EFFECT OF INTERNATIONAL JOINT VENTURES ON THE GROWTH OF NIGERIA ECONOMY

Ugwuegbu Charles, Agbwumba Adolphus, Onwudiwe Uju and Opara Darlington

ABSTRACT
The study investigated the effect of IJV on the growth of the Nigeria economy. The study identified factors like infrastructural decay, poor funding and insecurity as factors affecting the economic growth of the nation. The study also looked at investment opportunities in the non-oil sector which can be harnessed through IJV. In testing if IJV has improved the economy, the study adopted the T-Test statistic and multiple regression analysis. The result showed that there was a statistical difference in the post IJV on GDP and pre IJV on GDP. The regression analysis result reviewed that sectors that have witnessed IJV have contributed significantly to the growth of the economy. The study therefore recommends that infrastructural decay should be paid attention to, for it is a factor that hinders growth and attracts foreign direct investment. Also the non-oil sectors have potential for growth which can be harnessed through JV.

1.0 INTRODUCTION
The growth of a nation’s economy depends on the contribution of some strategic sectors like the oil & gas, construction, health, agriculture, food & beverages etc. These sectors of the economy contribute greatly to the GDP of any nation. According to Wikipedia, an international joint venture (IJV) occurs when two businesses based in two or more countries form a partnership. A company that wants to explore international trade without taking on the full responsibilities of cross-border business transactions has the option of forming a joint venture with a foreign partner. International investors entering into a joint venture minimize the risk that comes with an outright acquisition of a business. IJVs aid companies to form strategic alliances, which allow them to gain competitive advantage through access to a partner’s resources, including markets, technologies, capital and people. International joint ventures are viewed as a practical vehicle for knowledge transfer, such as technology transfer, from multinational expertise to local companies, and such knowledge transfer can contribute to the performance improvement of local companies and improve their economy. Within IJVs one or more of
the parties is located where the operations of the IJV take place and also involve a local and foreign company.

Joint venture in Nigeria has been more pronounced in the upstream and downstream sector due to the importance of the sector to the Nigeria economy. The quest for economic growth has led to JV where the Nigeria government through NNPC entered into joint venture with International Oil Companies (IOC) operating in the country. The parties are; Shell, Chevron, Mobil, Agip, ELF, Taxaco etc. In the agreement, NNPC holds 55% equity share, Shell Petroleum Development Company of Nigeria Limited (SPDC) holds (30%), ELF (10%) and AGIP (5%). For Chevron, NNPC holds 60% and the remaining 40% goes to Chevron Nigeria Limited. Between Mobil and NNPC is 40%:60%, for AGIP, NNPC holds 60%, AGIP 20% and Philip Petroleum 20%. Between ELF and NNPC is 40%:60%. For Texaco Petroleum Company of Nigeria unlimited, NNPC holds 60%, Texaco 20% and Chevron 20% (Business News, 2017).

The health sector also witnessed a joint venture between the FG and May & Baker (M&B) for the production of Vaccines for mothers and children. In the agreement, FG through the Federal Ministry of Health will hold 49% stake representing N1.2b equity contribution while M&B contributes 1.3b as equity representing 51%. (Daily Trust, 2017). The JV will reduce the importation of vaccines into the country which has great benefits to the economy. In 2015, FG entered into Join Venture with China Railway Construction Corporation (CRCC) to construct a rail line in Kano at the sum of $1.85 billion. The rail, with a total length of 74.3 kilometres, is expected to travel at a speed of 100 kilometres per hour. It is believed when completed, will boost economic activities.

There are many challenges rocking JV in Nigeria, one of which is the ability of partners to honour the obligations in the contract. Before the new implemented funding mechanism framework by FG through the NNPC with IOCs, poor funding threatened NNPC joint venture. As at 2015, NNPC was unable to pay $5b (N100M) as cash call to its joint partners (Shell, Chevron, Agip, ELF, Texaco etc.) due to fall in oil revenue (Business News, 2017). The inability to settle its debt affected projects meant to ramp up production from existing fields. The question that this study seeks to answer is; will the FG through her agencies be able to honour and fulfil its responsibilities and roles in the various JV entered into like that of May & Baker, CRCC, IOCs etc.? For it is when both parties play their roles that its benefits (JV) will be felt in the economy. Another challenge is that the growth of the Nigeria economy depends not on the oil sector alone but the non-oil sector, particularly construction, hotels, telecommunications wholesale/retail trade etc. Corruption and mismanagement have hindered the growth of the non-oil sector because money gotten from the oil sector has not been invested in the non-oil sector. These
sectors are yet to get the attention of International Joint Venture. Based on this background, this study seeks to know if there exist investment opportunities in these sectors. Economic growth of any nation also lies in the power sector. In 2009-2013, Nigeria witnessed an exodus of many Multinational firms closed their plants and relocating their production to nations that have steady power supply.

The general objective of this study is to examine the effects of International Joint Venture (IJV) on the Growth of Nigeria Economy. The specific of objectives are to: ex-ray the contribution of various sectors that have witnessed JV to the Nigeria economy, analyze IJV and investment opportunities in the non-oil sector and to make necessary recommendation to policy makers as to area of the economy that needs IJV.

LITERATURE REVIEW

2.1 NIGERIA ECONOMIC GROWTH

Between 2006 and 2016, Nigeria’s GDP grew at an average rate of 5.7 percent per year, as volatile oil prices drove growth to a high of 8 percent in 2006 and to a low of -1.5 percent in 2016 (world bank report, 2017). While Nigeria’s economy has performed much better in recent years than it did during previous boom-bust oil-price cycles, such as in the late 1970s or mid-1980s, oil prices continue to dominate the country’s growth pattern.

The shock of oil price in mid-2014 challenged the government in building an institutional and policy framework capable of managing the volatility of the oil sector and supporting the sustained growth of the non-oil economy. After contracting for five consecutive quarters, the economy has returned to growth in the second quarter of 2017. With a renewed focus on economic diversification, promoting growth in the private sector and driving job growth, GDP grew by 0.6 percent (year-on-year) in the second quarter of 2017, driven by recovering oil production and some recovery in non-oil industries, too, and modest growth in agriculture.

Economic growth is expected to have remained positive in the second half of 2017 according to analyst, averaging about 1.0 percent for 2017; driven by the continued recovery of oil production, sustained growth in agriculture, and the positive impact on investment and other private sector activities from the improved availability of foreign exchange to support imports. As the government begins to implement the structural reforms outlined in its Economic Recovery and Growth Plan 2017–2020, growth can be expected to strengthen further in the medium term, reaching about 2.8 percent by 2019.
Below is a chart of trend of gross domestic product of Nigeria at market prices estimate by the International Monetary Fund with figures in USD billions

<table>
<thead>
<tr>
<th>Year</th>
<th>Gross domestic product</th>
<th>US dollar exchange</th>
<th>Inflation index (2000=100)</th>
<th>Per capita income (as % of USA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>*58</td>
<td>1 Naira</td>
<td>1.30</td>
<td>7%</td>
</tr>
<tr>
<td>1985</td>
<td>*82</td>
<td>3 Naira</td>
<td>3.20</td>
<td>5%</td>
</tr>
<tr>
<td>1990</td>
<td>*118</td>
<td>9 Naira</td>
<td>8.10</td>
<td>2.5%</td>
</tr>
<tr>
<td>1995</td>
<td>*155</td>
<td>50 Naira</td>
<td>56</td>
<td>3%</td>
</tr>
<tr>
<td>2000</td>
<td>170</td>
<td>100 Naira</td>
<td>100</td>
<td>3.5%</td>
</tr>
<tr>
<td>2005</td>
<td>291</td>
<td>130 Naira</td>
<td>207</td>
<td>4%</td>
</tr>
<tr>
<td>2010</td>
<td>392</td>
<td>150 Naira</td>
<td>108</td>
<td>5%</td>
</tr>
<tr>
<td>2012</td>
<td>451</td>
<td>158 Naira</td>
<td>121</td>
<td>7%</td>
</tr>
<tr>
<td>2014</td>
<td>972</td>
<td>180 Naira</td>
<td>10</td>
<td>11%</td>
</tr>
<tr>
<td>2015</td>
<td>1,089</td>
<td>220 Naira</td>
<td>10</td>
<td>10%</td>
</tr>
<tr>
<td>2016</td>
<td>1,093</td>
<td>280 Naira</td>
<td>17</td>
<td>10%</td>
</tr>
<tr>
<td>2017</td>
<td>1,125</td>
<td>360 Naira</td>
<td>5 (est)</td>
<td></td>
</tr>
</tbody>
</table>

Source: International Monetary Fund (2017)

Below is also a chart of trend of the global ranking of the Nigerian economy, in comparison with other countries of the world, derived from the historical List of countries by GDP

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ranking</td>
<td>52</td>
<td>47</td>
<td>38</td>
<td>37</td>
<td>34</td>
<td>31</td>
<td>31</td>
<td>30</td>
<td>23</td>
<td>20</td>
<td>21</td>
<td>22</td>
<td>23</td>
</tr>
</tbody>
</table>

Source: www.Wikipedia.com
Based on the above trend, one can conclude that the economy of Nigeria is healthy which can be attributed to many factors like diversification of the economy to the non-oil sector, initiation of sustainable government policies, public private partnership (PPP), restoration of peace in the oil region etc.

2.2 FACTORS AFFECTING ECONOMIC GROWTH IN NIGERIA

Despite the fact that Nigeria is blessed with abundant natural resource, her economic prosperity has been threatened by corruption, mismanagement of public fund, nepotism etc. The much celebrated growth in the GDP would have been much higher than what we have now. Also by ranking, Nigeria would have been among the first 10th best economy in the world, if only her resource were judiciously utilized. The major factors that have been hindering economic growth in Nigeria are:

- **INFRASTRUCTURAL DECAY**

  Nigeria’s underdeveloped infrastructure is often cited as one of the major impediments to economic development, and successive governments have vowed to rectify the situation. China first became heavily involved in infrastructure improvements through the previously mentioned oil-for-infrastructure deals during the Obasanjo era. These projects were cancelled by late president Yarada as a result of lack of transparence in the contracts. Infrastructural decay can also be seen in the transportation sector like the port, railway and road sector. A sound legal framework and reforms are needed to allow Public and Private Partnerships (PPPs) to move forward in the rail and roads sector. Of the 50,000 miles of roads, only slightly more than 10,000 miles are paved, and many of these paved roads are in poor shape. Only five of Nigeria's twenty two airports—Lagos, Kano, Port Harcourt, Enugu, and Abuja—currently receive international flights.

- **POOR FUNDING OF INVESTMENTS**

  Poor funding of capital projects have affected the growth of the economy. Before the new implemented IJV model between the NNPC and IOCs, there was frequent delays in the payment of cash calls to the joint venture operators which discouraged investment by the oil companies. Insufficiency of funds has also constrained adequate equipment maintenance and efficient refinery operations by the NNPC. The Federal Government’s delays in the payment of cash calls for its JV operations in the upstream sub-sector, focusing more on maintenance rather than growth.

- **COMMUNAL DISTURBANCES IN THE OIL SECTOR**

  There had been frequent communal disturbances which disrupts crude production as oil communities’ clamor for higher stake in oil operations. Smuggling and diversion of petroleum products. There are
reported cases of massive smuggling of petroleum products across the borders in quest for foreign exchange and to take undue advantage of the lower domestic prices vis-a-vis neighboring countries prices.

- **FRAUDULENT PRACTICES IN THE AWARD OF CONTRACTS**
  Fraudulent practices among politicians have hindered growth in the Nigeria economy. An example was the cancellation of oil-for-infrastructure contracts signed by Obasanjo by late President Umaru Yar’Adua in 2007, award of contracts to companies that are linked to politicians, diversion of public funds to personal use etc. These practices have hindered economic growth in the Nigeria economy.

**2.3 INTERNATIONAL JOINT VENTURE AND ECONOMIC GROWTH IN NIGERIA**

JV is indeed a strategic vehicle that propels economic growth of a developed or developing state. More especially to developing nations that lack the technical knowhow, manpower, capital and technology needed to explore natural resources in some strategic sector of their economy. One of the objectives of JV by FG particularly in the oil & gas and maritime industries is to encourage technology and knowledge transfer. JV in Nigeria can be trace back to OPEC's 1968 resolution calling on its member countries to participate actively with the foreign companies in the exploitation of their nations’ strategic resource. In recognition of this, and as an OPEC member, the Nigeria government through the nations’ oil company NNPC, entered into joint venture agreements with the existing multinational oil companies such as SHELL, AGIP, MOBIL, ELF, CHEVRON (formerly GULF oil) and the new ones such as TEXACO Overseas and others by acquiring 35% equity interest in them in 1973, and by 1974 it came to 60%. This marked the birth of joint venture agreement arrangements in the Nigeria oil sector between government’s agent NNPC and multinational oil companies. The need for joint venture between two parties say, a host country and a multinational oil firm is to reduce the risk of investing in a foreign country and to enhance performance through cross-pollination of ideas with respect to the management of the enterprise.

In the study of Odularu (2008) on crude oil and the Nigerian economic performance, the study analyses the relationship between the crude oil sector and the Nigerian economic performance. Using the Ordinary Least Square regression method, the study reveals that crude oil consumption and export have contributed to the improvement of the Nigerian economy. However, one of the recommendations of the study was that government should implement policies that would encourage the private sector to participate actively in the crude oil sector.

Also in another empirical study of Ogbonna (2000) on Joint Venture in the Nigeria Oil Industry, reviewed that effective management of joint ventures has enhanced performance in the Nigeria oil sector,
enhanced technology application (or Transfer and reduced associated investment risks for the multinationals in the industry. It is concluded that the joint venture strategy still offers unique opportunities to Nigeria's quest for sustained economic growth and petroleum technology transfer to her nationals in spite of the criticism that multinational oil firms are not meeting the developmental needs of host countries.

The impact of various IJV (International Joint Venture) in Nigeria to the growth of the economy can be analysed via the contribution of each sector to the economy especially the sectors that have witnessed IJV like the Industry (Oil and Gas, manufacturing), service (health, transportation ie railway) power etc.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>23.89</td>
<td>22.28</td>
<td>22.05</td>
<td>21.01</td>
<td>20.23</td>
<td>20.85</td>
<td>21.20</td>
</tr>
<tr>
<td>Industry</td>
<td>22.03</td>
<td>24.81</td>
<td>23.67</td>
<td>22.01</td>
<td>20.66</td>
<td>16.01</td>
<td>14.16</td>
</tr>
<tr>
<td>Oil</td>
<td>15.38</td>
<td>17.52</td>
<td>15.77</td>
<td>12.86</td>
<td>10.79</td>
<td>6.36</td>
<td>5.28</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>6.55</td>
<td>7.19</td>
<td>7.79</td>
<td>9.04</td>
<td>9.75</td>
<td>9.53</td>
<td>8.77</td>
</tr>
<tr>
<td>Construction</td>
<td>2.87</td>
<td>3.02</td>
<td>3.05</td>
<td>3.34</td>
<td>3.58</td>
<td>3.68</td>
<td>3.55</td>
</tr>
<tr>
<td>Trade</td>
<td>16.46</td>
<td>16.39</td>
<td>16.5</td>
<td>17.12</td>
<td>17.63</td>
<td>19.15</td>
<td>20.37</td>
</tr>
<tr>
<td>Service</td>
<td>34.72</td>
<td>33.47</td>
<td>34.70</td>
<td>36.59</td>
<td>37.88</td>
<td>40.29</td>
<td>40.70</td>
</tr>
</tbody>
</table>

Source: NBS (2016)
The above chart shows that the service sector is the highest contributor of the economy but unfortunately, the sector is yet to be harnessed to the fullness. It was last year that the railway sub-sector of the service industry witnessed the presence of the FG that entered into partnership with the Chinese government. Looking at the industry sector (oil & gas, manufacturing, and mining) which account for the highest revenue to the government has not been stable due to the fluctuations in the global market. The oil & gas sub-sector alone account for 89% of the whole industry while the manufacturing sub-sector accounts for 8% with the remaining 1% goes to the mining sub-sector.

The JV between FG and IOC in Nigeria has contributed to the Nigerian economy through the energy they produce, revenues they generate and employment opportunities they provide for the country. In 2016, Shell-operated ventures in Nigeria produced an average of 572,000 barrels of oil equivalent per day (b/d), with 369,000 b/d from the Shell Petroleum Development Company of Nigeria Limited operated Joint Venture (SPDC JV) and 203,000 b/d from the Shell Nigeria Exploration and Production Company Limited (SNEPCo). Shell Nigeria Gas Limited (SNG) supplies natural gas to about 90 industrial customers in Ogun, Rivers and Abia States. The gas is used for power generation and processing by industries for the manufacture of domestic products ranging from household consumables, to household utensils and hardware. Among its customers are four compressed natural gas (CNG) companies that make the gas available to other companies outside the SNG pipeline network. The SPDC JV is the major supplier of gas to Nigeria Liquefied Natural Gas Company Limited (NLNG) (Shell share, 25.6%). The SPDC JV Afam VI power plant, which has a 650 megawatt generating capability, supplied approximately 12% of the nation’s grid-connected electricity in 2016 and since its commissioning in 2008 has delivered 24.16 million Megawatt-hour (MWh) of electricity into the Nigerian grid.

Looking at the inability of FG to settle its cash calls arrears in the JV entered with IOCs over the years which has accumulated to over $7 billion as of December 2016, the Federal Government, through the Minister of State for Petroleum Resources, Dr Ibe Kachikwu, has been engaging the multinationals and other partners on how to settle the debts through crude oil lifting and how to embrace the IJV model. In order to harness the benefits that accrue from IJV, a new model of IJV was formed which witnessed a new financing agreements. NNPC with Chevron and Shell entered into a new financing agreement worth at least $780 million to boost crude production and reserves (Nigerian Tribune, 2017). NNPC said a joint venture agreement with Chevron Nigeria Limited would see the development of proven and probable reserves of 211 million barrels at the joint Sonam project.
“The project is expected to begin to bear fruits in (the) next three and six months,” NNPC said in a statement, adding it was targeting production of 39,000 barrels per day of liquids and 283 million standard cubic feet of gas per day” (Nigeria Tribune, 2017)

It also said a joint venture with Shell Petroleum Development Company would lead to the development of a project comprising of 156 development activities across 12 oil mining licenses in the Niger Delta oil hub.

Still on the impact of IJV to the growth of the Nigeria economy, NNPC entered into PPP (public private partnership) with China State Construction Engineering Corporation (CSCEC) in a bid to generate employment and reduce Nigeria’s dependence on imported refined petroleum products. In May 2010, NN PC and the (CSCEC) signed a USD 23 billion Memorandum of Understanding for the construction of three refineries and a fuel complex, financed by Sinosure and China Exim Bank. Under the terms of the first refinery deal, worth USD 8 billion, CSCEC agreed to cover 80 % of the costs, with NN PC putting up the remaining 20 % and the Lagos State government providing land and infrastructure. The Chinese company would build and run the refinery as a majority owner, repaying the loan with the proceeds from the construction contract as well as the revenue from the refinery. The oil refinery was set to be located in the Lekki Free Trade Zone in Lagos State and is expected to produce 300 000 barrels of oil a day and 500 000 metric tonnes of liquefied petroleum gas each year (PS news, 2010.).

Also China Ocean Shipping Group Company (COSCO), the largest shipping company in China, established its West Africa hub in Nigeria’s economic capital, Lagos. In November 2010, a Chinese joint venture between China Merchants and the China- Africa Development Fund paid USD 154 million for a 47.5 % stake in the Tin-Can Container Terminal at Lagos Port. Nigeria’s second largest container terminal, Tin-Can has three berths, with a capacity to handle 360 000 standard 20-foot containers per year (PS news, 2010.). In the same year 2010, Power Holding Company of Nigeria (PHCN) contracted Chinese companies Sinohydro Corporation and Harbin Electricity Corporation to rehabilitate the Kainji hydropower station in Rivers State. The project, funded by a loan from the World Bank, will cost USD 82 million and is expected to add 340 megawatts to Nigeria’s electricity generating capacity. In a bid to improve the sector, FG on Nov 12 2017, signed an agreement with three Joint Venture (JV) partners to begin the processes of executing 3,050 Mega Watts (MW) Mambilla hydro- electric power plant in Taraba. The JV companies are China Gezhouba Group Corporation (CGGC), Sinohydro Corporation Ltd and CGOC Group Ltd. The contract is valued at of 5.792 billion dollars (about N1.140 trillion).
The pharmaceutical sub-sector of the manufacturing industry in 2017 also IJV between the FG through the Ministry of health and May & Baker Nigeria. It was a journey that started since 2003 when May & Baker approached the President Obasanjo led government to restore the dying Federal Government owned vaccine production laboratory (VCL) Yaba, Lagos which stopped production since 1991. The Federal Executive Council (FEC), on May 31, 2017 ratified a joint venture agreement (JVA) between the Federal Government of Nigeria and May & Baker Nigeria PLC for local production of vaccines. The decision will benefit all Nigerian citizens and residents, especially children and mothers, ultimately ensuring sustainable availability of routine immunization vaccines in the country. In the JV, government will own 49 per cent of the joint venture while May & Baker will own 51 per cent of the joint venture company, Biovaccines Nigeria Ltd. The government will contribute N1.2 billion; M&B is expected to contribute N1.3 billion as its equity contribution. All the above IJV and PPP are meant to reposition the economy through employment opportunities, strengthen the various sectors that rely on power, increase FG reserve/revenue, increase exports and reduce imports etc.

2.4 JOINT VENTURE & INVESTMENT OPPORTUNITIES IN THE NON-OIL SECTOR

Apart from the oil & gas sector that has been a focus of IJV, opportunities for JV lies more in the non-oil sector such as agricultural sector which contributes greatly to the economy. Also sectors like service, trade etc. have great potential for growth which can be harnessed fully through IJV and PPP (Public Private Partnership). Below are the analyses of selected sectors with their growth prospects which can be harnessed through IJV.

- **THE TRANSPORTATION SECTOR**

**AVIATION SUB-SECTOR**

There exist growth prospect in the aviation sub-sector. IJV can be entered among firms to establishment of an Aircraft Engine Workshop - A workshop that can affect A, B, C, & D checks on various grades of aircrafts used in the Country and in the West African sub-region; establishment of a modern aircraft training facility; development/construction of airport terminals etc.

(a) **MARITIME SUB-SECTOR**

In the maritime sub-sector, Foreign Shipping Companies can engage in the provision of Liner Services through joint sailing agreement with Nigerian shipping companies; Ship Acquisition and Ship Building Fund/Lifting of Crude Oil and Gas can be established through JV among companies or between the FG and foreign investors; there could be JV in Training /Technical Assistance; Tanker Trade - joint venture
with Nigerians in the exportation of Nigerian crude oil. More importantly is the Proposed Nigerian Maritime Consultancy Centre – JV could cover the following:

a) Marine engineering spare parts supplies;
b) Ships and Port management;
c) Ships, Ports and boat supplies;
d) Seaports, oil terminals and ship communication equipment;
e) Seaports and ships educational material;

**MANUFACTURING AND INDUSTRY**

Despite government efforts to diversify the economy the manufacturing sector remains relatively weak. As in many oil-rich countries facing the challenge of averting the “resource curse”, the manufacturing industry in Nigeria has declined as the country shifted attention to oil production. From 2010-2016, the contribution (all in %) of oil and gas is (15.38, 17.52, 12.28, 10.79, 6.36 and 5.28) while the manufacturing is (6.55, 7.19, 7.79, 9.04, 9.75, 9.53, and 8.77), (CBN, 2017). The data shows that the manufacturing sector needs urgent attention by the FG through. A central axe of the government’s development programme is to reverse this trend and use manufacturing as a tool for job creation and poverty reduction. Hong Kong and Taiwanese investors started manufacturing auto parts and textiles in Nigeria in the late 1960s and early 1970s. The industries subsequently collapsed due to decreased cotton production, inadequate infrastructure and increased competition from imported products, particularly from China. Lee Enterprises is one Hong Kong manufacturer that has managed to survive and even expand. The company produces plastics, steel, ceramic tiles and leather hides at its expansive complex of factories near Kano. Lee Enterprises employs a large Chinese and Nigerian workforce, and some have estimated it as being a multi-billion-dollar operation. Another well-known Hong Kong manufacturer, Wepco, produces roofing sheets and furniture. The FG can revamp the sector by encouraging JV through PPP (Public Private Partnership).

**AGRICULTURAL SECTOR**

Nigeria’s agricultural sector employs nearly 70 percent of the population and its contributions to the GDP from 2010-2016 according CBN, 2016 are 23.89%, 22.28%, 22.05%, 21.01%, 20.23%, 20.85% and 21.20%. Nigeria possesses an abundance of arable land and a favorable climate for the production of nuts, fruits and grains. The vast majority of farming in Nigeria is subsistence based, utilizing manual labor and relatively little agricultural machinery. The capacity of the agricultural sector can be improve
through JV in providing the machinery for mechanized farming, seed improvement and fertilize production/supply.

RESEARCH METHODOLOGY

3.1 DATA SOURCE AND PERIOD OF THE STUDY

The study used secondary sources of data, which were collected from the CBN database called Statistical Bulletin that contains information about the Nigeria Economy. The study compares the performance of the economy before most IJV & PPP and the after effects of that agreement on the economic growth of the nation. Data on economic growth for a period of seventeen years (2005-2016) years were analyzed. That is years prior to most IJV&PPP (2005-2010) and years after the IJV (2011-2016). Apart from the oil sector that has witnessed IJV throughout the decade, other sectors that this study seeks to analyze their effects to the economic growth of Nigeria are;

- Manufacturing sub-sector (specifically the pharmaceutical between FG vs. May and Baker, 2017),
- The service industry (specifically the railway sub-sector of Transportation sector between FG and China Railway Construction Corporation (CRCC, 2015)
- The service industry (specifically the power sub-sector between PHCN vs. Chinese companies Sinohydro Corporation and Harbin Electricity Corporation, 2010, and FG vs. China Gezhouba Group Corporation (CGGC), Sinohydro Corporation Ltd and CGOC Ltd, 2017)
- The water sub-sector (between China Merchants and the China-Africa Development Fund, 2010)
- Oil sub-sector (building of oil refinery between the NNPC vs China State Construction Engineering Corporation in 2010, and the new implemented IJV model between the NNPC and IOCs, 2017)

3.2 METHOD OF ANALYSIS

In testing the hypothesis $H_01$: **there is no significant effect of international joint venture on the economic growth of Nigeria**, two statistical tools were used.

The first is T-Test statistic employed in comparing the performance of the economy before and after various IJs. The second is the multiple regression analysis in estimating the contribution each of the sector to the total economy.

ANALYSIS OF THE GROWTH OF THE ECONOMY

T-Test Statistic:

$H_{01}$: **There is no significant difference between the Pre and Post IJVs on the GDP**
### Paired Samples Statistics

<table>
<thead>
<tr>
<th>Pair</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRE GDP IJV</td>
<td>3.6997E4</td>
<td>6</td>
<td>11579.74408</td>
<td>4727.41072</td>
</tr>
<tr>
<td>POST GDP IJV</td>
<td>8.3244E4</td>
<td>6</td>
<td>14414.24135</td>
<td>5884.58939</td>
</tr>
</tbody>
</table>

### Paired Samples Correlations

<table>
<thead>
<tr>
<th>Pair</th>
<th>N</th>
<th>Correlation</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRE GDP IJV &amp; POST GDP IJV</td>
<td>6</td>
<td>.983</td>
<td>.000</td>
</tr>
</tbody>
</table>

### Paired Differences

<table>
<thead>
<tr>
<th>Pair PRE GDP IJV - POST GDP IJV</th>
<th>Mean</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>Df</th>
<th>Sig.2 tailed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-4.62469E4</td>
<td>1508.58641</td>
<td>-50124.85148 - 42368.96185</td>
<td>-30.656</td>
<td>5</td>
<td>.000</td>
</tr>
</tbody>
</table>

P-values at 5% statistical significance

This table presents results of a Paired Sample Test of difference of means of the performances of the economy before and after various international joint ventures (IJVs) to examine the infect of the IJV on the growth of the Economy. Looking at the mean of comparison, the mean of the post GDP is significantly greater the mean of the GDP in the pre-era. Going further, the significant value is 0.000 at T = -30.656. This p-value is less than the 0.05 level of significance. It therefore shows that the means of the values for the two periods differ significantly. Hence, it is concluded that IJV has significant influence on the economy, using the GDP as a yardstick.

**THE REGRESSION EQUATION**

\[ \text{GDP} = \alpha + \beta_1\text{industry} + \beta_2\text{service} + \beta_3\text{construction} + e \]

GDP= Dependent variable/response variable used to represent the economic growth.
IJV= independent variable which is represented by the predictor variables such as the industry sector, service sector and construction. These predictor variables are the sectors where IJVs have been seen and felt.

Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.000a</td>
<td>.999</td>
<td>.999</td>
<td>994.73791</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), CONSTRUCTION, INDUSTRY, SERVICES

ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Regression</td>
<td>8.118E9</td>
<td>3</td>
<td>2.706E9</td>
<td>2.735E3</td>
<td>.000a</td>
</tr>
<tr>
<td>Residual</td>
<td>7916028.050</td>
<td>8</td>
<td>989503.506</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>8.126E9</td>
<td>11</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), CONSTRUCTION, INDUSTRY, SERVICES
b. Dependent Variable: Total Nominal GDP

Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Constant)</td>
<td>2117.091</td>
<td>2214.843</td>
<td>.956</td>
<td>.367</td>
</tr>
<tr>
<td>INDUSTRY</td>
<td>1.226</td>
<td>.168</td>
<td>.223</td>
<td>7.273</td>
</tr>
<tr>
<td>SERVICES</td>
<td>2.442</td>
<td>.480</td>
<td>1.036</td>
<td>5.087</td>
</tr>
<tr>
<td>CONSTRUCTION</td>
<td>-5.400</td>
<td>5.288</td>
<td>-.228</td>
<td>-1.021</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Total Nominal GDP

FROM THE COEFFICIENTS TABLE

It can be observed from the statistically tested that two sectors (industry & service) expect construction with the significant value of 0.000 at T = 7.273, .001 at 5.087 and .337 at -1.021 contributed to the economic growth of the nation. The p-values of industry and service are less than the 0.05 level of significance. The result is statistically significant at 5% & 4% respectively hence, it is concluded that the various IJVs witnessed by two sectors have significant contributed to the economic growth of Nigeria.
4.1 CONCLUSION AND RECOMMENDATION

International Joint Venture can be a strategic vehicle that transform the Nigeria economy with the right model if formed and implement. The growth of the Nigeria economy can be assured through IJV if the parties to the agreement fulfill their statutory obligations. The benefits of IJV to a growing economy like Nigeria, transfer enormous skills, knowledge, technology, employment opportunities etc. However, factors such as corruption, mismanagement of public funds, infrastructural decay, poor funding of JV among others have been identified as strategic issues affecting the growth of the Nigeria economy.

The study also identified areas in IJV were investment opportunities exist such the aviation sector, agricultural sector, maritime sector and manufacturing sector. Finally, based the interpreted results, it is concluded that IJV has significant effect on the growth of the economy. The study therefore makes the following recommendations:

- Government should pay more attention to the infrastructural development of the nation (power, roads, railways etc.) because it is a factor that hinders growth and attracts foreign direct investment.
- The non-oil sectors have potential for growth which can be harnessed through JV.
- Transparency should showed in the award of contracts
- The government should endeavor to fund various joint ventures entered by her agencies as to foster economic growth.
- Government should also create an enabling environment for the non-oil sector to strive and add to the GDP of the economy.
REFERENCES


Economic report: International Monetary Fund (IMF), 2017

Nigerian petroleum new law: PS News, 2010


Re-channeling Nigeria energy resources for economic revival: Daily Trust Newspaper, 2017

The impact of oil on a developing country: The case of Nigeria. Nigeria Tribune 2017


www.Shell.ng