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NIGERIA AND OPEC: TO BE OR NOT TO BE?

According to the *Economist*, 'Oil multiplied Nigeria's exports by a factor of 10 in the 1970s, and its imports by a factor of 11. This fuelled Nigeria's honourable ambitions to emerge as the greatest power in Africa. The country's rulers are bitterly disappointed by the way the oil glut has partially devalued this great natural resource. So are some exporters to it.'

In the wake of this unhappy state of affairs, Nigeria has taken steps to redress the situation. Some people, however, argue that the most effective action Nigeria should take is to lower the price of her oil and therefore sell more oil in order to maintain her revenues and thereby stem the tide of financial squeeze facing the country as a result of acute shortfall in crude petroleum exports. But Nigeria cannot unilaterally reduce the price of her oil as long as she is a member of OPEC. In order, therefore, to enable her to exercise this rational economic logic of lowering price and increasing her sales and receipts, the proponents argue that Nigeria should withdraw from OPEC. Many others, however, argue that Nigeria's interests are better served inside rather than outside OPEC. In this way, the 'Nigeria and OPEC: To Be Or Not To Be' controversy, is set.

In order to resolve this controversy, some basic questions need be asked and answered. First, why did Nigeria join OPEC in the first instance? What has Nigeria benefited or lost from OPEC membership? What is the case for and against Nigeria's continued membership of OPEC? And, finally, what prospects has oil in Nigeria?

The purpose of this lecture is to attempt answers to the above questions in the order in which they are put.

WHY NIGERIA JOINED OPEC

No account of why Nigeria joined OPEC will be complete or accurate without the background to the formation of OPEC. In order words, why Nigeria joined OPEC is almost synonymous with why OPEC was formed.

OPEC was formed on September 9, 1960 in Bagdad, Iraq, as a reaction to the outraged sense of justice at the high handedness of the multinational oil companies which at that time controlled all operations in the oil industry in the host countries, producing and selling the oil in accordance with their own interests and the dictates of their governments' foreign policies. Before OPEC came into existence, the oil companies fixed the quantity of oil to be produced and fixed and varied the prices at which the oil was sold with utter disregard of the interests of the host countries. Accordingly, when in 1959, and again in 1960 the oil companies unilaterally reduced the prices at which they sold Venezuelan and Middle East Oil, the five founding members, Iran, Iraq, Kuwait, Saudi Arabia and Venezuela, met in Iraq capital and formed a countervailing power block against the oil companies to protect their mutual national interests. Thus, the primary and proximate cause of the formation of OPEC was to forestall the downward trend in crude oil prices and the vulnerability of OPEC member economies to diminishing oil revenues.

Other factors responsible for the formation of OPEC include the need to correct the inequity of oil concession agreements which favoured the oil companies more than the host countries. For instance, the profit sharing arrangements made the host countries highly vulnerable to oil price fluctuations. Mention should also be made of the growing consciousness in the principal producing countries of the importance and immense contributions that the oil industry could make to the economic development of their countries.

The objectives of OPEC have progressively evolved since its inaugural conference. The first set of objectives included the stabilisation of crude oil prices, the co-ordination and unification of the petroleum policies of the member countries, the guarantee of a steady flow of income to the producing countries, ensuring efficient and regular supply of petroleum to consuming nations and a fair return on investment to the oil companies. A new set of objectives was introduced in June 1968. to cover direct exploration and production activities, participation in the equity of existing concessions; progressive and accelerated relinquishment of acreage of existing contract areas; the adoption of conservation rules in the industry and the fixing of posted prices by the governments of member countries. In a conference in Caracas in December 1970, a third set of objectives was formulated. These were, to establish 55% as the minimum income tax rate; to eliminate existing disparities in posted prices; to maintain a uniform increase in the posted prices; to adopt a new system for the adjustment of gravity differential on posted prices; and from January 1971, to eliminate completely the allowance granted to oil companies.

The success of OPEC in realising most of the above objectives demonstrated its relevance to an oil producing developing country like Nigeria. This explains why Nigeria joined OPEC. More concretely, Nigeria joined OPEC as a result of the realisation that the country was not gaining as much as the OPEC member countries from its oil industry. As Table 1 illustrates, the Nigerian government take per barrel of oil prior to OPEC membership was lower than Libya's, even though the crudes are similar in quality. This situation changed dramatically after Nigeria joined OPEC in July 1971. The table also compares Nigeria's posted prices with Libya's and shows that the posted prices were not used in Nigeria until 1967 and that Nigeria's posted prices were in the main lower than Libya's before joining OPEC. It became abundantly evident to the Federal Government of Nigeria that the country was losing revenue from its petroleum tax administration and that joining OPEC would correct the situation as Nigeria could learn from the experiences of the older OPEC members.

Even before joining OPEC, Nigeria was benefiting from the Organisation's activities. For example, the principle of posted price determination and royalty expensing were borrowed from OPEC.

Indeed, the few concessions that Nigeria wrested from the oil companies before joining OPEC were based on the most favoured nation principle whereby any better terms given to another producing country by the oil companies automatically became applicable to Nigeria.

In a nutshell, Nigeria joined OPEC because of the need to correct its faulty administration of petroleum taxation such that the government receipts per barrel and posted prices could compare more favourable with those of the OPEC members as well as the advisability of aligning her aspirations with those of other oil exporting countries at similar stages of development. Furthermore, since she had gained some benefits from the efforts of OPEC even when she was not a member, it became necessary to remove the guilty complex of being a "free rider" by joining and fully identifying herself with the organisation in the just struggle for wresting control of the oil industry from the foreign companies.

WHAT HAS NIGERIA BENEFITED/LOST FROM OPEC MEMBERSHIP?

As a member of OPEC, Nigeria has lost the freedom to unilaterally determine the price of her crude oil in accordance with market forces. Also because of production sharing and cut back agreements within OPEC, Nigeria's membership has deprived her of the freedom to fix her oil production levels.

It must, however, be stressed that these arguments are largely academic. Nigeria could not lose what it did not have. Before the formation of OPEC, neither Nigeria nor any other oil producing third world country had the power or freedom to determine production or price levels. It was the oil companies which determined both the quantity and the price. It was OPEC that wrested this power from the oil companies and it was as a result of Nigeria's membership of OPEC that she, eventually, was able to exercise some control over the quantity and price of her crude oil.

It can, therefore, be said emphatically that the first benefit Nigeria derived from her OPEC membership is the success in obtaining recognition of the principle of consultation by the oil companies and thus a measure of control over, and share in the industry. This was in the 1960s even before Nigeria became a member of OPEC. This was achieved under the "most favoured nation principle" mentioned above. Later in the 1970s, Nigeria, because of her membership of OPEC, succeeded in the assumption of full control over the pricing of her crude oil. Following the emergence of the Nigerian National Oil Corporation (NNOC) later reorganised into the present Nigerian National Petroleum Corporation (NNPC), she gained some control of the management of the "up-stream sector" of the industry. In this way, Nigeria, like other OPEC member countries, succeeded in putting an end to what was to her a humiliating spectacle of the unilateral determination of oil prices by the oil companies.

Secondly, and following from the above, we have the dramatic increases in oil prices which OPEC has achieved since its inception most especially since 1973 when OPEC countries took over price administration from the oil companies. Accordingly, OPEC marker price increased from \$5.397 per barrel in 1973 to \$34.00 per barrel in 1982. Similarly the posted price of the Arabian marker crude rose from \$2.170 per barrel in 1960 to \$18.00 per barrel in 1979 (Table 2). An interesting feature of this price administration is OPEC's ability to maintain crude oil prices in slack markets and increase oil prices in times of excess demand. As a member of OPEC, Nigeria naturally benefited from this price manipulation. The sale price of its crude oil rose from \$8.36 per barrel in 1973 to \$36.52 in January 1982. As a result, oil revenue rose from \$1.02 billion in 1973 to \$9.2 billion in 1981. (See Tables 3 and 4).

Thirdly, as a member, Nigeria has enjoyed many of the achievements of OPEC since 1971 and obtained benefits which would have been very difficult, if not impossible, to wrest unilaterally from the oil companies. These include majority equity participation in existing oil concessions; increased oil royalties and petroleum tax rates; increased oil exploration; a more efficient conservation policy and the use of production and service contracts for operating the oil industry instead of the traditional concessionary system.

Fourthly, OPEC membership has increased Nigeria's political stature in the comity of nations. The oil power has established her as an African leader and afforded her the opportunity of playing leading roles in African politics as exemplified in the struggle for Angolan and Zimbabwean independence.

Fifthly, Nigeria, as a member, has succeeded with OPEC in establishing and consolidating links with other developing countries, maintaining with them a common front on all global issues of mutual concern. A most outstanding example is the "Solemn Declaration" in Algiers in 1975 by the Sovereigns and Heads of State of OPEC member countries which later inspired the creation of the conference on International Economic Cooperation (CIEC), otherwise known as the North South Dialogue. In this way Nigeria has actively participated with OPEC and other third world countries in the quest for a New International Economic Order (NIEO).

Sixthly, while the search for NIEC continues, Nigeria with other OPEC members and without waiting for the industrialised countries took the initiative in the establishment in 1976 of "the OPEC Fund for International Development". Originally envisaged as a temporary aid instrument, the Fund was made permanent in January 1980 as an international agency for financial assistance to other developing countries.³

Finally, Nigeria has benefited immensely from OPEC membership by her contribution, through OPEC, to world development and to the philosophy of interdependence of nations. To quote Dr. Marc S. Nan Nguema,

OPEC has changed the world! Or, to be more precise, OPEC has had a profound and permanent impact on economic thinking throughout the world... There are signs that OPEC's policies are coming to be recognised for what they are, namely genuine pointers to the realities and challenges confronting world economic development. Never before has there been such a high degree of energy-consciousness as there is today. And it cannot be denied that OPEC has been the prime mover behind this awareness, the driving force which has led governments, the media, and the general public to concern themselves not only with the depletability of oil — although this resource is at present in the foreground — but with the whole spectrum of the world's exhaustible natural resources.⁴

THE CASE FOR AND AGAINST NIGERIA'S CONTINUED MEMBERSHIP OF OPEC

In the light of the above benefits which Nigeria derives from OPEC membership, the case for the continued membership is undoubtedly overwhelming. But the proponents of Nigeria's withdrawal from OPEC have their own arguments. The country for instance, can fix her crude oil prices to reflect market conditions and can produce as much as she wants as long as the market can permit without OPEC constraints. Furthermore, there will be no obligation to contribute to the OPEC Fund which gives out loans to other developing countries some of whom are even more developed than Nigeria. It is further argued that substantial savings can arise from these and other financial contributions which Nigeria has had to make to OPEC.

In addition, the stigma of greed attached to OPEC can be shaken off since most of the industrial and developing countries hold the view that OPEC crude oil prices are unjustifiably high. By thus being acclaimed to be financially abstemious and hence "a good boy", Nigeria would then most probably be seen as 'a friendly' nation by the industrial and some other developing countries, and as such may obtain a greater level of co-operation from them, especially in areas of oil sales, technical aid and transfer of technology.

To all intents and purpose, the above "benefits" of operating outside OPEC are merely heroic and definitely illusory. First, Nigeria may be regarded as a friendly country, if, as the weakest link in the OPEC chain, she succumbs to being used by the West to break and disintegrate OPEC. But the honeymoon will surely be shortlived. In the medium and long-term, the West will join

other OPEC members and the rest of the third world countries in condemning and "blacklisting" Nigeria as being instrumental to destroying the only effective hope the world has for bringing about the much desired New International Economic Order (NIEO). Can the country stand such a stigma? Surely not!

Although by operating outside OPEC, Nigeria may not contribute to the OPEC Fund, she will nonetheless continue to discharge her other International obligations such as contributing to African Development Bank and other international bodies. In such a situation the savings from non contribution to the OPEC Fund will become so marginal, more apparent than real, and at any rate, may not fully compensate for the consequent loss of face and debased international stature of the country.⁵

Perhaps the strongest case the Nigeria-leave-OPEC proponents have is over price and quantity i.e. that if she leaves OPEC she would be free to fix the price and determine the quantity of her crude oil according to the dictates of the market without OPEC constraints. But this argument is myopic. It assumes an unduly large price and income elasticity of demand for Nigeria's crude oil; it assumes that other OPEC members, particularly Libya and Saudi Arabia, will keep quiet if Nigeria starts a "price war"; and it assumes that Nigeria outside OPEC can succeed in becoming a price setter rather than a price taker which she is inside OPEC. Surely none of these assumptions are plausible. The price elasticity of demand for Nigerian oil is not infinite. OPEC cannot be expected to be neutral if Nigeria starts a price war to destroy its solidarity and Nigeria outside OPEC will remain a mere price adjuster rather than a price setter to reflect OPEC and North Sea oil prices.

But the price argument is myopic in yet another sense. It ignores all the other benefits of OPEC membership (enumerated above) which Nigeria outside OPEC would then lose. It ignores the international stature of OPEC and the pride derived from its membership which will also be lost. It ignores the fact that Nigeria outside OPEC would be very vulnerable to the machinations of the industrial countries and the oil-companies whose major objective is to have lower crude oil prices and break-up OPEC; and it ignores the fact that Nigeria would lose the protection against the oil companies afforded by OPEC membership.

In the light of the above, it becomes obvious that it will be a most regrettable retrogressive step for Nigeria to leave OPEC. It will amount to setting the clock of progress many many hours behind.

THE PROSPECTS

The answer to Nigeria's present economic problems therefore is not in opting out of OPEC but in effective management of the oil economy. Since 'oil is the main engine of growth of the economy'⁶ and since 'it is Government policy to use the oil resources to transform the country into a modern state, technologically and industrially'⁷ and 'to develop the productive capacity of the economy and thus permanently to improve the standard of living of the people', ⁸ the prospects lie in the efficient and effective use of the oil resources.

Available estimates indicate that despite competing substitutes, oil will still occupy its position as a major source of world energy by the year 2,000 although its percentage contribution is projected to decline from 45% in 1990 to 37% in the year 2009. Thus, increases in oil production from non-OPEC sources notwithstanding, OPEC still accounts for a substantial proportion of total world production of crude oil, accounting for

55% in 1973 and 44.3% in 1980. (See Table 5). OPEC oil is expected to remain an important factor in total world energy supply in the 1980s and 1990s. It is also estimated that Nigeria's reserves of oil (proven plus probable) are more than 115 billion barrels. The proven reserves alone are estimated to last Nigeria more than 25 years from now at a daily production rate of 2 million barrels. ¹⁰ Besides, as at 1st January, 1981, Nigeria's natural gas reserves stood at 88 trillion standard cubic feet, equivalent to about 15 billion barrels of crude oil. It follows, therefore, from all these that crude oil will continue to be a major source of world energy in spite of competing substitutes and that Nigeria will remain a major exporter of crude oil for many years to come because of her abundant proven and probable oil and gas resources.

The question then is price. Because Nigeria produces under competitive conditions, she cannot unilaterally significantly influence the prices of her oil. This is where and why solidarity with OPEC becomes imperative in order to use the combined weight of OPEC to maintain reasonable prices for her crude oil. But the politics of oil pricing must not be taken lightly. OPEC, for instance, is accused of over-pricing her oil and many argue that the high price partly explains Nigeria's current decrease in oil sales. According to a recent IMF study, however, "the present price of oil does not appear to be higher than economic theory would suggest to be appropriate."

It is nevertheless the fact that, apart from the worsening economic recession in the industrialised countries, the main consumers of oil, the present slump in the demand for oil is a direct consequence of the reaction by consuming countries against what they consider to be the high price of oil. Indeed, ever since the oil price explosion of 1973/74, the major oil consuming countries have been making strenuous efforts to reduce their dependence on OPEC oil. To this end, the previous loose co-operation between these countries under the umbrella of the OECD took a new turn. A tighter co-operation framework has been introduced under the International Energy Agency whose primary function is to co-ordinate the energy policies of its members with a view to reducing excessive dependence on oil imports and to increasing energy conservation. Other objectives, include the development of alternative sources of energy and the setting up of an oil consumption sharing system during supply emergencies. 12 Accordingly, in the United States, Western Europe and Japan, measures to substitute domestic coal, gas, nuclear power, solar energy and hydro-electricity for oil, have been pursued with vigour. Not only have these measures resulted in a 12% reduction in their total oil consumption and 17% fall in their total oil imports over the last two years, 13 but they have also helped to increase the energy options available to the major consumers. These efforts at substitution, together with increased oil production from the North Sea, Alaska, and Mexico have helped to depress the demand for OPEC oil, and ipso facto for Nigerian oil.14

This development is significant in assessing the prospects for OPEC oil in general and for oil in the Nigerian economy in particular because there is a presumption in some circles that the present slump in the oil market may be temporary. A closer examination may, in fact, indicate that it may not be temporary. OPEC may, through its production cut-backs, stabilise current oil prices; and there may certainly appear some recovery in oil demand when the economic recession is over; but the present efforts by the consuming countries to develop and expand substitutes for oil, to develop domestic oil resources, to achieve greater economy in oil consumption and to enforce more

stringent conservation measures, must be expected to continue. In these circumstances the growth in demand for OPEC oil is very unlikely to resume its pre-recession rates. And when sooner or later Iran, whose disrupted oil production helped many other countries to maintain their output, re-enters the world market, the competition for oil sales may be much more intense.

In assessing the prospects of oil in the Nigerian economy, therefore, certain factors have to be borne in mind. The first is that the present slump in the demand for oil may not be temporary after all. Even if, as expected, demand picks up after the recession, it is unlikely to reach its pre-recession levels. It follows that Nigeria's future revenue and expenditure possibilities are not as bright as they were in the past decade.

Secondly, Nigeria must explore other markets and other uses for her oil. The present over dependence on one market — The US — is most unhealthy. Indeed, while the major oil consuming countries are searching for alternative substitutes, oil producing exporting countries should be developing alternative uses for oil.

Thirdly, in addition to developing alternative uses and markets for their oil, Nigeria and other OPEC countries should expand their domestic consumption and refining capacity. Indeed, the bane of OPEC is that it produces a product it does not use or refine in any significant extent but relies almost exclusively on its raw or crude state. (Table 6). If OPEC increases her domestic consumption and refining capacity significantly, she can, at least, maintain current production levels and export some refined products if and when the demand for crude becomes depressed.

Finally, since Nigeria is the weakest link in the OPEC chain by being the most vulnerable to a decline in demand for oil, she should embark on a deliberate policy of building up reserves so as to be able to withstand future shocks arising from fluctuations in the international oil market. Her hitherto neglected agriculture should be revamped to diversify sources of reserve earnings. Although OPEC has recently proposed the establishment of a compensatory facility to assist its members in difficulty, such assistance cannot be limitless. Only robust reserves can maintain Nigeria's prestige and stature not only in OPEC but also in the comity of nations.

CONCLUSION

We may, therefore, conclude that the answer to Nigeria's current economic problems is not to pull out of OPEC. That would be a very regrettable, retrograde step. The answer lies rather in the judicious management of her oil resources, diversifying her uses and markets for oil, building up robust reserves to withstand future oil shocks, diversification of the economy and massive expansion of her agriculture to reduce the heavy dependence on oil. Rather than pull out, Nigeria should continue to help to strengthen OPEC. Without OPEC, the oil exporting countries of the third world in general and Nigeria in particular could not have achieved the success in the fight against imperialism and the multinationals in the control of their natural resources. Nigeria has a lot to lose by operating outside, and more to gain, by operating inside OPEC.

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- 4. ibid pp. 16 and 25.
- 5. Similarly the argument that Nigeria outside OPEC may be regarded by the West as a friendly nation and therefore attract a higher level of co-operation, technical aid and transfer of technology is not borne out by the experience of non-OPEC developing countries.
- 6. Third National Development Plan 1975-80, p.135.
- 7. Second National Development Plan, p.135.
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- 13. ibid p.14.
- 14. For further discussion, See
 - (a) Dr S.A. Madujibeya: 'Between Oil Wealth and Petromania South', February 1982, pp.53/55.
 - (b) Dr S.A. Madujibeya: 'A Slippery Position', West Africa, September 25, 1981, pp.2243/5.
 - (c) Donald O Caroll: 'World Oil Production: Offsetting OPEC cuts'. Petroleum Economist, September 1980, pp.369/70.

TABLE 1
GOVERNMENT TAKE PER BARREL AND POSTED PRICE PER BARREL
(\$/barrel)

	Government T	ake per barrel	Posted Price	e per barrel
Years	Nigeria	Libya	Nigeria	Libya
1960	0.67			
1961	1.12	0.45		2.230
1962	0.96	0.60		2.230
1963	0.60	0.65		2.230
1964	0.47	0.67	_	2.230
1965	0.42	0.79	****	2.230
1966	0.37	0.95		2.230
1967	0.52	1.00	2.170	2.230
1968	0.86	1.06	2.170	2.230
1969	0.45	1.05	2.170	2.230
1970	0.64	1.12	2.420	2.550
1971	1.56	1.67	3.178	3.399
1972	1.74	1.93	3.409	3.620
1973	2.88	2.80	8.404	9.061
1974	7.44	11.03	14.691	15.768
1975	10.51	9.77	13.070	16.060
1976	10.47	11.36	13.160	12.620
1977	12.87	11.93	14.570	14.200
1978	12.48	12.41	14.120	13.850
1979	21.60	21.59	25.61	25.60
1980	33.59	32.77	39.233	38.30
1981	34.62	34.90	40.408	40.72
1982	33.60	35.10	39.244	40.95

* Estimated, vide overleaf.
Source: OPEC Oil Report 2nd Edition, 1979

TABLE 2 POSTED PRICES FROM OPEC (SIX MAJOR COUNTRIES)

1960 — 1982 (US \$ per barrel)

Country	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	(a) 1979	(b) 1979	1980	1981	*1982
Nigeria	1.720 1.590 2.230	_	1.780 1.720 1.590 2.230 — 2.170	1.720 1.590	1.709 1.720 1.590 2.230 — 2.170	1.750 1.720 1.590 2.230 — 2.170	1.720 1.590	2.170	1.720 1.590 2.230 2.170	1.590 2.230 2.170	1.720 1.680 2.550	2.259 2.181 5.399 3.123	2.451 2.373 3.620 3.408	4.842 4.827 9.051 8.403	11.475 11.272 11.450 15.763 14.191 13.247	12.400 12.151 16.060 13.070	11.500 11.220 12.620 13.160	12.600 12.270 14.200 14.570	12.600 12.222 13.850 14.120	17.170 16.400 16.400 21.260 20.960	19.960 19.490 23.500 23.490	39.233	42.695	39.244

Note: (1) State Sales Price
(2) Prices effective mid May
(3) Prices effective 1st July
(4) May 1972

Sources: OPEC Oil Report: Second Edition 1979
Nigerian National Petroleum Corporation (NNPC)

TABLE 3 OFFICIAL SELLING PRICES

					USA	\$ PER	BARR	EL							
	O Gravity	Prior Sept. 1970	Sept. 1970	Jan. 71	Feb. 71	March 71	Effective 31st Dec. '76	Effective 1st July '77	Effective 31st Dec. '78	Effective 1st July '79	Effective Jan. '80	Effective 1st Feb. '80	Effective Jan. '81	Effective Nov. '81	Effective Jan. '82
Libya	Brega 40°	2.10	2.485	2.505	2.505	3.405	12.62	14.20	13.85	23.50	34.67	34.67	39.20	36.80	37.00
Abu Dhabi	Zakumo 40°	1.86	1.86	1.86	2.225	2.225	N/A	N/A	N/A	N/A	29.46	29.46	36.56	35.70	35.40
Iran	Light 34°	1.79	1.79	1.79	2.17	2.17	11.62	12.81	12.81	22.00	30.87	32.87	37.00	34.60	34.20
Kuwait	Kuwait 31°	1.59	1.59	1.68	2.085	2.085	11.23	12.27	12.27	19.49	27.50	27.50	35.50	33.04	32.30
Iraq	Basrah 35°	1.72	1.72	1.73	2.155	2.155	11.48	12.60	12.60	19.96	27.96	27.96	37.00	35.11	33.46
Algeria	Saharan 44°	N/A	N/A	N/A	N/A	N/A	13.10	14.45	14.10	23.50	33.00	37.21	40.00	37.50	37.00
Ecuador	Oriente 30°	N/A	N/A	N/A	N/A	N/A	11.60	12.65	13.00	17.42	35.50	35.50	37.00	33.15	33.35
Gabon	Gamba 31°	N/A	N/A	N/A	N/A	N/A	13.23	14.81	14.81	20.00	28.00	30.00	N/A	N/A	35.00
Indonesia	Sumatra 35°	N/A	N/A	N/A	N/A	N/A	12.80	13.55	13.55	21.12	27.50	29.50	N/A	N/A	35.00
Nigeria	Bonny 37°	1.04	1.04	1.64	1.64	1.64	13.09	14.63	14.12	23.49	29.99	34.20	39.76	36.52	36.52
Qatar	Dukham 40°	N/A	N/A	N/A	N/A	N/A	11.85	11.19	13.19	21.42	29.42	29.42	39.23	35.50	35.45
Saudi Arabia	Light 34°	N/A	N/A	N/A	N/A	N/A	11.51	12.70	12.70	18.00	26.00	26.00	34.00	34.00	34.00
UAE	Mubbarak 39°	N/A	N/A	N/A	N/A	N/A	11.92	13.24	13.26	21.56	N/A	N/A	N/A	N/A	N/A
Venezuela	Tiajuna 31°	N/A	N/A	N/A	N/A	N/A	12.35	13.54	13.54	21.85	26.90	28.90	36.00	35.00	35.00

OPEC Oil Reports 1st and 2nd Edition Nigerian National Petroleum Corporation (NNPC) Source: Petroleum Intelligence Weekly (several issues)

TABLE 4 FEDERAL GOVERNMENT REVENUE FROM CRUDE PETROLEUM
1970—1981 (¥ Million)

Year	Oil Revenue	Total Current Revenue	Oil Revenue as Percentage of Total
1970	166.4	633.2	26.3
1971	510.2	1,169.0	43.6
1972	764.3	1,404.8	54.4
1973	1,016.0	1,695.3	59.9
1974	3,726.7	4,537.0	82.1
1975	4,271.5	5,514.7	<i>1</i> 7.5
1976	5,365.2	6,765.9	79.3
1977	6,080.6	8,080.6	75.2
1978	4,654.1	7,371.1	63.1
1979	8,880.9	10,913.1	81.4
1980	10,990.2	15,813.1	69.5
1981	9,193.6	14,745.7	62.4

Source: Federal Ministry of Finance Lagos.

CBN Economic and Financial Review (various issues).

TABLE 5
OPEC POPULATION, GNP PER CAPITA AND OIL PRODUCTION

(Thousand barrels per day)

GNP OIL PRODUCTION Population Capita													
Country	Thousands (1977)	US \$ (1977)	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Algeria	17,152.0	1,140	1,029.1	785.4	1,062.3	1,097.3	1,008.6	982.6	1,075.1	1,152.3	1,161.2	1,203.7	1,090.4
Ecuador	7,324.0	820	4.1	3.7	78.1	208.8	177.0	160.9	187.8	183.4	201.8	218.4	224.5
Gabon	533.0	3,190	108.8	114.6	125.2	150.2	201.5	223.0	222.8	222.0	208.7	204.4	175.5
Indonesia	133,505.0	320	853.6	892.1	1,080.8	1,338.5	1,374.5	1,306.5	1,503.6	1,686.1	1,635.2	1,593.1	1,581.2
Iran	34,782.0	870	3,829.0	4,539.5	5,023.1	5,860.9	6,021.6	5,350.1	5,882.9	5,662.8	5,241.7	3,056.8	1,546.7
Iraq	11,803.0	1,570	1,548.6	1,694.1	1,465.5	2,018.1	1,970.6	2,261.7	2,415.4	2,348.2	2,562.0	3,431.0	2,700.7
Kuwait	1,137.0	12,690	2,989.6	3,196.7	3,283.0	3,020.4	2,546.1	2,084.2	2,145.4	1,969.0	2,131.4	2,512.1	1,603.8
Libya	2,636.0	6,520	3,318.0	2,760.8	2,239.4	2,174.9	1,521.3	1,479.8	1,932.6	2,063.4	1,982.5	2,064.2	1,788.0
Nigeria	(78,982.0)	(510)) 1,083.1	1,531.2	1,815.7	2,054.3	2,255.0	1,783.2	2,066.8	2,085.1	1,897.0	2,303.8	2,060.1
Qatar	N/A	N/A	362.4	430.7	482.4	570.3	518.4	437.6	497.6	444.6	486.7	506.3	471.5
Saudi Arabia	7,633.0	7,230	3,799.1	4,768.9	6,016.3	7,596.2	8,479.7	7,075.4	8,577.2	9,224.5	8,301.0	9,526.2	9,928.1
U.A.E.	N/A	N/A	779.6	1,059.5	1,202.7	1,532.6	1,678.6	1,663.8	1,936.4	1,998.7	1,830.5	1,831.1	1,704.0
Venezuela	13,513.0	2,630	3,708.0	3,549.1	3,219.9	3,366.0	2,976.3	2,346.2	2,294.4	2,239.9	2,165.5	2,355.9	2,160.0
Total OPEC					27,094.4	30,988.5	30,729.2	27,155.0	30,738.0	31,278.0	29,805.2	30,807.0	27,034.5
Total World Total OPEC as %		(46,465.0	49, 090 .0	51,795.0	56,770.0	56,925.0	54,045.0	58,465.0	60,940.0	61,510.0	64,180.0	61,020.0
of the World			50.4	51.6	52.3	54.6	54.0	50.3	52.6	51.3	48.6	48.0	44.3

N/A = not available

- Sources: 1. BP Stastistical review of the world oil industry 1980
 2. Petroleum Economist (The International Energy Journal) November 1981
 3. World Tables Second Edition (1980) from the data files of the World Bank
 4. OPEC Annual Reports

TABLE 6
CONVENTIONAL OIL AND REFINING DATA 1980

	Estimated proven reserves billion barrels	Local Oil production 1,000 b/d	Local consumption 1,000 b/d	Refining capacity 1,000 b/d	Cracking ratio	Refining to production ratio
Algeria	8.2	1,019.9	111.5	438.0		42.9
Ecuador	1.1	204.1	70.7	94.5	26.0	46.3
Gabon	0.45	174.5	27.8	44.0	16.0	25.2
Indonesia	9.5	1,575.7	400.0	471.0	10.0	29.9
I.R. Iran	57.5	1,467.3	400.0	1,265.0	10.0	86.2
Iraq	30.0	2,646.4	191.2	305.5		11.5
Kuwait	67.93	1,663.7	44.6	594.0		35.7
S.P.L.A.J.	23.0	1,830.0	94.0	130.0	_	7.1
Nigeria	16.7	2,058.0	165.8	247.0	12.0	12.0
Qatar	3.58	471.4	9.0	10.5		2.23
Saudi Arabia	168.0	9,900.5	383.6	1,178.0	0.5	11.9
UAE	30.41	1,701.9	100.0	15.0	_	0.88
Venezuela	19.6	2,165.0	358.0	1,444.9	9.5	66.7
Total OPEC	435.97	26,878.4	2,356.2	6,237.4	11.0	23.2
Mexico	44.0	1,935.0	1,150.0	1,470.0	30.4	76.0
Canada	6.6	1,429.0	1,750.0	2,296.0	30.0	160.7
USA	26.4	8,500.0	17,200.0	18,400.0	42.0	216.5
Total OECD	57.5	12,500.0	40,000.0	48,700.0	25.0	389.6

Source: OPEC Secretariat.