Determinants of Foreign Direct Investment in Africa: The Role of International Accounting Standards

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Abstract

Following the widespread adoption of the International Financial Reporting Standards (IFRS) by many countries, several questions have been raised on the economic consequences of this adoption, particularly for international investments. This paper investigates whether the adoption of IFRS promotes FDI Inflows to countries from the Africa continent. The study used a panel data of 49 African countries for the period 1996 to 2016 from the World Development Indicators. Estimation of the regression model was done using the logistic regression model and the Fixed Effects Estimation Technique. The results demonstrate that African countries that have adopted IFRS on the average experience better FDI inflows than non-adopting countries. Further, natural resources endowment, infrastructural development, economic growth and trade openness were found to be important predictors of the amount of FDI inflows to African countries. The findings of this study suggest that the type of accounting standards adopted by African countries have important implications on FDI activities on the continent. Thus, African countries that seek to improve their business environment and investor confidence and attract FDI inflows should endeavour to strengthen their financial systems by adopting quality and internationally recognized accounting standards such as the IFRS. This study contributes to literature on the macroeconomic implication of the adoption of IFRS from an African perspective.

Introduction

The widespread adoption of the International Financial Reporting Standards (IFRS) by countries has generated intense research interest in the field of accounting within the last decade, with particular focus on the economic consequences for the adopting countries. While earlier studies have predominantly focused on

the firm-level implications of adopting IFRS, recent studies have argued for the need to examine its macroeconomic implications (El-Helaly, Ntim & Al-Gazzar, 2020; Gordon, Loeb, & Zhu, 2012; Leuz & Wysocki, 2008; Ramanna & Sletten, 2009). The argument has been that the decision to adopt the IFRS is a public-policy decision hence, restricting its impact assessment only at the firm level limits our understanding of the true consequences of the IFRS regulatory change.

In response to this call, emerging studies have sought to investigate at national level the impact of IFRS adoption on foreign direct investment (FDI) inflows (Akisik, Gal & Mangaliso, 2020; Chen, Ding, & Xu, 2014; Gordon et al., 2012; Owusu et al., 2017a; Owusu et al., 2017b). Most of these studies have employed the Ownership-Location-Internalization (OLI) paradigm as their theoretical basis to argue that adopting the IFRS potentially enhances the capacity of a country to attract FDI inflows due to its perceived desirable qualities as an accounting standard to foreign investors. Compared to most other national accounting standards, the IFRS is considered to be higher in quality in terms of disclosure requirements and hence provides more reliable accounting information to international investors (Barth et al., 2008). Again, being the world most dominant accounting standard, it has been argued that the adoption of IFRS by a country increases the comparability of financial information of firms in that country to foreign investors and therefore facilitates cross-border investment decisions (Bova & Pereira, 2012).

While the evidence provided by some existing empirical studies (Akisik, 2008; Chen et al., 2014; Golubeva, 2020; Gordon et al., 2012; Owusu et al., 2017a) associate IFRS with growth in FDI inflows, findings of the few existing studies that focused exclusively on the African continent suggest the economic benefit of IFRS adoption may not be the same for all adopting countries. For instance, Nnadi and Soobaroyen (2015) found a negative relationship between the adoption of IFRS and net FDI inflows of some selected African countries. Their results thus, suggest that contrary to the perceived economic benefits of IFRS, its adoption could be potentially harmful to some countries in terms of their capacity to attract FDI. Nnadi and Soobaroyen (2015) in part attribute their finding to a conjecture that IFRS implementation and its outcome may be seen as a significant cost to foreign investors thereby pushing FDI flows to contexts where local forms of accounting practice may be operating. In contrast, Gordon et al (2012) believe to the extent that IFRS adoption is associated with improvement in the transparency of financial reports, it should promote FDI inflows especially in jurisdictions (such as those from the African continent) where financial reporting transparency is poor. Thus, whether the adoption of IFRS enhances the locational attractiveness of countries to FDI inflows still remain an open question.

The current study attempts to shed some new insights on this debate by analysing the IFRS and FDI nexus focusing exclusively on the African continent. We explore with a sample of 49 African countries with available data and test whether African countries that have adopted the IFRS experience better FDI flows than the non-adopting countries. Conceptually, our study differs from the empirical work of Nnadi

and Soobaroyen (2015) that measured net FDI inflow as the ratio of FDI to GDP. In its true economic sense, the ratio of FDI to GDP only measures the size of FDI relative to the GDP of the country in question and not net FDI inflows. In this study net FDI is measured in line with the World Bank view as

> *"the value of inward direct investment made by non-resident investors in the reporting economy, including reinvested earnings and intra-company loans, net of repatriation of capital and repayment of loans"*[4].

The empirical analysis we present in this study is relevant for three important reasons.

First, unlike countries from other regions, domestic sources of finance in Africa have over the years been woefully inadequate to support their developmental agenda (Osei, Morrissey, & Lensink, 2002). As a result, FDI inflows remain one of the important sources of external funding to African countries. However, the amount of FDI flows to Africa has also been very low compared with the rest of the world (EY attractiveness survey, 2014, p.5). This has left many African countries with a huge resource gap limiting their ability to finance public infrastructure for the needed economic transformation and poverty reduction. Studies on the factors that drive FDI inflows to the region are therefore crucial in addressing important developmental needs of the region.

Second, empirical studies on FDI generally suggest that Africa is structurally different from the rest of the world and the factors that attract FDI to Africa are different from the factors that drive FDI in other continents (Asiedu, 2002; Asiedu, 2006; Batra et al., 2003). This presupposes that results of studies on the determinants of FDI flows from an international setting may not apply to African countries. By implication, the finding that IFRS adoption promotes FDI inflows may not hold true for African countries given that African countries are structurally different from the rest of the world. Given the importance of FDI flows to the growth potential in the region, coupled with the fact that Africa is considered to be structurally different from the rest of the world, a study that specifically examines the impact of IFRS on FDI to the region is very much needed.

Third, focusing exclusively on Africa is also relevant given that prior studies on FDI determinants to Africa is scant and research on IFRS adoption and its impact on African countries is still at the evolution stage. With several countries from the continent already using the IFRS, an investigation into the impact of IFRS on FDI inflows to the region may not only be useful to policymakers in this region but also to the international bodies such as the International Accounting Standard Board (IASB) interested in assessing the impact of IFRS adoption.

The rest of the paper is organised as follows: we review the literature on IFRS adoption and FDI inflows and the moderating role of institutions in this relationship in the next section. We then discuss our empirical model, econometric methodology and the data employed in the analysis. A discussion of the econometric results from our estimations is then presented before providing summary insights, conclusions and policy implications from the study findings.

Literature review

Accounting standards and Foreign Direct Investment Inflows

FDI inflows undoubtedly have remained one of the important external financing sources to many developing economies for decades. While the relevance of FDI to the economic development of countries is well established in the literature, access to FDI has remained uneven across countries over the years (Leuz, Lins, & Warnock, 2010). Accordingly, extensive research has been conducted to identify the dominant factors that account for the differences in the amount of FDI inflows to countries. Notwithstanding the fact that significant amount of research effort has been devoted to the determinants of FDI, there is still no widely accepted set of explanatory variables regarded as "true" determinants of FDI (Gordon et al., 2012; Kok & Ersoy, 2009).

However, variables such as the growth rate of GDP, inflation, interest rates, exchange rates, openness of the economy, quality of institutions, infrastructure development, natural resource endowment have been documented on a consistent basis in several empirical studies to be important determinants of FDI inflows (Asiedu, 2002; Chakrabarti, 2001; Lay & Wickramanayake, 2007; Onyeiwu, 2004). Theories such as the Gravity Model, Hymer's Firm-Specific Advantages Theory, Theory of Transaction Cost Economics, Dunning's Eclectic Paradigm and Information Asymmetry Theory have often been employed to explain movement in capital from one country to the other. Proponents of information asymmetry, in particular, argue that the availability of information plays a key role in the decision to invest in foreign markets. Leuz et al. (2008) posit that investors in foreign markets are usually at an informational disadvantage relative to local investors. Compared with the foreign investor, access to information on domestic businesses are far easier and faster for a local investor. Foreign investors usually have to incur additional cost in order to get informed which increases the overall cost of investment in foreign markets.

From an accounting information perspective, informational disadvantage usually arises when there are differences in accounting standards between the home country of the investor and the host country (Khurana & Michas, 2011). It is common knowledge that investors will usually refer to a firm's financial statements in making their investment decisions. Difficulties in interpretation arise when accounting information from host countries are based on accounting standards and disclosure requirements that differ greatly from the home country of the investor. The challenge in interpreting financial statements compiled using different accounting standards can act as an impediment to foreign investment (Bradshaw, Mark, Brian & Bushee, 2004). It is on the basis of this that some existing studies argue that investors' familiarity with accounting standards have important implications on cross-border investment activities (Beneish et al., 2012; Chen et al., 2014; Gordon et al., 2012; Khurana & Michas, 2011).

From the information costs argument, the rational deduction will be that any change that would decrease foreign investors' information costs should potentially increase cross-border investment. With several countries already using IFRS as the basis for financial reporting, it has been argued that it has the potential to reduce information frictions faced by investors in foreign markets (Beneish et al., 2012; Omotoso, Schutte & Oberholzer, 2022) and hence, its adoption by a country could be helpful in attracting foreign investors

into that country.

In terms of IFRS adoption and FDI nexus however, most existing studies (Chen et al., 2014; Gordon et al., 2012; Nnadi and Soobaroyen, 2015; Owusu et al., 2017a; Owusu et al., 2017b) have relied on Dunning's Eclectic Paradigm (Dunning, 1977; 1988) to explain the link between IFRS adoption and FDI. Commonly referred to as the Ownership, Location and Internationalization (OLI) paradigm, the theory postulates that FDI decisions of multinational firms usually rest on three main pillars: ownership-specific advantages, location-specific advantages and internalization advantages. Within the OLI paradigm, the accounting system of a country (specifically the applicable accounting standards) is believed to be one of the important factors that enhances the locational attractiveness of a country to FDI. Based on the tenets of this theory and consistent with its application by prior studies (Chen et al., 2014; Gordon et al., 2012; Nnadi and Soobaroyen, 2015; Owusu et al., 2017a) we argue that the adoption of IFRS would have a positive effect on the amount of net FDI inflows to a country.

IFRS Adoption and FDI

Studies on IFRS adoption and its macroeconomic outcomes though limited have been on the rise within the last decade. Notwithstanding the fact that the main aim for the introduction of the IFRS is to improve comparability of accounting information for users across countries (Horton, Serafeim, & Serafeim, 2013), using a uniform set of accounting standards is believed to also have cross-border investment benefits (Bova & Pereira, 2012; Tweedie & Seidenstein, 2005). The argument is that using the same set of accounting standards effectively reduces information asymmetry between firms and their external parties. According to Gordon et al. (2012), any reduction in asymmetric information obtained by a country's IFRS adoption should make the country more attractive for foreign capital inflows than would otherwise be the case. Thus, adopting IFRS in a way improves a country's locational attractiveness to foreign investors and hence promotes inflows of foreign investment.

To some extent, the above theoretical assertion has received empirical support from some studies that have investigated IFRS adoption and FDI inflows. Based on the gravity model, Márquez-Ramos (2011) analysed the effect of IFRS adoption on FDI and concludes that IFRS adoption correlates positively with FDI flows of countries that have adopted the IFRS. Chen et al. (2014) similarly examine IFRS adoption as a driver of FDI and their study also reports findings consistent with Márquez-Ramos (2011). Unlike these two studies that relied on data on bilateral cross-border flows of FDI, Gordon et al. (2012) investigate the effect of IFRS on the total FDI inflows to a country from all other countries. Results of their study however, affirm the notion that IFRS adoption positively correlates with FDI inflows to countries.

Nnadi and Soobaroyen (2015) however, found the effect of IFRS adoption to be negative on net FDI of African countries. While the authors contend that the public policy decision to adopt IFRS should be seen as part of the location advantage that attract FDI, their finding in sharp contrast suggests adopting IFRS could potentially discourage FDI into African countries. The study by Owusu et al. (2017a) however, points out that notwithstanding its touted potential as an accounting standard, merely

adopting IFRS would not position countries especially developing countries to attract FDI inflows unless supported by a strong institutional framework. The authors argue that the presence of quality institutions is very critical to harnessing the economic benefits associated with the IFRS adoption. In effect, notwithstanding its perceived economic benefits as a global accounting standard, the mere adoption of IFRS by developing countries may not be enough to attract FDI unless the adoption decision is supported by reforms aimed at strengthening the quality of institutions in such countries. Given that African countries are generally considered to be structurally different from the rest of the world and coupled with the fact that the factors that drive FDI inflows to Africa are different from what pertains in other continents (Asiedu, 2002; Asiedu, 2006; Batra et al., 2003), an investigation into the IFRS-FDI nexus within the context of Africa may be useful in deepening our understanding of the economic consequences of IFRS adoption.

Accounting Systems and IFRS Regime in Africa.

Historically, most African countries are known to have adopted the systems and practices of their colonial masters at independence (Joireman, 2001). Just as their religion, language, legal systems, institutional framework and many other practices have been largely based on standards and practices from their colonial masters, the accounting systems and practices of most African countries to a large extent have traditionally mirrored the systems and practices of their colonial masters. As Nnadi (2012) surmised, the attainment of independence by African countries were purely political in nature and did not guarantee the independence of their accounting system or standards. Colonisation is therefore considered as the major factor in the development of accounting systems in Africa.

For the majority of African countries that were once colonized by the British (such as Ghana, Nigeria, Kenya etc), their accounting system and practices have been inspired by the British accounting system, while the accounting system of most francophone countries is basically a replica of the French system. Interestingly, within the African continent, the decision to adopt IFRS appear to follow the same trend. In terms of the adoption of IFRS by African countries, it has been observed to be closely linked with the predisposition of their former colonial masters towards the IFRS. From this neo-colonial perspective, it has been observed that a greater number of African countries colonized by the British have adopted IFRS or permitted its use, while very few African countries that were colonized by the French and other European countries have adopted the IFRS in any form (Nnadi, 2012). Thus, even in the post-independence era, most African countries continue to depend on their former colonial masters in several ways including the direction of their accounting systems. Table 1 (appendix) summarizes the adoption status of the 54 African countries. As shown in Table 1, seventeen (17) countries representing 31.5% of the 54 African countries have adopted the IFRS. Out of the 17 countries that have adopted IFRS, twelve (12) countries representing 70.6% of the number were once colonized by the British. The above statistics demonstrate that the motivation to adopt the IFRS is higher among African countries previously colonized by the British.

Methodology

This study uses a panel data of 49 African countries from 1996 to 2014 (with three-

year spaces). Data on FDI were sourced from the World Development Indicator (WDI) database published by the World Bank. Data on the IFRS adoption status of countries were obtained from the Internet database of the International Accounting Standard Board (IASB)- http://go.ifrs.org/global-standards. Where necessary, the official websites of national standard-setters of countries were also consulted to confirm the adoption status. Data on regulatory quality was obtained from the World Governance Indicators, published by the World Bank. Data for all other control variables for the study (infrastructure development, market size, inflation, openness to trade, natural resources availability, financial openness) were obtained from the WDI database. All values are denominated in US dollars at year-on-year exchange rates, for ease of analysis and comparability.

Empirical Specification

To examine the effect of IFRS adoption on FDI inflows, we follow Nnadi and Soobaroyen (2015) to specify a linear regression model as follows:

$$\ln FDI_{it} = \beta_1 + \beta_2 Adopt_{it} + \beta_3 \ln \inf r_{it} + \beta_4 \ln regqual_{it} + \beta_5 GDP_{it} + \beta_6 \ln \inf_{it} + \beta_7 \ln Nat_{it} + \beta_8 \ln Tropen_{it} + u_{it}$$

--(1)

Where FDI refers to net Foreign Direct Investment measured. The explanatory variables are Gross Domestic Product (GDP), Inflation (Inf.), Natural Resource (Nat.), Infrastructure (infr), Trade Openness (Tropen) and Regulatory Quality (regqual). Adopt refers to whether the country adopted IFRS and in what year it was adopted. The subscripts i refers to the country and t refers to the time unit. The "ln" before the variables in the model indicates the natural log of the variables. The coefficients of the regression estimates can thus be interpreted as percentage changes. Our model differs from that of Nnadi and Soobaroyen (2015) in the measurement of our dependent variable. While Nnadi and Soobaroyen (2015) measure FDI as a proportion of GDP, this can be problematic as GDP is used in the same equation as an independent variable. Besides, Nnadi and Soobaroyen (2015) use GDP per capita as another explanatory variable in the same equation where GDP is measured creating the possibility of double counting for the same variable.

We use Gross Domestic Product (GDP) as a proxy for market size. It is expected that a large domestic market would have a positive effect on the flow of FDI to African countries. Inflation is used as a proxy for macroeconomic stability. The expectation is that higher inflation rates mean higher macroeconomic instability and could scare away foreign investors. Hence, it is expected to have a negative effect on FDI inflows. Openness to trade reflects the host countries' trade relations with the world and it is computed as the sum of imports and exports as a ratio of GDP. This is expected to have a positive effect on FDI as investors will be more attracted to countries that are more open to trade. Regulatory Quality Index is one of the institutional variables and it measures the perception of the government's ability and the likelihood of formulating and implementing policies that promote activities of the private sector. We expect a positive relationship between the regulatory quality variable and FDI inflows. Level of infrastructure development and the

availability of natural resources are also expected to increase the locational attractiveness of countries to FDI inflows; hence, the coefficients of these variables are expected to be positive.

Equation (1), which is our base model, was estimated using the ordinary Least Squares Approach. However, being mindful of the effect of endogeneity issues on our estimated results, we adopt a two-step approach to the empirical analysis following the discussion by Lungu, Caraiani and Dascălu (2017) and Nnadi and Soobaroyen (2015). For instance, it has been argued that developing countries may adopt IFRS standards with the hope of attracting foreign investors and probably funds from the World Bank as this sends a signal of transparency in financial reporting and hence the ability of investors to be at ease in understanding such reports and making their investment decisions. Besides countries with a huge volume of FDI inflows may likely adopt the standards probably due to investor's pressure in order to sustain such investments. This means that FDI inflows may likely affect the adoption of IFRS, hence the possibility of reverse causality. This, therefore, requires that IFRS is purified of this endogeneity so that it does not affect the true effect of IFRS on FDI inflows into the country.

To achieve this, we adopt a two-stage regression model. In the first stage, we predict the probability of a country adopting IFRS, conditional on a set of explanatory variables, using the logistic regression model specified in equation 2. The logistic regression model is used when the outcome of interest is binary.

$$IFRS_{it} = \beta_1 + \beta_2 \ln F\,DI_{it} + \beta_3 \ln inf\, r_{it} + \beta_4 \ln r\,egqual_{it} + \beta_5 GDP_{it} + \beta_6\, lninf_{it} + \beta_7 \ln N\,at_{it} + \beta_8 \ln T\,ropen_{it} + u_{it} \text{---------- (2)}$$

Adoption (IFRS) is coded as one if the country has adopted the IFRS and zero otherwise. The independent variables used are FDI, Inflation, regulatory quality, GDP, infrastructure, natural resource and trade openness. Based on equation 2 we obtain the estimated values of IFRS adoption which we use in the second stage of our analysis as specified in equation 3, where 'Adopt' is the estimated IFRS adoption variable from the first stage.

$$ln\,F\,DI_{it} = \beta_1 + \beta_2 \hat{A}dopt_{it} + \beta_3\, lninf\, r_{it} + \beta_4 \ln r\,egqual_{it} + \beta_5 GDP_{it} + \beta_6\, lninf_{it} + \beta_7\, ln\,N\,at_{it} + \beta_8\, ln\,T\,ropen_{it} + u_{it} \text{----------(3)}$$

Equation 3 is specified to address the effect of adoption of IFRS on FDI inflows into the country using the estimated values of adoption from the first stage regression. We carry out two basic estimations using the fixed effect and the random effect models using equation 3. We conduct the Hausman (1978) test to choose the appropriate model from the study. We also test for Heteroscedasticity using the White's (1980) test. Our test indicates the appropriateness of the random effects model. Hence, we discuss the results of the random effects model, which was also adjusted for heteroscedasticity.

Results

Descriptive statistics and Correlation matrix

Before proceeding with the empirical analysis, we explored the characteristics of the data set by means of descriptive statistics and correlation analysis. Table 2

presents results of the descriptive statistics of the data set. From Table 2, the mean level of FDI is 0.81 with a standard deviation of 0.39. In addition, we find that the proportion of countries which have adopted the FDI are 18 per cent. The average rate of inflation in the study period was 1.72% and the average GDP per capita in the study period is 7.06. On average most countries in our sample do not have a very strong regulatory quality judging from the mean of regulatory quality in the descriptive. We report in Table 3 the correlation matrix for the variables used in the regressions. The table shows that correlations between independent variables are low and therefore there is no high degree of multicollinearity in our regression model.

Table 1: Descriptive statistics

Variable	Observations	Mean	Std. Dev.	Minimum	Maximum
IFRS dummy	364	0.18	0.39	0.00	1.00
FDI	356	0.81	1.41	-8.12	4.12
Natural Resources	360	13.50	13.78	0.00	81.26
Inflation	346	1.72	1.21	-2.47	9.06
Infrastructure	364	34.76	41.16	0.00	164.95
Trade openness	344	77.37	45.01	20.31	478.87
GDP per capita	360	7.06	1.08	5.27	9.85
Financial openness	364	0.31	0.30	0.00	1.00
Regulatory quality	364	-0.66	0.60	-2.23	1.08

Table 2: Correlation Matrix

	lnfdi	adopt1	lnatures	Linfl.	linfras	ltrade	lgdppc
Log of FDI	1						
Adoption (estimated)	0.1673	1					
Log of natural resources	0.0935	-0.2789	1				
Log of inflation	0.0101	-0.0951	0.1363	1			
Log of Infrastructure	0.3616	0.4473	-0.0637	-0.156	1		
Log of Trade Openness	0.5492	-0.1375	-0.1445	-0.0041	0.2878	1	
Log of GDP	0.2285	0.3297	-0.3342	-0.1029	0.3569	0.5027	1
Regulatory Quality	0.0429	0.4902	-0.5432	-0.2665	0.1489	0.0771	0.3292

Empirical results and discussions

Table 4 presents the empirical results from our estimations. The initial results based on equation 1 using the OLS regression technique is presented in the first panel of Table 4. Panel 3 of Table 4 presents the results of the logistic regression model used to estimate the adoption variable. Panels 4 and 5 contain results of the fixed effect and

random effect estimations respectively.

Table 3: Results from the empirical model

VARIABLES	(OLS) lnfdi	(Logit) IFRS dummy	(FE) lnfdi	(Re) lnfdi
IFRS adoption	-0.0581			
	(0.110)			
Log FDI		-0.0122		
		(0.270)		
IFRS adoption (estimated)			1.815***	1.665***
			(0.391)	(0.423)
Log Natural resources	0.142***	-0.0105	0.238***	0.188***
	(0.0275)	(0.112)	(0.0587)	(0.0439)
Log of inflation	0.0222	0.928***	0.0421	0.0150
	(0.0338)	(0.219)	(0.0374)	(0.0294)
Log infrastructure	0.0848***	0.591***	0.0463**	0.0364**
	(0.0180)	(0.108)	(0.0180)	(0.0175)
Log trade openness	0.997***	-1.383***	1.183***	1.261***
	(0.103)	(0.527)	(0.218)	(0.158)
Log GDP per capita	-0.493	-2.129	-2.549	-1.218*
	(0.352)	(1.801)	(2.183)	(0.645)
Financial Openness	0.428***	0.788	-0.357	0.118
	(0.120)	(0.530)	(0.268)	(0.175)
Regulatory quality	0.187**	2.630***	0.710***	0.331**
	(0.0925)	(0.713)	(0.159)	(0.139)
Constant	-3.140***	6.248	0.112	-2.978***
	(0.627)	(3.863)	(4.156)	(1.114)
Observations	307	307	299	299
R-squared	0.413		0.483	0.4356
Number of id	49	49	49	49
Hausman Test:	Chi^2= 10.37	P>chi2 = 0.17		

*Values in parenthesis are standard errors, *, ** and *** indicate significance at 10%, 5% and 1% respectively*

The estimated results based on the OLS regression technique, however, may be potentially affected by biases related to endogeneity. Consequently, a two-stage estimation approach is employed to further analyze the study objectives as specified in equations 2 and 3. After estimating the adoption variable in the first stage, we employ both the fixed effects and random effects estimation techniques, and the results are presented in the fourth and fifth panels of Table 4, respectively. While the results of the fixed and random effect estimations are not substantially different, the random effect result was chosen as the most appropriate for this study based on the Hausman test results. The results from the random-effects model, however, indicate that inflation and financial openness have no effect on FDI inflows.

As shown in Table 4, results from the

random effect estimation technique indicate the adoption of IFRS correlates positively with the amount of FDI inflows to countries. Specifically, at a 1% level of significance, countries that have adopted the IFRS received about 166.5% more inflows than countries that rely on their own domestic accounting standard for financial reporting purposes. The significance of the IFRS adoption variable in the model suggests total FDI inflows into countries that have adopted the IFRS is about 166.5% higher than countries that are yet to adopt the IFRS. This finding thus, supports the evidence provided by some existing studies (Chen et al., 2014; Gordon et al., 2012) that adopting IFRS has cross-border investment benefits to a country. The explanation is that compared with most domestic accounting standards, foreign investors find it easier to understand the accounting process of countries that have adopted the IFRS and are therefore more willing to invest in such countries. The argument is that IFRS is more global and by far the world most dominant accounting standards which most foreign investors are familiar with. Its adoption, therefore, reduces significantly the volume of adjustments foreign investors would otherwise have made in comparing financial statements of companies in different countries (Ball, 2006). It is well acknowledged that differences in accounting standards and disclosure requirements invariably increases the cost of investing in foreign markets usually in a form of additional information costs and hence serves as a disincentive to foreign investors (Ahearne et al., 2004).

An analysis of the control variables largely suggests our findings are consistent with theory and existing empirical studies on FDI determinants. As shown in Table 3, a positive and highly significant association was found between the availability of natural resources and the amount of FDI inflows to the sampled countries. Specifically, at the 5% level of significance, a 10% increase in the availability of natural resources in a country increases FDI inflows by 16%. This implies that African countries that are endowed with abundant natural resources are more attractive destinations to FDI inflows. Resource availability is, therefore, an important determinant of the amount of FDI inflows into countries in Africa. This is not surprising given that most investments into the African continent are usually targeted at the extractive sector due to the fact that most African countries are endowed with natural resources. Empirically, several studies (Aleksynska & Havrylchyk, 2013; Asiedu, 2006; Morisset, 2000) have shown that availability of natural resources has always been an important consideration for foreign investment decisions (Asiedu, 2006; Morisset, 2000). This explains why African countries (e.g. Angola and Nigeria) that are rich in natural resources such as oil and other mineral deposits are usually preferred destinations for foreign investors', especially resource-seeking investors.

The results also indicate that the level of infrastructural development matters for FDI flows in Africa. We observe a positive and significant relationship between infrastructure development variable and FDI inflows at a 5% significant level. Specifically, a 10% improvement in infrastructure in the county increased the inflow of FDI by about 4.8%, at the 5 per cent significance level. As pointed out by Asiedu (2002), the presence of good infrastructure in a country in the form of telecommunication, transportation, reliable supply of power, internet access and the provision of water lowers the cost of doing

business significantly in that country. This is because the availability such of infrastructural facilities saves prospective investors huge sums of money that would have otherwise gone into providing them. Countries with the good physical infrastructural base are therefore able to attract more investment than countries with poor infrastructure (Morisset, 2000)

The degree of trade openness was also positively associated with total FDI inflows to African countries. Specifically, countries that are more open to trade received an increase in FDI by about 127% than countries that were less open to trade at the 1% level of significance. We also find that openness to trade serves as a major boost to the attraction of FDI into the country. Specifically, an improvement in the trade terms or openness of countries to trading increases the inflow of FDI into the country by 1.26%. This may be explained by the fact that investors may interpret the openness of the country to trade to mean a high market, particularly externally, for their products and therefore find it profitable to invest in such countries.

Our findings also indicate the significance of GDP per capita in influencing the amount of FDI inflows into a country. GDP per capita is used as a measure of the level of economic growth and development. The traditional argument is that high-growing economies are usually characterized by large domestic markets, favourable macroeconomic policies and provide relatively better opportunities for making profits than slow-growing or stagnant economies (Chakrabarti, 2001; Onyeiwu, 2004). This means that countries with high growth rates provide better assurance to prospective investors in terms of returns and the security of their investments. Hence, the expectation is that countries with high GDP per capita are more attractive targets for foreign investors. Contrary to this expectation, our finding suggests a negative and albeit weakly significant relationship between GDP per capita and FDI inflows.

As shown in Table 4, an increase in GDP per capita by 1% reduces the inflows of FDI by approximately 1.2%. While this appears curious, some empirical studies have reported such negative effects of GDP per capita on FDI. For example, Buchanan et al. (2012), Jensen (2003), and Wint and Williams (2002) all find an inverse relationship between GDP and FDI inflows to developing countries. as countries develop, it may be necessary to find other means of attracting investors or improving the earnings in order to still attract the desired level of FDI inflows. The argument by these studies is that as an economy expands, the standard of living also rises leading to high labour cost and the high cost of capital which ultimately increases the cost of production thereby making such an economy less attractive to foreign investors.

Our results also indicate that regulatory quality which captures the perception of government's ability to formulate and implement sound policies and regulations that promote private sector development in a country also matter for FDI attraction into a country. Specifically, an improvement in the quality of regulation in a country by 1% improves the inflow of FDI into the country by 0.3%. This finding is expected given that countries with quality regulatory environments are usually characterized by free market operations and competition which are conducive environments for foreign investors. Moreover, in an environment where the quality of regulation is high, there is usually

the absence of unfriendly market policies such as price controls and are also free from excessive regulatory burden. According to Lucke & Eichler (2016), an environment that is characterized by a highly-developed regulatory framework is usually a demonstration of the existence of clear, predictable and friendly economic policies critical to private sector growth and development which are critical to the investment decision in a foreign environment. Empirically, Shima & Gordon (2011) document that, adopting IFRS may be of little consequences to foreign investors if the regulatory environment is weak.

Summary, Conclusion and Implications of findings to African countries

This study explored whether the adoption of IFRS could in anyway be associated with the value of FDI inflows to African countries. The study builds on and extends emerging empirical literature on IFRS adoption and FDI inflows using country-level data from 49 African countries. By employing the random effect technique to estimate the empirical model, we document that African countries that have adopted the IFRS experience better FDI inflows than non-adopting countries. Also, evidence of this study indicates that the attractiveness of a jurisdiction to FDI inflows is enhanced significantly by the quality of regulations in the country. Further, consistent with several empirical studies, natural resources endowment, level of infrastructural development, economic growth and trade openness were all found to be important predictors of the amount of FDI inflows to African countries.

As highlighted by the results of this study in the discussion section, the type of accounting standards a country adopts and the extent to which the applicable standards and regulations are complied with by reporting entities in a country have serious implications on FDI activities in that country. Hence, an important avenue by which African countries can improve their business environment and investor confidence and attract FDI inflows is to strengthen their financial systems by adopting quality and internationally recognized accounting standards such as the IFRS. Again, given that the capacity to comply with any internationally recognized accounting standards and good practices is critical, African countries that have adopted the IFRS should focus on building capacity of the various regulatory bodies in the financial sector to effectively execute their oversight responsibilities over the entities they regulate. This will ensure compliance with the IFRS provisions which is critical to harnessing the economic benefit of adopting the IFRS.

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Appendix:

Table 1 IFRS adoption status of countries in Africa

Country	Adoption status		Year
	YES	NO	
Algeria	√		2010
Angola		√	
Benin		√	
Botswana	√		2003
Burkina Faso		√	
Burundi		√	
Cabo Verde		√	
Cameroon		√	
The Central African Republic		√	
Chad		√	
Comoros		√	
Congo, Dem. Rep.		√	
Congo, Rep.		√	
Cote d'Ivoire		√	
Djibouti		√	
Egypt, Arab Rep.		√	
Equatorial Guinea		√	
Eritrea		√	
Eswatini (formerly Swaziland)	√		2012
Ethiopia		√	
Gabon		√	
The Gambia		√	
Ghana	√		2007
Guinea		√	
Guinea-Bissau		√	
Kenya	√		1999
Lesotho		√	
Liberia		√	
Libya		√	

Country	Adoption status		Year
	YES	NO	
Madagascar		√	
Malawi	√		2001
Mali		√	
Mauritania		√	
Mauritius	√		2001
Morocco		√	
Mozambique	√		2010
Namibia	√		2005
Niger		√	
Nigeria	√		2012
Rwanda	√		2008
Sao Tome and Principe		√	
Senegal		√	
Seychelles		√	
Sierra Leone		√	
Somalia		√	
South Africa	√		2005
South Sudan	√		2011
Sudan		√	
Tanzania	√		2004
Togo		√	
Tunisia		√	
Uganda	√		1998
Zambia	√		2008
Zimbabwe	√		2010