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"VENEZUELA'S POSITION IN THE INTERNATIONAL OIL INDUSTRY 1940 - 1965"

BY

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Abstract

The position that the petroleum industry occupies today in the Economy of the various producing and consuming countries, and the interrelations of these countries based or derived from the oil business has given this industry an international character. The petroleum industry, however, was subjected to certain changes by the transference of its centre of gravity from the Western Hemisphere to the Eastern, with the emergence of the latter as the major source of oil exports. The United States by itself had exerted a powerful influence over the international oil industry, particularly over prices and over the pricing system used while it was a net exporter of oil, that is, up to 1948. The influence on prices managed to persist, however, up to the mid-fifties due to the various international events that followed: the Korean war (1950), the nationalization of the Iranian oil industry (1951), and the Suez crisis (1956-1957). It is only after the United States established voluntary controls in 1957 and later in 1959 mandatory quotas, when market forces began to play a dominant part in the international industry.

There is logically a parallel line of thought with respect to the Venezuelan oil industry. It had also been under the influence of the American industry until 1959, and since then Venezuela has also been receiving the impact of market forces. However, this country has been susceptible to the strongest impact having the highest production cost

amongst the major exporting countries, and thus, under the prevailing competitive situation, has been losing position in world markets with respect to Middle Eastern and African sources. However, Venezuela believes that with the creation of O.P.E.C. competition among sources can be prevented, and that with a coordinated policy among O.P.E.C. members, they can become insulated from the effects of competition among oil companies. I believe that the weakness of this theory lies in the first assumption.

With the present work I hope to clarify in some degree the situation of the petroleum industry in Venezuela, and its position within the international scene. Needless to say, this will involve many political and social considerations, but because they are so entagled with the economics of the petroleum industry, they will be unavoidable.

TO MY MOTHER AND HER SON-IN-LAW

WITH RECOGNITION AND GRATITUDE

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I wish to acknowledge my utmost gratitutde to the Central Bank of Venezeula for having given me the opportunity and financial assistance to make this study. To Dr. Carmen C. Lasi, head of the Petroleum and Mining Division of this institute, I am also greatly indebted, for her moral support and for having "persuaded" me to join the Petroleum Section through which I was initiated in this field. From the Ministry of Mines and Hydrocarbons of Venezuela, I wish to thank Dr. Alirio Parra for his advice and assistance on many occasions, and Miss Ethel Brandt who kindly provided me with statistics and data. There are no words to express my gratitude to Professor Edith Penrose to whom I shall always be indebted for the training she has given me and for her patience as she supervised my work. To Dr. Biplabkukumar Das Gupta I am also very grateful for his encouragement at all times, and for his advice and help during difficult moments. And last but by no means least, I wish to acknowledge to "Shell Oil Company" in London, my gratitude for permitting me to use their excellent library, and to its very efficient staff who were always ready to lend a helping hand.

Merely as a precaution I want to emphasize that the views expressed in this work are entirely my own, and therefore do not represent those of any of the institutions mentioned above.

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I Chief Economic Characteristics of the International Oil Industry.

A. Vertical Integration

The oil industry is composed of five different stages: exploration, production, transport, refining and marketing. However, the major oil companies seem to have favoured vertical integration as a way of coordinating these and of making the process of "production", using the term in the widest sense, i.e. from well to consumer, quite efficient. Without implying that these stages could not have been, or could not be developed by separate companies or concerns, using "long-term contracts' (1) to assure the availability of the necessary inputs of each stage and the outlets for the intermediate and final product, the present situation is that characterized by vertical integration

It was through vertical integration that some companies managed to exert their supremacy in the oil business by restraining competition from the smaller companies that had no access either to crude oil or to markets. (2) But we must recognise, however, that it was also a way of securing an outlet for the vast resources of crude oil for those in the producing stage, and of securing an even flow of input in the refineries and of supplying a market with finished products rather efficiently for those in the refining stage. Vertical integration seems to be defended by the oil industry on the grounds

(1) Penrose, E.; "Monopoly and Competition in the International Petroleum Industry", The Year Book of World Affairs, 1964, page 157.
(2) Hartshorn, Jack; "Oil Companies and Governments", 1962, page 109.

that efficient operations require a continuous and secure flow of supplies, and big firms with large and far-flung markets and heavy investments cannot afford to be entirely dependent on others. One major oil company alleges that since the capital investment required at each stage of the oil industry is large "it is inevitable....that operators should seek.... an arrangement whereby their investment in each stage of the industry can be properly co-ordinated with that at other stages so as to ensure optimum employment of capital overall, thereby keeping costs as low as possible. The pursuit of these very natural aims in a capital-intensive industry has led to a large measure of vertical integration". (3) According to this same source, approximatley 70% of the industry is completely integrated vertically, and "there is a continuing tendency for more recently established companies to seek partial or complete integration". (4)

B. Oligopoly

On the whole, the activities of the international oil industry have been largely in the hands of eight fully integrated companies generally referred to as "Majors" that managed to acquire a high degree of control of the industry These companies five American and three European, are as follows:

1) Standard Oil of New Jersey.
2) Mobil Oil Company
3) Standard Oil Company of California
4) The Texas Oil Company
5) Gulf Oil Company
6) Royal Dutch/Shell

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(3) Shell International Petroleum Company, London; "Current International Oil Pricing Problems", August, 1963, page 3.
(4) Ibid, page 3.

7) British Petroleum

8) Compagnie Français des Petróles.

Joint operations are common between these companies and their affiliates in most parts of the world. Only among the first seven they hold (5) approximately 73% of the world production (6), 63% of refining (7), and market some 64% of the oil sold to consumers. (8) Furthermore, they are also "often closely associated through joint ownership of subsidiaries and through long term supply or maketing agreements". (9) The association through joint ownership also seems to be a way by which the oil companies have chosen to undertake certain investments. There have been agreements between companies whereby a surplus of any kind held by one concern in a particular area could be "sold to the competitor in exchange for supplies of an equivalent value" in another area where the former might be short, that result in saving of capital expenditure "to the advantage of both companies concerned". (10)

Although the oligopolistic nature still holds for the oil industry we must, however, make the observation that it has lost its characteristic of being a tight oligopoly with the entry of the independents, and today it is better to refer to it as an "oligopoly with a fringe". (11)

C. High Capital Investments

As another characteristic of the oil industry we have that it is one of high capital investments. At the end of 1964 there had been $ 135,625 million (gross figure) invested in fixed assets outside of the Sino-Soviet bloc

(5) Outside of North America and the Soviet Bloc (1965).
(6) Petroleum Press Service, November 1966, page 415.
(7) Ibid.
(8) Ibid.
(9) Penrose, E, "Middle East Oil: The International Distribution of Profits and Income Taxes", Economica, August 1960, page 204.
(10) Odell, P; "An Economic Geography of Oil" London 1963, page 113.
(11) Term used by David Owens. See "Crude Oil Prices: The Next Five Years in Competitive Aspects of Oil Operations", Institute of Petroleum, London 1958 page 186.

(see table I - 1). Of this amount, approximatley 50% had been allocated in the United States, and 70% were in the Western Hemisphere alone. Venezuela participated in the global figure with 5% and the Middle East with 4%. It would also seem interesting to point out Western Europe's participation of 11% in this figure since it reflects the importance and the development of the refining and marketing stages in the area.

With respect to the different stages of the oil industry, we find that nearly 50% of these gross investments are allocated in the production stage, followed by 17% in refining, 16% in Transport and 15% in marketing. This is a breakdown of the total figure which also reflects rather accurately the situation of the different producing areas. For this reason, and as we can see in table I - 1, this is not the case of Western Europe and the Far East (highly influenced by Japan) since these two regions are not characterized as producers but rather as heavy consumers and consequently have their petroleum industry based on refining and marketing.

With respect to the participation of American investment in the petroleum industry outside of the United States, we find that at the end of 1964 it had reached a figure of $23,325 million which was equivalent to 36% of the international oil industry outside of the American border. Canada was the country that had had major attraction for American Capital ($ 4,250 million) although Venezuela, that came close behind ($ 4,100 million), had the industry with the highest participation of American interests (64%). (see table I - 2)

Another facet of the oil industry's investment pattern is given by the allocation of net investments. Analysing the situation from this point of view, we continue giving the Western Hemisphere preponderance over the Eastern, but we find that Venezuela falls below the Middle East and Africa with respect to the amount of investment. (see table I - 3) The global

Table I - 1

Gross Investments in Fixed Assets - December 31, 1964
(million dollars)

Area	Production	Pipe Lines	Marine	Refineries	Chemical Plants	Marketing	Other	Combined
United States	42,725	4,960	1,090	9,100	3,475	7,775	1,975	71,100
Canada	3,525	625	30	1,135	190	1,250	120	6,875
VENEZUELA	4,865	510	20	715	0	175	90	6,375
Other Western Hemisphere	3,540	525	25	1,850	195	1,425	190	7,750
Western Hemisphere	54,655	6,620	1,175	12,800	3,860	10,625	2,375	92,100
Western Europe	1,025	510	40	6,075	1,540	5,650	435	15,275
Africa	1,930	575	10	430	10	1,060	110	4,125
Middle East	2,375	935	40	855	20	390	460	5,075
Far East	1,135	235	30	2,600	375	2,200	50	6,625
Eastern Hemisphere	6,465	2,255	120	9,960	1,945	9,300	1,055	31,100
Unallocated	0	0	12,425	0	0	0	0	12,425
World Total (1)	61,120	8,875	13,710	22,760	5,805	19,925	3,430	135,625

(1) Excluding Sino-Soviet Bloc.

Source: Chase Manhattan Bank; "Capital Investments of the World Petroleum Industry, 1964", page 4.

Table I - 2.

American Investment in the Petroleum Industry Outside the United States (1)
(December 31, 1964)

	Million Dollars	Percentage of Domestic Industry
Canada	4,250	61.8
VENEZUELA	4,100	64.3
Other Western Hemisphere	2,125	27.4
Western Europe	3,950	25.9
Africa	1,075	26.1
Middle East	2,475	48.8
Far East	2,075	31.3
Foreign Flag Tankers	3,275	26.4
Total	23,325	36.1

(1) Gross Investment in Fixed Assets.

Source: Chase Manhattan Bank; "Capital Investments of the World Petroleum Industry", 1964, page 6.

Table I - 3

Net Investments in Fixed Assets - December 31, 1964
(million dollars)

Area	Production	Pipe Lines	Marine	Refineries	Chemical Plants	Marketing	Other	Combined
United States	20,725	2,775	550	3,675	1,950	4,825	1,150	35,650
Canada	2,485	430	15	565	130	810	90	4,525
VENEZUELA	1,865	230	10	260	0	120	65	2,550
Other Western Hemisphere	1,820	310	15	1,125	175	875	155	4,475
Western Hemisphere	26,895	3,745	590	5,625	2,255	6,630	1,460	47,200
Western Europe	550	450	25	3,650	1,200	3,400	350	9,625
Africa	1,350	475	5	275	10	645	65	2,825
Middle East	1,475	375	25	330	15	230	150	2,600
Far East	555	165	20	1,550	275	1,325	35	3,925
Eastern Hemisphere	3,930	1,465	75	5,805	1,500	5,600	600	18,975
Unallocated	0	0	7,300	0	0	0	0	7,300
World Total (1)	30,825	5,210	7,965	11,430	3,755	12,230	2,060	73,475

(1) Exculding Sino-Soviet Bloc.

Source: Chase Manhattan Bank; "Capital Investments of the World Petroleum Industry, 1964", page 5.

figure of net investments for the end of 1964 is of $ 73,475 million of which 64% was allocated in the Western Hemisphere, and 26% in the Eastern. (12) Venezuela participated in this figure with 3%.

D. Economies of Scale

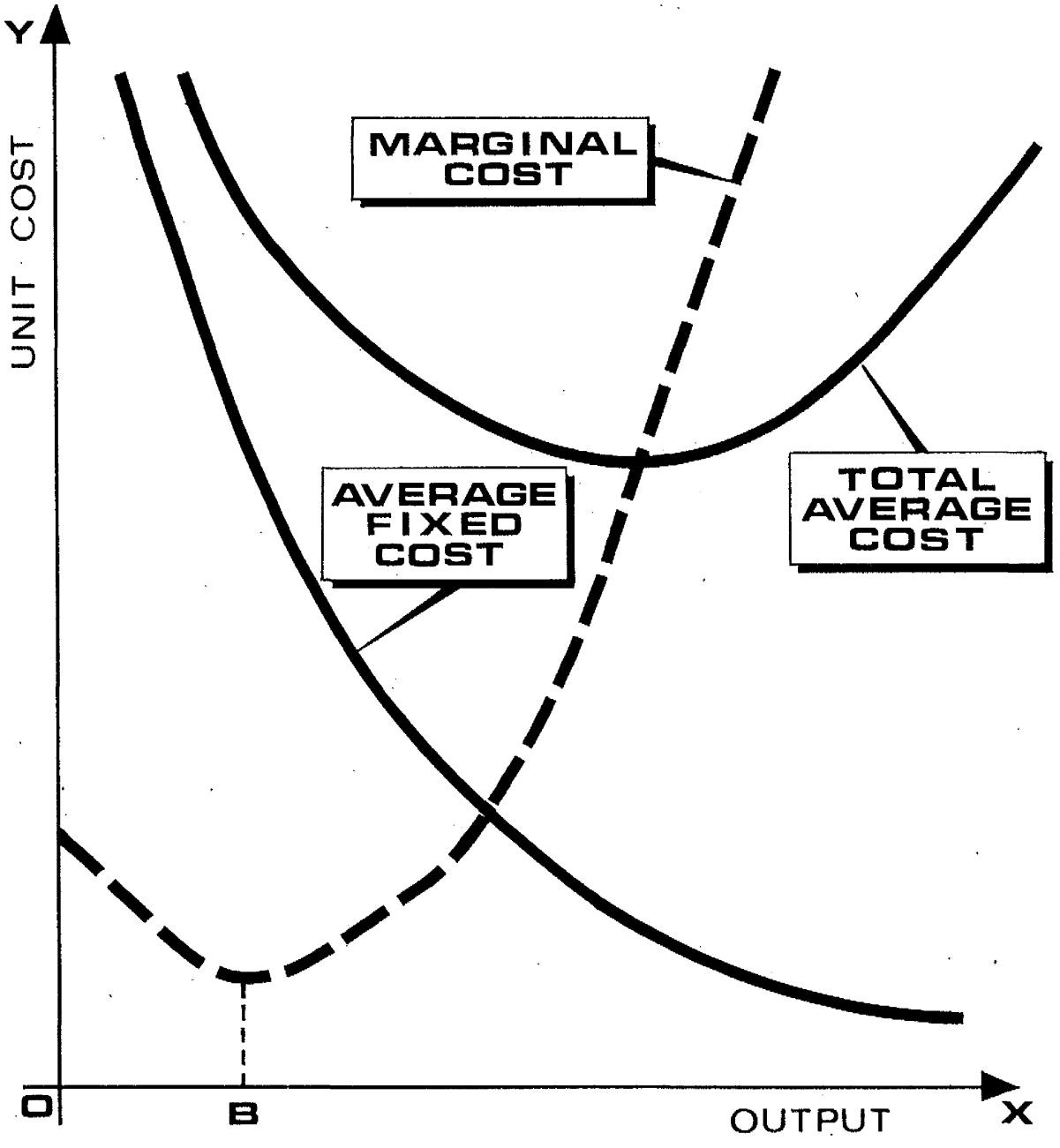
Economies of scale are also present in the petroleum industry since the decrease in unit costs which results as the scale of operations increases, constitutes a standing incentive to employ big units. (13)

In crude oil production, large-scale operations makes it possible for a company to "assume risks that would be beyond the capacity and resources of a small firm", and to apply more advanced technological methods and research to exploration and development. (14) In this sense we can understand that the larger the area is under exploration in a field that holds oil deposits, the higher will be the probability of success, and this success, if achieved, is what finally pays off the expense undertaken until that moment. In production great economies are also gained, but we must clairfy, that what characterixes the production stage is an "economy of high-level output". (15) Once the oil begins to flow, the higher the output the lower total average cost per unit it will be until marginal cost comes to coincide with average cost; (see diagram I No. 1). In other words, economies can be reached in the producing stage of the industry, but only up to the limit given by the marginal cost function since the size of any reservoir, no matter how large it may be, has been "limited by nature" and beyond this limit it can not be further

(12) The remaining percentage is unallocated.
(13) Thompson and Peters; "The Structure of the Oil Industry", page 57, Inst. of Petroleum, London 1958.
(14) C. Issawi and M. Yeganeh, "The Economics of Middle Eastern Oil"; New York, F.A. Praeger, 1962, page 84.
(15) Adelman, M.; "The World Oil Outlook" in Marion Clawson (editor) "Natural Resources and International Development", Baltimore, The Johns Hopkins Press, 1964, page 44.

DIAGRAM I-1

"Simplified Diagram of the Cost Structure of an Oil Deposit"



expanded. (15A)

In refining, investment per unit of capacity "falls sharply" with increase in scale up to a considerable level.(16) Issawi and Yeganeh found that in the United States it had been estimated that investment per barrel of capacity fell from $1,300 for a refinery with 10,000 B/D capacity, to $833 for one of 33,000 B./D capacity, $610 for one of 100,000 B/D, and $545 for one of 200,000 B/D due to the drop in unit fixed costs and of labour requirements. (17) In fact, an oil refinery seems to have the minimum capacity requirement of 15,000 barrels daily of throughput below which it would be "hardly ecomomic" to build. (18)

Tankers and pipelines also allow large economies of scale. With respect to tankers it has been estimated that compared with a 16,600 ton tanker (average size during the war), the saving in transport cost per ton is about 40% for a 45,000 tonner, 50% for an 85,000 tonner, and 60% for one of over 100,000 tons d.w. (19) This is so because building costs per ton decrease with size, and power requirements and fuel consumption increase less than proportionately with size. (20) According to the specialized press, building costs in 1964 were £50 to £55 per ton for a 19,500 tonner, £40 for a 40,000 tonner and £32 for the largest size vessels. (21) Pipelines also are capable of economies of scale with an increase in their diameter since such an increase results in a much larger proportionate increase in volume and thus gives forth a consequent fall in unit costs. In this respect it has been calculated that a 24 inch

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(15A) Adelman, M; "The Supply and Price of Natural Gas", Oxford: Blackwell, 1962, page 15.
(16) C. Issawi and M. Yeganeh, Op Cit, page 84.
(17) Ibid.
(18) Hartshorn, J; Op Cit, page 68.
(19) Petroleum Press Service, November 1960, page 405
(20) Newton, W.L.; The Long Term Development of the Tanker Freight Market", Journal of the Institute of Petroleum, September 1964, page 214.
(21) Petroleum Press Service, May 1964, page 172.

pipeline can carry thirty times as much oil as a 6 inch line. (22)

E. Large Initial Investments

The oil industry is also characterized by being one that requires large investments before output can begin in commercial quantities. It is a common belief that in general the cost of entry for a newcomer is very high (23), although it seems that it is not altogether inaccesible either. In this sense Professor Adelman seems to imply that this entry fee is not as large as it is made to believe and cites the case of the Japanese Arabian Oil Company that entered the business in 1958 by raising the "rather small sum" of $10 million. (24) This indeed was a fortunate case but because it was characterized by such good fortune and being "the relation between investment and basic new capacity unpredictable" (25), I doubt that it could be taken as the general yardstick.

To secure concessions in many of the countries with oil possibilities or to establish a marketing concern in any of the oil consuming regions of the world "very large initial investments are generally required". (26) With respect to the concessions that were granted in Venezuela during 1956-1957 (the period when new comers were all anxious to get into the business), The specialized press specifically states that payments in bonuses were made totalling 682 million dollars for 56 concessions of which "only 3 concessions can be labelled stand out successes, and 3 more barely successful". (27)

Besides these high expenditures which have to be undertaken before output

(22) The Statist, April 22, 1950 (Oil supplement).
(23) Hartshorn, J; Op Cit, page 103.
(24) Adelman, M.;"The World Oil Outlook", page 91.
(25) Adelman, M.; "The World Oil Outlook", page 59.
(26) Hartshorn, J.; Op Cit, page 103.
(27) Petroleum Press Service, October 4, 1965, page 5.

can be obtained there are also heavy social overhead costs which are necessary in order to develop infrastructure and comunity facilities in underdeveloped countries. Many roads have to be made, housing programmes developed, sanitary and health prerequisites seen to, and the establishment of hospital, school, and amenities before a petroleum settlement can begin to function. I became aware of the great investment taken under this heading during a visit to Cardon in Western Venezuela, but like in Cardon, this is common to the rest of the producing sites in Latin America and also of Africa and the Middle East.

Not only the first stages of the oil industry require a large entrance fee, but also transportation, refining and marketing requires large sums to initiate operations. (28) Furthermore, in refining it has been alleged that the cost has even increased due to the introduction of more complex methods of processing. (29) We must conclude then, that in spite of the difference of opinions with respect to the oil industry's entrance fee, we can accept without much hesitation that it is high.

(28) Issawi and Yeganeh, Op Cit, page 86.
(29) Ibid

II Stages of the Petroleum Industry

A. Exploration

Exploration is the initial stage in the petroleum industry and it consists in the searching for oil in an area which geologically seems favourable to the formation and accumulation of hydrocarbons. This stage is carried out through a series of methods ranging from the simplest and most economical, like the first general appraisal made by the geologist, to the most complicated and expensive techniques. The results obtained by the former methods will induce or restrain, whatever the case may be, the use of the latter. Generally speaking, the methods used in this stage of the industry are divided into geological, geophysical and geochemical. (30) The preliminary reconnaissance by the geologist usually takes a full year and only then it is followed by surface geological mapping and air photography. Geophysical techniques measure fractional differences in the earth's gravitational or magnetic fields and the use of seismic methods capable of echosounding are also of normal use. The geochemical procedure resorts to the chemical analysis of surface samples from the more favourable sites in order to verify their composition and then determine if there is any presence of hydrocarbons. All these methods however, can only assess the probibility that oil may be found in a certain area, so once a probable area has been determined, the only way to verify the presence of oil is to drill.

However, favourable geological conditions are not sufficient to induce a significant exploratory programme. Political considerations must be taken into account as well as the supply and demand pattern of the industry.

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(30) Fothergill, C.A.; "Oil Exploration Methods" in "Handbook of the Petroleum Industry"; Ed.: G. Sell and H.A. Dossett; London, page 21.

Exploration has been a way by which the petroleum industry has attempted to ensure itself of adequate supplies for future development (31), to find better located reserves with respect to the consuming countries, to find lower cost oil that would be more economical to produce even with the additional expense of exploration and developemnt, and to obtain a greater degree of diversification in order to obtain a stronger bargaining position with respect to the producing countries and to secure the availability of the oil in case of the closure of any particular source.

A1. Reserves

Reserves can be considered as the industry's stock room and the inventory may vary with the results of exploration and by the methods used to estimate the oil in situ. In this way we find that reserves could increase as a result of exploration, particularly when new techniques are applied, and also as a result of a different method of estimating the amount of resources in a particular reservoir. However, a new or better method of estimating reserves, or a revision of past estimates, could also lead to a reduction. Broadly speaking, there are two types of reserves: 1) proved reserves, and 2) probable reserves. (32)

Proved reserves are the amount of oil found as a result of drilling which can be produced economically under present technology. Probable reserves, on the other hand is a much wider concept since it is an estimate of the total petroleum recoverable, both from current proved reserves and from reserves that will be economically exploitable in the future considering probable technological

(31) The degree of this motivation will of course vary for the different participants in the industry according to their respective stocks.
(32) Adelman, M.; "The World Oil Outlook", page 66.

progress and future discoveries.

Reserves are quantified by an amount of barrels or tons in situ at a certain period, but one of the most important yardsticks used by the industry is the reserve-production ratio which enables us to calculate the theoretical duration of the reserves expressed in years at the current rate of production. This ratio varies substantially with respect to the various producing countries but we shall see this later.

B. Production

Although the term "Production" is sometimes used in a more general way including activities prior to the actual process of extracting the oil from the ground (i.e. exploration and development), we will use it here to refer to the stage of extraction only.

Considering the life cycle of an oil well, we can divide the process of oil production into two distinct phases: A) primary recovery, and B) secondary recovery. (33) The first corresponds to the initial period of extraction and is characterized by the natural drive of the oil flowing to the surface basically on its own accord. This is due to the pressure of the reservior formed by the presence of natural gas which usually accompanies the oil. Thus when the pressure in the oil reservior is high/"will gush to the surface the oil at a very high rate". (34) The second phase or secondary recovery, characterizes the production stage when the well's natural drive or pressure has been exhausted, and therefore "complex techniques" such as fluid injection with gas or water are used in order to bring the oil up to the surface. (35) The use of these techniques is referred to as "artificial lift", however, when they are applied early in a well's producing life, it is regarded as "pressure

(33) Hartshorn, J.; Op Cit, page 52.
(34) Hartshorn, J.; Op Cit, page 52.
(35) Ibid.

maintenance". (36)

The first phase, i.e. when the oil flows on natural drive, is obviously the period of a lower cost of production. This cost, however, will rise as more elaborate forms of secondary recovery are used. Therefore, as pressure is gradually lost, the rate of oil production will also tend to fall. But this is true not only of the first phase, but also of the second. Every time pressure-techniques are applied, the rate of output will rise But only to gradually fall again. This introduces us to one of the basic characteristics of oil production which is the production decline curve. (37)

During the first phase of production when the oil is obtained by the natural drive of the well, there is an "ultra short" period during which "the more barrels produced, the lower the cost per unit" it will render. (38) (In diagram I- No 1, page 17, this ultra-short period would be $\overline{0\ B}$ on X axis). However, in the remaining life of the field when the production decline curve is characterizing the situation (from "B" onwards) "marginal cost is a rising function of output". In other words, "the greater is the output the higher is the cost of additional output". (39)

This line of thought as presented by Professor Adelman, seems to qualify the oil industry as one of increasing costs in opposition to the not so unusual belief of the contrary. (40)

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(36) Ibid.
(37) Adelman, M.; The World Oil Outlook, page 41.
(38) Ibid, page 42
(39) Ibid.
(40) Dr. Paul Frankel in his "Essentials of Petroleum" (Chapman and Hall, London 1946, page 17) had characterized the oil industry as being a natural monopoly. Being a capital intensive industry "it is imperative" he said, "that the operator extracts the maximum from a producing well because his cost per barrel decreases rapidly as output increases". Therefore, not being a self-adjusting industry, and because of the poor price elasticity of crude, "agreements between producers have always been thought to be necessary" in order to avoid a situation of "glut".

It does seem obvious however, that "if the expenses per unit of time are fixed (and a fortiori if they are increasing as in fact they are), and if production per unit of time decreases, then the production cost per additional unit increases the greater is the total production". (41)

C. Transportation

Transportation in the petroleum industry can be classified into three distinct phases as oil moves to the final consumers. (42) First, and most important with respect to volume and distance, is the transportation of crude oil from the source of production to the refineries. Next we have the movement of products from the refineries to the marketing area, and third, the distribution to the various retailers. We can perceive the importance of the transport stage when we realize that over 50% of the volume of international seaborne trade is made up of petroleum.(43)

As we shall see later with more detail, there are two main routes that may be detected in the international movement of petroleum. The most important is the one that originates in the Middle East and is bound to Western Europe, and the other from Venezuela to North America. Next to these there are other important movements of oil: from the Middle East to the Far East and to North America, and from Venezuela and Northern Africa to Western Europe.

The transport requirements of the petroleum industry are fulfilled mainly by tankers and pipelines although the prime function of the latter is "to take the oil to the nearest convenient loading point for ocean transportation" and from the import terminals of the main consuming areas to the refineries. (44) The cost of ocean transport has been reduced considerably

(41) Adelman, M. "The World Oil Outlook", page 43.
(42) Odell, P.; Op Cit, page 145.
(43) United Nations; "Statistical Yearbook - 1964", page 401.
(44) Odell, P.; Op Cit, page 164.

by the increasing size of tankers (see page 18). Before the second world war a 12,000 ton vessel was of a standard size, and in 1945 a 24,000 ton ship was considered a super tanker. (45) Today they are over 100,000 tons, and a 200,000 tanker seems to have been forecasted. (46)

The expansion of tanker capacity after the Suez crisis also gave way to lower freight rates and thereby contributed to a lower C.I.F. price of oil for the various importing countries. As we shall also see, this reduced the competitive advantageof oil producing regions that had been enjoying freight advantage over others with respect to such consuming centers as Western Europe and the United States and increased competition within the industry.

D. Refining

The refining stage can be defined as the process by which crude oil is transformed into a "wide range" of end products which become suitable for use. However, this process has been highly susceptible to very specialized technology that has permitted to utilize most of the crude fed to the refinery, thus reducing waste to a negligible amount, and to make the refinery pattern more flexible according to the demand of a particular market area. (47)

In the refining process, the simplest technique is that known as "distillation", which is the "boiling off the different fractions of the crude oil", but it also utilizes more sophisticated methods such as thermal cracking which is "the treatment of surplus separated products under high temperature and pressure "in order to "convert" these into other products of which there are not enough to satisfy the market. (48) However, the ratio of cracking

(45) Harris, W.J.; "Distribution of Petroleum and its Products", Handbook of the Petroleum Industry, page 86.
(46) Odell, P.; Op Cit, page 156.
(47) Hartshorn, J.; Op Cit, page 69.
(48) Ibid, page 67,

and reforming capacity to total refining capacity is usually higher in refineries where there is an output pattern that favours a light-product yield (such as those of the United States), since this technique is particularly suitable to obtain the lighter type products such as gasoline.(49)

One of the most important economic characteristics of the refining stage, is that it produces a wide range of different products under a system of joint costs. In other words "one cannot have any of the final products without the whole cost" nor have one product (although one can obtain a larger proportion of it) and eliminate the rest. (50) Due to this characteristic and to the various degrees of price elasticity of the different products, a very particular price schedule for these was generalized which does not particularly favour some countries. We shall return to this point in a following chapter.

E. Marketing

Once the previous stages of the oil industry have provided a range of products suitable for use, the task now is to get these where there are consumers (actual and potential) in the quantities that these are prepared to buy. Since the major markets are so far from the producing area, even in one country such as the United States, a highly organised marketing system had to be developed in order to satisfy demand efficiently and secure the outlet for the oil.

This function has been generally in the hands of the private oil companies but the participation in this stage has also been the ambition of the producing countries, a role which they intend to fulfil through their own national oil companies once they have gained experience and participation in the previous

(49) Issawi and Yaganeh, Op Cit, page 13.
(50) Hartshorn, J; Op Cit, page 69.

stages of the industry. The participation in the latter stages of the oil industry has been a major preoccupation of the producing countries "partly... as a way of taking increasing responsability for the development of the countries' national resources, but largely... as one of the possibilities of increasing the governments' share in the proceeds of oil". (51) Thus we see how the national oil company of Venezuela, the "Corporación Venezolana de Petróleo" (C.V.P.), eager to begin its participation in this stage, was granted by decree a 33% share of the internal market for petroleum products. (52) Although a higher financial participation operating in the latter stages of the industry in the international sphere could be doubtful (53), an entrance to the marketing stage in their own domestic markets would probably permit these countries to gain more knowledge of the whole business and thus act with better judgement according to the different situations they would want to face or would have to face in the future.

(51) Hartshorn, J.; Op Cit, page 304.
(52) Republic of Venezuela, Decree No 167, November 1964.
(53) Hartshorn, J.; Op Cit, page 304.

III The Changing Pattern of Supply and Demand

Ever since the United States established itself in the early 1860's as the world's major oil producer, the Western Hemisphere became the chief source of petroleum from which markets all around the world were served for nearly a century. (54) It has only been in the past fifteen years that the centre of gravity of the oil industry began to shift from the Western Hemisphere to the Eastern, and today we find that the uncomfortable situation of the industry resulting from the encounter of opposing pressures, i.e. market forces and producers interests, is nothing more than the Eastern Hemisphere claiming her supremacy in the international scene.

With respect to proven reserves of crude oil, we find that in 1940 73% were located in the Western Hemisphere and 27% in the Eastern. The United States alone counted with 63% at this time. However, by 1965 the proportions had changed considerably. In the Western Hemisphere these estimates had fallen to just over 18% and those of the United States to 9%. The Eastern Hemisphere had increased its participation to 82% and the Middle East, which only had 3% of the proven reserves of 1940, became the most prolific area with 62% of the world's reserves. (see table I -4)

Production has also had a similar shift from the Western to the Eastern Hemisphere. In 1938 the Western Hemisphere accounted for 77% of the world's petroleum output, but by 1965 this proportion had been reduced to 44%. Furthermore, in 1964 production from the Middle East surpassed that of the United States for the first time, and since then, has been the world's

(54) American Petroleum Institute; "Facts and Figures", 1959, page 432.

Table I - 4

Proven Crude Oil Reserves
(%)

Area	1940	1950	1960	1965
United States	63.3	27.5	11.9	8.6
VENEZUELA	10.0	9.2	6.5	4.8
Other Western Hemisphere	-	4.7	3.6	4.3
Total Western Hemisphere	73.3	41.4	22.0	17.7
Middle East	3.3	50.4	61.3	62.4
Africa	-	0.2	3.2	6.3
Other Eastern Hemisphere (1)	23.4	8.0	13.5	13.6
Total Eastern Hemisphere	26.7	58.6	78.0	82.3
World Total	100.0	100.0	100.0	100.0

(1) Including Soviet Bloc.

Source: Venezuelan Ministry of Mines and Hydrocarbons "Petróleo y Otros Datos Estadísticos" 1966, pages 147 and 149.

major producing area, contributing in 1965 with approximately 28% of world production.(see Table I - 5)

There has also been a major change with the location of refining capacity during the last fifteen years. However, the shift that characterized the refining stage was from the oil producing countries to the major consuming regions,(see Table I - 6). In the corresponding table we have divided the areas by such a differentiation but separating the United States in the analysis being both a major producer and consumer. In this way we find that in 1940 the major producing areas had a greater proportion of the world's refining capacity, even if we exclude the United States which at this time had more than half of it. However, by 1965 the change had taken place and we find that the major consuming areas (also excluding the United States), i.e. Western Europe and Japan, had acquired a 30% participation of the world's refining capacity.

There are various reasons for this change of which the most important probably are the following six: (55)

1) Many of the markets for refined products had expanded enough to allow a refinery in that particular area with the minimum required throughput.
2) There was a need for a rapid expansion in refining capacity after the war and many European countries had small refineries that could be expanded to cover the increasing demand for products in that area.
3) The dollar shortage in Europe after the war made the respective Governments aware of the burden of oil imports on the balance of payments and therefore made them emphasise a domestic refining industry. In this respect, a figure of £160 million has been quoted as

(55) Hartshorn, J; Op. Cit.; page 71

Table I - 5

Crude Oil Production
(%)

Area	1938	1950	1960	1965
United States	61.1	51.9	33.6	25.9
VENEZUELA	9.4	14.4	13.6	11.5
Other Western Hemisphere	6.1	5.2	6.7	6.4
Total Western Hemisphere	76.6	71.5	53.9	43.8
Middle East	6.1	16.9	25.1	27.6
Indonesia	2.9	1.3	2.0	1.6
Africa	0.1	0.4	1.4	7.3
Other Eastern Hemisphere(1)	14.3	9.9	17.6	19.7
Total Eastern Hemisphere	23.4	28.5	46.1	56.2

(1) Including Soviet Bloc

Source: Venezuelan Ministry of Mines and Hydrocarbons, " Petróleo y Otros Datos Estadísticos" 1966, page 154.

Table I - 6

World Refining Capacity
(%)

Areas	1940	1950	1960	1965
Major Petroleum Exporting Areas				
VENEZUELA (1)	7.3	7.6	6.5	5.7
Middle East	5.3	7.9	6.0	5.2
Sub-total	12.6	15.5	12.5	10.9
Major Petroleum Importing Areas				
Western Europe	6.2	8.9	17.9	24.5
Japan	0.7	0.4	2.7	5.7
Sub-total	6.9	9.3	20.6	30.2
United States	58.1	56.6	41.5	31.0
Other (2)	22.4	18.6	25.4	27.9
World Total	100.0	100.0	100.0	100.0

(1) Includes the refineries of Aruba and Curazao
(2) Includes Soviet Bloc.

Source: Dogolyer and Mac Naughton, " Twentieth Century Petroleum Statistics" 1965, page 86; Venezuela, Ministry of Mines and Hydrocarbons.

being the amount of savings of foreign exchange incurred by the O.E.E.C. countries of Western Europe from 1949 to 1955 as a result of the gradual change from product to crude oil imports.(56)

4) Many independents seeking to secure markets in the European area found that the price of entry was the building of a local refinery.

5) Independent concerns in countries like Japan and Italy found that it was more economical to import crude, that began to carry heavy discounts, and refine it at home, than to import products.

6) The advances in refining technology reduced waste to a great extent making it more economical to transport crude than to ship the various products to different destinations from a major producing area considering that the movement of crude offered larger economies in comparison with the movement of products due to the lower costs that involved the shipping of dirty cargos.(57)

We could also add a strategic reason for the location of refineries in the consuming countries, and this is that there seems to be a point of view that oil companies prefer to have the refining area separated from the producing region so as to ensure that in the event of "international tension" the supply of products would not be interrupted presuming that the diversification of crude oil sources in the world permits a better chance of finding an alternative supply, and not so in the case of products.(58)

The various changes accounted for were rapidly reflected within the petroleum trade. In this respect we find that while in 1938 69% of the net exports of petroleum had originated from the Unted States and Venezuela,

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(56) Odell, P.; Op.Cit, page 118

(57) Ibid, page 112

(58) Odell Op.Cit., page 114

in 1965 - practically this same proportion (68%) corresponded to sources of the Eastern Hemisphere. (see Table I - 7). Also, and as a consequence of the gradual change in the location of the refineries, oil movements which were predominantly of refined products in 1938 (approximately 70%), are now made up of crude by approximately the same percentage.(59)

A major change in the demand pattern of the oil consuming countries has also been that concerning the demand for products. In the early stages of the oil industry the product that had the greatest demand was kerosene which was then used mainly as lighting oil; later, with the arrival of the automobile, gasoline took the lead, but now in many of the large consuming areas, such as Japan and Western Europe, fuel oil has been the main product demanded due to industrial requirements. For example, while fuel oil only participated in the demand pattern of the United Kingdom (the larger consumer of oil products in Western Europe) in approximately 20% in 1950, its participation had increased to 44% by 1960. In Western Germany the proportion was also doubled, from 12% to 24% during the same period.(60)

All these changes that we have analysed, particularly those referring to supply, have had a strong influence on the international oil industry, and especially on the system which had been used to price the oil. In the following chapter we thus turn to analyse some of its implications.

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(59) Gripaios, H.; "International Oil Prices"; Lecture delivered to the "British Association for the Advancement of Science". Published by "Shell Oil Company", September 10, 1964; page 9: Major World Oil Movements.

(60) Odell, P.; Op.cit, page 118

Table I - 7

Net Exports of Petroleum from Major Exporting Areas
(%)

Area	1938	1948	1958	1960	1965
United States	14.4	-	-	-	-
VENEZUELA	54.3	53.5	35.9	31.0	22.3
	68.7	53.5	35.9	31.0	22.3
Indonesia	-	-	3.9	3.4	2.7
Middle East	31.3	40.6	55.2	55.6	51.9
Africa	-	-	-	1.6	13.7
	31.3	40.6	59.1	60.6	68.3

Source: Bureau of Mines, World Petroleum Statistics, International Petroleum Quarterly.

CHAPTER TWO

Brief account of the evolution of the pricing system used by the international oil companies: A) The Gulf of Mexico Basing Point; B) The Venezuelan Basing Point; C) The Persian Gulf Basing Point. The Relative Fall of Middle Eastern F.O.B. Prices.

Introduction

Before any attempt is made to analyse certain aspects of the pricing system which characterized the oil industry, we must first clarify the situation or framework in which it developed. As we saw in our preceding chapter, the oil industry has been (and is) characterized by being one of oligopolistic nature and by the predominance of vertical integration. It is important to be aware of these two characteristics as we proceed in our analysis in order to have a clearer picture of the various situations relating to "prices".

Crude oil is only a raw material which must be refined before it can be of any use, and therefore needs to reach refineries to undergo such a process before a final product is offered to a consumer. However, crude oil is seldom "bought" since most of the crude refined is produced by the parent companies or affiliates of the refiners. As one source words it, "most of the crude produced in the world is never sold at all". (1) Approximately 70 to 80% of international oil movements go through integrated channels (2), and of the oil that is sold to independent refiners, only about 1/3 is actually traded at arm's-length deals since the rest is supplied under long-term contracts with major integrated companies or envolves commitments to refine for the major. (3)

(1) Hartshorn, J.; "Oil Companies and Governemnts" (1967), page 133.
(2) Ibid.
(3) Ibid, page 135.

It is precisely due to the fact that most of the crude moves through integrated channels, that many of the times that we hear of "prices" referring to crude oil, they are not such; since to be an actual market price or to have any economic significance, there has to be a market with a true buyer and a true seller. And as we saw, this is often not the case. In our next chapter we shall try to clarify the meaning of the "prices" of crude.

Another point that must be mentioned is that although the pricing system, of which we are about to analyse some aspects, was applied to both crude oil and products, we must recall that the main international movements of oil were in the form of products until approximately the mid fifties, and it was from this period onwards that crude oil has been the major form of petroleum being transported due to the growth of refining capacity in consuming countries (see chapter one page 31). We thus find that it was mostly due to the enquiries made by some customers in relation to the prices they had to pay for some products, that initial changes were introduced to the pricing system; and that as crude began to increase its proportion in the volume of oil movements, other parties become concerned as well about the pricing system used by major suppliers.

A. The Gulf of Mexico Basing Point

Until 1945 oil companies followed a pricing system which had the effect of eliminating price differences among themselves at any destination while avoiding price competition as far as possible. (4) Under this system the delivered price for any consumer was exactly the same regardless of whether he made his purchases, from a low cost or high cost source, or from a nearby or distant supply area. In other

(4) Frank, Helmut; "Crude Oil Prices in the Middle East - A Study in Oligopolistic Price Behavior" Praeger - 1966, page 9.

words, the F.O.B. price would vary with respect to the destination of the oil, and the C.I.F. or delivered price would always be exactly the same in any market no matter where the oil originated from.

To be able to arrive at any particular market with equal delivered price for crude oil or petroleum products under this system, the different suppliers observed the following procedure:

The price of oil F.O.B. the Gulf of Mexico was taken as the "Base Price". The next step was to add to the base price a standard freight cost from the base point to each of the various destinations. Thus we arrive at a delivered price which is the same no matter where the supplies originated from.

As a brief parenthesis, it will be convenient at this point to consider what is known as "Phantom Freight" and "Freight Absorption" to enable us to continue with the analysis of the Basing Point System.

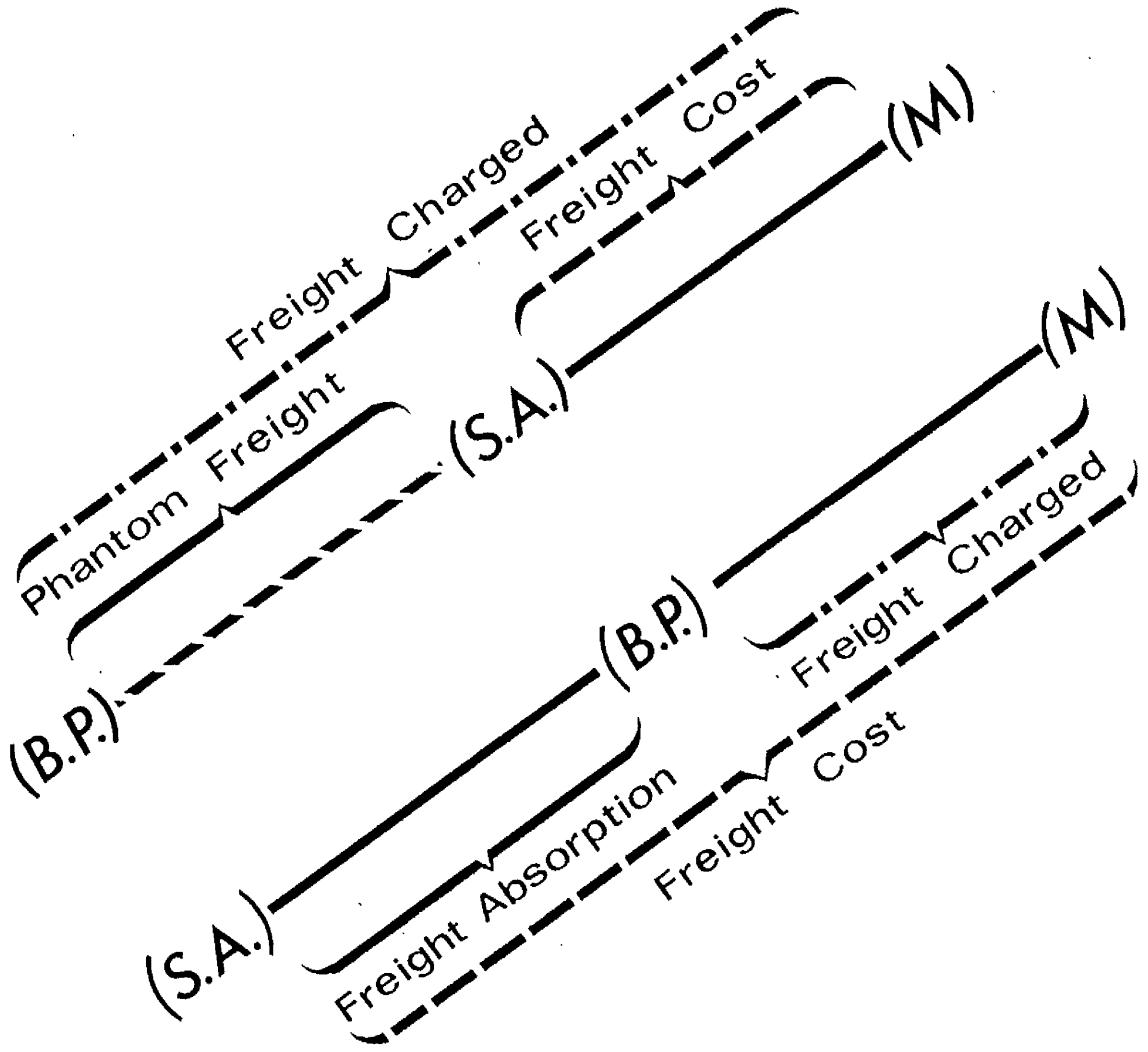
Simply stated we may say that phantom freight is a fictitious cost charged as freight, for a certain number of miles which have not been incurred in the transportation of petroleum from the supply area to its destination; Freight absorption, on the other hand, would be the amount of freight cost which has to be registered as a cost for the supplying company, because it could not be included in the C.I.F. or delivered price.

It is this way that suppliers who are located nearer to the market than the basing point, are able to charge what we have denominated "phantom freight"; and those who are further away have to absorb freight.(see diagram II -11).

Traditionally the Basing Point was the Gulf of Mexico and the base price was the American F.O.B. Gulf price. (5) This price is obtained from a

(5) Frank, Helmut J.; "Crude Oil Prices in the Middle East - a Study in Oligopolistic Price Behavior" Praeger - 1966, page 10.

DIAGRAM II-1



B.P. – Base Point
S.A. – Supply Area
M – Market

specialized journal (Platt's Oilgram Price Service) that publishes oil prices daily for internal as well as external bound markets. The justification of this Basing Point and Base Price was that the Gulf area had to supply markets all around the world, and that the price always had to be set at the level of the marginal or highest cost supplies required to satisfy demand. (6) It seems clear then, that a single basing point system was used by the companies for several decades presumably because "it guaranteed the participants greater profits than other pricing methods could have provided". (7)

In order to maintain the single basing point system, three basic rules had to be respected by all suppliers. (8)

1. The recognition of the Gulf of Mexico as the only Base Point, and the American F.O.B. quotation, appearing in Platt's Oilgram for this particular spot, as the Base Price.
2. The use of standard adjustments for differences in quality.
3. The common use of standard tanker rates.

Thus ever since petroleum became an item of international trade, oil prices generally were calculated as if the oil had originated from the Gulf of Mexico. In other words, suppliers located at different points of the globe quoted F.O.B. prices which tended to result in identical delivered prices at any given point, regardless of the different production or transportation costs actually incurred.

Consequently, shipments made to destinations to which transportation costs from an eastern supply point were lower than from the Gulf of Mexico

(6) De Chazeau, M. and Kahn, A.; "Integration and Competition in the Petroleum Industry", Yale University Press 1959, page 213.
(7) Frank, Helmut J.; Op Cit, page 9.
(8) Ibid, page 10.

had freight advantage or "phantom freight", and for destinations to which the supplier paid more freight than the Gulf supplier he incurred a freight disadvantage or "absorbed" freight.

Oil exports from Venezuela adjusted themselves initially quite well to the Basing Point system, since the American east coast was (and is) Venezuela's principle market, and the distance between these two points is approximately the same as that between the Gulf and the American eastern seaboard (highest consuming area of the United States). However, with the emergence of Venezuela as the principle source of exports of the Western Hemisphere, certain modifications were made to the system. (9)

Of the few exceptions to the Gulf Plus system, (10) one in particular should be mentioned. It was the establishment of a base price F.O.B. Constantsa (Rumania) at the beginning of the 1930's. (11) This was due to the fact that Rumania had an exportable surplus of crude which was not controlled by the international oil companies, but by a large number of local producers. In spite of this, it seems that Rumania's exports did not affect the international market and were not completely independent of the Gulf price because of her participation in various oil agreements with the oil companies. (12)

Just before the Second World War, the Gulf Plus system was threatend by the new discoveries of Middle Eastern oil. However, the fact that the interests behind the newly discovered fields were also the same ones that were delivering Western Hemisphere supplies to Eastern Hemisphere destinations

(9) These will be analysed in the following pages.
(10) The exceptions were Rumania, Galicia and Russia.
(11) Levy, W.J.; "The Past, Present and Likely Future Price Structure for the International Oil Trade", Third Petroleum Congress, Proceedings, Sec. X 1951, page 115.
(12) Ibid, page 115.

acted as a buffer for the price structure, minimizing the impact it would otherwise have received from the new discoveries. (13)

Consequently, petroleum continued to be priced until the outbreak of World War II as if it came from the Gulf area, with all price competition eliminated in almost every market. (14) Thus buyers in the Middle East that purchased either crude at arm's-length or products, paid for the oil as if it came from Venezuela or the United States. In other words, it was theoretically possible to buy Middle Eastern oil which quoted lower F.O.B. prices Ras Tanura in the United States or in Europe, than in Kuwait or Saudi Arabia.

Following the outbreak of hostilities in 1939, military operations in the Mediterranean made the Middle East a very strategic region because of its location and prolific oil resources. The fact however, that the price of Middle Eastern oil included a large amount of phantom freight, led British authorities to question the validity of the "Gulf Plus" pricing system as applied to oil from this source. In their investigations the British became most concerned with the problem of phantom freight charged for bunker fuel for purchases made at ports in the Indian Ocean and the Middle East. The result of this investigation was the quoting of a F.O.B. price for bunker fuel at the Persian Gulf which was to bring about later on, in 1945, the establishment of an authentic new basing point for crude oil and products. (15)

B. The Venezuelan Basing Point

Venezuela emerged as a "twin basing point" to the Gulf of Mexico before

(13) Frankel, P.H.; "American Oil in a Changing World", The Oil Forum, November 1950, page 445.
(14) Frank, Helmut; Op Cit, page 9.
(15) Frankel, P.H.; "American Oil in a Changing World", The Oil Forum, November 1950, page 445.

World War II, approximately around 1938, as she became the major source of exports. (16) Prices in the Caribbean were linked to those of the Gulf of Mexico, but were lower than these by the amount of American import tax which permitted Venezuelan crudes to be delivered to the eastern coast of the United States at prices comparable to those of American supplies. However, since Venezuelan producers granted this same duty allowance to arm's-length buyers in other areas, the price of Venezuelan crude became lower than the price of American oil by this same amount. (17) Furthermore, the delivered cost of Venezuelan oil became even more favourable for producers that delivered supplies to Western Europe due to the fact that shipments from the Caribbean enjoyed a transport advantage over those from the Gulf of Mexico of approximately fifteen cents a barrel. (18)

As mentioned above, Venezuela started to fulfil its role of "twin basing point" with the area of the Gulf of Mexico approximately in 1938, when supplies from the Western Hemisphere began to be predominantly from this source (see table I - 7). However, as we shall see in following pages, the lower prices at which Venezuelan oil could be placed in the European market in relation to supplies from the Gulf of Mexico (due partly to the freight advantage mentioned), and the increasing participation of Venezuelan crude in the exports of the Western Hemisphere, later led to some questioning about the validity of the Gulf of Mexico as the point of reference in the formula used to price Middle Eastern crude. As a result, Venezuela became in 1948 the exclusive basing point of the Western Hemisphere as the United States became a net importer.

(16) Frank, Helmut; Op Cit, page 31.
(17) Ibid.
(18) Ibid.

C. The Persian Gulf Basing Point

As mentioned before, "Gulf Plus" came to an end as the exclusive pricing system for the industry in 1945, when the Persian Gulf was able to establish its own F.O.B. quotations for all refined products and crude oil. Although we really can not consider the Persian Gulf as a basing point until this period, it was during the war that the first changes were brought about with the quotations made for bunker fuel oil. This was a considerable change in the pricing policy of the companies, but it was the result of a force external to the industry. It was due to the insistence of the British Government that the Middle Eastern Companies receive a lower net back sales with the elimination of phantom freight when the new quotations were made in the Persian Gulf. The U.S. Gulf Plus system was quite favourable for the industry but "the British Auditor stepped in and from 1943 or 1944 onwards the accepted procedure was to consider the F.O.B. Persian Gulf price as being the Platt's quotation...". (19) The British were very concerned with the phantom freight which they had to pay for their purchases of bunker fuel at the Persian Gulf, and realizing that considerable sales were made before the war from this supply area to the United Kingdom and North Western Europe in which because of freight absorption the net back to the Persian Gulf was lower, they began to investigate the prices which they had to pay for their oil. (20) Since this amount of freight absorption "was all but eliminated during the late war it is not surprising that it was then that the (British) authorities began to query the propriety of the price structure". (21) "We could no longer accept this origin differential automatically as a proper

(19) Frankel, P.H.; "American Oil in a Changing World", The Oil Forum, November 1950, page 447.
(20) Ibid.
(21) Ibid.

element in bunker prices in overseas ports..." were the words of the Auditor General. (22)

The advent of the new basing point brought very big economies for consumers in the Eastern Hemisphere as it eliminates a considerable proportion of phantom freight previously included in the C.I.F. price and can be regarded as a step towards a more adequate price structure taking the Middle East into consideration as an important supply area. However, the fact that prices for this area were equivalent to the quotations of the Western Hemisphere, led once more to a series of criticisms, this time from the American Government. The American point of view was expressed through a Congressional investigation during 1947-1948 known as the Brewster Hearings and Reports and became an interested party in the matter because of the purchases of petroleum made by the United States Navy from this source. The American Government did not hesitate to show its reluctance to accept a price which only reflected the higher cost oil from the Western Hemisphere and had no relation to costs in the Middle East. (23)

However, the oligopolistic character of the market in which "the oil was unobtainable elsewhere" and the fact that the British Government had accepted the Persian Gulf price equivalent to the American quotations at the Gulf of Mexico, seems to have made this price quite rigid, and the Navy could not obtain any concession. According to the specialized press, the British had accepted the Western Hemisphere price because "of the difficulty of

(22) The Petroleum Times; May 13, 1944, page 298.
(23) Information obtained from; "The International Petroleum Cartel", U.S. Senate, Select Committee on Small Business, Staff Report to the Federal Trade Commission, August 22, 1952, page 357 (hereafter referred to as "F.T.C. Report").

arriving at production costs and in the knowledge that F.O.B. prices in the Gulf of Mexico were controlled by the United States Government at levels giving a fair return...". (24)

No matter how controversial this aspect may be, one thing remains undebatable and this is that it was due to the inquiries and the insistence of the British Government that this major change in oil pricing was brought to pass. The new basing point was a great advantage for the consumers within the sphere of the Persian Gulf since, as already mentioned, it took into consideration the Middle East as an important supply area.

The establishment of a basing point in the Persian Gulf with a set of F.O.B. prices equivalent to the American quotations gave way to a new theoretical relationship by which supplies from the Middle East would meet those from the Western Hemisphere in the Mediterranean as far west as Italy with an identical delivered cost. In other words Italy became the limit where delivered costs became equal for both exporting areas, and which if surpassed would give rise to freight absorption. The F.O.B. price at both areas for crude oil that permitted such an encounter was $1.05 a barrel and with this quotation the new basing point became established at the end of 1945. (25)

It is important to realize, however, that apart from what the theoretical implications might have been, most of the crude oil that was moved from source to market was done through integrated channels, and since the supply from the Middle East was of lower cost, it produced a higher integrated return for the companies than if the shipments were made from other higher cost sources. "The companies supplied each market throughout the world from the source that

(24) The Petroleum Times, May 13, 1944, page 298.
(25) Frank, Helmut; Op Cit, page 27.

gave them the best net return". (25) Thus the westward movement of petroleum was a matter of good economics for the oil companies even in the case of "freight absorption".

(25) Hartshorn, J.; Op Cit, (1967), page 144.

II The Relative Fall of Middle Eastern F.O.B. Prices

The decade which followed the war was characterized by the economic rehabilitation of countries that were affected, and was a period in which many areas throughout the world went through considerable economic development. These were years of great industrial expansion in which the petroleum industry unavoidably played a major role. With oil prices going up in the United States, the Middle Eastern quotations were also influenced in the same direction. By 1948, and after various price increases in both the Gulf of Mexico and Persian Gulf areas, the delivered price was equalized in the United Kingdom and thus a westward movement of the frontier or "market range" from Italy to Great Britain became evident. The equalization of the delivered price of crude oil in the United Kingdom resulted in a $ 2.22 F.O.B. Abadan price by March 1948. (27) This quotation was reached with what has been known as the "net back formula"; adding to the American price F.O.B. Gulf of Mexico the freight cost from this point to the United Kingdom; and then subtracting the freight from this latter point to Abadan, (28)

Giving this phonomenon some closer attention we will notice that the shifting of the market range towards the west would have meant a relative reduction in the Middle Eastern price. There being no absolute reduction can be explained by the fact that the movement of the market range was the effect of a lesser price increase for Middle Eastern oil than for the supplies of the Western Hemisphere. Instead of raising its price a full $ 1.40 per barrel as in the Gulf of Mexico, the F.O.B. Abadan price rose $ 1.17 by March 1948, when it reached its highest mark and thereafter began a series of reductions.

(27) Frank, Helmut; Op Cit, page 30.
(28) Frank, Helmut; Op Cit, page 32.

Now the core of the situation is twofold. In the first place, why did the Middle Eastern quotation begin to rise with the American price? And second, why did it begin to fall after March 1948?

Having at that time a large control over oil resources, the major oil companies simply did not have any reason whatsoever to make any direct reduction or adjustment on the price of its oil from the Middle East, since the link to the American price made the whole system quite profitable. A lower price for Middle Eastern crude would have only meant to offer the raw material to independent refiners which would eventually compete with them in the market. Even for the few independents "there was... no particular incentive to underquote such laiddown American prices if the quantities... could be marketed at the American parity". (29) Furthermore, the fact that most of the oil moved through integrated channels and that there was very little oil in the hands of independents eliminated any competitive pressure on the oil price. "The emergence of non-American oil as a market factor was a gradual one", so for the independents it must have also been profitable to quote the Major's price. (30)

However convenient this situation must have been for the oil companies, we notice that the Eastern price followed the American quotation only until March 1948, and soon after it began to fall creating a growing margin between the two. There are some opinions on t is matter which we turn to analyse below.

In the first place there is a point of view from the authors of the "F.T.C. Report" which does not give much importance to t e establishment of a lower price (with respect to the American quotation) in the Persian Gulf alleging that "the Persian Gulf F.O.B. price did not actually result in a price reduction

(29) Frankel, P.H.; "American Oil in a Changing World", The Oil Forum, November 1950, page 426.
(30) Ibid.

...because its effect was more than offset by the rising level of United States Gulf prices, to which the Persian Gulf price was linked". (31) They state that the equalization of the delivered price at Great Britain in 1948 represented only a "theoretical downward adjustment" (32) and that it actually raised the Middle Eastern price to a higher level than before. In reality they are right, but it seems that their exposition lacks (voluntarily or involuntarily) the recognition of the significance which such a breakdown of price unity had. The equalization point in the United Kingdom in their opinion was due to "the need for finding Western European and United States markets for Middle East crude...." and in order not to be "faced with the prospect of having to absorb freight and take a lower net price ...".(33) To say only this, is not to have been fully aware of the already stated fact that most of the crude travelled through integrated channels and that if companies were delivering oil to Western Europe and to American markets it was because they were actually supplying their affiliates or parent companies with a lower cost crude in spite of their "freight absorption".

Professor Wayne Leeman, on the other hand, does recognize the significance of this "degree of independence" from the Western Hemisphere price but while doing so he attributes the lower quotation to a competitive situation in which there is "a struggle for customers in the vicinity of the watershed...". (34) He states that the decline of Middle Eastern prices relative to those in the United States is an "essentially competitive development". (35)

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(31) F.T.C. Report, page 362
(32) Ibid.
(33) F.T.C. Report, page 361.
(34) Leeman, W.; "The Price of Middle East Oil", Ithaca, N.Y. 1962, page 96.
(35) Ibid.

According to Professor Adelman, after Middle Eastern producers extended their (theoretical) market range as far west as the United Kingdom, they would have preferred to maintain this F.O.B. price instead of reducing it and reaching out farther west since this would have increased their profits in the European market. (36) This may be so in the case of products, but in the case of crude this could not have made much difference since as mentioned before, crude oil was generally supplied to integrated refiners, and therefore a lower or higher "transfer price" for crude would hardly affect the total integrated profit of the company. We thus see that while the price for Middle Eastern crude began to fall in 1948 the list prices for products in Europe did remain approximately in line with Caribbean parity until about the mid-fifties, and even discounts off list prices were hardly granted. (37) Professor Adelman however, does consider that "companies (were) resolved not to cut the price (presumably of crude) until somebody forced them to". (38)

This is the explanation that does seem most likely. It seems quite feasible that the westward movement of the "watershed" or "market range" could have been due to an external force, the United States Government. Quoting Dr. Paul Frankel "it was the advent of an extra-industry authority which once more brought about a change; this time the impulse came from Washington from the agency formed to administer the Marshall Plan". (39) It seems too much of a coincidence that when not long after the "European Co-operation Administration" (E.C.A.) began to operate in April 1948, the major oil companies began to lower their prices for Middle Eastern crude.

(36) Adelman, M.A.; "The World Oil Outlook" in "Natural Resources and International Development" Edited by Marion Clawson, page 81.
(37) Hartshorn, J.; Op Cit (1967), page 151.
(38) Adelman, M.A.; Op Cit, page 85.
(39) Frankel, P.H.; "American Oil in a Changing World", The Oil Forum, November 1950, page 447.

It was just a month before the E.C.A. programme was initiated that the Majors had reached the $2.22 F.O.B. Abadan price (March), and only two months later (June) when they all began to decline. It is also quite possible that the Middle Eastern price did not follow the American quotation all the way because "the companies involved acted in intelligent anticipation of possible Government pressure and behaved "as if there was orthodox competition". (40) Since by this time most of the crude from Western Hemisphere sources originated from Venezuela, and Venezuelan crude had a transport advantage over the oil from the Gulf of Mexico with respect to the European market of approximately 15 cents a barrel, and furthermore had a lower price by 10.5 cents considering the adjustment for the American import tax, the delivered price of Venezuelan crude in north-western Europe was approximately 25 cents a barrel below that of supplies from the Gulf of Mexico, and consequently it was also below the delivered price of Middle Eastern crude at Western European markets by that same amount. "Such a situation" as Helmut Frank says, "could not be expected to continue for very long under the watchful eye of Government officials". (41)

Thus the downward movement of the Middle Eastern price began. By mid-June 1948 a 19 cents reduction took place establishing a $2.03 price for Middle Eastern crude taking into consideration the lower Venezuelan price and the lower freight cost from this country to the United Kingdom, and also the change of loading ports from Abadan to Ras Tanura and a quality differential between Venezuelan and Arabian crudes. (42) It is at this moment when Venezuela becomes the exclusive basing point of the Western Hemisphere.

(40) Frankel, P.H.; Op Cit, page 448.
(41) Frank, H.; Op Cit, page 33.
(42) Ibid, page 32.

Due to the expanding production of the Middle East, which was essential in order to take full advantage of its lower costs, "curtailment" was applied to the higher cost production of other countries. (43) "The net cost of this (Middle Eastern) oil... was potentially very low providing output could be stepped up". (44) "ith about one million barrels of production shut in, the United States imported during the last few months of 1948 and the beginning of 1949 approximately 4 million barrels of crude oil per onth. (45) However, the fact that can be considered most revealing of the cost-price relationship of the oil industry in the Middle East is that these shipments were made at lower realized prices than the ones made to Europe. "The majors delivered the Middle East oil as far as it paid them well beyond the watershed...absorbing freight on a significant scale, (delivering) farther west than their Middle East quotations plus freights would in theory have permitted". (46)

The lower price of these shipments to the American market led to a series of public debates among all parties concerned and brought the whole petroleum situation out into the open. The American Government became directly involved in the matter due to the financial aid given to Europe under the Marshall Plan. The geographical price discrimination shown by the oil companies was forthis reason a serious matter to which the "European Co-operation Admininistration" was showing its dis.pproval and dissatisfaction. However, it must have been very difficult for the E.C.A. to handle the situation due to the fact that "only few of thesales were arm's-length transactions and most of them were transactions between associated companies". (47) Over 94% of

(43) "F.T.C. Report", page 364,
(44) Hartshorn, J.; Op Cit (1967), page 147.
(45) "F.T.C. Report", page 364.
(46) Hartshorn, J.; Op Cit, page 148.
(47) Frankel, P.H.; "American Oil in a Changing World", The Oil Forum, November 1950, page 448.

the oil shipments financed by E.C.A. in 1948 - 1949 were made by the Majors and most of them were shipments to their own affiliates.(48)

Since Europe's rehabilitation required a high proportion of fuel expenditure, this agency was deeply concerned that the prices charged were to be as low as the market would permit and that the "aid dollars" spent on this line were no more than required. Under the E.C.A. appropriations act" no purchases of commodities in bulk may be made with the funds appropriated, at prices higher than the market price prevailing in the United States at the time of the purchase, adjusted for differences in cost of transportation to destination, quality, and terms of payment". (49) Since price equalization in the United Kingdom had been based upon the theory that the supply of Middle Eastern oil was insufficient for European needs and therefore imports of Western Hemisphere crude were needed,(50) it must have created a very embarrassing situation for the oil companies when oil began to move in substantial volume to the eastern coast of the United States. The Majors, trying to give reason for this awkward situation, alleged that these shipments were only "transitory" and of "sporadic character".(51)

However, it seems evident that "supply pressures",(52) and the concern of the American Government for a "market price", induced the oil companies to make further reductions on the price of Middle Eastern oil.

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(48) "F.T.C. Report", page 365
(49) Oil and Gas Journal, August 12, 1948, page 57
(50) Frank, H.; Op.Cit. page 42
(51) Quoted by "F.T.C. Report", page 366
(52) Frank H.; Op.Cit, page 45

It also seems probable that in order to improve the industry's "public relations" (53) the companies had no other alternative but to eliminate the discriminatory situation of two different realised prices that actually persisted for Middle Eastern oil with the shipments to the United States. In conclusion, by July 1949 the F.O.B. Persian Gulf price had been reduced to $1.75 which equalized the delivered price of Middle Eastern oil with supplies from the Gulf of Mexico and Venezuela at the eastern coast of the United States.(54)

We have thus arrived to a situation where Middle Eastern prices gained some independence from the American quotations, although basically they were still linked to these. Because of this, the price increases of the Western Hemisphere during 1953 and 1957 were still reflected in the Middle East, although the second was already not reflected in its full force.(55) It is only after the reopening of the Suez Canal that "the full unleashing of the competitive forces" in the oil industry became evident,(56) and finally, with the imposition of import restrictions in the United States in 1959, that this link became completely severed.(57)

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(53) F.T.C. Report, page 367

(54) Frank, H.; Op.Cit. page 53

(55) Frank, H.; Op.Cit. page 86. We omit an analysis of these price increases since it would be beyond the scope of this discussion.

(56) Ibid. page 92

(57) Ibid. page 120. We shall give this new situation further consideration when we analyse the events that led to the creation of O.P.E.C. in Chapter 6.

CHAPTER THREE

Significance of Posted Prices, Realised Prices and Tax Reference Prices. Taxation on the Oil Industry in O.P.E.C. Countries.

I. Significance of Posted Prices, Realised Prices and Tax Reference Prices.

In relation to the oil industry there are three main interests involved in oil prices: those of producing countries, those of oil companies, and thos of consuming countries. Producing countries have an interest in high prices, particularly for crude, but also for products in the case of having an important refining industry as Venezuela, since their oil revenue is determined by quotations that ultimately depend on the market price in the sense that any quotation used will be under its pressure. Oil companies are also naturally interested in high prices for products in order to increase their own profits and to be able to finance part of the capital required by the industry for further development;(1) and in some cases it seems that the major oil companies would also be interested in quoting high "prices" for crude, due to certain tax advantages granted to them by their home-countries; (2) and because this would permit them "higher profits on oil sold to outside users, (keep) the raw material costs of competing refiners high, and sweeten.... political relations with the producing countries "(3) Consuming countries, on the other hand, which are importers of petroleum and that

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(1) "Current International Oil Pricing Problems", page 4, August 1963; Shell Oil Company.

(2) This is particularly so of American companies which receive "very favourable tax treatment" from the United States Government with respect to depletion allowances and reliefs for foreign tax. (Hartshorn, J.; "Oil Companies and Governments" (1967) page 195

(3) Penrose, E.; "Middle East Oil: The International Distribution of Profits and Income Taxes" "Economica", August 1960, page 209

lacka domestic fuel industry, usually favour low prices for products (and also for crude in the case of having a domestic refining industry) in order to save foreign exchange and to enable their industries to obtain cheap energey. In other cases however, consuming countries might also be inclined to favour high prices for petroleum (both crude oil and products) in order to protect a domestic oil industry and (or) other domestic fuel industries that may exist (e.g. United States, England, and Western Germany); or because the Government has an equity participation in the oil business and profits may outweigh the cost of imports (e g. United Kingdom and France with "British Petroleum" and "Compagnie Française des Pétroles" respectively), or because they are the home countries of oil companies th t contribute towards a favourable balance of payments with their remittance of profits.

In the oil industry we frequently hear of different types of "prices" being mentioned in relation to sales, taxes and royalties, and because of this there can be some misunderstanding with respect to their real significance unless we are able to differentiate what these "prices" really are and what their function is. The three types of "prices" that we usually come across are posted prices, realised prices, and tax reference prices, but as we shall see below, only one of these can be accepted as having economic meaning.

Posted Prices

Posted prices are those quotations listed by the oil companies and published in various oil publications which initially represnted a fairly "realistic price structure" for both crude oil and products, and now serve mainly the purpose of tax reference

prices.(3A) Thus we hear of a posted price for crude at the well-head, or F.O.B. at the port of export; or a posted ex-refinery price for the various products.

Crude oil prices began to be posted in the United States from the very beginnings of the industry by the demand side.(4) This was due to the particular situation of that country in which land-owners, having the right to any mineral wealth underneath, offered the oil to refining companies that "posted" the prices at which they were willing to buy.(5) In a history of the Standard Oil Company,(6) we find that this company as well as many others "procured its crude oil by spot purchase and by long-term contracts .... which were arranged at posted prices by the major purchasing companies in the various fields."

Prices were first posted in the Middle East for crude oil towards the end of 1950 (7) by Socony-Vacuum Oil Company, and later, in 1952, in Venezuela by Creole, a subsidiary of Standard Oil of New Jersey (8). It seems however, that in the Middle East posted prices were introduced by the companies as a way of valuing the crude in order to satisfy the aspirations of the Middle Eastern countries for a profit sharing system more or less along the lines of the Venezuelan.(9) The system finally adopted varied from the Venezuelan presumably due to company strategy, as we shall see in following pages, but basically, it was similar to it. With these new

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(3A) Hartshorn, J. Op.Cit (1967) page 137

(4) Gibb and Knowlton. "History of Standard Oil Company (New Jersey), The Resurgent Years 1911-1927" page 48

(5) Ibid, pages 48-50

(6) Ibid.

(7) "Platt's Oil Price Handbook" - 1950. page 307

(8) Ibid, 1952, page 335

(9) Frank, H.; Op. Cit. page 170

profit sharing agreements, instead of receiving a payment based on a flat royalty per unit produced, the Governments shared with the companies the profits from producing operations through tax payments and a royalty, and thus they came to acquire an interest in crude oil prices.

In Venezuela, on the other hand, the establishment of a posted price had nothing to do with the tax payments that had to be paid to the Government as in the case of the Middle East (as we shall see, the income tax that was paid in Venezuela, was based on the realised price and not on a posted quotation). And since it seems that Venezuelan posted prices initially "were prices at which a sizeable volume of arm's-length trading was probably done",(10), this takes us to consider that the posting of prices in Venezuela for the first time in 1952 could have been due more to oil-company policy seeking to establish a uniform pricing system for the major exporting areas. Furthermore, since the United States was (and is) the principle market for Venezuelan oil and increasing volumes of crude were also being imported from the Middle East, where prices were being posted for the reason stated above, listed quotations would have now seemed imperative for all the major sources of exports to allow any interested party in the United States to make some appraisal of the price structure of the oil that was being imported. It might have seemed necessary to make all prices at which oil was moving publicly available in view of the increasing disturbance of domestic producers in relation to the large quantities of imports, and unless a satisfactory relationship between prices from all areas could be substantiated for these domestic producers and their representatives in Congress, there could have been a danger of an

(10) Hartshorn, J.; Op.Cit. (1967), page 140

enactment of import restrictions in the United States of which by this time (1952) there was a "real threat". (11) A posted price was on the other hand, publicly know and therefore it did not "need to be documented each time it was in question."(12)

Realised Prices

Realised prices are the actual sale prices of petroleum which result from the posted price minus any discount that might be given to make an arm's-length transaction. It seems that the divergence of realised prices from actual postings became quite frequent and evident by 1957,(13) and since then, these have been the quotations that have been closer to a market price of oil.(14) Although the amount of crude being traded in the market at these arm's-length deals represents only about 7% of international oil movements, according to an authoritative source (15) these sales are the only ones that can actually be considered as representative of the market. Realised prices diverged from actual postings as a result of increasing competitive pressures which were only reflecting a situation of oversupply for the existing level of posted prices, and countries which had their oil revenues based on realisations, such as Indonesia, Libya, and Venezuela, were thus affected.

(11) Frank, H.; Op.Cit. page 161
(12) Ibid, page 174
(13) Ibid, pages 102 and followings
(14) Transfer prices of oil moving through integrated channels (which incidentally have also been moving down; Hartshorn, J.; Op.Cit. (1967) page 141) are also regarded as "realised prices", although it is clear that in this case they bear no connection with a market price either.
(15) Hartshorn, J.; Op.Cit. (1967) page 135

Tax Reference Price

As its name indicates, this is a figure or quotation chosen to calculate oil income which either will pass directly to the Government concerned, or that will eventually be taxed. Venezuela is a good example of a country that uses reference prices in the calculation of both royalties and income taxes. As in the case of posted prices, these quotations also do not have any economic meaning as prices, but serve only the purpose of a "reference" for the calculation of taxes. Reference prices or reference figures can be either a posted price, as in the case of the Texan price used to calculate Venezuelan royalties, or an original figure calculated to meet certain requirements, as in the case of the recent figures announced by the Venezuelan Government to calculate income taxes. We shall see more in relation to this point below.

II Taxation on the Oil Industry in O.P.E.C. Countries

Background to the Present Situation.

Under most of the earlier concession agreements, payments to the host governments were generally a"lump sum at the time the concession was granted, a dead rent during exploration, and a flat royalty per ton of oil produced".(11[1]) However, Venezuela set the "precedent" in 1943 with the establishment of a progressive income tax schedule to which the oil companies became subject to, and with the great expansion of production after World War II, host Governments generally began to exert pressure for revisions of their concession agreements.(12[1])

Contrary however, to Mr. Frank's belief that "the precedent" of the 50-50 sharing principle in Venezuela was what made the Middle Eastern countries persuade "their major concessionaires to submit to it"(13[1]) I am of the opinion that it could have been the companies that "persuaded" the Middle Eastern countries to "submit" to the 50-50. The following reasons seem to incline me to this belief.

1) First of all there has never been a 50-50 profit sharing principle in Venezuela. What was incorporated in 1948, as we shall see in greater detail in our next chapter, was an "additional tax" clause in the income tax law which was applied to all extractive operations, i.e. mining and hydrocarbons, and not only the petroleum industry. With this clause the Venezuelan Government ensured, as Mr. Frank correctly states, that the

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(11[1]) Frank, H.; Op.cit., page 170. Iran was the principle exception, "where the original agreement provided for a payment to the Government of 16% of net profits. This was changed in 1933 for a fixed royalty and a percentage of dividends above a stated floor".(Ibid)

(12[1]) Ibid, page 170

(13[1]) Ibid, page 170

Government's share of profits would not be in any case less than 50%. But it did not state that it would be 50%. The additional tax clause specifically stated that:

> "... in the cases of net income of tax payers obtaining earnings derived from the mining or hydrocarbon industry, including royalties and other participations of the same origin, if after the cedular and complementary taxes have been deducted the remaining exceeds the aggregate of the taxes caused by reason of the activities of the industry during the taxable year, such excess shall be subject to an additional tax of fifty percent."(14[1])

In other words, only in the case when the companies' share of profits was greater than the Governments, would this clause come into effect to divide the excess equally. But as the income tax law with its normal tax schedule and the royalty usually provided for a slightly higher share of profits, this clause seldom was applied.(15[1]) This clause was a simple guarantee but not the principle of profit sharing in Venezuela. This, I believe, has been a generalized misconception of the Venezuelan 50-50 clause.

2) In 1943 with the new petroleum law, Venezuela raised her royalties substantially to 16[2]/3% of production. Also the income tax law began to have effect in that year which gave the country another major source of

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(14[1]) Republic of Venezuela, "Official Gazette" 216, November 12, 1948.

(15[1]) From 1943 to 1948 the proportions of profits shared were approximately 54% - 46% to the Government's favour (Petroleum Press Service, July, 1949, page 158); In 1947, year before the additional tax clause was incorporated to the law, the government's share was of 52%. (Ministry of Mines and Hydrocarbons "Memoria 1965" page I - 199)

petroleum income. Royalties, however, could not be credited against the companies' tax obligations in the United States as could be done with the payments of income taxes to the host governments. After the experience of the legislative procedure in Venezuela, it would not be surprising if the major oil companies found it advisable to make formal agreements with the governments of the Middle East, which were anxious for better terms, to establish a profit sharing basis which would be acceptable to both parties before they too began to legislate as in the case of Venezuela. In any case we see that in the 50 - 50 profit sharing agreements of the Middle East, a lower royalty, which could not be credited to the tax obligation of the home country, was established (12.5%); and a limit to further payments, which would be treated as income taxes, was imposed, i.e. the difference to make up for the 50% share. Venezuela on the other hand was free to raise her income tax, as in fact she has done in not a few occasions, and usually surpassed the 50% level.(16)

3) Another reason for believing that the 50-50 agreements based on posted prices were introduced into the Middle East by the companies is that the Venezuelan system of taxation was already giving the companies hard times. Since 1945 companies in Venezuela were already being threatened with an "excess profit tax" because "some companies had made exceptionally high profits".(17) During that year the Government headed by Mr. Rómulo Betancourt and in which Dr. Perez Alfonzo acted as Minister of Development (18)

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(16) We will see the Venezuelan procedure of increasing her oil revenue in greater detail in our next chapter.

(17) Balestrini, C.; "La Industria Petrolera en Venezuela" Ministry of Mines and Hydrocarbons, 1966; page. 35

(18) The Ministry of Development at that time also fulfilled the role of the Ministry of Mines and Hydrocarbons.

began to talk about making modifications to the income tax law because the tax reform of 1943 "had not completely satisfied the national interest".(19) Since oil companies in Venezuela were beginning to feel the increasing intervention of the Government in relation to what were fair profits, they could have tried to avoid as far as possible the development of such a situation in the Middle East, and thus offered a profit sharing system to these countries exploiting an "equal share - fair business" slogan in which furthermore, because it was based on posted prices, they did not have "to open their books continuously to inspection by the host governments" and thus risk further prying into their business.(20) The companies "no doubt felt that .... the 50-50 with its inherent ring of fairness ... could give them an entirely new image which would reduce their concessionary problems, ensure stability, and safeguard the validity of their contracts" (21)

For these three reasons I am inclined to believe that the 50-50 profit sharing principle was actually introduced to the Middle East by the companies in the same way as we now see the Majors offer better terms to Governments in order to consolidate their position and to weaken that of their independent competitors.(22)

Present System of Taxation

At present there is a common system of taxation in crude oil production in all of O.P.E.C. countries. This system however, has certain variations in some countries which are quite important in practice but which nevertheless

(19) Balestrini, C.; Op.cit. page 34
(20) Frank, H. Op.Cit, page 174
(21) Ibid, page 173
(22) For this kind of oil company strategy in Libya see "Petroleum Intelligence Weekly", April 19,1965,p.6; and in Venezuela see same publication for February 28, 1966, page 4.

do not alter its fundamental principles. Such differences may consist of defining gross income on the basis of a posted price, a realized price or a reference figure, or the granting of certain allowances such as percentage depletion, or exemption from a variety of indirect taxes. However, as far as the major oil exporting countries are concerned, the present taxation system consists mainly of a royalty and and income tax.(23) We must however, make the observation here and now that in its true essence royalty is not a tax, and that income tax is normally not a tax on real income, but since they are generally regarded as such, we shall analyse these under those headings.

Royalty

Conceptually, royalty is a form of payment that we have inherited from the days before the introduction of income taxes and its origin is to be found in the times when the Crown claimed all mineral wealth. In return for the concession to extract the mineral, a concessionaire would pay the Crown a certain percentage of the product, known as a royalty. This system was later adopted in the United States with the landowner, who in that country owns sub-surface mineral wealth, taking the place of the Crown. Royalty then, is generally considered as a compensation to the owner of the mineral resource for the mineral itself, and as such it is distinct from any taxes which may be charged. In all of the major exporting countries, subsurface mineral rights are owned by the nation and the royalty is therefore payable to the Government.(24)

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(23) O.P.E.C.; "Taxation Economics in Crude Production"; page 8. Paper presented to the Fifth Arab Petroleum Congress; Cairo, March 1965

(24) Ibid. page 9

Income Taxes

In addition to the royalty paid to the Government, income tax is charged by the major exporting countries, usually at the rate of 50% of theoretical net earnings. This tax is usually a flat tax on these earnings, regardless of size, but in some countries, like Venezuela, it is progressive up to a certain point, depending on the total size of the income, and a flat rate above that point.(25) In most of the major concessions in the Middle East and Libya, the tax is levied on the theoretical net income calculated on the basis of posted prices. In Venezuela, it is levied on an income calculated on the basis of reference prices, and in Indonesia, it is chargeable on actual sales prices.

In many of the major exporting countries, though not in all, again as in Venezuela, concessionaire companies are exempt from taxes, other than royalty and income taxes. This exemption applies notably to import duties on equipment to be used in the development of oil resources, but is also applicable to several other indirect taxes, the nature of which varies from country to country.(26) In addition to the normal payments outlined above, which by far are the most important, there are also bonuses which are usually payable at the time the concession is granted and other minor taxes such as surface and exploration tax.

Middle East

In the Middle East, royalty in the major concession agreements is equal to 12.5% of production valued at the posted price,(27) and from 19[illegible]

(25) Ibid.

(26) O.P.E.C., Op. Cit, page 9

(27) Ibid. page 8

onwards it has been expensed and charged as a cost against income tax in some of the countries.(28) Previously, royalty was generally included in the 50% of the profits shared by the Government but, as we shall see in a following chapter, this led to serious criticisms from O.P.E.C., since the Middle Eastern countries under that system were either not obtaining a full share of income taxes on a 50% basis, which was claimed to be a normal tax for the level of profits obtained by the industry, or the oil companies were evading payment of royalties.(29) The companies agreed to pay royalties in addition to the taxes on income, in return for what was in effect a reduction in posted prices for tax purposes for a period. In the assessment of taxable income the companies would be given an allowance off the posted price for three consecutive years, and for the fourth, 1967, this allowance would be subject to consideration.(30) It seems however, that O.P.E.C. now finds that it should be eliminated for 1967.(31) The agreement has been effective in Iran, Saudi Arabia, and Qatar since 1964, but it did not apply in Iraq nor Kuwait because these countries considered that it went against "principles of state sovereignity".(32)

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(28) Petroleum Intelligence Weekly, January 18, 1965, page 6.

(29) O.P.E.C., "Explanatory Memorandum on the O.P.E.C. Resolutions IV 32, IV 33, and IV 34." page 14.

(30) Petroleum Press Service, February, 1966, page 42.

(31) Petroleum Intelligence Weekly, October 3, 1966, page 3

(32) Petroleum Intelligence Weekly, March 28, 1966, page 6
More in relation to this will be seen in the chapter related to O.P.E.C.

With respect to income taxes, the first country to follow Venezuela and obtain a similar payment was Saudi Arabia in December 1950, and then Kuwait in the following year, through the establishment of the 50-50 principle. Immediately afterwards this type of agreement becameggeneralized throughout the Middle East (33). The main difference however was that, as we saw before the Middle East calculated profits on the basis of posted prices, while Venezuela did it on the basis of realised prices. This type of agreement was first broken in 1957 with a new partnership arrangement between the National Iranian Oil Company (N.I.O.C.), and the Azienda Generale Italiana Petroli (A.G.I.P.), a subsidiary of E.N.I. (Ente Nazionale Idrocarburi) the Italian State company, by which the host government would receive more than 50% of the profits. The agreement provided that from net profits half shall be paid to the Iranian Government as tax, and the other half shall be divided equally between N.I.O.C. and A.G.I.P. (34)

Although legally the 50-50 type agreement still prevails in the Middle East, new associations of the kind seen above, the expensing of royalties in some cases, and the deterioration of sale prices, have resulted in an increasing participation of the Middle Eastern countries in the profits of the industry. In this way we find that the share of actual profits of countries in the Eastern Hemisphere has actually risen from 50% to 65% during the past nine years.(35)

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(33) Frank, H. Op.cit., page 171

(34) Petroleum Press Service, October 1957, page 359

(35) Petroleum Intelligence Weekly, November 7, 1966, page 1

Libya

With the petroleum law of 1965 Libya adopted a taxing system parallel to thatprevailing in the Middle East. There is a 12.5% royalty which can be paid in cash or in kind to the Government and that is treated as a cost for tax purposes, and an income tax which is also calculated at a flat rate of 50% of profits determined by posted prices.(36)

It seems however, that it was the major oil companies who actually proposed to make these payments to the Libyan Government offering the same terms they had agreed to give the Middle Eastern governments on condition that these would also be applied to all the companies operating in Libya. (37) It is obvious that the Majors were trying to make the situation more difficult for the independents that had managed to break into markets by granting heavy discounts on their oil, since these allowances were possible "largely because the profit sharing agreement with the Government was based on realised prices..."(38)

Indonesia

Indonesia has the most unique system of taxation among the major exporting countries. In her case neither royalties nor posted prices are relevant. Foreign companies may operate only as contractors to one of the state agencies which have now been reduced to two:Pertamin and Permina. Contractors work on a production sharing basis, advancing the capital for exploration and development operations and paying themselves with a share of the crude, ususlly 40%. However, in most cases the foreign contractor handles all exports and hands over to the Indonesian authorities 60% of the

(36) See official text of Libya's Oil Law in Petroleum Intelligence Weekly; December 6,1965 (Special Supplement) page 9
(37) Petroleum Intelligence Weekly, April 19, 1965 page 6
(38) Petroleum Press Service, August 1966, page 284

proceeds which are calculated at realised prices.(39)

The previous Indonesian Law, which dated back to 1954, had provided for a 50% share of profits as the general rule, but it became inoperative with the Presidential Decree 476 of August 28, 1961 that specified the present profit sharing basis.(40)

Venezuela

Venezuela's previous oil minister, Dr. Perez Guerrero, described 1966 as "a year of transition" for the Venezuelan oil industry.(40A) He was actually emphasising with his statement the changes that were being introduced to the taxing system and that would be applied to the oil industry in 1967. Since this new method of taxation is the one which affects the Venezuelan oil industry at the time of writing, I find it convenient to introduce its major characteristics at this point although it actually corresponds to a period beyond the one chosen for this study. We shall analyse in any case, the evolution of the taxing system in relation to the oil industry of this country in our next chapter.

Basically the new tax system is the same as before: there is a royalty of $16^2/3\%$ that can be paid in cash or in kind, and if it is accepted in cash, its value is determined by using the posted price (F.O.B. Gulf of Mexico) of similar Texan crudes with certain adjustments for gravity and deducting the American import tax. The average of such "royalty reference prices", as they are called, will obviously vary from one year to another

(39) Petroleum Press Service, September 1961 page 354. For a model of the new type of agreement between oil companies as contractors and the Indonesian Government, see the contract between Pan American and Pertamin: "Petroleum Intelligence Weekly", August 20, 1962, page 9

(40) Petroleum Press Service, October 1966, page 379

(40A) Petroleum Press Service, November 1966, page 403

according to the particular output pattern of crudes for the year.(41) The major change occured in income tax. First there was a rise at the top of the schedule to 52% against 47.5% which had prevailed previously,(42) and second and most important, the whole basis for calculating the industry's profits was changed. Before, profits had been calculated on the basis of realised prices, but now a whole new schedule of "reference prices" has been determined by the Venezuelan Ministry of Mines and Hydrocarbons that will substitute the realised price for each type of product and crude in the calculation. These prices are still not available for all the products and crude exported, but the following table gives us the reference prices for some of the more important types of crude that enter world markets.(seetable

The most interesting fact about these new prices is that they could actually be considered as new "postings", this time however, made by a Government. But even more important, that these new quotations have introduced a set of listed prices which are lower than the corresponding posted prices that have not been allowed to change since 1960. This of course was done to raise the tax basis from a lower realised price but it als implies a formal and official recognition by a producing government of the inadequacy and insignificance of the present structure of posted prices.

As mentioned above, reference prices for refined products will be set separately by considerations which are still not available. For crude oil, the formula to determine the reference price will be tied to the gravity differential of the various crudes. Traditionally companies

(41) Balestrini, C; Op. Cit. page 174

(42) Republic of Venezuela, "Official Gazette", December 23, 1966, page 9

Table III - 1

Reference Prices of Venezuelan Oil
(U.S. ¢ per barrel)

Crude	API Gravity	Posted Price	Reference Price	% Below Posted Price
Boscan	10	¢ 1.57	¢ 1.4040	10.6
Lagunillas	15.5	2.07	1.6042	22.5
Bachaquero	16	1.85	1.6224	12.3
Tia Juana (heavy)	18	1.90	1.6952	10.8
Tia Juana (medium)	26.5	2.30	2.0046	12.8
Guanipa	30.5	2.53	2.1502	15.0
Tia Juana (light)	31.5	2.55	2.1866	14.3
Oficina	35.5	2.80	2.3322	16.7
Lagocinco	36.5	2.76	2.3686	14.2
Cumarebo	47.5	3.34	2.7690	17.1

Source: Petroleum Intelligence Weekly, January 23, 1967, page 3.

establishing a posted price for a crude allow that price to move up or down by 2 cents for each one degree of gravity above or below that at which the price is posted.(43) Under the Venezuelan formula, a theoretical crude oil of zero gravity is priced at $1.04 per barrel. Then for each degree of gravity this price is raised by 3.64 cents.(44) Venezuela has generally followed this procedure in pricing her oil, although in certain cases quality factors have also been taken into consideration.(45) It also seems that these base prices set for 1967 will be "slightly"raised from 1968 to 1971 according to the agreement with the major companies.(46) Thus the Government has not merely arrested the downward trend of the quotation to be used in the calculation of profits (see table III- 2), but has actually reversed it. Furthermore, if a company sells oil at a higher price, then this sale price will be used in the determination of profits. With a further 5 cents per barrel which seems will be added to Venezuela's revenue, the profit sharing relation will now change to 72% - 28% to the greater favour of the Government.(47)

We have thus seen that Venezuela's income tax is no longer a percentage of profits, but a number of fixed cents per barrel as in the Middle East and Africa. It also seems that, with this new taxing system Venezuela's per barrel revenue will exceed the rest of the exporting countries "even overshadowing" Libya where as a result of her 1965 oil law, she managed

(43) Petroleum Intelligence Weekly, January 23, 1967, page 3.
(44) Petroleum Intelligence Weekly, January 23, 1967, page 3
(45) Ibid.
(46) Petroleum Press Service, November 1966, page 403.
(47) Petroleum Intelligence Weekly, October 17, 1966, page 1.

Table III - 2

Average Royalty, Posted and Realised Price of Venezuelan Crude
(U.S. $ per barrel)

	Average Royalty Reference Price (1)	Average Posted Price (2)	Average Realised Price (3)	% Below Posted Price
1961	2.71	2.31	2.12	8.2
1962	2.67	2.31	2.06	10.8
1963	2.66	2.31	2.03	12.1
1964	2.60	2.29 (4)	1.91	16.6
1965	2.58	2.27 (4)	1.86	18.1

(1) The average royalty reference price was obtained by dividing royalty payments by the volume of royalty oil.
(2) The average posted price has been weighted considering the proportions of the different types of crude produced in that year.
(3) The average realised price was obtained by dividing total earnings derived from the sales of crude by the volume of crude exported.
(4) The lower average of the posted price for 1964 and 1965 is the result of a higher proportion of heavy crude in the production pattern of crude oil.

Source: Banco Central de Venezuela; "Informe Economico 1965", pages 278 and 279. Ministry of Mines and Hydrocarbons; "Petroleo y Otros Datos Estadisticos 1965", page 169.

to raise her revenues substantially. (48) (see Table III - 3)

As can be seen from Table III - 3, payments to the Governments of the principle oil exporting countries have been increasing year by year. Higher rates of production, reduction in operating costs, and in some cases, new agreements such as royalty expensing are responsible.(49)

In the Middle East, the 1960 cut in posted prices was partially offset by the production of larger volumes of oil and by reductions in operating costs. In Libya higher exports, and the 1965 petroleum law raised oil revenue substantially in that year to $422 million which is more than double that of the previous year. (see Table III - 3) The two major changes introduced by the petroleum law were: the application of the royalty agreement, and second the changeover to a posted price basis for tax payments. It seems that only the application of the royalty agreement increased Libya's revenues in 1965 by approximately $134 million.(50) In Venezuela we also see an increase in total reveue but we also notice lower per barrel payments. The return per barrel in Venezuela depended partly on the gravity of the oil exported, and partly on the price it obtained in the market i.e. the realised price. Both these reasons accounted for the lower per barrel revenue of Venezuela. In this respect we saw in Table III - 2 how the average posted price of crude oil declined due to the greater participation of heavy crudes in the export pattern of the oil, and also how the realized price, which was the basis of income tax, had been falling. Per barrel payments in Venezuela are still higher

(48) Petroleum Intelligence Weekly, October 17, 1966, page 1
(49) Petroleum Press Service, September 1966, page 326.
(50) Petroleum Press Service, September 1966, page 326.

Table III - 3

Oil Revenue of the Main Exporting Countries

A) Total Government Oil Revenues
(in $ million)

	Kuwait(1)	Saudi Arabia(1)	Iran	Iraq	Others(2)	Total Middle East	Libya	Venezuela
1956	310	300	153	193	47	1,003		738
1957	338	323	213	137	57	1,068		968
1958	425	310	247	224	72	1,278		993
1959	405	315	263	243	69	1,294		926
1960	465	355	285	266	70	1,442		877
1961	464	396	301	266	70	1,497	3	938
1962	526	446	334	267	75	1,648	39	1,071
1963	555	489	398	308	83	1,833	109	1,106
1964	624	552	474	353	95	2,099	197	1,122
1965	636	639	532	368	120	2,295	422	1,128

B) Government Receipts Per Barrel
(U.S. cents P/B of exports)

1956	76.5	82.9	84.3	89.5	-	82.3		87.2
1957	79.6	88.2	86.8	93.1	-	85.7		103.0
1958	81.7	81.7	89.0	88.9	-	84.8		111.6
1959	77.8	75.8	83.6	82.4	-	79.8		98.4
1960	76.4	75.0	80.1	78.6	-	77.7		89.2
1961	74.4	74.6	75.8	76.5	-	75.6	62.7	92.9
1962	74.8	75.8	74.5	76.7	-	75.7	64.7	97.2
1963	74.0	76.7	79.7	76.5	-	76.5	65.0	98.6
1964	74.8	80.7	81.7	80.1	-	77.6	62.9	95.4
1965	74.8	80.5	82.7	80.2	-	77.7	95.2	95.0

(1) Including half Neutral Zone.
(2) Qatar, Abu Dhabi and Bahrain.

Source: Petroleum Press Service, September, 1966, page 326.

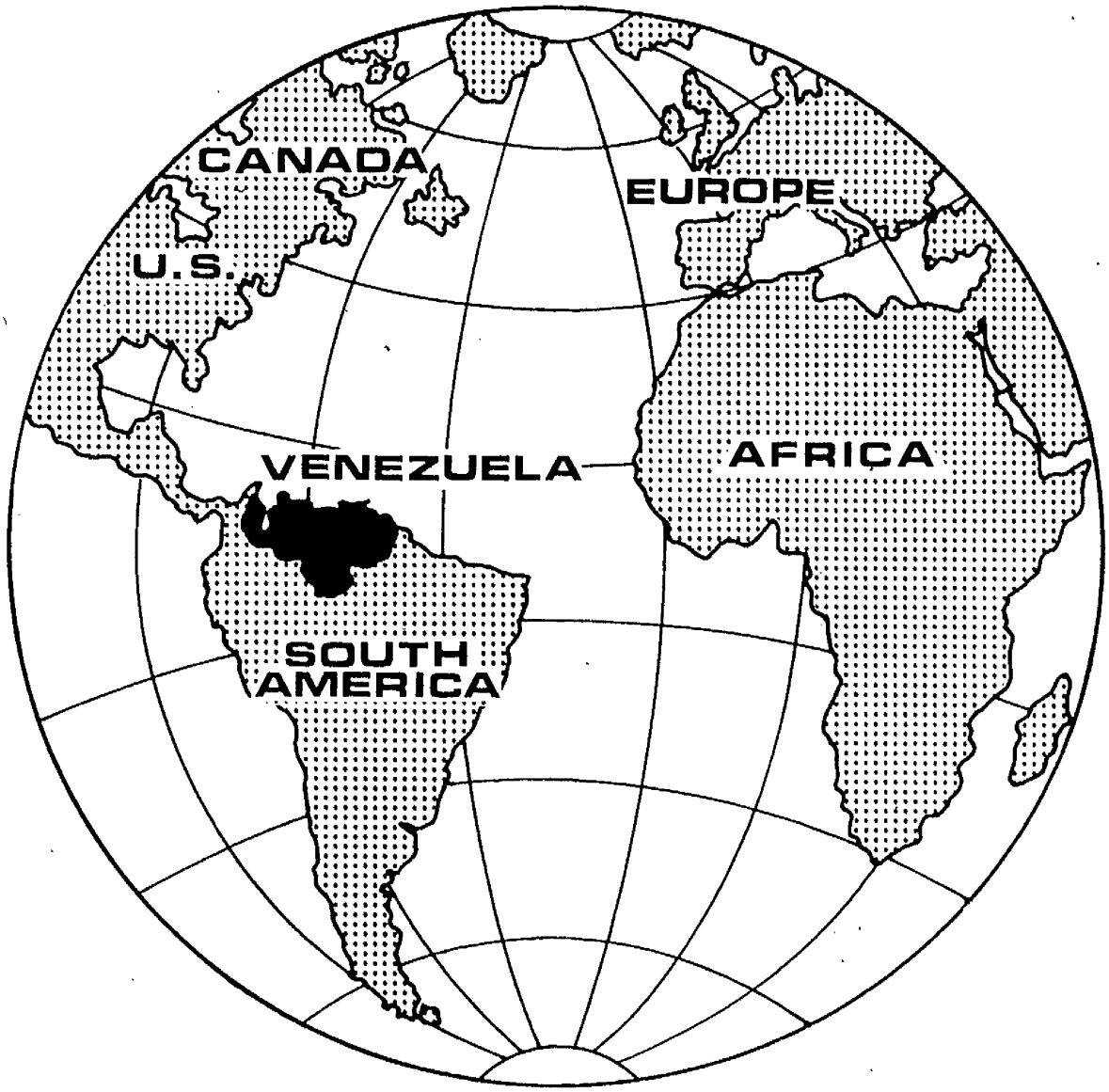
than in the Middle East, but the difference has been narrowing in recent years, dropping from 22.1 cents in 1963 to 17.8 cents in 1964 and 17.3 cents in 1965. With respect to Libya, Venezuela fell short in her per barrel reveue by 0.2 cents for the reasons stated above, but as we also mentioned, it seems that with the new Venezuelan taxing system she will surpass Libya again.(51)

(51) I shall leave for later the discussion of the possible effects of Venezuela's new tax measures on total revenue.

PART II

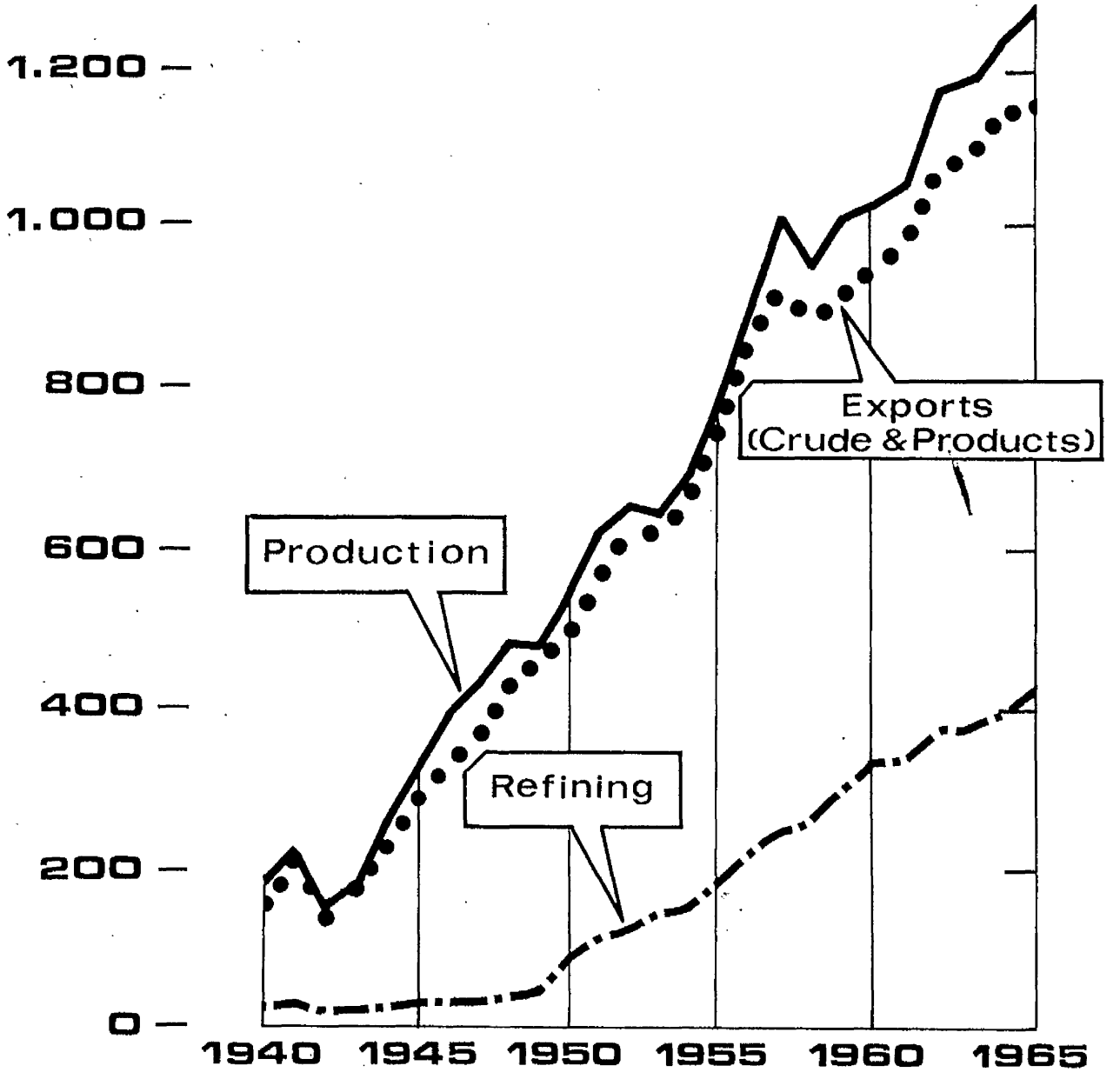
Venezuela in the Framework of the International Oil Industry

VENEZUELA'S GEOGRAPHICAL POSITION



GROWTH OF PETROLEUM ACTIVITIES IN VENEZUELA 1940 - 1965

(MILLION BARRELS)



CHAPTER FOUR

The Beginnings of the Oil Industry in Venezuela. Characteristics of the Venezuelan Oil Industry and its Position in the International Industry: Exploration, Reserves, Production, Refining, and Investments. Significance of the Oil Industry to the Venezuelan Economy. Venezuela's Petroleum Policy. The "Corporacion Venezolana del Petroleo" (C.V.P.). The Petrochemical Industry in Venezuela.

I. The Beginnings of the Oil Industry in Venezuela

From a commercial point of view we can go back as far as September 3, 1878 to set the beginnings of the oil industry in Venezuela. On this date the "Compañía Petrolia del Tachira" was founded by Mr. Manuel Pulido to expoloit the black oils which were filtrating from the ground and refine them in an ordinary still in order to supply the neighbourhood with kerosene (1). This first commercial venture took place in what is now the State of Tachira in western Venezuela covering an area of 100 hectares over which Mr. Pulido obtained exclusive exploitation rights. In 1880 an oil derrick was imported from the United States in order to drill for the oil as it was done in the American industry (2), and by 1912 this company was registering a daily production of 60 barrels of crude oil. (3) At this early period, however,

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(1) Baptista, Federico; "Historia de la Industria Petrolera en Venezuela", Creole Petroleum Corporation, Caracas; page 2.

(2) Baptista, Federico, Op. cit., page 2

(3) Betancourt, Romulo; "Venezuela: Politica y Petroleo", Fondo de Cultura Economica, - Mexico 1956; page 14.

no official interest was given to the incipient industry, and all government attention was directed towards agriculture and cattle breeding which at that time were the main economic activities of the country (4).

It seems to be that the first concession granted to a foreign interest dates back to 1883 when an American named Horacio Hamilton obtained a concession to exploit asphalt from the lake of Guanoco in the State of Sucre in the eastern part of Venezuela, and which later passed to the "New York and Bermudez Company" a subsidiary of "General Asphalt Company of Philadelphia". (5) In 1909 there was another important concession to a foreign interest, this time to the Briton John Allen Tregelles who represented "The Venezuelan Development Company Ltd." (6) This concession covered an area of 26 million hectares in 12 states and a Federal Territory, but after four years without having drilled any wells, the Government considered that the Company had not fulfilled its commitments and cancelled the concession.(7) Other concessions were also granted to the various nationals that were favoured by the prevailing Governments, but these concessions were held by these people only while they were able to pass them to foreign companies in arrangements between these private interests and the newcomer. (8)

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(4) Betancourt, Romulo; Op. cit. page 13.

(5) Balestrini, Cesar; "La Industria Petrolera en Venezuela" Ministry of Mines and Hydrocarbons, - Venezuela; page 7.

(6) Betancourt, Romulo; Op.Cit. page 25

(7) Ibid

(8) Ibid

It is on September 14, 1922, however, that the event which is considered to be the most significant in the history of the Venezuelan oil industry took place. (9) On this date, the "Barrosos 2" well of the "Venezuela Oil Concessions (subsidiary of the Royal Dutch-Shell group) (10) struck oil and gave forth 100,000 barrels of oil per day for nine consecutive days. This event in the history of the Venezuelan oil industry which in my opinion is comparable to Drake's success in the United States in 1859, acted as a stimulus for oil men and attracted many more companies to the country which now proved to have great potential oil wealth. Intensive exploratory programmes took place, and by 1929 seventy three companies were searching for oil on Venezuelan territory, obtaining major success those which today are subsidiaries of the Royal Dutch-Shell group, Jersey standard, and Gulf Oil Company, which until this day are the major producers. (11)

Of the three major producing companies, the Royal Dutch-Shell was the first to arrive on Venezuelan soil in 1912 through its affiliates "Shell Caribbean Petroleum Company","Shell Venezuelan Oil Concessions", and the "Colon Oil Company".(12) In 1917 it built in San Lorenzo the first refinery of the country and also the first pipeline which was between San Lorenzo and the Mene Grande oil field. (13) Next to enter the country was Jersey Standard in 1921 with its affiliate

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(9) Baptista, Federico; Op. Cit.,page 6

(10) Batancourt, Romulo; Op.Cit.,page 29

(11)Baptista, Federico; Op.Cit.,page 6

(12) Balestrini, Cesar; Op. Cit., page 73

(13 Ibid

"Standard Oil Company of Venezuela", which in 1943 merged with the "Lago Petroleum Company" and formed the "Creole Petroleum Corporation". In 1923 the "Venezuelan Gulf Oil Company" entered as a subsidiary of Gulf Oil which today operates in Venezuela as the "Mene Grande Oil Company".(14)

It might be of interest to point out how it was the Royal Dutch-Shell group who entered Venezuela nearly 10 years before Standard Oil, due probably to the different strategy that governed these companies, since while Standard Oil was busy consolidating its position in the United States, the Anglo-Dutch were out trying to secure its oil from foreign sources due to the fact that it did not count with domestic supplies.(15)

(14) Baptista, Federico; Op.Cit., page 7

(15) Frankel, P.H.; "Essentials of Petroleum: A Key to Oil Economics". London, 1946, page 89.

II Characteristics of the Venezuelan Oil Industry and its Position in the International Industry.

The oil industry in Venezuela is formed by approximately fifty companies of which about 10 are fully integrated. (16) Three of these, Compañía Shell de Venezuela (subsidiary of Royal Dutch-Shell), Creole Petroleum Corporation (subsidiary of Jersey Standard), and Mene Grande Oil Company (subsidiary of Gulf Oil) account for 77% of domestic production,(17) 80% of refining,(18) and held approximately 65% of the area in concessions at the end of 1965. (19) Besides the private companies there is a National Oil Company, the "Corporacion Venezolana del Petroleo" (C.V.P.) which also operates in all stages of the industry and which is supported by favourable legislation.(20) However, although this company does not participate at this moment in any of the operations in a considerable proportion, it may eventually gain control over its competitors since it alone is authorized to sign service contracts with the private oil companies. The more important firms in Venezuela then, generally belong to parent companies with headquarters in the United States, United Kingdom, Holland and, in minor cases, Spain, Canada, Switzerland and France. (21) Decisions of importance and especially the capital budget

(16) Information obtained from the Central Bank of Venezuela.

(17) Table IV-8

(18) Ministry of Mines and Hydrocarbons - Venezuela; "Memoria - 1965", page IV -38.

(19) Ibid page IV - 9. (also table IV - 4)

(20) We shall see this point in following pages.

(21) Parra & Pocaterra; "The Petroleum Industry in Venezuela" page 3. (Paper presented by the Venezuelan Delegation at the Third Arab Petroleum Congress, Alexandria, October 1961)

of each operating company must be approved by the parent organisation although the several executive boards of companies in the country have varying degrees of autonomy. (22) Local capital programmes in any case are approved by the Venezuelan Ministry of Mines and Hydrocarbons.

A) Exploration.

As can be seen in table VI - 1, large sums of money are directed towards exploration in various parts of the world. In 1965 $1,180 million were spent by the international oil industry in exploration and lease rentals and another $5,785 in the development of new areas in production capital expenditures. Venezuela had usually occupied an important position in these expenditures but, as we can see in our table, in 1965 less than 3% of the total was allocated to this country. During that year the areas that were mostly favoured by exploration and development, apart from the United States, were Canada, the Middle East, and Africa (table IV - 1). The various reasons for exploration have been analysed in a previous chapter. Reasons for the fall in exploratory activities in Venezuela however, are debatable.

As mentioned above, exploration in Venezuela had usually been maintained at a considerable level up to 1960 when these activities started to decline sharply (table IV - 2). The peak years of 1956, 1957, and 1958 can be attributed to the new concessions granted at that time (table IV - 3), but soon after the decline was to reduce exploration to levels far below those before the 1956-58 period. There are some quite opposing views in explaining this situation. Mr. Anibal Martinez, a

(22) Ibid, page 4

Table IV - 1

"Exploration and Production Capital Expenditures"

(million dollars)

		Geological and Geophisical and Lease Rentals	Production Capital Expenditures	Total Exploration and Development	%
1956	United States	700	4,575	5,275	72.3
	Canada	90	400	490	6.7
	VENEZUELA	45	680	725	9.9
	Other W.Hemisph.	35	190	225	3.1
	W Europe	30	110	140	1.9
	Africa	35	80	115	1.6
	Middle East	30	175	205	2.8
	Far East	35	90	125	1.7
	World Total (1)	1,000	6,300	7,300	100.0
1957	United States	700	4,525	5,225	67.2
	Canada	95	380	475	6.1
	VENEZUELA	65	900	965	12.4
	Other W.Hemisph.	50	260	310	4.0
	W. Europe	35	160	195	2.5
	Africa	55	150	205	2.6
	Middle East	35	190	225	2.9
	Far East	40	140	180	2.3
	World Total (1)	1,075	6,705	7,780	100.0
1965	United States	610	3,760	4,370	62.7
	Canada	125	550	675	9.7
	VENEZUELA	10	175	185	2.7
	Other W.Hemisph	60	255	315	4.5
	W. Europe	150	175	325	4.7
	Africa	100	340	440	6.3
	Middle East	35	405	440	6.3
	Far East	90	125	215	3.1
	World Total (1)	1,180	5,785	6,965	100.0

(1) Excluding Sino-Soviet Bloc

Source: Chase Manhattan Bank, "Capital Investments of the World Petroleum Industry" - 1965, page 22 and followings.

Table IV - 2

"Exploration and Exploratory Drilling in Venezuela"

	1951	1955	1956	1957	1958	1959	1960	1965
Exploration: (Thousands of Hectares)								
Aeriel Geology	4,578	4,572	3,599	926	4,064	6,469	837	-
Aerial Mapping	3,294	2,469	8,942	4,563	6,487	2,289	550	-
Surface Geology	2,234	2,024	1,472	5,002	5,384	5,395	2,371	271
Gravimeter	120	973	2,028	2,227	1,925	788	-	-
Seismograph	1,353	4,462	4,272	7,527	2,774	1,056	114	541
Structural Drilling	130	13	23	165	34	7	5	2
Total	11,709	14,513	20,336	20,410	20,668	16,004	3,877	814
(Crew/Months) (1)								
Surface Geology	171,60	127,44	120,59	107,92	103,43	81.40	32.80	13.45
Gravimeter	25,65	34.10	29,40	44.56	51,99	25.00	-	-
Seismograph	166,40	191,80	148,39	260,87	207,26	66,30	9,24	2,47
Structural Drilling	35,21	15,70	34,60	41,30	46,30	47,60	44,00	7,16
Exploratory Drilling: (2)								
Completed Wells	103	171	138	136	168	103	62	64
Producing Oil Wells	34	70	61	68	83	41	28	28

(1) Summatory of monthly averages
(2) For the objective at the beginning of drilling.

Source: Ministry of Mines and Hydrocarbons - Venesuela. "Memoria" - 1965, page I - 154

Table IV - 3

"Area in Conessions in Venezuela"
(hectares)

	Area in Concession at the beginning of the year	New Concessions Granted	Relinquished Area	Area in Concession at the end of the year
1945	8,641,864	3,148,474	265,664	11,524,674
1946	11,524,674	-	361,356	11,163,318
1947	11,163,318	-	439,615	10,723,703
1948	10,723,703	-	2,422,451	8,301,252
1949	8,301,252	-	990,551	7,310,701
1950	7,310,701	-	815,346	6,495,355
1951	6,495,355	-	202,478	6,292,877
1952	6,292,877	-	25,779	6,267,098
1953	6,267,098	-	61,263	6,205,835
1954	6,205,835	-	179,167	6,026,668
1955	6,026,668	-	155,384	5,871,284
1956	5,871,284	301,714	1,013	6,171,985
1957	6,171,985	519,377	-	6,691,362
1958	6,691,362	-	339,530	6,351,832
1959	6,351,832	-	597,381	5,754,451
1960	5,754,451	-	1,036,007	4,718,444
1961	4,718,444	-	597,593	4,120,851
1962	4,120,851	-	343,653	3,777,198
1963	3,777,198	-	218,829	3,558,369
1964	3,558,369	-	314,639	3,243,730
1965	3,243,730	-	247,707	2,996,023

Source: Ministry of Mines and Hydrocarobs - Venezuela; "Memoria"-1965, page I - 151.

Table IV - 4

"Area of Concessions in Venezuela Held by the Main Oil Companies at the end of 1965"
(hectares)

		%
Mene Grande Oil Company	764,879	25.5
Creole Petroleum Corp.	720,509	24.0
Cia. Shell de Venezuela	453,928	15.2
Mobil Oil Co. of Venezuela	181,711	6.1
Sinclair Venezuelan Oil Co.	171,647	5.7
Others (20 companies)	703,349	23.5
Total	2,996,023	100.0

Source: Ministry of Mines and Hydrocarbons, Venezuela. "Memoria" - 1965, page I - 152

Venezuelan geologist, (23) is of the opinion that this reduction is a very natural phenomenon since "the extension of the Venezuelan sedimentary basins being finite, there had to come a time when the various methods for oil exploration would totally cover the whole country". (24) According to Mr. Martinez nearly 94% of all the area of the Venezuelan sedimentary basins bas been "adequately" explored, and the reduction in exploration since 1958 is ascribed "only to a true physical situation and to normal development stages". (25) He thus believes that it is "absolutely normal" that from 1960 onwards the number of geological field crews in Venezuela would have "drastically diminished". (26) Other points of view play with the idea that the reduction of exploratory activities in Venezuela is only but part of a global reaction of the oil companies against the "aggresive" petroleum policy prevailing since 1959, since it tends to affectthe national revenue which derives from such activities, the labour force, and alsothe expenditures at this stage.(27)

One thing, however, does seem obvious, and this is that since the policy of "No more Concessions" was proclaimed, the companies have reduced substantially their exploratory activities.(28) Exploration

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(23) Mr. Martinez is Chief of the Enforcement Department of the Organisation of the Petroleum exporting Countries, and Delegate of Venezuela in the Permanent Council of the World Petroleum Congress.

(24) Martinez, Anibal; "Our Gift, Our Oil", page 44.

(25) Ibid, page 44

(26) Ibid.

(27) Casado, Ezequiel M.; "Economia, Politica y Legislacion de Hidrocarburos" Caracas - 1962, page 62.

(28) We shall see the Petroleum Policy at the end of this chapter

had gradually reached 20,668 thousand hectares by 1958, and soon after began to be reduced leaving only 814 thousand by the end of 1965 (see Table IV - 2). As a result of this, there was only a trivial increase (1%) of proven reserves in 1965, most of which was due to revisions,(29) and the industry's expected operating period has been reduced from a theoretical duration of 13 years in 1958 to 14 years.

Venezuela's petroleum policy does not go against exploration, as one could think, but only against handing out more concessions to the oil companies which would delay the time in which the industry would pass to the entire domain of the state oil company, "Corporacion Venezolana del Petroleo" (C.V.P.). The former oil Minister, Dr J.P. Perez-Alfonzo has stressed the need for more exploration on different occasions,(30) and the same can be said with respect to Dr. M. Perez-Guerrero who held the same position until recently. (31) However, they insist that exploration should be done on the existing concessions alleging that they have not been adequately explored.(32) The attitude of the Venezuelan Government is that as long as idle areas, granted for development, still exist, there is no justification for more concessions.(33) Mr. Martinez considers "adequate exploration" to be the "verification" of the presence, or absence of petroleum in the favourable traps found

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(29) See Table IV - 6

(30) Perez-Alfonzo, J.P.; "Petroleum Policy", Ministry of Mines and Hydrocarbons - Venezuela; page 24.

(31) Perez-Guerrero, M; "Hechos y Consideraciones" Ministry of Mines and Hydrocarbons - Venezuela; pages 20-21.

(32) Petroleum Press Service, November 1965, page 431.

(33) Perez-Alfonzo, J.P.; Op.Cit, page 24.

and delineated by the various exploration methods.(34) According to this geologist, wildcat drilling is the only tool known in this respect, and as the end of 1964 only 42% of the Venezuelan basins (explored in 94%) had undergone oil testing through what is known as exploratory drilling.(35) However, it seems logical that the oil companies would have verified the better prospects of these fields leaving the more doubtful behind and, having a time limit imposed with the expiring of the concession contracts in the relatively near future (most concessions will begin to expire in 1983),(36) these concessionaires could feel that there was not time enough to recoup the investments which would be necessary to develop these higher cost fields. "Costs are considered over the remaining life of the field (for the concessionaire the life of the field is also limited to the time the concession expires), ··· and decisions on investments and production are made on that basis".(37)

B) Reserves

World crude oil reserves for 1965 were estimated to be of the order of 364,961 million of barrels of which a breakdown is presented in Table IV - 5. The greater proportion of these (62%) are located in the Middle East and at present, Venezuela occupies the seventh place among the major countries with reseves after Kuwait, Saudi Arabia, Iran, United States, Russia and Iraq, with approximately 5% of the total figure. Present reserves seem to be more than adequate to cover expected demand

(34) Martinez, Anibal; Op.Cit, page 45

(35) Ibid.

(36) Casado, Ezequiel M.; Op.Cit, page 36.

(37) Adelman, M.A.;"The World Oil Outlook" in "Natural Resources and International Development", page 42.

Table IV - 5

"Proved Crude Oil Reserves of Main Producing Regions"
(Millions of barrels at the end of year)

	1940	1945	1950	1955	1960	1965	%
United States	19,025	19,942	26,218	29,561	31,613	31,352	8.6
VENEZUELA	2,589	7,038	8,724	12,429	17,402	17,367	4.8
Middle East	1,449	18,500	48,000	132,927	162,840	227,777	62.4
Kuwait	-	4,000	15,000	50,125	61,450	75,000	20.6
Saudi Arabia	-	3,000	10,000	40,125	52,450	68,707	18.8
Iran	-	6,000	13,000	26,000	22,000	40,000	11.0
Iraq	-	4,750	8,700	15,000	24,000	30,000	8.2
Other M. East	-	750	1,300	1,677	2,940	14,070	3.8
Soviet sphere	3,081	8,719	5,994	10,000	25,299	37,268	10.2
Africa	-	75	183	269	8,374	22,978	6.3
Rest of World	4,107	3,753	6,089	11,804	19,856	27,720	7.7
Total	30,251	58,027	95,208	196,990	265,684	364,962	100.0

Source: World Oil (July or August issues for each year).

up to the end of the century, and there are at present "no indications of an emerging trend towards long-term shortage".(38) Furthermore, according to O.P.E.C., the reserve position "will be further strengthened by improvement of methods in secondary recovery".(39)
Professor M.A. Adelman also seems to find current world reserves at a "comfortable" level even accepting a world demand (excluding the Soviet sphere) of 15 billion barrels per annum by 1975.(40) Professor Adelman does not venture into giving an opinion of the situation after 1975 for considering it only a "guess", but in any case he does seem to agree that there will be plenty for as far as one can foresee.

"Oil Resources" is a term used by the industry which includes three different variants of the oil wealth of a country: a) the cumulative production up to a given moment, b) the volume of proved reserves at the same instant, and c) the estimate of probable reserves: i.e. of future discoveries which will be economically exploitable. (41) Such an estimate of Venezuelan oil resources was made by Anibal Martinez in 1961,(42) but his work was recently brought up to date by

(38) O.P.E.C. "The Development of Petroleum Resources under the Concession System in Non-Industrialized Countries", page 15.

(39) Ibid

(40) Adelman, M.A.: Op.Cit, page 98

(41) Martinez, Anibal, "Nuestro Petroleo, Defensa de un Recurso Agotable", Geneva - 1963, page 71.

(42) Ibid, page 62

Dr. Perez-Alfonzo.(43) They conclude that oil resources in Verezuela are of the order of 80,500 million barrels of oil which might "eventually" even reach the global figure of 100,000 million.(44) To arrive at such a figure of 80,500 million barrels, the cumulative production for 1965 was set at 20,500 million barrels; the volume of proved reserves were estimated at 30,000 million barrels,(45) and a further 30,000 million barrels were considered as the "conservative" measure for probable reserves.

Due to the reduction of exploration in Venezuela (Table IV - 2) proved reserves have shown very little expansion since 1959-1960, and even registered a net reduction during 1961 and 1962 as can be seen in Table IV - 6. As we saw in a previous chapter, the increase in proved reserves can be obtained by revisions of previous estimates, by an extension of known reserves which is accomplished by intensifying exploration in known deposits, and thirdly, by the discoveries of new fields. During 1965, 74.3% of the increase in reserves was due to revisions,

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(43) "Vertice", July-August, 1966, page 14.

(44) Martinez, Anibal; "Nuestro Petroleo, Defensa de un Recurso Agotable", page 62.

(45) According to Dr. Perez-Alfonzo, reserves in-situ in Venezuela are estimated to be approximately 90,000 million barrels. To this figure the oil companies apply a recovery factor of 20% and thus they arrive to a figure of published or proved reserves of 18,000 million barrels (17,367 million, see Table IV - 6). However, the Ministry considers that a recovery factor of 20% is extremely low considering experiences of other countries, and thus applies a factor of 33% which brings proven reserves up to 30,000 million barrels. ("Vertice", Op.Cit, page 13)

Table IV - 6

"Venezuelan Reserves of Crude Oil"

(million barrels)

	New Reserves				Estimated Proved Reserves at the end of the year	% Change	Crude Oil Production	Theoretical Duration of Reserves (1)
	Discov.	Ext.	Rev.	Total				(years)
1945	-	-	-	687	7,038	-	323	21.8
1950	-	-	-	1,038	8,724	-	547	15.9
1951	-	-	-	962	9,064	3.9	622	14.6
1952	-	-	-	817	9,221	1.7	660	13.9
1953	-	-	-	1.575	10,152	10.1	644	15.8
1954	436	617	419	1,472	10,932	7.7	692	15.8
1955	320	1,151	813	2,284	12,429	13.7	787	15.8
1956	371	813	1,281	2.465	13,995	12.6	899	15.6
1957	818	940	853	2,611	15,592	11.4	1,014	15,4
1958	857	1.244	39	2,140	16,781	7.6	951	17,7
1959	342	695	196	1,233	17,003	1.3	1,011	16.8
1960	585	594	262	1,441	17,402	2.3	1,042	16.7
1961	106	365	72	543	16,879	- 3.0	1,066	15.8
1962	148	144	802	1,094	16,805	- 0.4	1,168	14.4
1963	69	298	1,025	1,392	17,011	1.2	1,186	14.4
1964	74	268	1,084	1,426	17,195	1.1	1,242	13.9
1965	77	293	1,070	1,440	17,367	1.0	1.268	13.7

(1) This is an estimate of what reserves would last at the current rate of production.

Source: Ministry of Mines and Hydrocarbons, - Venezuela. "Petroleo y Otros Datos Estadisticos" 1965, pages 53 and 55

20.3% to intensive exploration in known deposits, and only 5.4% to new discoveries (Table IV - 6). Taking a longer period we find that from 1963 to 1965 75% of the increase was a result of revisions. Considering then, what the oil companies' estimate of Venezuelan reserves is, the country has oil to last another fourteen years at the present rate of production.

C) Production

Production in 1965 averaged a little over 30 million barrels daily (Table IV - 7), which represents an increase of approximately 7% with respect to the previous year. In fact, such has been the average annual increase over the last decade and it seems that it is also the general prediction up to 1970 (46). The United States was the main producer with 26% of the total, followed by Russia and Venezuela with 16% and 12% respectively. The Middle East as a whole however, surpassed the United States by producing 29% of the world total.

In Venezuela, most of the crude (80%) is produced in the western region of the country in the Maracaibo, Falcon, and Apure basins, and the rest from the eastern part, known as the Oriental basin. (47) The crude exploited in 1965 was of an average gravity of 24.8° A.P.I.,(48), which falls in the medium range of crudes, formed by 30% heavy crudes

(46) O.P.E.C., "Elasticity of Demand for Crude Oil; Its Implications for Exporting Countries", page 31; and "The Development of Petroleum Resources Under the Concession System in Non-Industrialized Countries", page 12.

(47) Ministry of Mines and Hydrocarbons - Venezuela, "Memoria - 1965", page IV - 31.

(48) Classification of crude according to the "American Petroleum Institute" which divides crude oil considering its gravity.

Table IV - 7

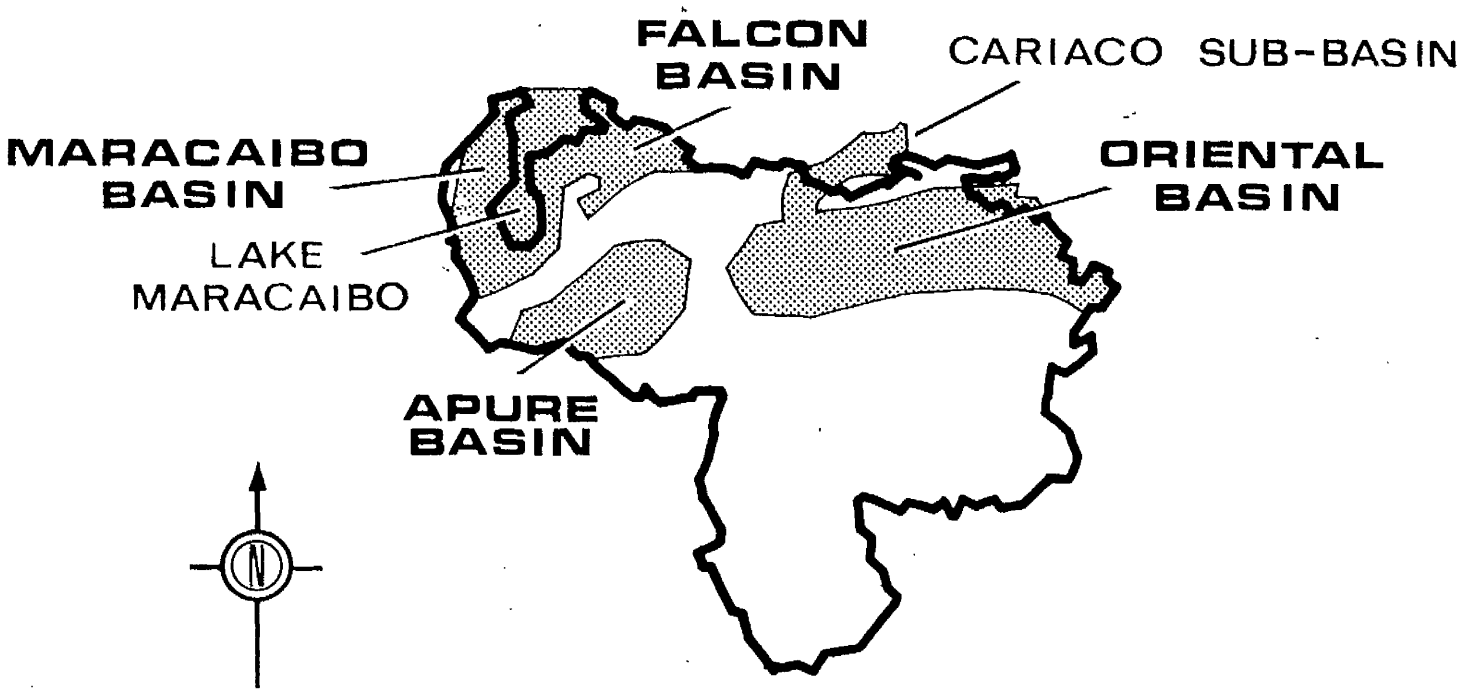
Crude Oil Production by Main Producing Areas

(barrels daily)

	1938	1950	1955	1960	1965	%
United States	3,327,000	5,407,052	6,806,652	7,035,335	7,804,148	25.9
VENEZUELA	515,178	1,497,988	2,157,216	2,846,107	3,472,882	11.5
Middle East	328,241	1,755,490	3,243,253	5,250,460	8,330,005	27.6
Kuwait	-	344,444	1,103,882	1,691,785	2,350,033	7.8
Saudi Arabia	1,356	546,703	977,162	1,315,214	2,205,304	7.3
Iran	214,718	664,315	328,863	1,052,478	1,885,519	6.3
Iraq	89,433	136,236	688,236	968,830	1,315,157	4.4
Other M.East	22,734	63,792	145,110	222,153	573,992	1.8
Russia	571,992	748,493	1,438,356	2,951,913	4,837,364	16.0
Africa	4,406	45,760	37,902	282,810	2,208,091	7.3
Rest of World	799,851	964,381	1,775,358	2,553,482	3,512,326	11.7
Total	5,446,668	10,419,164	15,458,737	20,920,107	30,165,816	100.0

Source: "World Oil" (various July or August issues).

LOCATION OF PETROLEUM BASINS IN VENEZUELA



(less than 19.9° A.P.I.), 35% medium crudes (between 20.0° and 29.9° A.P.I.), and 35% light crudes (more than 30.0° A.P.I.). (49) In the last few years, however, the oil companies have raised the proportion of the heavier crudes (medium and heavy) in Venezuela's production pattern because of the favourable acceptance of these in both the European and American markets due to industrial requirements. (50) Venezuela has realised that although this deprives her of higher royalties since they are regarded as of lower quality and as such are accordingly priced, it permits her to maintain markets which cannot be satisfied with the lighter crudes from other sources. (51)

As mentioned earlier, production is mainly in the hands of three companies. However, in Table IV - 8 we see how these Companies have been losing control of the productive stage due mostly to the entry of independent firms. In Table IV - 9 we can also follow the country's yearly output since 1920, which reaches a million barrels per day in 1946, two million barrels daily in 1955, and almost arrives at 3.5 millions of barrels per day in 1965.

In the series we notice four years in which there was a reduction in production: 1942, 1949, 1953 and 1958. The reduction in 1942 was due to the presence of German submarines in the Caribbean during the war which made transportation of crude oil more difficult.(52) In 1949 and 1953 production was affected by the recessions in industrial activity in the United States, and in ,1958 it is alleged that it was the result of world

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(49) Banco Central de Venezuela, "Informe Economico - 1965", page 247

(50) Ibid

(51) This will be analysed further in a following chapter.

(52) Banco Central de Venezuela; "Revista Trimestral" April-June 1965, page 46

Table IV - 8

"Percent Production of Crude in Venezuela by Major Companies"

	1945	1950	1955	1960	1965
Creole Petroleum Corp. (Jersey Standard)	54.5	45.8	45.5	38.4	37.4
Cia. Shell de Venezuela (Royal Dutch-Shell)	25.2	30.8	28.2	26.5	27.7
Mene Grande Oil Co. (Gulf Oil Company)	15.4	13.5	14.7	14.1	11.8
Others	4.9	9.9	11.6	21.0	23.1
Total	100.0	100.0	100.0	100.0	100.0

Source: Ministry of Mines and Hydrocarbons - Venezuela.
"Memoria" - 1965, page I -172.

Table IV - 9

Production in Venezuela

	B/D	% change
1920	1,261	-
1930	370,538	-
1940	502,270	-
1941	621,319	23.7
1942	405,904	- 34.7
1943	491,463	21.1
1944	702,288	42.9
1945	886,039	26.2
1946	1,064,326	20.1
1947	1,191,482	11.9
1948	1,338,798	12.4
1949	1,321,372	- 1.3
1950	1,497,988	13.4
1951	1,704,648	13.8
1952	1,803,915	5.8
1953	1,764,994	- 2.2
1954	1,895,309	7.4
1955	2,157,216	13.8
1956	2,456,785	13.9
1957	2,779,245	13.1
1958	2,604,840	- 6.3
1959	2,771,012	6.4
1960	2,846,107	2.7
1961	2,919,881	2.6
1962	3,199,771	9.6
1963	3,247,976	1.5
1964	3,392,848	4.5
1965	3,472,882	2.4

Source: "Memoria" - 1965, Ministry of Mines and Hydrocarbons; page I - 169

wide adjustments in the supply pattern after the Suez crisis. (53)

D) Refining

World refining capacity stood at 34,883 thousand barrels daily by the end of 1965 of which 31% was located in the American industry, 25% in Western Europe and approximately 6% in Japan. Venezuela's refining capacity (the highest of the major exporting countries) at the end of 1965 was 1.2 million barrels daily which represents approximately 3.6% of the world's capacity However it is sometimes useful to include the capacity of the Dutch islands of Aruba and Curaçao which are right off the coast of Venezuela and refine Venezuelan oil, in order to give a more representative figure of the refining capacity of the area. Including then the refining capacity of the Dutch islands, which is of 740,000 b/D, we arrive at a global figure of approximately 1.9 million b/D for the area, or 6% of world capacity (Table IV - 10).

The refining stage in Venezuela began to gain importance after the introduction of the "Refining Clause" in the Petroleum Law of 1943.(54) Since then, a growing proportion of crude has been refined in the country reaching by 1965 34% of production. (Table IV - 11) At the end of 1965 there were 15 refineries in Venezuela of which the major ones are Amuay Refinery (435,000 b/D capacity) owned by the Creole Petroleum Corporation

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(53) Parra and Pocaterra, Op.Cit. page 15.

(54) We shall see this with more detail in following pages.

Table IV - 10

"World Refining Capacity by Major Areas"
(thousands of barrels daily)

	1940	1950	1960	1965	%
United States	4,461.1	6,540.3	10,400.0	10,800.0	31.0
Western Europe	475.2	1,027.3	4,457.9	8,603.7	24.0
Japan	52.6	47.5	683.7	1,993.0	5.7
VENEZUELA	54.4	258.5	1,003.5	1,199.9	3.6
Netherland West Indies	505.0	624.3	680.0	740.0	2.1
Middle East	409.5	922.5	1,474.8	1,792.2	5.2
Africa	18.3	41.0	122.5	613.3	1.8
Soviet Sphere	901.5	946.5	2,965.2	4,212.2	12.1
Rest of World	1,197.0	1,141.9	3,282.5	4,528.3	14.0
World Total	7,674.6	11,549.8	25,040.1	34,882.6	100.0

Source: Degolyer and Mac Naughton, "Twentieth Century Petroleum Statistics" 1966, page 86.

Table IV - 11

"Petroleum Refined in Venezuela"
(thousand barrels)

	1940	1945	1950	1955	1960	1965	%
Crude Runs to Stills	26,711	32,644	91,181	195,866	322,915	429,026	-
% of Crude Production	14.5	10.0	16.7	24.9	31.0	33.8	-
% of Refining Capacity	100.0	89.4	96.9	100.0	87.9	97.8	-
Output:							
Fuel Oil	18,906	22,870	51,622	103,731	187,470	256,946	59.9
Gasoline and Naphtha	2,144	3,028	14,688	25,939	38,840	52,308	12.3
Diesel-Gas Oil	4,844	5,426	17,700	42,625	57,097	73,655	17.2
Kerosene	244	495	2,159	7,548	9,382	9,582	2.2
Asphalt	46	181	661	989	6,334	5,520	1.3
Gas	-	-	1,366	2,037	4,532	4,539	1.0
Lubricants	-	-	157	1,011	1,473	4,930	1.1
Others	362	548	2,799	11,803	18,016	21,292	5.0
Total	26,526	32,548	91,152	195,683	323,144	428,771	100.0

Source: Ministry of Mines and Hydrocarbons - Venezuela, "Petroleo y Otros Datos Estadisticos" 1965, pages 57,73.
Banco Central de Venezuela, "La Economia Venezolana en los Ultimos Veinticinco Años", page 58.

(Jersey Standard), and the Cardon Refinery (315,000 b/D capacity) owned by the Shell group. (55) These two companies alone hold 72% of the country's capacity, and if we include the refinery of Puerto La Cruz owned by Mene Grande (Gulf Oil Company), 85% of capacity is held by just three companies (Table IV - 12). It may also be interesting to point out, that in 1965 98% of the country's capacity was used, which is undoubtedly a high proportion, giving forth a refinery yield made up mainly of fuel oil (60%), Diesel-Gas Oil (17%), and Gasoline and Naphtha (12%). (See Table IV - 13)

E) Investments

We have already seen the investment pattern of the petroleum industry in a previous chapter. However, it seems necessary at this point to take a look at the pattern of capital expenditures of the international oil industry for 1965. Analysing Table IV - 15 we find that almost half of this expenditure (48%) went to the American industry, and another heavy proportion (16%) to Western Europe. These two main areas, favoured by new expenditure, were followed by the Far East 6%, Canada 6%, Middle East 5%, Africa 5%, Western Hemisphere (excluding the United States, Canada and Venezuela) 5%, and Venezuela 2%.

Capital expenditure in the Venezuelan petroleum industry during 1965 totalled 200 million dollars, a reduced figure if we were to compare it with previous years especially prior to 1960. In this respect we can see the results of such lower new expenditure in Table IV - 14. At first glance we find that the gross value of fixed assets has been increasing to the current

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(55) Ministry of Mines and Hydrocarbons - Venezuela, "Petroleo y Otros Datos Estadisticos" 1965, page 71

Table IV - 12

"Refinery Capacity in Venezuela by Companies"
(barrels per day)

	1951	1955	1960	1965	%
Creole Petroleum Corp.	103,000	205,000	413,500	509,200	42.4
Shell de Venezuela	79,600	209,600	329,600	351,600	29.3
Venezulan Gulf	30,000	59,000	121,200	159,000	13.3
Mobil Oil Company	270	130	55,200	80,500	6.7
Chevron Oil Co.	-	-	33,000	45,500	3.8
Sinclair Oil Ref.	35,000	35,000	35,000	38,000	3.2
Texas Petroleum Co.	10,000	10,000	10,000	10,000	0.8
Phillips Petroleum	-	2,100	3,500	3,800	0.3
C.V.P.	-	-	2,500	2,300	0.2
Total	257,870	520,830	1,003,500	1,199,900	100.0

Source: Ministry of Mines and Hydrocarbons - Venezuela; "Venezuelan Petroleum Industry Statistical Data - 1965", April 1966, page 11.

Table IV - 13

"Capital Expenditures of the International Oil Industry in 1965"
(millions of dollars)

	Production	Pipe lines	Marine	Refineries	Chemical Plants	Marketing	Others	Total Capital Expenditure	%
United States	3,760	225	40	600	525	1,000	225	6,375	48.4
Canada	550	30	0	35	25	100	10	750	5.7
VENEZUELA	175	5	0	10	0	10	6	200	1.5
Other W. Hemisphere	255	25	0	125	100	75	20	600	4.6
Western Europe	175	75	5	710	175	350	60	2,050	15.5
Africa	340	100	0	85	0	75	0	600	4.6
Middle East	405	85	0	50	15	20	50	625	4.7
Far East	125	5	5	250	85	300	30	800	6.1
Unallocated	0	0	1,175	0	0	0	0	1,175	8.9
World Total (1)	5,785	550	1,225	1,865	925	2,430	395	13,175	100.0

(1) Excluding Sino-Soviet Bloc.

Source: Chase Manhattan Bank; "Capital Investments of the World Petroleum Industry - 1965", page 16-17.

Table IV - 14

"Value of Fixed Assets of the Venezuelan Oil Industry"
(millions of bolivars)

	Gross Value	Reserves	Net Value
1947	5,320	2,015	3,305
1950	8,027	3,006	5,021
1951	8,526	3,384	5,142
1952	9,312	3,855	5,457
1953	9,873	4,413	5,460
1954	10,212	4,678	5,534
1955	10,937	5,288	5,649
1956	13,038	6,015	7,023
1957	15,828	6,826	9,002
1958	17,218	7,566	9,652
1959	18,303	8,428	10,375
1960	18,987	9,216	9,771
1961	19,155	10,015	9,140
1962	19,253	10,748	8,505
1963	19,353	11,267	8,086
1964	19,872	12,094	7,778
1965	20,057	12,596	7,461

Source: Ministry of Mines and Hydrocarbons - Venezuela: "Memoria - 1965", page I - 204

level (for 1965) of 20,057 million bolivars. However, taking a closer look at the series, we notice that the net value of these assets, i.e. net investment in fixed assets, reached its highest level in 1959 and from then began to fall constantly. Since that year there has been a reduction in the amount of new capital expenditure aimed to expand the industry, and considering that depreciation and amortization follow their normal course, we thus find that a period of disinvestment has been characterizing the oil industry since 1960. (Table IV - 14).

The situation seems to imply that the oil companies do not find at present any stimulus for further expansion in Venezuela, and thus have concentrated their operations in other areas of the world. There are two main reasons for this which will be analysed later, but at this point we may just mention them. costs and the petroleum policy of the host government.

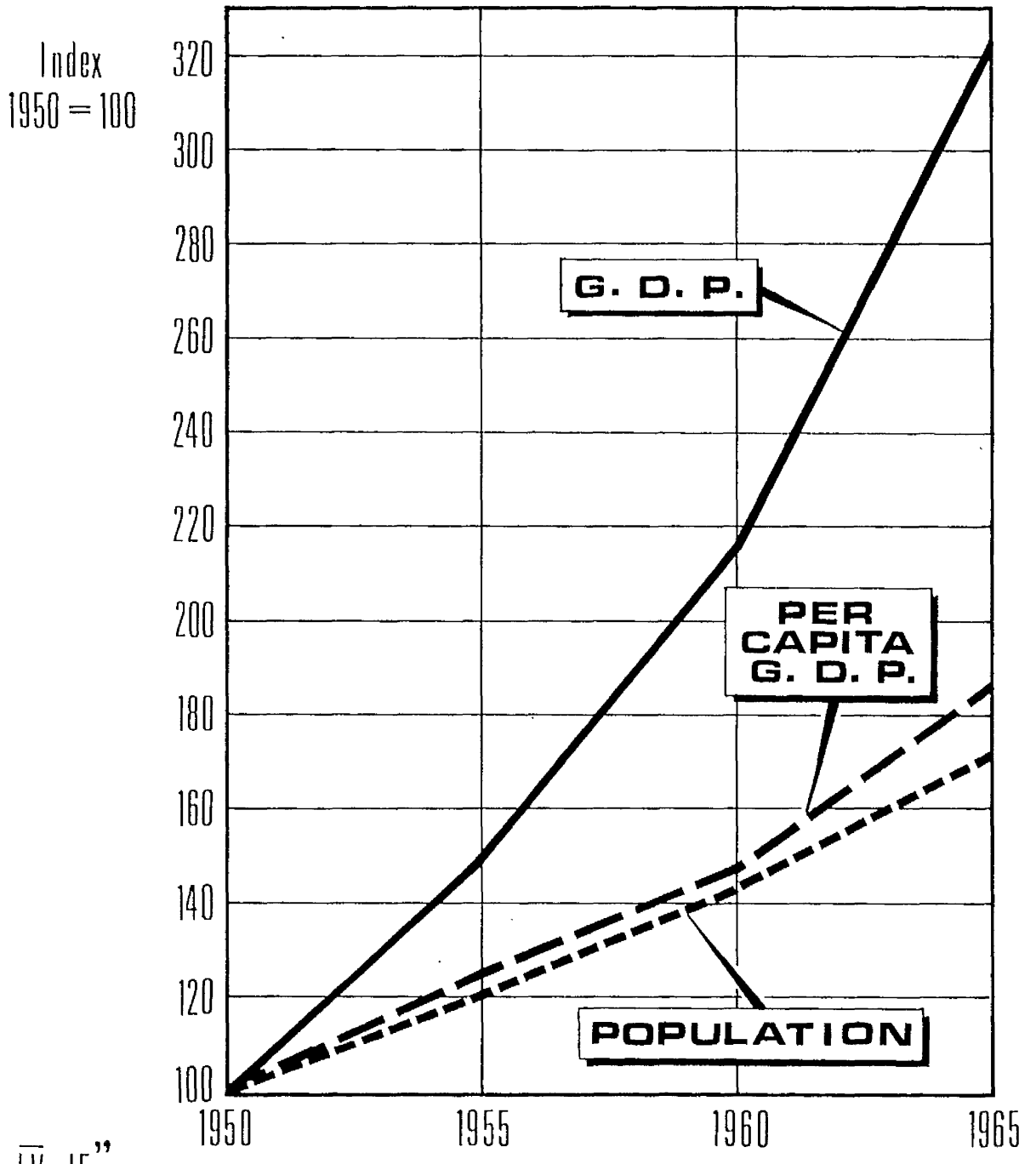
III Significance of the Oil Industry to the Venezuelan Economy.

It is difficult to exaggerate the importance of petroleum in Venezuela's economy. Petroleum wealth has financed the country's economic growth and has made Venezuela one of the richest countries in Latin America. It was the petroleum industry that gave the economy the basic stimulus as a source of fiscal revenue, savings, and of foreign exchange and enabled other sectors of the economy to develop. Using revenues derived largely from royalties and income taxes paid by the oil companies, Governments have been able to encourage industrial expansion and diversification and at the same time, devote increasing attention to the education, housing and health of its people. Below then, we analyse some of the more important contributions of the petroleum sector to the Venezuelan economy in order to have a more accurate basis to judge the significance of this industry to the country.

As we can see from table IV - 17, oil has had a predominant share of the Gross Domestic Product all throughout our series. In 1965 it participated with approximately 27% of the G.D.P. which is the largest contribution made by any particular sector of the economy (see table IV - 16). However, we might have noticed that the petroleum industry's contribution to G.D.P. has been losing some weight. This is due partly to the development of the rest of the economy which is fortunately making the country less dependent on one major source of income, but also due to the weakning of Venezuela's position in the international oil industry coupled with the fall in oil prices. In any case, oil is still the major contributor to Venezuela's G.D.P. which, as a point of further interest, we may mention that its growth outpaces the country's population

DIAGRAM IV-1

Growth of G.D.P. Outpaces Population Increase



"Table IV-15"

Index 1950=100

	POPULATION	G.D.P.	G.D.P. PER CAPITA
1950	100	100	100
1955	122	151	124
1960	146	217	148
1965	173	322	186

SOURCE:- Ministry of Mines and Hydrocarbons - Venezuela. "Petroleo y Otros Datos Estadisticos" 1965, page 2

Table IV - 16

Composition of Venezuela's G.D.P. (1965)
(millions of bolivars adjusted to 1957 prices)

	Bs	%
Agriculture	2,395	7.1
Mining	402	1.2
Petroleum	8.984	26.6
Total Primary Sector	11,781	34.9
Manufacture	4.921	14.6
Construction	1,527	4.5
Energy	702	2.1
Total Secondary Sector	7.150	21.2
Commerce	4,730	4.0
Transport	1,358	14.0
Services	8.746	25.9
Total Third Sector	14,834	43.9
Total G.D.P.	33,765	100.0

Source: Central Bank of Venezuela: "Informe Economico" 1965, page 129.

Table IV - 17

Gross Domestic Product
(millions of bolivars adjusted to 1957 prices)

	G.D.P.	Petroleum	%
1950	12,728	3,797	29.8.
1951	14,212	4,323	30.4
1952	15,248	4,594	30.1
1953	16,190	4,500	27.8
1954	17,749	4,842	27.3
1955	19,325	5,514	28.5
1956	21,366	6,300	29.5
1957	23,848	7,135	29.9
1958	24,164	6,708	27.8
1959	26,065	7,154	27.4
1960	26,433	7,384	27.9
1961	26,881	7,554	28.1
1962	28,585	8,279	29.0
1963	29,765	8,403	28.2
1964	32,135	8,807	27.4
1965	33,765	8,984	26.6

Source: Banco Central de Venezuela: "La Economia Venezolana en los Ultimos Veinticinco Anos". pages 22 and 24. "Informe Economico" 1965, page 129

Table IV - 18

National Income

	National Income (millions of BS)	Population (thousands)	National Income per capita (BS)
1950	8,607	5,035	1,709
1955	13,057	6,150	2,123
1956	14,712	6,393	2,301
1957	16,782	6,636	2,529
1958	18,279	6,879	2,657
1959	19,742	7,122	2,772
1960	19,294	7,364	2,620
1961	19,638	7,612	2,580
1962	20,646	7,872	2,623
1963	22,364	8,144	2,746
1964	27,326	8,427	3,243
1965	29,238	8,722	3,352

Source: Ministry of Mines and Hydrocarbons - Venezuela; "Petroleo y Otros Datos Estadisticos" 1965, page 2.

increase (table IV - 15).

With respect to foreign investments petroleum holds practically the total figure (table IV - 19). For 1964 (which at the moment of writing is the most recent figure available), total foreign investments reached 23,453 million bolivars of which approximately 88% was allocated in the petroleum industry. The same can be said concerning exports. Petroleum exports represented 93% of the total value of Venezuelan exports in 1965 (table IV - 20).

The most revealing yardstick of the oil industry's significance to the Venezuelan economy however, may be its participation in the country's balance of payments (table IV - 21). By analysing the balance of payments, one thing becomes clear, and that is how the country lives on oil. Oil exports have permitted to finance the high level of imports to satisfy internal demand of both consumer and capital goods which still are not produced locally. We may also notice that in spite of the heavy deficit in the balance of payments in 1960 and minor ones in 1961, 1962 and 1965, the five year period has produced a global surplus of over 100 million dollars due mainly to the proceeds of the oil sector. This becomes quite significant considering the capital flight which has been characterizing the oil industry in Venezuela which furthermore was aggravated during the beginning of this decade with that of the rest of the economy due to political uncertainty.

Venezuela's international reserves are also mainly the result of her petroleum wealth. In 1940 (2 years after Venezuela became the world's major oil exporter, a position which she still holds), her international reserves reached only 31 million dollars (table IV - 22). Ten years later they

Table IV - 19

Foreign Investment in Venezuela
(millions of bolivars)

	Total Foreign Investment	Petroleum Industry	%
1950	8,893	8,245	92.7
1951	9,369	8,594	91.7
1952	10,209	9,095	89.1
1953	11,230	9,698	86.4
1954	12,437	10,702	86.0
1955	13,328	11,329	85.0
1956	15,753	13,193	83.8
1957	18,922	15,554	82.2
1958	20,247	16,984	83.9
1959	20,621	17,449	84.6
1960	21,137	18,506	87.6
1961	21,488	18,708	87.1
1962	21,142	18,105	85.6
1963	20,747	18,020	86.9
1964	23,453	20,512	87.5

Source: Banco Central de Venezuela: "La Economia Venezolana en los Ultimos Veinticinco Años" pages 275 and 277.
Ministry of Mines and Hydrocarbons - Venezuela: "Petroleo y Otros Datos Estadisticos" 1965, page 14

Table IV - 20

Exports
(millions of $)

	Total	Petroleum	%
1940	278	262	94.2
1950	1,155	1,124	97.3
1951	1,370	1,297	94.7
1952	1,446	1,384	95.7
1953	1,498	1,428	95.3
1954	1,648	1,564	94.9
1955	1,891	1,791	94.7
1956	2,211	2,086	94.3
1957	2,751	2,570	93.4
1958	2,472	2,299	93.0
1959	2,317	2,128	91.8
1960	2,384	2,175	91.2
1961	2,453	2,276	92.8
1962	2,544	2,370	93.2
1963	2,464	2,300	93.3
1964	2,480	2,319	93.5
1965	2,436	2,260	92.8

Source: Banco Central de Venezuela: "Informe Economico" 1965, pages 181 and 185. "La Economia Venezolana en los Ultimos Veinticinco Anos" page 260.

Table IV - 21

"Venezuela's Balance of Payments"
(millions of dollars)

	1957	1960	1961	1962	1963	1964	1965
Oil Sector							
Oil Exports	2,570	2,175	2,276	2,370	2,300	2,319	2,260
Oil Company imports	-396	-92	-58	-105	-93	-67	-64
Profits transfers	-887	-409	-477	-556	-548	-592	-626
Other Expenditures	-216	-33	-58	-69	-50	-108	-71
New Capital	503	-87	-76	-235	-119	-57	-43
Net Receipts	1,874	1,554	1,607	1,405	1.485	1.495	1,456
Non Oil Sector							
Exports	181	209	177	174	164	162	176
General Imports	-1,379	-1,053	-998	-1,057	-940	-1,117	-1,260
Services	-456	-400	-389	-374	-352	-397	-428
Capital inflow	179	-16	-318	-306	-233	39	97
Net Expenditures	-1,475	-1,260	-1,528	-1,563	-1,361	-1.313	-1,415
Errors and Omissions	102	-402	-98	156	32	-84	-54
Changes in Gold and Foreign Assets	501	-108	-19	-2	156	96	-13

Source: Banco Central de Venezuela, "Informe Economico" 1965, page 185.

Table IV - 22

Venezuela's International Reserves
(millions of dollars)

1940	31
1950	326
1955	525
1956	909
1957	1,381
1958	983
1959	703
1960	597
1961	571
1962	576
1963	740
1964	825
1965	835

Source: Banco Central de Venezuela, "La Economia Venezolana en los Ultimos Veinticinco Años" 1966, page 208. "Informe Economico" 1965, page 234.

were ten times as much. They passed the billion dollar mark in 1957 and although they were affected as debts of the recent dictatorship began to be paid, they stood well over 800 million dollars at the end of 1965 which is about a quarter of the total international reserves of Latin America. (56)

The Oil industry also supplies the country with most of its foreign exchange (table IV - 23). During 1965, 1,899 million dollars entered Venezuela of which 72% were provided by the petroleum industry. Quoting the Central Bank of Venezuela, "it has been due fundamentally to the high proportion of foreign exchange accruing from the oil industry...which has enabled the country to maintain ample convertibility of its monetary unit". (57) In fact, the Venezuelan bolivar seems to be considered as one of the world's hardest currencies and it has been anticipated that the International Monetary Fund might regard it as one of the currencies recognized for use in international settlements. (58)

With respect to the exchange rate, we might mention at this point that Venezuela is characterized by a system of multiple rates, depending on the origin of the foreign currency, i.e. petroleum, mining, agriculture and general public. From 1940 to 1963 the petroleum dollar was purchased by the Central Bank at a rate of 3.09 bolivars. Since 1964, however, this rate was raised to 4.40 bolivars. The Central Bank thus buys petroleum dollars at 4.40 bolivars and provides them to the Commercial Banks at 4.485 which in turn sells them to the public at 4.50 bolivars.(59)

(56) International Monetary Fund , "Annual Report - 1966", page 60.
(57) Banco Central de Venezuela, "La Economia Venezolana en los Ultimos Veinticinco Años" 1966, page 193.
(58) First National City Bank, "Venezuela, An Economic Study" June 1966, page 17
(59) Banco Central de Venezuela, "La Economia Venezolana en los Ultimos Veinticinco Años" 1966, page 214.

Table IV - 23

Foreign Exchange
(million U.S. dollars)

	Total	From Petroleum Industry	%
1955	1,291	916	71.0
1956	1,534	1,048	68.3
1957	2,094	1,391	66.4
1958	1,971	1,340	68.0
1959	2,167	1,611	74.3
1960	2,521	1,406	55.8
1961	1,741	1,350	77.5
1962	1,603	1,255	78.3
1963	1,669	1,351	80.9
1964	1,850	1,398	75.6
1965	1,899	1,371	72.2

Source: Ministry of Mines and Hydrocarbons - Venezuela. "Petroleo y Otros Datos Estadisticos" 1965, page 11.

Considering the amount of petroleum dollars which enter the Central Bank, we can see that the profit margin of 0.085 bolivar per dollar also provides the Government with another not too negligible source of income. According to the Central Bank, the profits made on such transactions amounted to 106 million bolivars in 1965. (60)

Fiscal receipts from the petroleum industry also provide the Government with the greater proportion of the total. In 1965 of the 7,264 million bolivars entering the national treasury as ordinary fiscal receipts, 4,830 bolivars, or 66.5%, were derived from the oil industry (table IV - 24).

Due to the extraordinary amount of fiscal receipts, which as we specified are provided mostly from the oil sector, the Venezuelan Government has been capable of directing "substantial" allowances towards the creation of the necessary infrastructure for economic development. (61) Thus approximately 54% of the Government's expenditure, which reached 8,250 million bolivars in 1965, (62) generally goes to education, health, public works, communications, industrial development and agriculture. (63)

As we see, the oil industry's influence reaches all sectors of the economy. Even being a Capital intensive industry it has influence on the general wage level of the country. Many of the prerogatives gained by the oil syndicate for its members are soon sought by other labour

(60) Banco Central de Venezuela. "Informe Economico - 1965", page 160.
(61) Banco Central de Venezuela, "La Economia Venezolana en los Ultimos Veinticinco Años" 1966, page 221.
(62) Banco Central de Venezuela, "Informe Economico - 1965", page 150.
(63) Banco Central de Venezuela, "La Economic Venezolana en los Ultimos Veinticinco Años" 1966, page 221.

Table IV - 24

Fiscal Receipts
(million of bolivars)

	Total Normal Fiscal Receipts	Fiscal Receipts derived from Oil Industry	%
1940	330	98	29.7
1950	1,917	901	47.0
1955	2,970	1,714	57.7
1956	3,398	2,062	60.7
1957	4,263	2,630	62.9
1958	4,705	2,712	57.6
1959	5,441	3,224	59.3
1960	4,968	3,001	60.4
1961	5,792	3,236	55.9
1962	5,910	3,226	54.6
1963	6,596	3,597	54.5
1964	7,133	4,766	66.8
1965	7,264	4,830	66.5

Source: Ministry of Mines and Hydrocarbons - Venezuela. "Petroleo y Otros Datos Estadisticos", pages 1 and 6.
Banco Central de Venezuela, "Informe Economico" 196[illegible], page 158.

unions resulting in wage increases in the various sectors of the economy. (64) As one source puts it, "wages in the highly efficient petroleum industry have tended to pull up those in other less productive industries". (65) In this way labour costs have been affected to such an extent that they have reached levels relatively higher than those of other Latin American countries making goods manufactured in Venezuela (especially those of labour intensive industries such as textiles, leather products, and furniture) difficult to compete even in her neighboring countries. (66)

In table IV-25 we find some relationships in connection with this point which might be of interest. First of all we notice the low participation of the Petroleum Industry's labour force in the total figure for the economy (1.3% in 1964). However, we also notice that this 1.3% of the labour force accounted for 7.5% of the total earnings, i.e. wages and salaries, registered in that year. Secondly we find that the earnings per capita in the petroleum industry are quite above the national average, although we recognize that this average bears faults due to the very unequal distribution of income that characterizes Venezuela. (67) In any case, it can give us an idea of the higher standard of the petroleum worker in relation to those of other sectors. Thirdly, we notice how the per capita earnings rise much faster in the petroleum sector than in the economy on a whole leading the way so as to say, as we mentioned above. Taking 1950 as the base year, we thus obtain for 1964 a 262 index for the

(64) The recent Labour Contract between the Oil Companies and the Oil Syndicate is published in "Petroleo y Mineria de Venezuela" August 1966, page 3.
(65) First National City Bank, Op. Cit. page 19.
(66) Fedecamaras - Venezuela, "Fedecameras Ante La Alalc", page 6.
(67) This average is not weighted due to the lack of statistical data.

Table IV - 25

"Oil Industry's Participation in the Labour force"

	Employment			Wages and Salaries						
	A	B	B/A	C	D	D/C	Per Capita	Index	Per Capita	Index
	Total Economy	Petroleum Industry	%	Total Economy	Petroleum Industry	%	Total Economy	1950 =100	Petroleum Industry	1950 =100
	(thousands)			(millions of bolivars)			(BS.)		(BS.)	
1950	1,600	44	2.8	5,147	563	10.9	3,217	100	12,795	100
1955	1,924	43	2.2	7,280	787	10.8	3,784	118	18,302	143
1964	2,619	33	1.3	14,863	1,108	7.5	5,675	176	33,576	262

Source: Column A: Banco Central de Venezuela, "La Economia Venezolana en los Ultimos Veinticinco Anos" 1966, page XXXV.
Column B and D: Ministry of Mines and Hydrocarbons - Venezuela. "Petroleo y Otros Datos Estadisticos" 1965, page 124.
Column C: Banco Central de Venezuela, Op Cit, page 21.

petroleum worker and a 176 index for the general economy.

We must conclude recognizing then, that it has been due to the petroleum industry that Venezuela enjoys a higher standard of living in relation to other less fortunate countries. In this way, a growing middle class has been emerging which has been capable of enjoying many of the benefits that other countries enjoy but after long periods of development.

IV Venezuela's Petroleum Policy

Venezuela's present petroleum policy was first formulated during 1945 - 1948 when Dr. J.P. Perez-Alfonzo was minister of Development and all petroleum matters were under this ministry. (68) However, for political reasons, this policy was not applied until ten years later (1958) when the same party took office once again and Dr. Perez-Alfonzo became minister, this time of Mines and Hydrocarbons.

Since it is a fact that Venezuela depends heavily on her petroleum resources, it is not surprising her petroleum policy should emphasize conservation. As the recent oil minister said, "this does not mean that we are going to halt production and preserve it for the future in detriment of the present generation. What it does mean is that we intend to avoid waste as much as possible for the benefit of both present and future generations". (69)

The Venezuelan petroleum policy can be summarized in the following principles: (70)

1. The maximization of the country's oil income
2. The defence of petroleum prices since the oil income shared depends ultimately on these as well as on the volume of exports. The agency established to pursue this objective is the "Co-ordinating Commission for the Conservation and Commerce of Hydrocarbons" created in 1959.
3. The principle of "No More Consessions" which reflects the Government's intention of gaining a greater control of the country's oil wealth once present consessions expire.

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(68) Betancourt, Romulo; Op Cit, page 235.
(69) Perez-Guerrero, Manuel; Op Cit, page 29
(70) Cordiplan - Venezuela; "Programa de Hidrocarburos y Minas" October 1965, page 50.
Banco Central de Venezuela; "Memoria 1961", page 25.
Betancourt, Romulo; Op Cit, page 236.

4. The substitution of concessions for "service contracts" which would be awarded to applicants by the national oil company "Corporacion Venezolana del Petroleo" (C.V.P.)

5. The increasing participation of the Government in the activities of the petroleum industry through the national oil company C.V.P.

6. The creation of a common oil policy among the different petroleum exporting countries through the international organization known as O.P.E.C; and

7. A closer collaboration among the different national oil companies of Latin America through the organization of "ARPEL" (Agrupacion Regional Petroleras Estatales Latinoamericanas) which includes Mexico, Colombia, Peru, Bolivia, Chile, Argentina, Brazil, Uruguay and Venezuela.

Below we analyse then, some aspects of this policy although we shall leave for later the analysis of its implications.

Share in Oil Income

As we stated briefly in our previous chapter. Venezuela has usually been able to increase her share in oil income through legislation by increasing her income tax rates on different occasions.

In analysing the nation's oil revenue and its relation to the industry's net profits (table IV 26) we can see how it has varied according to the modifications of the law. For instance we notice how from 1948 to 1957 there was an average relation of 55/45 in favour of the country which was made possible with the introduction of an income tax law in 1943 as we shall see below. Also, after the amendment of this law in 1958, (71)

(71) Casado, Ezequiel M.; Op Cit, page 48

Table IV - 26

Payments to the Government from the Oil Industry (in millions of bolivars)

	Income Tax	Royalty	Other Taxes	Total	Government Share %	Industry's Net Profit	% Share
1948	479	640	171	1,290	55%	1,060	45%
1949	272	627	156	1,055	60%	704	40%
1950	394	519	108	1,021	51%	970	49%
1951	525	727	196	1,448	55%	1,201	45%
1952	594	751	199	1,544	55%	1,262	45%
1953	507	786	209	1,502	54%	1,261	46%
1954	585	874	117	1,576	53%	1,412	47%
1955	712	1,003	126	1,841	52%	1,710	48%
1956	931	1,188	162	2,281	52%	2,115	48%
1957	1,199	1,550	241	2,990	52%	2,774	48%
1958	1,465	1,415	187	3,067	65%	1,616	35%
1959	1,260	1,444	156	2,860	68%	1,335	32%
1960	1,070	1,503	138	2,711	68%	1,282	32%
1961	1,216	1,552	131	2,899	66%	1,477	34%
1962	1,462	1,703	143	3,308	66%	1,693	34%
1963	1,544	1,731	142	3,417	67%	1,678	33%
1964	2,251	2,557	129	4,937	67%	2,455	33%
1965	2,282	2,551	129	4,962	66%	2,596	34%

Source: Memoria 1965, Ministerio de Minas e Hidrocarburos, page I - 199.

we notice how this relation rose to 65/35 to Venezuela's benefit. This relationship was approximately the same for 1965(66/34), but as we saw in the previous chapter, the new income tax law for 1967 which raised the top tax rate to 52% might now, along with other measures, increase Venezuela's participation to 72%. (72) In fact the history of the Venezuela oil industry could be divided into four periods taking into consideration certain changes in legislation or government policy which have given the nation a greater share in profits:

1. We could begin in 1878, year which we have chosen as the starting point of the oil industry in Venezuela (see page 83), and extend it up to 1920 when the first law of hydrocarbons was promulgated. (73) During this initial period there was no special legislation or consideration for hydrocarbons in Venezuelan law and all petroleum matters were included in the mining code. (74)

2. The second interval covers the period from 1920 to 1943 when two significant laws took effect. The first law was the first Venezuelan income tax law, (75) and the second, equally important, was the new hydrocarbons law which brought radical changes in the industry. (76)

3. The third stage covers years of increasing national petroleum income, and begins with the set of laws mentioned above, and extends to 1958 when the Perez-Jimenez government came to an end.

4. The fourth period covers the present moment of the Venezuelan industry and itis characterized by a very nationalistic petroleum policy

(72) Petroleum Intelligence Weekly October 17, 1966, page 1.
(73) Republic of Venezuela, "Gaceta Oficial" July 29, 1920.
(74) Casado, Ezequiel M., Op Cit, page 25.
(75) Republic of Venezuela, "Gaceta Oficial" July 17, 1942.
(76) Republic of Venezuela, "Gaceta Oficial" March 13, 1943.

which besides wanting to increase its share in profits is striving for an active role in all stages of the industry.

The period before 1920 was one in which exploration was very scattered and the Government did not have a very clear picture of the potential oil wealth of the country. (77) Because of this, the state did not give Hydrocarbons any particular legal consideration, and all petroleum matters were subject to the provisions of the Mining Code. The law of 1920 was therefore/of transcendental importance since it made a clear separation for the first time between minerals and hydrocarbons with the issuing of two different legal texts:

a. A new mining code

b. A hydrocarbons law

Following the law of 1920 there was a series of seven laws of minor importance considering the changes they introduced in Petroleum Policy. Thus we arrive to the Petroleum Reform of 1943 which brought a new hydrocarbons law that serves until this day as the basis of the country's petroleum legislation. The Petroleum Reform of 1943 was the culmination of a long political, social and legal process through which the state was able to obtain a larger share of the profits made by the oil industry. The oil companies, on their part, accepted this reform agreeing to ignore previous concession agreements, which in comparison to what was being proposed were quite favourable, because the Government offered to renew all concessions for forty years starting in 1943. (78) In this way higher revenues were achived through the unification of the tax obligations

(77) Betancourt, Romulo, Op Cit, page 14.
(78) Casado, Ezequiel M., Op Cit, page 35.

for the different concessions, since previously each concessionaire paid the taxes that were stipulated in their respective contracts which varied from one to another. The higher share was also achieved by a general rise of petroleum taxes: (79)

A. The royalty was raised from 7.5 and 16 (varying between these two figures in the different contracts) to 16 2/3 of production. (80)

B. The Initial Exploitation Tax which is paid before production begins was set at eight bolivars per hectare.

C. The Exploration tax which was four bolivars per hectare in the law of 1938, was raised to six bolivars per hectare.

D. Surface Tax was set at five bolivars per hectare per year during the first ten years of the concession. After this period, the tax would rise five bolivars and would have similar raises every five years until the maximum of thirty bolivars was reached, amount which would then be paid per hectare per year until the end of the concession.

With the 1943 reform, the companies also began to pay general taxes, such as import duties, since by former legislation they were exempted from this obligation. And now, with the newly proclaimed income tax law, which fell into this category, the Government increased substantially its oil revenue. Other benefits from the 1943 hydrocarbons law were the "special advantages" for the Government. (81) Some of these permitted the Government to claim larger payments than those stipulated by law, if it found circumstances that would justify such a claim. (82) Among the "special advantages" the most important one was the clause which referred to refining under which it was made obligatory for the companies to refine at least 10%

(79) Casado, Ezequiel M., Op Cit, page 39.
(80) It was stipulated that royalties could be paid in cash or kind.
(81) Casado, Ezequiel M., Op Cit, page 42.
(82) Ibid.

of domestic production in the country. This clause gave a great impulse to refining in Venezuela and today approximately 34% of production is refined in the country. (table IV - 11)

Before 1945 the most important Government revenue accruing from the oil industry was the royalty, but since then, income tax has had a major role and gradually has become almost as important. It has been through income tax laws that the Government has lately been able to increase its share of the profits from the industry. Since its establishment, the most important modification has been:

1. The Additional Tax (known as 50/50) by which the Government assured itself of at least 50% of the industry's profits. As we saw in another opportunity, this tax would only have effect if the company's net profit surpassed the Government's revenue from the industry. If this case would occur, then the larger proportion in the hands of the oil company would be divided equally with the Government. This clause was introduced in the income tax law in 1948. (83)

2. The raising of the progressive income tax schedule in 1958 which nearly doubled the maximum tax rate from 26% to 47.5%. (84) This new income tax schedule made the 50/50 clause completely obsolete since the Government's participation became usually over 65%.

3. The "PAY AS YOU GO" system, established on February 15, 1961. Before this date, income tax was collected in the year following its accrual, but thereafter it began to be paid every three months during

(83) Republic of Venezuela, "Gaceta Oficial 216", November 12, 1948 (for the official text see chapter III page).

(84) Parra Alirio, " La Industria Petrolera y Sus Obligaciones Fiscales" in : "Aspestos de la Industria Petrolera en Venezuela, page 794.

the first fifteen days after the end of the period. (85)

4. The introduction of a new income tax law for 1967 which has raised the top tax rate from 47.5% to 52%. (86)

Although we have seen how the Venezuelan Government has managed to increase its share in profits and how up to 1965 total revenue had increased to 4,962 million bolivars (table IV - 26), it might seem of interest to take a look at the per barrel income obtained.

In table IV - 27 we notice that the per barrel revenue of the Government reached its highest level in 1958 ($ 1.00) due to the almost twofold increase in the income tax rate seen above, which coincided with the period in which prices were still influenced by the recent Suez crisis. Since then the Government's per barrel revenue has fallen, but still it is greater than what it received before the Suez crisis. In other words, not only has total national petroleum revenue reached a higher level (table IV- 26) but the nation has been receiving a better "price" for each barrel of oil that has left the country.

It is hard to say if this trend will continue after the recent tax measures since, although the per barrel payment might be protected by them, total revenue might fall as other sources become more competitive. (We shall analyse this in a following chapter).

Service Contracts

With respect to Service Contracts, Venezuelan congressional approval seems to be the only thing holding up their signature. (87) Concerning their approval, the previous oil Minister has made it clear that he considers

(85) Ibid, page 798.
(86) Republic of Venezuela, "Gaceta Oficial" 1,069, December, 1966.
(87) Petroleum Intelligence Weekly, October, 24, 1966, page 8.

Table IV - 27

Per Barrel Share of Oil Income
(U.S. $ per barrel produced)

	Government Revenue	Industry's Net Profit
1950	0.63	0.57
1951	0.68	0.62
1952	0.68	0.61
1953	0.70	0.64
1954	0.72	0.66
1955	0.72	0.70
1956	0.77	0.76
1957	0.89	0.88
1958	1.00	0.55
1959	0.87	0.43
1960	0.82	0.40
1961	0.85	0.45
1962	0.89	0.47
1963	0.89	0.46
1964	0.87	0.44
1965	0.87	0.47

Source: Ministry of Mines and Hydrocarbons. "Memoria 1965", page I.20

the following conditions basic to distinguish Service Contracts from Concessions: (88)

1. The oil that may be found in areas assigned by C.V.P. to private companies must be considered as the property of Venezuela. Its ownership is not to be transferred in any form until it becomes a commodity subject to mercantile transactions at "fair prices".

2. The nation's financial share in the business must be greater, insofar as possible, than the one now derived from the concession system.

3. The Government must be assured an active participation in operations through C.V.P.

4. To secure a Service Contract, present concession holders must submit a programme of exploration, production and development of their existing concessions since the Government feels that exploration of areas now under concession is far from complete.

At present there seem to be two types of contracts under study which will involve either the formation of mixed companies with C.V.P. as a partner, or direct service contracts with a company but with an option for C.V.P. participation. (89) In both cases all initial investment prior to the commercial production stage will be undertaken at the expense of the contractor. Under the first type of contract, i.e. mixed company contracts, state financial participation is obligatory, though the exact share is subject to agreement between the contracting parties.

Mixed company contracts may be divided into two types. In one, the foreign company will operate jointly with C.V.P. while the development stage is reached, at which point C.V.P. will hand over an agreed share of crude oil

(88) Petroleo Interamericano, July, 1966, page 27.
(89) Petroleum Press Service, December, 1966, page 470

output to the contracting company and each partner will make its own profit independently. Under the second type, an integrated partnership will be formed between C.V.P. and the foreign company, which will be entitled to the oil produced and to its sale in the international market. The partnership will pay tax and the participants will then share net profits on an agreed basis. C.V.P. may also have the right to market an agreed proportion of the oil produced if it wished.

Direct Service Contracts provide for exploration, development and marketing of crude oil by the foreign company on behalf of C.V.P., the latter sharing in the profits on the agreed basis. These contracts will provide for optional capital participation by C.V.P. up to an agreed amount after commercial production has begun. As in the case of mixed company contracts, C.V.P. will reserve to itself the right to market a specified share of the crude produced under the contract.

All contracts will have to be approved by the Venezuelan Ministry of Mines and Hydrocarbons before signature, and C.V.P. will be able to sign contracts not only with private companies but also with other state companies as well provided these can guarantee outlets for Venezuelan oil.

Contracts will normally be valid for 15 - 20 years which will begin to count from the start of commercial production as long as this production had begun not later than five years after the contract had been signed. At the end of the contractual period, all fixed assets of the contracting company will become the property of C.V.P. without payment of compensation.

The contracting company will be obliged to sell not only its own share of crude oil and products, but also that part of C.V.P.'s share which the State company may have been unable to place. Such sales for C.V.P. would have to be made at prices agreed with C.V.P., and for this service the

contracting company would be paid an agreed commission. (90)

The "Corporacion Venezolana del Petroleo"

The Venezuelan national oil company "Corporacion Venezolana del Petroleo" (C.V.P.) was established on April 19, 1960, considering: (91)

1. That the experience and know-how acquired during the long period of activity of the petroleum industry in Venezuela, and the fact that the oil will continue to be the basis of Venezuelan economy for many years, justify the creation of a national oil company.

2. That in areas close to producing fields hydrocarbons migrate by nature, and so create drainage problems which can only be conclusively solved if those areas are developed.

3. That as the national oil company develops the adjacent areas, a more efficient exploitation of the reservoirs will be achieved and it will be possible to undertake joint projects of secondary recovery.

4. That it is not justified to let private investors develop proven areas, that is, where no economic risks exist.

5. That the policy of the National Government being not to grant more concessions, it is still convenient to promote the increase of the proved reserves of the country, notwithstanding the extensive areas that, under development by private companies, permit the normal increase of these reserves.

6. That the law gives to the Executive the right exclusively to explore, exploit, refine and transport hydrocarbons and,

7. That the creation of a state oil company is a legitimate aspiration

(90) All information concerning Service Contracts was obtained from "Petroleum Press Service", December, 1966, page 470

(91) Republic of Venezuela, "Official Gazette", 26,284 April 22, 1960.

of the Venezuelans.

In accordance then, with its policy, the Government established C.V.P. as the agency through which petroleum activities could continue developing once present concessions expire. As we saw before, it is through C.V.P. that Service Contracts will be granted and, in this respect, the Government has declared its preference for those offers which provide for a degree of C.V.P. participation in the negotiations of sales in the international market. (92)

C.V.P. instead of receiving concessions operates on what have been called assignments. These had reached by the end of 1965 approximately 373,000 hectares. (93) Production averaged only 9,000 barrels daily in 1965, although at present C.V.P.'s potential producing capacity is around 30,000 barrels daily. (94) C.V.P.'s refinery at Moron is also only of a 2,300 barrels daily capacity (table IV - 12) but there are plans to increase it to 16,300 B/D, and to build another refinery of 50,000 B/D in the western part of Venezuela. (95)

Up to the present moment, C.V.P. has not entered the international market with either crude of products, and major operations have been directed towards gaining a greater share in domestic sales with the support of favourable legislation. (96) Thus by decree, C.V.P. is to have by 1968 33% of the domestic market. (97) According to a resolution of the Ministry of Mines and Hydrocarbons in 1965, (98) private companies had to relinquish their rights over to C.V.P. of a sufficient number of service stations to represent 10% of the gasoline market of the previous year, to help C.V.P.

(92) Petroleum Press Service, December 1966, page 470.
(93) C.V.P. "Informe Anual", 1965, page 8.
(94) Petroleum Press Service, February 1967, page 69.
(95) Ibid.
(96) Republic of Venezuela, "Decree No. 187", November 1964.
(97) Banco Central de Venezuela, "Informe Economico", 1964, page 226.
(98) Ministry of Mines and Hydrocarbons, Resolution No. 266, March 1965, "Memoria - 1965", page I - 45.

meet its goal. However, in 1965 C.V.P.'s participation in domestic sales, inspite of these measures, reached only 5.7%. (99) In the sphere of natural gas C.V.P. is also concentrating its main efforts. Sales in 1965 amounted to an estimated of 1,008 million cubic metres. (100) It is also expanding its gas pipeline network, and among the important projects to be undertaken, is a 225 kms. gasline with a daily capacity of over 11 million cu. metres from Anaco, (90 kms. south of Puerto La Cruz) to Puerto Ordaz, in the industrial area of Guayana in eastern Venezuela. (101)

The Petrochemical Industry in Venezuela

The petrochemical industry in Venezuela was founded in 1953 considering: (102)

1. That there were favourable conditions in the country for the establishment of such an industry having a domestic petroleum industry which could supply the basic raw materials, and having a growing market for its products.
2. That it was necessary to diversify, the economy as far as possible.
3. That there was a need of great quantities of fertilizers to cultivate agriculture intensively if imports of this sort were to be substituted; and
4. That it would produce a greater outlet for minerals which could be further exploited.

The petrochemical industry is a branch of the chemical industry that uses natural gas and petroleum as its main basic materials. However, it seems that it requires very heavy investments in order to operate, and to

(99) C.V.P., "Op Cit", page 25.
(100) Ibid, page 20.
(101) Petroleum Press Service, February 1967, page 69.
(102) Balestrini, Cesar, "Op Cit", page 42.

operate at a high capacity in order to be economical. (103) Approximately 1 billion bolivars have been invested in the petrochemical industry of Venezuela, and although a potential market was thought to exist, it is producing at a "substantial loss...due to the low capacity at which it operate (104) Venezuelan petrochemical production consists mainly of fertilizers, acids, liquid chlorine, caustic soda, amonia, sodium hypochlorite and explosives. (105) There are also some plans for future production of synthetic rubber, plastics and detergents, if outlets are found for these products presumably in the Latin American market. (106)

(103) Balestrini, Cesar; Op Cit, page 42.
(104) Ibid, page 49
(105) Ministry of Mines and Hydrocarbons - Venezuela, "Petroleo y Otros Datos Estadisticos", 1965, page 183
(106) Balestrini, Caser; Op Cit, page 49.

CHAPTER FIVE

Venezuela's International Markets

Introduction. The Deterioration of Venezuela's Position as the World's Major Exporter of Petroleum: A) Domestic Reasons, B) External Reasons. The Pattern of Venezuela's Petroleum Exports: Special Reference to Fuel Oil.

I. Introduction

Venezuela's oil exports reached 1,187,187 thousand barrels in 1965 of which approximately 72% were of crude oil and the rest of products.(1) Exports increased steadily up to 1965 except for 1953 and 1958 (Table V - 1) when they fell due to the recession of industrial activity in the United States (Venezuela's most important market) in the first case, and to a readjustment of the supply pattern after the Suez crisis in the second.(2) Lately, however, Venezuela has been facing a very particular situation with the slackening of the growth of petroleum exports (only 1% increase was registered in 1965 which is the smallest in our series), and according to an unofficial estimate, even registering an absolute reduction of 3% in 1966 (3). This situation we intend to analyse in following pages, but it is first necessary to take a general look at the more important markets for Venezuelan Oil.

Venezuelan exports include exports from Aruba and Curazao, which are the two Dutch islands off the coast of Venezuela that refine about

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(1) Only 65 million barrels of refined products were consumed in the country in 1965 which is approximately 15% of domestic refinery output; (Banco Central de Venezuela, "Informe Económico" 1965, page 250)

(2) Parra and Pocaterra, Op.Cit., page 15

(3) Petroleum Intelligence Weekly, January 9, 1967; p.1.

Table V - 1

Exports of Petroleum from Venezuela (1)

(thousands of barrels)

	Crude	% of Total	Products	% of Total	Total	% Change
1945	291,393	91.7	26,308	8.3	317,701	-
1950	452,437	87.1	67,221	12.9	519,658	-
1951	502,865	85.4	85,646	14.6	588,511	13.2
1952	530,891	84.8	94,391	15.2	625,732	6.3
1953	488,862	80.6	117,618	19.4	606,430	- 3.1
1954	528,634	80.7	126,250	19.3	654,884	8.0
1955	590,816	80,0	147,812	20.0	738,628	12.8
1956	675,270	79.8	170,951	20.2	846,221	14.6
1957	758,775	80.7	181,536	19.3	940,311	11.1
1958	687,725	77.3	201,855	22.7	889,580	- 5.4
1959	719,835	76.5	221,033	23.5	940,868	5.8
1960	730,962	74.4	251,747	25.6	982,709	4.4
1961	743,711	73.7	265,300	26.3	1,009,011	2.7
1962	810,485	73.6	291,274	26.4	1,101,759	9.2
1963	818,325	72.9	303,537	27.1	1,121,862	1.8
1964	860,361	73.2	315,421	26.8	1,175,782	4.8
1965	851,093	71.7	336,094	28.3	1,187,187	1.0

(1) Export pattern as it leaves Venezuelan territory.

Source: Venezuelan Ministry of Mines and Hydrocarbons. "Petroleo y Otros Datos Estadisticos" 1965, pages 93,94,97.

30% of the crude that leaves this country. This is due to statistical reasons since Venezuelan sources usually present the global figure as of Venezuelan origin since Venezuelan crude refined in these islands was taxed by the Government in accordance with what was known as the "Aruba Formula" by which taxes depended on the companies net earnings derived from the sale of products obtained from this oil (4).

Having this in mind, we begin by analysing the destination of Venezuelan exports, which we find in table V-2 for the last twenty years. It becomes apparent how the United States has been by far her most important market. This country is then followed by Canada and the United Kingdom. North America and Europe are the two major areas to which Venezuela exports her petroleum. In 1965, approximately 43% of total exports went to the United States, 11% to Canada, and 9% to the United Kingdom. North America alone accounted for 54% and Europe for 23% (Table V - 3). Roughly half of total exports for 1965 was refined products, of which about 66% was fuel oil. (For a percentage breakdown of exports in crude and products by major destinations see Table V - 4)

Besides the three major countries mentioned above, other important Venezuelan markets are Brazil, Panama, Holland, Sweden and France. Trinidad and Tobago are also important due to their refining industry, and in our tables are included in "Central America".

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(4) Petroleum Intelligence Weekly, October 10, 1966, page 6.

Table V - 2

"Destination of Venezuelan Oil, 1945-1965"
(thousands of barrels)

	United States	Canada	Total North America (1)	Central America	South America	United Kingdom	Total Europe (1)	Total (1)	U.S. as % of Total
1945	90,010	6,878	96,888	25,821	15,045	20,384	35,368	288,634	31.2
1950	222,816	38,322	261,138	44,372	58,709	31,346	109,652	494,150	45.1
1955	299,157	82,578	381,769	55,521	97,261	51,526	157,368	747,694	40.0
1960	424,152	94,991	520,008	103,817	101,103	91,858	190,993	950,419	44.6
1961	420,243	101,221	523,983	93,276	89,737	88,765	230,753	976,705	43.0
1962	452,500	106,872	561,280	104,018	80,343	100,954	275,663	1,067,049	42.4
1963	449,606	111,316	561,702	128,116	64,798	107,710	296,283	1,089,750	41.3
1964	478,559	132,371	612,621	149,158	73,482	103,411	270,823	1,146,421	41.7
1965	496,288	128,497	625,752	162,587	68,997	106,641	261,296	1,157,071	42.9

(1) Includes other areas not specified.

Source: Ministry of Mines and Hydrocarbons, Venezuela, "Memoria", 1965, page I - 192.
1945: Lasi, Carmen; "Un Cuarto de Siglo de Actividad Petrolera en Venezuela", page 54.

Table V - 3

Exports of Venezuelan Oil by Major Areas of Destination - 1965
(million of barrels)

	Crude	%	Total Products	%	Fuel Oil	%	Total	%
United States	168.74	29.3	327.55	56.2	271.02	70.8	496.29	42.9
Canada	84.57	14.7	43.93	7.6	25.22	6.6	128.50	11.1
Total North America	253.30	43.9	372.45	64.2	296.27	77.7	625.75	54.1
Central America	116.15	20.1	46.43	8.0	23.69	6.2	162.59	14.1
South America	48.99	8.5	20.00	3.4	7.72	2.0	69.00	6.0
United Kingdom	63.80	11.1	42.84	7.4	24.54	6.4	106.64	9.2
Total Europe	155.07	26.9	106.22	18.3	48.49	12.7	261.30	22.6
Total (1)	576.74	100.0	580.34	100.0	381.22	100.0	1,157.07	100.0

(1) Including other areas not specified.

Source: Ministry of Mines and Hydrocarbons, Venezuela; "Petroleo y Otros Datos Estadisticos" 1965, pages 100, 101.

Table V - 4

Export Pattern of Venezuelan Oil by Major Areas of Destination - 1965

(%)

	Crude	Products	Total	Fuel Oil of Total Products
United States	34.0	66.0	100.0	82.7
Canada	65.8	34.2	100.0	57.4
Total North America	40.5	59.5	100.0	79.5
Central America	71.4	28.6	100.0	51.0
South America	71.0	29.0	100.0	38.6
United Kingdom	59.8	40.2	100.0	57.3
Total Europe	59.3	40.7	100.0	45.7
Total	49.8	50.2	100.0	65.7

Source: Table V - 3.

II The Deterioration of Venezuela's Position as the World's Major Exporter of Petroleum: A) Domestic Reasons, B) External Reasons.

Although Venezuela still occupies the first position among the major oil exporting countries (a position which she has held since 1938(5)) it has been under severe strain and has deteriorated with the gradual loss of markets in both hemispheres. This situation manifested itself particularly after the Suez crisis when the petroleum industry began to feel the pressures of oversupply, and majors and independents found it more convenient to draw supplies from other sources. However, Venezuelan exports have been affected by a combination of both external and domestic factors, particularly since 1960, and for this reason our analysis tends to concentrate more on 1960-1965.

During this period Venezuelan exports to the United States fell in 1961 and 1963; those to the European market increased progressively less each year until absolute reductions were also registered in 1964 and 1965 (Table V - 5). Consequently we find not only that Venezuela's total petroleum exports have been slackening to the extent that 1965 barely presented an increase in relation to the previous year, but also that the estimates for 1966 have already announced an absolute reduction of 3% in her exports.(6)

Comparing Venezuela's petroleum exports with those of the rest of the world, we find that Venezuela has not kept pace with other exporting countries in supplying world markets, and therefore has been losing ground in this trade (Table V - 6). Venezuela's share of the international

(5) Ministry of Mines and Hydrocarbons - Venezuela "Memoria" - 1965, page I - 112.

(6) Petroleum Intelligence Weekly, January 9, 1967; page 1.

Table V - 5

Petroleum Exports from Venezuela - 1960-1965
(thousand of barells)

	United States	% Change	North America	% Change	United Kingdom	% Change	Europe	% Change	(1) Total	% Change
1960	424,152	-	520,008	-	91,858	-	190,993	-	950,419	-
1961	420,243	-0.9	523,983	0.8	88,765	-3.4	230,753	20.8	976,705	2.8
1962	452,500	7.7	561,280	7.1	100,954	13.7	275,663	19.5	1,067,049	9.2
1963	449,606	-0.6	561,702	0.1	107,710	6.7	296,283	7.5	1,089,750	2.1
1964	478,559	6.4	612,621	9.1	103,411	-4.0	270,823	-8.6	1,146,421	5.2
1965	496,288	3.7	625,752	2.1	106,641	3.1	261,296	-3.5	1,157,071	0.9

(1) Including other areas not specified.

Source: Ministry of Mines and Hydrocarbons, Venezuela; "Petroleo y Otros Datos Estadisticos" 1965, page 54. page 54.

Table V - 6

World Petroleum Net Exports - 1960-1965
(thousand barrels daily)

	Total World	% Change	From Venezuela	% Change	From Other Countries	% Change
1960	8,650	-	2,685	-	5,965	-
1961	9,430	9.0	2,764	2.9	6,666	11.8
1962	10,555	11.9	3,019	9.2	7,536	13.1
1963	11,754	11.4	3,073	1.8	8,681	15.2
1964	13,246	12.7	3,211	4.5	10,035	15.6
1965	14,466	9.2	3,232	0.7	11,234	11.9

Soruce: Ministry of Mines and Hydrocarbons, Venezuela; "Memoria", 1965, page I - 112.

market fell to 22% in 1965 which compares to 31% just five years back, and 36% in 1958 (table V - 7). In the United States, which as we have mentioned before is Venezuela's most important market, other sources have gradually been increasing their share in total imports by this country, at Venezuela's expense. While in 1960 Venezuela supplied 46.5% of the crude imported by the United States, in 1965 she only supplied 34.9%, a loss of more than 10% of the American import market in just five years (Table V - 8). The Middle East and Africa together increased their share from 30.9% to 32.4% in this same period, and Canada from 11.1% to 23.8% likewise. The same can be said in relation to the European market. Venezuela supplied in 1959 10.2% of its requirements of crude and in 1965 this share had fallen to just 7%. On the other hand, Middle East and African sources together increased their participation in the same period from 82.5% to 88.3% (Table V - 9). Even in Venezuela's most important South American market, Brazil, she has lost ground to other sources. In 1960 Venezuela supplied 66.3% of the crude imported by this country, and in 1965 this share had gradually fallen to 42.2% (Table V - 10). The Middle East and Russia have been the major areas penetrating into this market, raising their share from 27.7% in 1960 to 54.3% in 1965. Russia alone, increased her share during this period from 1.5% to 20.4%. Estimates for 1966 show that Venezuela fell to 6th place, after having the 4th and 5th in 1964 and 1965 respectively, in supplying her most important European market, the United Kingdom, after Kuwait, Iraq, Libya, Nigeria and Saudi Arabia.(7)

(7) Petroleum Intelligence Weekly, March 6, 1967; page 6.

Table V - 7

Share of Venezuela and the Middle East in World Petroleum Exports

(%)

	VENEZUELA	Middle East	Others
1938	54.3	31.3	14.4
1948	53.5	40.6	5.9
1958	35.9	55.2	8.9
1960	31.0	55.6	13.4
1961	29.3	55.1	15.6
1962	28.6	54.1	17.3
1963	26.2	53.3	20.5
1964	24.2	52.4	23.4
1965	22.3	51.9	25.8

Source: Ministry of Mines and Hydrocarbons, Venezuela. "Memoria" 1965, page I - 112.

Table V - 8

"Source of United States Crude Oil Imports"

(%)

	1960	1961	1962	1963	1964	1965
Middle East	30.5	31.2	26.5	25.0	24.8	27.0
Africa	0.4	0.5	2.4	2.2	4.0	5.4
Sub Total	30.9	31.7	28.9	27.2	28.8	32.4
Canada	11.1	17.5	20.7	21.9	23.2	23.8
VENEZUELA	46.5	40.8	41.1	42.3	39.7	34.9

Source: U.S. Department of the Interior. Bureau of Mines

Table V - 9

Source of European Crude Oil Imports

(%)

	1959	1960	1961	1962	1963	1964	1965
Middle East	82.5	79.2	72.8	67.4	65.5	63.4	60.2
Africa	-	4.8	8.9	13.5	20.8	24.5	28.6
Sub Total	82.5	84.0	81.7	80.9	86.3	87.9	88.8
VENEZUELA	10.2	8.1	8.9	9.4	8.6	7.5	7.0

Source: Petroleum Press Service, April issues for the various years.

Table V - 10

"Source of Crude Oil Imports by Brazil"

(%)

	1960	1961	1962	1963	1964	1965
Middle East	26.2	31.5	38.6	37.6	35.4	33.9
Russia	1.5	4.6	3.4	5.8	16.0	20.4
Sub Total	27.7	36.1	42.0	43.4	51.4	54.3
VENEZUELA	66.3	58.4	52.4	46.5	44.3	42.2

Source: Ministry of Mines and Hydrocarbons, Venezuela. "Memoria" 1965, page I - 123.

There is no doubt that Venezuela's position in major markets has been deteriorating. However, the ability of Venezuela to compete with other sources in the international market is at present limited by both internal and external factors. Among the first is the petroleum policy of the various Governments in Venezuela since 1958 which has reduced the advantage for the companies to market Venezuelan oil, and among the external factors are:

1) The weakening of Venezuela's geographical advantage over other sources with respect to major markets due to a fall in ocean freights.

2) Competition from other sources particularly due to lower costs.

3) The development of domestic industries in countries which once depended heavily on Venezuela for petroleum supplies; and

4) Import restrictions of the United States.

In following pages we analyse then, how these factors have been affecting Venezuela in recent years.

A) Internal Factors: Domestic Petroleum Policy

Venezuela's petroleum policy is clear. If one of the main targets of this policy is to maximize oil revenue,(8) the Government will naturally try to squeeze as much revenue as possible out of the oil companies for each barrel of oil that leaves the country while they operate under the concession system,(9) since, as we saw earlier, this system will be substituted by service contracts in which, according to the previous oil minister, the nation's financial share in the business must even be greater. (10) This argument could even have more force if we recall that according to Venezuelan geologiststhe country's petroleum resources are diminishing.(11)

We saw in previous chapters how fiscal obligations for the oil companies were higher in Venezuela than in other exporting countries thus giving her higher receipts per barrel of exports (approximately 17 cents per barrel higher than the average for the Middle East during 1965).(12) We can imagine that this difference can get to be quite considerable for the oil companies if we realize that costs are also higher in Venezuela (we shall see this point in following pages). All the more if, according to estimates, the new tax measures in Venezuela raises her per-barrel revenue a further five cents. (13) The oil companies have stated on various occasions that Venezuelan oil has had great difficulty in

(8) Chapter 4, page 131.
(9) Concessions begin to expire in 1983; chapter 4, page 135.
(10) Perez-Guerrero, M; "Petroleo Interamericano" July 1966, page 27
(11) Chapter 4, page 93.
(12) Chapter 3, page 78.
(13) Chapter 3, page 75.

competing in world markets due to her more "onerous terms" and that now with taxes an average five cents per barrel higher, Venezuela will be even "less competitive".(14) Creole (Jersey Standard), for instance, has clearly stated that among other reasons it has been due to higher taxes in relation to other areas why Venezuelan producers suffer a market disadvantage. (15) I realize that such statements are natural from oil companies, but the present situation seems to reflect that they hold some truth.

The uncertianty of future terms in new Government-Company relations which, as mentioned above, must raise Venezula's financial share in the business (a goal which has been repeatedly expressed since 1959), has also made the oil companies, in my opinion, use all their bargaining powers from drastic type propaganda concerning the future of the Venezuelan industry to a reduction of the country's output, to prove to the Venezuelan Government that it cannot or should not go seaking very much more than what it was already getting. It is hard to prove this last point, but it seems to me that it is too much of a coincidence that while the recent negotiations between the Venezuelan Government and the oil companies were taking place, production fell 3% even before any settlement had been reached. And now, once everything was signed and accepted on both parts, (16) production started to rise again during the first few months of 1967 in relation to the same period the year before. (17) This again is only natural. Oil companies do not want to lose Venezuela, and if they have come to accept the reality of the "No More Concession"

(14) Petroleum Intelligence Weekly, October 10, 1966; page 6
(15) Petroleum Intelligence Weekly, September 19, 1966; page 6
(16) Petroleum Intelligence Weekly, February 20, 1967, page 8
(17) Petroleum Intelligence Weekly, March 27, 1967, page 8.

policy, they will try to make sure that the new terms do not get to be any more onerous than what results after they have done their best to prevent them.

Venezuela has been under a strain due to the encounter of two forces: Government and Oil Companies. The fact that concessions will soon expire has determined a crucial moment for the country. Either the same type of arrangements were adopted again, more or less along the same lines, or a whole new system took their place. As we have seen, the Government has chosen the latter, and this is why the previous oil Minister has described the present period as one of transition for the oil industry.(18) I would think that it is especially during these periods that pressures between Governments and oil companies become greater and I believe that this has been one of the main factors that have contributed to the situation confronting Venezuela.

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(18) Petroleum Press Service, November 1966, page 403.

B) External Factors

1) Diminishing Freight Advantage

Venezuela's privileged geographical position with respect to main consuming areas (i.e. North America and Western Europe) over other major sources of oil (i.e. the Middle East) has been gradually deteriorating with the downward trend of freight rates due to lower costs per barrel of oil transported.(19) We saw in Chapter I how the building of larger tankers has permitted a considerable reduction in freight costs due to lower unit costs of construction and of fuel, and also because of higher speed.(20) Creole (Jersey Standard's affiliate in Venezuela) seems to have quoted industry figures which indicate that tankers operating in 1954 averaged 15,000 deadweight tons, while in 1964 the average size was 25,300 d.w.t. and the average size of vessels under construction was 53,300 d.w.t. In the super-tanker category (over 100,000 d.w.t.), 5 were operating worldwide in December 1964, while a year later 16 were in operation with 51 more under construction. (21) With 10 to 30,000 d.w.t. vessels, the operating costs of shipping a barrel of 35° gravity crude from Persian Gulf to New York ranged from $1.01 to $1.06. But with 30 to 50,000 tonners costs dropped to 78 cents from 84 cents. Furthermore, with tankers of over 50,000 tons transport costs fall to only 67 cents per barrel.(22)

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(19) Petroleum Intelligence Weekly, September 19, 1966, page 6

(20) Chapter One, page 18.

(21) Petroleum Intelligence Weekly, September 19, 1966; page 6

(22) Petroleum Intelligence Weekly, September 19, 1966; page 6

It is obvious that since Venezuela is closer to markets in the United States and Western Europe than is the Middle East, high freight rates are to her advantage. However, this freight advantage has been diminishing constantly since 1957. In Table V - 11 we see how this freight advantage which was approximately ¢1.42 per barrel in 1957 at the U.S. eastern seaboard was reduced to ¢0.67 by 1965. Although the figures of our table correspond to posted F.O.B. prices and average freight rates without taking note of discounts, which would give us a more realistic situation, it enables us to follow the effect of lower freight rates on the delivered price of both Venezuelan and Middle Eastern crudes. (23)

The diminishing freight advantage for Venezuelan oil is evident. However, it is necessary to be aware that as the difference in delivered cost narrows, Venezuelan oil will be less attractive for oil companies which have lower cost sources elsewhere, and will gradually lose markets as oil from other sources advances (see diagram V -1). This will reflect itself in the domestic scene by the gradual elimination of the higher marginal cost fields, and the companies operating only where the marginal cost plus freight (marginal delivered cost) will allow the oil to meet supplies from other sources in international markets.

Only to give an idea of how Venezuelan oil can be displaced from international markets by the narrowing of her freight advantage we present diagram V - 1. Assuming that all other conditions remain equal, in a market (such as the U.S. market for example) supplied by Venezuelan crude and Middle Eastern crude, we find that if the oil was to be supplied to this

(23) Using current freight rates, Creole states that the delivered cost from the Middle East is less than from Venezuela by ¢0.38 to Argentina, ¢0.35 to Rotterdam, and ¢0.07 to New York. (Petroleum Intelligence Weekly, September 19, 1966; page 6)

Table V - 11

Decreasing Advantage of Venezuelan Crudes*

(U.S. $ per barrel)

	1957	1959	1961	1963	1965(a)
FOB R S TANURA (1)	2.05	1.92	1.80	1.80	1.80
AVERAGE FREIGHT	1.90	1.34	1.12	1.04	0.90
CIF U.S. ATLANTIC COAST	3.95	3.26	2.92	2.84	2.70
FOB AMUAY (2)	2.54	2.34	2.30	2.30	2.30
AVERAGE FREIGHT	0.48	0.36	0.30	0.28	0.23
CIF U.S. ATLANTIC COAST	3.02	2.70	2.60	2.58	2.53
DIFFERENCE	0.93	0.56	0.32	0.26	0.17
FREIGHT ADVANTAGE	1.42	0.98	0.82	0.76	0.67

(1) Saudi Arabia (34-34.9°)

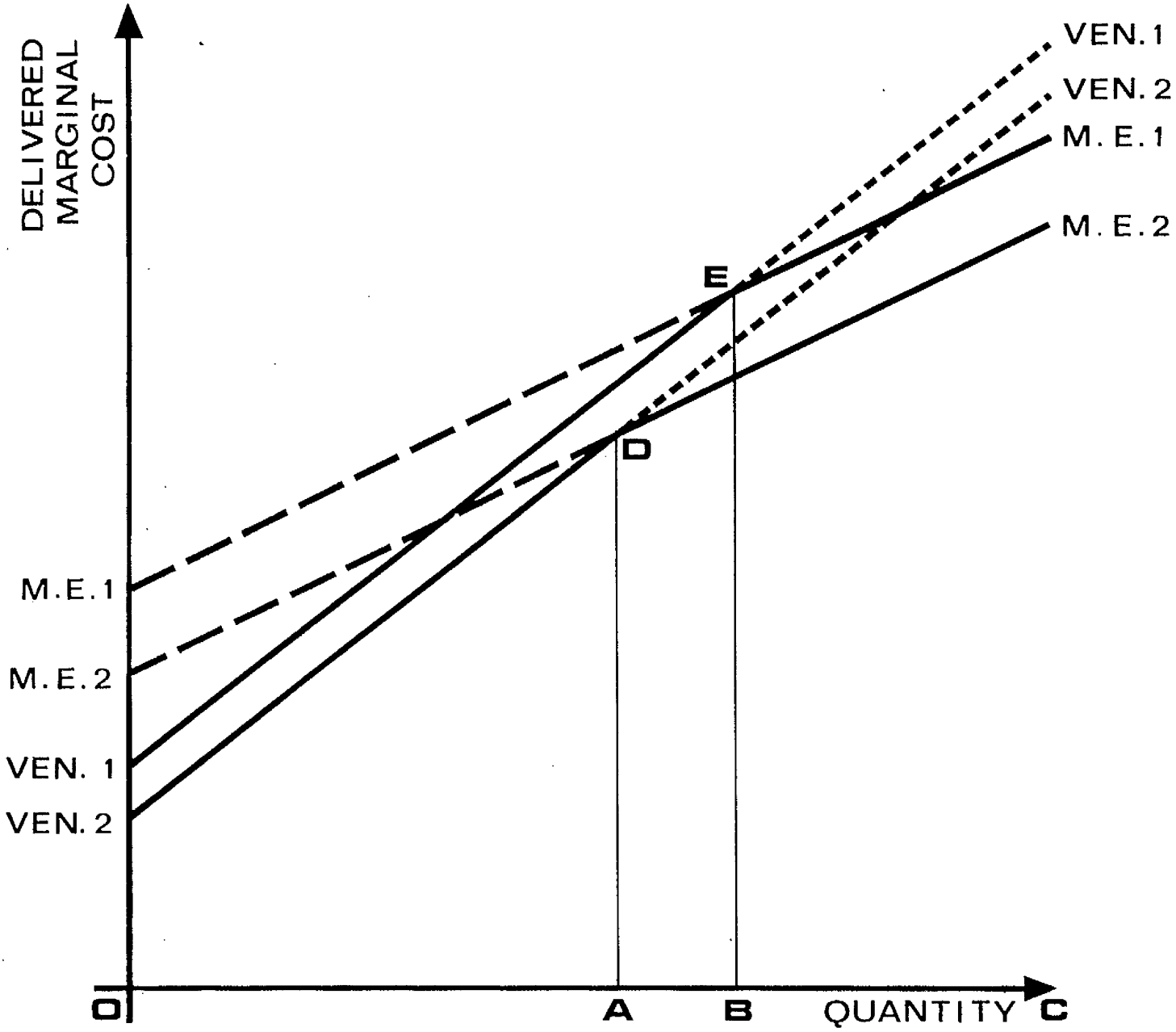
(2) Venezuela (26-26.9°)

(a) Estimated

(*) Crude Petroleum prices when F.O.B. are those posted by major oil companies, when C.I.F. they are computed by adding to posted prices an estimate of freight based on average rates compiled by the London Tankers Brokers' Panel.

Source: U.N. Monthly Bulletin of Statistics; December 1965 page 151

DIAGRAM V-1


DELIVERED MARGINAL COST
VEN. 1
VEN. 2
M. E. 1
M. E. 2
E
D
M.E.1
M.E.2
VEN. 1
VEN. 2
O
A
B
QUANTITY
C

market by considerations of comparative costs, the proportions of the market supplied by these two sources would be determined at the point of intersection of their respective delivered marginal cost curves. Thus if initially we find that the two curves (VE_M^1 and ME^1) intersect at a point such as "E", this point of intersection determines that a quantity such as $\overline{OB}$ be supplied by Venezuela, and a quantity such as $\overline{bC}$ by the Middle East. Assuming now an equal percentage reduction in freight rate all over the world, this would affect the two major sources of imported oil to the United States. Because of the greater distance of the Middle East from the United States, the marginal delivered cost per unit of Middle Eastern oil will reduce more sharply than that for Venezuelan oil. Although both of these two curves will shift downwards, the one for the Middle East will shift more than that for Venezuela, and the point of intersection of these two curves (VE^2 and ME^2) will move to the left to point "D". With both curves intersecting at "D", we find that the reduction in transport cost has thus enabled Middle Eastern oil to gain a greater proportion of the market, since now it can supply a quantity such as $\overline{A\ C}$ at a lower marginal delivered cost than Venezuela.

2) Competition from Other Sources

Not only have the vast reserves from the Middle East permitted this region to compete with Venezuelan oil in international markets, but also North Africa with her proximity to Europe has also been competing with Venezuela. North Africa has been increasing her exports steadily not only to Europe but also to the United States since 1960, and by 1965 has gained a share in world net exports (including the Soviet Union) of 13% which is

more than half of Venezuela's. (24) The major sources from Africa are Algeria, Libya, and Nigeria, and most of the supply is sold in the European market.

The Soviet Union has also maintained a considerable share in world net exports (6%) in spite of her domestic consumption, and although her main markets out of her political orbit are Europe, the Scandinavian countries and Japan, she has obtained a respectable share of the Latin American market, not only because of the foothold she has gained in Cuba, but also in important markets such as Argentina and Brazil which are going through a period of industrial expansion. (25) Russia offers the advantage of barter transactions which are very appealing for countries with a shortage of foreign exchange. It has been with this type of competition that Russia hasbeen able to supply markets close to Venezuela to the prejudice of the latter country.

With respect to Brazil, we saw how Russia and the Middle East have penetrated into this market at Venezuela's expense (see Table V -10) Brazil has recently notified Venezuela that she was not willing to buy Venezuelan oil if she could buy cheaper Middle Eastern crude. (26). In this respect Brazil made clear that recent discoveries of several big oil fields in the Middle East and Africa coupled with the low cost of developing proven reserves there, and the new gas discoveries in the North Sea would make Venezuelan oil even less competitive. (27) Western Europe has also estimated a reduction in her purchases from Venezuela. According to the specialized press, by 1970 Latin

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(24) Ministry of Mines and Hydrocarbons - Venezuela "Memoria" 1965, page I - 113

(25) Ministry of Mines and Hydrocarbons - Venezuela "Memoria" 1965, page I - 112

(26) Petroleum Intelligence Weekly; April 3, 1967 page 1

(27) Ibid.

America would only have a 5% share in this market while Africa would have increased its participation to 35% of total imports. (28) Even in the United States new suppliers have been cutting into Venezuela's share of this market. We saw in Table V - 8 how Middle Eastern, African and Canadian sources were increasing their share of the crude oil imported by the United States. Now it seems that Venezuela will also begin to lose her share of the fuel oil market in this country. (29) According to the press, Italy, Panama, Ireland, United Kingdom, France, and the Middle East are making inroads into the market of residual fuel which has been supplied until now almost entirely by Venezuela. (30)

Venezuela as we see, faces competition from many other areas. But this is not only due to higher taxes, loss in freight advantage and new sources. Average production costs in Venezuela are also higher than in any other major exporting country. (31) Professor M.A. Adelman has made a comparative study of these costs of the main producing areas of the Western World, and has reached the conclusion that Venezuela is on the average the highest cost net exporter with a production cost of $0.62 per barrel (Table V-12). The main exporters of the Middle East do not surpass 10 cents per barrel, and costs even reach the low of $0.04 per barrel in Iraq. African varies from $0.15 in Libya to $0.46 in Algeria which is also below the average cost in Venezuela.

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(28) Petroleum Press Service, October 1966, page 387

(29) Petroleum Intelligence Weekly, February 13, 1967, page 1 (this will be further analysed in following pages)

(30) Ibid

(31) Adelman, M.A.; "Oil Production Costs in Four Areas, published by: Proceedings of the Council of Economics of the A.I.M.E.; New York, March 1966, p. 209

Table V - 12

"Average Oil Production Costs" (1)

(U.S.¢ per barrel)

VENEZUELA	¢ 0.62
Algeria	0.46
Nigeria	0.31
Libya	0.15
Saudi Arabia	0.10
Kuwait	0.10
Iran	0.07
Iraq	0.04

(1) Operating and Development Costs

Source: Adelman, M.A. "Oil Production Costs in Four Areas," page 209.

We thus see that production costs do not favour Venezuela either, and as a result have also been a negative factor for marketing oil from this country.

3) Development of Domestic Industries.

Another factor which has not favoured Venezuelan exports has been the development of petroleum industries in various countries both in the extractive and the refining stage. Such has been the case of many South American countries where private and national concerns have been increasing production and refining capacity steadily. We mentioned earlier how the national oil companies of the various Latin American countries have been united under "ARPEL" (Agrupacion Regional Petroleros Estatales Latino Americanos) in order to collaborate in the further development of their respective oil industries.(32) With respect to Brazil, it has been announced that its importance as a crude oil customer will decline this year as the country increases production from its local oil fields.(33) Argentina also seems to be seeking self sufficiency in oil "through an intensive, fast, and rational development of local oil reserves" by private companies; (34) and Colombia's production is also making her oil industry's outlook "bright". (35)

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(32) Chapter 4, page 132.

(33) Petroleum Intelligence Weekly, January 9, 1967, page 1

(34) Petroleum Intelligence Weekly, February 6, 1967, page 6

(35) Petroleo Interamericano, August, 1966, page 36.

With respect to refining capacity, it has been in the more developed countries of Western Europe where it has been most accentuated due to the present tendency of locating refineries in consuming centres (see chapter I page 31). This has affected Venezuela's exports of refined products to the area and will continue to do so as supplies of crude oil from the Middle East and Northern Africa permit European refineries to cover domestic demand at lower cost. This has been the case of Italy where independent refiner-marketers and state owned ENI, which together share more than 40% of the local market, have been able to obtain their crude at "attractive" prices due to competition among crude suppliers who seek to gain an outlet for their oil in this important European market. (36)

In France, besides having an important refining industry, Government controlled companies obtain supplies from the franc-zone, mainly from Algeria, in order to assist French companies in these areas and to favour franc-oil for currency reasons.(37)

Recently there has also been an important tendency in Europe to unite State and private independent companies from several common market countries in order to free competition from the Majors.(38) They are asking support from European authorities alledging that wholly free competition between sides as unequally matched as Majors and Europe's independents does not favour Europe's interests. (39) Where this might affect Venezuelan exports is in

(36) Petroleum Intelligence Weekly, January 4, 1965; page 5

(37) Ibid

(38) Petroleum Intelligence Weekly, February 13, 1967; page 6

(39) Petroleum Intelligence Weekly, February 13, 1967, page 6.

that these companies pretend to obtain their crude oil requirements from those sources that offer the better price and not necessarily from Majors whose interest is to move their oil through integrated channels. As we have seen, most of Venezuela's crude is produced by three international majors, and if these were to be displaced by legislation from the European market, Venezuelan exports could be directly affected.

Not only domestic petroleum industries have been affecting Venezuelan exports to the European market, but also the industries of indigenous fuels which in some cases get protection from the Government. Though indigenous coal is becoming "less competitive", oil is facing increasing rivalry from natural gas and nuclear power.(40) With respect to coal, although there are indications of an "inevitable decline" on its share within the total supply of fuel which will meet Europe's energy requirements in the future, political protection may "slow it down", especially in the United Kingdom and Western Germany.(41)

4) Import Restrictions in the United States

Venezuela has been claiming unfair treatment by the United States with relation to the import restrictions of petroleum. In the latest annual report of the Venezuelan Ministry of Mines and Hydrocarbons this situation is described as "discriminating with respect to Venezuela", considering the preferential treatment for imports from Canada and Mexico. (42) The

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(40) Petroleum Press Service, March 1967; page 83

(41) Petroleum Press Service, March 1967, page 83

(42 Ministry of Mines and Hydrocarbons - Venezuela: "Memoria" 1965, page I-117

preferential treatment consists in that from 1959 to 1962 there was no regulation of imports of petroleum which entered the United States by land from either country, while seaborne shipments entering through the east coast were limited to 9% of total demand. (43) This system was modified for 1963 when the import quota was changed to 12.2% of domestic production, but still Canada and Mexico had preferential treatment since from this 12.2% open to foreign imports, the estimate of imports of crude oil from these countries was deducted from this quota. (44) In other words, as inland imports increased, the quota for seaborne shipments would diminish in the same amount. As a result, imports from the two countries, which in 1959 had 9.6% of total imports, reached 24% of the total in 1965.(45) Venezuela's share, on the other hand, fell from 47.1% in 1959 to 34.9 in 1965 (Table V - 8).

The United States is interested in securing a considerable supply of oil which could be obtained from other North American sources such as Canada and Mexico as a precaution against international crisis. However, Venezuela insists that it would be dangerous to favour other sources which do not have the same oil potential as she does for the same reason of security in supply. (46) Whoever is right on this matter is besides the point, but it does seem clear that Venezuela is not favoured by these restrictions.

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(43) Petroleum Press Service. March 1959, page 115, April 1959, page 127

(44) Petroleum Intelligence Weekly, April 2, 1962; page 3
Petroleum Press Service, April 1962; page 150

(45) U.S. Department of the Interior; Bureau of Mines.

(46) Perez-Guerrero, M.; "Petroleo: Hechos y Consideraciones", page 17

III The Pattern of Venezuela's Petroleum Exports: Special Reference to Fuel Oil.

We have analysed in previous pages how Venezuela's share of the international market has been diminishing and how this has led from a proportionate reduction of its participation to an absolute contraction of both production and exports, as seems to be the case for 1966. Now it is essential that we should analyse the pattern of Venezuela's petroleum exports and its effect on earnings in order to appreciate the situation confronting Venezuela. For statistical reasons however, we will exclude 1966 from this analysis and we shall concentrate more from 1960 to 1965.

As we can see from Table V - 13, exports of Venezuelan oil are composed of both crude oil and products. Of the latter the more important are fuel oil, diesel-gas oil, gasoline and naphtha, and kerosene. Although total exports have increased (up to 1965), we do notice that the export pattern has changed from 1950 to 1965 in the sense that the volume of products has been losing weight in the total figure. In this way we find that while in 1950 products accounted for 63% of total exports (Table V - 14), in 1965 this proportion had fallen to approximately 50%. This is due to the variation of the demand pattern of the more important consuming countries, which as we saw, having increased their refining capacity now import a greater proportion of crude (see Chapter I, page31). With respect to products we also find th t fuel oil besides being the major product exported, has gradually increased its participation in the total volume of products to 66% in 1965. This in turn is due to its high demand in industrialized countries and because Venezuelan crudes, being of the heavier type (see Chapter IV, page103), favour the production of this product.

Table V - 13

Exports of Crude and Products from Venezuela

(thousands of barrels)

	Crude	Gasoline and Naphtha	Kerosene	Diesel-Gas Oil	Fuel Oil	Other	Total Products	Total
1950	184,407	55,027	16,312	38,816	193,889	5,699	309,743	494,150
1955	332,490	48,761	21,948	74,391	250,824	19,280	415,204	747,694
1960	475,569	49,433	16,732	76,457	294,491	37,737	474,850	950,419
1965	576,736	58,880	11,568	74,600	381,217	54,007	580,272	1,157,008

Source: Ministry of Mines and Hydrocarbons, Venezuela. Petróleo y Otros Datos Estadísticos" 1965, page 98.

Table V - 14

Venezuela's Petroleum Export Pattern

(millions of barrels)

	Total Petroleum	Crude	Total Products	Fuel Oil
1950	494,15	184.41	309,74	193.89
1955	747.69	332,49	415.20	250.82
1960	950.42	475,57	474.85	294.49
1961	976.70	481,09	495.61	293.57
1962	1,067.05	542.14	524.91	309.47
1963	1,089.75	555.84	533.91	315.68
1964	1,146.42	588.33	558.09	351.37
1965	1,157.01	576.74	580.27	381.22
Share:	%			Fuel Oil as % of Total Products
1950	100.0	37.3	62.7	62.6
1955	100.0	44.5	55.5	60.4
1960	100.0	50.0	50.0	62.0
1961	100.0	49.3	50.7	59.2
1962	100.0	50.8	49.2	59.0
1963	100.0	51.0	49.0	59.1
1964	100.0	51.3	48.7	63.0
1965	100.0	49.8	50.2	65.7

Source: Ministry of Mines and Hydrocarbons, Venezuela. "Petroleo y Otros Datos Estadisticos". page 98

Since fuel oil is Venezuela's most important export product we shall deal mainly with the figures of crude oil, total products and fuel oil, and in our analysis we intend to show that Venezuela's petroleum export pattern has not been favouring her either. (47)

We find in Table V - 15 next to the figures of volume, the corresponding earnings or gross receipts derived from these exports for 1960-1965. These earnings were the ones presented to the Venezuelan Government in the financial statements of the companies for tax purposes. We notice that in spite of the annual increase in the volume of exports, there have been annual reductions in earnings from 1963 onwards, and in 1962 the increase in value was not proportionate to the increase in volume. In other words,

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(47) Fuel oil is a derivative of crude oil which is used as a major source of energy in many industries. Being itself a liquid, it offers certain advantages over the more traditional types of fuels (such as coal) since it becomes easier to transport and store, cleaner to use, and on the whole more economical or as economical as these (see J.E. Hartshorn's chapter "Oil as a General Fuel", Op.Cit., page 35). However, it seems that demand for fuel oil is characterized by being highly price-elastic due to the existence of other competing fuels (principally coal, but also natural gas and in growing importance nuclear energy), and having its market limited to some extent by Government policies that tend to protect (other) domestic fuel industries, accounts for a lower price. Government protection has been the case of England and Western Germany (Petroleum Press Service, March 1967 page 83), and of the United States in which country the Government is "under heavy political pressure from top coal executives" (Petroleum Intelligence Weekly, September 28, 1964, page 5). It was also estimated that a tax of about $0.80 per barrel was imposed on fuel oil in the United Kingdom, and of $1.05 in Belgium (O.P.E.C. "Elasticity of Demand for crude Oil. It's Implications for Exporting Countries" page 11).

Table V - 15

Volume and Value of Venezuelan Petroleum Exports

	Earnings from Petroleum Exports(a) (Millions of $)	% change	Volume of Exports (millions of barrels)	% change
1960	2,149	-	982.71	-
1961	2,213	3.0	1,009.01	2.7
1962	2,343	5.9	1,101.76	9.2
1963	2,335	-0.3	1,121.86	1.8
1964	2,303	-1.4	1,175.78	4.8
1965	2,283	-0.9	1,187.19	1.0

(a) Export earnings as recorded in the financial statements of the companies according to the Ministry of Mines and Hydrocarbons of Venezuela.

Source: Ministry of Mines and Hydrocarbons, Venezuela. "Memoria", 1965, page I 210

while Venezuela exported more petroleum, which we must recall is a wasting asset each year the earnings from these exports were getting lower.

There are two main reasons for this:

1) lower prices; and

2) the Venezuelan export pattern.

In Table V - 16 we see how the different prices for Venezuelan oil have fallen between 1960-1965. Since earnings are a function of both volume and price, we find that the latter has had the stronger influence in the determination of oil earnings since the effect of lower prices has more than outweighed the effect of greater volume. It is quite understandable why the Venezuelan Government puts pressure on the oil companies. It is not just a matter of trying to squeeze more revenue out of them just because of greed, it is simply that the Government faces the reality of reducing the nation's stock of a wasting asset, which is the prime source of revenue, while receiving each year a lower price for its sales. It is the crucial problem of terms of trade which affects so much the countries exporting raw materials which is being fought. (48)

Prices, however, have been only one of the reasons for Venezuela's lower earnings from petroleum. This has also been due to the change in the "mix" of petroleum exports, since as we saw, products have been losing weight in the total volume of exports, and fuel oil, which accounts for a lower price among refined products, has been increasing

(48) Venezuela's term of trade index for 1965 (1959 the base year) had fallen to 82.4. (Banco Central de Venezuela, "Informe Economico 1965, page 204.)

Table V - 16

"Realized Prices of Petroleum Exported from Venezuela"

(U.S.$ per barrel)

	Crude	% Change	Products	% Change	Total Petroleum	% Change
1960	2.11	-	2.42	-	2.19	-
1961	2.12	0.5	2.40	-0.8	2.19	0.0
1962	2.06	-2.8	2.30	-4.2	2.13	-2.7
1963	2.03	-1.5	2.24	-2.6	2.08	-2.3
1964	1.91	-5.9	2.09	-6.7	1.96	-5.8
1965	1.86	-2.6	2.08	-0.5	1.92	-2.0

Source: Banco Central de Venezuela; "Informe Economico" 1965, page 279.

at the same time its share in the total volume of products going out to markets (Table V - 14). In this respect we find that during 1965 the average price for Venezuelan crude was $1.86 per barrel, compared to $2.08 per barrel as the average price for products, (49), and for fuel oil, Venezuela's most important export product, it was only $1.55 per barrel.(50)

The trend in Venezuela's export pattern contributes to reduce the Government's oil revenue since the average price of crude oil is below that of the average barrel of refined products on a whole, and fuel oil, having the strongest weight within the product "mix", contributes in turn to reduce the average price obtained for total products. Furthermore, the fact that Venezuelan crudes offer a variety within the "heavier" category (see Chapter IV page103), oil companies have been able to increase the proportion of heavy crudes in the total output of crude (51) to satisfy demand in countries that prefer to process their own fuel oil in domestic refineries, but since these crudes are particularly suitable to yield lower price products, they are accordingly priced. Venezuela has consequently been losing revenue in this way since oil companies value the crude extracted according to its gravity to pay the nation her royalty. Thus royalty payments which normally vary proportionately to the amount of crude exploited, presented in 1965 a reduction of 0.2% with respect to 1964 inspite of an increase of 2.4% in crude oil production during this period. (52)

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(49) Table V - 16

(50) Petroleum Intelligence Weekly, April 4, 1966, page 5

(51) Ministry of Mines and Hydrocarbons - Venezuela, "Memoria" 1965, page IV 29.

(52) Banco Central de Venezuela, "Informe Economico" 1965, page 280

The United States is Venezuela's most important market and has been gradually absorbing more Venezuelan fuel oil, imports of which surpassed in 1965 the volume of crude and other products together (see Table V - 17). This has been due to the increasing demand for fuel oil but also to certain characteristics very particular to the petroluem industry of the United States, and to the petroleum policy of her Government which are really beyond the scope of this study to analyse. Suffice it to say that import restrictions in the United States have been more lenient on fuel oil than on the other forms of petroleum, and only to give an idea of the situation, we point out below certain aspects of these restrictions on oil imports.

a) With the promulgation of the Revenue Act in 1932 by which the American Government taxed petroleum imports for the first time, crude oil and fuel oil imports were favoured by establising an import tax of 21 cents a barrel on these, while gasoline was taxed at $1.05 and lubricants at $1.68. (53)

b) In 1939 the tax on crude and fuel oil was halved to 10.5 cents for an amount of imports equivalent to 5% of domestic supply; over this amount and for other products taxes remained unchanged. (54)

c) At the end of 1941 the United States eliminated the restriction on the amount of crude and fuel oil which could enter at 10.5 cents a barrel. (55)

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(53) The Petroleum Industry Research Foundation, "United States Oil Imports - A Case Study in International Trade" New York 1958, page 24

(54) Ibid, page 25

(55) Ibid, page 26

Table V - 17

Venezuelan Petroleum Exports to the United States

(thousand of barrels daily)

	Crude	% of Total	Fuel Oil	% of Total	Other Products	% of Total	Total
1955	388	47.3	375	45.7	57	7.0	820
1956	451	48.9	393	43.0	75	8.1	924
1957	539	50.3	429	40.0	104	9.7	1,072
1958	451	41.5	457	42.0	180	16.5	1,088
1959	456	41.2	517	46.8	133	12.0	1,106
1960	490	42.3	567	48.9	102	8.8	1,159
1961	436	37.9	585	50.8	130	11.3	1,151
1962	491	39.6	599	48.3	150	12.1	1,240
1963	500	40.6	588	47.7	144	11.7	1,232
1964	486	37.2	676	51.6	146	11.2	1,308
1965	462	34.0	743	54.6	155	11.4	1,360

Source: Ministry of Mines and Hydrocarbons, Venezuela.
"Exportacion de Petroleo y Productos desde Venezuela, Aruba y Curazao" 1965, page 23.

d) In 1952 light crude oil (25° A.P.I. and over) from Venezuela was taxed at 10.5 cents a barrel, while heavy crude and fuel oil was taxed at half of this amount (5.25 cents p/b). (56)

e) In 1959 with Mandatory Restrictions, imports of crude and products received a quota with the sole exception of fuel oil which was not subject to any restriction. (57)

f) In 1962 with the establishing of quotas for all oil imports, fuel oil was assigned a quota which still permited to raise imports to a "record figure" of over half a million barrels daily. (58)

g) For 1966 the import programme of the United States eliminated even the assignment of quotas to the importers of residual oil by permitting any company wishing to import to do so "simply by filing an application" (59)

These were the rules to which the companies had to abide, so Venezuela having a type of crude which was favourable for fuel oil production, and also having geographical advantages over other sources of supply, she soon became the major supplier of fuel oil for the American market (Tables V-18 and V-19). The companies adapted themselves to the circumstance as best they could, but it seems that the American Government has been protecting the domestic petroleum industry at the expense of the Venezuelan, since with the set of restrictions it protects its own by enabling the production of high cost crude (60) which can be refined into products that

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(56) Ibid page 28

(57) Petroleum Press Service, March 1959 page 115, April 1959, page 127

(58) Petroleum Press Service, April 1962, page 150

(59) Petroleum Intelligence Weekly, April 4, 1966; page 5.

(60) It is generally accepted that American import restrictions "have long been ... enabling high cost marginal producers to survive". (Petroleum Press Service, November 1966, page 415).

Table V - 18

Supply of Fuel Oil in the United States

(%)

	Domestic	Imports
1954	53.5	46.5
1955	49.1	50.9
1956	46.0	54.0
1957	44.6	55.4
1958	42.5	57.5
1959	34.7	65.3
1960	36.4	63.6
1961	34.5	65.4
1962	31.1	68.9
1963	25.2	74.8
1964	22.9	77.1

Source: Bureau of Mines "Residual Position by Years Supply and Demand". 1954-1964.

Table V - 19

Imports of Fuel Oil to the United States

	Volume (B/D)	Venezuela (1) (%)	Others (%)
1961	631,992	85.5	14.5
1962	729,403	84.7	15.3
1963	761,514	81.0	19.0
1964	826,367	81.7	18.3
1965	1,065,363	84.6	15.4

(1) Including Aruba and Curazao

Source: U.S. Department of Commerce, Bureau of The Census, F.T.110, F.T.125.

obtain a higher price in the market, while the Venezuelan industry supplies the low price fuel oil so needed in the American economy. If for any reason the United States were not able to obtain its supplies of fuel oil from abroad, "it would have immediate detrimental effects on the consumers of this commodity" since to produce it locally would raise the cost of industries. (61) In other words, fuel oil imports fulfil the important economic function of lowering the price the United States pays for its energy. (62)

Venezuelan Reaction to the Situation.

The Venezuelan Government realizing that American restrictions on petroleum imports were not very suitable for her, since they favoured only the entry of a low price product, reacted to such a situation towards the end of 1965. On December 30, 1965 it announced in an official decree that it would not recognise for tax purposes the realized price of fuel oil in future sales.(63) It established a maximum discount of 15% off the posted price of $2.00, thus establishing a reference price of $1.70 for 1966. (64) Venezuela's President, Dr. Raul Leoni, justified this measure on the grounds that the country had been obtaining 45 cents per barrel less for residual oil sales since the actual sales price had dropped from the $2.00 posted price of 1959, to a realized price of $1.55 in 1965.(65) The increasing proportion of fuel oil

(61) Petroleum Industry Research Foundation, Op.Cit., page 53

(62) Ibid page 37

(63) Petroleum Intelligence Weekly, January 10, 1966, page 5

(64) Petroleum Intelligence Weekly, January 24, 1966, page 5

(65) Quoted by Petroleum Intelligence Weekly, April 4, 1966 page 5. This same journal stated on February 28, 1966 that the actual price for fuel oil F.O.B. Caribbean had fallen to $1.45 per barrel.

exports at these lower prices, President Leoni pointed out, show that "Venezuela has been left with the least beneficial part of the oil business", ... and that "the magnitude of damage that Venezuela has been suffering is enough to justify the measure we have taken in defence of an acceptable and reasonable price for our oil". (66)

Soon after this action was taken by the Venezuelan Government, the Government of the United States also announced, at the beginning of the year, the liberalization of residual fuel imports for 1966.(67) The immediate result of these two measures was a "perceptible strengthening" in the price of heavy fuel oil. (68) Spot sales at the beginning of April were made at a price of $1.60 which was 10 to 15 cents higher than a few months back, and according to the petroleum press, "all of the major Carribbean suppliers... seemed willing to make a stand on the $1.60 price. (69) The precision of these two moves, however, could give rise to wonder whether they were just a mere coinsidence. Venezuela has been claiming better treatment from the American Government in relation to oil import restrictions, and to this respect various meetings were held between the representatives of both Governments during 1965. (70) Furthermore, President Johnson in his speech of December 10, 1965 specifically stated that "the United States recognizes that the oil industry

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(66) Petroleum Intelligence Weekly, April 4, 1966 page 5
(67) Ibid, January 24, 1966, page 6
(68) Ibid, April 4, 1966, page 5
(69) Ibid.
(70) Ministerio de Minas e Hidrocarburos - Venezuela. "Memoria" 1965, page I, 117.

in Venezuela has a special position in the contribution it makes to Western Hemisphere security" (71), so it would not be too surprising if the American Government in its effort to come to terms with the Venezeulan, and probably realizing that the restrictions were not so favourable for Venezuela, agreed to the elimination of the restrictions on fuel oil as a way of alleviating the situation for this country.

Although access to the American market became free in one way, Venezuela has now come across another kind of limitation to her fuel oil exports: anti-pollution measures. Air pollution resulting from high sulphar content fuels induced New York and New Jersey authorities to make regulations requiring the sulphar content of fuel oil to be limited to 2.2% from the beginning of 1967, with further reductions to 2% after October 1969 and to 1% after May 1971. (72) It seems that about 1/3 of the volume of Venezuela's exports of fuel oil are affected by these measures,(73), and according to Dr. Jose Antonio Mayobre, Venezuela's present oil Minister, investments totalling $100 million will have to be made by the oil companies if Venezuelan fuel oil is to meet the standards of sulphur content recommended.(74). However, Dr. Mayobre specified that

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(71) Petroleum Intelligence Weekly, December 20, 1965, page 3.

(72) Petroleum Press Service, April 1967, page 146.

(73) However, Venezuelan heavy crudes (14° API) have an averyage sulphur content of 2.6% while the equivalent crude in the Middle East has a sulphur content of 7.3%. With respect to medium crudes (24° API), in Venezuela they have an average sulphur content of 1.8%, while in the Middle East it is of 3.3%. (Ministry of Mines and Hydrocarbons - Venezuela. "Venezuelan and Other World Petroleums", Page 81.)

(74) Petroleum Press Service, April 1967, page 146.

these limitations on the sulphur content of fuel oil could be met "without much difficulty" by the Venezuelan oil industry, but that if similar recommendations were adopted by the States of New York and New Jersey, Venezuelan refiners would be compelled to embark on major structural changes. (75)

Estimates for 1966 say that Venezuela has already "lost ground" in the American fuel oil market due partly to the "Stringent anti-pollution measures" of the east coast cities, by falling from 85% to an 81% share of total imports of this fuel by the United States.(76) However, this same source states that in absolute terms Venezuela increased its exports of this product to this country by approximately 14%. In any case it does seem that these anti-pollution measures might be another threat to Venezuelan exports.

(75) Petroleum Press Service, April 1967, page 146.

(76) Petroleum Intelligence Weekly, March 27, 1967, page 1.

CHAPTER SIX

The formation of the Organisation of Petroleum Exporting Countries (O.P.E.C.). O.P.E.C.'s Efforts to Increase Member's Share of Oil Income. Venezuela as a Member of O.P.E.C.

I. The Formation of the Organisation of Petroleum Exporting Countries (O.P.E.C.).

The Organization of Petroleum Exporting Countries was established as a result of a conference held in Baghdad in September 1960 by the five major petroleum exporting countries: Iran, Iraq, Kuwait, Saudi Arabia and Venezuela, which became O.P.E.C.'s Founder Members. Qatar, which attended that Conference as an observer, joined in January 1961, and Libya and Indonesia followed in June 1962, bringing the number to a total of eight members. (1)

The formation of O.P.E.C., however, was by no means an abrupt happening. Contacts between the countries which were eventually to form O.P.E.C. began as far back as 1949. In September of that year an official Venezuelan three-man delegation visited Saudi Arabia, Iran, Egypt, Iraq, Kuwait and Syria with the aim of exchanging views and establishing regular and close communication, and during the following years, sporadic and informal meetings were held between the Middle Eastern producers and Venezuela. (2)

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(1) O.P.E.C., "Background Information", page 4; Geneva, Switzerland

(2) O.P.E.C.; "Background Information", page 11.

In 1959, following the enactment of mandatory import restrictions on petroleum in the United States, posted prices in the Middle East were reduced, "reflecting the growth of competitive pressures and the availability of low cost supplies". (3) This brought much discontent to the producing countries especially tothose of the Middle East where oil revenue was based on the posted price. Thus in 1959, when the posted prices of Middle East oil were cut, the First Arab Petroleum Congress, held in Cairo during that year and attended by observers from Venezuela and Iran, adopted a general resolution recommending that any proposed changes in the posted price of crude oil should first be discussed with the country concerned. On May 13, 1960, Dr. Perez-Alfonzo, then Venezuela's Minister of Mines and Hydrocarbons, and Abdullah Tariki, then Saudi Arabia's Director General of Petroleum Affairs, issued a joint statement calling for a common petroleum policy to "safeguard the legitimate interests of the producing countries".(4) However, by mid 1960, as one source puts it, "the economic logic for a further reduction was so strong",(5) that in August the companies again reduced prices. This called forth an immediate reaction on the part of the major oil exporting countries, and in the following month the organisation known as O.P.E.C. came into being.

Among its resolutions are the following: (6)

1) That Members can no longer remain indifferent to the attitude heretofore adopted by the Oil Companies in effecting price modifications.

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(3) Frank, Helmut; Op.cit. page 175

(4) O.P.E.C. "Background Information", page 11

(5) Frank, Helmut; Op. cit. page 175

(6) O.P.E.C., "Background Information" page 12

2) That Members shall demand that Oil Companies maintain their prices steady and free from all unnecessary fluctuations...

3) ...That Members shall ensure that if any new circumstances arise which in the estimation of the Oil Companies necessitate price modifications, the said Companies shall enter into consultation with the Member or Members affected in order fully to explain the circumstances.

4) That Members shall study and formulate a system to ensure the stabilization of prices by, among other means, the regulation of production... to the necessity of securing a steady income to the producing countries ....

5) That if as a result of the application of any unanimous decision of this Conference any sanctions are employed, directly or indirectly, by any interested Company against one or more of the Member Countries, no other Member shall accept any offer of a beneficial treatment whether in the form of an increase in exports or an improvement in prices, which may be made to it by any such Company or Companies with the intention of discouraging the application of the unanimous decision reached by the Conference.

6) That the principal aim of the Organisation shall be the unification of petroleum policies for the Member Countries and the determination of the best means for safeguarding the interests of Member Countries individually or collectively.

The factors that brought O.P.E.C. members together in one organisation are obvious: apart from being a group of developing countries, they are all net exporters of petroleum, and depend almost entirely on the revenue which accrues from this industry. Furthermore, these countries

together have a strong position as suppliers of this commodity. For 1965 they held 44% of total world production, 65% of proved reserves, and 35% of exports (see Tables VI - 1, and VI - 2 which follow). (7) Since petroleum resources in all these countries are mainly controlled by the major international oil companies (8) whose interests, according to O.P.E.C., "are not necessarily compatible with the interests of those countries".(9), this organization felt that it was imperative" to assume their proper responsabilities in an industry on which their economies and developments are almost entirely dependent".(10) O.P.E.C. felt that before its formation, "an individual oil exporting country found itself dealing alone with a solid front of the international majors"... which "sometimes used their ability to regulate volume offtake among the various producing areas as a weapon to influence the policies of any individual exporting country and weaken its bargaining power". (11)

These have been in general terms the official justification for the formation of O.P.E.C., but it is clear that the main concern of these countries was and is to increase their oil income as much as possible, and that it was due to the reduction of the posted price for crude oil in the Middle East in 1959 and 1960 which accelerated its formation since this directly attacked the basis for the calculation of profits which were to be shared.

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(7) Ministry of Mines and Hydrocarbons, Venezuela; "Memoria", 1965; pageI-113

(8) O.P.E.C.; "Background Information" page 6

(9) Ibid; page 5

(10) Ibid

(11) O.P.E.C. "Background Information" page 5

Table VI - 1

Production In the O.P.E.C. Area - 1965

('000 ofB/D)

Venezuela	3,473
Kuwait	2,350
Saudi Arabia	2,197
Iran	1,883
Iraq	1,310
Libya	1,226
Indonesia	513
Qatar	218
O.P.E.C. Total	13,169
World Total	30,092

% of O.P.E.C. in World Total: 43.8

Source: Ministerio de Minas e Hidrocarburos; Yearbook 1965
(Information received from O.P.E.C. Office)

Table VI-2

Proven Reserves In the O.P.E.C. Area - 1965

(Billion of barrels)

Kuwait	63
Saudi Arabia	60
Iran	40
Iraq	25
Venezuela	17
Libya	10
Indonesia	10
Qatar	3
O.P.E.C. Total	228
World Total*	353
% of O.P.E.C. in World Total:	64.6%

*Including Soviet zone.

Source: Ministerio de Minas e Hidrocarburos; Yearbook 1965 (information received direct from O.P.E.C. office)

II O.P.E.C's Efforts to Increase Member's Share of Oil Income

Although member countries of O.P.E.C. have also expressed their desire for an active participation in the oil industry, i.e. from exploration to marketing, (12) O.P.E.C.'s major efforts have been directed to increase the share of oil revenue for its members. However, of the major issues which have been raised by O.P.E.C. for discussions with the oil companies, there are three in particular which merit consideration: A) The marketing allowance, B) The expensing of royalties, and C) The restoration of the level of posted prices. All these were raised at O.P.E.C's Fourth Conference held in mid 1962.

A) The Marketing Allowance

O.P.E.C!s resolution IV -34 reads: (13) The Conference, Considering:

1) That neither the Members nor the Companies operating in their countries participate in the worldwide marketing operations of the Oil Companies;

2) That the bulk of the crude oil produced by the Operating Companies is marketed through their parents or parent affiliates with no brokerage charges being incurred;

3) That one of the Member Countries (Venezuela) makes no contribution whatsoever to the selling expenses of the Oil Companies;

Recommends:

That the Member Countries affected should take measures to eliminate any contribution to the marketing expenses of the Companies concerned."

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(12) O.P.E.C.; "Exporting Countries and International Oil" page 12

(13) O.P.E.C.; "Explanatory Memoranda on the O.P.E.C. Resolutions" Page 15.

It was in June 1962 during O.P.E.C.'s fourth Conference that this resolution was made, since in O:P.E.C. member countries of the Middle East, a certain percentage of posted prices was deducted before determining taxable income in order to compensate the oil companies for marketing expenses. Member countries insisted that this was unjustified since marketing costs were incurred in external markets and therefore had little connection with the activities of the company within the producing country.

O.P.E.C. reasoned that where the relationship between the producing country and the oil company was one of sale and purchase, the producing country sells its crude to the "purchaser-company"(14)at well-head; and to expect the seller to cover expenses which are incurred by the purchaser was an anomally. On the other hand, where the basis of the relationship was a concessional grant, the producing country gives the concessionaire the right of extracting the crude "on the basis of the assertion that they already possessed all the necessary facilities required for ensuring the flow of oil through the various stages to the final consumer".(15) According to O.P.E.C., marketing allowances were only a "disguised discount" off posted prices (16). Furthermore, O.P.E.C. considered that since approximately 90% of the crude oil transactions were with affiliates, "a real sales commission on an inter-affiliate transaction can have no meaning".(17)

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(14) Ibid, page 17

(15) Ibid, page 19

(16) Ibid.

(17) Ibid., page 18

As we see, O.P.E.C. was mainly concerned with what in effect meant a discount off posted prices for tax purposes, and thus began to insist on the elimination of this allowance. Although I have been unable to obtain the percentage that was allowed for marketing expenses, O.P.E.C. states that this represented a yearly reduction from gross receipts of approximately $6 million. (18) The companies came to agree at the end of 1964, to reduce the marketing allowance toa half cent per barrel(19)

B) The Expensing of Royalties

O.P.E.C.'s resolution IV -33 reads: (20) "The Conference, considering:

1) That the Companies enjoying in Member Countries the right of extracting petroleum which is a wasting asset should, in conformity with the principle recognised and the practice observed generally in the world, compensate the Countries for the intrinsic value of such petroluem altogether apart from their obligations falling under the heading of income tax;

2) That under the arrangements at present in force between the Member Countries (of the Middle East) and the Oil Companies in general no compensation is paid for the intrinsic value of petroleum, royalty or stated payment commitments being treated as credits against income tax liabilities;

3) That the Member Countries' right to receive compensation for the intrinsic value of petroleum is incontestable;

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(18) Ibid, page 19

(19) Petroleum Intelligence Weekly, January 18, 1965; page 6

(20) OPEC; "Explanatory Memoranda on the O.P.E.C. Resolutions", page 11.

Recommends:

That each Member Country affected should approach the Company or Companies concerned with a view to working out formula thereunder royalty payments shall be fixed at a uniform rate which Members consider equitable, and shall not be treated as a credit against income tax liability."

This issue, also presented in 1962, led to harder bargaining since it meant that oil companies had to increase their payments to the host Governments by 50% of the amount paid as royalties. For example:

A) Without Expensing

Royalties

	$
Net Earnings	= 100
Host Gov. 50% share (50% of 100)	= 50
Royalty	= 20
Liability left to be paid	= 30
Company share	= 50
Government share	= 50
Royalty = 20	
Income Tax = 30	

B) Expensing

Royalties

	$
Net Earnings	= 100
Royalty	= 20
Oil Company's profit before tax	= 80
Host Gov. 50% share (50% of 80)	= 40
Company share	= 40
Government share	= 60
Royalty = 20	
Income Tax = 40	

As mentioned earlier, the royalty is a leftover from the days before the introduction of income taxes and its origin is to be found when the Crown claimed all mineral wealth. In return for the concession or privilege to extract the mineral, the lessee would pay the Crown a certain percentage of the product, known as a royalty. However, the introduction of income taxes gave way to two different types of payments that can be made. Thus in the United States the oil companies pay the owners of the oil-bearing land a royalty, and the Government an income tax, and in Venezuela, where all mineral wealth is owned by the nation

both royalty and income tax are paid to the Government. (20-A) The idea however, that royalty is a "compensation for the intrinsic value of petroleum" is a mistake, because there is no such thing as the "intrinsic" value of crude but a market value, and this is why Governments never take their royalty in kind to store, but in cash, and when they do accept it in kind, it is only because they feel that they might get more out of a barter transaction or by selling it themselves due to its market value.

With the introduction of the 50/50 profit sharing agreements in the Middle East, the royalty became included in the 50% share received by the host Government and the difference was paid as taxes. But 50% became the established limit of the payments which would be made to the Government for the concessions granted under the 50/50. This again, is the difference in the Venezuelan case where the Government can raise taxes any time it wishes. As O.P.E.C. sees it, "the legislative power in a sovereign State, within the limits of the Constitution, may pass any law imposing or changing the rates of any tax. Nevertheless, in most Middle Eastern concessions there is a fixed income tax rate for the duration of the concessions..."(21) one of which (in Kuwait) ends in the year 2026, and none of the other major concessions before 1994.(22) This makes one think, as we mentioned in Chapter Three, that the 50/50 might have been offered to the Middle Eastern countries by the oil companies in their effort to reach an agreement with these countries in

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(20-A) Ibid, page 13

(21) O.P.E.C.; "Background Information" page 10 (my underline).

(22) Ibid, page 9

order to preclude the adoption of legislative procedures like those of Venezuela (see page 64). If this was the case, oil companies introduced the 50/50 with a very forward view of the situation, since it managed to check the establishment of greater payments, by the Governments concerned, for approximately fourteen years (1950-1964) for concessions that were granted under this type of agreement. The 50/50 was broken with new agreements as other concessions were granted; and with the fall in market prices and using posted prices as the basis for calculating profits, Governments usually got more than the 50% share of actual profits. However, since the Governments could not easily increase their take by raising the nominal 50% share, O.P.E.C. devised the formula of royalty expensing as a way of increasing the share of oil revenue for its members.

To sum up, royalties were treated in Middle Eastern countries as a direct credit against income tax obligations since the agreements between companies and these countries established a 50/50 participation in profits. This being so, the royalty of 12.5% was deducted from the total tax liability of the companies and the remainder was paid as income taxes. According to O.P.E.C., the countries concerned were then either not receiving a royalty, or were not receiving full payment of a corporate tax according to usual rates. (23)

For the settlement of this dispute, a compromise emerged. The companies agreed to pay royalties as an addition to income taxes, considering the royalty as an expense in calculating the profits that

(23) O.P.E.C "Exporting Countries and International Oil", page 11 (usual rates according to O.P.E.C. were 50%)

were to be shared with the host Government. On the other hand, the Governments that accepted (some Governments did not accept the offer as we shall see later) agreed to a more realistic basis in the calculation of profits. The companies would be given an allowance of 3.5% off the posted price for the first year of the agreement(1964), 7.5% for the second, and 6.5% for the third. Thereafter the question would be reconsidered. The effect was to raise the per-barrel revenues of the Middle Eastern Governments by an average of 3.5 cents in the first year, 4 cents in the second, and 4.5 cents in the third. (24)

C) The Restoration of the Level of Posted Prices

O.P.E.C's resolution IV-32 reads: (25) "The Conference, considering

1) That the Member Countries.....duly protested against the price reduction effected by the Oil Companies in August 1960.

2) That the Oil Companies have so far taken no steps to restore prices to the pre-August 1960 level; .....

Recommends:

That Member Countries should forthwith enter into negotiations with the Oil Companies concerned.... with a view to ensuring that oil produced in Member Countries shall be paid for on the basis of posted prices not lower than those which applied prior to August 1960. If within a reasonable period after the commencement of the negotiations no satisfactory arrangement is reached, the Member Countries shall consult with each other with a view to taking such steps as they deem appropriate in order to restore crude oil prices to the level which prevailed prior to August 9, 1960 ..."

(24) Petroleum Press Service, February 1966 page 42.

(25) O.P.E.C. "Explanatory Memoranda on the O.P.E.C Resolutions". page 3

The restoration of posted prices to the level prior to the reduction of August 1960 was the main concern when O.P.E.C. was founded. However, this demand has been gradually transformed into a request that there be no further deterioration of actual prices or, in other words, for the "stabilization" of oil prices.(26) Since posted prices are tax reference quotations, and these are higher than the actual sales price it would seem difficult however,for the oil companies to return to an even higher tax basis while market pressures were deteriorating actual sales prices, and after they had actually managed to reduce the tax reference quotation. In any case, O.P.E.C. realizes that as long as there is a surplus producing capacity at prevailing prices, and as long as it is uncontrolled, prices will tend to fall. According to O.P.E.C, "one of the reasons why crude oil prices are deteriorating .... is the fact that oil companies are incapable of acting collectively", and that it is for this reason that "the exporting countries have little choice ... but to act collectively", among other ways, "by exercising an effective control on production".(27)

Thus the ninth Conference of O.P.E.C. held in July 1965, passed the following resolution by unanimous vote: (28)

"The Conference, ... with a view to counteracting the continuing erosion of crude and product prices; considering that one of the contributing factors to the deterioration of crude and product prices is the unrestricted competitive use of the excess producing capacity; ...

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(26) O.P.E.C. "Background Information" page 16

(27) O.P.E.C. "Elasticity of Demand for Crude Oil; Its Implications for Exporting Countries". page 20

(28) O.P.E.C. "Note on Resolution IX 61" page 3.

Resolves: to adopt as a transitory measure a production plan calling for rational increases in production from the O.P.E.C. area to meet estimated increases in world demand...."

This plan could be reduced to four major points: (29)

1) All companies operating in the O.P.E.C. area will be asked to provide their production estimates.

2) Each country will add the figures submitted by the companies in their territory and send the national total to O.P.E.C. which will compare the sum of the national plans with the forecast of the market made by O.P.E.C.'s economic section.

3) If actual production runs higher than the market forecast, O.P.E.C. will ask the member country to justify its production rates and the ability of the companies operating in that country to dispose of their oil at satisfactory prices; and

4) If production rates can not be justified, the member country will ask the producing companies to hold down output.

This was the first attempt of the organization to promote production among members, an idea which can be attributed to Abdullah Tariki and which he presented as early as May 1960 (prior to the formation of O.P.E.C.) to the "Association of Independent Producers" in Texas. (30) His thesis recommended that proration should be based on a formula which would take into consideration the proven reserves of each producing country. However, in order to prevent an abrupt change in the share of various countries in the international market, he made clear that some form of "factor of correction" would have to be considered in the allocation of quotas to

(29) Petroleum Intelligence Weekly, September 6, 1965; page 5

(30) Oil and Gas Journal, May 9, 1960; page 99

avoid an abrupt fluctuation in the oil earnings of countries, such as Venezuela, which have a large share in the market in spite of a low proportion of world reserves. Abdullah Tariki gave no further explanation however, on what this "factor of correction" would be, nor how it would be applied, and just limited himself to presenting the idea of proration for the oil exporting countries, and his belief that the problems which could arise in relation to his proposal could be solved with a "factor of correction".

It is clear that in a situation of surplus producing capacity competition could tend to be very fierce among the various suppliers unless production itself could be brought under some control. Therefore, a prorationing system that would cover all the major exporting areas would tend to limit the degree of competition in favour of the producing interests. However, how successful proration on the different exporting areas can be, became apparent. What is difficult to conceive is that if it is true that "the oil companies are incapable of acting collectively", how the exporting countries thought they could do so. Venezuelan officials admit that O.P.E.C's attempt to control production "has not been very successful" and have already announced that "a new more effective scheme may soon be adopted".(31) In any case, the results of the first attempt seem to prove that proration is quite difficult to establish among different nations.

The quotas established by O.P.E.C. for the increments in production for the twelve month period July 1965- June 1966 over the previous twelve

(31) Petroleum Intelligence Weekly, April 3, 1967, page 3

months, and the actual rates of increase can be seen in table VI - 3. We immediately become aware that none of the quotas was met. Saudi Arabia and Libya surpassed their quotas, and the rest of the countries did not even reach it, which shows that producing countries can do little to determine and allocate the volume of output among the various sources. This is only natural since oil companies will generally consider costs (including taxes), commitments to parent companies or affiliates, quality of the oil and company strategy, before they draw supplies from a particular source to satisfy demand. Furthermore, even if the quotas had been met, it is difficult to see how long the exporting countries would have limited themselves to a "quota".

In all these countries economic plans depend largely on the revenue which accrues from this industry and in all cases it is their principle single source of foreign exchange and budget revenue. It is therefore natural that these countries would want to develop their oil industries to the maximum and assure themselves of the income it provides. Some of the member countries have set high production targets and encouraged further exploration in order to expand the industry as quickly as possible, and establish themselves in a position as strongly as their other fellow members of the organization. Iran, for example, is reported to have a goal of reaching 4 million barrels daily by 1970 (32), while Libya expects to reach an output of 3 million barrels daily by the same year.(33) New concessionaires have entered in Saudi Arabia, Kuwait, and Iran, and Libya has been considering applications for leases from almost fifty

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(32) Petroleum Intelligence Weekly, November 29, 1965

(33) Ibid, September 6, 1965, page 5

Table VI - 3

"Increase in Production in the O.P.E.C. Area"

(%)

July 1964 - June 1965 ⟷ July 1965 - June 196(

	Quote Assigned by O.P.E.C.	Actual Increase
Saudi Arabia	12.1	15.1
Kuwait	6.5	0.2
Iran	17.5	16.5
Iraq	10.0	4.3
Qatar	32.0	18.1
Libya	20.0	26.6
Indonesia	10.0	4.6
Venezuela	3.3	0.2
TOTAL	10.0	7.9

Source: Petroleum Intelligence Weekly; August 1, 1966, page 5.

companies.(34) Libya's oil Minister, Fuad Kabasi had even stated that his country could "not accept less than parity with the major Middle East producers such as Kuwait, Saudi Arabia, Iran and Iraq."(35) I really doubt that if countries were after higher production, they would have submitted themselves in the long run to the assigned quotas. Sooner or later O.P.E.C. would have had to face the problem of fitting all the estimated increases of the various countries to the market forecast, and failing to do so would have given way to competition among sources.

Venezuela was the only country which seemed to be content with her quota. This was because she believes that if the oil exporting countries coordinate and cooperate, a plan, such as the production plan, would enable all the participants to have a share of the market while strenghthening prices. For a country with a high production (3.5 million barrels daily) proration on all the exporting countries in proportion to existing production would favour her interests since this would stabilize prices. However, the situation did not seem to be so favourable for Venezuela since with her assigned quota, and the rest of the exporting countries pressing for higher production, she was permitting her competitors, both in and out of the O.P.E.C. area, to consolidate their positions in the international market at her expense.

It would be difficult, however, to say how far O.P.E.C. has been successful in her activities. It is true that the Middle Eastern countries and Libya have benefited from this organization because of the hardening of posted prices (on which their tax payments are based),

(34) Petroleum Press Service, September 1965

(35) Petroleum Intelligence Weekly, September 6, 1965; page 5.

and the more recent royalty expensing agreement which is of normal practice in Venezuela. With respect to the royalty expensing agreement, we must mention that it was not accepted by Iraq nor Kuwait because these countries considered that it went against "principles of state sovereignity".(36) The clauses which these two countries went against were the following: (37)

1) The "no additional tax" clause, whereby the Government agrees not to impose any other new taxes on any operations connected with oil, without written agreement from the oil companies.

2) The "quit claim" clause, which stipulates that the royalty expensing agreement is in full and final settlement of any and all past royalties and taxes due to the Government.

3) The "most favoured company" clause, which stipulates that the companies will not be required to pay the additional revenues they are offering under this agreement, if the terms of any other concession granted by the Government to any other company would result in lower payments if applied to the signatory companies.

4) Part of the arbitration clause, which specifies that dispute involving tax matters should be referred to an international arbitration committee. Kuwait demands that they should go to Kuwaiti courts.

It is very significant that the oil companies insisted on the "no additional tax" clause which in effect is a clause limiting the State's legislative power. The countries which accepted the royalty expensing agreement continue then to be limited to a ceiling over which

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(36) Petroleum Intelligence Weekly, March 28, 1966; page 6

(37) Ibid.

they cannot tax the oil companies. In other words, it is the same situation as before, in as much as the 50/50 is nominally the sharing principle for the duration of the concessions involved. The oil companies have agreed to expense royalties, but they made sure that their tax payments would not be raised. Again, this is due to the introduction of the 50/50 agreements in the Middle East which, as we noted earlier, has limited the State's legislative action from the very beginning. The countries that accepted the agreement did get more money, but it is not sure that they could not have obtained the same results by bargaining directly with the oil companies without the backing of O.P.E.C. An achievement it would have been, if O.P.E.C. had been able to eliminate the clauses in question.

III Venezuela as a Member of O.P.E.C.

Venezuela, besides being a founder member, could be considered as one of the chief promoters of O.P.E.C., since, as mentioned earlier, this country began to contact the rest of the major exporting countries as far back as 1949 However, it is difficult to say that she has really benefited by her association with this group. This is so, partly because O.P.E.C. has been mainly concerned with the situation of Middle Eastern countries vis-avis the oil companies, since these countries have been under less favourable conditions than Venezuela due the the limitations imposed on them by their concession agreements with the oil companies, and partly because Venezuela's petroleum industry is characterized by a very different situation in relation to the oil industry of the Middle East.

With respect to the first point, I think it has been obvious how the Middle East has been under a disadvantage without being able to modify unilaterally her petroleum legislation as Venezuela does every time she considers it necessary. In my opinion, Venezuela has been more of a standard for other exporting countries that try to reach many of the prerogatives she has long been enjoying. We thus see, for example, that issues which had to be bargained for the Middle East, such as the expensing of royalties and the reduction of the marketing allowance, did not involve Venezuela because her petroleum legislation had already taken them into account. Recently, Venezuela changed her whole taxing system affecting the oil companies,by establishing reference prices to value exports. This she did by bargaining directly with the oil companies (even if it meant using threats of back taxes and excess

profits tax) and succeeded in an attempt, which to me is comparable to O.P.E.C.'s unsuccesful and forgotten issue of raising posted prices in the Middle East for tax purposes. If, as we shall see l ter, there are opinions that Venezuela's reduction in output during 1966 was due to retaliation on the part of the oil companies because of higher taxes, and parallel to this there was an increase in production in all the other major areas during that year, what benefit did Venezuela get out of O.P.E.C.'s resolution which states that the Organization would react to such cases?

The second reason why Venezuela does not seem to benefit much by her association with O.P.E.C. is because her petroleum industry operates under very different conditions than that of the other member countries. Basically, it is the difference in the amounts of reserves and of the different levels of production between Venezuela and her fellow members, which makes the first insist more on conservation while the rest look forward to further expansion. This to me is one of the main reasons why Venezuela cannot completely intergrate herself with this organization. The majority of the members pursue an objective, which is not compatible with Venezuela's domestic policy; a clear example of this, is the recent attempt to control output. Venezuela agreed to prorration while most other members pressed for higher production. It is obvious that Venezuela will not benefit by associating herself with a group of countries which besides outnumbering her, have different immediate objectives.

It is true that Venezuela has benefited indirectly from O.P.E.C., since as Middle Eastern and African countries raised their share of oil revenue, this narrowed the cost advantage of these regions. However,

I am of the opinion that it would be preferable for Venezuela to follow a more independent line aside from this organization so as not to be too dependent on O.P.E.C.'s success, particularly in joint programmes of any kind.

CHAPTER SEVEN

Conclusions

Venezuela's oil industry is in a critical position at this moment due to the convergence of various circumstances that have placed the country at a disadvantage with respect to other producing areas. It seems, however, that the country's difficulties could be greatly mitigated by a domestic petroleum policy that adjusted itself more closely to reality. Following are the three main conflicting situations which have placed Venezuela in an unfortunate position; if we take notice, we can see that in each case one of the determinants reflects conditions in which the petroleum industry unavoidably has to operate, while the other is the result of a domestic policy that is not appropriate to the situation.

I	Expiring of Concessions in 1983	No system has yet (mid 1967) been established to allow oil companies to operate after 1983
II	Much of Venezeulan oil is naturally high cost.	Domestic Petroleum Policy increases cost to oil companies
III	Oversupply of oil in world markets at current prices; Middle Eastern and African countries eager to expand production.	Venezuela considers oil a national asset that should be conserved until prices are high.

At present there is in Venezuela a highly nationalistic Government headed by a left-wing party that has achieved important changes in oil policy during the times it has come to office. In 1948 it was responsible for the inclusion of the 50-50 clause in the income tax law and announced its particular policy of no more concessions. During its present term in office it has insisted on the substitution for the concession formula that of service contracts, and just recently (end of 1966) has come to an agreement with the oil companies in the country to change the whole basis for the calculation of income taxes by eliminating the use of the "realized price" for a more stable "reference price". It is also of interest to

mention that while this party was in office in1960 the "Corporación Venezolana de Petróleo" (C.V.P.) was founded and Venezuela acted as a chief motivator in the creation of O.P.E.C.

Since the present Government is characterized by having a socialist tenedency and thus believes that all major industries should be controlled by the State, it is difficult to determine whether its petroleum policy has had its faults, or, whether on the contrary, the Government is managing to gain control of the petroleum industry without having to turn to outright nationalization. As one source words it, "Venezuela is no exception to the recent tendency of sub-developed countries in the free world to favour nationalistic ideas of the socialist type, (and)... during the last few years the Government has expressed its interest in controlling the basic industry and public services in the country...."(1) The elimination of the concession system without providing any other system to take its place by which the private companies could operate, the passing over to the national oil company (C.V.P.) of private companies' assets in 1983, the acquisition of control of the internal market by decree and the increase in the costs of the private industry with claims of back taxes and tax reforms at a time when private concerns find it difficult to make Venezuelan oil compete with that of other areas, make us wonder if the Government is not obtaining its goal without causing a greater disruption to

(1) Diaz, L.J.; "Venezuela", Proceedings of the Council of Economics of the A.I.M.E.; New York, March 1966, pages 354, 357.

the industry. Whatever the case might be, the Government has to face the fact that it depends on the oil revenue provided by the oil companies to fulfil the needs of the country, and this is what it must find most difficult to reconcile with the current policy. It is not surprising that the newly elected oil Minister, Dr. Jose Antonio Mayobre, has come to the conclusion that "it is of maximum urgency for Venezuela to overcome the problems that have caused petroleum exports to decline". (2) However, I do not believe that oil barters with countries short of foreign exchange would be the answer.(3)

The aim of obtaining for the country a higher share in its oil income can not be criticized by anyone who does not have opposing interests. On the contrary, one should find laudable such a nationalistic policy. Such has been the attitude of the United Nations which passed a resolution saying that developing countries should have more control of and get more profit from natural resources that are being developed by foreign capital.(4) However, no matter how praiseworthy the attempts of a national Government to obtain benefits for its country may be, one should never ignore the realities of the situation, and by this I mean the Economics of the situation.

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(2) Petroleum Intelligence Weekly, January 9, 1967, page 1

(3) Ibid

(4) Petroleum Intelligence Weekly; December 12, 1966, page 1
(I have been unable to obtain the original source to quote).

I. The expiring of concessions in the near future (1983) has naturally made the oil companies aware that by this date they will have to leave the country, passing all assets to C.V.P., and that their business in Venezuela ends then and there unless some other form of agreement can be settled between them and the Government. They have asked for new concessions but because of the "no concession" policy they have been unsuccessful in obtaining new acreage. The Government has instead promised a new system in the form of service contracts under which the private concerns will be able to work in the future in cooperation with the national oil company. However, no new system has yet been put into practice, since according to Governmental opinions "there is no rush to implement the service contracts."(5) Therefore the companies have followed a policy of amortizing as fast as possible their fixed assets and have limited their new investment to a minimum. This led to the disinvestment of the petroleum industry in Venezuela, and other regions, such as the Middle East and Africa became favoured for their investments. This is only natural if the oil companies have a short period limiting their activities in the country, since new investments for exploration and development would only be justified if they were followed by a period of time that would allow future production to amortize them.

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(5) Manuel Perez Guerrero, Minister of Mines and Hydrocarbons: Petroleum Intelligence Weekly, March 14, 1966; page 1.

The concession system might have proved to be a good one, but I agree that another, such as Service Contracts, could be formulated to be even better. However, the fact that a new system has not been defined has been highly unfavourable for the country and this is one of the main faults of the Government in relation to oil policy.

II. The oil companies, like any other commercial enterprise, are also out to make profits. They will normally concentrate their activities in the more promising areas, and will leave others if according to their standards they are less profitable. This degree of profitability depends on the costs of the industry and on the returns it gets from the sale of the oil, which in turn depend on the demand and supply of products.

As the situation has evolved, and as we have seen in previous chapters, the oversupply of petroleum at existing prices created a Buyers Market that forced the oil companies to grant major discounts in order to sell their oil. In other words, if costs remained unchanged their margin of profits would be reduced. Thus the present situation of the market makes it all the more necessary to concentrate in the lower cost areas as far as possible.

As we have seen, Venezuela occupies the higher cost bracket of the exporting countries in O.P.E.C., while the Middle East and Africa gain favour due to their lower costs. (6) In this sense we have already seen how oil from these scurces competes with Venezeulan oil in some of her more traditional markets, and how the industry is responding to the situation of the market by gradually shifting to lower cost areas. O.P.E.C. countries recognize this

(6) See page 171.

phenomenon as natural to petroleum economics. "If the producer's prices (in one region) are higher than the going level then offtake volumes will shrink, not because the overall consumption of oil is reduced, but because other areas become more economical. Similarly, if his prices are lower, offtake volumes will increase rapidly at the expense of production in other areas." (7)

Thus we have an external situation that is not in the power of Venezuela to change and to which she must adjust herself as best she can. In these circumstances, the normal procedure to follow in order to maintain Venezuela's position in the international market would be to try to counteract internally the disadvantages that Venezuela has with respect to other producing areas. This could be done partly by defining the situation in which the oil companies will be permitted to operate, thus reducing uncertainty and political risk, both of which are costs, and partly by not pressing for higher per barrel revenues if this would lessen total revenue by leading to a lower rate of production. At a time of oversupply it is extremely dangerous to attempt to maximize per barrel revenue, since it may have negative effects on production. Gratifying though a high per barrel revenue may be, Venezuela's financial problems will not be solved by additional per barrel income if production levels continue to decline.

In spite of Venezuela's disadvantage with respect to other regions, and in spite of market pressures, the Government chose the present moment to make a new tax reform seeking higher oil revenues, which in the present

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(7) "Taxation Economics in Crude Petroleum"; page 7; Paper presented by O.P.E.C. at the Vth Arab Petroleum Congress, Cairo, March 16th - 23rd, 1965.

situation of uncertainly and disinvestment of the oil companies in the country proved to be quite inopportune. The whole situation prevailing in Venezuela with respect to uncertainty in oil policy, back tax claims, and tax reforms, plus its disadvantage in costs were to a great extent the reason for a 3% reduction in its output in 1966 while every other major producing area had "sharp" increases.(8)

III As to Venezuela's participation in O.P.E.C I find that she has benefited only indirectly from this Organization while acting as a standard for the rest of the member countries. In this respect it seems interesting to quote Dr. J.P. Perez Alfonzo's opinion on the matter:

> "One must insist" he says, "that the association of Venezuela with other producing countries hasn't been producing any benefits for our country."(9)

We must recall that Dr. Perez Alfonzo was one of the chief instigators in the formation of O.P.E.C. with Abdulah Tariki of Saudi Arabia. What has happened is that O.P.E.C. has directed its efforts towards achieving for the Middle Eastern and African participants a greater financial share in their respective petroleum industries seeking many of the prerogatives Venezuela had been already enjoying such as the expensing of royalties. In this sense, many of these countries were able to increase their oil revenue with the solidarity and backing of the group. However, Venezuela hardly received this kind of benefit. She gained indirectly with the financial gains of her

(8) Petroleum Press Service, January 1967, page 7. I decline to believe, however, that the 3% reduction was due solely to market conditions. I make further observations on this point in following pages.

(9) Petroleum Intelligence Weekly; September 16, 1963, page 1.

fellow members of the group only in as much as this increased the cost of Middle Eastern and African oil to the oil companies and thus narrowed the cost advantage of these regions. Furthermore, the different criteria between Venezuela and the rest of the O.P.E.C. members concerning production rates did not particularly suit Venezuela either. This was due to the "different philosophy", as the specialized press puts it, with which Venezuela and the rest of O.P.E.C. countries approached the problem. (10) Venezuela considers oil as a national asset that should be conserved and sold only when prices - and thus revenues - are high, while the Middle Eastern countries use their oil resources to get money quickly.

Dr. Perez-Alfonzo has expressed the opinion that the present level of oil revenue accruing to the nation is "sufficient" to enable the whole economy to continue its expansion, and that in order to make the optimum use of oil income, its rate of flow over time to the nation should be regulated, and the revenue should be channeled into investments which would produce an increase in the National Product. He therefore considers that, "the present level of oil production should be stabilized and even a gradual reduction could be considered as higher oil prices are achieved."(11)

It is difficult to say if investment opportunities in Venezuela are at present limited due to the lack of skilled labour, entrepreneurs, or market, but if this were the case it might be preferable to obtain the oil income and invest it abroad than to check oil production which might receive a lower price in the future. As we saw, Dr. Perez-Alfonzo counts on achieving a higher "price" for oil (that for the nation means a higher per

(10) Petroleum Intelligence Weekly, December 12, 1966, page 6.
(11) Vertice, July-August, 1966 (Caracas); page 15.

barrel revenue), which in effect the country has been obtaining; and on maintaining the current level of total oil income, which might not have been the case for 1966, or very close to not being.(12) Venezuelan oil policy rest on the assumption that oil has an intrinsic value and that it may be stored until the "price" paid by the oil companies is "reasonable",(13) which seems to fit quite well to Dr. Perez-Alfonzo's theory above. However, since oil has a market value and there is an oversupply at present prices, it seems quite difficult to expect an increase in the per barrel revenue for Venezuelan oil and at the same time maintain the current level of production, while other exporting countries are anxious to expand production which furthermore is of lower cost.

Obviously, each has a right to choose its own "philosophy", but Venezuela should realize that the longer she maintains hers, the further she will be driven out of markets by the rest of the exporting countries. The experiment of the production plan proved many things, but the fact that I wish to point out here is that the Middle Eastern and African countries did not hesitate to make demands for the highest possible output while Venezuela accepted to limit her production in view of the "general" proration plan. This showed clearly that Venezuela could not identify herself with her fellow members of the association without receiving the short end of the bargain. They were

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(12) According to Dr. Perez-Guerrero, Venezuela's previous oil Minister, the nation lost an estimated $45.4 million in oil revenues as a result of the 3% reduction in exports in 1966. (Petroleum Intelligence Weekly, January 9, 1967, page 1)

(13) Term used by Venezuela's President, Dr. Raul Leoni, when the reference price for fuel oil was established. (quoted by: Petroleum Intelligence Weekly, April 4, 1966, page 5)

out to increase total revenue as fast as possible, and Venezuela was after st stable prices.

The result of the experiment is known by all. Not only the failure of the plan became public, but also the incompatability of the two "philosophies". Venezuela could not benefit by keeping her oil in the ground like she expected because the other exporting countries were only too eager to expand their production. It isn't necessary to say she got the best part of the deal in this case.

Venezuela has to realize that in order to revive her petroleum industry she will have to be more realistic with respect to the international situation of the industry. First she will have to realize that presently she has need of the oil companies to market her oil; second, that there is an oversupply of petroleum in the world at existing prices which according to impartial observers will persist; third, that the Middle East and African countries are only too willing to expand production; fourth, that her present petroleum policy is not compatible with that of her fellow members of O.P.E.C. and that fifth, that her petroleum policy is not appropriate to the situation of the international market.

It is true that both companies and host governments assume attitudes and take actions so as to bolster their bargaining position vis a vis one another. This is normal and understandable, but we should always keep in mind that this is a part of the process of negotiations. It would be absurd if we said that Venezuela did not have need of the oil companies to market her oil today. However, it would also be absurd if we said that the oil companies were not willing to come to terms with Venezuela. Mr. John Loudon,

a Director of Shell Oil Company stated it clearly: "Outside of North America, Venezuela is by far the most important country to us in the Western Hemisphere."(14) This is why a solution to satisfy both parties would not be impossible. Both the Government and the companies play the cards that they have, and will also have recourse to a certain degree of "bluff" in order to intimidate the partner. This is natural and not so infrequent when two parties are bargaining. As a recent example, we have Venezuela's threats to impose an excess profit tax and to claim a fantastic sum of money as back taxes in order to make the companies compromise to the new system of calculating income taxes;(15) and on the other hand the continuous warnings from the oil companies of the dark future that awaits the Venezuelan industry. Even the oil press admits that every time Venezuela has changed its taxation structure there have been "prophets of doom" for the oil industry.(16) There are opinions also, that the companies make use of their offtake patterns for reasons "which go beyond purely commercial criteria." (17) According to Dr. Perez Alfonzo, the oil companies in Venezuela were reducing production in 1966 as a bargaining weapon in the negotiations with the Government over back taxes and tax reforms.(18) One thing seems clear, and this is that it is very doubtful that the 3% reduction in Venezuela's oil output during 1966 was due entirely to the market situation when the industry on a whole "achieved the biggest annual increase so far recorded in history".(19) Venezuela's competitive

(14) Petroleum Intelligence Weekly; May 31, 1965, page 6

(15) It seems that Venezuela agreed to accept 1/3 of what she claimed as back taxes. Petroleum Intelligence Weekly, October 10, 1966.

(16) Petroleum Press Service, January 1967, page 7.

(17) O.P.E.C."Notes on Resolution IX 61", page 7; Tripoli, July 1965

(18) Petroleum Intelligence Weekly, May 9, 1966, page 6

(19) Petroleum Press Service, January 1967, page 7.

situation could not have varied so in a year in which, furthermore, the new tax measures were not operative since these were still under discussion. It is difficult to prove that the oil companies reduced venezuelan offtake as a weapon, but as there can be opinions, I also feel inclined to believe that they used this ability in the Venezuelan case.

We have seen, however, that the oil companies have a great concern for a wide diversification of producing areas partly to lessen political risk and and also for strategic reasons. The location of Venezuela in the Western Hemisphere almost at the doorstep of the United States, adds value to her oil and makes Venezuela a convenient place in which to maintain a foothold. This is one card that Venezuela has in her favour and she knows it.

All these considerations are true however, up to a certain point. The oil companies will not want to leave an area that gives them a good margin of profits, but as soon as this margin begins to be threatened they will intensify their operations where there are better prospects. This is the reality that Venezuela must accept. The oil companies, like any other commerical enterprise, are out for profits and they will operate where they can do business. Venezuela has already seen the results of her policy with the disinvestment of the oil industry and also with the reduction of her output. This situation should induce the Government to revise its petroleum policy.

What is urgently needed is to define the grounds on which the oil companies will operate after their concessions expire in 1983 and to ensure that the rules within which they will have to play allow Venezuelan oil to compete with that from other sources. If the Venezuelan Government wants

to do away with the concession system, that is their priviledge, but let us have something ready to take its place to assure the industry its continuity.

In relation to Venezuela's most important market, the United States, I do believe that Venezuela can insist and obtain better terms for her industry. Towards the end of chapter five, I emphasised the need for an agreement between the United States and Venezuela in which Venezuelan oil would be treated with the same considerations as Canadian and Mexican oil. This is of prime importance for Venezuela and very feasible if the United States really considers Venezuela as strategic for Western Hemisphere security Having the American market equally open to Venezulan oil would be an incentive for the oil companies to operate in Venezuela. By doing this, the United States would not be going against domestic producers but only placing Venezuela in a preferential status with respect to producers of the Eastern Hemisphere. I also believe that this kind of relationship between the United States and Latin American countries is far more effective than any aid programme in the form of long term loans.

Venezuela should also be more realistic with respect to O.P.E.C. Not only in relation to the power this organization might have vis a vis the companies and of the control it could gain of the market, but also to the advantages it can offer Venezuela. An international association can be very promising, but many times the comflicting interests or ideas of the members makes it rather inefficient. All the more when the different members find themselves competing with one another to fill their treasury as fast as possible. In such a case, Venezuela rather than submit herself to an

organization where she is outnumbered by members who have their petroleum industries under very different circumstances, and consequently with entirely different ideas or theories as to how to obtain the most benefit from the industry, and where up to the present moment she has received little benefit by her association, it would seem more convenient for her to follow a more independent line so she would not have to depend on the policies of the other members to make her own succeed. I think that the failure of the proration scheme, and still more important, the ambitions of many of the member countries in relation to this plan, is enough to make this worth considering. One Arab member of O.P.E.C. favouring price cuts as a way of introducing Arab royalty oil into the market actually "suggested that competition with non Arab members of O.P.E.C. is no particular crime."(20) Venezuela can continue playing an important part in O.P.E.C, but let not Venezuela depend on O.P.E.C.'s success.

(20) Suggestion attributed to Ashrof Lutfy, Kuwaiti. Delegate at O.P.E.C., Petroleum Intelligence Weekly, March 22, 1965, page 6.

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