper is structured as follows. The second section contains a succinct review of the literature on the economic freedom and FDI-economic performance linkage. The third attempts stylized facts about economic freedom and FDI-economic performance within the context of SSA countries, while the fourth section describes a Heritage Economic Freedom and the fifth presents the empirical model and dataset. The results are presented and discussed in the sixth section. The seven and final section succinctly concludes.

**Brief Literature Review**

The section initially attempts at terse presentation of various mediating links in FDI-growth interactions as espoused in the empirical literature, after which delve into a particular strand of literature that situates the useful role of economic freedom in FDI-growth space. The previously mentioned is aptly pursued in what follows.

The age-long controversy both in the theoretical and empirical literature as it relates to FDI-growth interaction, basically centres on contention surrounding the presumed benefits of FDI spillovers by the recipient country. By implication, the supposed benefits between the two seemed non-automatic but rather conditional. The direction of benefits however, is typically linked to the presence of absorptive capacity in the host environment. By way of confirmation, a huge body of empirical evidence has emerged to either validate or refute the claims using different mediating channels.

Arguing along the different dimensions of absorptive capacity of the host country in FDI-growth relations are Blomstrom, Kokko, and Zejan (1994), that asserted the importance of country’s level and stage of development; Balasubramanyam, Salisu, and Sapsford (1996), stressed the use-
ful role of trade policy of the recipient country; De Mello (1997), focused on the cruciality of physical capital accumulation; Benhabib and Spiegel (1994) and Borensztein, Gregorio and Lee (1998) supported the presence of sound human capital development while Hermes and Lensink (2003), Alfaro et al. (2004), Durham (2004) and Adeniyi et al. (2012) argued in favour of recognition as well as institution of a well developed domestic financial sector.

That apart, the emergence of institutional economics by Douglas North (1990), has added a new dimension to the mediating links’ discourse in FDI-growth repository. Among the adherents that tilted along institutional lines of reasoning are Knack and Keefer (1995), Demetriades and Law (2006) and Rodrik, Subramanian, and Trebbi (2004). They extolled the virtues of institutional factor as an important growth recipe more than any other conditioning variables. Largely, the strand of literature that creates a role for EF (a vital aspect of institutional quality) in FDI-growth relation is undoubtedly scarce or at best rudimentary. The arguably exceptions however, are Bengoa and Sanchez-Robles (2003) and Azman-Saini, Baharumshah, and Law (2010) and Tiwari (2011).

Bengoa and Sanchez-Robles (2003) explored the interplay between economic freedom, foreign direct investment and economic growth using panel data for a sample of 18 Latin American countries over the period spanning 1970 through 1999. Their results suggest that FDI is positively correlated with economic growth. They also observed that the host country requires adequate human capital, economic stability and liberalized markets to benefits from long-term capital flows. Azman-Saini, Baharumshah, and Law (2010) also investigated the systemic link between economic freedom, foreign direct investment (FDI) and economic growth in a panel of 85 countries. The empirical results, based on the generalized method-of-moment system estimator, reveal that FDI by itself has no direct (positive) effect on output growth. Instead, the effect of FDI is contingent on the level of economic freedom in the host countries. This means the countries promote greater freedom of economic activities gain significantly from the presence of multinational corporations (MNCs). To date, empirical studies on FDI-growth relationship still largely remain limited particularly with respect to the effects of EF on FDI spillovers.

Arguably, countries that promote greater freedom of economic activities are more likely to gain from the presence of MNCs (Azman-Saini, Baharumshah, and Law 2010). Tiwari (2011) examined the effectiveness
of foreign aid, foreign direct investment, and economic freedom for selected 28 Asian countries in a panel framework. The model includes foreign aid, foreign direct investment, economic freedom, labour force, and capital stock. The estimation procedure was carried out on pooled annual time series data for the period 1998–2007. Both static and dynamic panel data techniques were employed. The results indicated that an increase in the fiscal freedom, financial freedom and domestic capital stock were significant factors positively affecting economic growth. Freedom from corruption, inflow of foreign direct investment and foreign aid were significant factors negatively affecting economic growth. Further, they found that life expectancy played a significant and positive role in economic growth. Foreign aid had a non-linear impact (negative impact of high aid flows) upon economic growth.

In light of the foregoing, the study’s contributions to the extant stock of literature stems from the following angles: first, the mediating role of EF is examined in relation to FDI-economic performance nexus using both economic-wide as well as sectoral economic performance measures like: value-added in the agriculture, manufacturing, and service sectors. The import of using the latter measure is in twofold: (i) the use of only aggregative economic-wide performance measure have a tendency of masking sectoral peculiarities inherent in the region. Thus, using sectoral economic performance measures typically avert this type of problem (ii) a clear policy messages becomes easily discernible rather than basing it on presumptive conclusion of aggregation bias that may have possibly submerged the emanated policy outcomes into the sea of fallacy. Second, despite the scanty nature of an empirical literature on tripartite relationship involving EF and FDI-growth interactions (even the few ones that have been conducted are done for other regions) we are yet unaware of any study that has specifically examined EF and FDI-economic performance interactions for SSA region. We use only countries in Sub-Saharan Africa to capture the unique characteristics of the region and suggest region-specific policy interventions. This further lends support to our claim of being one of the pioneering attempts in this direction at least for the region.

Data and Methodology

It is assumed that a good proxy for the quality of institutional background in the host country is the index of economic freedom and institutional quality has been recognized as one of the cardinal determinant of growth
empirics and as well, a channel through which FDI can influence economic performance, hence a study of this sort is inevitable. The study is also at variance with previous studies because it examines not only the effect of FDI and economic freedom on economic growth but also on different sectoral performance (agricultural sector, manufacturing sector and the service sector) in the SSA region.

Our empirical model is espoused from the works of De Gregorio (1992), Sanchez-Robles (1998) and Bengoa and Sachez-Robles (2003) on the link between FDI and Economic Performance when Index of Economic Freedom is controlled for in the model. However, these authors (De Gregorio 1992, Sanchez-Robles 1998) used data until 1985 while Bengoa and Sachez-Robles (2003) data ends in 1995 whereas the period considered in this present study ends in 2010 and it is on the specific case of SSA region.

The underlying specification is the model of the form:

\[
\text{PCGDP}_{it} = \alpha_0 + \alpha_1 \text{DI}_{it} + \alpha_2 \text{FDI}_{it} + \alpha_3 \text{EF}_{it} + \alpha_4 \text{OPENX}_{it} + \alpha_5 \text{M2 GDP}_{it} + \varepsilon_{it},
\]

where PCGDP is Per Capita GDP, DI is Domestic Investment measured as Gross Fixed Capital Formation/GDP ratio minus FDI/GDP ratio, FDI is Foreign Direct Investment inflow as percentage of GDP, EF is Index of Economic Freedom, OPENX is Trade Openness measured as Total Trade/GDP ratio, M2GDP is Financial Development Indicator measured by broad money supply over GDP. It is quite instructive to mention that the choice of control variables is guided by previous literature.

The second model presented below examines the impact of FDI and Economic Freedom on different sectoral performance in the SSA region:

\[
\text{Sectoral performance} = \psi_0 + \psi_1 \text{DI}_{it} + \psi_2 \text{FDI}_{it} + \psi_3 \text{EF}_{it} + \psi_4 \text{OPENX}_{it} + \psi_5 \text{M2 GDP}_{it} + \eta_{it},
\]

where sectoral performance is defined by three specific sectoral output growths in the sub-Saharan Africa region vis-à-vis: Agricultural, Manufacturing, Service sector and Industrial sectors. DI, EF, OPENX and M2GDP as earlier defined.

The study employed the panel data analysis approach and data for the study covers the period 1995–2010 for 19 SSA countries selected based on data availability and we extracted the data from WDI and Open Data for Africa database of ADB.
Table 1 presents three different scenarios in which columns (1), (2) and (3) controlled for foreign direct investment and economic freedom, while columns (4), (5) and (6) excluded only economic freedom and columns (7), (8) and (9) are without foreign direct investment respectively. It can be observed from the table that the coefficients on all the explanatory variables have the expected a priori signs except for domestic investment that carries a negative sign thus contradicting theoretical prediction between it and per capita GDP. Thus, when both FDI and economic freedom variables are controlled for, we observed that the financial markets of sub-Saharan African region appeared to be more deepened over the period of review as indicated by the 1% conventional level of significance. The result is similar for both fixed and random effects. In terms of relative effects, the results from both fixed and random effects show that a 10% increase in the ratio of broad money to gross domestic product will increase per capita GDP (a measure of economic-wide performance) by 4.3% for both estimators. Many reasons may have contributed to this spectacular
improvement for the region. However, specific mention must be made of financial sector reforms’ effects that almost took off about the same time for most of the countries within the region.

The coefficient on variable of domestic investment has a significant but negative effect on per capita GDP thus confirming the worsening conditions of the region’s prevailing capital stock. One of the prevalent features of the region is that of the worsening condition of capital stock, which came in the wake of persistent crises occasioned by war and other civil disturbances. Besides, investment in the region is dominated by public investment which is prone to rent seeking activities which might affect the desired effect on growth, hence the effect on domestic investment is not surprising. In fact, virtually every country within SSA region is involved in one form of crises or the other. Thus, a 10% increase in domestic investment tends to reduce per capita GDP by 1.3%. This is found to be consistent for both fixed and random effects.

More importantly, the coefficients of foreign direct investment variables consistently bear the expected theoretical signs in both estimators but having little and negligible impacts on economic-wide variable. This is clearly indicated by the magnitude of relative impacts of 1% in both fixed and random effects. These results are not surprising as most FDI inflows to the region are directed mostly at extractive industries whose impacts are rather sectionalized. The result is significant only in random model but appears insignificant in fixed effects. In addition, the level of statistical significance also occurs at 5% as indicated in the table. The level of integration of the region, measured by the degree of openness variable, has a positive and statistically significant impact on economic-wide performance as 10% increase in trade openness increases the region’s performance by 1.6% and this occurs at 1% conventional levels in both estimators.

The coefficients on economic freedom index are also found to be positive and statistically significant both in fixed and random effects. The contribution from economic freedom index is more than any other explanatory variables judging by the magnitude of importance in the relative effects. For instance, a 10% increase in the overall economic freedom index tends to increase per capita GDP of the region by 5.7%. This further underscores the importance of economic freedom as a catalyst of driving growth. The contribution from each dimension of economic freedom index may have greatly contributed to this feat for the region.

The results in columns (4), (5) and (6) are not too different when eco-
TABLE 2 Results on the Impact of FDI, Economic Freedom on Sectoral Performance in SSA

<table>
<thead>
<tr>
<th>Regressors</th>
<th>(a)</th>
<th>(b)</th>
<th>(c)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>2.64</td>
<td>3.10</td>
<td>2.82</td>
</tr>
<tr>
<td></td>
<td>(1.47)</td>
<td>(4.76)*</td>
<td>(4.30)*</td>
</tr>
<tr>
<td>M2GDP</td>
<td>-0.27</td>
<td>-0.28</td>
<td>-0.27</td>
</tr>
<tr>
<td></td>
<td>(-1.67)</td>
<td>(-4.12)*</td>
<td>(-4.19)*</td>
</tr>
<tr>
<td>DI</td>
<td>0.05</td>
<td>0.05</td>
<td>0.05</td>
</tr>
<tr>
<td></td>
<td>(0.25)</td>
<td>(0.93)</td>
<td>(0.32)</td>
</tr>
<tr>
<td>FDI</td>
<td>-0.002</td>
<td>-0.003</td>
<td>-0.03</td>
</tr>
<tr>
<td></td>
<td>(-1.03)</td>
<td>(-2.70)<strong>(-2.82)</strong></td>
<td>(-3.43)*</td>
</tr>
<tr>
<td>OPENX</td>
<td>-0.21</td>
<td>-0.19</td>
<td>-0.20</td>
</tr>
<tr>
<td></td>
<td>(-1.03)</td>
<td>(-2.70)<strong>(-2.82)</strong></td>
<td>(3.43)*</td>
</tr>
<tr>
<td>EF</td>
<td>0.49</td>
<td>0.37</td>
<td>0.44</td>
</tr>
<tr>
<td></td>
<td>(0.96)</td>
<td>(2.34)<strong>(2.85)</strong></td>
<td>(2.19)**(3.76)*</td>
</tr>
<tr>
<td>R²</td>
<td>0.96</td>
<td>0.94</td>
<td>0.77</td>
</tr>
</tbody>
</table>

Hausman Tests

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>26.96</td>
<td>11.69</td>
<td>11.78</td>
<td>8.06</td>
<td>8.06</td>
<td>6.18</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(0.006)</td>
<td>(0.04)</td>
<td>(0.04)</td>
<td>(0.15)</td>
<td>(0.15)</td>
<td>(0.29)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes Dependent variables: (a) agricultural value added, (b) manufacturing value added, (c) service sector value added. Column headings are as follows: (1) fixed effect, (2) Swamy-Arora random effect, (3) Nerlove random effect. *, **, *** indicate 1%, 5% and 10% level of significance respectively. t-statistics are presented in parenthesis.

Economic freedom index is not accounted for as can be observed from the table. The manifestation of this could be seen from the decline in the level of statistical significance of foreign direct investment from 5% to 10%.

In addition, there seems to be no clear difference in results when foreign direct investment is not controlled for as presented in column (7), (8) and (9) respectively. The only noticeable difference occurs at the substantial level of reduction in the relative effects of economic freedom index from 0.57% to 0.01%. The import of this result is that omission of key variable like foreign direct investment in tripartite relationship (involving FDI, economic and economic performance) could exert a greater influence on economic-wide performance.

Given the results on table 1, it is noteworthy to mention that random effect model is preferably elected based on non-significances of values of Hausman tests in both estimators.

Unlike the results obtained under economic-wide performance, while two explanatory variables namely domestic investment and economic freedom index conform with a priori expectation, others like ratio of broad money to GDP, foreign direct investment and openness bear con-
tradictory signs. None of the variables appears as significant under fixed effects, whereas three explanatory variables were statistically significant but occur at varying levels under random effects.

Unlike economic-wide performance results in table 1, the ratio of broad money to GDP and degree of openness exert negative significant impacts on agricultural sector performance. In terms of relative effects, a 10% increase in the level of financial deepening variable tends to reduce agricultural value added by 2.7% but occurs at highest level of significance of 1%. This can be explained in part by the fact that the financial markets in SSA region are not financially connected with the sector that is believed to be operating at smaller scales. Same results in terms of negativity can be said of the degree of openness but this occurs at 5% level of significance. By implication, a 10% increase in the degree of trade openness reduces agricultural value added by 19% to 20% respectively.

Interestingly, economic freedom index appears to be significant at 5% level. However, Hausman tests support expression of preference for fixed effects’ results over random effects given the value of its statistical significance.

The results of manufacturing sector performance present a different scenario from that of agriculture at least in terms of signs on the variables’ coefficients. In this case, domestic investment bears a negative a priori expectation while degree of openness has a positive signs. The financial sector variable significantly affects manufacturing sector performance while degree of openness has a significant positive impact. The possible explanation could be likened to the advantages derivable from importation of both capital and raw material resources require in the production process. The criterion for estimator selection favours fixed effect model given the significant value of Hausman tests via Swamy-arora transformation but the preference changed in favour of random effects under Nerlove transformation as indicated on table 2 (a). Interestingly however is the statistical importance of economic freedom index.

Unlike agriculture and manufacturing sectors, the explanatory variables bear the hypothesized signs but with the exception of the degree of openness variable which carries a negative sign in both estimators. Apart from financial development variable that has a significant positive impact on service sector performance, both FDI and economic freedom index are also found to be positively correlated with service sector value added. While economic freedom has a significant positive impact on the one hand, foreign direct investment impacts do not appear to be significant

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statistically. Just like the case of agriculture, degree of openness seems to exert negative impact on service sector performance but occurring at 5% level of significance. In addition, economic freedom variable is statistically significant at a 1% level of significance.

**Conclusion**

This study examines the relationship between foreign direct investment inflow and economic performance while economic freedom is controlled for in a panel of nineteen sub-Saharan African countries. The selection of the countries was based on data availability consideration and of which the study period covers 1995 to 2010. The panel data modelling approach was adopted for the analysis and both the fixed and random effects models were estimated.

However, decision on which of the model is considered appropriate is made by the Hausman test result. Apart from the economic-wide performance measure (proxied by GDP per capita), three different proxies of economic performance were also adopted namely: agricultural performance measure proxied by agricultural value added, manufacturing sector performance captured by manufacturing sector value added and lastly, service sector performance measured by service sector value added in the SSA region.

The study revealed that FDI inflow has a significant positive influence on a measure of overall economic-wide performance captured by GDP per capita in the region when economic freedom is controlled for. However, the effect was found to be little and negligible and this is unsurprising in a region where the bulk of FDI flows are directed at the extractive sector whose impacts are known to be sectionalized and hence limited. This may be likened to the nature of inelasticity of the demand for the products both locally and internationally. On a sectoral basis, FDI inflow was found to have insignificant effect on agricultural sectoral performance. This could be said to have been due to several factors like non profitable nature of the sector as compared to other sectors like mining and extractive industries; smallness and subsistence nature of the sector at least in the region, which is mostly non commercial both in terms of its scale and modus operandi; being relegated in terms of usefulness as compared to other sectors and as well as its relative uncompetitiveness owing largely to vagaries of the farm produce.

In terms of manufacturing sector performance estimation, the result was not significantly different from that of agricultural sector. This per-
haps plausibly explains by the moribund state of manufacturing sector in the region. FDI was also found to have a positive but insignificant effect on the service sector performance in the region however; this is not surprising because the sector is still at its infancy in the region.

Quite interestingly however, economic freedom was found to be germane in influencing economic performance in all the models. In the light of the resulting outcomes, it is therefore recommended that policies aimed at strengthening economic freedom culture being given top priority on the developmental policy agenda. This can be achieved by according every dimensions of economic freedom index utmost importance. In other word, by ensuring as well as maintaining investment and business freedoms, making banking industry enjoys both financial and policy independent devoid of government control, and putting in place law and regulations prohibiting any forms of flagrant abuses of copyrights, patent and franchise rights. The region also needs to adopt targeted approach which places the region in a vantage position at attracting FDI into the manufacturing and service sector as these sectors are likely to provide superlative value added to the region’s economy than that of the primary sector.

Notes

1 A plethora of studies have examined the absorptive capacity of the host country via different mediating links which include: domestic economy’s trade, human capital policies, physical capital accumulation, market size, natural resource endowment, financial sector development and institutional factors among others.

2 The two most important definitions of EF are that given by Heritage Foundation and Frazer Institute. The former defined EF as ‘the absence of government coercion or constraint on the production, distribution, or consumption of goods and services beyond the extent necessary for citizens to protect and maintain liberty itself.’ By extension, the highest form of economic freedom provides an absolute right of property ownership; fully realized freedoms of movement for labour, capital and goods. The latter conceived EF as: individuals have economic freedom when the property they acquire without the use of force, fraud, or theft is protected from physical invasions by others; and they are free to use, exchange, or give their property to another as long as their actions do not violate the identical rights of others (Gwartney, Lawson, and Block 1996).

3 SSA growth records have been described as ‘abysmally disappointing’ in spite of the incipient recovery in growth rates in the last decade, they are

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still far lower to accommodate the desired threshold require to launch the region on the path of sustainable development.

4 Explore modernization and core-periphery theories of FDI for detail expositions.

5 Some studies in this literature have found that FDI exerts a positive growth effect on the recipient countries (De Mello 1999, Chong et al. 2010), while others have found no such evidence (Ericsson and Irandoust 2001) or even a negative effect (Moran 1998) on growth.

6 Such studies have neglected regional specific peculiarities. It would amount to policy misapplication if other continents’ experiences have to be extrapolated for a continent with distinct socio-economic and political settings like SSA.

7 Angola, Botswana, Cote D’Ivoire, Ethiopia, Gabon, Ghana, Guinea, Kenya, Lesotho, Madagascar, Malawi, Mozambique, Namibia, Senegal, South Africa, Swaziland, Uganda, Tanzania and Togo.

8 World Development Indicator.

9 African Development Bank.

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