FOREIGN DIRECT INVESTMENT - LED INDUSTRIALISATION IN NIGERIA: LESSONS FROM CHINESE INDUSTRIALISATION

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Abstract

This paper attempts to draw some lessons from China on FDI led industrialisation in Nigeria. To achieve this, relevant literature relating to FDI, policy documents and evaluation of the achievements recorded in meeting the FDI roles, particularly as it relates to China and Nigeria were reviewed. FDI can propel industrialisation and structural transformation thereby creating new jobs in Nigeria. It leads to technological transfer that may lead to industrial development. FDI in Nigeria has helped in the growth of the telecommunication industries. Improving foreign trade and attracting FDI played significant role in promoting China’s reform and development. Though, attracting FDI is good for industrial development, it should be done with caution to avoid the crowding out of the local industries. One major challenge of industrialisation in Nigeria through FDI is the problem of insecurity. Nigeria also has the problem of power infrastructure deficit and poor road network like the Chinese in their earlier stage of industrialisation. To encourage FDI and promote industrialisation, infrastructure should be given consideration and above all, security of lives and property must be guaranteed.

Key words: FDI, industrialisation, infrastructure, insecurity, corruption

1 INTRODUCTION

One of the most important pointers to economic development is foreign direct investment hereafter known as FDI. It is considered as one of the major conduits of technology diffusion across borders since the inflow of foreign direct investment contains knowledge about new technologies and materials, production methods, or organizational management skills (Bodman and Le, 2013). It adds to investible resources, capital formation and increases total investment by attracting higher levels of domestic investment. In developing economies, there exists huge saving-investment gap which has led to the argument that external financing is very critical for sustained growth and development (Chenery and Strout, 1966).

Historically, Nigeria like many other economies in Africa has attracted some FDI over the years. According to the Central Bank of Nigeria (2009), the amount of FDI inflows into Nigeria reached US$2.23 billion in 2003 and rose to US$5.31 billion in 2004, this figure rose again to US$9.92 billion in 2005. The volume however decreased vaguely to US$9.44 billion in 2006. Until 2014, Nigeria was consistently ranked among the top three destinations for FDI in Africa. Total FDI inflows ranged between $5 and $7 billion per year, as investors targeted the oil and gas, real estate, communications, and consumer goods industries. When crude oil prices fell to about $45 per barrel, FDI to Nigeria fell by 34 percent from $4.7 billion in 2014 to $3.1 billion in
As at the third quarters of 2016, FDI had fallen by 52.54 percent to $340.64 million from $718 million in corresponding quarter of 2015. However, when compared with the FDI of second quarter of 2016, it rose by 84.84 per cent to $340.64 million from $184.3 million (Nwokpoku, 2016).

The total value of capital imported into Nigeria in the first quarter of 2017 was estimated to be $908.27 million. Although this was an increase of 27.75% relative to the same quarter of 2016, it was nevertheless 41.36% smaller than the value of capital imported in the previous quarter, and was the second lowest value recorded since 2007 (Business News Report, 2017). The second largest component of capital importation in the first quarter of 2017 was portfolio investment, which accounted for $313.61 million or 34.53% of the total. This represented growth of 10.34% relative to the previous quarter, and 15.71% relative to the same quarter of 2016. This was the only category to record both year on year and quarterly increases, and it was the first year on year increase since the third quarter of 2014 (Business News Report, 2017). The pattern of the inflows of FDI has often skewed towards extractive industries. This implies that the monumental rate of FDI inflow into Nigeria has been adduced to natural resources, although the size of the local market may also be a consideration (Asiedu, 2001). Ekpo (1997) found that fluctuation of FDI in Nigeria results from political regime, real income per capita, rate of inflation, world interest rate, credit rating, and debt service explained the variance of FDI inflows to Nigeria while Obadan (1982) noted that market size, trade policies and raw materials explains fluctuation of FDI in Nigeria.

FDI provides a means of transferring production technologies, skills, innovative capital and managerial as well as organizational capacities between locations (Obadan, 2017). It can be new equity capital, reinvested earnings, or net borrowing from a parent company or its affiliates. It is generally investment made to acquire a lasting interest and an effective voice in the management of an enterprise. According to the International Monetary Fund, IMF (2010b), many developing countries face shortages in domestic savings, trade imbalances and a foreign exchange crisis. The absence of foreign capital and the shortages of external financing are likely to put constraints on economic growth and development. Lin (2011) contends that FDI has helped to enhance technical equipment level of industries in China as well as promoted the improvement of China’s capability internationally to some degree.

Industrialisation is the process by which an economy is transformed from primarily agricultural to one based on the manufacturing of goods. Individual manual labour is often replaced by mechanized mass production, and craftsmen are replaced by assembly lines (Investopedia, undated). It is the period of social and economic change that transforms a human group from an agrarian society into an industrial society, involving the extensive re-organisation of an economy for the purpose of manufacturing (O’Sullivan, 2003). The industrial sector in Nigeria is made up of manufacturing, mining, and utilities. It accounts for about 6 percent of economic activities while the manufacturing sector contributed only 4 percent to gross domestic product in Nigeria in 2011 (Chete, et al, 2016).

The importance of FDI in industrialisation of any country cannot be overemphasized. Ceteris paribus, the relationship between both concepts is a direct one from FDI to industrialisation. According to Rainesh (1992), direct influences of the international environment on developing country’s industrialisation are felt through the inflow of foreign direct investment. The role of FDI in the industrialisation of developing countries is very important because unlike loans, FDI
can bring capital for development without repayment commitments. Furthermore, it is far more than mere capita; it is a uniquely potent bundle of capital, contacts, managerial and technological knowledge with potential spillover benefits for host country firms. In addition, unlike other forms of capital flows, FDI has proven to be resilient during crises (Dadush, Dasgupta and Ratha, 2000).

Despite plan after plan, industrial policies and investment policies have been renewed, fine-tuned and at times completely revamped, resources are abundant and investment opportunities are almost unlimited, Nigeria can still be said not to be industrially developed (Obioma, et al., 2015). For example, since independence in Nigeria, policy makers have attempted to provide different policies and programmes to drive industrialisation as manifested in the First National Development Plan (1962 – 1968), Second National Development Plan (1970-74) and the Third National Development Plan (1970-74). In the early 1970s, government introduced the Indigenization of Enterprises Operating in Nigeria Act of 1972 which resulted in an indigenization policy which was subsequently amended, repealed, and replaced by the Nigerian Enterprises Promotion Act of 1977. The policy encouraged among others widespread ownership of enterprises among Nigerian citizens and created opportunities for Nigerian indigenous businessmen.

The Structural Adjustment Programme (SAP) of 1986 was adopted, among others to promote the efficiency of Nigeria’s industrial sector by privatizing and commercializing state-owned enterprises. In year 2000, the Bank of Industry (BOI) was established as a development institution to promote industrial development through the provision of long-term loans, equity finances and technical assistance to industrial enterprises. Surprisingly, the results from these different policies on industrialisation have not been encouraging because of factors like policy summersault, lack of political will, corruption and insecurity through wanting destruction of properties and killings. Corruption is the misuse of public power by elected politician, appointed civil servant, Chief Executive Officers, Chief Finance Officers of companies, the notary public, the team leader at a workplace, administrators, among others for private gain.

The extent to which the other components of the industrial sector are effectively utilized is the degree of manufacturing (Kaldor, 1967). In 1960, the contribution of the manufacturing to GDP in Nigeria was 4.8 percent, increased to 7.2 percent in 1970 and to 7.4 percent in 1975. In 1980, it declined to 5.4 percent, but then surged to a record high of 10.7 percent in 1985. As at 1990, the share of manufacturing in GDP stood at 8.1 percent, fell to 7.9 percent in 1992; 6.7 percent in 1995 and fell further to 6.3 percent in 1997. As at 2001, the share of manufacturing in GDP decreased to 3.4 percent from 6.2 percent in 2000. However, it increased to 4.16 percent in 2011 which is less than what it was in 1960 (Central Bank of Nigeria, 2011). Contribution of Manufacturing to Nominal GDP was 8.34 percent in the fourth quarter of 2016, lower than the 9.09 percent recorded in the corresponding period of 2015, and 8.59 percent in the third quarter of 2016 (NBS, 2017). Compared countries like China; manufacturing sector contributes 34 percent to GDP in China, 30 percent in Malaysia, and 28 percent in Indonesia (Ogbu, 2012). Considering the importance attached to industrialisation in the economic growth of Nigeria, any problem militating against its achievement should be of interest to us (Dauda, 2006).

FDI can boost industrialisation and structural transformation of the Nigerian economy through technological transfers. It can help to engineer a structural shift to higher productivity jobs and
high-value added industry (Sutton, et al, 2016). In spite of the numerous efforts, FDI inflow into Nigeria has not reached the level for celebration (Obadan, 2017). Nigeria is richly endowed with many natural resources and has over the years, tried to attract capital inflow with numerous incentives and measures. However, the country has not been able to benefit much from foreign private investment flows in recent years, compared with other industrializing developing countries such as China (Obadan, 2017).

The much faster industrialisation of China, as compared to that of Europe or the USA, reflects in part the “stage skipping” phenomenon. While China still has a strong agricultural base, a large portion of its economic output has shifted to the industrial sector. It has constructed massive cities, built thousands of factories, retrained its labour force, and developed an efficient transportation infrastructure (Wojcik, 2017). This is made possible by the countries benefitting from the much more rapid diffusion of technologies by foreign firms and domestic efforts for acquisition of technology (Naudé, et al, 2013). It is therefore important to establish some lessons on FDI led industrial development of China.

The main purpose of this paper is to draw some lessons for Nigeria from FDI led industrialisation in China. Following the introduction, section 2 provides literature review while section 3 discusses the role of FDI in industrial development of Nigeria. Section 4 harps on the link between FDI China and that of Nigeria while section 5 discusses the challenges and lessons on FDI and industrialisation in Nigeria. Section 6 concludes and provides the recommendations.

2. LITERATURE REVIEW

The World Bank defines FDI as the net inflows of investment to acquire a lasting management interest (10% or more of voting stock) in an enterprise operating in an economy other than that of the investor. It is also the sum of equity capital, reinvestment of earnings, other long-term capital, and short-term capital as shown in the balance of payments. FDI can be the form of Greenfield investment or Brownfield investment. Greenfield investments occur when a parent company or government begins a new venture by constructing new facilities in a country outside of where the company is headquartered. On the other hand, Brownfield investments occur when an entity purchases an existing facility to begin new production (Investopedia, 2017).

Lucas (1988) noted that FDI spurs long-run growth through such variables as research and development (R&D) and human capital. Development of human capital is a major factor that can lead to industrial growth through research and development. International environment represents both constraints on and opportunities for the expansion of developing economies’ industrial production (Rajnesh, 1992). This direct influence of the international environment on the manufacturing sector of the developing economies is felt through the inflow of foreign private investment (Adejumo, 2013). The 1999 World Investment Report (UNCTAD, 1999a) noted that FDI provides financial resources and also contribute to the upgrading of both managerial and technological effectiveness hence may trigger industrialisation in developing countries. UNCTAD (2000) posited that FDI contributes to economic and industrial growth through technology transfer with the multinational firms transferring technology either directly to their foreign owned enterprises or indirectly to domestically owned and controlled firms in the host country. Ayanwale and Bamire (2001) assessed the influence of FDI on firm level productivity in Nigeria and report a positive spill-over of foreign firms on domestic firms’
productivity. Carkovic and Levine (2002) noted that the economic rationale for offering special incentives to attract FDI frequently derives from the belief that foreign investment produces externalities in the form of technology transfers and spill-over.

Keller (2003) explained that FDI contributes to total factor productivity and income growth in host economies over and above what domestic investments would trigger in an economy. The study found that policies that promote indigenous technological capability, such as education, technical training, and Research and Development, increase the aggregate rate of technology transfer from FDI which are important prerequisites for positive FDI. According to Okafor, et al, (2016), this would reduce the technology gap that exists between developed and developing economies. De Gregorio (2003) was of the opinion that FDI may allow a country to bring in technologies and knowledge that are not readily available to domestic enterprises and in this way increases their productivity throughout the economy. FDI may also bring expertise that the country does not possess and the foreign investors may have access to global markets. In fact, he found out that FDI is three times more efficient than domestic investment.

Ikiara (2003) noted that foreign firms may allow local firms to appropriate its technology if forein firm is guaranted access into some of the benefits available in the host country such as access to valuable local technology and possibility of receiving commercial advantages. According to Khan (2007), technological change can be stimulated through the technological transfers and the absorption of know-how which in turn enhances the competition process. Employee training, licensing agreements and imitation can be used to achieve this. Lin (2008) considered the developing countries’ perspectives on the role of FDI in telecommunication industries. The author concludes that additional investment in telecommunications from abroad should bring technology transfer, more abundant capital, and increased market competition, which should benefit national telecommunications development. Introducing foreign investment into developing countries, a workable local telecommunication infrastructure and universal access can be more easily reached. Furthermore, increased foreign investment and privatization in telecommunication markets will result in substantial progress in meeting developing countries’ basic telecommunications requirements.

Djeri-wake (2009) used time-series and panel data from 1990 to 2007. They found that in the short run, bilateral trade can enhance Nigeria economic growth if the policy priority for Nigeria is to make sure that FDI inflows from China and its trade relationship with China can exert the reinforcing and beneficial effects on gross domestic product and exports through active acquisition of advanced technology and open trade regime. Bilateral or multilateral cooperation among trading nations necessitate the introduction of innovative ways of doing things, and products innovation by overseas firms which in turn lead to industrial development of any country (Wan, 2010). The existing stock of knowledge of the host country can also be vastly promoted, which will go a long way in accelerating industrial growth and development. Subair and Salihu (2011) harped on foreign direct investment and development of small and medium scale enterprises in Nigeria. They used the ordinary least squares estimation technique and found that FDI contributed negatively to the development of small and medium scale enterprises in Nigeria through multinational companies.

Adejumo (2013) considered foreign direct investments and manufacturing sector performance in Nigeria using data from 1970 to 2009, it was discovered that in the long-run, foreign direct
investments have a negative effect on the manufacturing sub-sector in Nigeria. De Gregorio (2003) noted that FDI may allow a country to bring in technology and knowledge that are not readily available to domestic investors and in this way increase productivity growth throughout the economy.

Through technological transfer to their affiliates and technological spill-over to unaffiliated firms in the host economy, foreign companies can speed up the development of new intermediate product varieties, raise product quality, facilitate international collaboration on R&D, and introduce new forms of human capital (Okafor, et al. 2016).

The theoretical linkage between FDI and industrialisation can be discussed using Puga and Venables (1999) theory that abstract from the notion of comparative advantage (Søreide, 2001). With respect to FDI industrial linkage, Puga and Venables (1999) discussed the linkage and wage effects of moving manufacturing firm from one country to another. They noted that industrialisation of one country is interplay with countries exhibiting different levels of industrialisation. They explained the forces that are conducive to the stepwise spread of industries from one country to another. Such forces according to them are differences in the initial level of industrialisation and in the need to demand manufactured goods. Most industries would like to produce in low wage countries (wage effect), though, may be less profitable in the short run because of the movement of intermediate inputs and transport costs barriers. Agglomerated production in one country may generate externality in another country (linkage effect) with low wage.

FDI can be profitable when the wage effect exceeds the linkage effect (Puga and Venables, 1999). Furthermore, the returns from FDI depend on local demand for industrial produced goods, consumer goods as well as intermediates. This implies that in the short run the low profit in the new country of location (say, country B) will become large in the long run due to industrialisation brought from the other country (say, country A). Industrialisation of the later country (country B) due to the presence of some manufacturing, backward and forward linkages that are created narrows the wage gap between the countries as they become more similar in terms of economic growth through industrialisation.

3. THE ROLE OF FDI IN INDUSTRIAL DEVELOPMENT OF NIGERIA

FDI is regarded as the catalysts for industrial development. The Ownership-Location-Internalization paradigm developed by Dunning (1977), also known as the eclectic paradigm or the eclectic theory explains the rationales for the patterns of FDI. These are the three potential sources of advantage that may underlie a firm’s decision to become a multinational. Ownership advantages address the question of why some firms go abroad, and suggest that a successful multinational enterprise has some firm-specific advantages which allow it to overcome the costs of operating in a foreign country. Location advantages focus on the question of where a multinational enterprise chooses to locate while internalization advantages influence how a firm chooses to operate in a foreign country (Neary, undated). On the other hand, the neoclassical international trade model hypothesizes that free trade promotes industrial development and reduces regional disparity. Since the past thirty years, a remarkable trend in the world economy has been increasing global economic integration as a result of the rising wave of foreign direct investment (Adejumo, 2013).
FDI can compliment local industries and may stimulate development in the host countries. According to Markusen and Venables (1997), one of such developmental gains is the creation of technological externalities, knowledge spill-overs or demonstration effects for the local industries. Furthermore, FDI can change the structure of imperfectly competitive industries. For example, FDI can change the supplies and demands in related industries as well as creates room for additional competition among local industries. This is because; competition in one sector can lead to same in other sectors. This can be through price reduction and forward linkages to customers. In addition, FDI can lead to additional demands for local output as such output may lead to backward linkages which can strengthen supply industries which in turn feeds other local industries through forward linkages. Furthermore, FDI inflow may contribute to the upgrading of both managerial and technological effectiveness and improve human capital as this may trigger industrialisation in developing countries (Søreide, 2001).

FDI may affect industrial development in Nigeria in the following ways: It leads to technological transfer that may lead to industrial development. Technology has been the major driver of economic and industrial growth globally. However, most developing nations are yet to nurture the technical capabilities resident in them to develop and maintain technologies they require to make living conducive for their citizenry (Ogbaudu, 2017). In the 1970s, Nigeria’s technology industry was largely dominated by foreign companies. To counter this trend, the government established the National Office for Technology Acquisition and Promotion (NOTAP) in 1979. The aim was to regulate the inflow of foreign technology into Nigeria, through putting in place new policies which promote the establishment and growth of local software and innovation firms (Emeka, 2014).

Out of seven OECD countries that account for 90 percent of all expenditure on research and development (R&D), the United States alone accounted for as much as 40 percent (UNCTAD, 1999a) as documented in Søreide (2001). These inventions are transferred to other countries through different channels. Søreide (2001) noted that the transfer of and adoption of new technology is one of the important ways FDI can help to develop the industries of other countries. In Nigeria, FDI has helped in the growth of the telecommunication industries. FDI on telecommunications comprises of the ability to establish a commercial presence in Nigerian territory, or the purchase of telephone companies by foreign investors. It could also be joint ventures between Nigerians and foreign partners to establish new telecommunication service companies. For increasing the proportion of foreign investment on telecommunication sectors, foreign capital is raised either through a share offering or the sale of a minority share to foreign partners.

Since the deregulation of the telecommunication industries in Nigeria, there are increasing numbers of opportunities for foreign investors to establish foreign subsidiaries or to combine with others in joint ventures. For example, according to the National Bureau of Statistics, NBS (2016), in real terms, the telecommunications sector contributed 1,411.74 billion to GDP in the first quarter of 2016, or 8.83%, an increase of 0.5% points relative to the same quarter of the previous year. The industry has remained as the major driver of innovation and technological transfer to Nigeria.

Furthermore, FDI can serve to integrate domestic industries into the global economic system far more effectively than could have been achieved only by traditional industry flows. The benefits from FDI will be enhanced in an open investment environment among industrialists with a
democratic trade and investment regime, active competition policies, macroeconomic stability and privatization and deregulation. Under such conditions, FDI can play a key role in improving the capacity of Nigeria industrialists to correspond to global economic integration and future national developmental strategies. However, in practice, the greater the openness and freedom toward FDI, the more economic reforms and potential benefits that receiving FDI brings not only new technology and developmental funds to industries; it also brings innovation and competition for industrialists. These positive effects promote the capacity of Nigeria industries and benefit the formation of “world industrial village.”

FDI can help to improved competition among industries. According to Dunning (1993), foreign affiliates established by multinational companies generally have firm-specific advantages that enable them to compete successfully with local companies despite the superior knowledge of locals, markets and culture. Such multinational companies are often characterised by product differentiation and advanced technology. The entry of multinational companies to the local industries may therefore provoke local industries to protect their profits by increased productivity and quality of their products. This will make the local industries to efficiently explore existing technology and resources by copying the technology used by the multinational companies.

Local industries that are affiliated to multinational companies may on the long run begin to produce quality products, security and labour rights the way the multinational does known as demonstration effects. According to Blomström and Kokko (1997), multinational affiliates lead to diffusion of technology as it demonstrates the existence and profitability of new products and processes.

4. FDI BETWEEN CHINA AND NIGERIA

China has quickly become Africa's single largest trading partner. In just over a decade, merchandise trade increased almost twenty-fold, from about US$10.5 billion in 2000 to more than US$200 billion in 2012 (International Centre for Trade and Sustainable Development, 2013). FDI from China to Africa of which Nigeria is a key beneficiary has brought in much needed capital, along with technology and managerial know-how to enhance the production and skills capacities in the country (Izuchukwu and Ofori, 2014). From less than USD 2 billion in 2000, trade between China and Nigeria reached nearly US$18 billion just ten years later. Between 2003 and 2009, Nigeria was a top destination for Chinese FDI on the continent, second only to South Africa (Egbula and Zheng, 2011). Some of the major Chinese companies in Nigeria are as shown in Table 1:
Table 1: Some Major Chinese Companies in Nigeria

<table>
<thead>
<tr>
<th>Companies</th>
<th>Sector of Activities</th>
<th>Assets (US$ billion)</th>
<th>Employees</th>
<th>Investment in Nigeria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sinopec</td>
<td>Oil and gas</td>
<td>152.80</td>
<td>373,375</td>
<td>Blocks OML 64,66, 29% stake and operating rights to block 2, Nigeria – Sao Tome Joint Development Zone</td>
</tr>
<tr>
<td>CNPC</td>
<td>Oil and gas</td>
<td>470.80</td>
<td>1.67 million (80,000 foreigners)</td>
<td>Licenses for OPL 471, 721, 732, 298</td>
</tr>
<tr>
<td>SEPCO</td>
<td>Electric power construction</td>
<td>38.60</td>
<td>19,756</td>
<td>Papalanto Power Plant</td>
</tr>
<tr>
<td>CCECC</td>
<td>Construction</td>
<td>2.17</td>
<td>70,000</td>
<td>Rehabilitation of Palalanto-Lagos expressway, Athletes’ village, Ikot Akpaden-Okoroette road, Lekki Free Trade Zone</td>
</tr>
<tr>
<td>CSCEC</td>
<td>Construction and real estate</td>
<td>58.90</td>
<td>121,500</td>
<td>Refinery</td>
</tr>
<tr>
<td>CNOON</td>
<td>Offshore oil and gas</td>
<td>13.8</td>
<td>21,000</td>
<td>45% interest in offshore exploitation licence, OML 130</td>
</tr>
<tr>
<td>Sinoma</td>
<td>Cement Engineering Construction</td>
<td>2.9</td>
<td>9,000</td>
<td>in collaboration with Nigeria Dangot Group for cement production line EPC project in 2008</td>
</tr>
<tr>
<td>CGC</td>
<td>Construction</td>
<td>0.30</td>
<td>-</td>
<td>Kebbi Airport, Water supply project in Gombe, Sakke Dam</td>
</tr>
<tr>
<td>Huawei</td>
<td>Telecom</td>
<td>25.00</td>
<td>51,000</td>
<td>Network, handsets</td>
</tr>
<tr>
<td>ZTE</td>
<td>Telecom</td>
<td>13.00</td>
<td>85,232</td>
<td>CDMA, handsets</td>
</tr>
</tbody>
</table>

Egbula & Zheng (2011, P. 10)

One of the major sources of FDI in Nigeria is China. China and Nigeria formally established bilateral relations in February 1971. According to Izuchukwu and Ofori (2014), the Nigerian-Chinese Chambers of Commerce was established in 1994, which paved way for China Civil Engineering Construction Corporation to win a US$529 million contract to rehabilitate the Nigerian railway system in 1995. Later, the former premier of China’s State Council, Li Ping visited Nigeria in 1997, signing protocols relating to power generation, steel and oil. Due to western nations sanction on Nigeria, during Sani Abacha’s regime, China Civil Engineering Construction Corporation was unable to complete the Nigerian railway project given to them.

Later in year 2000, tender award was given to China Civil Engineering Construction Corporation to build 5,000 housing units for athletes participating for the eighth annual All-African Games in Abuja, which were duly built. In 2001 the two countries signed an agreement on the establishment of Nigeria Trade Office in China, China Investment Development and Trade Promotion Centre in Nigeria. In 2006, the inter-governmental Nigeria-China investment Forum was established. It increased the growing number of Chinese companies in Nigeria projects. Chinese multinational companies won significant contracts in Nigeria, most especially in telecommunications, construction, transportation and power. By the end of 2008, according to
the Chinese Ministry of Commerce, the total volume of Chinese investment in Nigeria was about US$6 billion.

According to the United Nations Conference on Trade and Development, UNCTAD (2013) in its Global Investment Trends Monitor of 2013, Nigeria’s FDI declined by about 20 percent to US$5.5 billion, largely due to asset sales by foreign oil companies such as Royal Dutch Shell and Chevron. China has however maintained its trade with Nigeria, with bilateral trade volume between both countries rising to US$13 billion in 2012 from $2 billion in 2002. Aderigbigbe (2014) noted that Chinese Companies invested US$1.79bn in 2013. Djeri-wake (2009) noted that according to the China Customs, the bilateral trade volume between China and Nigeria in 2006 reached US$3.13 billion, up by 10.6, from 2000 to 2006, among which China’s export to Nigeria was US$2.85 billion, up by 23.9, while China’s import from Nigeria was US$280 million, down by 47.3. China had a surplus of US$2.57 billion. China mainly exported motorcycles, machinery equipment, auto parts, rubber tires, chemical products, textiles and garments, footwear, cement, among others.

As at 2003, FDI from China was worth US$3 billion while China’s direct investment in Nigeria is reported to be now worth about US$10 billion. In 2013, the Chinese government has invested US$1.1 billion in Nigeria’s infrastructure, in the form of low-interest loans (Izuchukwu and Ofori, 2014). The loans was to be used for the construction of four airport terminals in the country and a light-rail line in the capital city Abuja, with an additional US$1.7 billion contract that the Chinese companies won to construct road in the country. However, the question is, why is China investing so heavily in Nigeria? Analyst has argued to the fact that the country is one of the largest oil-producing countries in the world and statistics has shown that oil and gas sector receives 75 percent of China’s FDI in Nigeria. China is investing in raw material deposits overseas, and is multiplying its trading partnerships in order to secure regular supplies (Lafargue, 2005). Some bilateral Trade agreement between Nigeria and China can be summarized as below:

Table 2: Major Agreement between China and Nigeria 2001 - 2010

<table>
<thead>
<tr>
<th>Year</th>
<th>Type of Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>Agreement on Trade, Investment Promotion and Protection.</td>
</tr>
<tr>
<td>2002</td>
<td>Agreement for the Avoidance of Double Taxation and Prevention of Fiscal Evasion with respect to Tax on Income.</td>
</tr>
<tr>
<td>2002</td>
<td>Agreement on Tourism Co-operation</td>
</tr>
<tr>
<td>2002</td>
<td>Agreement on Co-operation on strengthening management of Narcotic Drugs, Psychotropic Substance and Diversion of Precursor Chemical.</td>
</tr>
<tr>
<td>2002</td>
<td>Agreement on Consular Affairs</td>
</tr>
<tr>
<td>2003</td>
<td>Agreement of South-South Co-operation among China, Nigeria and FAO.</td>
</tr>
<tr>
<td>2006</td>
<td>Memorandum of understanding on Strategic Partnership.</td>
</tr>
<tr>
<td>2009</td>
<td>Agreement against fake products exported to Nigeria from China</td>
</tr>
<tr>
<td>2009</td>
<td>Memorandum of understanding on promotion between Ogun State of Nigeria and Zhejiang Province of China.</td>
</tr>
<tr>
<td>2010</td>
<td>Memorandum of understanding on Peace Co-operation</td>
</tr>
</tbody>
</table>

Egbula and Zheng (2011, P. 4)
After reforms in China, the country opened their economy to the outside world and developed a light industry along with heavy industry, and moreover, attracted and utilized foreign investment actively to create a miracle of economic growth. In the early 1990s in China, light industry, especially the textile industry, developed at a high speed. This ends the era of shortages of products with the overall strength enhancement of high-tech industry. China’s manufacturing industry in the aggregate ranks third of the world, just after the United States and Japan.

As part of industrialisation process in China, companies owned collectively by villages could produce goods they saw as desirable, rather than products and amounts dictated by the government. This leads to a 32% increase in GDP over the span of ten years, and dramatically increased rural wages (Wen, 2016). China began to invest heavily in infrastructure to support this massive economic shift, building 2.6 million miles of public roads and developing a massive high-speed railway system (Wen, 2016).

China’s energy infrastructure was not developed to meet the high demand of factories that were built. It uses about twice as much energy as developed countries to accomplish the same tasks, demonstrating the extent to which new investments were needed to decrease energy usage (Dong, et al., 1998). While China has a large variety of natural energy resources within their territories, the lack of infrastructure and high demand has led them to acquire energy from abroad. While China is the world’s largest oil importer as well as a heavy investor in internal oil exploration, the primary form of energy used in the country is coal. “China is the world’s top coal producer, consumer, and importer, and accounts for almost half of global coal consumption.” (U.S. Energy Information Administration, 2015).

This heavy reliance on coal is because; it is historically the most commonly available form of energy in China. Coal is cheap and a readily available resource that can be used in both industrial energy production and by small households. During the winter, there is significant portion of coal usage in China, especially in more remote provinces where infrastructures are not as developed (Shambaugh, 2016).

In order to improve the competitiveness of China’s local enterprises and enhance the strength of its industries, Chinese government exerts the power of industrial policies to protect and favour its infant industries. Linden (2004) noted that government intervention played a positive role in promoting economic growth in the high-performing economies of East Asia. Li and Zheng (1993) summarized the characteristics of industrialisation during this period as the industrialisation revolution aimed at optimizing economic structure, improving economic growth and achieving people’s prosperity.

According to Wojcik (2017), openness to the international economy has consistently served as important drivers of Chinese industry’s global rise. Wojcik (2017) further noted that openness is important because it allows new technology and know-how through foreign direct investment (FDI), imports of intermediates and capital equipment, and the movement of people and ideas. Deepening of industrial capabilities became possible through multiple channels like domestic and overseas education, accumulation of production and marketing experience, increasing domestic R&D outlays, learning from large-scale as well as inward and outbound FDI.
The country adopted the strategy of balanced development in agriculture, light industry as well as heavy industry. Various kinds of economic ownership employed foreign capital were actively used. Six areas of priorities were focused on, that is, policy promoted the development of light industry: light industry have priorities for supply of raw materials, fuel and electricity, priorities for innovation and transformation, priorities for investment in infrastructure, priorities for mortgage, priorities for foreign exchange and importing technology, and priorities for transportation.

The second phase began from mid and late 1990s. The basic characteristic of this stage was that heavy industry grew at a fast rate and it once again dominated the pattern. After the adjustment of industrial structure, light industry took off and expanded fast. After people’s basic needs such as food and clothes have been satisfied, they begin to pursue other durable consuming goods, for instance, cars and houses (Chen, et al. 2006). More importantly, the entry of a large number of foreign capitals and rapid expansion of China’s foreign trade has provided new sources of funding, technology, channels and market space for China's industrial development. The Chinese industries grew because of the attraction of FDI.

With respect to FDI, China gradually opened the door to the outside world and started to attract foreign capitals after which the inward FDI of China increased rapidly. OECD (2000) noted that China has replaced the US to be the largest FDI. The inflow of FDI expands China’s domestic investment scale and pushes the high-speed of GDP growth. It induced innovation via exporting and importing of technology, exploring of new products and adopting of advanced management methods. FDI not only solved the capital problem for host country, but also provides the host country an opportunity to access new technology.

According to Peng (2010), China adopted different means to attract more FDI. First is approval of improvement in a variety of investment incentives and preferential policies. These include favoured tax rate, preferential duty-free period as well as preferential tariff concession and tax rebate to foreign investors. Furthermore, the increase of international investment agreements offered a high-quality external environment and rational mechanism.

In 1985, Chinese government carried out reform regarding to science and technology system (Chen and Shi, 2005). According to the reform announcement, government increased the funding to support research and development. The source of funds varied in line with the type of research and areas. And government including central and local intended to establish institutions and organizations to provide assistance for researchers and research and development activities. China increase investment in science and technology in the late 1990s. With the improvement, according to Motohashi (2005), China is a country that easily attracted cheap but high quality human resource in science and technology.

5. CHALLENGES AND LESSONS ON FDI AND INDUSTRIALISATION IN NIGERIA

5.1 Challenges to FDI and Industrialisation in Nigeria
Foreign firms in Nigeria have been criticized for being “closed” as they hardly employ local experts. Where they employ locals, they are treated like slaves in closed environments with meagre wages or salaries. For examples, the conditions of employment of Nigerians in Chinese
firms neither conform with the Nigeria Labour Laws nor to that of the International Labour Organization (Izuchukwu & Ofori, 2014). In September 2002, about 40 Nigerians were trapped in a Chinese factory in Lagos that was gutted by fire as a result of the locked up of the building factory by a foreman. No compensation was given to the victims or their family members. This would mean that the alleged technology transfer from Chinese FDI is insignificant because most of the Chinese firms bring into the country finished products and complete equipment with Chinese technicians (Izuchukwu and Ofori, 2014). In 2015, a Chinese company, Hongxing steel company limited, liquefied iron bathed some Nigerians that work in the company in September, 2015 and no adequate compensation was made to the family (Yusuf, Undated).

In Nigeria, most investments by Chinese are in the important sectors of the economy, particularly telecommunications, manufacturing, electricity, and even in oil and gas. Though, there are reservations about the activities of Chinese investors particularly the ones that are engaged in manufacturing. Some of them through the collaboration of some Nigerians involve in sharp practices like importation of sub-standard products that has flooded the Nigerian markets and the exploitation of tariff concessions, in dumping cheap goods in the market and stifle competition.

Furthermore, the massive influx of Chinese FDI into the country to produce goods and services at cheaper prices and the importation of cheap products from China would enhance the welfare of Nigerians negatively. Besides, given that Nigerian manufacturing firms are not competitive, influx of Chinese FDI into Nigeria to produce goods and services may lead to closure of most domestic competing firms, with adverse employment effect particularly where Chinese firms are fond of bringing in workers from their country. Also, the fact that Chinese firms in Nigeria bring in inputs from their own country and set up their own market outlets implies that there may not be major backward and forward linkages between Nigerian and Chinese firms (Izuchukwu and Ofori, 2014).

FDI brings in capital which also leads to a stream of outflows of profits and other investment income. This outflow of profit increases overtime as the stock of foreign investment rises. FDI can also reduce the number of locally-owned firms, either by takeover or because such firms are not able to compete with the greater resources of FDI.

Obadan (2017) identified the following challenges of FDI in Nigeria: Hash regulatory environment for economic and social activities which is due for reforms and improvement. Until the deregulation era, occasioned by the implementation of liberal structural adjustment policies, many rules and regulations tended to discourage foreign investment. The level of competitiveness of the Nigerian economy has tended to decline over time and, in comparative terms; the country is one of the least competitive economies in Africa. The 2014 – 15 rankings showed that out of the 144 countries surveyed, Nigeria was ranked 127, moving down seven positions from its 120th position in 2013. Since 2003 when the annual global competitive rankings began, Nigeria has always, except 2009, remained in the bottom quartile of the rankings.

The insecurity situation in the country continues to worsen since last year. Insecurity is the state of being open to danger or threat; lack of protection. There are crises in almost everywhere in Nigeria, with people dying and properties being lost. Nigeria was ranked the 13th least stable
country in the world on the Fragile States Index, FSI, released by the Washington DC-based think-tank, Fund for Peace, FFP (Olorunyomi, 2017). Security has several dimensions; in the context of this paper refers to freedom from, or resilience against, potential harm (or other unwanted coercive change). Additionally, Nigeria receives poor assessments for its infrastructure (130th) as well as its health and primary education levels (142nd). Furthermore, the country is not harnessing the latest technologies for productivity enhancements, as shown by its low rates of ICT penetration.

With respect to industrialisation, major challenges include:
Infrastructure like road networks, energy, water and railways system that are not linked to most productive communities are in poor state. For example, energy supply is insufficient and unstable while water supply is inadequate to cope with surging demand from both domestic and industrial consumers. A major constraint to industrial development is poor electricity generation and distribution. Industry operators have groaned for a long time because of the inadequate and epileptic power supply. Today the government celebrates power generation of 4,500 MW and actual availability of less than 2,500 MW. Huge sums of money have allegedly been spent. Yet, the nation is continuously in darkness. There is overdependence of foreign technology which in some cases is provided through foreign purchase or via FDI. Most of the technology and machines used by local manufacturers in Nigeria are imported from other countries and are very expensive, because of foreign exchange fluctuations. This hinders potential industrialists from venturing into production.

Furthermore, most of the raw materials used are imported and even if sorted locally are not enough due to among others the poor state of our agricultural sector. The amount of raw materials produced by the sector for the manufacturing sector is not enough to support massive industrial production. Thus, the manufacturers depend largely on foreign raw materials for production. This hinders industrialisation in the country.

Even with FDI, most goods produced by our industrialist for Nigerian use are sub-standard. Hence, consumers still have more confidence on foreign products than home made goods. There are also the problems of illiteracy and inadequate skilled manpower. This problem is worsened by the lack of adequate technical education in our secondary schools, polytechnics and universities. Thus, skilled manpower required for high industrial growth is grossly inadequate in Nigeria.

Another problem of industrial development as well as FDI into Nigeria is frequent changes in government policies and incessant insurgencies. This has been a bane to industrialisation, development and FDI in Nigeria. The Niger delta militants and of recent the Boko Haram group have continuously hindered economic activities and discourages local and foreign investors from investing in Nigeria.

Corruption is a form of dishonest or unethical conduct by a person entrusted with a position of authority, often to acquire personal benefit. It may include many activities including bribery and embezzlement and nepotism. Nigeria ranks very high in the Corruption Perception Index. According to Chete, et al, (2016), this has implication for investment and FDI flows into the country. The authors noted that anti-corruption policies implemented in Nigeria have been targeted at enforcement measures rather than addressing the root causes. The root causes of corruption in Nigeria have been identified to include social insecurity and over-centralization of
resources at the centre. Even though there are suitable laws and viable institutions to fight corruption in Nigeria, one of the challenges is formulation of strategic plans of action to deal with the primary causes of corruption.

**Vaccaro (undated) and Brandt, et al, (2016) summarize the problems of industrialisation as below:**

Widespread poverty and unemployment means people cannot afford to go to school to become skilled workers
- i. High inflation levels make it difficult, if not impossible, for manufacturers to make effective profit margins
- ii. Lack of adequate and quality education across, including inadequate trained in technical and commercial fields.
- iii. Poor infrastructure like roads and rail linkages prevent businesses from growing and reaching wider markets
- iv. Inadequate funding for education and development to train up new employees
- v. Lack of support for local businesses by government
- vi. Collapse of the global oil markets in 1980 stalled economic growth in Nigeria
- vii. Not a lot of support for manufacturing industry due to unfair tax system
- viii. Problems with security make it difficult for some foreign businesses to invest in Nigerian companies

**5.2 Lesson to be Learnt**

Industrialisation in China since the last 150 years has been an ongoing process through which firms acquired and deepened manufacturing capabilities (O’Rourke and Williamson, 2017). Openness to the international economy through FDI is the major factor that has been consistently important to this process. In addition, most industries gradually shifted from labour intensive production to capital-intensive products and processes. China’s transformation and industrialisation has been impressive compared to some developing nations of Africa (Brandt, et al, 2016). Though, it may not be easy for Nigeria to go the Chinese ways as regards industrialisation and FDI due to corruption and differences in economics and politics, the following lessons from China are vital.

When China decided to pursue industrialisation, it first adopted the Soviet model and then turned towards self-developed approaches (Peng, 2010). Why can Nigeria not do the same? Improving foreign trade and attracting foreign direct investment played significant role in promoting China’s reform and development. China’s foreign economic relations are also out of control to a certain degree, which may cause negative impact on the economic stability and healthy development of industrialisation (Peng, 2010).

Over dependence of imports by Chinese government made them to put up several anti dumping policies to protect infant industries.

It is also important to conduct structural transition and get a more rational division of resources. For example, in the process of Japanese industrialisation, it upgraded and benefited industrial structure continually. It started with light industry like textile in the 1950s and then it moved to coal and steel in the early 1960s, machinery and fiber in the late 1960s. After that, automobile occupied, which was followed by computer and high-tech productivities. They also took the
foreign economic policy as a basic means to implement national industry policy and macro-economic policy.

Companies that were collectively owned by communities produced only goods that they found important rather than what government needed. China also invested heavily in public roads and developed a massive high-speed railway system which helped in the haulage of goods from one location to another. As substitute for energy supply shortages, the country developed alternative energy supply using coal which was relatively cheap while the difference was imported. Expansion of industrial capabilities expanded through channels like domestic and overseas education and increasing domestic R&D outlays.

6. CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion
China’s transformation and industrialisation have been impressive. To conclude, the paper attempted to draw some lessons from China on FDI led industrialisation in Nigeria. The paper discussed the roles of FDI in industrial development of Nigeria; the lessons that Nigeria learned from the FDI led industrialisation from China and the challenges to industrialisation and FDI in Nigeria. Major problem of FDI and industrialisation in Nigeria are energy problem and poor road network. For example, energy problem in China was solved by using alternative energy supply like coal which is very cheap in China. Also, the country invested massively on roads and railways to meet the demands while good produced by the locals were according to the ones desired not as needed by government. Over dependence of imports by Chinese government made them to put up several anti dumping policies to protect infant industries.

A major problem of FDI is that if not controlled can crowd out local industries through the production of sophisticated products which the local industries may not have the incentive to produce.

Nigeria government should adopt Chinese model in the pursuit of industrialisation before becoming self developed just like the Chinese government first adopted the Soviet model before they turned towards self-developed approaches. Furthermore, companies that are collectively or individually should produce only goods that they found important rather than what is needed by government as done in China. Also like the Chinese government, heavy investment in public roads and development of a massive high-speed railway system which can help in the haulage of goods from one location to another should be the priority of the Nigerian government if industrialisation is to thrive. As substitute for energy supply shortages, the Chinese government developed alternative energy supply using coal which was relatively cheap while the difference was imported. According to Ewepu (2016), Nigeria has coal deposits in 18 states out of 36 state of the federation. He noted that experts estimated that the coal in Nigeria can last for 200 years. He further noted that electricity from coal is very cheap compared to hydro, gas or solar. This implies that if Nigeria builds coal-fired power plants, electricity would become cheaper for all categories of consumers and further spur industrialisation.

6.2. Recommendations
China that over dependent on import for economic development and industrial growth had to put up several anti–dumping policies to protect infant industries. Country like Japan put incentives in
place to stimulate domestic consumption using regulatory agencies. Nigeria government can also strongly protect infant industries by checking the second hand goods that are imported into the countries because some people are of the opinion that they are better than home made goods. They should be up to their task to fight against fake products in circulation and the market in particular. Serious sanctions should be placed on anyone found guilty in this regard.

With respect to domestic investment, overcapacity within industries is a huge problem for Nigeria. Due to a large potential domestic market and cheapest human resource, Nigeria might solve the problem by enlarging the domestic market by government using series of conducive economic policies. Of course, it does not mean developing blindly, but means to make clear policy to protect and nurse national industries as soon as possible.

Japanese government took the foreign economic policy as a basic means to implement national industry policy and macro-economic policy. It is good for Nigeria to learn from this experience. Strengthen the overall balance of foreign policy and prevent the divergence of domestic policy can better off domestic economic development and promote the progress of industrialisation. It is also important to strengthen monitoring system and control some macroeconomic variables when introducing foreign investment. It is necessary to enhance operation and management on activities of multinational companies in Nigeria. Over dependence on foreign capital is not a fundamental solution to technology gap. Furthermore, when working to attract FDI, encouragement of capital outflow should not be ignored.

FDI is good for industrial development, the country’ FDI should be done with caution in such a way that it does not crow out the local industries. Nigeria in this regard can borrow the Japanese model. Studying and learning from the Japanese experience, further improving the industrial policy and foreign economic policy, protecting and nursing national infant industries is imperative.

It is also important to conduct structural transition and get a more rational division of resources. For example, in the process of Japanese industrialisation, it upgraded and benefited industrial structure continually. It started with light industry like textile in the 1950s and then it moved to coal and steel in the early 1960s, machinery and fiber in the late 1960s. After that, automobile occupied, which was followed by computer and high-tech productivities. Although Nigeria may have made giant stride in improving industrialisation, there is need to encourage the development of high-tech industries which can be achieved through the increase in expenditure on research and development.

Finally, to attract more FDI to Nigeria, sound macroeconomic policies, reflecting low inflation, low fiscal deficits, stable exchange rate, and high and sustainable economic growth should be maintained. This would help to maintain sound macroeconomic stability and investors’ confidence. Furthermore, there should be significant improvement in the investment climate to have in such a way that there sound macroeconomic stability and consistent policies is achieved. In addition, there should be transparent rules and regulations, political stability, adequate infrastructure, particularly energy road, rail and water. Most important, there should be security of lives and property as well as non-politicisation of corruption fight.
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