

INTERNATIONAL FINANCIAL REPORTING STANDARDS (IFRS) AND EDUCATION MANAGEMENT IN AFRICA

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Abstract

International Financial Reporting Standards (IFRS) is considered a way of attracting Foreign Direct Investments (FDI), improving comparability in financial reporting, reducing information asymmetries and cost for foreign investors. The effect of regulatory quality is found as an incentive for quality of accounting information, which is of great importance to accounting educators and compliance to the IFRS by firms. Using the fixed effect model for the regression and a sample of 45 countries in Africa, we find that compliance of IFRS has a positive impact on the flow of FDIs. We also established that regulatory quality is an incentive for compliance to IFRS standards. The results which are very useful to managers of education (teachers of accounting education), show that IFRS compliance by African countries will boost the flow of FDIs by increasing comparability. Improving regulatory quality will further strengthen the effect of IFRS compliance as well as enhance transparency.

Keywords: International Financial Reporting Standards (IFRS); Information Asymmetry; Education Managers, Africa, Foreign Direct Investments (FDI).

Introduction

Accounting is a way of reporting or disclosing a company's position and results. Since most investment decisions taken involve economic agents, information asymmetries due to differences in accounting standards affect the flow of foreign investments, as they determine investor's resource allocation when investing in a foreign country. Ahearne et al. (2004) studied the factors that determine US investors' holdings in foreign equities and pointed out the importance and significance of information barriers caused by differences in national financial reporting standards, regulatory environments and disclosure requirements. They established that information cost, an indirect barrier to foreign investments, is an important and significant determinant of the home bias phenomenon. Foreign companies whose accounting standards are considered weak and hence with financial information of low credibility, become more attractive to US investors if they get listed on a US exchange. To get listed on any US stock exchange, foreign companies must comply with SEC disclosure requirements and reconcile its financial

reports with the US GAAP. Doing these remove a lot of information cost for the US investors, as investor protection requirements demand a more credible and standardized accounting information. Therefore, adopting a uniform set of standards, like the IFRS, can reduce the degree of existing information asymmetries that affect investors' decisions in the market (Ahearne et al, 2004). Transparency effect implies an increase in accounting quality on adoption of IFRS. Barth et al, (2008) found that companies that have adopted IFRS display less smoothening of earnings, less adjusting of earnings to achieve a pre-determined objective, timely and judicious acknowledgment of losses and a greater relationship between accounting figures and returns. These suggest a greater value relevance of accounting figures in comparison with market prices of the companies' equity. An improvement in transparency would imply a greater relationship between stated accounting information and value of the company. This makes it an important factor when making investment decisions, particularly when this decision involves cross-border investments. The panel data regression was done with the interaction variable between IFRS dummy and regulatory quality index and the lagged dependent variable were included. The transparency effect strengthens the comparability effect, leading to improvement in familiarity needed for greater market efficiency. These two effects reduce the information asymmetries between the foreign and local investors and are believed to boost the flow of foreign direct investments (Marquez-Ramos, 2011).

A country can adopt IFRS in three different ways: convergence, wholesale or endorsement. On wholesale adoption, a country abandons her domestic GAAP for the IFRS without any amendments for variety of reasons such as lack of manpower, convenience or economic reasons. Countries such as Ghana and Kenya took this approach. In convergence adoption, the adopting country's local GAAP is cautiously converged to IFRSs. Countries such as India, China and the US favour this approach, in which case IFRSs are not promptly included in their accounting system. Areas of similarities are identified while divergent parts are gradually converged to the IFRSs. A typical case of endorsement is the case of the European Union. In this approach, IFRSs are carefully studied by the country or regional body prior to passage into law. This approach makes for flexibility in handling country or region-specific accounting issues with a consistent tailored solution, will lead to the country or region having a peculiar version of IFRS (Nnadi, 2011).

Studies have shown benefits in trade in goods and FDI flows on adoption of IFRS. MarquezRamos (2011) show that accounting convergence process across Europe was helping to reduce unfamiliarity and information asymmetries in financial information between firms from different countries, leading to reduction in information costs which stimulates the flow of foreign direct investments and international trade. The relevance of IFRS compliance in the developing economies of Africa has been an issue of debate. Chamisa (2000) found evidence that IFRS are relevant in Zimbabwe and other capitalist developing countries. In the same vein, Arnold and Sikka

(2001) show evidence of substantial compliance but harmful activities of accounting firms and their partners in developing countries. They concluded that a country's ability to regulate multinational enterprises is undermined relationships with capitalist interests, more than by globalization itself. These relationships will be further accentuated by a global accounting standard like IFRS. Therefore the objective of this study is to determine the compliance of African countries to IFRS.

IFRS and flow of Foreign Direct Investments

Multinationals investing in emerging markets may benefit from incentives given by the emerging market government to attract their investment. Problems may manifest in form of information asymmetries, which may arise as a result of venturing into a new environment, or a differential effect of political risk. Private capital usually flows from developed economies to emerging economies, often referred to as "North-South" model. Shifts in FDI flows have led to "South-South" model, where emerging market firms invest in other emerging markets and "South-North" model, where emerging market firms are investing in developed economies. Foreign direct investors basically face the same challenges as the domestic investors and other additional problems which exposes them to a different cost of capital. Adopting IFRS is expected to reduce information asymmetry and reduce agency conflicts via improved external monitoring. Adoption of IFRS can also reduce the cost of capital, by increasing transparency and comparability (Barth 2008). These make company valuation easier for likely foreign investors and cause an increase in the valuation of the domestic firms due to reduction in risk premium.

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increased the volume of their investments abroad, in other European countries; more than the less uncertainty-averse countries after IFRS compliance. This proves that comparability effect is not uniform across countries but varies according to patterns of behaviour. This also suggests that harmonization of accounting standards can be a strategy for reducing the apparent risks in investing abroad. There are also indications that IFRS compliance does not affect the cost of capital in developing countries (Al-Shiab, 2008). Pope and McLeay (2011) find that the consequences of complying to and the degree of implementation of IFRS, are not uniform among countries, and are determined by factors like preparer motivation and the effectiveness of domestic enforcement.

The relevance of IFRS compliance in the developing economies of Africa has been an issue of debate. Chamisa (2000) found evidence that IFRS are relevant in Zimbabwe and other capitalist developing countries. Bova and Pereira (2012) used limited data on Kenya to provide evidence of potential economic effects of adopting IFRS in an African country, where capital market is relatively open and compliance enforcement is relatively weak. Conversely, Bakre (2006) shows compelling evidence that financial reporting techniques were used to legitimize and sustain the triangular relationship of imperialism, colonialism and capitalism. He described IFRS as being based on western standards, designed to meet the need for international mobility of capital. In the same vein, Arnold and Sikka (2001) show evidence of substantial harmful activities of accounting firms and their partners in developing countries. They concluded that a country's ability to regulate multinational enterprises has undermined relationships with capitalist interests, more than by globalization itself.

Methodology

This study uses panel data from 1996 to 2011 on FDI flows, GDP (Gross Domestic Product), GDP per capita, Inflation, Special Drawing Rights Interest Rate (SDRINT), human capital development, infrastructure, rule of law index, corruption perception index, and regulatory quality index, openness to trade and IFRS compliance in 45 African countries. All values are denominated in US dollars at year-on-year exchange rates, for ease of analysis and comparability. Table 1 in the appendix shows the IFRS compliant status of 45 African countries.

Explanatory Variable

To study the effect of IFRS adoption on the flow of FDI, various determinants of FDI were controlled for using proxies and can be classified either as pull factors or push factors. Pull factors are endogenous to the African countries while push factors are exogenous to these countries.

Push and pull factors

Push factors, being external to these African countries are expected to be active in countries that fund or provide foreign direct investments to African countries. In this study, Special Drawing Rights Interest Rate (SDRINT), sourced from DataStream and published by the International Monetary Fund (IMF) was used as a proxy for push

factors. Other similar push factors may include growth rates, international interest rates, industrial production indexes or Treasury bond rates. The effect of push factors may be positive or negative because of substitution or income effects (Levy-Yeyati et al., 2002). However, the expectation is that the coefficient of SDRINT will be negative from the regression results.

The pull factors are active within the host country and are viewed as endogenous to these countries. The pull factors used in this study and their proxies are:

Market Size- Gross Domestic Product (GDP)

The GDP is used as a proxy for market size. It is expected that a large domestic market would have a positive effect on the flow of FDI, particularly market-seeking or horizontal FDIs, to African countries. This variable is expected to have a positive coefficient from the regression. Total GDP figures used for this study were obtained from Euromonitor/IMF, International Financial Statistics (IFS).

Level of Economic Development- GDP per Capita (GDPPC)

Per capita GDP is used as a proxy for the level of economic development and wellbeing of the citizens. The expectation is that the higher the GDP per capita, the higher the demand for goods and services and hence the higher the flow of FDI as foreign investors try to take advantage of revenues and profit opportunities in Africa. This variable is expected to have a positive coefficient in the regression. GDP per capita data are sourced from Euromonitor/IMF, International Financial Statistics (IFS).

Macroeconomic Stability- Inflation

Inflation is used as a proxy for macroeconomic stability. The expectation is that higher inflation rates means higher macroeconomic instability and could scare away foreign investors. Hence, it is expected to have a negative coefficient in the output of the regression.

The inflation data for these African countries are sourced from Euromonitor/IMF, International Financial Statistics (IFS).

Openness to Trade- (Import + Export)/GDP

Openness to trade reflects the host countries' trade relations with the world and its proxy the share of trade, made up of import and export, in the GDP. This is expected to have a positive coefficient as FDI, especially efficiency-seeking and resource-seeking FDIs will be attracted more to countries that are more open to trade. Market-seeking FDI may, on the other hand, may be more attracted to countries that are less open to trade as trade restrictions force investors to set up local subsidiaries to take advantage of revenue and profit opportunities. The expected coefficient of this will vary, depending on other country characteristics. The data used to construct this proxy is sourced from Euromonitor/IMF, International Financial Statistics (IFS).

Human Capital- Adult Literacy Rate

The percentage of literate adults aged 15 years and above is used as a proxy for human capital development. Many previous studies have concluded that the availability of skilled labour is one of the determinants of foreign direct investments. It is also expected to make technology transfer very easy and to have a positive coefficient in the regression as a positive FDI determinant. The data for this were sourced from Euromonitor/UNESCO.

Infrastructure- Fixed telephone lines in use.

The number of fixed telephone lines in use per thousand of the population is used as a proxy for the level of infrastructural development. It is expected that infrastructural development would pull FDI into Africa countries. Excellent infrastructure can reduce operation costs for businesses, while also improving the standard of living. The expected coefficient from the regression results is expected to be positive and the data are sourced from Euromonitor/ International Telecommunications Union (ITU).

Regulatory Quality Index

This is one of the institutional variables and it measures a perception of the government's ability and likelihood towards formulating and implementing policies that promote activities of the private sector. The index was sourced from Euromonitor and higher values reflect better governance.

Rule of Law Index

This is an institutional variable and it reflects the perceptions about agents' confidence in the rules and regulations of the society, the quality of the police, property rights, contract enforcement, the courts and the likelihood of crime and violence. The index was sourced from Euromonitor and higher values reflect better governance.

Corruption Perception Index

This measure reflects corruption as perceived by businesses and entrepreneurs. It is a composite index built from surveys involving business people. The index was sourced from Euromonitor/ Transparency International and higher values reflect a cleaner and less corrupt society.

Time Effect

The time effect considers if the function being estimated has changed over time. Since the model was built with data from 1996 to 2011, dummy of 1 was used for period 2005 to 2011 and zero for other periods. The European Union's compliance of IFRS in 2005 made it a milestone in the history of IFRS compliance and accounting standards convergence.

Results Regression Data

Table 1 below shows the summary statistics of the variables used for the data regression.

Table 1: Descriptive statistics result

Variables	Abbrev.	Obs.	Mean	Std. Dev.	Min.	Max.
FDI /GDP	Infdi_gdp	685	-3.736	1.366	-9.189	-0.101
Openness to trade	Inopenns	717	-0.638	0.519	-2.423	1.769
Infrastructure	Ininfrastr	720	4.447	1.736	0.693	9.380
GDP	Ingdp	720	8.584	1.586	4.289	12.920
GDP per capital	Ingdppc	720	6.643	1.143	4.458	10.070
Inflation	Inflation	706	7.339	7.913	-33.2	48.5
Human capital	Humcap	715	62.351	20.505	7.8	94.5
SDRINT	Sdrint	720	2.696	1.388	0.290	4.440
Rule of law	Rlaw	720	-0.629	0.676	-2.2	1
Corruption perception	Corr_perc	466	3.049	1.090	0.7	6.4
Regulatory quality	Reg_qtyi	720	-0.591	0.592	-2.4	0.9
IFRS adoption	Ifrsadopt	720	0.164	0.370	0	1
Time effect	Time_eff	720	0.438	0.496	0	1
Regulatory quality index	Reg_qtyiif t	720	-0.052	0.311	-2.3	0.9

For this regression, the lagged dependent variable and the interactive variable from the interaction between IFRS compliance and regulatory quality variable were included in the regression. The results presented in table 2 indicate the p-value of the F-test significance at 1 percent level, thus suggesting model adequacy. The interaction variable, openness to trade, lagged dependent variables are significant at 1 percent and with expected positive coefficients while IFRS compliance and inflation are significant at 5 percent and 10 percent respectively. IFRS compliance has an expected positive coefficient and inflation has an expected negative coefficient. GDP, GDP per capita, infrastructure, human capital development, global interest rates, corruption perception, regulatory quality and time effects are statistically insignificant. Rule of law is significant at 1 percent, but with an unexpected negative coefficient.

Table 2: Results of Regression

Variables	Coeff.	Std. Error	T	Sig.
LnGDP	0.975	1.277	0.76	0.446
LnGDP per capital	-1.186	1.416	-0.84	0.403
Inflation	-0.012	0.006	-2.03	0.043*
LnInfrasture	0.073	0.136	0.54	0.592
LnOpenness to trade	0.907	0.27	3.35	0.001***
Human capital	-0.2	0.019	-1.05	0.293
SDRINT	0.054	0.034	1.58	0.116
Rule of law	-0.735	0.26	-2.82	0.005***
Corruption perception	0.019	0.105	0.18	0.856
Reg. Quality	0.386	0.256	1.51	0.132
IFRS adoption	0.322	0.136	2.37	0.018**
Time effect	0.196	0.151	1.29	0.197
Reg. quality*ifrsadopt	0.654	0.229	2.85	0.005***
Ln(FDI/GDP)1 year lag	0.287	0.048	5.99	0.000***
Constant	-2.238	2.255	-0.99	0.322

F(14,369) =10.32

Prob>F =0.000

R.sq: = 0.2814

Significance at 0.1 level; **significance at 0.05 level; ***significance at 0.01 level

The insignificance of global interest rate (SDRINT) may be affected by the perceived high risk premium on African investments which could lead to a higher threshold of expected return to trigger FDI flows. This can render the continent less competitive, compared with other emerging markets. Rule of law has a negative coefficient and significant at 1 percent. Until recently, many African countries were not democratically led and foreign investors do not trust the stability that comes from dictatorships. On the insignificance of regulatory quality and corruption perception, many foreign investors see African as one big country and hence any institutional decay in any part of Africa is perceived as affecting the whole of Africa (UNCTAD,2012). Therefore, country-specific institutional indexes may play no part in FDI flows, particularly resource-seeking FDIs. The

time effect dummy, 2005 to 2011, has a positive coefficient but statistically insignificant which suggests that the FDI/GDP function may not have changed greatly over time (Gujarati, 2003; Akinlo, 2004).

Discussions of Results

The results in Table 2 indicate that Openness to trade, the interaction variable and the lagged dependent variable have expected positive coefficients and statistically significant at 1 percent each. IFRS compliance has expected positive coefficient and significant at 5 percent while inflation has the expected negative coefficient and is significant at 10 percent. All things being equal, increasing openness to trade by 1 percent will increase the flow of FDI/GDP by 0.9 percent.

This highlights the need for Africa to further open up her economy particularly to traderelated FDI for competition and efficiency. Increasing inflation by 1 lowers FDI/GDP by 1.2 percent which implies that a more macro economically stable Africa would attract more FDI. A 1 percent increase in lagged FDI/GDP predicts a 0.28 percent increase in FDI/GDP. This implies the extent to which a previous year's FDI/GDP flow can be used to predict a current year's flow. IFRS compliance increases FDI/GDP flow by 32.22 percent while increasing the interaction variable by 1, increases FDI/GDP by 65.43 percent. African countries may comply to IFRS to improve on their regulatory quality to receive more FDI inflows. Regulatory quality is not statistically significant on its own, so all things being equal, its effect on FDI flows depend on the compliance of IFRS.

GDP, GDP per capita, infrastructure, human capital development, global interest rates, corruption perception, regulatory quality, and time effect are statistically insignificant. The insignificance of GDP may be due to the prevalence of resource-seeking FDI flows to Africa which are determined by the availability of raw materials, particularly mineral resources and not by market size. The result of the GDP per capita may be affected by the population growth and size, which are dominant factors in the flow of FDIs as most Africans have little discretionary income. This implies that most FDI flows, particularly market-seeking FDIs, are in the essential products and services sector like food and shelter, and not in the luxury sectors where GDP per capita will drive demand. Infrastructure also is statistically insignificant.

The proxy used for infrastructure is the number of fixed telephone lines per thousand of population and with the current boom in the mobile telephony, many African countries like Nigeria, Ghana, Kenya, Cameroun have witnessed a decline in the number of fixed telephone lines, while witnessing an astronomical growth in the mobile telephony sub-sector. The statistical insignificance may be because most telecommunications FDIs to Africa have been in the mobile sub-sector, with the fixed line sub-sector on the decline. Also resource-seeking FDIs, which are common in Africa, are mostly not determined by the availability of basic infrastructure but by the availability of raw materials.

Human capital development is statistically insignificant, which is possibly because raw materials are exported for value addition to the developed countries. Also most of the important and higher remunerated extraction processes are still done with foreign labour (Wadhwa and Sudhakara, 2011); hence the FDI flows have no linkage with the level of human development in Africa.

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Conclusions and Recommendations

The study reveals the positive impact of IFRS compliance on the economy of African countries. It also reveals that the regulatory quality to a very large extent determines the quality of reporting, further lowering information barriers after IFRS compliance and increasing the flow of FDIs to Africa. This fact is worthy of note to accounting teachers. Several economic policies and reforms aimed at attracting foreign direct investments to Africa are yet to yield the expected rewards, and many attribute this to Africa's history of political instability. Some previous studies have identified information asymmetries as one of the major barriers to the flow of trade and foreign direct investments which have been confirmed by the result of our study. Thus, lowering financial information barriers between different countries will reduce information asymmetries between Africa economies and foreign investors and hence reduce investment risks for foreign investors.

Countries in Africa would benefit more by working towards an improved management of information on the continent, particularly political and financial information. Regional integration which would promote intra-African trade and investments should be promoted. It is known that many African countries have very little economic linkages amongst themselves and regional integration will help build the critical mass needed to attract high FDIs, particularly market-seeking FDIs. Apart from larger market sizes, regional integration can also lead to the joint development of regional infrastructure which is critical to regional development. Strengthening regional bodies like the African Union, ECOWAS and SADC would help promote good governance by encouraging

healthy peer-review mechanism. Further study could examine if the demand for better financial information or IFRS compliance, by foreign investors to African influence the compliance of IFRS by such countries. This can be done by using firm-level data for compliance level and transparency effect, as against the country-level data of IFRS compliance and transparency effects used in this study. A national study can be undertaken to identify the ways curriculum planners and teachers of accounting can effectively impart on future accounting managers issues of IFRS compliance and FDI flows.

References

- Ahearne, A.G.; Grier, W.L. and Warnock, F.E. (2004), "Information Costs and Home Bias: An Analysis of U.S. Holdings of Foreign Equities", *Journal of International Economics*, Vol. 62, No. 2, p. 313-336.
- Akinlo, A. E. (2004), "Foreign direct investment and growth in Nigeria: An empirical investigation", *Journal of Policy Modeling*, Vol. 24, p. 627-639.
- Al-Shaib, M. S. (2008), "The Effectiveness of International Financial Reporting Standards Adoption on Cost of Equity Capital: A Vector Error Correction Model", *International Journal of Business*, Vol. 13, No. 2008
- Arnold, P.J. and Sikka, P. (2001), "Globalization and the state-profession relationship: the case of the bank of credit and commerce international", *Accounting, Organizations and Society*, Vol. 26, p. 475-499.
- Bakre, O. M. (2006), "Financial reporting as technology that supports and sustains imperial expansion, maintenance and control in the colonial and post-colonial globalization: The case of the Jamaican economy", *Critical Perspectives on Accounting*, Vol. 19 (2008) p. 487–522
- Barth, M. E. (2008), "Global Financial Reporting: Implications for U.S. Academics", *The Accounting Review*, Vol. 83, No.5, p. 1159–1179.
- Barth, M.E.; Landsman, W.R. and Lang, M.H., (2008), "International Accounting Standards and Accounting Quality", *Journal of Accounting Research*, Vol. 46, No. 3, p. 467 498.

- Bova, F. and Pereira, R. (2012), "The determinants and consequences of heterogeneous IFRS compliance levels following mandatory IFRS adoption: evidence from a developing country", *Journal of international accounting research*, Vol. 11, No. 1, pp. 83-111.
- Chamisa, E.E. (2000), "The relevance and Observance of the IASC Standards in Developing Countries and the Particular Case of Zimbabwe", *The International Journal of Accounting*, Vol. 35, No. 2, pp. 267-286.
- Gujarati, D.N. (2003), *Basic Econometrics* (4th ed), McGraw-Hill, New York.
- Levy-Yeyati, E., Panizza, U. and Stein, E. (2002), "The Cyclical Nature of North-South FDI Flows", *IADB Working Paper*, No. 479.
- Marquez-Ramos, L. (2011), "European accounting harmonization: consequences of IFRS adoption on trade in goods and foreign direct investments", *Emerging markets finance and trade*, September-October 2011, Vol. 47, Supplement No. 4, pp. 42-57.
- Nnadi, M. (2011), "IFRS Adoption and Financial Results of EU Companies: The Challenge of Nomenclature-Evidence from the UK, France and Germany", *Working Paper Series*, available at <http://ssrn.com/abstract=1779506>.
- Pope, P.F. and McLeay, S.J. (2011), "The European IFRS experiment: objectives, research challenges and some early evidence", *Accounting and Business Research*, Vol. 41, No. 3, August, p.233-266.
- United Nations Conference on Trade and Development (UNCTAD) (2012), "World Investment Report", *United Nations*, Geneva. Pp. 4 – 5.
- Wadhwa, K. and Sudhakara, R. S. (2011), "Foreign Direct Investment into Developing Asian Countries: The Role of Market Seeking, Resource Seeking and Efficiency Seeking Factors", *International Journal of Business and Management*, Vol. 6, No. 11. November.