

# A Comparative Analysis of Production Sharing Contracts of Selected Developing Countries: Nigeria, Indonesia, Malaysia and Equatorial Guinea

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**Abstract** Maximization of returns and benefits are the major determinants state considers for adopting particular petroleum fiscal regime in the course of exploiting its petroleum resources. Two major fiscal regimes are adopted for exploiting petroleum resources: Joint venture agreement (JVA) and production sharing contract (PSC). However, considering the inherent difficulties associated with Joint venture agreements, developing countries gave emphasis to production sharing contract. This study aims to compare expected returns from exploiting petroleum resources of selected countries (Nigeria, Indonesia, Malaysia and Equatorial Guinea) that have adopted the Production Sharing Contracts. A literature based methodology was adopted, and indeed, data were gathered from the PSC treaties and related documents. The findings suggest that Nigerian PSC provides less return compared to its contemporaries. Indeed, the results showed that Malaysia received the highest returns, followed by Indonesia and Equatorial Guinea. On the other hand, the findings justified the underlying hypothesis of socio-economic factors help shape the terms and conditions of oil and gas contracts in developing countries particularly production sharing contract.

**Keywords:** *comparative analysis, production sharing contracts, joint venture agreement*

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## 1. Background

Most of the developing countries are technologically and financially incapacitated (Ayoola, 2005). Hence, one of the options for the countries that produce oil and gas resources is to engage International Oil Companies (IOCs) who argued to have required financial and non-financial resources to exploit the petroleum resources contained within the territory of the countries (Johnson, 2003). Production sharing contract (PSC) is perhaps the most common form of agreement between those developing countries and the IOCs in international petroleum operations (Johnston, 2003). In a PSC (in most cases), the IOC bears all exploration costs and risks and if commerciality is attained, the host country has the right to participate in the venture as a working interest owner at a pre-determined rate (Brock et al., 2007).

The IOCs do not get payment for the host country's share of exploration cost; rather, they recover such costs from future production. In a PSC, the host-government owns the concession as against what is obtainable in a royalty/tax regime; where the concessionaire holds the title to the concession. The contractor only receives a share of production for its services (Johnston, 2003). Cost oil and profit oil are common features of PSCs. As earlier mentioned, the IOC usually bears all the exploration costs

and part or all the development and production costs. Hence, the portion of oil and gas production earmarked for the recovery of such costs is referred to as cost oil, while the gross production/revenue accruing to the parties after cost recovery is referred to as profit oil (Brock et al., 2007). The contracts usually specify which costs are recoverable, the order of recoverability, limit and type of cost recovery, ringfenced or unringfenced, whether interests on capital costs is recoverable or not, and the order of cost recovery (Brock et al, 2007).

Typically, the exploration and development costs are recoverable over a specified number of years, and unrecovered costs in any given year are often recovered in subsequent years. However, in some agreements, carry-forwards are not acceptable; hence the recovery is forfeited (Brock et al., 2007). Host countries sometimes incorporate some incentives in the contractual agreements in order to encourage IOCs to invest more in exploration drilling and development activities (Pongsiri, 2004). Such incentives include capital uplift, domestic market obligations, royalty holidays and tax holidays, and unringfencing. Capital uplift, otherwise referred to as investment credit, is usually a percentage of capital costs recoverable over and above the actual amount spent. In view of the above explanation of the most common adopted agreement (PSC) by the developing states, this study aims to compare expected returns that the selected countries (Nigeria, Indonesia, Malaysia and Equatorial

Guinea) get by adopted Production Sharing Contract as an agreement that guides their petroleum operations. This analysis will help to assess which country amongst the selected states benefits more from its PSC. As consequence, the paper has been divided into seven Sections. Sections 2, 3, 4 and 5 highlight socio economic background of the selected countries; Malaysia, Equatorial Guinea, Indonesia and Nigeria respectively. This is followed by section 6 which discusses data presentation and analysis. Section 7 concludes the paper.

## 2. Socio-Economic Background of Malaysia

Socio-economic history of Malaysia is admirable among developing countries; this is due to constant successful graduation from one cadre to another in terms of policy implementation, innovation and technological advancement. When Malaysia attained its Independence in 1957 the economy was fundamentally primary commodity-based with heavy dependence on rubber and tin which contributed about 70 per cent of total export earnings, 28 per cent of government revenue and 36 per cent of total employment (Economic Planning Unit) (EPU, 2007) These marked the Malaysia's economic record to have been one of Asia's best. Real gross domestic product (GDP) grew by an average of 6.5% per year from 1957 to 2005. Performance peaked in the early 1980s through the mid-1990s, as the economy experienced sustained rapid growth averaging almost 8% annually (U.S.D.S, 2007). Even though it had a slide difference last year, where the gross domestic product (GDP) grew at an estimated rate of 5.9 percent in 2006 (EIA, 2014) still the country maintains a positive development. Generally this favorable economic atmosphere of Malaysia is attributed to conducive political atmosphere under the long serving prime minister Dr. Mahthir Mohamed, though majority credited the development at different economic policies the country had adopted since independence. Among the polices adopted highlighted in U.S.D.S, (2007) are New Economic Policy (NEP) formulated in 1970 which had the two-pronged objectives of poverty eradication irrespective of race and the restructuring of society to eliminate the identification of race with economic functions. The promulgation of the NEP addressed ethnic and regional imbalances and ensured national unity. Then in 1990, Malaysia build upon the NEP by embarking upon a strategic planning mission to achieve a wide range of economic objectives and social transformations to further decrease the incidence of poverty and ensure a higher quality of life. This national programmed, known as Vision 2020, seeks to establish Malaysia as a developed country in its own by the year 2020. These policies have virtually transformed and diversify the Malaysian economy. One of the roles the policies played was in eighties which witnessed a major structural transformation, where by the manufacturing sector became the fastest growing sector with a growth rate of 10.4 per cent per annum and for the first time in 1987 it surpassed the agricultural sector to account for 22.6 per cent of GDP (EPU, 2007).

Malaysia is a developing country that always thinks and plan of actualizing it economic policies so as to achieve it

is long term visions. As it combines agriculture with manufacturing now the country re-diversify the economy to oil and gas sector, where as its national oil company is now counted one of the best across the globe. The country is now important to world energy markets because of its huge oil and natural gas resorts. Malaysia's oil production occurs offshore and primarily near Peninsular Malaysia (EIA, 20014). Moreover the country had many attempt of extracting oil and natural gas since pre independence, but insufficient quantities to a commercial level jeopardize the effort. Thus the discovery and exploitation of offshore oil fields in Sarawak led to major increases in oil production after 1967. Crude petroleum production rose from 1,000 barrels to about 99,000 barrels per day between 1967 and 1973. But with it is unique quality among the developing. Gale, (2007) highlighted that unlike many developing oil exporting countries like Indonesia; Malaysia was in no desperate need to export its oil in order to finance industrial development. Its good balance of payments position based on the traditional exports of rubber, tin, palm oil, and tropical hardwoods (Gale, 2007). Therefore these diversification qualities of economy tend to differentiate Malaysia with virtually many developing oil producing states.

Even though Malaysia is not OPEC member but it has establishes its NOC which is now better off than many NOC of OPEC member countries. Thus according to AG, (2007) Petronas, had 37 oil fields in Malaysia with further sites under development. Of Malaysia's 214 identified gas fields, 11 are currently online. It is also currently involved in oil production in 24 countries. Unlike Nigerian NNPC which had no any activities outside the country. Petronas like any other NOC has role of protecting the interest of the nation. Gale, (2007) Stress that PETRONAS was established to follow PERTAMINA's lead in consolidating". The petroleum interests of state governments into a single organization, negotiating production sharing contracts and following policies aimed at the expansion of downstream activities such as refining and marketing.

## 3. Socio-Economic Background of Equatorial Guinea

Equatorial Guinea is the only Spanish speaking country in Africa, the country got independent on 12<sup>th</sup> October, 1968 and the country has the population of about 500000. Less than a decade ago, the economic and political atmosphere of Equatorial Guinea continue to draw the attention of Africa and the world in general. Like many other African countries, since independence the country was under military dictator, until 1982. Nevertheless even the current constitution gives the president extensive powers, including naming and dismissing member of the cabinet, making laws by decree, dissolving chambers of representatives, negotiating and rectifying treaties and calling legislative elections.

Equatorial Guinea has experienced very rapid growth as a result of the discovery and exploitation of major offshore oil reserves. From a low-income economy a decade ago, it has become one of the thriving economies in Africa and a highly desirable place for oil exploration (Yumiseva, 2005) Even though traditionally, agriculture

(primarily cocoa, coffee and timber) was the basis of the Equatorial Guinean economy. However, important offshore oil discoveries since 1995 have caused oil to displace cocoa as the main export commodity. Since 1995, oil exports (currently 97 percent of total export earnings) have caused the country's economy to grow rapidly. In 2005, the country's real gross domestic product (GDP) grew 15.4 percent, and was increased with about 6.9 percent in 2006. (EIA, 2014) Now Equatorial Guinea is third largest oil producer in sub-Saharan Africa and the sixth largest oil producer in Africa (Frynas, 2004). This remarkable rapid development made the country to be remembered whenever African economy is mentioned. Lucky enough for the country, her oil production has jumped from just 17,000 barrels per day in 1996 to a current rate of more than 220,000 barrels per day (Silverstein, 2003). Moreover, with all this development, Equatorial Guinea's experience more closely resembles Nigeria's. Inflation has grown rapidly, hurting the purchasing power of the impoverished masses and prompting a fifteen percent exchange rate appreciation between the end of 2001 and the middle of 2003 (McSherry, 2006) Thus most of the country's citizens doubt the significance of oil resources in the country.

The country started exploration effort since 1965 through joint venture but were unsuccessful. In their effort of 1980s a joint venture group of Total, Elf and Hamilton Oil Co. (later BHP Petroleum) carried out exploration activities which were also unsuccessfully (Yumiseva, 2005) The more important finds took place in the second half of the 1990s. Moreover today, three fields Zafiro, Ceiba and Alba account for the majority of the country's oil output (EIA, 2014). Following the successful discovery of these important fields, the government has been keen on obtaining an active stake in the country's oil development. In 2001, state company GEPetrol was established by presidential decree as the primary state-run institution responsible for the country's downstream oil sector activities.

Thus the country engages in production sharing contract and joint venture with many companies. The oil and gas industry of the country is now dominated by three US companies: the world's largest oil company Exxon Mobil, followed by Amerada Hess and Marathon Oil. For all three companies, Equatorial Guinea is an important asset, albeit to a varying extent. Devon Energy, Noble Energy (both US firms) and Energy Africa (a South African firm) also have important ownership stakes in the current oil output, but they do not operate the oil concessions. Exxon-Mobil, Amerada Hess and Marathon run the day-to-day operations. While various other foreign firms continue to explore for oil in Equatorial Guinea, (Frynas, 2004) This very small enriched oil country will be a very good comparator considering the its newly entrance in the global race of oil politics.

#### **4. Socio-Economic Background of Indonesian**

The political and historical emerging of petroleum activities of Indonesia is really a motivating factor of choosing the country as one our comparison bases. Right from pre-colonial era to date, Indonesian history is a full

of political and economic struggle, the country seems to celebrate two ceremonial independence day. Aspinall and Berger (2001) highlighted that with the looming defeat of Imperial Japan in 1945, the Indonesian nationalists hastily laid the groundwork for an independent republic. On 17 August 1945, just after the Japanese surrender, the new government of independent Indonesia, with Sukarno as the first President was imaged.

Moreover the Indonesian republic's prospects were highly uncertain. The Dutch, determined to reoccupy their colony, castigated Sukarno and Hatta as collaborators with the Japanese and the Republic of Indonesia as a creation of Japanese fascism. This signifies the political struggle within and outside the country. Hence, Downer, (1998) added that it took more than four years of diplomatic negotiation and at times bitter fighting before the Indonesian Republic finally gained its independence from the Netherlands in December 1949. The final independence opens a new page in the general political scene of the country. Mishra, (2002) stress that Indonesia had first democratic experience in early 1950's even though in that period many had noted the absence of grassroots democracy in the operation of political parties. Moreover the first nationalist leader of struggle General Suharto took power in 1966, and uses authoritarian administration, the New Order, which lasted 32 years and was marked by strong central government and rapid industrialization, but widespread allegations of corruption and misuse of power. Even though Mishra, (2002) added that The Suharto regime had been successful because it dealt with social conflict by a combination of military force, cooption of local leaders into the Golkar machine and manipulation and censorship of all non-government media. It tried to barter high economic growth for autocratic discipline. This long ruler ship of Suharto had contributed to this highly populated country. Between 1980 and 2001, the population of Indonesia grew 46%, from 147 million to 215 million. This made it the fourth most populous country in the world (after China, India, and the United States) in 2001. As a result of rapid, trade-led industrialization, Indonesia's real gross domestic product (GDP) grew even faster than its population during the same period. Real GDP increased an average of 3.3% per year between 1980 and 2001, from \$194 billion to \$561 billion. (EIA, 2014).

Unlike many developing countries Indonesia had long discovered oil and gas in its territory. The first discovery of commercial oil in the Netherlands East Indies (N.E.I), now Indonesia, was accidentally made by a Dutchman, Aeilko Janszijkker, in 1883 near a tobacco field in Langkat, North Sumatera (Carlson, 1977 cited by Sihotang, 2003) Since the discovery of oil in commercial quantity, mining laws were enacted and many IOC made an attempt to penetrate the country's oil industry. On 16 June 1890, the Royal Dutch Company was established to produce and refined oil in the region (Sihotang, 2003) this had opened up the activities fully in the country. Since then the country had practice concessionary system. Moreover (Sihotang, 2003) added that in 1960 Indonesia petroleum law no.44 was enacted to regulate oil and gas minerals exploration, where all international oil companies' holdings concessionary were converted in to 30 years contracts of work to continue production in old concessionary areas. The contracts of work served as a

preparatory of PSC, which Barrows, (1993) stress that Indonesia is believed to be the first country to apply it to petroleum operations. Thus Indonesia is believed to be the father of PSC but it has eventually introduced JV though it was not effective.

Just like its counterparts of OPEC, Indonesia had NOC Pertamina, which carries out the country's oil and gas activities until 2001, where BAMIGAS was established as an executive agency that controls the upstream oil and gas activities of the government with a stipulated role of supervising and establishing Cooperation Contract or Productions Sharing Contract activity which previously done by PERTAMINA, in which currently BAMIGAS undertaking PSC with twenty eight companies.

## 5. Socio-Economic Background of Nigeria

The Nigerian economy has over time become largely dependent on oil. Oil accounts for about one-third of the country's Gross Domestic Product (GDP), 76% of government revenue and 95% of the foreign exchange earnings. With an average production of over two million barrels of oil per day (2mb/d) (EIA, 2014), Nigeria is the largest oil producer in Africa. However, the increasing spate of pipeline vandalism, kidnapping and militant takeover of oil facilities in the Niger Delta have greatly impeded the progress of the Nigerian oil and gas industry in the last couple of years. Hence, oil production in Nigeria has remained far below the estimated capacity of about two million nine hundred thousand barrels per day (2.9mb/d) as at the end of year 2009 (EIA, 2014). The commercial discovery of oil at Oloibiri in 1956 by Shell D'Arcy effectively marked the beginning of petroleum operations in Nigeria (Ameh, 2006). As such, shell continued to dominate the Nigerian oil industry for decades. However, the Nigerian government began to exert more control over its petroleum resources after joining the Organization of Petroleum Exporting Countries (OPEC) in 1971.

Other IOCs that later entered the Nigerian oil industry after shell include Gulf Oil and Texaco (now ChevronTexaco), Elf (now Total), Mobil (now ExxonMobil), and Agip. However, while some OPEC member countries have instituted NOCs to take direct control of their petroleum production operations, the IOCs in Nigeria were allowed to carry on with such operations but with government partnering as a working interest owner in a Joint Venture (JV) arrangement. Hence, Nigeria's NOC (the Nigerian National Oil corporation-

NNOC- which later transformed into Nigerian National Petroleum Corporation- NNPC) mainly served as an agency to help in achieving government's policy and objectives, and negotiating and signing petroleum contracts on behalf of government (Gidado, 1999). Meanwhile, by 1979, the government had through the NNPC, acquired at least 60% working (participating) interest in all the existing joint venture agreements. The peculiarities of offshore oil and gas operations (for example, the complexity of the terrain which makes regulation difficult; and huge capital requirement which makes funding difficult for government) necessitated the adoption of different fiscal system for such operations (Lukman, 2009). As such, in awarding deep water oil exploration licenses in 1993, the government adopted the PSC system as against the usual JV arrangement (Ameh, 2006).

## 6. Data Presentation and Analyses

Having seen the socio-economic background of the selected states, this section presents data and analysis of findings. As earlier stated, the study aims to compare expected returns from exploiting petroleum resources of the selected countries (Nigeria, Indonesia, Malaysia and Equatorial Guinea) who adopted Production Sharing Contract as an agreement to exploiting their endowed petroleum resources. Thus, this study restricts the analyses to three major components or provisions (bonuses, cost oil and profit oil) in the contractual agreements of the selected countries.

### 6.1. Bonus as Mechanism for Increasing Country's Benefits

Governments' objective is to maximize wealth from its natural resources. This can be achieved primarily through work commitments and fiscal systems. Moreover host countries can realize these through capturing economic rent at the time of transfer of right through signature bonuses and during the production through royalties and production sharing, or taxes. On the other hand IOC have the objectives of building equity and maximization of wealth by finding and producing oil and gas reserves at the lowest possible cost and highest possible profit margin (Johnston, 1994).

From Table 1 below, Nigeria seems to be highest bonus receiving country compared to other countries involved in this study.

**Table 1. BONUSSES CONTAINED IN THE SELCTED PSC OF THE COUNTIRES INVOLVED IN THIS RESEARCH**

	NIGERIA	E. GUINEA	INDONESIA
SIGNATURE BONUS	5	1	6
PROSPECTIVITY BONUS	5	-	-
PRODUCTION BONUS	10	2	3.5
DISCOVERY BONUS	-	3	-
FIRST SALE BONUS	-	1	-
SPECIAL PURPOSE BONUS	-		3

Source: Author Generated.

Seen from above Table and Figure, Nigerian PSC 2003 Sections 2.1, 2.2 and 2.3 which says contractor shall pay to the corporation Signature, Prospectivity and Production

bonus of (U.S. \$5,000,000, \$5,000,000 and \$10,000,000) respectively. These gave the country an initial sum of twenty million US Dollars (\$ 20,000,000) as bonus before

even starting enjoying the actual returns while sharing the profit oil. However, Equatorial Guinea has the signature bonus, discovery, first oil sale and production bonuses of \$ 1,000,000, \$ 300,000, \$ 1,000,000 and \$ 2,000,000 respectively; these amounted to the sum of \$ 4,300,000 which is less than 30% of the bonus received by Nigerian government.

Indonesian 2004 PSC section 8.1, 8.2 and 8.4 had stipulate the collection of \$ 6,000,000, 300,000, \$ 1,500,000 and 2,000,000 from the IOCs as signature bonus, special purpose, and production bonus respectively. Thus in this contractual terms, the production bonus is divided in to two, that is the first \$ 1,500,000 is expected to be paid when production reached (50 MMBOE) and the last one \$ 2,000,000 can only be paid when production reached (75 MMBOE). Therefore the total bonus collection will be \$ 9,800,000 even the production reached the highest 75 MMBOE. On the other hand Malaysia's current PSC did not provide for any bonus either production, signature or any kind; this might be attributable to the level of the country's involvement in oil production activities compared to other developing countries, because its National Oil Company engaged in oil activities like any other IOC. In fact, Malaysia is currently involved in oil production in 24 countries. Unlike Nigerian NNPC which had no any ongoing activities outside the country. Moreover there is no provision for bonus in Malaysia agreements. The findings in the above analyses show that Nigeria collected the highest bonus of \$20m, followed by Indonesia with \$12.3m then Equatorial Guinea with \$7m. These differences might be attributable to the level of country's prospectivity and commitments, on the other hand could be attributable to the way host country wants draw foreign investments.

## **6.2. Cost and Profit Oil Distributions.**

Cost oil and profit oil percentage allocation varies across the oil and gas producing countries, thus these differences occur as a result of fiscal systems and contractual agreements adopted by the countries. Most of the countries formulated the agreements so as to attract IOC and some make the agreement favorable to IOC because of the environmental factors while others because of technological constrains, and so on. Johnston (1994) stress that most of the objectives of host government is to design a fiscal system where exploration and development rights are acquired by those companies who place the highest value on them. In order to accomplished these objective. The government must design a fiscal system that would provide a fair return to the government as well as the industry, avoid undue speculation, limit undue administration burdens, provide flexibility and finally create healthy competition and market efficiency. (Johnston, 1994).

In this analyses the following assumptions were made, gross oil revenue of ten barrels at the rate of fifty dollar per barrel to be appropriated by applying all the necessary terminology and fiscal system in order to determine the party's take at the end of illustrations. A stipulated percentage of royalty in each country's terms and fiscal system if any will be apply. Secondly in every PSC, the contractor is always allowed to recover his cost before the

profit oil is shared, and in many cases governments do place a limit so as to earn a certain return from the initial stage of oil exploration. This cost recovery is viewed by Johnston, 1994 as the only distinction form PSC and concessionary systems; therefore we will analyze the cost oil percentage of each country as given in their respective contractual terms and allocate it to the contractor. In addition, in all the contractual terms a categorical percentage of how to share the oil profit is given, thus we will allocate the share to each party according to the percentage stipulated in the terms. And lastly in all contractual agreements a tax is expected to be deducted out of the contractor's oil profit and added to the non-contractor's return therefore we will appropriate the taxes accordingly. These in addition to other benefits analyzed at the end of the chapter will help in determining whether Nigeria gets more returns than others or not at same time the contributing factors of these differences.

For example, throughout the analysis, a ten barrel of oil at the rate fifty dollars (10bb at \$50) is use, that is \$500 gross oil revenue is appropriated to the parties involved, where by each party is appropriated certain take either inform of royalty, cost oil, profit oil or tax. Royalty is always the first appropriated revenue to the government in fiscal systems and in Nigeria the percentage varies, according to water depth, that is in the case of offshore, thus we take the average depth of 500-800 meters which is 8% therefore the government gets \$40. The next appropriation is cost recovery, which is mainly for the contractors to recover their total cost. Nigeria modified the usual 1994 PSC which place a limit to cost recovery at 40% and sign another memorandum of understanding (MoU) 2000 which allows IOC to recoup their total cost fully. Thus this new MoU has entirely changed the system.

Furthermore, in the analyses IOC gets the entire remaining \$460 as cost recovery which means Nigeria can only start benefiting fully after the companies recoup all their cost no matter how long the operations will take. Moreover having 100% cost recovery in the initial stage of PSC in Nigeria, shows that, there is no remaining profit oil to be shared neither the taxes to be deducted, therefore the entire gap or provisions fill with no applicable entry. Thus at the end, the contractor gets \$460 while non-contractor (Nigeria) gets \$40. Notwithstanding when the contractor finishes recouping his cost, the country will start receiving petroleum profit tax at the rate of 50% as well as profit oil at the rate of 60/40% sharing ratio. This will generally change the level of take the country gets at the end of the contract.

## **6.3. Malaysia PSC and Fiscal System**

In the case of Malaysia's PSC, the royalty is 10% which is equal to \$50, that's first revenue to the government. The cost recovery percentage is limited to 50%, which is \$250, appropriated to the contractor. The next allocation is the remaining value of \$200 that is profit oil, which is to be split like that of Nigeria 60%/40% in favor of the government, therefore Malaysia gets \$120 and the contractor gets \$80. Like any country's contracts, Malaysian agreements had a provision for tax on oil profit allocated to the contractor, but is only 20%, therefore 20% of \$80 is equals to \$16, thus this amount should added on the non-contractor's take. In a nut shell the \$186 total

government's takes come up from the summation of \$50 royalties, \$120 profit oil and \$16 taxes. On the other hand contractors take is amounted to the \$314 that is \$250 cost recovery, \$80 profit oil share and deductions of \$ 16 as taxes paid to the government.

Malaysia is often touted as having one of the toughest fiscal systems in Southeast Asia, because the country has good geological potentials and robust GNP growth. The balance between the prospectivity and fiscal terms is the fundamental themes in the industry. A lot of companies would love to explore in Malaysia and the government knows this (Johnston, 2003) of course it can be justified that none of the selected countries in the research has the technological advancement of Malaysia. The royalty is 10% which is higher than that of Nigeria. At same time the recovery cost was limited to 50% which is better than leaving it unlimited. So also the sharing of profit oil deal is very fairer 60/40% in favor of governments, therefore the government ended up with \$186 against \$314, but with all these difficulties, companies are trooping to Malaysia due to geological potentials and political stability.

#### 6.4. Indonesia PSC and Fiscal System

The Indonesian contracts did not provide for any royalty payments. Therefore the first allocation is cost recovery which is limited to 80% and it amounted to \$400, thus the remaining \$100 is profit oil and is to be share 72% against 28% in favor of government. Therefore the government gets \$72 while the contractor gets \$28. Just like other country's agreements Indonesia had a provision of tax on oil profit allocated to the contractor at the rate of 48%, hence, charging this percentage on the oil profit share will amounted to \$13.8462 which is to be added on the government's take. Having these allocations the contractor's take equals to \$415 that is a summation of \$400 cost oil, \$28.8462 and deductions of \$13.8462 tax. On the other hand the government's take is only \$85 that is the summation of oil profit and tax. This situation like that of Nigeria will continue till the contractors recoup their cost fully. Then the cost recovery percentage drops to only operating cost, where the country will start benefiting fully.

#### 6.5. Equatorial Guinea PSC and Fiscal System

The assumed \$500 oil gross revenue is appropriated as follows in the case of Equatorial Guinea. The country has a fixed royalty of 10% which amounted to \$50 leaving a balance of \$450 which is automatically allocated to the contractor as operating cost. Since the provision says 100% cost recovery should be given to the contractor. Thus this signified that the process will continue until the contractors recoup all their cost no matter how long it will take, therefore in the initial stage of the activities there is no any oil profit neither tax, just like that of Nigeria, even though Nigeria had a limit before but just modify its MoU in year 2000.

Analyst argued that the newly entrance of Equatorial Guinea into oil industry influences the country to make its contractual terms so attractive. Of course one can justified from bonus distribution Table 1, which showed that the country's total bonus was only \$7m compared to Nigeria

with \$20m and Indonesia with \$9.8. On the other hand, government take allocation shows that Equatorial Guinea gets only 10% that is \$50 as royalty, because like that of Nigeria the country did not place any limit for cost recovery, therefore in the initial stage the country will not have any share of oil profit neither taxes at the end of the allocation. Therefore the final take stands at only \$50. Moreover even after the contractors recover their cost the percentage of sharing oil profit between government and the contractor is 50%/50%, instead of 40%/60% in case of Nigeria that is by assuming same well depth. In addition, even the tax on contractor's oil profit is restricted to 25% compared to 48% and 50% for Indonesia and Nigeria respectively.

## 7. Conclusions

Our findings justified the underlying hypothesis that says socio-economic factors help shape the terms and conditions of oil and gas contracts in developing countries. These can be seen from different countries analyses. The findings relates to Nigeria showed that even though the country gets highest bonuses of \$20m (Table 1), yet the country gets only \$ 40m as final returns in the distributions of oil revenue, even though this take is at the beginning of the contract, one may argue that at the end when IOC recoup its cost, the take will change, but still the percentage of profit oil is lesser than that of Malaysia. Equally, the findings show that Nigerian level of returns decreases as a result of amending contractual terms, this amendment happens as a result of political instability and less technological advancement of the country.

Indonesia is the second receiving bonus country among the countries, with the total bonus of \$12.3m, but the country's final take shows that it only received \$85m, which is just 20% of the contractor's take. And this is attributable to high percentage of cost oil of 80%. On the other hand, the general assessments and records of EIA shows that Indonesian reserve is continuously depleting. Moreover Indonesia has amended its contractual terms four times from 1966 to 2007, in favor of IOCS and these may be attributable to the oil depletion which might help in retaining and even attracting more companies in to the country.

Malaysia is believed to be more technological advanced country among the countries involved in our research. The country has no any bonus at the beginning of contracts. The analyses shows that the country gets highest returns compared its contemporaries, in all respect such as royalty, oil profits and even cost oil is limited to 50% many view the contractual terms of Malaysia as toughest, but due to political stability and geological potential companies are still patronizing the country.

Equatorial Guinea is newly oil discovered country compared to the rest. In fact, results show that the country received bonus of only \$7m, which is less than that of Indonesia and less than 50% percent that of Nigeria. On same vain, the final take of the country is only \$50m a little above that of Nigeria, just like Nigerian the country did leave cost recovery unlimited to the MNOC and even MNOC recoup their cost, the percentage value of tax and oil profits are per lower than the rest of the countries. These are attributable to the lack of man power,

technological advancements and more importantly serves as an attractive major to the MONC.

Therefore the general research findings justified the underlying hypothesis of socio-economic factors help shape the terms and conditions of oil and gas contracts in developing countries. This position agrees with the opinions of Jahnsen (2003), Frynas, (2004), Pongsiri (2004), Umar (2002) and Gidado (1999) who posited that environmental characteristic of a country influences its terms of agreement with multinational oil companies which basically affected the country's return. In addition, the finding in this study showed that Nigerian agreements did not provides more returns and benefits compared to chosen countries. Because the research findings shows that Malaysia received the highest returns, followed by Indonesia and Equatorial Guinea. Nonetheless, no doubt this paper has some inherent weaknesses, particularly having used only secondary data as a source of information. It is therefore, recommended for future researchers to employ both primary and secondary data. This will enrich the findings by providing more insightful information.

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