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Opportunities and challenges of foreign direct investment utilisation and its impact on construction sector in developing countries

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Abstract

Purpose – Foreign direct investment (FDI) inflows to both developed and developing countries have increased over the past three decades. However, investigation of opportunities and challenges associated with FDI on the host economy and its impact especially on the construction sector through empirical assessment, have received scant attention. The purpose of this study is to address this gap in knowledge within the Nigerian context; and examine the trend of FDI inflows to the construction sector for the period 2000-2013 inclusive. Relationships between contributions of the construction sector to Nigeria's Gross Domestic Product (GDP) are also studied.

Design/methodology/approach– The study ~~adopted~~ used a literature review, a questionnaire survey, and archival data culminated in data analysis. The survey targeted financial experts in Nigerian financial institutions/local banks. Archival data included the annualised data extracted from the Central Bank of Nigeria (CBN) statistical bulletins. The period examined witnessed stable economic conditions. Data collected were analysed using mean score, factor analysis, and correlation.

Findings – Eight identified opportunities of utilising FDI were grouped into three principal factors: knowledge spillovers; capital for new investment; and resilience during financial crises. The 10 identified FDI challenges were grouped into three major factors: loss of ownership advantage and additional costs; crowding-out of national firms; and administrative bottlenecks and overdependence. Based on the hypotheses tested, the study found a significant relationship between the contributions of FDI inflows in the construction sector and the total GDP of the host country.

Practical implications – This study provides greater insight on the effects of FDI on a host economy in developing countries, which would help policymakers to examine existing policies, and look for new ways of increasing foreign investment flow~~,~~. ~~e~~Especially in the area of Construction Facility Investment (CFI).

Originality/value – This study is important because it ~~would enable~~ informs policymakers in developing countries at large, to promote FDI with special considerations for the construction sector of the economy.

Keywords Foreign direct investment, construction sector, developing countries, gross domestic product, Nigeria

Paper type Research paper

1. Introduction

Over the last three decades, foreign direct investment (FDI) has significantly expanded across many countries. For instance, the developed ~~economies~~, developing, and transition economies have attracted high volumes of inward FDI. ~~The~~ FDI flows across the globe ~~has~~ have risen sharply, from an annual average of US$142 billion during the period ~~of~~ 1985-1990, to over US$385 billion in ~~the year~~ 1996. ~~and then i~~It made a record by reaching US$1.9 trillion in ~~the year~~ 2007 [United Nations Conference on Trade and Development (UNCTAD), 2009a]. Developing countries are not an exception to this ~~development~~ trend; ~~These countries~~ they increased their annual share ~~out~~ of ~~total~~ world FDI from 15 per cent in 1990 to 30 per cent in

2006; and then to 37 per cent in the year 2008 (UNCTAD, 2009a). In 2014, the global FDI inflows fell by 16 per cent to US$1.23 trillion, mostly because of the fragility of the global economy, policy uncertainty for investors and elevated geopolitical risks (UNCTAD, 2015). In Africa, the largest recipients of FDI in 2015 included: Egypt (US$ 10.2 billion); Mozambique (US$ 4.7 billion); Morocco (US$ 4.2 billion); South Africa (US$ 3.6 billion); Ghana (US$ 2.5. billion); the Democratic Republic of the Congo (US$ 2.5 billion); Zambia (US$ 2.4 billion); Tanzania (USD$ 2.3 billion); Ethiopia (US$ 2.1 billion); Guinea (US$ 1.9 billion); and Kenya (US$ 1.9 billion) respectively [African Development Bank (AfDB), 2016].

The significance of foreign infrastructure development capital for the provision of infrastructure development for both macroeconomic and microeconomic activities of a country cannot be overemphasised. In developing countries, a key factor influencing the economic growth is the amount and quality of infrastructure provided for transport, water, energy, waste disposal, education, and health. Thus, the This provision is costly and normally requires expertise and resources that are not often not available locally (Howes and Robinson, 2005). Developing countries have huge requirements for infrastructure development in order to support growth, reduce poverty, and improve living standards. As FDI is part of the economic system that stimulates economic growth, there is a need for governments in developing countries to attract investment capital from developed countries to bridge their 'infrastructure gap', hence enhancing their economic growth. The importance of FDI in the growth dynamics of countries has created much interest amongst scholars (see De Mello, 1997; Borenzstein *et al*., 1998; Dees, 1998 among others) among others. Despite these previous studies, empirical evidence on whether FDI promotes growth in Africa remains inconclusive (Edwards, 2001).

In Nigeria, tThe empirical linkage between FDI and economic growth in Nigeria is yet unclear (Ayanwale, 2007). Previous studies have that examined this the impact of FDI on Nigeria's economic growth with varying outcomes (see Akinlo, 2004). Also, few studies have focussed on the impediments of attracting significant FDI inflows to Nigeria (Dupasquier and Osakwe, 2006). Other studies have focussed that focus on determinants of FDI in Nigeria (see Asideu, 2006; Anyanwu, 2011). However, there is a dearth of effort at investigating through empirical assessment, the opportunities and challenges associated with FDI on the a host economy in developing countries. Also, the impact of FDI, especially on at the construction sector level, has received equally scant attention. It is against this backdrop that this study aims to fill the identified gaps. Therefore, tThis study therefore was guided by the following derived objectives:

- Identify and assess the opportunities and challenges associated with FDI on the Nigerian economy
- Examine the trend of FDI inflows to the Nigerian construction sector in Nigeria between the years 2000 and 2013
- Establish the relationships between the contributions of construction sector FDI inflows in the construction sector and Nigerian's gross domestic product (GDP).

This study would provides greater insight on the effects of FDI on a host economy, which would help policymakers to examine existing laws legislation, and look for new ways of increasing foreign investment flows, especially in the area of Construction Facility Investment (CFI).

2. Literature review

2.1 Theoretical framework of the study

It is generally agreed that FDI plays a vital role in the developmental process of a country but the question of ~~if~~ whether its effect is positive or negative, is highly controversial. There are ~~some relevant~~ economic theories underpinning the role of FDI in the country both from the positive and negative points of view. This study~~, therefore,~~ considered and reviewed endogenous growth model theory and dependency theory as theoretical underpinnings of the opportunities and challenges associated with FDI on ~~the~~ a host economy, ~~which is the focus of this~~ study focus are as follow~~:~~.

2.1.1 Endogenous growth model theory

The new growth model endogenised the technological progress in the older Neoclassical Solow-type model (Romer, 1986). It provided a theoretical justification for FDI as a catalyst for economic growth and development. Theoretically, FDI increases the rate of technical progress in the host country through a "contagion" effect from the more advanced technology and management practices used by multinational corporations (MNCs), which may lead to improvements in productivity and efficiency in local firms and hence economic growth (Zhang 2001; Durham, 2004). For instance, Eaton and Kortum (1996) found out that domestic productivity growth is mainly related to foreign innovation, rather than domestic innovation. The evidence of positive spillover effects tend to be more favourable in developed countries. For example, Haskel *et al*. (2007) found out positive spillovers from foreign to local firms in a panel dataset of firms in the UK. Görg and Strobl (2003) concluded that foreign presence reduces exit and encourages entry by domestically owned firms in Ireland's high-tech sector. It is evident that FDI fosters international technology spillovers. It can be deduced from endogenous growth model theory that there is a positive relationship between FDI and economy growth of a host country.

2.1.2 Dependency theory

During the 1960s and 1970s, FDI was highly criticised as being responsible for inequalities between the developed and developing countries. Much of this view was wrapped up in dependency theory (Lund, 2010). Dependency theorists argued that FDI holds negative political, social and economic costs. For instance, Alfaro (2014) asserted that the impact of FDI on the host economies is difficult to assess. For example, the empirical evidence for FDI generating the expected positive effects is ambiguous at both the micro and macro levels (Alfaro, 2014). Görg and Greenaway (2004) concluded that the micro-level analysis of spillovers from foreign-owned to domestically owned firms indicate the effects are mostly negative. Blomström and Kokko (2003) concluded that the spillovers are not automatic, since local conditions have an important influence on firms' adoption of foreign technologies and skills. Alfaro *et al.* (2010) confirmed that not all countries satisfy the preconditions for taking advantage of FDI's potential benefits. Bruno and Campos (2013) concluded that the effects of FDI are mostly negative or that the evidence for its benefits is weak at best, particularly for developing countries. The mixed findings reached by studies under endogenous growth model theory and dependency theory on the effect of FDI and host countries suggest that these relationships should be examined closely.

3. FDI and the Nigerian economy

Recently, ~~the~~ FDI inflows into Nigeria ~~was~~ were dominated by the oil industry. Although at independence, in 1960, there was a widespread FDI presence in the economy. Policy design thereafter narrowed the scope for FDI and decades of political instability, economic mismanagement and endemic corruption further reduced Nigeria's ability to attract and retain

FDI (UNCTAD, 2009b). This was compounded by a relentless deterioration of the country's social conditions and physical infrastructure, in spite of increased public revenues generated by the oil sector (UNCTAD, 2009b). Nigeria as a country, given her natural resource base and large market size, qualifies it to be a major recipient of FDI in Africa and indeed is one of the top three leading African countries that consistently received FDI in the ~~past~~ decade preceding 2003 (Asiedu, 2003). This is corroborated by Ayanwale (2007) ~~that~~ Nigeria is one of the few countries that have consistently benefited from ~~the~~ African FDI inflow ~~to Africa~~. In 2006, FDI inflow to West Africa ~~was~~ mainly benefited ~~dominated by inflow to~~ Nigeria, who received 70 per cent of the sub-regional total (UNCTAD, 2006).

Since 2007, more than 50~~%~~per cent of ~~the~~ Nigerian FDI investment ~~capital invested into Nigeria~~ has targeted ~~been into~~ the capital intensive resource sectors, particularly the oil sector. There has been strong growth in investment into telecommunications, with the sector attracting 23.9 per cent of FDI projects between 2007 and 2013 (Ernst and Young, 2014). Between 2007 and 2013, Nigeria ~~has~~ attracted FDI from industrialised countries such as the United States, the United Kingdom, France, and emerging economies such as China, India, and South Africa (African Development Bank (AfDB), 2016). In 2011, the country ranked 170 out of 213 countries with respect to the Gross National Income Per Capita which was put at US$1,200 (World Bank, 2011b). Many analysts and experts have suggested the use of FDI as a veritable injection to kick-start the Nigerian economy. The Central Bank of Nigeria (CBN) (2013) reported that FDI inflows constituted 18~~.0~~ per cent of total inflows and represented 2.1 per cent of GDP, signifying ~~the~~ continued confidence in the economy by foreign investors. However, the country has witnessed a sharp decrease in FDI from US$ 8.1 billion in 2011 to US$ 1.4 billion in 2015 (AfDB, 2016). This is not surprising because ~~the year~~ during 2015 ~~was~~ a general election in Nigeria ~~that~~ triggered political risk coupled with deteriorating security, corruption and poor infrastructure, which are threats to investment and business. ~~in Nigeria.~~

4. The Nigerian construction sector

The Nigerian construction sector primarily comprises ~~the organised~~ a formal sector and unorganised informal sector. The formal sector encompasses foreign/expatriate and indigenous firms that are classified into small, medium and large based on their number of employees, and annual turnover (Oladapo, 2007). The large firms are dominated by international construction firms, and they accounted for about 5 per cent of the total number of construction firms in the formal sector~~. They~~ and ~~control~~ about 95 per cent of the construction market (Oladapo, 2007). For instance, Vetiva (2011) reported that 'Julius Berger Nigeria Plc.' remains the market leader, as it controls a large chunk of public sector construction, but with the ~~entrant~~ entrance of Chinese Construction giants (China Civil Engineering Construction Company) the dominance of Julius Berger faces a significant threat in the long term. Between the 1960s and 1980s, the construction sector was the major contributor to Nigeria's GDP, account~~ed~~ing for about 70 per cent of ~~the~~ GDP (Aibinu and Jagboro, 2002). This made the sector very strategic to the nation's development efforts. Regrettably, ~~the~~ Nigerian construction ~~sector~~ is bedevilled by low productivity and poor performance, since the decline of the national economy started at the end of the 1980s (Adeyemi *et al.,* 2005).

The ~~Nigerian construction~~ sector performed below expectations between 1981 and the late 1990's (Aibinu and Jagboro, 2002). The only period of the boom between 1980's and 1990's was in early 1980's when the sector accounted for 6 per cent of the Nation's GDP (Aina and Wahab, 2011). At the beginning of 2000, ~~the sector's~~ GDP contribution was around 1-2 per cent (Bamisile, 2004). Despite a 9 per cent growth ~~in the sector~~ as a result of on-going

national economic reforms, the sector's contribution has only increased by 1.14 per cent in nominal terms in first quarter of 2016 (National Bureau of Statistics (NBS), 2016). In spite of this, it is obvious that the sector is yet to realise its potential and contribution to economic growth in a significant manner. For instance, the ~~Nigerian~~ construction ~~sector~~ accounted for 1.4 per cent of national GDP in 2010 compared to a contribution ~~to GDP~~ of 4 per cent in South Africa; 5 per cent in Kenya; 6 per cent in Egypt; 13 per cent in China; and about 8.5 per cent in the UK (Vetiva, 2011). The growth effects of FDI are extensively dependent on the sectoral composition of the FDI inflows. Thus, understanding the role of sectoral composition of the FDI on economic growth is important. As a result of this, several studies have been conducted in relation to the impact of FDI on various sectors of the economy in Nigeria, but with the exemption of construction ~~sector~~. Being aware of these gaps, this study becomes imperative with a view to examining FDI inflows into the construction sector.

5. Research methods

The methodology of any study relies upon the philosophy underpinning the research (Dainty, 2007; Badu *et al.*, 2012). Saunders *et al.* (2012) asserted that there are several research philosophies available to the researchers. From various philosophical positions, there are potential influences. Holt and Goulding (2017) considered an "-ological" triad, namely ontological, epistemological and methodological in the context of construction management research. This was supported by Love *et al.* (2002) that there is a need for construction management researchers to adopt a robust methodological approach that takes account of both ontological and epistemological viewpoints. This study is structured in a philosophical position of epistemological concepts. The most commonly used example of epistemological positions is positivism vs. interpretivism (Sutrisna, 2009). The philosophical concepts underlying this study emanate from positivism. Positivism refers to a scientific framework which aims to generate empirical evidence that is objective and testable (Saunders *et al.*, 2012). Dainty (2007) claimed that many authors aligning positivism with quantitative approach. This study adopted quantitative approach, which was questionnaire survey targeted on financial experts in the Nigerian financial institutions. This was supported by Fellows and Liu (2008) that quantitative approaches seek to gather ~~factual~~ data, which are subjective (respondents') opinions and to study relationships between facts. In achieving this, the study adopted a deductive approach, which conventionally commences from literature review with a view to identifying and assessing the opportunities and challenges associated with utilisation of FDI on the host country.

The study adopted a literature review, a questionnaire survey, and archival data culminated in data analysis. The outcomes of literature review produced eight key opportunities and 10 main challenges of FDI inflows on a recipient country as presented in Table I and II as follows:

>>>>>>>>>>**Insert Table I and Table II**>>>>>>>>>>>>>>>

~~>>>>>>>>>>Insert Table II>>>>>>>>>>>>>>>~~

As indicated in Table I and II, the outcomes were used to design the questionnaire.

5.1 Questionnaire survey

~~In order to capture broad perceptions of the respondents and to empirically assess the opportunities and challenges associated with the FDI in Nigeria; this study adopted a questionnaire survey.~~ The questionnaire survey was conducted with targeted financial experts in the Nigerian financial institutions/banks. ~~The~~ Potential respondents were purposively selected based on two major criteria as follows:

- Having reached the managerial level or departmental/unit head ~~of the unit~~
- Having in-depth knowledge of private/foreign capital investment

Given these criteria, it was believed that it afforded the respondents opportunities to give reliable and realistic information. Also, the respondents were selected from 20 commercial banks and 6 specialised banks, thus resulting in 26 banks in Nigeria. For objectivity, during the survey, 3 copies of the questionnaire were distributed to each bank at their head office. This approach was supported by previous studies (see Badu *et al.*, 2012; Famakin *et al.*, 2012; Babatunde and Perera, 2017). Overall, 78 copies of the questionnaire were purposively administered, out of which 63 copies of the questionnaire were completed and deemed suitable for the analysis.

The questionnaire ~~designed for the study~~ was structured and multiple-choice type. ~~The questionnaire~~ It was divided into two sections. Section 'A' comprised the background information of respondents; this includes their academic qualification, years of industrial/professional experience. Section 'B' was designed in relation to the purpose of the study. The questions were asked using an ordinal Likert type scale of 1 to 5 where: 5–very critical, 4–critical, 3–somehow critical, 2–less critical, and 1– not critical. ~~Further, a~~ A reliability test using Statistical Package for the Social Sciences (SPSS) was conducted. The result indicated the reliability coefficient value of Cronbach's alpha 0.84~~0~~ signifying that the questionnaire used was ~~significantly~~ reliable and indicates evidence of internal consistency (George and Mallery, 2003). ~~The~~ Those data obtained through questionnaires were analysed using ~~the~~ SPSS. The study employed both descriptive and inferential statistics for the analysis. ~~The d~~Descriptive statistics ~~techniques used~~ include~~d~~s percentage, average and mean score. The inferential statistics employed was factor analysis. As a first step in conducting factor analysis, the suitability of ~~the~~ survey data collected was examined using Kaiser-Meyer-Olkin (KMO) test (Pallant, 2010). The KMO values indicated ~~the~~ sampling adequacy to be 0.707 and 0.805 respectively for the factors identified as opportunities for utilising FDI and identified factors as challenges associated with FDI. The KMO values exceeded the 0.6 value that Kaiser (1974) suggested as satisfactory for accurate completion of factor analysis. Therefore, the data obtained were confirmed satisfactory and appropriate for use in factor analysis.

5.2 Archival data

Annualised archival data from the Central Bank of Nigeria (CBN) Statistical Bulletin from the year 2000-2013 served as the data source. The period examined witnessed stable economic conditions. The details information relating to FDI inflows to Nigerian economy, FDI inflows to the construction sector, total GDP, and contributions of the construction sector to total GDP were extracted from archival data for the period 2000-2013. The statistical technique employed in analysing ~~the~~ secondary data was correlation (instead of regression because the purpose of the analysis was not a prediction but simply to show the relationships between ~~the~~ dependent and independent variables) (Tabachnick and Fidell, 1996). ~~In this regards, t~~The following hypotheses were postulated:

i. There is no significant relationship between FDI and total GDP in Nigeria~~.~~
ii. There is no significant relationship between the contributions of the FDI inflows in the construction sector and the total GDP of the Nigerian economy~~.~~

6. Results and discussion

6.1 Background information of respondents

The background information of ~~the~~ respondents in terms of academic qualifications and the years of industrial experience revealed that the highest percentage of respondents' academic qualifications were ~~MSc (~~Master's Degree~~) with~~ (47.1 per cent), followed closely by ~~BSc (~~Bachelor's Degrees~~) with~~ (45.6 per cent), and ~~HND (~~Higher National Diploma~~) with~~ (7.4 per cent). ~~The years of industrial experience of r~~Respondents indicate~~d~~s that 67.7 per cent ~~of respondents~~ had~~s~~ industrial experience between 6-10 years, ~~of industrial experience,~~ 20.6 per cent ~~of respondents have~~ had between 0-5 years ~~of industrial experience~~, and 11.8 per cent ~~of respondents have~~ had between 11-15 years ~~of industrial experience~~. It ~~can be~~ was deduced that the respondents ~~have the~~ held suitable industrial experience to supply reliable information.

~~>>>>>>>>>>Insert Table III>>>>>>>>>>>>>~~

6.2 Ranking of the opportunities and challenges associated with FDI in the host country

Table ~~IV~~ III ~~reveals the~~ shows analysis of ~~the survey~~ response data that produced the mean score values for the eight identified factors for the opportunities of utilising FDI in a host country ranging from 2.97 to 3.65. Based on the 5-point ~~Likert~~ rating scale, an attribute was deemed critical if it had a mean of 3.0 or more. Also, given two or more identified factors with the same mean value, the one with the lowest standard deviation was assigned highest importance ranking (Field, 2005). It can be deduced ~~further~~ from Table ~~IV~~ III that the ~~most~~ top four ranked opportunities of utilising FDI ~~that~~ displayed mean score values ranging from 3.50 to 3.65. ~~are:~~

- ~~FDI provides training for the employees, innovations in operational practices, and new financing tools~~
- ~~FDI provides management, accounting, and legal guidance with the best practices~~
- ~~FDI has proved to be resilient during financial crises~~
- ~~FDI allows quick implementation.~~

These findings ~~of this study~~ are similar to those ~~the findings~~ of ~~other notable~~ earlier studies. For instance, De Mello (1997) asserted that FDI augments the existing stock of knowledge in the host economy through labour training, skill acquisition and diffusion, and the introduction of new managerial practices and organizational arrangements.

>>>>>>>>>>Insert Table ~~IV~~III>>>>>>>>>>>>>

Table ~~V~~ IV ~~reveals the~~ shows analysis of the ranking based on ~~in terms of the~~ mean score~~s values~~ for the 10 identified challenges of FDI in a host country ranging from 3.03 to 3.75.~~;~~ tThis indicates that all ~~the~~ identified challenges were considered ~~by respondents~~ as important challenges of FDI in Nigeria. Further, it was revealed from Table ~~V~~ IV that the top four ranked challenges of FDI had mean scores ranging from 3.34 to 3.75. ~~further reveals the most top four ranked challenges of FDI in Nigeria as follows:~~

- ~~Delays due to government bureaucracy and local political demands~~
- ~~Increased FDI brings over reliance which makes a country too dependent on it and it may turn into a risk~~

- ~~Domestic firms may suffer if they are relatively uncompetitive~~
- ~~Sophisticated foreign investors can use their skills to strip the company of its value without adding any.~~

~~On the other hand, t~~The two factors that were ranked ~~least~~ lowest are: 'language and cultural barrier may pose problems between the investor and the host country'; and 'loss of control by host country' with their mean scores ~~values~~ of 3.03 and 3.06~~,~~ respectively. Although these ~~aforementioned two factors~~ were ranked ~~least~~lowest, ~~but~~ considering their mean score values are greater than 3.0, it indicates that they are considered important. ~~highly ranked factors as well.~~ These findings ~~of this study~~ are similar to previous studies. Bruno and Campos (2013) found ~~out~~ that the effects of FDI are mostly negative or that the evidence for its benefits is weak at best, particularly in developing countries.

>>>>>>>>>>Insert Table ~~V~~ IV>>>>>>>>>>>>>

6.3 Factor analysis of the opportunities and challenges associated with FDI on a host country

Table ~~VI~~ V shows ~~indicates the~~ results of the Principal Component Analysis (PCA) conducted on eight identified factors for opportunities of utilising FDI on a host country. ~~Table VI shows t~~The three components ~~that~~ had eigenvalues greater than 1. The three components were retained for further investigation after satisfying either Kaiser's criterion or eigenvalues (i.e. eigenvalues greater than 1). This is supported by K'Akumu *et al.* (2013) that eigenvalues are useful in factor analysis as a "deciding criteria as to what are the most important factors to be considered in the analysis". ~~Table VI contains the three factors with their eigenvalues, the percentage of the variance, and the cumulative percentage of the variance in each factor. It can be seen from Table VI that the eigenvalues for the three factors were ranging from 1.036 to 3.301. The total variance explained by the 1st factor is 28.486 per cent, the 2nd factor is 26.714 per cent and the 3rd factor is 15.276 per cent. The cumulative percentage of variance explained by extracted three factors accounted for 70.476 per cent.~~

>>>>>>>>>>Insert Table ~~VI~~ V>>>>>>>>>>>>>

Table ~~VII~~ VI shows the principal factor extraction with a varimax rotation conducted on the eight identified factors for the opportunities of utilising FDI on a host country. The rotation matrix converged in six iterations. It can be seen ~~from Table VII~~ that the factor loadings ranges ~~ranging~~ from 0.581 to 0.924, ~~this implies~~ implying that there is no need to eliminate any variable from the analysis. This approach was corroborated by earlier researchers. For instance, Kline (2002) claimed that variables with a factor loading of 0.30 or higher can be considered as important. This is affirmed by Brown (2009) that variables with factor loadings near 1 are clearly important in the interpretation of the factor, and variables that factor loadings near 0 are clearly unimportant. The result of analysis grouped the eight identified factors into three principal interpretable factors with their components, viz: factor 1: knowledge spillovers; factor 2: capital for new investment; and factor 3: resilience during financial crises.

>>>>>>>>>>Insert Table ~~VII~~ VI>>>>>>>>>>>>>

~~The three principal factors derived are interpreted as follows:~~

- ~~Factor 1: knowledge spillovers~~
- ~~Factor 2: capital for new investment~~
- ~~Factor 3: resilience during financial crises.~~

Factor 1: knowledge spillovers: This factor accounts for 28.49 per cent of the total variance of opportunities for utilising FDI on a host country. The three components of knowledge spillovers as a factor include: FDI provides training for the employees, innovations in operational practices, and new financing tools; FDI contributes to corporate tax revenues in a host country; and FDI provides management, accounting, and legal guidance with the best practices. These three components have a high factor loading of 0.822, 0.803, and 0.735, respectively. ~~This finding was similar to previous studies. For instance,~~ Alfaro (2014) asserted that FDI embodies capital, technology, and know-how. Spillover mechanisms include direct knowledge transfer through partnership, the opportunity to learn from the innovation and experience of foreign firms and interaction and movement in labour markets. These are essential for developing countries to industrialise, develop, and create jobs so as to alleviate the poverty situation in their countries.

Factor 2: capital for new investment: This factor accounts for 26.71 per cent of the total variance of opportunities for utilising FDI on a host country. The four components are: the risk involved is reduced; FDI reduces the disparity that exists between costs and revenues, especially when they are calculated in different currencies; FDI allows diversification; and FDI allows quick implementation. These four components have a factor loading of 0.872, 0.642, 0.638, and 0.581, respectively. It is believed that one reason policymakers give for promoting FDI in developing countries is the scarcity of capital for new investment. Thus, foreign investors provide additional capital when they set up new enterprises in local markets.

Factor 3: resilience during financial crises: This factor accounts for 15.28 per cent of the total variance of opportunities for utilising FDI on a host country. The only component is FDI has proved to be resilient during financial crises with a high factor loading of 0.924. The resilience of FDI during financial crises led many developing countries to regard it as the private capital inflow of choice. Loungani and Razin (2001) asserted that in East Asian countries, FDI was remarkably stable during the global financial crises of 1997-98. Also, the resilience of FDI during financial crises was also evident during the Mexican crisis of 1994-95 and the Latin American debt crisis of the 1980s.

~~Similarly,~~ Table ~~VIII~~ VII indicates the result of the Principal Component Analysis (PCA) conducted on 10 identified challenges of FDI on a host country. It can be seen from the Table ~~VIII~~ that the three components had eigenvalues greater than 1; thus, they were retained for further investigation. ~~Further, Table VIII contains the three factors with their eigenvalues, the percentage of the variance, and the cumulative percentage of the variance in each factor. As indicated in Table VIII the eigenvalues for the three factors were ranging from 1.115 to 4.526. The total variance explained by the 1st factor is 29.923 per cent, the 2nd factor is 21.747 per cent, and the 3rd factor is 18.305 per cent. The cumulative percentage of variance explained by extracted three factors accounted for 69.975 per cent.~~

>>>>>>>>>>Insert Table ~~VIII~~ VII>>>>>>>>>>>>>

Table ~~IX~~ VIII shows the principal factor extraction with a varimax rotation conducted on 10 identified challenges of FDI on a host country. The rotation matrix converged in seven

iterations and the factor loadings were ranging from 0.594 to 0.848~~.~~. ~~t~~This implies that there is no need to eliminate any variable from the analysis, so ~~. Thus,~~ the result of analysis grouped the 10 identified challenges into three principal interpretable factors with their components, viz: factor 1:loss of ownership advantage and additional costs; factor 2: crowding-out of national firms; and factor 3: administrative bottleneck and overdependence.

>>>>>>>>>>**Insert Table ~~IX~~ VIII**>>>>>>>>>>>>>

~~The three principal factors derived are interpreted as follows:~~

- ~~Factor 1: loss of ownership advantage and additional costs~~
- ~~Factor 2: crowding-out of national firms~~
- ~~Factor 3: administrative bottleneck and overdependence~~

Factor 1: loss of ownership advantage and additional costs: This factor accounts for 29.92 per cent of the total variance of the challenges of FDI on a host country. The five components are: percentage restrictions on investments and ownership; high travel abroad and communications expenses; language and cultural barrier may pose problems between the investor and the host country; extra expenses incurred for management talent to train staff and managers in the host country; and domestic firms may suffer if they are relatively uncompetitive. These five components have a factor loading of 0.812, 0.801, 0.732, 0.693, and 0.594, respectively. This finding was similar to Dunning's (1988) that for a firm to engage in FDI, the firm must possess ownership of some specific tangible or intangible asset or skill that gives it an advantage over other firms; otherwise, it would not be able to overcome the additional costs such as the costs of dealing with foreign administrators, and transportation among others.

Factor 2: crowding-out of national firms: This factor accounts for 21.75 per cent of the total variance of the challenges of FDI on a host country. The three components include: sophisticated foreign investors can use their skills to strip the company of its value without adding any; FDI takes a longer time to set up; and loss of control by the host country. These three components have a high factor loading of 0.848, 0.743, and 0.723, 0.693, respectively. This finding was supported by the claimed that MNCs create distortions within the local economy by squeezing out local entrepreneurs; employing inappropriate capital-intensive technologies leading to unemployment; worsening the distribution of income, and altering consumer tastes and undermining the local culture.

Factor 3: administrative bottleneck and overdependence: This factor accounts for 18.31 per cent of the total variance of the challenges of FDI on a host country. The two components are: delays due to government bureaucracy and local political demands; and increased FDI brings over-reliance which makes a country too dependent on it and it may turn into a risk. These two components have a high factor loading of 0.835, and 0.808, respectively. This finding is supported by Anyanwu (1993) that FDI is more exploitative and imperialistic in nature, thus ensuring that the host country absolutely depends on the home country and her capital.

6.4 Relationship between FDI inflows to the construction sector, and contributions of the construction sector to total GDP in Nigeria

Table ~~X~~ IX shows the FDI inflows to Nigeria economy and the construction sector, total GDP, and contribution of the construction sector to total GDP from 2000-2013.

>>>>>>>>>>Insert Table ~~X~~IX>>>>>>>>>>>>>

To establish whether there is a relationship between FDI inflows to the construction sector and the total GDP, correlation with log analysis was conducted. ~~instead of regression because the purpose of the analysis was not a prediction but simply to show the relationship between the dependent and independent variables (Tabachnick and Fidell, 1996).~~ In this respect, the following hypotheses were postulated:(1) there is no significant relationship between FDI and total GDP; and (2) there is no significant relationship between the contributions of the FDI inflows in the construction sector and the total GDP of country's economy.

~~1. There is no significant relationship between FDI and total GDP.~~
~~2. There is no significant relationship between the contributions of the FDI inflows in the construction sector and the total GDP of country's economy.~~

Analysis of the extract from Table ~~X~~ IX yielded Table ~~XI,~~ X. ~~which is presented as follows:~~

>>>>>>>>>>Insert Table ~~XI~~ X>>>>>>>>>>>>>

It can be seen from the Table ~~XI~~ that there is a significant relationship between FDI and total GDP, which gives a value of 0.997 with recorded *p*-value of 0.000 (i.e. $p<0.05$). This confirms that null hypothesis should be rejected. On the second hypothesis, the result indicates a significant relationship exist between the contributions of the FDI inflows in the construction sector and the total GDP of the economy, which gives a value of 0.873 with recorded *p*-value of 0.000 (i.e. $p<0.05$). This implies that null hypothesis should be rejected. This study finding was similar to previous studies. For instance, Puapan (2014) found out a strong statistically significant positive effect of FDI on the output in the construction sector in Thailand.

7. Conclusions

~~This study provided the empirical evidence on the opportunities and challenges associated with Foreign Direct Investment (FDI) on the host country. The study further examined the trend of FDI inflows to the construction sector for the period 2000-2013, and established the relationships between contributions of the construction sector to Nigerian's Gross Domestic Product (GDP). The period examined witnessed stable economic conditions. In achieving this, a comprehensive review, a questionnaire survey and archival data were conducted.~~ The study revealed the ~~most~~ top four ranked opportunities of utilising FDI as follows: FDI provides training for the employees, innovations in operational practices, and new financing tools; FDI provides management, accounting, and legal guidance with the best practices; FDI has proved to be resilient during financial crises; and FDI allows quick implementation. The study ~~further~~ showed the ~~most~~ top four ranked challenges associated with FDI on the host country to include: delays due to government bureaucracy and local political demands;

increased FDI brings over-reliance which makes a country too dependent on it and it may turn into a risk; domestic firms may suffer if they are relatively uncompetitive; and sophisticated foreign investors can use their skills to strip the company of its value without adding any.

~~The study, through f~~Factor analysis, grouped the eight identified opportunities of utilising FDI into three principal factors~~. The factors~~ to include: knowledge spillovers; capital for new investment; and resilience during financial crises.~~ In the same vein~~ Similarly, the study~~, through factor analysis,~~ further grouped the 10 identified challenges associated with the utilisation of FDI into three major factors~~. These~~ to include: loss of ownership advantage and additional costs; crowding-out of national firms; and administrative bottleneck and overdependence. ~~Based on the hypotheses tested in this study, the study found a~~ A significant relationship between FDI and total GDP of the host country was found, and a significant relationship between the contributions of FDI inflows in the construction sector and the total GDP of a country's economy. ~~It is on t~~This premise, ~~that this~~ the study established that FDI inflows in the construction sector have a positive relationship with economic growth in developing countries.

The findings of this study ~~are very interesting and important,~~ provid~~e~~~~ing~~ greater insights and empirical evidence on the positive relationship between FDI inflows in the construction sector and the total GDP of the host country. These findings will be beneficial to policymakers, particularly in the developing countries to promote FDI with special considerations for the construction sector of the economy. ~~Also, the study f~~Findings will also enable policymakers to carefully review the sectoral basis on how to facilitate FDI promotion policies to be more productive and beneficial for the developing countries. This study is not without limitations. Although the use of questionnaire survey allows large sample to be captured, other methods such as interviews which can complement questionnaire survey in revealing the host country's specific opportunities and challenges associated with FDI were not used. Therefore, further studies should be conducted in other developing countries to derive specific opportunities and challenges associated with the utilisation of FDI on each host country.

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List of Tables

Table I: Opportunities associated with the utilisation of FDI on the host country

Opportunities	Reference
1. FDI provides training for the employees, innovations in operational practices, and new financing tools	Zhang 2001; Durham, 2004 Haskel *et al*. ,2007; Thadani, 2011
2. FDI provides management, accounting, and legal guidance with the best practices	Görg and Strobl, 2003; OECD, 2008; Amadeo, 2013
3. FDI has proved to be resilient during financial crises	De Silva, 2011; Thadani, 2011
4. FDI allows quick implementation	Thadani, 2011; Amadeo, 2013
5. FDI contribute to corporate tax revenues in the host country	De Silva, 2011; Amadeo, 2013
6. FDI reduces the disparity that exists between costs and revenues, especially when they are calculated in different currencies	Loungani and Razin, 2001; Thadani, 2011
7. The risk involved is reduced	Ernst and Young, 2012; Amadeo, 2013
8. FDI allows diversification	Ernst and Young, 2012; Amadeo, 2013

Table II: Challenges associated with the utilisation of FDI on the host country

Challenges	Reference
1. Delays due to government bureaucracy and local political demands	Thadani, 2011; De Silva, 2011
2. Increased FDI brings over-reliance which makes a country too dependent on it and it may turn into a risk	Thadani, 2011; Amadeo, 2013
3. Domestic firms may suffer if they are relatively uncompetitive	Bruno and Campos, 2013; Amadeo, 2013
4. Sophisticated foreign investors can use their skills to strip the company of its value without adding any	Amadeo, 2013
5. High travel abroad and communications expenses	De Silva, 2011
6. FDI takes longer time to set up	Alfaro *et al.*, 2010
7. Extra expenses incurred for management talent to train staff and managers in host country	De Silva, 2011
8. Percentage restrictions on investments and ownership	OECD, 2008; De Silva, 2011
9. Loss of control by host country	Amadeo, 2013
10. Language and cultural barrier may pose problems between the investor and the host country	De Silva, 2011

Table III: Ranking of opportunities for utilising FDI on the host country

Opportunities	Frequency	Mean score	Std. dev.	Rank
1. FDI provides training for the employees, innovations in operational practices, and new financing tools	68	3.65	0.71	1
2. FDI provides management, accounting, and legal guidance with the best practices	68	3.54	0.78	2
3. FDI has proved to be resilient during financial crises	68	3.50	0.68	3
4. FDI allows quick implementation	68	3.50	0.76	4
5. FDI contribute to corporate tax revenues in the host country	68	3.38	0.77	5
6. FDI reduces the disparity that exists between costs and revenues, especially when they are calculated in different currencies	68	3.34	0.84	6
7. The risk involved is reduced	68	3.16	0.89	7
8. FDI allows diversification	68	2.97	0.79	8

Table IV: Ranking of challenges associated with utilisation of FDI on the host country

Challenges	Frequency	Mean score	Std. dev.	Rank
1. Delays due to government bureaucracy and local political demands	68	3.75	0.87	1
2. Increased FDI brings over-reliance which makes a country too dependent on it and it may turn into a risk	68	3.72	0.75	2
3. Domestic firms may suffer if they are relatively uncompetitive	68	3.35	0.93	3
4. Sophisticated foreign investors can use their skills to strip the company of its value without adding any	68	3.34	0.84	4
5. High travel abroad and communications expenses	68	3.32	0.82	5
6. FDI takes longer time to set up	68	3.32	1.01	6
7. Extra expenses incurred for management talent to train staff and managers in host country	68	3.26	0.92	7
8. Percentage restrictions on investments and ownership	68	3.18	0.98	8
9. Loss of control by host country	68	3.06	0.91	9
10. Language and cultural barrier may pose problems between the investor and the host country	68	3.03	0.91	10

Table V: Total variance explained on the opportunities for utilising FDI on the host country

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative % of Variance Explained	Total	% of Variance	Cumulative % of Variance Explained	Total	% of Variance	Cumulative % of Variance Explained
1	3.301	41.267	41.267	3.301	41.267	41.267	2.279	28.486	28.486
2	1.301	16.260	57.526	1.301	16.260	57.526	2.137	26.714	55.200
3	1.036	12.950	70.476	1.036	12.950	70.476	1.222	15.276	70.476
4	0.674	8.423	78.899						
5	0.586	7.328	86.226						
6	0.510	6.371	92.597						
7	0.375	4.693	97.290						
8	0.217	2.710	100.000						

Table VI: Principal factor extraction and varimax rotated component matrix[a] on the opportunities for utilising FDI on the host country

Component	Principal Factor		
	1	2	3
1. FDI provides training for the employees, innovations in operational practices, and new financing tools	0.822		
5. FDI contribute to corporate tax revenues in the host country	0.803		
2. FDI provides management, accounting, and legal guidance with the best practices	0.735		
7. The risk involved is reduced		0.872	
6. FDI reduces the disparity that exists between costs and revenues, especially when they are calculated in different currencies		0.642	
8. FDI allows diversification		0.638	
4. FDI allows quick implementation		0.581	
3. FDI has proved to be resilient during financial crises			0.924

Extraction Method: Principal Component Analysis
Rotation Method: Varimax with Kaiser Normalization[a]
[a]Rotation converged in 6 iterations

Table VII: Total variance explained on the challenges associated with utilisation of FDI on the host country

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative % of Variance Explained	Total	% of Variance	Cumulative % of Variance Explained	Total	% of Variance	Cumulative % of Variance Explained
1	4.526	45.260	45.260	4.526	45.260	45.260	2.992	29.923	29.923
2	1.357	13.567	58.826	1.357	13.567	58.826	2.175	21.747	51.669
3	1.115	11.148	69.975	1.115	11.148	69.975	1.831	18.305	69.975
4	0.685	6.846	76.820						
5	0.517	5.174	81.995						
6	0.497	4.974	86.969						
7	0.441	4.407	91.376						
8	0.395	3.946	95.322						
9	0.276	2.760	98.083						
10	0.192	1.917	100.000						

Table VIII: Principal factor extraction and varimax rotated component matrix[a] on the challenges associated with utilisation of FDI on the host country

Component	Principal factor		
	1	2	3
8. Percentage restrictions on investments and ownership	0.812		
5. High travel abroad and communications expenses	0.801		
10. The language and cultural barrier may pose problems between the investor and the host country	0.732		
7. Extra expenses incurred for management talent to train staff and managers in host country	0.693		
3. Domestic firms may suffer if they are relatively uncompetitive	0.594		
4. Sophisticated foreign investors can use their skills to strip the company of its value without adding any		0.848	
6. FDI takes longer time to set up		0.743	
9. Loss of control by host country		0.723	
1. Delays due to government bureaucracy and local political demands			0.835
2. Increased FDI brings over-reliance which makes a country too dependent on it and it may turn into a risk			0.808

Extraction Method: Principal Component Analysis
Rotation Method: Varimax with Kaiser Normalization[a]
[a]Rotation converged in 7 iterations

Table IX: FDI inflows into construction sector and GDP of the Nigerian economy (-N-MILLIONS)

Year	FDI inflow to the Nigerian economy	FDI inflow to construction sector	% of FDI inflow to construction sector	Total GDP	Contribution of construction to total GDP
2000	157,508.60	3,995.90	2.50	329,178.70	6,433.80
2001	161,441.60	4,211.90	2.60	356,994.30	7,205.90
2002	166,631.60	4,293.90	2.60	433,203.50	7,518.90
2003	179,687.60	4,545.80	2.50	477,533.00	8,176.80
2004	249,639.30	5,194.10	2.10	527,576.00	7,622.50
2005	324,129.30	6,713.30	2.10	561,931.40	8,544.50
2006	482,447.80	10,461.10	2.20	595,821.60	9,654.80
2007	552,498.60	12,030.20	2.10	634,251.10	10,912.60
2008	586,309.70	12,702.50	2.20	674,889.00	12,337.50
2009	492,737.92	8,825.40	1.79	24,794,240	347,690
2010	108,737.92	6,414.31	5.90	54,612,300	1,570,970
2011	274,749.36	6,581.40	2.40	62,980,400	1,905,570
2012	401,100.00	9,969.28	2.49	71,713,900	2,188,720
2013	431,230.00	8,563.50	1.99	80,092,560	2,676,280

Source: (CBN annual report, 2013)
(Exchange Rate (official) in 2013:1US$= N155.70, 1UK£= N257.48)

Table X: Correlations with log

		LFDIE	LFDIC	LTotal	LConstruct
LFDIE	Pearson Correlation	1	.873**	.128	.099
	Sig. (2-tailed)		.000	.663	.735
	N	14	14	14	14
LFDIC	Pearson Correlation	.873**	1	.329	.310
	Sig. (2-tailed)	.000		.251	.281
	N	14	14	14	14
LTotal	Pearson Correlation	.128	.329	1	.997**
	Sig. (2-tailed)	.663	.251		.000
	N	14	14	14	14
LConstruct	Pearson Correlation	.099	.310	.997**	1
	Sig. (2-tailed)	.735	.281	.000	
	N	14	14	14	14

**. Correlation is significant at the 0.01 level (2-tailed)