HD 9574 •C22A25 v.III

The State of Competition in the Canadian Petroleum Industry

Volume III

International Linkages: Canada and the World Petroleum Market

The State of Competition in the Canadian Petroleum Industry

Statement of Evidence and Material Submitted to the Restrictive Trade Practices Commission in Connection with an Inquiry under Section 47 of the Combines Investigation

Industry, Trade Industrie et Commerce et Commerce MAR 5 491

Library Bibliothèque

relating to

THE EXPLORATION FOR, AND THE IMPORTATION, PRODUCTION, PURCHASE, MANUFACTURE, STORAGE, TRANSPORTATION, DISTRIBUTION, BARTER, SUPPLY AND SALE OF CRUDE OIL, PETROLEUM, REFINED PETROLEUM PRODUCTS AND RELATED PRODUCTS

by

Robert J. Bertrand, Q.C.,
Director of Investigation and Research
Combines Investigation Act

Volume III — International Linkages: Canada and the World Petroleum Market

This is one of a set of seven volumes comprising the Statement of Evidence and Material submitted to the Restrictive Trade Practices Commission in this matter by the Director of Investigation and Research under the Combines Investigation Act. The volumes comprising this Statement include:

Volume I — Findings, Issues and Remedies Volume II — The Domestic Sector: An Overview of the Environment. Industry Behaviour and Performance Volume III — International Linkages: Canada and the World Petroleum Market - The Production Sector Volume IV Volume V — The Refining Sector Volume VI — The Marketing of Gasoline Volume VII - Index: Documents, Hearing Transcripts and other Sources Referenced in Volumes II through VI

© Minister of Supply and Services Canada 1981

Available in Canada through

Authorized Bookstore Agents and other bookstores

or by mail from

Canadian Government Publishing Centre Supply and Services Canada Hull, Quebec, Canada K1A 0S9

Catalogue No. RG53-1981/56-3E

Canada: \$10.00

ISBN 0-660-10847-X

Other Countries: \$12.00

ISBN 0-660-10844-5 (set)

Price subject to change without notice

Table of Contents

VOLUME III: INTERNATIONAL LINKAGES: CANADA AND THE WORLD PETROLEUM MARKET

Α.	Introduction	
В.	Market Structure	
C.	Vertical Integration and the Transfer Pricing Policy of the Multinational Oil Companies	
	1. Transfer Pricing Policy and Performance	
	2. The Harmonization of Crude Oil Transfer Pricing Policies	
	3. The Transfer Pricing Policy of Imperial Oil	
	(a) Exxon Control	
	(b) Imperial's Objectives	
	(c) Imperial's Crude Costs	
	4. The Transfer Pricing Policy of Texaco	
	(a) Control by Parent Firm	
	(b) Price History	
	(c) Security of Supply	
	(d) Coordination Engendered by the Parent Corporation	
•	5. The Transfer Pricing Policy of Gulf	
	(a) Control and Coordination of Behaviour	
	(b) Pricing History Prior to 1970	
	(c) Pricing History After 1970	
	6. The Transfer Pricing Policy of Shell	
	(a) Pricing History Prior to 1970	
	(b) Shell's Perception of Multinational Pricing Practices	
	(c) Pricing History After 1970	
	7. The Transfer Pricing Policies of Sun Oil, and Irving	
).	An Evaluation of the Detrimental Effect of the High Crude Transfer Prices	
	1. The Level of Transfer Prices to Canadian	
	Subsidiaries as Compared to World Market Prices	_
	2. The Effect of the Transfer Pricing Structure	1
<u>.</u>	Conclusion	1
₹.	Appendices	1
	Appendix A: The Determination of Competitive Freight Rates	1
	Appendix B: Derived F.O.B. Prices of Imported Crude Oil	1

Appendix C: Third-Party or Arm's-Length Prices	147
Appendix D: Posted Crude Oil Prices	151
Appendix E: Value of Refinery Product Shipments	155
Appendix F: Calculation of Competitive World Prices	
Delivered at Portland	159

List of Tables and Figures

Table 1	Shares of Crude Oil Production, and Refining Capacity, and Sales of
	Product in the 'Foreign' Oil Industry by Each of the 'Seven Largest' Companies, 1953 and 1972
Table 2	Share of Crude Oil Imports in Quebec, 1960-73
Table 3	Share of Crude Oil Imports in the Maritimes 1960-73
Table 4	Crude and Products, Imports by Company as Percentage of Total Crude
1 abic 4	and Product Imports for Quebec, 1960-73
Table 5	Crude and Products, Imports by Company as Percentage of Total Crude
	and Product Imports for the Maritimes, 1960-73
Table 6	Summary of Largest Companies' Crude Oil Surplus Position, 1957 and 1966
Table 7	Tying Provisions of Gulf Crude Oil Contracts 1959-65
Table 8	Tying Provisions of Texaco Crude Oil Contracts 1956-68
Table 9	A Comparison of The Difference in The Incentives of Imperial and its
	Parent to Replace Brega with T.J. Light in Canada, 1970
Table 10	The Profitability of The Imperial/Mobil Swap to Exxon (1970)
Table 11	Exxon's Producing Economics (1969, 1980)
Table 12	Imperial's Disadvantage in Crude Costs Compared to The "Average of
	Competition"
Table 13	Texaco Crude Prices at Portland
Table 14	Texaco Crude Costs as Opposed to Estimated Market Values for Crude,
	1969
Table 15	"Market Strength" Increases Imposed on Texaco, (1970-1973)
Table 16	Gulf Canada's Crude Imports 1960-1964
Table 17	Gulf Canada's F.O.B. Crude Prices 1961-1969
Table 18	Difference in Crude Prices Offered Gulf Canada and two Gulf 'Regional'
	Subsidiaries by Parent Firm in 1973
Table 19	Comparison of Increases for Gulf Canada (GOCAN) and "Average of
	Competition" for Nigerian Oil, 1970-71
Table 20	Comparison of Gulf Canada's Montreal Refinery Product Costs with
	Caribbean Product Import Cost—1972
Table 21	A Comparison of Changes in Host Government Taxes and The Changes in
	Gulf Canada's Prices—1969-1973
Table 22	Gulf Canada's Crude Slate, 1969-1973
Figure 1	Imperial's Estimate of Overseas Crude Prices — F.O.B.
Table 23	Shell Canada's Venezuelan Crude Costs, 1956-1970
Table 24	Escalation in F.O.B. Costs of Specific Crudes for Gulf and Shell
Table 25	Escalations in Average Landed Costs of Crude Oil for Texaco, Imperial,
	and Shell
Table 26	Shell Delivered Prices at Portland
Table 27	The Shell Groups' Crude Acquisition Costs and The Prices Charged to
	Shell Canada (1972)
Table 28	A Comparison of Venezuelan Prices Charged Sun Limited and Other
m 11 00	Firms by The Sun Subsidiary in Venezuela
Table 29	Comparison of Crude Prices Paid by Sun Limited and its Estimate of
m 11 00	Alternate or Market Values, 1962-1970
Table 30	Comparison of Crude Prices Paid by and Sun's Evaluation of
	Alternate or Market Prices

96 98
98
99
100
110
114
11:
110
118
130
131
132
134
134
139
140
14
143
143
144
14:
14
148
153
150
15
15
15
16

VOLUME III

INTERNATIONAL LINKAGES: CANADA AND THE WORLD PETROLEUM MARKET

A. Introduction

Considerable debate has centred around the ability of the petroleum industry to perform effectively in the public interest in the absence of government controls. In Canada, the extent of governmental interference with the market system has differed markedly across the country.

In the west, oil production was restricted by provincial prorationing. This restraint served to build up substantial excess capacity by the nineteen sixties. The National Oil Policy reinforced the effect of the Alberta prorationing system by restricting the importation of crude oil and refined product into Canada west of a line drawn from Ottawa to Kingston. As a result, the downward pressure on prices that occurred in world markets was deflected from those Canadian markets that lay west of the Oil Policy Line.

In contrast to its affect on Western Canada, governmental restrictions upon the importation of crude and product into Eastern Canada, until the nineteen seventies, have been minimal. As a result, this market can be considered to have been, at least potentially, an integral part of the world market for petroleum. Starting in the late nineteen fifties, the world market was characterized by falling crude and product prices as the production of cheap Middle Eastern oil expanded. Therefore the competitiveness of the Canadian petroleum industry in the absence of government policies can be gauged by the extent to which the performance of the Eastern Canadian market reflected world market conditions. The degree to which Canadian prices equated to world prices and the speed with which they did so are measures of the extent to which the Canadian petroleum industry, when free of governmental regulations, approached the competitive norm established in arm's-length trading in the world market.

This study demonstrates that the performance of the Eastern Canadian market was adversely affected by the transfer pricing policy of the multinationals operating in this market. Throughout the period under study—1958 to 1973—the crude oil prices paid by most of the Canadian subsidiaries of these companies were high compared to arm's-length crude prices and this served to affect prices in the final product market. This outcome was the result of each of the participants in the Eastern Canadian market adopting analogous policies for pricing their crude imports. The actual devices used for harmonizing policy varied over time as circumstances demanded changes in the techniques employed. However, throughout the period, the harmonization focused on the level of crude oil transfer prices.

I

Vertical integration by petroleum companies complicates any study of this industry. Each segment — production, refining, and marketing — must be studied on its own and in relationship to the others. This volume shall focus on what might be referred to as the 'crude acquisition sector' in Eastern Canada. It investigates the way in which the Canadian market for foreign crude oil has functioned. Alone, this section does not suffice to describe the manner in which competition in Eastern Canada was affected by the analogous behaviour of participants in the industry. Activities in the refining and marketing sectors served to augment and to solidify the effects of the behaviour described in this section. These will be dealt with subsequently. However, common approaches to crude pricing outlined in this section provided the foundation for the set of industry activities that adversely affected competition in Eastern Canada.

B. Market Structure

At least in terms of structure, the market in Eastern Canada throughout the post-war period reflected the same forces at work elsewhere in the world. While this is not the place for a comprehensive description of the world market, two salient aspects of the world industry bear on the structure and the resulting behaviour of the Canadian industry. The first is that the number of major producers of crude in the world market remained small throughout the post-war period. The second is that the degree of vertical integration in the industry was very high. Table 1 shows that the top seven firms in the industry in both 1953 and 1972 dominated all three segments of the industry — the production of crude oil, the refining sector, and the marketing of petroleum products.

At the beginning of the post-war period, relatively few producers controlled the world industry. The largest eight firms owned 100 percent, while the four largest of these owned 82.6 percent, of all production outside North America in 1950. The largest seven, commonly known as the 'Seven Sisters', Exxon (formerly Standard Oil Co. (New Jersey)) hereafter Exxon; British Petroleum Company, Ltd. hereafter BP; Royal Dutch Petroleum Company and Shell Transport and Trading hereafter Shell; Gulf Oil Corporation hereafter Gulf; Standard Oil Company of California hereafter Socal; Mobil (formerly Socony-Vacuum Oil Company) hereafter Mobil; and Texaco (formerly The Texas Company) hereafter Texaco² owned virtually all that production since the eighth firm enjoyed only about a 1 percent share.

^{1.} M.A. Adelman, *The World Petroleum Market*, published for Resources of the Future (Baltimore: Johns Hopkins University Press, 1972), Table III-2, p. 81.

^{2.} Neil H. Jacoby, Multinational Oil: A Study of Industry Dynamics, (New York: MacMillan, 1974), p. 10.

^{3.} Adelman, pp. 80-81. The eighth firm was Compagnie Française des Petroles.

The high level of concentration existed because, from an early date, the same 'Seven Sisters'—the majors — contractually tied up the Persian Gulf and Venezuelan reserves. The comprehensiveness of these ties is reflected in the fact that Venezuela granted new concessions only once — in 1956—during the post-war period.¹ However, new sources of crude in Libya and Nigeria were developed in the nineteen sixties and, through competition, began to erode the control enjoyed by the majors.² As a result, the 'Seven Sisters' share fell from about 89 percent in 1957, to some 78 per cent in 1966, and then to about 76 per cent in early 1969.³

A similar trend is evident at the other levels of this vertically integrated industry. As Table 1 shows, the percentage of world non-communist refining capacity outside of the United States owned by the seven majors fell from 72.6 per cent in 1953 to 48.6 per cent in 1972. Similarly, their share of total sales of product in eastern hemisphere non-communist markets fell from 71.7 per cent in 1953 to 54.2 per cent in 1972. However, the decline indicated by these numbers overestimates the degree to which the accompanying structural change may have been conducive to competition in the world market as a whole. Many new entrants which arguably diminished industry concentration were government companies whose activities did not substantially extend beyond national boundaries. In some countries, new ventures were jointly owned by the majors and domestic enterprises. As such, their classification as independent forces in the world market is incorrect. Therefore the degree of concentration on a world basis diminished but not so substantially as the relative share figures suggest. Moreover, the effective concentration levels attained by the 'Seven Sisters' would appear to have been even higher than these simple percentages suggest. This was by virtue of the extensive linkages between, and the consequential interdependence that developed among various groupings of the Seven.

With no governmental restrictions on imports of crude oil and petroleum products, Eastern Canada has been a part of the world market for most of the post-war period. However, not all the large multinational petroleum companies have operated here. Control over crude oil imports rested with the integrated Canadian subsidiaries of a subset of the seven largest multinational oil companies. Therefore the initial concentration of crude imports into Canada was even greater than the concentration of crude oil production in the world arena. It also remained relatively higher at the end of the period.

Before the structure of the industry in Canada is examined, the relevant market needs to be defined. Ideally, Eastern Canada should be defined as that area of Canada that has been served, in whole or in part, by products

^{1.} Adelman, The World Petroleum Market, p. 100.

^{2.} John Blair, The Control of Oil, (New York: Pantheon, 1976), p. 84.

^{3.} Adelman, The World Petroleum Market, pp. 80-81.

TABLE 1

SHARES OF CRUDE OIL PRODUCTION, AND REFINING CAPACITY, AND SALES OF PRODUCT IN THE 'FOREIGN' OIL INDUSTRY BY EACH OF THE 'SEVEN LARGEST' COMPANIES, 1953 & 1972

(000 bbl/day)

Company	Production ¹	1953 Refining ² Capacity	Sales ³ of Product	Production	1972 Refining Capacity	Sales of Product
Esso	24.9	18.9	18.0	13.7	13.1	12.8
B.P.	20.6	17.9	11.3	14.9	8.1	9.4
Shell	12.3	22.3	26.2	11.3	12.1	14.0
Gulf	11.2	1.2	1.5	8.1	2.8	1.7
Texaco	6.7	4.4	4.3	9.3	5.1	6.7
Socal	6.1	3.8	4.3	8.6	3.8	4.1
Mobil	5.3	4.1	6.0	5.0	3.8	5.4
Subtotal	87.1	72.6	71.7	70.9	48.6	54.2
Others	12.9	27.4	28.3	29.1	51.4	45.8

Notes: 1) For foreign non-communist world petroleum exploration concession areas of twenty leading firms.

Source: Jacoby, Multinational Oil, pp. 177, 198-9, 207-8.

refined from imported crude. Prior to 1961 and the implementation of the National Oil Policy, this definition would have included much of Ontario within Eastern Canada. After 1961, to the extent that government policy substantially reduced the westward flow of crude and product across the National Oil Policy Line, Eastern Canada would be defined as that area to the east of this line. This includes the eastern tip of Ontario, all of Quebec, and the Maritimes. However, it is misleading to refer to Eastern Canada as if it were only one homogeneous market. The Quebec and the Maritimes markets differed markedly in character. The size of the Ouebec market and its density attracted relatively more firms. In addition, prices in the two markets did not equate. Although Imperial Oil Ltd. found that its rate of return fell to low levels in Quebec, its results in the Maritimes were judged acceptable (Document # 106935). As Imperial noted: "... the relatively small spread out nature of the [Maritimes] market does not make it nearly as attractive for new entrants as in the case of Quebec" (Document # 106935).2 Therefore although the term Eastern Canada will be used to refer to two main markets — Quebec and the Maritimes — the market structure of each should be examined separately.

Imports into Quebec have been dominated by subsidiaries of four of the major multinational petroleum firms — Exxon, Gulf, Shell, and Texaco. Each subsidiary was controlled by one of the large multinational petroleum

²⁾ For foreign non-communist world refining capacity of twenty leading companies.

³⁾ For non-communist eastern hemisphere markets of twenty leading companies.

companies, though in each case, there were minority shareholders. As of 1975, Exxon owned approximately 69 per cent of Imperial; Gulf Oil Corporation, 69 per cent of Gulf Canada; the Shell Group of companies, 79 per cent of Shell Canada; and Texaco, 68 per cent of Texaco Canada. Table 2 outlines the share of Quebec's crude oil imports by company for the period 1960 to 1973. In 1960, these four firms accounted for 84 per cent of all crude imports into Quebec. By 1973, their share had fallen to 61 per cent as the result of entry by new firms and the expansion of existing firms. Most of the deterioration in the market share of the four largest majors occurred during the early part of the decade as the result of expansion by British Petroleum (B.P.) and by Petrofina — the former, one of the 'Seven Sisters', the latter, a much smaller firm when measured on a world scale but nevertheless an integrated multinational. Between 1960 and 1968, the four largest firms' market share fell by 12 percentage points while the share of B.P. and Petrofina together increased by 9 points. Therefore, during this period, the market share of the six largest firms stayed above 90 per cent. By 1973, the share of the largest six firms fell to about 80 per cent with the entry of Ultramar, a 'lesser' integrated multinational petroleum company.1

To summarize, entry occurred in Quebec but concentration levels (as measured by share of crude imports) remained higher than in the world production sector. Adelman estimated that in the world market the percentage of production accounted for by the eight largest firms was 100 per cent in 1950, but had fallen to about 80 per cent by 1969.2 In Ouebec six firms controlled about 94 per cent of imports in 1969. This difference between the structures of the Quebec market and the world market continued into the early nineteen seventies. The six largest firms' share in Quebec, which remained above 90 per cent in the nineteen sixties, fell to 80 per cent by 1973 mainly as the result of the entry of Golden Eagle (Ultramar), another smallish but integrated multinational. In contrast, the seven largest firms on the world scene accounted for only 71 per cent of production in 1972.3 It is apparent, therefore, that during the nineteen sixties the Quebec market for crude oil was dominated by a subset of the small number of firms that produced most of the world's crude oil and that it had a structure that was more concentrated than that found in the world production sector.

^{1.} The degree of independence possessed by Ultramar in the Canadian market is not clear. During the period in which Ultramar acquired a share of the Quebec market, its parent was negotiating and concluding a complex, international, asset sale and supply-processing agreement with Texaco's parent. Apparently as part of this agreement Texaco Canada was linked to Ultramar via a commitment to take refined product from Ultramar's new refinery in Quebec city,

^{2.} Adelman, The World Petroleum Market, p. 81.

^{3.} Jacoby, Multinational Oil, p. 177.

65

22

59

20

61

19

69

24

Rows 1-4

Rows 5+7

						(%	₅)								
Company/ Year	Row	1960	61	62	63	64	65	66	67	68	69	70	71	72	73
Gulf	(1)	15	14	14	14	15	15	19	18	18	16	15	14	12	12
Shell	(2)	22	22	21	19	20	19	18	18	16	18	19	19	18	20
Imperial	(3)	24	25	25	25	26	26	24	24	24	21	22	21	18	18
Texaco	(4)	23	21	19	18	14	14	13	13	14	13	13	11	П	11
B.P.	(5)	6	6	8	9	П	12	12	11	12	13	11	10	9	8
Sun	(6)			2	2	3	3	2	3	3	3	2	3	3	2
Fina	(7)	10	10	10	11	11	12	11	13	13	13	13	12	11	11
Cities Service	(8)		I	2	2										
Murphy Irving	(9)									1	3	4	4	4	3
Golden Eagle	(10)												5	15	15

75

22

74

24

74

23

73

24

72

25

68

26

76

20

TABLE 2 SHARE OF CRUDE OIL IMPORTS IN QUEBEC, 1960-73

16 Note: Columns may not add to 100 per cent because of rounding error.

82

18

84

16

Table 3 shows that the Maritimes market was even more concentrated than the Quebec market. Two firms - Imperial and Irving - accounted for around 100 per cent of crude oil imports at the beginning of the nineteen sixties. As in Quebec, the dominant Canadian firms operating in this market were direct or indirect extensions of the major multinational petroleum companies.1 By the end of the decade, these two firms still accounted for about 80 per cent of crude imports into this region. Since Imperial's refinery was located in Nova Scotia and Irving's was in New Brunswick, the concentration of crude imports would be even higher if measured on a provincial basis. The major new entrant in the early nineteen seventies was Gulf with a refinery at Point Tupper — a refinery that was built as much for the export trade as for the domestic market. By 1973, three firms—Imperial, Gulf, and Irving—accounted for 87 per cent of all crude imports.

TABLE 3 SHARE OF CRUDE OIL IMPORTS IN THE MARITIMES, 1960-73

						,, 								
Company/Year	1960	61	62	63	64	6 5	66	67	68	69	70	71	72	73
Imperial	100	54	55	51	45	45	44	47	42	46	43	31	23	27
Texaco Gulf				6	10	9	9	10	12	12	12	8 21	6 31	6 25
Irving		45	39	36	37	38	39	35	35	33	36	32	35	36
Golden Eagle Nfld: Refining		I	7	7	7	7	8	8	H	9	9	7	5	3

Note: Columns may not add to 100 per cent because of rounding error.

^{1.} Irving was linked to Standard of California via ownership of Irving Refining and purchased crude from this organization.

Since refined product imports are a substitute for domestically refined products obtained from imported crude, trends in the concentration of imported crude may not properly reflect changes in market structure of this sector of the industry. Therefore Tables 4 and 5 recalculate the import shares of both crude and product for each company for Quebec and the Maritimes separately. When this is done, Table 4 indicates that the dominant position of Imperial, Gulf, Shell, and Texaco in Quebec is not changed. In 1960, their share of both crude and product imports into Quebec was about 82 per cent; in 1968, it was about 67 per cent.

Product imports had less effect on concentration in the Maritimes. A comparison of Tables 3 and 5 shows that the decline in the market share of Imperial and Irving in imported crude from 1961 to 1970 was 20 percentage points; whereas, when imported product is added, their loss was only about 16 points. Contrary to the Quebec situation, product imports were not as important in explaining the declining concentration in the Maritimes; for, in Quebec, adding product to crude imports increased the amount by which the share of the four largest majors declined between 1960 and 1970. This suggests that if product imports played an important role in determining domestic prices, then the performance of the Maritimes market should have been different from that of Quebec.

Thus the structure of the market for crude in Eastern Canada reflected some of the forces at work in the world. Both the world market and the Eastern Canadian market were highly concentrated in the early nineteen fifties but became less so by the end of the nineteen sixties. The difference between the two is that in Eastern Canada concentration was generally higher. In addition, the Eastern Canadian market was dominated throughout this period by subsidiaries of the 'Seven Sisters'-multinational petroleum companies whose interdependence has been well documented elsewhere. In some cases, joint ventures permitted the mutual interdependence of these firms to be strengthened because of the nature of the information provided each on others' activities. In other cases, the strengthening was more explicit, since some production and operating plans required joint action.2 In yet other cases, it developed because of agreements that had the effect of 'suppressing discoveries'. In still other cases, it occurred because long term supply contracts tied firms together. One such relationship tied British Petroleum and Exxon together. Another such arrangement between Gulf and Shell tied crude prices to product realizations in downstream markets where both buyer and seller competed with one another. The Gulf/Shell contract for Kuwait crude penalized Gulf if its actions negative-

^{1.} Blair, The Control of Oil, passim.

^{2.} Adelman, The World Petroleum Market, pp. 82-91.

^{3.} Blair, The Control of Oil, pp. 81-85.

TABLE 4

CRUDE AND PRODUCTS, IMPORTS BY COMPANY AS PERCENTAGE OF TOTAL CRUDE AND PRODUCT IMPORTS FOR QUEBEC 1960-73

(%)

	Row	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
Imperial	(1)	25.6	25.5	25.4	25.7	25.1	25.5	23.7	23.4	23.3	19.5	19.3	18.2	16.3	17.4
Shell	(2)	21.5 (23.6)*	21.3 (23.8)*	20.2 (22.0)*	18.2 (20.5)*	18.1 (21.3)*	17.4 (19.8)*	18.1 (20.8)*	17.9 (20.4)*	17.4 (21.7)*	17.5 (23.2)*	19.3 (25.3)*	18.5 (24.1)*	18.0 (22.4)*	19.3 (23.2)*
Texaco	(3)	20.0	19.3	16.4	15.9	11.5	11.5	11.3	10.5	11.2	10.0	10.9	9.7	9.9	9.9
Gulf/BA	(4)	14.6	13.0	13.1	12.6	13.5	14.6	16.9	17.3	15.2	14.8	13.3	12.2	10.6	11.1
Fina	(5)	9.1	9.3	9.0	9.3	9.2	9.1	9.3	10.0	9.8	10.4	10.7	10.5	9.8	10.3
BP	(6)	5.8	5.3	6.7	7.7	9.5	10.1	10.7	10.4	9.8	10.8	9.2	9.0	8.0	7.4
Can. Fuel	(7)	1.9	2.4	1.7	2.3	3.2	2.4	2.7	2.5	4.3	5.7	6.0	5.6	4.4	3.9
Irving	(8)	1.2	1.2	0.9	0.9	0.6	_		_	_		_	_	_	_
Can. Oil	(9)	0.2	0.2	0.1	_	_	_			_		- ,,		_	
Sun	(10)	0.0	0.1	1.7	2.0	2.7	2.6	1.7	2.5	2.0	2.5	2.0	2.8	2.6	2.2
Cities Serv.	(11)		1.2	1.9	1.5			_		_					_
Others	(12)		0.9	2.5	2.5	3.8	4.9	3.7	4.0	4.3	5.2	4.4	4.2	4.5	2.3
Golden Eagle	(13)	_	0.4	0.6	1.4	2.9	1.8	1.8	1.5	1.7	1.4	1.8	6.1	12.8	13.1
Murphy	(14)	_					0.2	0.2	0.1	0.9	2.2	3.2	3.3	3.2	3.1
Rows 1-4		81.8	79.1	75.1	72.4	68.1	69.0	70.0	69.1	67.1	61.8	62.7	58.6	54.8	57.6
Rows 1-4 & 7		83.7	81.5	76.8	74.7	71.3	71.4	72.7	71.6	71.4	67.5	68.7	64.2	59.2	61.5
Rows 5 & 6		14.9	14.6	15.7	16.9	18.7	19.2	20.0	20.4	19.6	21.2	19.9	19.5	17.8	17.7

Notes: 1) *Shell plus Canadian Fuel plus Canadian Oil.

²⁾ Columns may not add to 100 per cent because of rounding error.

TABLE 5

CRUDE AND PRODUCTS, IMPORTS BY COMPANY AS PERCENTAGE OF TOTAL CRUDE AND PRODUCT IMPORTS FOR THE MARITIMES 1960-73
(%)

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
Imperial	84.7	52.2	49.8	47.7	42.5	42.2	42.0	43.2	38.9	40.8	37.8	30.1	22.9	25.9
Irving	6.1	39.6	34.8	32.3	34.4	35.4	38.5	37.2	37.1	35.8	38.2	31.5	33.9	35.4
Gulf/BA	4.9	2.7	4.4	4.5	4.4	3.6	0.9	0.6	1.2	0.9	1.8	19.5	29.4	24.4
Shell	4.3	2.1	2.6	2.0	2.4	1.8	1.8	1.3	1.2	1.3	1.4	1.4	1.4	1.2
									(1.3)*		(1.4)*	(1.8)*	(1.8)*	(1.6)*
Others		2.0	2.9	2.3	1.5	2.1	1.7	1.6	1.8	1.8	1.4	1.3	1.2	1.2
Техасо	_	0.9		5.3	8.5	7.8	7.7	8.1	9.6	9.1	8.7	7.2	5.8	5.9
Golden Eagle	_	0.5	5.5	5.8	6.3	7.1	7.2	7.8	10.0	10.4	10.7	8.7	5.0	2.9
Fina	_		_				0.2	0.4	_		_		_	_
Can. Fuel			_	_	_			_	0.2		0.1	0.4	0.4	0.4
Nfld. Ref.			_	_	_			_						2.8
BP	_	_	_	_	_			_	_	_	_	_		_
Can. Oil	_		_		_			_		_	_	_	_	
Murphy	_	_	_		_	_		_	_	_	_		_	
Sun	_			_	_		_	_		_				
Cities Serv.				_	_				_				_	

Notes: 1) *(Shell + Can. Fuel)

2) Columns may not add to 100 per cent because of rounding error.

ly affected Shell's markets. Thus the monopolistic situation that governed the performance of the Eastern Canadian market was the control over imports that was exerted by a small group of firms with common and closely linked interests. Together, the extent of control exerted by the large multinational oil companies over crude sources and the close links that had developed among these firms meant they had the potential to exploit various downstream markets — especially one like Eastern Canada where concentration was relatively high.

The study of the interface between the firms operating in the Eastern Canadian industry and their parent firms reveals the extent to which the discretionary power possessed by the giant multinationals was used to exploit the Canadian consumer. Since the Canadian market has been populated mainly by subsidiaries of the multinational oil companies, a study of this market must, of necessity, examine the nature of the relationships between the Canadian subsidiaries and their parents. Given the predominant position of these subsidiaries in Canada, the transmission of world market forces to Eastern Canada has depended to a large extent upon the degree to which vertical integration served to facilitate or to deflect the transmission of trends from the world arena to Eastern Canada. Therefore a study of competition in the petroleum industry in Eastern Canada must involve an evaluation of the effects of vertical integration in a multinational context.

C. Vertical Integration and the Transfer Pricing Policy of the Multinational Oil Companies

1. Transfer Pricing Policy and Performance

The extension of the concentrated world industry into Canada via the multinational firm delayed the transmission to Canada of competitive forces that emerged at this time in the world market. It has been recognized that the downstream extension of the tightly knit oligopoly that existed at the world level in the production sector served to reduce the competitive pressures that would have otherwise developed in crude markets. For instance, Adelman noted that an independent refining sector would have provided more competition in the crude markets:

"An independent refining industry would have provided a world market in crude oil, with producers selling as producers in a wide market rather than as refiner-marketers in many narrow markets. Competition would have been much more intense in such a market."

When analyzing the extent of vertical integration in the Canadian marketing sector, firms like Texaco Canada indicated that a motive for integrating forward was to prevent large independent marketers from obtaining low

^{1.} Adelman, The World Petroleum Market, p. 92, and Blair, The Control of Oil, pp. 42-43.

^{2.} Adelman, The World Petroleum Market, p. 97.

prices (Document # 49802). The same objective was furthered by the multinationals' extension into and their dominance of the Eastern Canadian imported crude market. During much of the post-war period, the majors were in the position of having excess crude—given the prices they had set. Table 6 indicates that, even as late as 1966, the eight major multinationals had more crude under their control than they used in their own refineries. With the entry of new firms, competition in the world crude market developed that placed inexorable downward pressures on crude prices during this period. As shall be demonstrated, the multinationals used their dominant position in the Eastern Canadian market and their control over the firms operating therein to keep crude import prices and Canadian product prices from declining in response to trends in world markets as fast as they might otherwise have done.

Together, the high level of concentration in the industry outside of Canada and the joint activities of the majors in the Persian Gulf meant overseas co-operation could be used to affect the Canadian industry. In the early postwar period, policies were harmonized by linking the prices paid by the Canadian subsidiaries' one to another using explicit formulae. At a later date, the same result was accomplished in a variety of other ways.

Of course, concentration of the industry located outside of Canada, without a degree of vertical integration into Canada, might have been sufficient to enable high prices to be set for the Canadian market. The Canadian market might have been exploited by the producing oligopoly without a substantial degree of vertical integration if the member firms could successfully have fixed a crude price that was considerably above the competitive level. It is a well known proposition that, in a model with fixed proportions, a raw material monopolist need not integrate downstream to capture monopoly surplus.² Thus, in the case of a monopolist with fixed proportions, vertical integration cannot be treated as extending market power that already exists at one level of production. However, this argument applies to a monopolist. The petroleum industry is an oligopoly rather than a monopoly. In this case, vertical integration, when adopted, can be used to extend market power because it may serve to coordinate policies — the lack of which might otherwise cause oligopoly discipline to breakdown.³

While concentration and vertical integration were the structural characteristics essential to the exploitation of the Canadian market, the actual mechanism used to accomplish this involved the adoption of analogous pricing formulae that resulted in high crude prices for Canadian subsidiary purchases.

^{1.} Adelman, The World Petroleum Market, pp. 196-204.

^{2.} F. Warren-Boulton, Vertical Control of Markets, (Cambridge, Mass: Ballinger, 1978), p. 55.

^{3.} See R.O. Jones, Vertical Integration, Cartel Coordination and The Petroleum Industry, (Unpublished Ph.D. thesis, University of California, Santa Barbara, 1977), ch. II.

TABLE 6

SUMMARY OF LARGEST COMPANIES' CRUDE OIL SURPLUS POSITION, 1957 and 1966 (000 bbl. daily)

	Esso	Mobil	Socal	Texaco	BP	Gulf	Shell	CPP	Total
Production									
1957	1,782	393	529	617	977	774	1,497	183	6,751
1966	3,352	953	1,166	1,440	2,423	1,633	2,380	829	14,176
Total availability									
1957	1,887	437	529	617	827	362	1,853	193	6,705
1966	3,608	1,016	1,166	1,440	2,130	866	3,241	866	14,353
Surplus (production basis)									
1957	393	98	252	216	335	628	290	1	2,213
1966	349	109	562	382	838	1,182	-213	291	3,500
Surplus (total availability basis)									
1957	498	143	252	216	185	216	646	11	2,167
1966	604	172	562	382	545	435	648	328	3,676
Increase				•					
1957-66	106	29	310	166	360	219	2	317	1,509

Note: Production plus receipts on long-term sales contracts (or minus deliveries on long-term sales contracts) equals availability. Subtracting refinery throughput leaves surplus available for sales to third parties.

Source: Adelman, The World Petroleum Market, p. 91.

Since other mechanisms could have been used to exploit successfully the opportunities offered by the Canadian market — such as a combination of a low transfer price for crude and a controlled, high product price — reasons for the choice should be explored. No such reasons emerge from individual corporate records and so they must be sought by inference. Any oligopoly that seeks to maximize profits must arrive at a rule that is both relatively simple and yet predictable in application if it is to coordinate the activities of member firms. Simplicity reduces the cost of coordinating activity. Predictability reduces the chance that misunderstandings will develop and that coordination will breakdown. In the absence of an explicit agreement as to the price level, oligopoly managers must pursue tacit arrangements by price and output decisions that can be understood easily and that are least likely to invite disequilibrating retaliatory action. Therefore an oligopoly will want to reduce the number of acts required to coordinate behaviour. If managers can restrict the number of price and output decisions they make, they can accomplish this. Hence, where there are a relatively large number of final products but only a few intermediate ones there is an incentive to make price and output decisions at the intermediate level rather than at the final product level. Simply put, this argues that the observed analogous crude pricing mechanisms were adopted because they offered an efficient method of behaving predictably in pursuit of joint maximization and of reducing the likelihood of retaliation.

Other features of the Eastern Canadian petroleum oligopoly reinforced the desirability of pursuing joint maximization through visible, predictable crude pricing strategies. These factors were the existence of minority shareholders and Canadian tax authorities. Both required that acceptable levels of profit remain in Canadian subsidiaries after they had paid the analogously derived, 'unrealistically' high crude prices. The first required a fair return on investment, the second applied fair market value rules to prevent tax revenue exports. In order to satisfy both these external demands for profit, the subsidiaries had to ensure that the high crude transfer prices were reflected in commensurately high product prices. Since together the oligopoly's Canadian subsidiaries had a major share of the Eastern Canadian market, they possessed sufficient market power to satisfy the external demands for profit by imposing high product prices because they knew the lower priced independent marketers were not important enough to cause a breakdown in product prices. In addition, as the Marketing Volume demonstrates, predatory policies were used against those who did threaten price competition.

In sum then, both the endogenous structure of the international industry and its reflection in the Eastern Canadian market, together with exogenous features of that market propelled the industry toward the adoption of visible, predictable formulae for imposing high crude transfer prices on the Canadian subsidiaries of the international oligopoly. It was in this way that the

major oil firms exercised their power in a fashion deleterious to the Canadian market. Canadian crude import prices were kept above arm's-length or competitive levels for much of the post-war period. This, in turn, increased Canadian product prices above what they would otherwise have been.

While the argument presented above suggests that high crude transfer prices can be used to generate monopolistic profits, there is a second reason why high transfer prices can be pursued to advantage irrespective of their influence on downstream product prices. Taxation considerations also suggest that the vertically integrated nature of the industry would have led to high crude prices being charged the Canadian subsidiaries of the multinationals. During the post-war period, American tax law provided an incentive for American multinational petroleum companies to transfer income from consuming to producing countries. Middle Eastern producing countries levied taxes on the difference between non-market posted prices and a fixed per unit cost of production. Essentially this tax amounted to a fixed per barrel tax and meant the marginal foreign tax rate on all revenue that could be sourced in the Middle East rather than Canada would be zero. As long as such revenues were not subject to American taxes, the marginal United States tax rate for the American multinational petroleum companies would also have been zero. Since the United States Treasury accepted as tax credits the royalties levied in the oil producing countries as income taxes, they were deductible from U.S. tax liabilities on foreign income. These credits were greater than the tax liability on foreign income of American petroleum companies for the period between 1962 and the early nineteen seventies.1 The range of prices over which this tax incentive was operative was quite large. For instance, in 1968, the excess foreign tax credits of the American oil companies amounted to 32 per cent of total foreign taxes paid.² As such, the marginal U.S. tax rate on funds that could be transferred from Canada to producing areas was close to zero. Therefore the sourcing of increased amounts of income in the Middle Eastern producing countries provided the American multinational petroleum companies with a method of decreasing their global tax liabilities. The fixed tax per barrel levied by the oil producing countries and the excess tax credit position created by the American taxation system meant that taxes could be saved by shifting income from such consuming countries as Canada to producing countries.

Evidence that multinational firms operating in Canada took advantage of this can be found. As shall be demonstrated in this volume, the price each paid for crude was above world market levels. But just as important, the Canadian companies acknowledged the tax advantage that existed and their

^{1.} Glenn P. Jenkins and Brian D. Wright, "Taxation of Income of Multinational Corporations: The Case of the United States Petroleum Industry", Review of Economics and Statistics, (February 1975), pp. 3-4.

^{2.} Ibid., p. 4.

parents' tendency to exploit this advantage by charging the Canadian companies high crude prices. Documentary evidence confirms that throughout this period, Exxon acted in such a way as to maximize its world profits. In 1967, an Imperial study of marketing in the Montreal Refinery area noted, as "background" information to the study, that Exxon's "inter-affiliate transfer prices [are] set to maximize profits" (Document # 89023). Profit maximization required high crude prices as was admitted by a statement emanating from the Exxon Chief Executive's Conference, held in April of 1973:

"Past strategy has been to foster strong crude prices — both in the open market and to affiliates — since this contributed most to the total integrated profits as long as we had adequate equity crude resources."

(Document # 110455, April 4, 1973, Imperial)⁵

Sun Oil Company is also forthright in describing why its parent adopted the policy of charging it high transfer prices. The prices that Sun Oil paid throughout the nineteen sixties were admitted to be "normally higher than arm's-length, world-market crude oil prices" (Document # 83938).6 As Sun acknowledged, it was "to the benefit of the consolidated Sun organization for Sun Limited to pay a price as high as possible that is also acceptable to the Department of National Revenue" (Document # 83926).7 A Sun analyst explained why Sun Limited — the Canadian company — was charged more than the market price:

"In summary, the answer is that tax dollars are saved in Canada, and therefore, for Sun Oil Company overall, by this pricing method . . . for U.S. tax purposes, the parent company has a large foreign tax payment to use as a credit or deduction in computing U.S. taxes on consolidated results. Sun (U.S.) can, therefore, take in foreign-source income as, for example, via sale of crude to Sun Limited at high prices, and offset this by using these credits or deductions to eliminate taxes on such income here."

(Document # 83938, September 18, 1970, Sun)8

Thus the fact that Canadian subsidiaries of multinationals paid 'unrealistic' prices for crude oil can be explained by two phenomena. First, this may have served to create monopolistic profits. Secondly, it may have served to transfer taxes from the Canadian government to the multinationals or to foreign jurisdictions. While the manifestation of the policy would have been the same in each case—high transfer prices—the effects were different. Facilitating oligopolistic coordination would have enhanced Canadian product prices and the amount of profits earned in Canada. Facilitating a transfer of taxes would only have affected the amount of profits recorded as being earned in Canada and not product prices. It is in the former case that detriment to the competitive process occurred and is distinct from the detriment imposed on Canada's tax revenues.

Thus it is the relative level of transfer prices of crude and the effect of higher than arm's-length crude prices on product prices that concerns this study.

A decrease in the price of Canadian crude imports over the period under study should not be interpreted to indicate that the petroleum oligopoly did not successfully wield its market power. Prices rarely remain constant in an industry. Even an oligopoly which is able to take advantage of a monopolistic situation will change its prices in response to changing conditions. What is of interest is the extent to which Canadian prices continually stayed above world prices.

This phenomenon is investigated in subsequent sections on a companyby-company basis. The performance and behaviour of each of the companies was not identical. As should be expected, their relative positions in the Canadian market and that of their parents in the world market meant each did not adopt identical transfer prices. Imperial, as the subsidiary of the largest oil firm in the world and as the largest Canadian company, behaved very much in accord with what the theory of a dominant firm, which is willing to accept entry, predicts. Its crude prices were amongst the highest of all companies. On the other hand, Gulf Canada, as the subsidiary of a parent whose crude production capacity substantially exceeded both its refining and marketing capacities (see Tables 1 and 6), was more aggressive and paid less for its crude. While differences in the pricing policies of the Canadian subsidiaries did exist, it is the similarity in the crude transfer policies of the various companies that is of greater importance. A joint profit maximizing oligopoly generally suffers from divergent interests among its members. This divergence need not prevent member firms from adopting predictable, stabilizing and, therefore, mutually reinforcing behavioural patterns. The extent to which this pattern succeeded in maintaining the crude prices that were paid by Canadian operating subsidiaries above world market levels is investigated herein. It is shown that each of the four majors' Canadian subsidiaries were charged comparatively high transfer prices. In a subsequent section, all the evidence is accumulated and compared to a time series of market prices that prevailed in the world. Finally, the last section links the performance of the crude and product sectors in Eastern Canada and shows that the higher than arm's-length crude prices were passed through to the product market.

2. The Harmonization of Crude Oil Transfer Pricing Policies

The previous section characterized the tendency of the world petroleum oligopoly to integrate vertically into downstream markets such as Canada as an attempt to maintain stability in both product and crude markets. Higher than normal crude transfer prices were the instrument to be used to obtain this objective. But vertical integration was only a necessary step in accomplishing this goal. The industry also had to maintain harmony with respect to the pricing policies to be used.

In the Canadian case, two different methods of achieving this objective were followed during the time period under study. In the earlier part of the period, the degree of concentration in the industry and the existence of posted prices, which were accepted benchmarks for the state of the market, made the coordination of transfer prices relatively easy. Generally, the major multinationals which operated in Canada did this by linking their subsidiaries' prices to the posted prices of each other at the production level. However, when posted prices lost their validity as transaction prices, and were abandoned for this purpose by the industry, the majors were forced to adopt a new arrangement. Instead of focusing on the price postings of one another at the producing level, the two leading majors concentrated on local conditions in Eastern Canada. The shift in approach served to create a new predictability that, while less certain than the first, was just as effective given the degree of inter-subsidiary communication that existed.

During the late nineteen fifties, Canadian subsidiaries were charged world posted prices by their parent firms. These prices were comparatively high as events of subsequent years were to prove. Not only is it significant that prices were 'unrealistically' high — this will be dealt with in succeeding sections — but it is also significant that the similarity of policies adopted was the result of deliberate action. Not only did parent companies constrain their Canadian subsidiaries via the imposition of high transfer prices, but also they did so in a manner that made the behaviour of each subsidiary predictably similar to that of the others. This was done by tying the price that Canadian subsidiaries paid, one to another, in an indirect fashion. The precise tying formula varied from major to major, but as the following review of the various company policies makes clear, the policy allowed for both the easy estimation of any given price and for the adoption of a generally acceptable price level.

From 1955 to 1960, Gulf's price for oil was tied to the price of United States Gulf Coast crudes.' Gulf's price was set to equal the average of postings by "Humble, Magnolia, Texas Co., Stanolind, Carter, Shell and Sinclair" on crude of similar gravity to West Texas Sour and Oklahama Sweet plus 8.5 cents per barrel. (Exhibit T-28, Gulf, Toronto Hearings, 1975)° Starting in 1959, Gulf changed this to the average price posted by 'Sister' companies in Venezuela or the Middle East. Table 7 indicates that, in 1960, T.J. Medium—a Venezuelan crude—was to be priced on the basis of Exxon's postings and any changes in Exxon's postings were automatically to cause Gulf's price to change. All other Venezuelan crudes were to have their prices changed on the basis of the average postings of Creole (an Exxon Venezuelan subsidiary), Shell, and Mene Grande—a one-time jointly operated enterprise of Shell, Gulf and

^{1.} For a discussion of the 'Gulf Coast' pricing system and its relationship to the 'international control mechanism', see Blair, *The Control of Oil*, pp. 113-119.

TABLE 7
TYING PROVISIONS OF GULF CRUDE OIL CONTRACTS
1959-65

Year	Agent	Crude Type	Gulf Price Tied To
1959	Mene Grande	Venezuelan Marlago	Same as San Jacinto Venezuelan Posted.
1960	Mene Grande	Venezuelan T.J. Medium	Esso Export Posted price.
1961-72	Mene Grande	All Venezuelan except specialities	Base prices escalated with average of Creole, Shell and Mene Grande postings.
1961-72	Mene Grande	Marlago	Base price escalated with Shell's escalations in Lagotreco posted price.
1961-62	Mene Grande	T.J. Medium	Base price escalated with Esso Export's posted escalations for T.J. Medium.
1963-65	Mene Grande	T.J. Medium	To be priced at 20¢/bbl. off Esso International posting.
1966	Mene Grande	T.J. Medium	To be priced at 20¢/bbl, off Creole (Exxon) posting.
1967	Mene Grande	T.J. Medium	
1959	Mene Grande	Iraq	Average of postings of Mobil and British Petroleum.
1959-60	Mene Grande	Arabian	Average postings of Mobil California, Texaco.
		Qatar	Average postings of Mobil, Shell, British Petroleum.
		Kuwait	Gulf Kuwait posted price.
1961-72	Mene Grande	Kuwait	Price to involve a discount off Gulf Exploration posted price.
1961	Mene Grande	Arabian	12¢ discount off postings of Mobil, California and Texaco.
		Qatar	12¢ Discount off postings of Mobil, Shell and British Petroleum.
1961-72	Mene Grande	Iranian	Price to involve a discount off Gulf Price.
1965	Mene Grande	Nigerian	Price to escalate with Gulf Kuwait postings for Kuwait Crude.

Source: Exhibit T-28, Gulf, Toronto Hearings, 1975.11

Exxon.^{1,2} In the Middle East, Iraq oil was to be priced at Mobil and British Petroleum's average; Arabian, on the basis of the average postings of Mobil, California (Socal), and Texaco; Qatar, on the basis of Mobil's, Shell's, and

^{1. 82}nd Congress, 2nd Session, Senate Small Business Committee, *The International Petroleum Cartel*, Staff Report of the Federal Trade Commission 1952, p. 163f.

^{2.} Gulf's links to the other majors in Venezuela through Mene Grande led Adelman to comment: "Gulf's Venezuelan interests had in effect been signed over to Shell and Esso control..." in *The World Petroleum Market*, p. 147 quoting the FTC, *International Petroleum Cartel*, pp. 171-90 and "Prospectus" of Gulf Oil Corporation, May 6, 1963, p. 5.

TABLE 8

TYING PROVISIONS OF TEXACO CRUDE OIL CONTRACTS 1956-68

Year	Crude Type	Contract Price Tied To	Escalation Provision
1956	Arabian	*	To Creole and Mobil Officina (Venezuela) postings.
	Officina (Venezuelan)	Average of Creole and Mobil postings	Average of Creole and Mobil posting.
1957	Arabian	*	Escalation to Creole and Mobil Specified Venezuelan crudes.
	Venezuelan (Various types	Suppliers' posted price	As Suppliers' posted price.
1958	Arabian	*	Average of Creole, Socony and Meneg Postings on Officina Venezuelan crude.
	Venezuelan (Various types	Suppliers' posted price	As Suppliers' posted price.
1959	Iranian	*	Average of Creole, Socony and Meneg postings for Officina Venezuelan crude.
1960	Arabian	*	Average of Creole, Socony, and Meneg postings for Officina Venezuelan crude.
	Iranian	*	Average of Creole, Socony, and Meneg postings for Officina Venezuelan crude.
•	Venezuelan & Trinidad	*	As Creole posting for T.J. Medium.
1961-68	Arabian	•	As average of Esso Export, Texaco, and California postings.
	Iranian	*	As average of Esso Export, Iran California, and Texaco Iran Posting.
	Venezuelan	*	As Creole posting for T.J. Medium.

Note: *No precise information available.

Source: Exhibit T-17, Texaco, Toronto Hearings, 1975.12

British Petroleum's average. While the Kuwait and Iranian contracts did not mention the prices of other firms, the Gulf-Shell agreement in Kuwait would probably have served to coordinate the prices of these two companies in this locale.

Texaco followed a policy similar to that adopted by Gulf. Table 8 shows that Texaco, in 1956, tied the price that Texaco Canada paid for Venezuelan oil to the average of postings by Creole and Mobil in Venezuela. At the same time, the price Texaco Canada paid for Arabian crude was linked to

these same Venezuelan postings. Texaco commented that, in 1960, all of its crude was tied in price to the posting of Exxon's major Venezuelan subsidiary:

"It should also be stated that in the case of all crude sold under the contract of December 2, 1960, the price was tied to changes in Creole's posting for Tia Juana Medium Crude."

(Document # 57484, December 10, 1964, Texaco)¹⁰

The practice of tying Middle Eastern price changes to Venezuelan price changes for Texaco Canada continued until 1961. In that year Texaco changed the price escalation clause on Middle Eastern oil so as to link its prices for this crude to the average postings of the Middle Eastern crudes of Exxon and California (Socal). Changes in Texaco's Venezuelan price continued to be linked to changes in Creole's Venezuelan postings throughout the nineteen sixties.

There is less evidence on Shell's practice. However, in the late nineteen fifties, Shell's successive Middle Eastern contract prices did tie the Canadian company into the rest of the industry. Its 1955 contract for Kuwait crude stipulated that the price was to be "the average of export cargo prices of major suppliers whose prices for Kuwait crude were reported in the 'National Petroleum News'" (Exhibit T-19, Shell, Toronto Hearings, 1975). In 1958, its Kuwait price was tied to the posted Gulf Kuwait price less the discount Shell was entitled to receive from its supplier (Exhibit T-19, Shell, Toronto Hearings, 1975). Since the supplier was Gulf, this effectively linked Shell's Middle East price to that of Gulf.

All of this demonstrates that the prices that each major Canadian subsidiary of the multinationals paid were linked together. Shell was connected to Gulf; Gulf and Texaco to Exxon; and, of course, Imperial received its crude from Exxon. These linkages were derived from contracts between parent and subsidiary. These contracts determined that the transfer price to the subsidiary would be set by reference to the posted price of a single or a group of 'Sister' companies. These linkages can be considered to have extended conscious parallelism into the realm of what might be entitled 'contractual parallelism'. Not fully owning their Canadian subsidiaries, the foreign parents used these contracts in a way that ensured that their Canadian subsidiaries were forced to follow the leadership of Exxon. Since Imperial, Shell Canada, Texaco Canada, and Gulf Canada together accounted for over 80 per cent of crude imports into Ouebec in the early nineteen sixties and, with Irving, almost 100 per cent into the Maritimes, these linkages, combined with Exxon's pricing policy, served to determine the price at which the majority of crude oil was imported into Canada.

^{1.} Comparison of Appendices Tables B-3 and D-1 indicate Shell received no discount through 1962.

This evidence demonstrates the linkages that were developed between the prices charged to the Canadian subsidiaries that dominated the Eastern Canadian market at that time. In addition, it is clear from the contracts that, during the late nineteen fifties, Canadian companies continued to pay posted or very close to posted prices for their crude oil even though world prices had fallen below the posted levels. Deterioration in world crude markets at this time was not reflected in the price paid by Canadian companies. The large subsidiaries operating in Canada were closely linked by the actions of their parent corporations into a framework of 'contractual parallelism' that served to delay the adjustment of the Canadian market to world conditions.

By the late nineteen fifties, posted prices were becoming increasingly unrepresentative of world prices. In fact, posted prices were not generally changed between 1960 and 1970—although world prices fell during this period. Therefore it is not surprising to find that their importance in these contracts decreased after 1960. If the parent corporation was to harmonize the behaviour of its subsidiary with that of others in the Canadian market, new methods had to be found.

A leadership model emerged that helped the majors hold crude prices above arm's-length world prices during this latter period. The leading firm recognized that other firms tended to follow it and adopted a strategy that served to prevent the average price level for crude imports from falling to third-party levels. The workings of the model also appear to have involved direct inter-firm communications in order to affirm the prices that were being charged each of the Canadian subsidiaries. Both of these points are illustrated by an excerpt from a 1969 Imperial document. Shell, after contacting Gulf, approached Imperial requesting a formal exchange of information on crude prices. Imperial recognized that Shell approached it for such an exchange because all the companies were keying on Imperial's prices:

"This really boils down to the fact that, for past years, Imperial's crude prices have established the fair market value for all other importers."

(Document # 116001, May 2, 1969, Imperial, emphasis added)¹⁵

With this knowledge, Imperial adopted, or had forced upon it by its parent, a policy that served to hold an umbrella over the industry. Imperial's crude prices were set equal to the "average of competition" as is demonstrated in the following excerpt from a 1965 Imperial document:

^{1.} Adelman, The World Petroleum Market, p. 161.

This particular overture by Shell for a formal exchange appears to have been rejected though other evidence shows that information was indeed exchanged between Imperial and other companies.

"Our current objective calls for procuring crude oil and arranging transportation so that we meet the average laid-down crude oil costs incurred by competing refineries in Eastern Canada."

(Document # 90516, July 5, 1965, Imperial)¹⁶

The same objective is contained in a statement used for discussion by Imperial at head office in 1966:

"Basic Objective — Acquisition of imported crude supplies at average costs equal to average of competition."

(Document # 89312, July 21, 1966, Imperial)¹⁷

Evidence that Imperial's parent adopted this policy is provided by the following excerpt. It is taken from a letter that Exxon sent to Imperial outlining the way in which the policy worked:

"... Imperial will review their raw material cost position relative to competition about twice yearly, and changes will be made only if significant differences in their position should develop. At the same time, every effort will be made to correct promptly any substantial differences which do develop."

(Document # 89232, August 11, 1967, Imperial)¹⁸

That the Exxon-Imperial agreement served as the foundation for the enhancement of crude prices can be discerned both from Imperial's recognition that others were focusing upon it and from the actual workings of the agreement. Under the "average of competition" approach, Imperial's crude prices were not adjusted instantaneously or completely to the levels being charged by its competition. An Imperial official, in discussing the agreement, noted:

- "1. Our original agreement was based on detailed analyses supported by D.B.S. statistics which, by the time discussions were completed, resulted in recognition of our non-competitive position at least one year later than we had actually experienced. This deficiency was never made up.
- 2. Our understanding of the agreement was not that we be kept whole on a rolling basis but rather that we were entitled to a crude slate which would trend toward making us competitive."

(Document #89231-2, August 11, 1967, Imperial, emphasis added)¹⁹

Imperial, therefore, was provided with adjustments in its crude costs, but only with a lag. It was this lag in the "average of competition" approach that provided the stable umbrella which supported the rest of the industry and that gave the participants an incentive to harmonize their price policies. That this policy was aimed at preventing transfer prices from falling during a period when world crude prices were declining was recognized by Imperial. The following excerpt is from a presentation made by the Transportation and Supply Depart-

ment to Imperial's president. It noted that the "average of competition" approach served to stem the fall in crude prices in Eastern Canada:

"... our objective is directed towards Imperial's crude cost being equal to the average of competition; inasmuchas we do not believe it to be in the interest of Imperial to lead crude prices lower in Eastern Canada."

(Document # 88434, October 24, 1966, Imperial)²⁰

Gulf followed a similar policy to that of Imperial except that it directly focused on product realizations in Eastern Canada. At about the same time as references to the "average of competition" approach are first found in Imperial documents, Gulf implemented its new programme for its Canadian subsidiary. A Letter of Agreement dated October 1, 1965 was signed that tied Gulf Canada's crude prices to its product realizations in the Montreal refining marketing area (Document # 65445).²¹ Gulf was promised that its crude costs would be sufficiently reduced, should product realizations fall, to permit Gulf Canada to earn "6 per cent of employed assets" (Document # 65445).²²

This change can be explained by the increasing complexity of the international petroleum market. In the late nineteen fifties and early nineteen sixties, the firms operating therein were sufficiently few in number that it was relatively easy for the parent corporation to set a benchmark for a subsidiary's crude oil prices that would ensure the latter possessed little or no leeway for independent action. By the mid-nineteen sixties, competition in the world petroleum market meant this arrangement could no longer be relied upon. Since posted prices were no longer meaningful, a different bench mark had to be found. Product realizations in Montreal emerged as best serving this purpose. However, reductions in crude costs by the parent firm to match falling product realizations were made only with a lag. For instance, for the 1967 year Gulf Canada did not receive a reduction in crude prices as per the terms of the 1965 Letter of Agreement until 1968 or early 1969. A letter written February 20, 1969 stated:

"This Letter Agreement would be maintained in effect. The crude price revisions proposed above would cover crude price adjustments due GoCan under this Letter Agreement through the year 1967. The next round of price adjustments under this Letter Agreement would be based on 1968 market realizations and, if required, would become effective on July 1, 1969."

(Document # 65445, February 20, 1969, Gulf)²³

By lagging the adjustments, Gulf reduced Gulf Canada's incentive to meet competition quickly and, therefore, slowed down the rate of domestic market adjustment and the introduction of world market competitive pressures to the domestic market.

Gulf's practice closely paralleled Exxon's "average of competition" doctrine. Together, each firm's arrangements served to reinforce the strategy of

delaying the responsiveness of the Canadian market to falling world petroleum prices. The fact that adjustments were done with a lag, were done begrudgingly, and that the Canadian subsidiaries were constrained by minority shareholders and taxation authorities from operating at an artificial loss, reduced the capacity of the two largest firms to react quickly to changing market conditions.

At this time, the other two major Canadian companies — Texaco Canada and Shell Canada — were restrained to an even greater extent by their respective parents than either Imperial or Gulf Canada. They were not given the opportunity to adjust their crude costs using an "average of competition" approach for they both had their crude prices frozen. Shell Canada signed a ten year contract in 1967 at fixed prices. Its prices, in fact, had ceased to fall several years earlier. Texaco was placed in a similar situation. Even though crude costs and transportation rates were falling in the late nineteen sixties, no downward adjustment was made in Texaco Canada's crude costs between 1965 and 1969 (Document # 53897).²⁴ This policy left both these companies with even less flexibility than Gulf Canada and Imperial.

The policies that were implemented by the multinationals, therefore, served to reduce the responsiveness of the acquisition costs of their Canadian subsidiaries to the downward trend in world crude prices that was occurring. However, the argument presented above did not dwell on the importance of inter-firm communications. The issue is whether each of the arrangements between multinational company and Canadian subsidiary was implemented on a strictly bilateral basis; for it was the coincident operation of all the high priced transfer arrangements that detrimentally affected the competitive process. To the extent that communications existed that served to harmonize pricing policies, then the Canadian subsidiaries can be said to have knowingly contributed to or acquiesced in the operation of a monopolistic situation that was inimical to the Canadian public interest. The effect of such discussions is ably argued in an Imperial memorandum that dealt with the effect that discussions between the majors on crude prices for tax matters would have:

"It was his [an Exxon employee] feeling that discussions, which would probably result in further discussions in subsequent years would have some influence on laid down prices for foreign crude and the tendency would be to fix or stabilize such prices at a figure which past experience indicated was acceptable to the Canadian government for tax purposes. Accordingly, an agreement to this end would be presumed."

(Document # 115999, May 5, 1969, Imperial)²⁵

While it is possible to argue that none of the arrangements would have been entered without a knowledge of what the other companies were doing, it is not necessary to rely solely on this approach. Direct evidence on communications between the majors' Canadian subsidiaries exists.

The need for communication between the Canadian subsidiaries can be attributed to three changes in the environment the industry faced at this

period that led the multinationals to pay increasing attention to local conditions when harmonizing their transfer pricing policies. First, an increase in the number of firms together with a proliferation of crude sources meant that the information necessary for the adoption of a predictable approach based on an average of the competition's laid-down costs could be more efficiently obtained or verified within the Canadian market. In addition, as the major new entrants to the Canadian market, British Petroleum, Petrofina, and latterly Ultramar were not based in the U.S., information exchanges between subsidiaries operating in Canada would have been easier than between parent firms now spread more equally across both sides of the Atlantic. Secondly, the "average of competition" approach relied on a leading firm supporting the market. A leadership situation will only persist as long as the follower firms resist the temptation of exploiting the leader by pricing well below it. In this situation, monitoring the followers is best done in the pertinent local market. Thirdly, the Canadian tax authorities presented the majors with a problem that had to be surmounted if transfer prices were to be maintained at high levels. This too required the local acquisition of information. As a Sun analyst noted in referring to the fact that the Sun subsidiary in Canada was charged more than the market price for its crude:

"We [the Sun organization] are ahead as long as the Canadian tax authorities recognize these high prices fully as costs, despite their basic unreality."

(Document #83938, September 18, 1970, Sun Oil)26

Inter-company communication as to the level of the 'unrealistically' high transfer prices used by each or others would have facilitated the harmonization of such prices and their consequential acceptance as "fair market value" prices by the Department of National Revenue. Beyond direct, there is considerable indirect evidence of inter-company communication, the latter being predominantly found in the extent of the knowledge that most importers possessed about the transfer prices charged by other, 'competing' companies. Imperial, perhaps the company that was most careful in phrasing its memoranda,²

^{1.} This nineteen sixties experience closely paralleled that of the nineteen thirties when the predecessors to the 'Seven Sisters' established 'local cartels' to implement the principles articulated by the parties to the Achnacarry 'As Is' agreement. See Blair, *The Control of Oil*, pp. 54-71.

^{2.} Imperial took care to avoid references to questionable activity in their written material. For instance, the legal department aided in instructing departments what not to include in written memoranda — even if the activity was legal (Document # 122669).²⁷ The Assistant General Manager (Marketing) referred to the "sanitization" of a set of Automotive Strategy Studies (Document # 118631).²⁸ Despite the "sanitization" he still worried that one of the reports still contained material that showed Imperial did not recover full costs from some dealers but by implication did from others and that this might be used to argue Imperial was engaged in discrimination (Document # 118632).²⁹

referred to its "intelligence sources" in discussing the problems involved in finding a price level that met both its own corporate needs and the acceptance of the Department of National Revenue. For instance, when National Revenue requested data from Imperial in 1964 for the 1961 tax year, an Imperial document noted:

"Subsequent intelligence indicated to us that the same data was being requested from other Canadian crude importers."

(Document # 114390, August 21, 1970, Imperial)³⁰

Four years later, Imperial again commented that its "intelligence" was able to provide it with reports on Fina, Shell, Texaco, Gulf, and Sun:

"... by early 1968 we heard that Fina, Shell, Texaco, Gulf and Sun were involved in disputes with the Department [National Revenue]. Later in 1968 our intelligence sources indicated that most of the companies had settled with the Department on the basis of an arbitrary agreement that crude costs in excess of a 12% discount off posted prices would be disallowed."

(Document # 114391, August 21, 1970, Imperial)³¹

Other companies also had information on the transfer prices that competitors were using. Texaco Canada, at different times, reported to its parent the prices being used by other companies. For instance, Texaco Canada described a meeting between itself and its parent in the late nineteen fifties where it communicated the price Imperial was paying for its crude:

"In August 1959 A.A. Marshall and J.G. Light saw Henry Ryer in New York. We requested a 12¢ reduction in Arabian Crude in order to equate with the cost of Crude to our competitors in Montreal. In particular, we had reason to believe Imperial were obtaining a 10¢ discount on Guanipa."

(Document # 6641, September 2, 1964, Texaco)³²

Some seven years later, Texaco Canada again reported to its parent the transfer prices being used for other multinational subsidiaries in Canada:

"We informed Mr. Conner[1] that Gulf's price of Ceuta advanced from \$1.80 to \$2.00 per barrel January 1, 1971, but that the freight stayed constant at \$0.16 per barrel.

. . .

We informed Mr. Conner that Gulf's price for Nigerian crude was about \$1.81 FOB, plus \$0.37 freight, for \$2.18 CIF Portland in 1970."

(Document # 6627, February 24, 1971, Texaco)³⁴

Information on crude markets was acquired in various ways. For instance, a general study of the world crude market made by the Shell

^{1.} Mr. Conner was assistant manager, crude oil purchase and sales division, Texaco Inc. N.Y. as of November 1966 (Document # 6635).³³

International Petroleum Company was found on Texaco's premises (Document # 57663).³⁵ Examples of communications between companies to discuss general pricing levels can also be found. In 1969, Sun held discussions with Texaco about the transfer prices that would be acceptable to the taxation authorities (Document # 83913).³⁶ Similar discussions were held at about the same time between Sun and Shell (Document # 83913).³⁷ When Shell contacted Imperial in 1969 to discuss crude prices, Shell indicated that it had already been in contact with Gulf (Document # 116004).³⁸ Of significance is the statement made by Shell at this time that elsewhere in the world, an agreement was made to exchange information between Shell and an Exxon subsidiary:

"He [Shell] also made a point of mentioning that a Jersey [Exxon] interest in Europe has agreed, some time ago, to exchange similar information with Shell."

(Document # 116001, May 2, 1969, Imperial)³⁹

Other examples provide further evidence of communications in Canada. For instance, the following excerpt shows that, in the early nineteen sixties, Texaco was being given information by both Canadian Oil and Petrofina:

"Mr. K.A. West, Vice-President, Canadian Oil told us they were offered 30¢ discount on Light Iranian Crude posting and freight at U.S.M.C. minus 65% to Montreal from the Persian Gulf."

"Information from Mr. Spence Hanah [sic], Canadian Petrofina, August 1960 indicated that they were obtaining Iranian Crude Oil at 10¢ under our cost per barrel."

(Document # 6642, September 2, 1964, Texaco)⁴⁰

During these discussions, information on third-parties was also exchanged. In the following excerpt from a Texaco document, it is evident that Petrofina not only discussed its own pricing policy with Texaco but also passed along what was known of British Petroleum and Imperial Oil:

"... Petrofina were obtaining Iranian crude at a cost lower than ours by \$0.10 plus.

In a more recent conversation, Mr. Hanna indicated the prices they paid for Middle East crudes were equated with costs of laying down Venezuelan crudes at Montreal and, therefore, by inference, they are also paying less for Venezuelan crudes than we are.

Mr. Hanna is of the impression that B.P.'s costs are possibly lower than theirs and has the impression that Imperial are also obtaining substantial discounts on their imports of Venezuelan crudes."

(Document # 6736, August 25, 1960, Texaco)⁴¹

During the mid-nineteen sixties, discussions such as these between the companies revolved around the prices to be used so as to present a consistent

approach to crude pricing when discussing fair market value for tax purposes. Nowhere is this made clearer than in the following statement by Imperial as to the reason Shell had contacted Imperial:

"His real interest in exchanging price information with Imperial and Gulf is to know on a current basis what other major importers are declaring as crude costs so that they will be able to control tax disallowances."

(Document # 116001, May 2, 1969, Imperial)⁴²

The relationship between Sun and Texaco provides a specific example of the manner in which coordination for tax purposes resulted in the harmonization of crude transfer prices. Sun Oil had a processing agreement with Texaco in Montreal whereby Texaco processed crude oil that Sun imported. This both necessitated and facilitated an agreement on transfer prices; for, if the two companies reported different crude prices, it was felt that National Revenue would examine their transfer pricing system too closely. Sun noted:

"Texaco would, of course, not like to have Sun import Lt Arabian at a price substantially lower than their cost at Montreal."

(Document #83921, undated, Sun)43

Therefore Sun Oil opted for the same transfer price on "Arabian Light as that employed by Texaco" (Document # 83918). The final say on the exact arrangement was to be in Texaco's hands. The actual prices, Sun was told, would depend upon whether Texaco agreed:

"If Texaco agrees, the prices for the two crudes will be respectively, \$1.65 per barrel and \$1.60 per barrel."

(Document # 83918, March 4, 1969, Sun Oil)45

This episode provides an example of the extent to which vertical integration provided the means by which the behaviour of companies operating in the Canadian market could be governed by external coordination of the crude prices that each paid. The incentive to harmonize policies to avoid Canadian taxes reinforced the primary market incentive to generate high profits through the harmonization of high 'unrealistic' transfer prices.

The companies also exchanged information on the use of 'tax-haven' subsidiaries. For instance, Texaco was aware of the fact that Petrofina used an offshore trading company:

"We [Texaco Canada] understand they [Petrofina Canada] report [to National Revenue] posted price or equivalent as their declared values and this, of course, would have the effect of raising the average declared value. . . Petrofina's discount on Lagomedio is handled through an associated company in the West Indies."

(Document # 6701, undated, Texaco)46

Sun Oil possessed even more detailed information on Petrofina's activities and its offshore 'tax-haven' subsidiary:

"We have learned from a reliable source that Canadian Petrofina have agreed with National Revenue that \$2.20 a barrel is a fair market price for Venezuelan crude imported by them at Montreal. Petrofina have a 'tax-haven' subsidiary which purchases the Venezuelan crude at 60 to 75 cents off the posted price of \$2.50. The 'tax-haven' company then sells to Canadian Petrofina at the posted price. The agreed upon fair market value is thus 12% off posted price."

(Document # 84037-8, September 6, 1966, Sun Oil)⁴⁷

The fashion in which information on Petrofina's 'tax-haven' was passed from Petrofina to Gulf is documented in the following excerpt from a Gulf document. A senior official of Petrofina described to Gulf in great detail, the operation of its 'tax-haven' subsidiary. A Gulf official reported:

"On Wednesday of this week, October 9, I had lunch with Mr. G.S. Hanna of Canadian Petrofina who offered the following information with regard to his company's arrangement on the handling of Venezuelan crude for their Montreal East refinery through a Nassau company.

Mr. Hanna stated that when they first switched from Middle East to Venezuelan crude they purchased from Superior, but for the past two to three years they have been buying from Atlantic Refining. He related the following steps with regard to their purchases.

- 1. The Atlantic Venezuelan company sells Lagomedio crude to Atlantic Refining at posted price or at a nominal discount. Mr. Hanna vaguely mentioned the price of \$2.28 per barrel.
- 2. The Atlantic Refining Company then sells this crude to the parent Petrofina company in Belgium at a long discount. Mr. Hanna mentioned a price of \$1.60 to \$1.65 per barrel.
- 3. The Atlantic Refining Company realizes a substantial loss in this transaction which apparently they can use to a tax advantage in the U.S.A.
- 4. The parent Petrofina company then sells the Lagomedio crude to a Nassau company which is owned largely, if not wholly, by Canadian Petrofina. The selling price of this crude is at posting or at a nominal discount, therefore, the parent Petrofina company realizes the entire profit on this crude transaction with Atlantic Refining.
- 5. The Nassau company sells the crude to Canadian Petrofina at the same price it is purchased from the parent Petrofina company so Canadian Petrofina in effect is paying the posted price or a nominal discount.
- 6. The Nassau company is then used by the parent Petrofina in its other world-wide arrangements involving Middle East crude trading, exchanges, processing deals, etc. which results in an accumulation of a substantial profit to the Nassau company.
- 7. This profit is then passed along as a dividend to Canadian Petrofina who is the major shareholder but who is not represented on the Board of the company.
- 8. The dividend paid to Canadian Petrofina represents approximately the profit that parent Petrofina realizes on its crude transaction with Atlantic Refining and

amounts to approximately \$8 million per year. However, not any of the money represented by this dividend is realized through transactions with respect to the crude Canadian Petrofina purchase for use at their Montreal refinery.

. . . ,,

(Document # 64693-4, October 11, 1963, Gulf)⁴⁸

While the above examples all relate to Petrofina, it was neither the only company to possess an offshore trading company nor the only case where its use was known to others within the industry. Sun Oil understood that Canadian Oil—subsequently acquired by Shell—was using an an offshore trader (Document # 84036).⁴⁹ Imperial suggested that changes in Golden Eagle's prices indicated that it had formed an offshore trader (Document # 113244).⁵⁰ Texaco knew that Imperial itself was employing a similar device as the following excerpt indicates:

"I advised that IOL had established a tax-haven sub. in Bermuda and we considered that such sub. was being used to gain a tax-free advantage on transportation and perhaps on additional discounts which they have received in excess of perhaps 15% in view of the Department's [National Revenue] agreement to settle with others at 12% up to the end of 1965."

(Document # 51166, January 8, 1970, Texaco)51

The discussions that took place surrounding 'tax-haven' trading companies were an integral part of the process that served to ensure that high crude costs were passed on to high product prices. To the extent that the tax authorities placed the binding constraint on product pricing activity, then the harmonization of the transfer prices used for tax purposes would have been sufficient to yield an oligopoly equilibrium with high product prices. But long-run stability required either the knowledge of or the ability to predict one another's real crude costs. For otherwise, it would be difficult to predict whether some firms were developing a cost advantage and whether this advantage might be exploited. In turn the factor of predictability that is critical in maintaining oligopoly stability would have been reduced. All of this meant that the veil of the offshore 'tax-haven' had to be penetrated if the trust that is essential to the maintenance of oligopoly discipline was to be maintained. The exchange of confidential information on 'tax-havens' means that the majors cannot be regarded as arm's-length competitors in any normal sense of the word. The mutuality of trust that an exchange of such sensitive information exhibits is characteristic of cooperating oligopolists and not of competitive rivals.

During the nineteen sixties, the majors' harmonization of crude prices was facilitated by discussions relating to tax matters. These activities were used to do more than make sure the majors knew "what other major importers [were] declaring as crude costs so that they [would] be able to control tax disallowances" (Document # 116001)⁵². They also served to enhance stability and, hence, reduce competition at this level of the industry. While world crude

prices were not rigid, they were not extremely volatile either, since they declined at steady rates — except for the Suez crisis of 1967. This meant the majors generally did not have to exchange an inordinate amount of detailed information. They could focus on the percentage figure by which posted prices would be reduced for tax reporting purposes and whether 'tax-haven' subsidiaries were being used. As the previous examples show, this is what many of the discussions involved. But with the advent of the nineteen seventies, the world crude market changed. The change in the relative bargaining power of the oil producing countries and the large multinationals that occurred in the early nineteen seventies caused a quantum jump in the uncertainty that faced the industry in comparison to the nineteen sixties.

Not surprisingly, when faced with this uncertainty, the Canadian companies communicated directly with one another. To acquire current information on each other's crude costs, contacts were established between companies to discuss crude prices. In 1970, Gulf discussed prices with Shell, Petrofina, Texaco, Imperial, British Petroleum and Murphy (Document # 65423).⁵³ Texaco called Shell executives to exchange crude price information (Testimony, Texaco, Toronto Hearings, 1975).⁵⁴ In 1971, Imperial and British Petroleum discussed crude prices. A British Petroleum official summarized the expected crude price changes for majors in Eastern Canada and noted:

"Imperial told me this week that they estimate their cost will be increased by 25 cents per barrel."

(Document # 9460, December 31, 1971, British Petroleum)⁵⁵

In 1972, Texaco and British Petroleum discussed each other's crude costs (Document # 51078). Representatives of the majors also continued to discuss tax matters. On September 14, 1972, officials of Shell, Gulf, and Imperial met on "another matter" but discussed in general terms the challenge that National Revenue had made of Shell's and Gulf's import prices (Document # 116195). Among the documents seized from the Gulf President's office were handwritten notes (Document # 79853-5) containing detailed prices of Shell and Imperial. Not all of the information required for a harmonization of policy took place via exchanges in Canada because, in some cases, uncertainty could not be resolved easily there. In this event, some discussions appear to have taken place at the head offices of the parent companies. For instance, in 1974, Gulf Canada was informed by its parent that its Venezuelan costs were about the same as those of Shell Canada (Document # 62880). Second Shell Canada (Document # 62880).

The end result of all the devices used to harmonize policies was that the large firms — Imperial, Texaco, Gulf and Shell — all paid 'unrealistically' high crude prices and because of their presence in the downstream market they were able to pass along their high costs in varying degrees to product markets. The following sections outline the crude price history of each company.

3. The Transfer Pricing Policy of Imperial Oil

Key to an understanding of the petroleum industry in Eastern Canada is an appreciation of the nature of the relationship between the multinational petroleum companies and their Canadian subsidiaries. Canadian subsidiaries of multinational companies paid too much for crude oil because they acted in the interests of their parent company or because they had their crude acquisition policy dictated to them. Canada's largest oil company, Imperial, was 68 per cent owned by Exxon in 1975. The transfer pricing policy of all other oil companies would have had little impact upon the Canadian market if Imperial had not provided the umbrella under which they operated. Therefore the extent to which Imperial's leeway in its acquisition of crude was restricted or the extent to which Imperial itself independently adopted a policy that had the effect of slowing the rate of adjustment of Canadian prices to world levels bears examination.

(a) Exxon Control

The picture of Imperial that emerges from various sources is that of a company which had little control over either the sources or the prices of its crude. Its freedom to choose the lowest priced crude suitable for its refineries was substantially restricted by its parent corporation.

Within the Exxon (Jersey) organization, a central supply group had the responsibility for allocating oil supply sources to the various marketing subsidiaries (Imperial Oil Limited v. Nova Scotia Light and Power Limited [N.S.L.P.] Hearings). While vitally affected by the decisions of this central supply group (the oil sent to Imperial was determined by this group), Imperial had no representation on the group and was allowed only to submit recommendations to it (N.S.L.P. Hearings). The manager in charge of obtaining foreign crude for Imperial described Imperial's position in the following terms:

"We may decide at Imperial, we may decide that we want to get oil, and that is our decision, but whether or not the final decision is made that we are going to get that is not necessarily, particularly ours, Imperial's."

(Testimony of M.J. Huffman, N.S.L.P. Hearings, February 19, 1975)62

There can be no doubt as to the constraints imposed upon Imperial by this relationship. When asked whether it was fair to say that the Exxon organization, in effect, made the decision as to the price to be paid and the amount of oil to be received by Imperial, the foreign supply manager agreed by answering, "Yes, I think that is fair and how it happens most of the time" (N.S.L.P. Hearings).⁶³

Additional evidence confirms the nature of the constraints placed upon Imperial's behaviour by Exxon. While the history of Imperial's crude acquisition policy that follows will indicate the nature of its dependence upon the

Exxon organization, an event in 1971 provides a striking example of Imperial's own admission that it had little freedom of action. Until 1971, Imperial had organized some of its own transportation for crude oil. In 1971, Exxon moved to take over this function. The effect of such a policy was noted by Imperial in the following quotation:

"Esso Supply can assign any vessel to Imperial service at any time, which effectively gives them complete control of Imperial's Supply and Transportation operation. They now have 100% control of the supply function."

(Document #89473, December 8, 1971, Imperial, emphasis added)64

Other evidence confirms that Imperial's crude slate ultimately was determined by its parent. The following statement was made by the manager of Imperial's offshore subsidiary:

"It is becoming increasingly evident that New York are obtaining control of the supply and transportation functions of all Jersey affiliates worldwide *including Imperial*.... They now have complete control of our supplies and can force us to accept their decisions whether we agree with them or not."

(Document #89470, December 8, 1971, Imperial)65

This should not be construed to imply that Imperial Oil was an unwilling partner to this arrangement. To the contrary, the previous section showed that Imperial's management willingly adopted the "average of competition" pricing strategy because they did not want to lead prices downward in Eastern Canada. In addition, in communications to its parent, Imperial stressed where its transfer prices lay in relation to the "average of competition" rather than the fact that its prices were not at third-party or arm's-length levels. That Imperial acquiesced in the arrangement may be attributed to more than just the fact that Exxon was a majority shareholder. To the extent that the arrangement increased Canadian product prices and the amount of profits left in Canada, then Imperial's minority shareholders also stood to gain.

Of course, the majority shareholder stood to gain most. Evidence shows that sometimes Imperial's parent did exploit its position to its own advantage. Imperial's and Exxon's interests were not always in complete accord. When they were diametrically opposed, Exxon's control over Imperial would have allowed it to force its interest on Imperial. For instance in 1970, Imperial planned for the importation of Libyan (Brega) crude. Table 9 indicates that the interests of Imperial and Exxon were in conflict on this issue. Imperial would have profited from the use of a cheaper crude. Exxon would have suffered a loss because it was in its interests to supply Imperial with a higher priced Venezuelan crude that was more profitable to itself. Imperial was informed that it

^{1.} See note 20, p. 23.

^{2.} For events surrounding this conflict see Exhibits # 0009-0012, N.S.L.P. Oil, Hearings.66

^{3.} See Table 11 for an example of Exxon's production economics.

TABLE 9

A COMPARISON OF THE DIFFERENCE IN THE INCENTIVES
OF IMPERIAL AND ITS PARENT TO REPLACE BREGA WITH
T.J. LIGHT IN CANADA, 1970
(¢U.S./bbl.)

Corporation	I	11
Imperial, before tax	-8	-12
Jersey, after tax	+14	+13
Columns: I Without freight penalties for operating the Imperia zuelan upcoast service. II With penalties for operating the Imperial Ottawa exc service.		•

Source: Exhibit # 0011, N.S.L.P. Hearings.67

would not receive the Libyan crude. This was not an isolated incident. As the subsequent section on Imperial's crude prices indicates, Imperial, throughout most of the post-war period, was forced to take higher priced Venezuelan crude because this gave Exxon larger profit margins than did cheaper Middle Eastern crude.

Control by the multinational oil companies such as Exxon over their Canadian subsidiaries was closely exercised in the matter of crude supply. As a result, the major Canadian subsidiaries were closely tied to their parent for supply. Imperial might appear to be a major exception to this observation. During the nineteen sixties, it purchased a substantial portion of its Venezuelan crude from Mobil. However, this anomaly should not be misconstrued to imply that Imperial was free to purchase crude from any foreign source. Imperial's purchase of Venezuelan crude from Mobil was in the interests of the Exxon organization. The explanation for this arrangement can be found in the situation that faced Exxon at the time this agreement was implemented. In the early nineteen sixties, there was substantial excess capacity in the Western Canadian producing areas. As a result, considerable pressure developed to limit and even to reduce the amount of foreign crude being imported into Eastern Canada. The Canadian government indicated that, as long as progress was made in increasing Canadian exports to the United States, this course of action would not be followed. Therefore, if the majors were to continue to use foreign crude in the Eastern Canadian market, they had to find a way of increasing exports of Canadian crude to the United States. Mobil possessed a refinery on Puget Sound in Washington State. Imperial entered into a contract with Mobil to sell Canadian crude to Mobil's refinery and in return agreed to purchase an equivalent amount of Venezuelan crude from Mobil for Eastern Canadian use (Exhibit T-21, Imperial, Toronto Hearings, 1975).68 While the agreement was modified to deviate from the original barrel for barrel terms, its spirit remained

substantially unchanged until its termination in 1971. In sum, then, Imperial only bought crude from Mobil because in turn Mobil purchased Western Canadian crude (N.S.L.P. Hearings)⁶⁹ and the transaction was in Exxon's best interests.

Table 10 presents the relative advantages to Imperial and Exxon of these arrangements with Mobil as of 1970. Column 1 contains the profit per barrel of the various transactions that were linked to the crude swap. Column 2 presents the total profits on the basic arrangements — those directly linked to the swap. Column 3 gives the total profits of all the arrangements Imperial had with Mobil and includes some transactions which, while not directly linked with the Western Canadian-Venezuelan crude swap, were in Imperial's words "actually contingent upon a continuation of the Mesa purchase" (the swap) (Document # 123960). It is clear that even on the basic arrangements Exxon found it to its advantage to have Imperial purchase Mobil's Venezuelan crude in return for increased Canadian exports. Of course, to the extent that this also decreased the probability of Exxon's Venezuelan production being excluded from Eastern Canada because of Canadian import controls, the arrangement would have been all the more favourable to Exxon.

(b) Imperial's Objectives

While the degree and type of parental control is an important factor in explaining Imperial's behaviour, it is not sufficient in and by itself to do so. Imperial certainly was influenced by its parent's objectives. But equally, it recognized its position as the dominant firm in the Canadian market and acted so as to restrain the impact on Canada of the competition that had developed in world markets.

Imperial was the largest of the four firms which together accounted for most of the foreign crude imported into Quebec and the Maritimes. The high level of concentration in those markets enhanced the level of interdependence among these firms. The other firms looked to Imperial as the leader. For instance, Gulf regarded Imperial as the price leader in the Atlantic Provinces as indeed it did elsewhere in Canada (Document # 70490). In turn, Imperial recognized that its dominant position gave it a special role because of the degree of perceived mutual interdependence among the firms in the oligopoly. Any fall in Imperial's prices, as a result of a decrease in its crude costs, would have been met quickly by the rest of the industry. Any competitive advantage gained would have been short-lived. For example, Imperial noted that the adoption of a more aggressive crude acquisition policy would not have led to any long-run advantages, since "major reductions in Imperial's crude costs would directionally tend toward competitive reductions" (Document # 89023).

This statement, in predicting competitive price reductions, implicitly recognized that the other members of the oligopoly — Shell, Gulf and Tex-

TABLE 10

THE PROFITABILITY OF THE IMPERIAL/MOBIL SWAP TO EXXON (1970)

	Profit Barrel	Basic Profit	Profit on Total	
Transaction	(\$/bbl.)	(M\$/yr.)	(M\$/ <u>vr.</u>)	Notes
1. Purchase Mesa Crude	.14	0.6	0.7	Imperial Advantage versus T.J.L.
2. Sell Crude to U.S. Dist. V	.42	4.6	7.6	Profit on incremental production
3. Receive Transmountain Pipeline Profit	.03	0.3	0.6	8% share of incremental profit
4. Sell Crude to U.S. Dist. I-IV	.42	-	4.9	Profit on incre- mental production
5. Receive Interprovincial Pipeline Profit	.13		1.5	30% share of incre- mental profit
6. Receive Crude Marketing Fee	.01	0.1	0.3	Imperial collect- ing fee from Mobil
7. Purchase Weyburn/Midale Crude	.23		1.0	60% loss of present benefits
8. Purchase Pembina Crude	.09		0.8	60% loss of present benefits
Total Imperial Profit (B.T.) (A.T.)		5.6 2.8	17.4 8.7	
Creole Effect				
Lost T.J. Light Sales (A.T.)	(.37)	(1.6)	(1.9)	T.J. Light ex Refinery at \$1.65/bbl.
Net Jersey Effect		2.0	6.1	
Imperial (70% Equity) Creole (95% Equity)		2.0 (1.5)	(1.8)	
Net Effect		0.5	4.3	

Notes: 1) Brackets indicate negative quantities.

Source: Document # 123964-5, Imperial.71

²⁾ T.J.L. means Tia Juana light crude.

³⁾ Districts 1-V are U.S. regions.

⁴⁾ Mesa Crude - the Mobil Venezuelan crude.

⁵⁾ Weyburn/Midale and Pembina — Canadian crudes.

⁶⁾ B.T. — before tax.

⁷⁾ A.T. — after tax.

aco — were also paying 'unrealistically' high prices for crude oil. Just as Imperial knew it was paying more than the long-run cost of crude to its parent as a transfer price, it recognized that the other major companies were in a similar situation. The same admission was made by the several companies before the Royal Commission on Energy in the late nineteen fifties. At that time, the issue of whether Canadian oil should be used in Montreal was thoroughly investigated. During the debate, several firms pointed out that, even if Canadian oil had been laid down in Montreal at the same price as was in effect for foreign oil, Canadian oil would not have been used because their suppliers (the parent companies) could have reduced the price of foreign oil.¹ Such an argument presumes that existing prices were above both realistic arm's-length prices and the level needed for long-run equilibrium. It was Imperial's perception that any actions it might take to reduce its crude costs toward this level would simply be matched by other major importers.

As a result of its perceived role, Imperial adopted a policy that provided an umbrella to support the high price structure of the industry. Imperial's "objective" was "directed towards Imperial's crude costs being equal to the average of competition; inasmuchas we do not believe it to be in the interests of Imperial to lead crude prices lower in Eastern Canada" (Document #88434). Such a policy had the effect of supporting industry crude prices at a comparatively high level.

(c) Imperial's Crude Costs

Imperial's crude costs, throughout the nineteen sixties, were high in comparison both to the average costs of its major competitors in Eastern Canada and to the level of third-party prices existing in the world market. Throughout this period, Imperial's communications with its parent focused on the level of prices required to bring Imperial's crude costs into line with the "average of competition" in Eastern Canada. These communications provide direct evidence both on Imperial's competitive position and on the amount Imperial itself felt it was paying in excess of third-party world prices.

In 1964, Imperial noted that its major competitors were "bringing foreign crude into Canada at unrealistically high prices" (Document # 90592).75 Yet, at the same time, Imperial stated that its competitors in the Montreal area were obtaining crude at prices up to 36 cents per barrel less than itself (Document # 90592).76 In Imperial's words, "Imperial has not, for quite some time, been able to buy Venezuelan crude from Creole at competitive prices" (Document # 117868).77

^{1.} J.H. Dagher, "Effect of the National Oil Policy on Ontario Refining Industry", (Unpublished Ph.D. dissertation, McGill, 1968), p. 604.

Imperial's strategy, as indicated above, was to maintain its price equal to the "average of competition". To this end, the Canadian company in 1964 informed Creole that it required a decrease in price (Document # 90588). Imperial's request was refused (Document # 90588). However, it appears that the refusal was related to a different Exxon strategy. At this time, the Venezuelan Government was exerting pressure on the producing companies to keep prices from falling. Partially as a result of this, Imperial's Venezuelan crude had become increasingly uncompetitive relative to crude being used by its Canadian competitors. In order to force a change in Venezuelan policy, Exxon decided to switch Imperial's marginal purchases to Middle Eastern crude. An Imperial document noted that:

"Regarding price, it is my understanding that Creole feel that in order to influence the Venezuelan Government, Imperial should replace Creole production with Middle East crudes..."

(Document # 90592, May 29, 1964, Imperial)80

In the result, the switching strategy allowed the simultaneous pursuit of keeping Imperial's crude price 'unrealistically' high but close to the "average of competition" while increasing the pressure on Venezuela to let its prices fall.

Other Imperial documents make this clear in providing evidence as to the extent of its competitive disadvantage at this time. The landed cost of the Middle Eastern crude that Imperial was eventually permitted to purchase was between 35 and 40 cents per barrel cheaper than the Venezuelan crude that it had been using (Document # 90587).⁸¹ But even so, the Exxon organization still charged Imperial prices for Middle Eastern crude that were above those prevailing in arm's-length transactions. Iranian crude was offered to Imperial by the Exxon organization at an 18 cent per barrel discount off posted prices (Document # 90589).⁸² Other Middle Eastern crudes were offered by Exxon at discounts of between 15 cents to 27 cents (Document # 90589).⁸³ However, Creole admitted that prevailing discounts on Arabian crude were 30 cents at this time (Document # 90592).⁸⁴ Imperial itself estimated that arm's-length transactions in Middle Eastern crudes involved a discount of 35 cents per barrel (Document # 90594).⁸⁵

At this time, Middle Eastern crude that Imperial could buy was considerably cheaper than the Venezuelan crude it was purchasing when comparisons were made on a laid-down basis in Eastern Canada. For instance, after quality differentials were taken into account, the landed cost of the Middle Eastern crude that Imperial was permitted to import (Basrah) was \$2.27 as compared to \$2.69 for the Venezuelan Guanipa it had been purchasing (Document # 90585-7). By early 1964, an Imperial study recognized that the difference between Middle Eastern prices and Venezuelan prices was sufficient to warrant major investment in refinery facilities to permit increased utilization of Arabian crude:

"... the return on these new facilities shows a rapid payout so we are including a project in our 1965 Capital Budget that will allow us to step up our Middle East crude runs by an additional 40,000/50,000 B/D giving us a total Middle East crude volume potential of about 75,000 B/D."

(Document # 90589, August 7, 1964, Imperial)87

Before proceeding, one argument that must be refuted is that the potential cost savings from purchasing Middle Eastern and African crudes was not available to Imperial because refinery equipment is crude specific and because Imperial's refineries were designed to use only Venezuelan crude. This argument can be disposed of for three reasons. First, there were at least two African crudes that Imperial could have run at this time — Libyan and Nigerian (N.S.L.P. Hearings). Secondly, Imperial's refineries did use some Arabian crude in the early nineteen sixties (N.S.L.P. Hearings). Finally, as Imperial noted itself, investments in new equipment which would have permitted the utilization of Middle Eastern crude would have more than paid for themselves. A 1965 study done by Imperial indicated that the rate of return on such facilities would have been 118 per cent at Montreal and 42.6 per cent at Dartmouth (Document # 90564-5).90

Other evidence also suggests that Imperial could have switched its refining focus to use cheaper Middle Eastern crude oil. In answer to a question as to why an Imperial refining study considered a wide number of crude types for possible refining at Dartmouth, an Imperial official said:

"Well, this is a general price forecast and its looking at the period up to 1980; and there's no reason why, in that time frame of ten years, you wouldn't look at these alternatives and decide to put in equipment to make it capable of running at the refinery."

(Testimony of M.J. Huffman, N.S.L.P. Hearings, February 20, 1975)91

Since the period under review here consists of a fifteen year period following the 1958 Suez Crisis, a period when Imperial continued to hold up the industry's price structure, short-run arguments about technical constraints placed upon its behaviour lack sustainable relevance.

As noted previously, Imperial's competitive disadvantage vis-à-vis its major competitors during this time period stemmed from its crude mix: "with our relatively high proportion of higher cost Venezuelan supplies being the major cause of our competitive crude cost disadvantage" (Document # 88440).⁹² Imperial's communications with its parent reflected this, and stressed the need for sufficient Middle Eastern crude to permit it to remain competitive in the Montreal market (Document # 90560).⁹³ The objective that was stressed continually was that Imperial should meet the "average of competition" in its crude costs. Through 1964, 1965, and 1966 Imperial continually requested

increases in the amount of Middle Eastern crude delivered to it in order to reduce its average cost of crude oil toward this objective.

Even in doing so, Imperial was not unmindful of its parent's interest. As early as 1950, Exxon's policy was to keep Persian Gulf crude out of North America. For instance, while formulating its supply objectives, Imperial took into consideration "what magnitude of increase in Eastern Hemisphere crude processing would be appropriate in consideration of Jersey general interest" (Document # 89329). Jersey's (or Exxon's) general interest involved both straightforward economic calculations and political considerations that were relevant to the economics of crude production. For political reasons, Imperial recognized that it had to keep its Middle Eastern liftings to a minimum:

"It is felt that from the point of view of government relations, any proposals for Imperial to use Middle East crude should result in a ratio of Middle East to Venezuelan crudes for Imperial not greater than the 1963 industry ratio."

(Document # 90563, January 13, 1965, Imperial)95

However, the economic impact upon Exxon of crude substitution by Imperial provided a much more direct constraint on Imperial's activity. Exxon calculated that, in early 1966, the net penalty to itself for each barrel of Eastern Hemisphere crude that Imperial used to replace a barrel of Venezuelan was 20 to 25 cents per barrel after tax (Document #89309). Table 11 indicates that, in 1969, Exxon received 65 to 77 cents net after-tax profit for every barrel exported from Venezuela, but only 48 cents for its Middle Eastern crude production. The producer net income did not vary greatly between the two areas. The difference in profitability to Exxon occurred because Exxon obtained a smaller percentage of the net income in the Middle East than in Venezuela. Equally significant is that Table 11 indicates Exxon predicted that net income for Venezuelan oil would remain above net income from the Middle East. Therefore, for both short and long-term profitability considerations, it was in Exxon's interest to have Imperial use high cost Venezuelan crude.

Discussions between Imperial and Exxon during 1966 illustrate the extent of control exercised over Imperial's crude slate. Imperial indicated a desire to increase its use of Middle Eastern crude but was informed by Esso International (an Exxon subsidiary), early in the year, that no authority had been received "to allow increased liftings by Imperial of Eastern Hemisphere crude oil above the 42 MB/D level" (Document # 89331).97 Imperial wanted to increase its liftings to the 60 thousand barrels per day level to bring its crude costs down to the average of its competitors (Document # 89331-3).98 The Exxon

^{1.} Adelman, *The World Petroleum Market*, p. 146 quoting "Petroleum Study, p. 417", Hearings before a Subcommittee on Interstate and Foreign Commerce, H.R., 81st Congress, 1st Sess., 1950.

supply executive committee met and did not permit the increased liftings (Document # 89307). During these meetings, the discussion focused on whether it was important to keep Imperial competitive in Eastern Canada. That even this minimal commitment to competition was not readily adopted is evidenced by the following account of the meeting:

"Also discussed at the meeting was the need for Esso International to attach too much importance to Imperial's objective to be competitive on crude oil costs. (No conclusion reached but a variety of opinions seems to be held)..."

(Document # 89308, August 8, 1966, Imperial)100

What appears to have been at issue for the Exxon organization was the extent to which Imperial's higher costs were gradually forcing a loss in market share in Eastern Canada that in the long-run would offset the profitability of having this outlet for the high-priced, but profitable, Venezuelan crude.

It might be argued that the higher price paid by Imperial was justified by the security this offered. However, the fact that Imperial paid more than arm's-length prices for crude did not protect it from supply instability. At times during the nineteen sixties, Imperial found itself having cargoes of crude arbitrarily diverted from it. During the winter of 1965/66, Imperial had at least three cargoes of Eastern Hemishphere crude destined for Canada diverted to Europe (Document # 89335).102 Imperial claimed compensation and by late 1966 Esso International agreed to compensate Imperial by doing "their utmost to provide an additional 18 MB/D [for a total of 60 MB/D] of Eastern Hemisphere crude to Imperial" (Document # 89302). 103 This would have increased Imperial's Middle East crude supply from 42 to 60 thousand barrels per day. It should be pointed out that this was the amount Imperial had told Exxon would be required to bring its crude costs into line with the "average of competition" in Montreal (Documents # 89331-3).104 The Exxon organization can be said, therefore, to have agreed either to compensate Imperial for the loss of crude or to have moved Imperial's crude costs toward the "average of competition"—but not both. However, even this minimal commitment was not honoured. By December 1966, Imperial was having its cargoes of Eastern Hemisphere crude diverted to Europe once again. Its fourth quarter liftings were reduced to around 45 to 47 thousand barrels per day of Eastern Hemisphere crude (Document #89274).105

Throughout this period, Exxon's policy kept Imperial at a competitive disadvantage vis-à-vis its major competitors in Eastern Canada. Table 12 lists the disadvantage Imperial perceived itself to have had during this period. Since Exxon adjusted Imperial's crude costs with a lag, as long as the international market price for crude continued to fall, Imperial was a high cost importer of crude. For instance, although Imperial received more Middle Eastern crude in 1966, its relative cost position almost immediately deteriorated since the

TABLE 11 **EXXON'S PRODUCING ECONOMICS (1969, 1980)** (\$U.S./bbl.)

Crude	Year	Posted Price	Discount	Actual F.O.B.	Royalty	Producing Cost	Taxable Income	Income Tax	Producer Net	Jersey Net	Govt. Income
Guanipa	1969	2.53	.35	2,18	.48	.16	1.54	.73	.81	.77	1.21
	1980	2.53	.64*	1.89	.48	.16	1.49	.71	.54	.51	1.19
T.J. Medium	1969	2.27	.35	1.92	.47	.16	1.29	.61	.68	.65	1.08
	1980	2.27	.43*	1.84	.47	.16	1.24	.59	.62	.59	1.06
Bachaquero	1969	1.85		1.85	.36	.17	1.32	.63	.69	.66	.99
	1980	1.85	.11	1.74	.36	.17	1.21	.57	.64	.61	.93
Arabian	1969	1.80	.15**	1.65	.23	.12	1.35	.68	.67	.48	.91
	1980	1.80	.34***	1.46	.23	.12	1.45	.73	.38	.23	.96

Notes: * 40¢ discount allowed for tax purposes.
*** 10¢ discount allowed for tax purposes.
*** No discount allowed for tax purposes.

Source: Document # 90549, Imperial.101

competition continued to switch its supply sources to even cheaper crudes. Some firms began to purchase Nigerian crude oil that in Imperial's words had "a CIF advantage of 30¢/B over Venezuelan versus our Eastern Hemisphere CIF advantage of about 20¢/B over Venezuelan" (Document # 88435). 106

An Imperial analyst, writing in 1967, noted that the reason Imperial suffered a continuous disadvantage was that "our evaluations are against a constantly moving target" (Document # 91072).¹⁰⁷ In turn, he noted this was having serious consequences on Imperial's performance:

"We believe that our present objectives as interpreted inhibit our ability to benefit from any efficiencies or ingenuity which we might introduce in either the transportation or refining areas."

(Document # 91073, March 10, 1967, Imperial)108

Of course, to the extent that adjustment to the competitive average was less than automatic, and the evidence presented above suggests it was slow, then pressure was exerted upon Imperial to operate as efficiently as possible within that constraint. Whatever the cost to efficient operation, it is clear that this delay must have had a far more deleterious effect upon the performance of the Canadian market. As long as Imperial felt constrained not to make losses in Eastern Canada, and it indicated it felt such a constraint, Imperial's high crude costs would have served to support the product price structure at unrealistically high levels.

Even though Imperial was permitted to import some Middle Eastern crude in the mid-nineteen sixties, it was Exxon's position that, from the point of view of maximizing its own profits, it chose to move Imperial towards the "average of competition" by reducing Venezuelan prices rather than to permit Imperial to run Middle Eastern crude. Exxon's position on this matter was explained as:

"... it would not be much more costly to Jersey for Imperial to procure Venezuelan supplies from Creole at prices which would hold us even versus Eastern Hemisphere supplies, as it would be for Imperial to run Eastern Hemisphere crude oils at current f.o.b. prices and transportation... the net penalty to Jersey for each barrel of Eastern Hemisphere crude oil run by Imperial was now calculated at 20-25¢/b after tax."

(Document # 89308-9, August 8, 1966, Imperial)111

As long as Imperial's disadvantage vis-à-vis the other major importers was less than the 20 to 25 cents per barrel net profit loss to Exxon that occurred when Imperial substituted Eastern Hemisphere for Venezuelan crude,² it was in

^{1.} W.O. Twaits, Chief Executive of Imperial 1960-1973, testified that, in the long-run, Imperial's crude costs had to be reflected in its prices. See also reference #432.

^{2.} See Table 11.

TABLE 12						
IMPERIAL'S DISADVANTAGE IN CRUDE COSTS COMPARED TO THE "AVERAGE OF COMPETITION"						
(¢ U.S./bbl.)						

Year		Disadvantage
1963		122
1964		112
1965		32
1966		5 ²
1967	JanJune	15 ¹
	July-Dec.	71

Sources: 1. Document # 88565, Imperial109

2. Document # 88446, Imperial¹¹⁰

Exxon's interest to move Imperial back towards an all Venezuelan slate and to decrease the price Imperial was paying for this crude.

What had made this difficult for Exxon earlier was the position of the Venezuelan fiscal authorities who opposed price reductions. However, by late 1966, revisions in Venezuela's tax laws were made that permitted Creole to offer more competitive prices to Imperial. The Venezuelan authorities moved to a set of reference values that determined the amount of tax that had to be paid on exports. Since this reduced the amount of the tax that depended upon actual realizations and, hence, stabilized Venezuelan tax revenues, Venezuela was less opposed to the export price falling.

In addition to political difficulties, there was another barrier that had to be overcome before the prices Exxon charged Imperial could be decreased. Creole had to devise a method of discriminating between Imperial and Humble—the Exxon American subsidiary (Document # 88438).¹¹² The American market had been protected from falling world prices by government import quotas. Exxon was not going to reduce crude prices needlessly for the American market. As Imperial noted:

"With Humble's volume about the same as ours, and the apparent need to equalize discounts on the same or related crude types, there is obviously a substantial incentive to arrange price schedules to minimize this backlash.

This factor will probably result in some restructuring of price differentials between crude types, with higher discounts likely applying to crudes that are not common to Imperial's and Humble's slates."

(Document # 89269, January 6, 1967, Imperial)¹¹³

Shortly after the passage of the Venezuelan tax legislation, Creole informed Imperial that it wished to have Imperial eliminate its entire volume of

Imperial's Eastern Hemisphere crudes (Document # 89279).¹¹⁴ At this time, Imperial's Arabian crude was 16 cents per barrel cheaper than its Venezuelan crude oil, its Basrah was 20 cents cheaper, and its Brega 30 cents less expensive (Document # 89280).¹¹⁵ In order to keep its total crude costs unchanged, Imperial advised that it would require a decrease of 11 to 12 cents per barrel on all Venezuelan crude that it purchased (Document # 89281).¹¹⁶ However, in order to equalize its crude costs with that of its competitors, it indicated that it required a decrease of 16 to 17 cents per barrel (Document # 89281).¹¹⁷ If Venezuelan crude were to equate to the Middle East prices that Imperial had been paying the Exxon organization, Venezuelan crude would have required a 23 cents per barrel decrease (Document # 89281).¹¹⁸ The discounts which were granted in April of 1967 (Document # 88528)¹¹⁹ were just sufficient to keep Imperial's costs unchanged (Document # 89240).¹²⁰

The advent of the 1967 Suez Crisis did have the beneficial effect, as far as Imperial was concerned, of temporarily reducing its competitive disadvantage. Imperial calculated that its competitive disadvantage of 15 cents in the first half of 1967 decreased to about 7 cents in the last half of the year (Document # 88565).¹²¹ In 1968, Imperial felt that it did not suffer a competitive disadvantage (Document # 113048).¹²² When freight rates increased after the Suez crisis of 1967, those firms which used Middle Eastern crude found that their landed crude costs increased by more than the crude costs of those companies, such as Imperial, which imported Venezuelan crude.

However, the Suez Crisis was not the only factor that served to reduce Imperial's perceived 1968 disadvantage in crude costs to zero. Exxon's Canadian subsidiary also reduced its costs by decreasing the profits reported to and the taxes paid to the Canadian Government. It did so by setting up an offshore trading subsidiary — Albury — a Bermuda-based company. Albury purchased crude, added 10 cents per barrel to the price, and resold the crude to Imperial. The difference — some 10 cents per barrel — was then remitted tax-free to Imperial for an after-tax advantage of 21 cents per barrel (Document # 88533-34). 123

Imperial, as early as 1960, had considered a proposal "to incorporate a subsidiary company in a tax-free or low tax foreign jurisdiction for the purpose of engaging in transactions at a profit which is free of Canadian tax" (Document # 89882).¹²⁴ The major function envisaged for the subsidiary was to purchase Imperial's foreign crude requirements below posted prices and the tax-free repatriation of the resulting profits from reselling the oil to Imperial at posted prices. Another function that was envisaged was the transfer of interest and dividends from Imperial's Canadian investments to the foreign subsidiary. While these profits would be subject to a 15 per cent Canadian withholding tax, this rate of tax was much lower than the higher Canadian corporation tax that would have been levied against such payments when made directly to Imperial.

Since these profits, once sourced offshore, could then be repaid tax-free to Imperial, this device would have enabled it to reduce its tax liabilities. Anticipated after-tax savings on such a scheme, given the discounts on crude that existed in 1960, were about 13.2 cents per barrel (Document #89883).¹²⁵

In fact this was not a new arrangement. Imperial had recognized its ability to reduce its overall income tax liability by incorporating a non-resident foreign subsidiary to carry on operations in a tax-free or low tax jurisdiction and to receive tax-free dividends from the foreign subsidiary when it first built the Imperial St. Lawrence — an oil tanker — in 1955. At that time, Caribbean Oil and Transport Incorporated was set up in the Republic of Panama as a wholly owned subsidiary of Imperial. Panama was chosen, according to an Imperial memorandum, because its corporation law was liberal, no income tax was payable in Panama, no foreign exchange control existed, Panama was politically stable, and no flag restrictions were imposed under its Maritime law (Document # 120883-4).¹²⁶ In 1964, when violence broke out in Panama, the corporation was shifted to Bermuda and given a new title — The Western Oil and Trading Company Limited. During the period of operations from 1957 to 1963, Caribbean Oil and Transport Inc. provided a net tax benefit to Imperial of \$4,400,000 (Document # 120887).127 Caribbean Oil and Transport Inc. was finally disbanded in late 1969. It was reported that over the life of the company the discounted cash flow return to Imperial was 23.5 per cent (Document # 114707).128

With the advent of the 1966 Venezuelan tax changes, Imperial reassessed the desirability of an offshore trader. Creole would now be able to discount somewhat more than in the past and, therefore, the creation of the trader offered even greater tax savings than when it was originally proposed. By early 1967, Imperial felt that the benefits of a trader could be realized at little risk. An Imperial analyst wrote:

"... we feel that if the Canadian tax authorities continue to establish fair market value for imported crude on some basis of average cost into Canada, and not on open market transactions, there is little risk, in relation to potential benefits, in establishment of a trader."

(Document # 89863, April 27, 1967, Imperial)129

The primary and probably only purpose envisioned for the offshore subsidiary was that of a 'tax-haven'. An Imperial document entitled "USE OF OFF-SHORE SUBSIDIARY FOR CRUDE PURCHASES" (Document #89865-8)130 lists only one objective for the Company:

"... to purchase foreign crude through such a company at the lowest possible prices and re-sell to Imperial at the highest possible prices, leaving a tax-free profit with the subsidiary that would eventually return to Canada by means of tax-free dividends."

(Document # 89865, April 25, 1967, Imperial)¹³¹

Other evidence exists on this point. When asked why Albury was established, its general manager referred to its tax advantages (N.S.L.P. Hearings).¹³² A similar question, put to the former President of Imperial, W.O. Twaits, elicited a similar response. (Testimony, Imperial, Toronto Hearings, 1975).¹³³ The manager of crude supply, when asked whether there were any real advantages to having personnel operating in Bermuda apart from tax advantages, answered:

"I presume our tax people, who understand how these things operate, made the recommendations that he [the Manager of Albury] operate from Bermuda."

(Testimony of M.J. Huffman, N.S.L.P. Hearings, February 19, 1975)¹³⁴

In fact, when pressed as to whether the existence of this offshore subsidiary might have facilitated the other major function it performed for Imperial—scheduling—the manager of crude supply answered:

"Having to go through Albury to arrange ships or schedule ships certainly wasn't as neat as the way we now do it . . . "

(Testimony of M.J. Huffman, N.S.L.P. Hearings, February 19, 1975)135

Besides tax-free profits that were generated in Albury, additional tax-free profits were generated in Western Oil and Trading Marine Transportation—the offshore transportation operation that had previously existed in Panama as Caribbean Oil and Transport Inc.

The tax savings to Imperial from these various entities were considerable. Albury provided a mark-up of \$5.6 million on crude oil in 1971 (Document # 125530). ¹³⁶ Earnings on Western Oil and Trading Marine Transportation were \$2.2 million in the same year (Document # 125530). ¹³⁷ In addition, Canadian profits earned by Building Products (an Imperial subsidiary) were also being transferred to Albury. Since Imperial calculated that a 10 cent per barrel tax-free dividend was worth 21 cents per barrel (Document # 88533-34), ¹³⁸ the 13 cent per barrel tax-free dividend in 1971 would have been equivalent to an after-tax reduction of about 27 cents per barrel in crude costs. Thus tax savings from the offshore trader aided in reducing Imperial's costs towards the "average of competition" from 1967 onwards.

With the outbreak of the Middle Eastern War in 1967 and the closure of the Suez Canal, Imperial was forced to give up its Middle East supplies. Exxon informed Imperial that it intended to shift Imperial's Brega crude to its Caribbean refinery in order to make available Venezuelan crude for the United Kingdom (Document #89229). To make up its shortfall, Imperial was offered Venezuelan crude at an additional cost of 28 cents (Cdn.) per barrel or U.S. Gulf Coast crude at an additional cost of \$1.25 per barrel (Document #89231). Imperial was informed "that the basis for their [Exxon] position was Jersey Economics" (Document #89230).

"Mr. Konrad acknowledged that if we were a completely arm's-length customer there would be no question that we would receive the Brega crude as promised. The sole reason for requesting our inclusion of the Gulf Coast crude is to reduce Jersey's over-all costs associated with the Suez crisis through diverting costs from 100% to 70% affiliates."

(Document # 89233, August 11, 1967, Imperial)¹⁴²

This event illustrates Exxon's ability to transfer profits from one subsidiary to another even at the expense of minority shareholders. More importantly, it discredits the contention that Imperial was treated as an arm's-length customer of Exxon. Finally, it indicates that not only did Imperial pay prices in excess of market prices, but also that it was not guaranteed stability of supply by doing so. As Imperial itself argued during the 1967 Middle Eastern crisis:

"One of the major reasons for rationalizing the higher prices Imperial paid over what could be obtained on the open market, was that we had 'security of supply'. We have paid the premium on this 'security of supply' for many years and feel that it should provide us with some security in price structure as well."

(Document # 89232, August 11, 1967, Imperial)¹⁴³

In light of Imperial's argument, it is significant that it did not do so.

The result of the crisis was that Imperial incurred substantially increased crude costs because of the substitution of Venezuelan for Middle Eastern crude (Document # 89233).¹⁴⁴ There were two reasons for this. First, the Venezuelan crudes that were substituted were more expensive. Secondly, Creole unilaterally made changes in Imperial's Venezuelan crude slate in the last quarter of 1967 and the first quarter of 1968 (Document # 91936).¹⁴⁵ As Imperial noted: "Crude substitutions were made in the fall (T.J. Medium for T.J. Light and Guanipa) without Imperial approval or knowledge" (Document # 91937).¹⁴⁶

But the crisis had a greater effect on Imperial's long-run than its short-run competitiveness. The Exxon organization, through its Venezuelan subsidiary (Creole), required Imperial to extend its contract with Creole through 1968 and to waive the "average of competition" approach that had been pursued (Document # 89238). Imperial, as a result, returned to an all Venezuelan slate in the subsequent year. Though Imperial temporarily saw its crude costs equate to the "average of competition" in 1968, as a result of the change in its crude slate, it predicted it would return to a disadvantage of at least 15 cents per barrel in subsequent years (Document # 88565). In the subsequent years (Document # 88565).

The fact that Imperial, for a brief period, saw its crude costs equate with the "average of competition" in 1968 should not be construed to imply that the largest Canadian crude importer was now paying world market prices. That would have been the case if the Canadian average had approached the world

price. This was not so. Indicative of the fact that open-market prices were lower than those paid by Imperial is the fact that the smaller more aggressive firms were still importing crude at lower prices. Imperial, in a December 1968 study, reported Fina was purchasing T.J. Medium at less than \$1.60 U.S. per barrel f.o.b., (Document # 88511)149 and Golden Eagle was receiving T.J. Medium at \$1.58 U.S. per barrel (Document # 88507).150 In contrast, Imperial paid \$1.98 U.S. per barrel to its offshore trader for this crude (Document # 88574).¹⁵¹ Moreover, Imperial noted that its competitive position promised to deteriorate as freight rates fell from their post-Suez highs. Imperial predicted that, by 1970, its competitive disadvantage would increase to about 15 cents per barrel if it were forced to continue using only Venezuelan crude. In addition, Imperial noted that its position could deterioriate even more because "further emphasis by competitors on Eastern Hemisphere crude supplies would increase Imperial's disadvantage" (Document # 113048). 152 Fina and Golden Eagle, Imperial noted, had an advantage at this time over Imperial of at least 30 cents per barrel because of their position as "third party buyers" (Document # 113049).153 Additional evidence is available as to the difference between Imperial's and third-party prices. In December, 1967, Imperial noted that "the delivered open market price of Venezuelan crude, as set by Middle East competition, is around \$2.00/B." on the U.S. East Coast (Document # 90910). 154 Since this quotation does not refer to the average gravity or other characteristics of the oil in question, comparisons are tenuous; however, Imperial's laid-down cost of crude on the Atlantic coast in 1967 was \$2.23 per barrel (Document # 94904),155 or about 23 cents higher than the above quoted landed cost of Middle East crude oil.

During the next two years, Imperial continued to pay more than the market price for Venezuelan crude. Exxon documents (Document # 123960-5, and # 123966)^{156, 157} that discussed whether Imperial should continue to purchase Venezuelan crude from Mobil noted that the "estimated market price" of T.J. Light in early 1970 was \$1.65 to \$1.70 per barrel (Document # 123963).¹⁵⁸ The transfer price to Albury for T.J. Light was \$2.02 per barrel at this time (Document # 123961).¹⁵⁹ Once again, this provides evidence that Imperial was being charged prices above those that prevailed in the open market.¹

The general downward trend in oil prices ended in the early nineteen seventies. Prior to this period, Imperial's crude prices decreased slowly and continually lagged behind world market prices. Through Imperial — the dominant Canadian firm — Exxon provided an umbrella to support industry opera-

^{1.} Equally important, by using these open-market or alternate value prices in a head-office study on the desirability of Imperial's Mobil purchase, Exxon can be said to have corroborated the validity of these prices.

tions in Eastern Canada. With the turnaround in the world market in the early nineteen seventies, Exxon's behaviour remained unchanged. In late 1971, Imperial had a disadvantage of some 15 cents per barrel on a gravity corrected basis; in early 1972, some 16 cents (Document # 125180).160 By the end of that year, its costs were still 10 cents above its competitors' costs (Document # 116177).161 With the advent of host government tax increases in 1973, crude prices began to escalate and Exxon not only passed on these increases but added "market hardening premiums". Exxon, in effect, was adding to its margins. Between January 1, 1973 and April 1, 1973, Imperial saw its imported crude costs rise by 56 cents per barrel. Of this amount 14 cents was accounted for by "market strength" increases (Document # 116179).162 Of the 55 cent per barrel increase that Imperial experienced in its cost for T.J. Light — a Venezuelan crude—13 cents were the result of increased margins or "market hardening premiums" (Document # 94918). 163 As a result, by June 1973, Imperial gauged its disadvantage to have been between 12 and 26 cents per barrel in comparison to the "average of competition" (Document # 120336).164

In summary, from 1958 to 1974, Exxon continuously kept the crude prices of its Canadian subsidiary above world levels. Exxon, via the control exercised over Imperial, provided the umbrella under which the industry operated in Eastern Canada. Although Exxon adopted the strategy of moving Imperial towards the "average of competition", except for the brief period at the end of the nineteen sixties, Exxon actually kept Imperial's costs above this level. During the period when world crude oil prices were falling, Exxon tried to stem this trend by preventing the prices its Canadian subsidiary paid from falling to open-market prices and continually kept Imperial's costs above the average price of its competition. When the decline in world prices began to reverse itself in the nineteen seventies as OPEC strengthened its control over the industry, Exxon, in that it kept Imperial's costs above the "average of competition", can be said to have again led the way in trying to extract higher prices from the Canadian market.

4. The Transfer Pricing Policy of Texaco

(a) Control by Parent Firm

Vertical integration by the multinational petroleum companies into Canada operated to reduce the degree of independence of the Canadian inudstry and the level of competition in the Canadian market. Given the structure of the world petroleum market, vertical expansion by the multinationals into Canada facilitated parallel and mutually predictable behaviour among firms operating in the Canadian market. As a result, prices paid by Canadian subsidiaries for imported crude were generally kept above world levels. This was accomplished

via both the exercise of parental control that reduced the subsidiaries' scope for decision-making as well as by local communication among the subsidiaries. Together these instruments served to ensure the consistency and, therefore, the predictability of the approach being followed by each company. Texaco's relationship with its parent illustrates the degree of control that was exercised over the operations of a Canadian subsidiary and the reulting high transfer prices that were extracted from the Canadian firm.

Texaco Canada (hereafter referred to as Texaco) was some 68 per cent owned by a United States corporation, Texaco Inc. Evidence indicates that Texaco had its crude slate and crude prices dictated to it by its parent. For instance, Texaco admitted that it used Middle Eastern crude in the nineteen sixties because it was told to do so (Document # 6710). When it suited its parent to change its crude slate — as in 1967 and 1969—Texaco had no say in the matter. In 1967, Texaco's crude costs were increased even though, in its own opinion, its contract with its parent should have protected it from any increase (Documents # 8503-5, # 8494, # 8495) 166, 167, 168. In 1970, Texaco claimed that, even though a reduction in price had been negotiated with its parent, it never received the full amount to which it was entitled (Document # 51097). These episodes indicate Texaco had little independence of action; the history of its crude prices illustrates the effect of this control.

(b) Price History

From 1958 to 1970, Texaco paid prices for its crude oil which were not only higher than world market prices but which were also higher than the average paid by its 'competitors' in Eastern Canada.

World crude oil prices reached a high in 1957 and 1958 but began to fall rapidly thereafter. However, Texaco's prices did not decrease as rapidly as world prices. Between 1958 and 1962, Texaco's f.o.b. price for Arabian crude was reduced by 42 cents per barrel (Document # 6640). On the other hand, the f.o.b. price of selected Arabian crudes imported into the United States fell by 58 cents per barrel over the same period (Document # 57714). The difference is even more pronounced if the comparison is made with landed or c.i.f. costs of Middle Eastern crude. Table 13 presents Texaco's c.i.f. crude prices at Portland for the period from 1954 to 1963. Between 1958 and 1962, Texaco's c.i.f. price fell by 49 cents per barrel. However, Texaco reports that AFRA freight rates from the Middle East fell by 30.3 cents per barrel during this period (Document # 57548). Therefore, if Texaco's landed crude costs had reflected trends in both f.o.b. crude prices and transportation rates, it

^{1.} See Appendices D and C for posted and arm's-length prices respectively.

1963

(\$0.5.7001.)						
Year	Arabian 34º API	Venezuelan 31° API				
1954	3.010	2.803				
1955	2.840	2.799				
1956	2.765	2.815				
1957	3.083	3.075				
1958	3.000	3.087				
1959	2.815	2.886				
1960	2.680	2.804				
1961	2.590	2.758				
1962	2.510	2.700				

TABLE 13

TEXACO CRUDE PRICES AT PORTLAND
(\$U.S./bbl.)

Source: Document # 57548, Texaco¹⁷⁵

should have fallen by some 30 cents more than the 58 cent decline observed in the f.o.b. price of Arabian crudes imported into the United States.¹

2,430

2.547

Of course averages such as those quoted above ignore the crude mix and, thus, must be interpreted with caution. But Texaco itself noted that its crude prices were higher than those of its major competitors. For instance, in 1959, Texaco estimated that its crude costs were 12 cents per barrel higher than the average of its 'competitors' in Montreal (Document # 6641).¹⁷⁶ For 1960, using Imperial's public statements as to its crude cost differential between Toronto and Montreal, Texaco calculated that it suffered a competitive disadvantage vis-à-vis Imperial in Montreal of at least 35 cents per barrel (Document # 6642).177 In 1964, Texaco argued that its crude costs were at least 20 cents per barrel higher than were justified. On large volume sales in the Montreal area, in the highly competitive markets for government, railroad, and other large commercial gasoline accounts, Texaco claimed that it lost 20 cents on every barrel of Arabian crude processed (Document # 6642).178 Its 'competitors', it noted, were receiving greater discounts on crude. Texaco, in a study dealing with 1964 crude markets, calculated that the average discount was 33.5 cents per barrel on Venezuelan crude that was being received by its Montreal 'competitors' (Document # 6701)¹⁷⁹ while it was receiving discounts of only 27

^{1.} Texaco's c.i.f. price for Venezuelan crude fell by 38.7 cents over the same period. The average decrease in the f.o.b. price of Venezuelan crudes imported into the U.S. during this period was 36.4 cents (Document # 57714).¹⁷³ However, since Texaco's crude slate in 1961 contained 79 per cent Middle Eastern crude (Document # 57546)¹⁷⁴ the more relevant comparison is between Texaco's costs and Middle Eastern crude prices.

cents per barrel at this time. A similar problem existed for Middle Eastern crude. Texaco noted that Canadian Oil had been offered a discount on Middle Eastern crude of 30 cents per barrel in the early nineteen sixties (Document # 6642), while its own discount was somewhere between 10 and 17 cents per barrel (Document # 6711). 181

At the same time, Texaco suffered from uncompetitive freight rates. Gulf paid only ATRS minus 50 per cent in 1964-65 on the Venezuela to Portland route¹ (Document # 6703).¹⁸² By way of contrast, Texaco's freight rates at this time from Venezuela were higher than Gulf's since they were ATRS minus 41.9 per cent or 24.5 cents per barrel (Document # 6703).¹⁸³ This rate was also higher than another standard, the AFRA rate of 22.3 cents per barrel (Document # 6706)¹⁸⁴ — a rate that has been calculated to have been above market rates.² In view of this state of affairs Texaco, in 1964, informed its parent that an additional discount of at least 10 cents per barrel was required to keep it reasonably competitive (Document # 6685).¹⁸⁵

Subsequently, Texaco's competitive disadvantage continued. Writing in early 1965, Texaco noted that it was having to compete with products that had been produced from crudes costing \$2.30 (Cdn.) per barrel at Montreal (Document # 6703). 186 Its own c.i.f. average costs in Montreal in 1964 were \$2.78 (Cdn.) per barrel. This left it with a disadvantage of some 48 cents (Cdn.) per barrel. Texaco also reported that British Petroleum received discounts of at least 35 cents per barrel on light Iranian (Document # 6710), 187 but its own discount (calculated by subtracting a "reasonable" freight rate from its c.i.f. price) was only 10 cents per barrel (Document # 6711). 188 Texaco's disadvantage, therefore, was 25 cents per barrel using this alternate calculation. Part of the difference between the latter estimate based on f.o.b. prices and the 48 cents (Cdn.) per barrel referred to above, which was based on c.i.f. costs, was the result of Texaco's freight rate disadvantage.

In 1965, Texaco's crude costs declined but, in its own opinion, its competitive disadvantage did not disappear since crude prices in the world market continued to decrease. Once again, Texaco used the Montreal market to gauge its disadvantage relative to others operating therein:

"... our figures proved that the consumer and jobber product price structure was declining and, if competitive prices were met, we should take a loss on most bid business."

(Document # 6727, November 8, 1966, Texaco)189

^{1.} Freight rates are often denoted in terms of a scale which when applied to a given route could be translated into an absolute dollar figure. For a discussion of tanker freight rates, see Adelman, *The World Petroleum Market*, Chapter IV.

^{2.} Adelman, The World Petroleum Market, p. 113-4.

^{3.} See Table B-1, Appendix B for Texaco's crude costs over this period.

Even though this disadvantage was pointed out to Texaco's parent, the U.S. corporation decided to maintain the crude price it was charging its Canadian subsidiary. Texaco was informed that lower tanker costs were going to lead to lower freight rates for others but that it should not expect its "prices for crude to decline as larger tankers came into service" (Document # 6728). 190 Indeed, between 1965 and 1969, no downward adjustments were made in Texaco's crude costs (Document # 53897). 191

The degree of control exercised over Texaco and its effect on crude prices are, therefore, not in doubt. In addition, the effect in product markets of that control is of interest. The fact that crude prices were 'unrealistically' high would not have mattered if it had not affected Texaco's behaviour in product markets. But the same representative from the parent company, who told Texaco not to expect a decrease in crude costs, responded to Texaco's queries as to how it was to remain competitive by advising them to withdraw from the competitive segment of the market. Texaco reported that:

"At this point Mr. Conner [the parent representative] said, in effect, 'Well you don't have to bid at a loss, we don't, just pass it up'."

(Document # 6727 November 8, 1966, Texaco)¹⁹²

This instruction, coming from a man who was authoritative enough to be able to inform the company in 1966 that it would not receive any decreases in crude costs as the result of a long-run downward trend in crude prices, forges the link between the level of Texaco's crude prices and that of its product prices. As such, the crude transfer pricing policy of Texaco would have served to do more than just shift profits out of Canada. It would have helped to keep the level of Canadian product prices above world levels—thereby affecting the level of profit both created in and extracted from the Canadian market.

During the last half of the nineteen sixties, Texaco's competitive disadvantage continued since its crude prices were frozen as world prices generally continued to fall. In 1968, it noted that its costs were 12 to 14 cents per barrel higher than the average of its 'competitors' (Document # 53897). However, comparisons using averages such as these ignore the existence of offshore traders. Therefore Texaco used comparisons with specific companies which it was reasonably certain did not use an offshore trader in order to delineate its true disadvantage. Gulf was one of these and its Venezuelan costs were stated to have been 25 cents per barrel less than Texaco's equivalent crude cost (Document # 51097). On Nigerian crude, Gulf's advantage was estimated to have been 12 cents per barrel. Other evidence corroborates Texaco's observation as to its disadvantage. In Table 14, Texaco's crude costs are compared to estimates of crude market values. In 1969, Texaco's landed cost of

^{1.} See Appendix C for estimates of market value.

TABLE 14

TEXACO CRUDE COSTS AS OPPOSED TO ESTIMATED MARKET VALUES FOR CRUDE, 1969 (\$U.S./bbl.)

	Iranian (34º) (c.i.f. at Portland)	Venezuelan (32º) (f.o.b.)		
Texaco	2.33 ¹	2.20 ²		
Market Value	1.96-1.98 ³	1.70 ⁴		

Notes: 1. Document # 53908-9, Texaco. 195

- Texaco c.i.f. cost was \$2.40 for Lagomedio at Portland \$2.20 f.o.b.—using freight rates on Exhibit T-17, Texaco, Toronto Hearings, 1975. 196
- 3. British Petroleum's ci.i.f. costs of Iranian were \$1.96 in 1969 (Document # 10586).¹⁹⁷ Sun reports price as \$1.30 in 1969 (Document # 83927),¹⁹⁸ and a freight charge of 68¢/bbl. from Persian Gulf to Portland (Document # 6634),¹⁹⁹
- 4. Sun reports Lagomedio's alternate value in the market as \$1.70 during 1969 (Document # 83927)²⁰⁰ Exxon documents specify a range of \$1.65 to \$1.70 for T.J. Light in 1970 (Document # 12363).²⁰¹

Middle Eastern crude was over 30 cents per barrel above B.P.'s landed costs while its Venezuelan crude costs (on an f.o.b. basis) were some 50 cents per barrel above Sun's estimate of market prices.

Texaco's own evaluation of the basic unreality of its transfer prices was shared by other companies. Imperial, in a December 1968 study of the crude costs of its 'competitors', found it difficult to believe that Texaco's reported crude costs were accurate — that they did not reflect the use of a trading company to source profits offshore. Imperial noted:

"The reported price of Arabian Light is confirmed again to be only 2¢ off posted (\$2.15 and \$1.78 U.S./bbl.) for the crudes from Sidon and Ras Tanura.... The Light Arabian price particularly suggests the use of a trading company, although there is no concrete evidence to support the conclusion. Regardless, the price being paid is approximately 30-40¢ (U.S.)/bbl. in excess of what could be considered fair market value."

(Document # 88512, December 15, 1968, Imperial)²⁰²

Therefore, until 1970, Texaco can be said to have paid prices for crude which were well above third-party arm's-length prices and the cost of crude imported into Eastern Canada by some of its 'competitors'. In 1970, Texaco was granted a reduction in its crude costs — a reduction that would have left it 8 cents above the average 1968 cost of crude incurred by its 'competitors' (Document # 53897).²⁰³ In fact, Texaco reported that its crude costs in 1970 remained about 9 cents per barrel above the average of the other companies (Document # 51097).²⁰⁴ Moreover, with the reversal in the world market conditions in 1970, its parent reneged on part of the promised price reduction. Texaco reported that:

"... we did not obtain the full amount of the reduction to which we calculated we were entitled for the year 1970."

(Document # 51097, February 24, 1971, Texaco)²⁰⁵

The parent firm had adopted a new position as to the price its Canadian subsidiary should pay. The parent demanded that Texaco now pay the open-market price (Document # 51096)²⁰⁶ — a position entirely different from that adopted during the nineteen sixties when market prices were falling. Subsequently, the parent Texaco company incorporated "market strength" increases into the price increases demanded of its Canadian subsidiary. This course was pursued until at least 1973. In that year Texaco pointed out that the increases that were being demanded "were out of line with the prices which would be expected from applying increases in freight and government take over the past year" (Document # 50061).²⁰⁷ The increases proposed would have left the Canadian subsidiary at what it considered to have been a disadvantage of 50 cents per barrel in Montreal (Document # 50062).²⁰⁸

That the parent corporation was successful in these demands is illustrated by Table 15. This Table compares Texaco's prices in January 1971, July 1972, and January 1973 with what they would have been, had only changes in host government taxes, revaluation, and freight premiums been added to the price Texaco was paying for crude in 1970. The Table shows that Texaco's landed prices escalated by more than these increases. The difference was greatest for Middle Eastern crudes. Between 1970 and mid-1972, host government take and related costs increased by 52 cents per barrel for Arabian crude. Texaco's price escalated by 62 cents per barrel. Between January 1970 and January 1973, host government take and related costs on Arabian crude went up by 69 cents per barrel (Document # 133746).²⁰⁹ Texaco's price increased by some 80 cents per barrel. Therefore Texaco's parent company passed on more than the tax and related cost increases that took place during this period. Paying higher than normal crude prices during the nineteen sixties did not protect Texaco from the rapid price increases of the early nineteen seventies.

Unlike its nineteen sixties experience, in the early nineteen seventies Texaco's price increase corresponded almost exactly to changes in market prices. For instance, Imperial calculated that market prices for Arabian crude between 1970 and mid-1972 climbed by about 65 cents per barrel; between 1970 and January 1973, they increased by 85 cents per barrel (Document # 133774).²¹⁰ As Table 15 indicates, Texaco's price for this crude climbed by 62 cents per barrel and 82 cents per barrel for each of these periods. Since Texaco's

^{1.} Late 1972 is chosen for comparison to January 1, 1970 to remove the influence of an unstable freight market in late 1970 and 1971. By 1972, world freight rates had returned to their early 1970 level.

TABLE 15
"MARKET STRENGTH" INCREASES IMPOSED ON TEXACO, (1970-1973) (\$U.S./bbl.)

	1970	January, 1971		July, 1972		January, 1973	
Type	1970 Texaco Price ²	1970 price +HGT ¹	Texaco Price ³	1970 price +HGT ¹	Texaco Price ²	1970 price +HGT ¹	Texaco Price4
Lagomedio (32°) Arabian Lt (34°)	2.25 2.28	2.38 2.35	2.46 2.69	2.87 2.80	2.90 2.90	2.99 2.97	3.015 3.075

Sources: 1. HGT: changes in what is referred to as 'host government take' in this Table includes changes in tax, royalty, freight premiums and revaluation and are taken from Document # 133744-6 (Imperial).²¹¹

- 2. Document # 51116, Texaco.212
- 3. Document # 51105, Texaco.213
- 4. Exhibit T-17, Texaco, Toronto Hearings, 1975, p. 2719.214

crude prices were above world market levels prior to the early nineteen seventies and increases similar to world market prices were incurred between 1970 and 1973, Texaco would have been left in the same relative position by the end of this period.

Therefore, as with Imperial, Texaco was forced to pay crude prices throughout the period that were higher than world market prices. As crude prices decreased from their post-war highs in 1958, Texaco's price moved down slowly but always with a lag and, hence, always remained above the prevailing arm's-length market price. Once more the effect of the multinational parent's extension into the Canadian market was to restrain the rate at which the Canadian market responded to world market conditions. Just as this control was exercised so as to keep prices up in a falling market, in the rising market of the nineteen seventies, the multinational parent used its power to restore the margins earned on crude sales to the levels enjoyed prior to the disequilibrating influences that led to competition in the world crude market and a decrease in world crude prices starting in the late nineteen fifties. Texaco's parent firm successfully extracted crude price increases from the Canadian market that were even greater than the increases in taxes levied by the producing countries—a policy that was also followed by Imperial's parent firm.

(c) Security of Supply

One of the arguments oft-repeated by the Canadian subsidiaries of the multinationals is that their connections with a large parent organization guaranteed them security of supply. The events of the early nineteen seventies show that Texaco was not protected from the vagaries of the market by its contractu-

al relationship with its parent. In addition, Texaco's fate during the events surrounding the 1967 Middle East War does little to substantiate any claim that it was provided with stable prices during periods of crisis. With the onset of hostilities in 1967, Texaco was informed by its parent that it would not receive the Middle Eastern oil for which it had contracted. Instead, it was offered U.S. Gulf Coast crude at a price of \$3.64 per barrel c.i.f. Portland. This price was considerably above the \$2.33 per barrel c.i.f. price that Texaco normally paid for Arabian crude. The higher c.i.f. cost was the result both of the higher price of U.S. Gulf Coast crudes and the parent company's imposition of freight surcharges.

Texaco argued that both increases were unjustified. First, it pointed out that an increase in freight charges was inappropriate because of the adverse treatment it had received prior to the 1967 crisis:

"The reduction in AFRA in the years 1964, 1966 and 1967 to June 30th was not passed on to Texaco Canada in view of the fact that we had a C.I.F. contract. Now that AFRA is increasing we are asked to absorb the increase and disregard, in effect, the C.I.F. price as per contract."

(Document # 8494, August 18, 1967, Texaco)²¹⁷

Secondly, Texaco argued that under the terms of its contract, there should have been no reduction in the amount of Arabian and Iranian crudes supplied to it and, therefore, no cost penalty from the forced adoption of American crudes. The production of the particular crudes for which Texaco had contracted had not fallen. Therefore, Texaco argued, it was difficult to see how "force majeure" applied. But even if it was applied, Texaco argued that the "force majeure" clause should have resulted in all companies supplied by its parent being cut back proportionately. Instead, Texaco was being requested to take a 100 per cent cutback (Document # 8503).²¹⁸ Texaco summarized its position:

"In view of the quantities of Arabian and Iranian oil presently being produced and transported, it appears that in an arm's length transaction, and in compliance with the contract, Texaco Canada should obtain as much crude as heretofore at the contract price."

(Document # 8495, August 18, 1967, Texaco)²¹⁹

In addition, Texaco pointed out that if the flow of Middle East crude was reduced, its contract, if it was of any value, should still have protected it from price increases:

^{1.} See Document set # 8475-8508²¹⁵ for a history of events at this time.

^{2.} See Document # 8475²¹⁶ in the above set.

^{3.} See footnote # 2, p. 87 and Reference # 216.

"With respect to the short fall, we would expect the alternate source clause to become effective whereby crude oil comparable in quality and price to that supplied under our contracts would be made available to us."

(Document # 8503, August 2, 1967, Texaco)²²⁰

In the words of Texaco's Canadian subsidiary, any rationale for its having paid more than the market price in return for security of supply would have been destroyed if it was forced to pay more for its crude during the Middle East crisis. In particular, since gasoline prices softened in Montreal in the middle of 1967, Texaco felt any increase could not be justified in terms of market conditions (Document # 8495-6).²²¹ Texaco further observed:

"Should we pay more for our crude supply during this crisis, the advantage of this association will be questionable in the eyes of the Taxation Division, particularly in view of the fact that as stated above our competitors are receiving crude at prices substantially the same as those prevailing prior to the Middle East crisis."

(Document # 8497, August 18, 1967, Texaco)²²²

In light of this statement, it is significant that Texaco did end up paying more for its crude. Its parent ultimately charged it 65 cents per barrel more than it would have paid if it had not had to use U.S. Gulf Coast crude (Document # 8476).²²³ Therefore both the 1967 crisis and the period of the early nineteen seventies indicate that Texaco was not guaranteed price or supply stability in return for paying 'unrealistically' high crude prices.

Lack of stability of price was not the only handicap imposed on Texaco. Texaco also suffered from having its crude slate arbitrarily and unilaterally changed by its parent. It had designed its Montreal and Dartmouth refineries to run Middle Eastern crudes and was purchasing most of its crude from the Middle East as the result of a request from its parent to do so (Document # 6710).²²⁴ In 1969, Texaco was suddenly forced to decrease the amount of Arabian crude run from 85 to 0 per cent and to increase the amount of Venezuelan (Lagomedio) from 15 to 95 per cent (Document # 53898).²²⁵ But Texaco's uncertainties during this year extended beyond the type of crude it was to receive. The company was left in limbo throughout the year as to its price, since it was given no contract (Document # 53901)²²⁶ Texaco noted:

"During all the discussions in early 1969 on the crude slate, we endeavoured to discuss crude pricing, with which we were dissatisfied. We were informed that it was impossible to discuss prices until the slate was fixed. The crude slate was adjusted continuously throughout 1969, so that we never got around to discussing prices until the end of the year."

(Document # 51176, February 19, 1970, Texaco)²²⁷

In the contract discussions that followed, the parent corporation refused to include any "alternate source" clause — a clause that would have required it to supply a comparable crude at a similar price if that which had been promised

was unavailable (Document # 53908).²²⁸ The parent company stated that it was willing only to include a "best efforts" clause. Texaco's already dubious claim to security was, therefore, further weakened.

In addition to its lack of security with respect to both the price level and the type of crude, Texaco experienced supply shortages during this period. For instance, in 1970 it ran short of crude:

"... we have had to cut our crude running due to lack of supply of crude. In January, 1970, we lost 90,000 bbls. of running which cannot be regained. At this date, we face a loss of 100,000 bbls. of running due to the late arrival of crude boats."

(Document # 53898, February 25, 1970, Texaco)²²⁹

This incident was not an isolated occurrence; it continued for the next two years. As late as 1972, Texaco noted:

"Our crude oil supplies have been uncertain on many occasions during the past two years and we often have had to slow the plant down because of non-arrival of crude oil."

(Document # 57926, April 5, 1972, Texaco)²³⁰

The reports of, and these experiences themselves call into doubt the argument that Texaco justifiably paid high prices for crude because of the security it was given. Its prices were subject to fluctuation during crises, its crude slate was uncertain, and its refinery production had to be reduced because of the delays in crude delivery.

(d) Coordination Engendered by the Parent Corporation

That the parent Texaco company used its control to keep the crude costs of its Canadian subsidiary above world market levels has been outlined above. Of equal interest is the extent to which the parent corporation was able to coordinate the behaviour of Texaco with subsidiaries of other major oil companies operating in Canada. The way in which Texaco's crude costs were tied to the prices of other major companies has already been described. Processing agreements had similar effects. As previously described, Sun and Texaco coordinated the prices their Canadian subsidiaries paid for Middle Eastern crude — an agreement facilitated by the Sun-Texaco processing arrangement in Montreal. It should be noted that the parent company initiated two other proposals for inter-firm cooperation in Eastern Canada. In 1970, the parent firm urged Texaco to reach a processing agreement with Petrofina in Montreal (Document # 53907).²³¹ The arrangement would have been conditional upon Petrofina purchasing crude from the parent Texaco company and processing it for Texaco (Document # 53907).²³² Just as the Sun processing

arrangement had resulted in price coordination between Sun and Texaco, such an arrangement with Fina would have promised similar benefits. While this arrangement apparently was not implemented, it would have served to draw one of the smaller refiners in the Quebec market more closely into the fold of the leading firms.²

At appproximately the same time a processing arrangement was worked out with Golden Eagle — the newest entrant to the refining sector in Eastern Canada. The arrangement originated with the parent Texaco company and was related to Texaco Inc.'s "over-all arrangements with Ultramar [Ultramar was Golden Eagle's parent] and the Panama refining complex" (Document #50141).²³⁴ The processing arrangement in Canada suited the Texaco organization because it promised to give them heavy fuel for export. But the manner by which it was effected indicates that it was the parent who organized the arrangement and the Canadian subsidiary was left with little choice but to participate. For instance, Texaco noted that it was unhappy with the basis on which it was told to participate:

"We repeated that it was difficult for us to agree to a processing scheme in which neither the crude oils nor the yields were specified."

(Document # 8609, March 14, 1973, Texaco)²³⁵

In light of the coordinating role such processing arrangements had previously played, this incident once more indicates the degree to which the parent company was able to initiate agreements that affected the degree of competition in Eastern Canada. By linking the interests of two otherwise separate companies, it increased the degree of market concentration and by increasing the likelihood that crude transfer prices would be coordinated, it reduced the potential for competition that arises from the existence of a competitive advantage in input costs.

5. The Transfer Pricing Policy of Gulf

(a) Control and Coordination of Behaviour

The history of Gulf Canada's crude procurement policy illustrates the variety of the controls that were exercised over subsidiaries of the multinationals

^{2.} The volume on the Refining sector develops at greater length the tendency of refining agreements to link the interests of different firms.

during the post-war period. Of particular interest is the changing nature of the type of controls used during this period. The parent corporation adopted different means to reduce the flexibility of its Canadian subsidiary as the degree of competition in world markets changed.

In the late nineteen fifties, competition was just beginning to have a marked effect on world crude prices. However, this had not yet been felt in Canada. During this time—1955 to the early nineteen sixties—the Gulf Oil Corporation tied the crude costs of its subsidiary Gulf Canada (hereafter referred to as Gulf) in one way or another to the costs of the subsidiaries of the other major companies that were operating in Canada. This policy served to harmonize the activity of the Canadian Gulf subsidiary with the activities of most of the other multinational subsidiaries operating in Canada.

The arrangements in the early period that tied Gulf directly to other companies used posted prices as a guide. Since posted prices were visible and a reasonably accurate indicator of the level at which most transactions took place prior to the outbreak of competition that occurred in the post-1958 period, they served as an ideal reference that allowed the major companies to link the activities of their subsidiaries. Parallel predictable behaviour was relatively easy to accomplish when crude input costs were aligned in this way.

By the early nineteen sixties, posted prices had diverged substantially from market prices and ceased to have much relevance except for tax purposes. Therefore a new system had to be devised for aligning crude input costs so as to bring about similar behaviour in the downstream market. While Exxon focused its scheme on the "average of competition" at the crude import level, Gulf's parent centred its attention directly on the final product market. In 1965, Gulf was told its crude costs would be adjusted so as to guarantee a 6 per cent rate of return on its Montreal operations (Document # 65445).²³⁶ In other words, Gulf and its parent adopted a variant of the "average of competition" approach the approach that was described in an Imperial document as "non-aggressive" (Document # 91069).237 Under the "average of competition" approach, Gulf was encouraged to adopt the same prices as others in the product market and not to lead prices downward. This was accomplished by adjusting Gulf's crude costs but only with a considerable lag. For example, although this agreement was signed on October 1, 1965 no price changes were made under it until 1968 or early 1969 and Table 17 indicates that f.o.b. prices were constant during 1965, 1966 and 1967. Therefore, if Gulf was at all constrained by taxation authorities, or minority shareholders, or by its parent as to the minimum rate of return it earned, then this policy effectively prevented Gulf from behaving independently in the final product market.

^{1.} See Appendix B on individual company crude costs.

Equally important as the effect of this specific policy is the cumulative effect of this type of policy when taken in conjunction with the policies pursued by other multinationals. Both Imperial and Gulf adopted variants of the "average of competition" approach. Simultaneously Texaco and Shell had their crude prices frozen. After Texaco received adjustments in its crude price in 1965, it received no subsequent price reductions until 1970. Shell was treated similarly. In 1967, a contract was signed that froze Shell's crude oil prices for a period of five years — in the face of a downward trend in crude and freight costs. With these two companies having their crude costs held constant and with both Imperial and Gulf adopting or being held to variants of the "average of competition" approach, there was very little movement in the average crude cost of these four companies. Since together they controlled about 70 per cent of the crude being imported into Quebec during the last half of the decade, these policies taken together would have reduced the degree to which the price of crude imported into Canada responded to the downward movements in the world price that occurred in the late nineteen sixties.

Inter-company harmonization continued into the nineteen seventies. With the transition in the external environment to a more uncertain crude market, harmonization was pursued via direct communications between Canadian subsidiaries. In addition, Gulf's parent continued to support this goal by keeping the "average of competition" approach but, instead of focusing on Canadian product realizations, it apparently concentrated on the average crude price paid by subsidiaries of other major companies operating in Canada. Documents indicate that the President of Gulf continued to argue that the price of Gulf's crude should coincide with that of the other major firms. In 1972, he wrote:

"...I believe, that the soundest approach to pricing Ceuta crude into Portland for the Montreal refinery is to continue to meet the laid-down cost of our major competitors for similar crudes."

(Document # 79255, July 20, 1972, Gulf)²³⁸

The adjustments necessary for following such a strategy explicitly demonstrate that Gulf was willing to follow the lead of other companies as the following description of the process indicates:

"Gulf Canada will be kept competitive with major competition on the price of Venezuelan crude laid down in Portland Retroactive adjustments will be made in the event that subsequent information indicates that major competition have not followed through on their stated intention to pass the full increase in government take on to their Canadian affiliates."

(Document # 78191, January 27, 1972, Gulf)²³⁹

Therefore, for the entire post-war period, Gulf's crude acquisition policies served to solidify the degree of mutual interdependence among the members of the oligopoly that dominated the petroleum industry in Eastern Canada.

(b) Pricing History Prior to 1970

Even though the posted price structure had begun to break down by 1958, the Gulf parent kept its Canadian subsidiary paying posted prices until the beginning of 1961. From 1961 until 1965, Gulf Canada received a discount of 12 cents per barrel off posted prices on Iranian crude (Document # 78768)²⁴⁰, on Kuwait crudes (Document # 78771)²⁴¹, and on Arabian and Qatar crudes (Exhibit T-28, Gulf, Toronto Hearings, 1975).²⁴² Yet, Imperial noted that, in 1965, arm's-length transactions in the Middle East were characterized by discounts of about 35 cents per barrel (Document # 90594).²⁴³ Therefore Gulf's Middle East crude costs did not reflect world market conditions in the late nineteen fifties or early nineteen sixties.

A similar conclusion can be drawn with respect to Gulf's Venezuelan crude costs. Gulf reported that in early 1965 it could land Venezuelan 30° Mesa crude at Portland for \$2.63 per barrel (Document # 64942).²⁴⁴ In 1964, Imperial's landed costs for T.J. Light (32°) at Portland was \$2.43 per barrel — or about \$2.39 per barrel for 30° equivalent crude (Document # 90590).²⁴⁵ Yet, Imperial noted that its Venezuelan crude was overpriced by at least 20 cents per barrel (Document # 90588).²⁴⁶ Gulf's landed costs were, therefore, comparatively even more 'unrealistic'. In fact, a Gulf analyst noted that, in early 1965, on the basis of landed product prices at Montreal (a basis which presumably reflected world crude prices), Venezuelan crude was only worth \$1.93 per barrel (f.o.b.) to Gulf. However, the implicit f.o.b. price for Gulf was \$2.32 per barrel (Document # 64942)²⁴⁷ — a difference of 39 cents.¹

Therefore Gulf's Venezuelan prices were as unrepresentative of world market prices as were its Middle Eastern prices. During the early nineteen sixties, the majority of Gulf's imports came from Venezuela as Table 16 shows. It was the Venezuelan disadvantage that was critical in determining the degree to which Gulf's average crude costs were held at an 'unrealistically' high level in this period.

Table 17 gives Gulf's f.o.b. prices from 1961 to 1969. In 1965, its prices were finally decreased so as to bring them closer to world prices.² But they were still high by world standards. By 1967, Gulf reported an f.o.b. price of \$2.03 per barrel for 32° Ceuta crude from Venezuela. Yet Sun listed the alternate, or arm's-length value for Lagomedio (32°) as \$1.63 per barrel in

^{1.} This differential is conservative since refinery operating costs used in the Gulf study were only 44 cents per barrel. Should a figure of 76 cents be used, then crude worth would be \$1.70—the figure reported for third-party prices by Sun. Gulf charged 70-75 cents per barrel for processing in its Ontario refinery in the late nineteen sixties and, therefore, this would be the more relevant operating cost figure.

^{2.} See Appendix C.

TABLE 16

GULF CANADA'S CRUDE IMPORTS, 1960-1964
(Thousands of Barrels)

Year	South America	Middle East
1960	11,364	3,030
1961	11,254	3,204
1962	11,123	3,611
1963	11,050	4,743
1964	4,242	11,258

Source: Document # 64937, Gulf²⁴⁸

1967 (Document # 83927).²⁴⁹ Therefore, in 1967, Gulf's Venezuelan prices were still some 40 cents high in comparison with arm's-length prices. In the next two years, Gulf's Ceuta price fell first to \$1.91 per barrel in 1968, and then to \$1.80 per barrel by 1969. Several standards of comparison indicate Gulf's price was still above the world price. Ultramar purchased T.J. Medium from Exxon for \$1.56 in the late nineteen sixties (Document # 94909).²⁵⁰ Exxon itself, as late as 1970, lists the market or market or alternate or market value for T.J. Light as \$1.65-\$1.70 (Document # 123963).²⁵¹ Similarly, Sun lists the market or alternate value of Lagomedio (32°) as \$1.70 in 1969 (Document # 83927).²⁵²

TABLE 17

GULF CANADA'S F.O.B. CRUDE PRICES 1961-1969
(\$U.S./bbl.)

Crude Type	1961	1965	19664	19674	19684	1/6/19695
Nigerian (34°-35.9°)		1.723	1.71	1.71	1.73	1.80
Ceuta (30°-32.9°)	2.321	_		2.03	1.91	1.80
Mesa (30°-30.9°)	2.301				1.86	1.85
Oficina (35°-35.9°)	2.551					
Kuwait (31°-31.9°)	1.472	1.33^{2}	1.34	1.34	1.26	1.26
Agha Jari (34°-34.9°)	1.662	1.442		1.45	1.45	1.38
Gach Saran (31°-31.9°)	1.512	1.34^{2}	. 1.34	1.34	1.31	1.31

Note: Corrections to degree gravity indicated use 2¢ per ° API.

Sources: I. Document # 65463, Gulf.253

- Posted prices of \$1.59, \$1.78 and \$1.63 corrected to 32° API/taken from Document # 11175254 less the discounts listed in Documents # 78768-71.255
- 3. Document # 65429, Gulf.256
- 4. Exhibit T-28, Gulf, Toronto Hearings.257
- 5. Document # 65444, Gulf.25k

Therefore, even by the end of the decade, Gulf's Venezuelan costs, although lower than in 1965, were still at least 10 cents above third-party or market prices.

By the late nineteen sixties, Venezuelan crude was a less important part of Gulf's crude slate. In 1969, less than 40 per cent of Gulf's imports came from the Western Hemisphere (Document # 37519).²⁵⁹ Some 25 per cent came from the Middle East and about 35 per cent from Nigeria. Evidence suggests Gulf's prices for Middle East crude were still above third-party prices.

In 1965, the discounts granted Gulf on Kuwait crudes had been increased to 25 cents per barrel (Document # 78771).²⁶⁰ From 1965 to 1967, Gulf's f.o.b. price for both Kuwait and Gach Saran was \$1.34 per barrel. Adelman reported that open-market prices for Gach Saran for this period were around \$1.18-\$1.23 per barrel — a discount of 40-45 cents off posted prices and 11-16 cents per barrel less than Gulf's price. He also reported Kuwait was selling at about \$1.20 per barrel to large German and Italian refineries.² Therefore, here too, Gulf's price was about 14 cents above the world price.

In 1968, the effective price for Kuwait was reported as having been \$1.18-\$1.24 per barrel.³ Similarly, it was reported that the f.o.b. price of British Petroleum was \$1.15 per barrel for Kuwait crude at this time.⁴ Gulf was paying \$1.26 per barrel.

In 1969, Sun stated the open-market price of Light Iranian was \$1.15-\$1.20 per barrel (Document # 83956).²⁶¹ Gulf was paying \$1.38 per barrel. Therefore, by 1969, Gulf's Middle Eastern prices had fallen, but in some cases remained 10-20 cents above the open-market price.

The slow decline in Gulf's crude prices that had begun in the early nineteen sixties was to be quickly and dramatically reversed in the early nineteen seventies. The next section shows that the parent organization used the supply disruptions and OPEC production curtailments in the nineteen seventies to re-establish the high margins that it had extracted from its Canadian subsidiary in the late nineteen fifties before competition in the world crude market began to erode crude prices.

(c) Pricing History After 1970

With the advent of tentative moves by OPEC countries to increase taxes and take control of production, most of the international petroleum

^{1.} Adelman, The World Petroleum Market, p. 186.

Idem.

^{3.} United States Senate, Hearings before the Subcommittee on Antitrust and Monopoly of the Committee on the Judiciary, Ninety-First Congress, First Session, Governmental Intervention in the Market Mechanism: The Petroleum Industry, April 1969, p. 75.

^{4.} Ibid., p. 173.

companies were able to take advantage of the supply shortages that developed. In the short-run, OPEC's actions improved the oil companies' profit margins. By the summer of 1972, the oil companies were obtaining 30 cent per barrel margins on Middle Eastern crude. A report on world crude conditions made by W.J. Levy Consultants equated this margin to a 75 per cent rate of return (Document # 33125).²⁶² The following year these margins increased even further to between 43 and 50 cents per barrel (Document # 42301).²⁶³ Margins such as these, in Shell's words, were "unheard-of since the late 1950s" (Document # 42301).²⁶⁴

One of the majors — Shell — saw long-run as well as short-run advantages to OPEC taking greater control over crude sources by increasing the share they 'owned' or what was called 'participation crude'. Shell pointed out that 'participation' by the oil countries promised to stabilize margins in the long as well as the short-run. When analyzing the move to increased 'participation', Shell noted that:

"Participation may not necessarily be disadvantageous for the Group [Royal Dutch Shell Group?]. Increasing participation will place more emphasis on the MTM [Manufacturing, Transportation, and Marketing] phase of the business as the operating companies progressively lose their hold on the production and the cost of crude will tend towards a common level. If participation proceeds far enough the International companies could be in the position of nominating crude volumes much as is done in North America."

(Document # 24722, April 24, 1972, Shell)²⁶⁵

What Shell recognized in this excerpt was that in North America the large companies had purchased crude in a market where crude prices were set by an administered price system that was bolstered by prorationing, and that differences in crude costs for various companies were thereby reduced—though, though, of course, not necessarily eliminated. This process tended to reduce the competitive advantage one company might gain since the cost of crude tended towards a 'common level'. Therefore, in the long-run, OPEC's actions promised to reduce disparate crude costs and thus to reduce competition that had arisen from this source.

Even so, the new situation required a revision in the multinationals' transfer pricing policy. The parent Gulf company's reaction to OPEC's moves was to reorganize its "profit centres" (Document # 63538-60).²⁶⁶ With the changing world situation, the parent noted that its previous role as "a seller of foreign crude oils" was over (Document # 63539),²⁶⁷ and that changing circumstances required a completely new transfer pricing policy. In effect, the parent recognized that it would no longer be able to source its profits in the Middle

^{1.} See the Overview Volume for a description of the forces in North America that created this system.

East — not with the producing countries becoming even more aggressive in their demands for increased revenue. As a result, Gulf decided to reorganize its operations so as to permit Gulf subsidiaries to become "viable market participators, and not hindered by corporate restraints" (Document # 63539).²⁶⁸ To implement this new policy, up and downstream operations were to be established as separate profit centres; transactions between profit centres were to be at "market oriented prices"; and no company was to have "unwanted prices, crudes or freight rates imposed on it" (Document # 63539-40).²⁶⁹ That these conditions emerged from the reorganization implies that they were not in effect prior to 1972. Whether the new policy did in fact remove the constraints imposed upon affiliates such as Gulf Canada or whether it merely established a new profit centre somewhere outside the Middle East remains to be determined.

Under the new system, the Gulf Oil Trading Company (GOTCO — a fully owned Gulf subsidiary) was to buy crude from producing subsidiaries and resell to marketing subsidiaries using what were now referred to as "market oriented" prices. In order to implement the system, a "market oriented" price for production had to be determined. The manner in which this was to be done was explained in the following way:

"There are several well established benchmarks for such measurement in international trade practice today. Among them are the long term volume disposals of Kuwait crude, such as our Gulf/Shell or the B.P./Petrofina type outlets. These and other examples suggest that the intrinsic value of oil to a strictly Exploration and Production operation is in the range of 10-25¢/Bbl. over cost, a margin which is sufficient to generate a reasonable return on E&P activity."

(Document # 63542, May 2, 1972, Gulf, emphasis added)²⁷⁰

However, Gulf noted that vertically integrated firms had traditionally extracted higher margins from their downstream subsidiaries (Document # 63542).²⁷¹ In the end, a mark-up of 20-30 cents per barrel, a margin at the upper end of the range, was chosen for use between the producing companies and GOTCO (Document # 63543).²⁷²

The prices charged by GOTCO to the marketing affiliates were, at first glance, also to be "market oriented"; but this did not hold in practice. For a distinction between regional companies (fully owned subsidiaries) and affiliates such as the Canadian company (partially owned subsidiaries) was drawn. GOTCO was to give first preference to the regional companies with respect to crude supply. To the extent that all available oil was not sold to the regions, GOTCO would then offer it to affiliates and third-parties (Document #63541).²⁷³ Affiliates were also to be treated differently with respect to the price charged for crude. Prices charged to affiliates were to be "market oriented" whereas those charged regional companies were to be "tax oriented" (Document #63548).²⁷⁴

At least the latter aspect of this policy was implemented. In July, 1972, Gulf's Canadian subsidiary noted that it was being discriminated against:

"...Gulf Eastern have been getting considerably lower prices than Gulf Canada, primarily on the philosophy that Gulf Canada is being treated as a third party and has been given the higher cost figures in the third party range."

(Document # 63024, August 2, 1972, Gulf)²⁷⁵

In particular, Gulf Canada, an affiliate, was paying more for both Nigerian (15 cents) and Gach Saran (5 cents) crudes than the regional company (Document # 63023).²⁷⁶ This policy was continued into 1973. Table 18 compares the prices that were offered two Gulf regional companies and Gulf Canada in that year. Gulf's prices were at least 10 cents per barrel higher than the prices being used for the regional companies.

The profit centre reorganization also affected the freight rates that were charged each type of company — the regional and the affiliate. The parent Gulf company decided that the "market oriented" prices, which would be charged, would correspond to the long-term component of AFRA. Again, however, a distinction was to be made between regional and affiliated companies. Affiliates and third-parties were to be charged higher prices than regional companies. As the parent Gulf company noted:

"When we deal with Affiliates and Third Parties, we have an incentive to maximize the transportation charge and thereby Gulf's income."

(Document # 63490, February 26, 1973, Gulf)²⁷⁸

Of course, to the extent affiliates were permitted to arrange their own ocean transportation, the market would set the limit on the amount they could be charged. But Gulf was not permitted to charter tankers from outside the organization (Document # 75712).²⁷⁹ As a result of the control exercised over Gulf's Canadian subsidiary, it is not surprising that Gulf paid higher prices for

TABLE 18

DIFFERENCE IN CRUDE PRICES OFFERED GULF CANADA
AND TWO GULF "REGIONAL" SUBSIDIARIES BY PARENT FIRM IN 1973
(\$U.S./bbl.)

Crude Type	Gulf Canada	Gulf Eastern Hemisphere	Gulf U.S.
Kuwait	\$1.90	\$1.79	
Agha Jari	\$2.00	\$1.90	***
Arabian Light	\$1.98	\$1.86	
Nigerian	\$2.98	\$2.73	\$2.80

Source: Document # 63375, Gulf²⁷⁷

freight than regional companies. Gulf noted that, in 1973, they were to pay W49.6¹ for freight but Gulf Eastern, a regional, was to be charged only W41.8 (Document # 63464).²80 More importantly, the freight rate from Venezuela that was demanded of Gulf Canada was greater than the market freight rate. In 1973, the parent organization demanded and obtained 26 cents (Cdn.) or about 26 cents (U.S.) per barrel from Gulf for freight from Venezuela (Exhibit T-28, Gulf, Toronto Hearings, 1975).²81 Yet, Gulf noted that:

"The competitive charter rate for LR I vessels for this service would be approximately 23 cents per barrel."

(Document # 63042, September 15, 1972, Gulf)282

All this suggests that the parent's profit centre reorganization did not remove the constraints imposed upon the Canadian subsidiary. It has been shown that the Canadian subsidiary was told that it could not charter outside of the Gulf organization (Document # 75712).²⁸³ In addition, it was charged freight for its South American crude that, in its own words, was greater than the market rate (Document # 63042).²⁸⁴ But control went beyond the area of freight rates. GOTCO found it necessary to write to Gulf's Canadian subsidiary pointing out that the new policy did not mean the Canadian subsidiary could pursue the course of action it found to be in its own best interest:

"I want to emphasize again that our one objective is to optimize the total Gulf Oil Corporation, and I know that in the pursuit of this objective we are all pulling together ... every member of our professional staffs around the world will recognize that he is part of this larger organization and that the health of the overall enterprise is what all of our organization is about."

(Document # 79253, July 14, 1972, Gulf)285

This letter was sent in response to the Canadian company's protests about the new profit centre policy. Gulf's Canadian subsidiary had reacted to the new proposals by pointing out the problems that would arise if they were implemented. That it should have had to react in such a fashion suggests that the new policy involved less freedom for each subsidiary than was originally claimed. In effect, the Canadian company was worried not so much about the difficulties the new policy would create with Canadian taxation authorities as about the problems that would arise with minority shareholders. The president of the Canadian subsidiary replied to the above statement with:

"We agree completely that our main objective is to make optimum utilization of Gulf's resources and opportunities and that it is imperative that we pull together to achieve this objective....You and all others concerned appreciate, I am sure, that the Gulf Canada management — whoever it may be from time to time — in addition to

^{1.} W refers to Worldscale: See Adelman, *The World Petroleum Market*, p. 21 for a description of the relationship between Intascale and Worldscale.

its Corporate concern carries the responsibility of also protecting and advancing the interests of all its shareholders, including Gulf Oil Corporation, on a strictly arm's length basis, neither receiving any special favours from Gulf nor unduly favouring its major shareholder."

(Document # 79255, July 20, 1972, Gulf)²⁸⁶

This exhange can also be interpreted as a warning from Gulf's Canadian subsidiary to its parent that its competitive position would be threatened should its crude prices rise any further. For, starting in 1970, the Gulf organization had begun to increase Gulf Canada's crude price at a rate that suggested to Gulf Canada that it was being left at a disadvantage. Gulf's Canadian subsidiary was thereby informing its parent that there were limits within which this could occur even though Imperial and Texaco were all experiencing an increase in their crude costs. The debate between Gulf and its parent reflected different perceptions of the degree of competition in Eastern Canadian markets and the best transfer pricing strategy to adopt in the face of such conditions.

Table 19 was used by Gulf in early 1972 to indicate to its parent that the escalation in its Nigerian prices was greater than that experienced by others. Gulf's position was that its crude price for this crude was from 50 to 70 cents per barrel too high (Document # 65314).²⁸⁷ Other evidence was also adduced to suggest that Nigerian was over priced by some 49 cents per barrel (Document # 65315).²⁸⁸ Gulf underlined this position in two ways. First, in 1971, Gulf replaced some imported crude with Naptha purchased from Irving and saved some 51 cents per barrel (Document # 65315).²⁸⁹ Second, a comparison by Gulf of its f.o.b. crude costs with those of others showed its prices were at least 50 cents per barrel too high. In Gulf's words:

"Reference was also made to some published statistics on Nigerian F.O.B. prices indicating that Gulf Canada's prices were 50¢ to 70¢ high."

(Document # 65314, April 19, 1972, Gulf)²⁹⁰

In evaluating its mid-1971 competitive position, Gulf wrote:

"While no precise conclusions can be drawn from this it is clearly evident that Gulf Canada's Venezuelan prices were out of line with others. As we have been increased by the amount of recent Government Take increases, it is reasonable to assume that our relative position is unchanged."

(Document # 78178, April 12, 1972, Gulf)²⁹¹

In 1972, Gulf also claimed that its Venezuelan crude costs were too high. It pointed out that other importers were obtaining Venezuelan crude at 30 to 40 cents per barrel below its own costs (Document # 65314).²⁹² A year later, its Venezuelan crude was still overpriced by about 30 cents per barrel above what some firms were obtaining. Gulf purchased Venezuelan Ceuta for \$2.69 per barrel from its parent but was offered Mesa crude (10-20 thousand barrels

per day for 1 to 2 years) at \$2.35 per barrel by a different company— Commonwealth (Document # 62997).²⁹³

Another standard of comparison exists that indicates how 'unrealistic' Gulf's Nigerian and Venezuelan crude costs were. The Nigerian and Venezuelan crudes that Gulf imported were considerably more expensive than its Middle Eastern crude. When transhipped via Point Tupper, Gach Saran cost Gulf 21 cents per barrel less than Venezuelan and 63 cents per barrel less than Nigerian. When shipped directly, the advantage was 16 cents and 58 cents per barrel respectively (Document # 65320).²⁹⁴ Since Gulf used the Venezuelan and Nigerian crudes in Montreal (Document # 62994),²⁹⁵ its competitive disadvantage was greatest in this market. Middle Eastern crudes (Gach Saran and Kuwait) were used at the Point Tupper refinery in Nova Scotia — a refinery that produced as much for the parent corporation as it did for Gulf Canada.

There is also evidence to suggest that the crude price increases imposed upon Gulf were greater than increases in world prices — and to suggest that Gulf's parent, in tandem with the other major companies, was testing the Canadian market to see whether it would again sustain the pre-1958 crude margins. For instance, Gulf's crude prices were increased more rapidly than the prices of imported product which presumably more accurately reflected world market conditions (Document # 71461).²⁹⁷ As a result, those independents who made use of offshore product were given a cost advantage that increased vis-à-vis Gulf. In Montreal, the spread between the majors' pump prices and those of the lowest priced discounters increased from 9 cents (Cdn.) in 1969, to

TABLE 19

COMPARISON OF INCREASES FOR GULF CANADA (GOCAN) AND "AVERAGE OF COMPETITION" FOR NIGERIAN OIL, 1970-71 (\$U.S./bbl.)

Period	Gocan price f.o.h.	"Canada" f.o.h.	"U.S.A." f.o.b.
October, 1970	1.80	1.79	2.10
November, 1970	1.80	1.78	1.86
December, 1970	1.80	1.89	2.22
January, 1971	2.10	1.81	2.21
February, 1971	2.10	1.82	2.19
March, 1971	2.72	2.07	1.86
April, 1971	2.72	2.00	1.99
May, 1971	2.72	2.15	2.20
June, 1971	2.72	2.22	_

Notes: Gulf used "Middle East Petroleum and Economic Publications", Beirut, October 15, 1970 for columns 2 and 3.

Source: Document # 65325, Gulf²⁹⁶

10 cents (Cdn.) in 1970, and 12 cents (Cdn.) in 1971 (Document # 71462).²⁹⁸ Unless discounters had become more efficient during this period — or majors had increased their marketing spread — these figures suggest a crude price increase of 70 cents (Cdn.) per barrel in excess of product prices between 1970 and 1972.¹ The result of this advantage was that discounters expanded and captured 16 per cent of the Montreal market and 25 per cent of the Ottawa market.² As a result, Gulf's sales in Eastern Canada were 6.4 per cent less in the first ten months of 1971 compared to the same period in 1970 (Document # 71462).²⁹⁹

The problem that Gulf faced worsened in early 1972. Gulf noted that, with the new crude oil price increases that were imposed upon it, the cost of imported gasoline for the first time in many years was lower than Gulf's own refinery gasoline transfer costs (Document # 71461). Table 20 shows the differential between the cost of imported product and Gulf's refinery transfer prices (costs) for gasoline. Even before this differential had evolved, imports had caused Gulf's share of retail gasoline sales in Eastern Canada to fall from 9 per cent to 7.3 per cent of the market (Document # 65313). Gulf predicted that if nothing was done it would lose all of its sales in the competitive third-party market:

"Sales made by S. & T. [Supply and Transportation] out of Montreal Refinery to other refiner/marketers will decline in 1972 by some 2.5 million barrels vs 1971, almost entirely due to our inability to meet price competition."

(Document # 78176, April 12, 1972, Gulf)³⁰²

TABLE 20

COMPARISON OF GULF CANADA'S MONTREAL REFINERY PRODUCT
COSTS WITH CARIBBEAN PRODUCT IMPORT COST—1972
(¢ Cdn.)

	Gulf Refinery			Difference Gulf Over Import	
Product	Cost (¢/gal.)	Jan. 31 (¢/gal.)	Feh. 29 (¢/gal.)	Jan. 31 (¢/hhl.)	Feh. 29 (¢/hhl.)
Gasoline (premium)	15.13	12.61	13.57	88.00	55.00
Gasoline (regular)	13.73	11.41	12.37	82.00	48.00
Diesel/Gas Oil	11.81	11.45	10.49	12.00	46.00
Residual	289.00	237.00	252.00	52.00	37.00

Source: Document # 65319, Gulf303

^{1.} This uses a conversion factor of 35 gallons per barrel—i.e. 1¢ per gallon translates to 35¢ per barrel.

^{2.} See the Marketing Volume.

It was at this stage that Gulf Canada was faced with its parent's desire to reorganize its profit centres. This policy promised further increases in the Canadian subsidiary's costs. It was, therefore, not surprising that Gulf warned its parent about the consequences of even higher prices that might be charged under the new profit centre policy.

Table 21 summarizes the magnitude of the "market hardening premiums" that were imposed upon Gulf's Canadian subsidiary as the world crude market tightened in the early nineteen seventies. In the Table, the price that Gulf was charged is compared to what it would have paid if changes in government taxes only had been added to its 1969 crude prices.

Gulf's f.o.b. price went up by more than this amount for all major crudes purchased — but the differential was greatest for Venezuelan and Nigerian crudes. These two crudes made up approximately three-quarters of Gulf's imported crude slate between 1970 and 1972 (see Table 22). It was the

TABLE 21

A COMPARISON OF CHANGES IN HOST GOVERNMENT TAXES AND THE CHANGES IN GULF CANADA'S PRICES—1969-1973

(\$U.S./barrel)

Crude Type	1969 Gulf f. Price + Tax C as of		Actual Gulf f.o.b. Price ²	Difference
Ceuta	1969	1.79	1.79	.00
	Jan. 1, 1971	1.92	2.02	. 10
	April 1, 1971	2.19	2.54	.35
	Jan. 1, 1972	2.19	2.54	.35
	Feb. 1, 1972	2.39	2.74	.35
	April 1, 1972	2.39	2.70	.31
	Jan. 1, 1973	2.51	2.62	.11
Nigerian	1969	1.81	1.81	.00
_	April 1, 1971	2.10	2.75	.65
	March 1, 1972	2.10	2.93	.83
	Jan. 1, 1973	2.25	3.04	.79
Gach Saran	1969	1.31	1.31	.00
	March 1, 1971	1.65	1.71	.06
	June 1, 1971	1.71	1.78	.07
	March 1, 1972	1.83	1.90	.07
	June 1, 1972	1.83	1.83	.00
	Jan. 10, 1973	2.00	1.99	01

Sources: 1. Tax changes come from Documents # 133744-46, Imperial.³⁰⁴ Documents # 28079-80, Shell³⁰⁵ confirm the validity of the Imperial figures.

^{2.} Exhibit T-28, Gulf, Toronto Hearings, 1975,306 (except for 1969 price that is taken from Document # 65444, Gulf³⁰⁷).

TABLE 22
GULF CANADA'S CRUDE SLATE, 1969-1973 (000 BBL.)

Crude Type	1969	1970	1971	1972	1973
Nigerian	8,723	11,213	9,259	7,048	4,364
Venezuelan	10,215	10,691	16,480	16,739	19,192
Middle East	6,143	1,845	8,120	11,049	13,239
Other	_	· —		508	

Source: Exhibit T-28, Gulf, Toronto Hearings, 1975.308

Montreal refinery that used these two crudes extensively. The price increases in Middle Eastern crude were much more in line with escalations in host government tax take. As emphasized, Middle Eastern crude went primarily to Gulf's Point Tupper refinery, much of which was re-exported as product to the parent Gulf organization.

It is of further interest to compare the relationship between Gulf's price increases and open-market price increments. Benchmarks are, however, more difficult to establish for open-market prices in the early nineteen seventies than in the nineteen sixties. However, the accompanying chart (Figure 1) of Imperial shows that between the beginning of 1970 and mid-1972, the openmarket price for Venezuelan crude (T.J. Light) went up about 80 cents per barrel; for Middle Eastern (Light Arabian) about 60 cents per barrel (Document # 133774).309 The price of Gulf Canada's Venezuelan Ceuta increased by 90 cents per barrel over the period from mid-1969 to mid-1972; that of its Middle Eastern Gach Saran rose by 50-60 cents per barrel. Gulf was, therefore, bearing increases which closely paralleled or were larger than those in the open-market. Its status as a subsidiary that paid more than open-market prices during most of the nineteen sixties did not protect it during the crises of the early nineteen seventies. Moreover, to the extent that its crude prices started off above open-market prices, the escalation experienced by Gulf meant that it remained above the market during the entire period as Gulf itself pointed out (Document # 78178).310

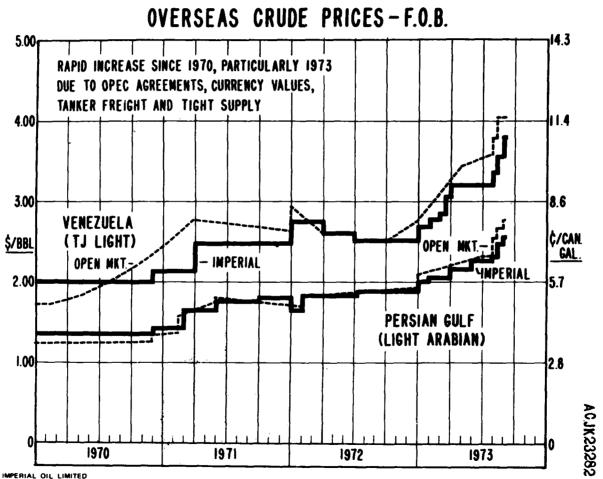
6. The Transfer Pricing Policy of Shell

(a) Pricing History Prior to 1970

From 1955 to 1970, Shell Canada like the other three major importers paid more for its crude than was being charged in competitive world petroleum markets — though, as shall be shown, its disadvantage was less than that of some of the other major companies.

FIGURE 1

IMPERIAL'S ESTIMATE OF



3377

AUG. 1973.

(Reproduction of Document # 133774
'Figure 1' and addition to title added)

In the period from 1958 to 1962, Shell imported both Middle Eastern and Venezuelan crudes with the former accounting for about 63 per cent of its crude slate. Up to 1962, its Middle Eastern crude came entirely from Kuwait. During these four years, the f.o.b. price it paid for this crude was almost exactly the posted price. For example, in 1956, its price was \$1.74 per barrel, the posted price for 31° Kuwait was \$1.72 per barrel: in 1957, \$1.86 per barrel versus \$1.85 per barrel; in 1960, \$1.63 per barrel versus \$1.59 per barrel; and in 1962, \$1.58 per barrel versus \$1.59 per barrel. Differences in average gravity probably account for the small differential between Shell's costs and posted prices. Between 1958 and 1962, Shell's Middle Eastern crude was purchased under a contract that had been signed in 1958—the year the price structure had first begun to break after the Suez crisis. In that year, Shell Canada had entered into a contract with one of the Shell group of companies to purchase Kuwait crude at the Gulf posted price less a discount which was the rate "the Sellers [a Shell Company were, for the time being, entitled to deduct pursuant to their contract with their supplier [Gulf]" (Exhibit T-19, Shell, Toronto Hearings, 1975).312 The cited prices suggest Shell received little or no discount up to 1962 on this crude.

In 1962 and 1963, Shell Canada imported some Iranian crude at \$2.20 per barrel c.i.f. Portland. If the estimate of the long-term freight rate for 1962 and 1963 (see Appendix A) is used, Shell's 'implicit' f.o.b. price on this crude would have been about \$1.51. This compares to the \$1.78 per barrel posted price for Iranian crude. Therefore, Shell Canada received a discount of some 27 cents per barrel on this crude. Adelman noted that prices to large South American purchasers of crude oil were around \$1.20 to \$1.30 in 1960-61 and more like \$1.10 to \$1.20 from the end of 1964 through 1966. Shell Canada was well above these figures with respect to both its Kuwait and Iranian purchases in the early nineteen sixties.

The remainder of Shell Canada's crude slate was made up of Venezue-lan crude in the late nineteen fifties and early nineteen sixties. Gradually, this crude came to make up a larger percentage of Shell Canada's crude slate until no other crude was used between 1964 and 1971 (apart from some Nigerian crude imported in 1965). Therefore Shell's Venezuelan crude costs governed its competitiveness during the middle and late nineteen sixties. Table 23 presents Shell Canada's Venezuelan crude costs from 1956 to 1970. A comparison of column II—the posted price of Tia Juana 31°—and column III—Shell's f.o.b. crude costs—indicates that until 1960, Shell paid the posted price for its

^{1.} U.S. Senate, Governmental Intervention in the Market Mechanism: The Petroleum Industry, p. 43.

^{2.} Adelman, The World Petroleum Market, p. 385.

Venezuelan crude. Thus, in the case of both Venezuelan and Middle Eastern crudes, Shell continued to pay posted prices for at least two years after these prices became unrepresentative of market conditions.

In 1961, the f.o.b. price of Shell's Venezuelan crude slate fell from \$2.41 to \$2.13. Belated recognition was finally accorded the fact that transfer and open-market prices were so divergent that some adjustment was required. But the reduction was only granted on Venezuelan crude at this time. Its Middle Eastern crude prices remained essentially at posted levels. Even so, Shell's Venezuelan costs were still above prices that were being negotiated in arm's-length transactions. A comparison of Shell Canada's f.o.b. crude costs (columns I & III) to Sun's estimate of the alternate or market value of Venezuelan crude (column V) indicates that Shell was still between about 50 to 60 cents too high in 1962. There is other evidence to substantiate the magnitude of this difference. For instance, Golden Eagle is quoted as being able to obtain Venezuelan crude in 1963 at between \$1.85 and \$1.95—assuming a posted price of \$2.55.2 Irving reported on their conversation with Golden Eagle by saying:

"If the Refinery needed to be expanded Mr. Lorbeer says that he could get all of the crude he needs from the Near East or Venezuela at posted prices minus 60 to 70¢."

(Document # 2287-8, March 7, 1963, Irving)313

Finally, Imperial paid \$2.19 per barrel for 32° Tia Juana Light in 1964 (Document # 90590)³¹⁴ but argued that this price left the landed cost of Venezuelan crude some 20 cents higher than comparable Middle Eastern crudes available to it (Document # 90588).³¹⁵ However, Imperial also pointed out that the discounts available from its parent on Middle Eastern crude were only 18 cents per barrel (Document # 90589)³¹⁶ whereas 35 cents per barrel was the general rule in most Middle Eastern transactions (Document # 90594).³¹⁷ Thus, the market price for Venezuelan crude implicitly being recognized by Imperial was really about \$1.80—as compared to the \$1.70 figure being used by Sun to represent alternate or market value. Shell's Venezuelan costs were above these estimates (see Table 23).

In 1964, Shell's f.o.b. Venezuelan costs fell to about \$2.00 per barrel and remained at this level for the rest of the decade. Throughout this period, Shell's costs remained above Sun's estimate of the alternate or market value. However, Shell's costs were, during the rest of the nineteen sixties, lower than or equal to the other major importers. Gulf, as of 1967, was paying about \$2.03

^{1.} Adelman, *The World Petroleum Market*, p. 161 reports that, as of 1957, the posted prices were "widely discounted".

^{2.} See Appendix Table D-1.

per barrel f.o.b. for its 32° Ceuta. Imperial did not reduce the f.o.b. price it paid for Tia Juana Light (31°) to \$2.02 until 1967, and Texaco even in 1969 continued to pay about \$2.20 per barrel for its 31/32° Lagomedio.

(b) Shell's Perception of Multinational Transfer Pricing Practices

That Shell's crude costs were among the lowest of the four largest oil firms operating in Eastern Canada should not be misinterpreted. It does not imply that its crude costs adequately reflected world market prices. Individual price comparisons have already been adduced to suggest otherwise. Evidence on this topic is also provided by Shell itself. Throughout the nineteen sixties and

TABLE 23
SHELL CANADA'S VENEZUELAN CRUDE COSTS 1956-70
(\$/bbl.)

Year	Shell's Price of Mesa (28°) ¹ (\$U.S.)	Posted ³ Tia Juana (31°) (\$U.S.)	Shell's Average F.O.B. Price! (\$U.S.)	Shell's Average Landed Cost ² (\$Cdn.)	Sun Alternate or Market Value ⁴ (\$U.S.)
	1	Ħ	111	IV	V
1956		2.55	2.66		
1957		2.80	2.86		
1958		2.80	2.79		
1959	•	2.65	2.59		
1960		2.55	2.41		
1961	2.20	2.55	2.13		
1962	2.20	2.55	2.09		1.60
1963			2.09		1.60
1964			2.02		1.63
1965			2.01		1.63
1966			2.01		1.63
1967			2.01	2.52	1.63
1968				2.49	1.80
1969				2.48	1.70
1970				2.41	1.70

Sources: 1. Exhibit T-19, Shell, Toronto Hearings, 1975,319

- 2. Document # 41549, Shell.320
- 3. Adelman, The World Petroleum Market, p. 340.
- 4. Documents # 83925-7, Sun.321

^{1.} See Table 17.

^{2.} Document # 125176.318

^{3.} See Table 14.

early nineteen seventies, Shell appeared before various tribunals or agencies of the Canadian Government to request protection from imported petroleum products. The price of these imports was lower than domestically refined product because offshore refineries were using cheaper crude than that which Shell was allowed to import by its parent.

Implementation of the National Oil Policy was less advantageous to Shell than to other companies. Not possessing the same amount of Western Canadian reserves, when forced to buy Canadian crude for its Ontario operations, Shell found itself earning little additional profit from the incremental domestic production that was encouraged by the National Oil Policy. There was, therefore, a greater incentive for Shell to try to ensure that Ontario product prices were increased to reflect Canadian crude costs. This would not have been possible if offshore product had been allowed unchecked into Ontario. Following the announcement of the National Oil Policy in 1961, Canadian crude prices were frozen (actually they increased slightly) whereas world prices continued to fall.

In 1964, Shell approached the National Energy Board and the federal cabinet and threatened to defeat the National Oil Policy by importing large amounts of crude and /or product unless the flow of product by other companies across the line was stopped (Document # 45282). Numerous arguments were invoked to persuade the Canadian Government that the offshore product was being 'dumped' in Canada. At first, Shell maintained that cheap import product prices were the result of offshore refineries not fully recovering their refining costs. New refineries in the United Kingdom, which would have difficulty selling in that market alone, and refineries in Italy, which benefitted from subsidies and excess capacity requirements imposed upon them by the Italian Government, were mentioned as the chief culprits (Document # 45316-7). 323

Notwithstanding these arguments, Shell ultimately admitted that the problem really lay elsewhere. Caribbean refineries were generally owned by the large multinational oil companies and product from these refineries — product which Shell could not properly argue was being 'dumped'—was admitted to be as much of a problem as European supply. Shell noted that grade 2 gasoline from the Caribbean could be landed at 13.6 cents (Cdn.) per gallon in Toronto whereas its comparable domestic refined product cost 14.4 cents (Cdn.) per gallon (Document # 45296-7). Shell admitted that the real problem was not cheap import product prices but falling world crude prices. Shell did indicate that imported product gave it difficulties:

"Mr. McKinnon [an N.E.B. official] advised that the Customs Department had been making a thorough review and it was hoped that under the Customs Act a way might be found to stop the import of gasoline and heating oil from Western Europe at distress prices. We pointed out that whereas European prices were lower than in the Caribbean, products were, in fact, freely available in the Caribbean at prices which

could enable an importer to bring in product cheaper than it could be marginally refined at Montreal, and certainly we could not be competitive in Ontario when using Canadian crude."

(Document # 45304, March, 1966, Shell, emphasis emphasis added)³²⁵

But crude costs were recognized by Shell as being the real problem. Shell pointed out that low crude costs of others were responsible for its problems and would have to be countered if adequate protection were to be afforded it. Shell emphasized to governmental authorities:

"... in determining a fair return, the Department would have to establish that the cost of raw material used was not at a distress price."

(Document # 45305, March, 1966, Shell)³²⁶

Shell provided more than inferential evidence that its own crude prices were too high. It readily admitted, in discussions with the National Energy Board in 1964, that the transfer prices for crude oil used in integrated companies such as itself were above the prices being paid by independent companies:

"Intra-group transfer prices are not published of course, but they tend to be somewhat higher than those at which independents acquired their supplies..."

(Document # 45314, March, 1966, Shell)327

The reason for the "higher supply prices quoted by majors to their affiliates" was frankly admitted by Shell to be "their desire not to contribute to the depression of market prices" (Document # 45314).³²⁸ This is the same motivation, quoted earlier, that was the cause of Imperial's adoption of the "average of competition" approach. In this sense, both Imperial and Shell were working towards a common goal.

By this time, Shell's discussions with the National Energy Board had progressed beyond the problem of Ontario to the "problems the refiners faced in Quebec with competition from imported products" (Document # 45308). 329 By doing so, Shell, in effect was serving notice that it would comply with the National Oil Policy in the Ontario market if the government gave it added protection in Quebec. Shell argued for quotas on all imported products irrespective of whether they were destined for east or west of the National Oil Policy Line. Equally, Shell argued against the use of dumping duties because of the difficulties involved in justifying what was a "fair" price for the crude used to produce imported products (Document # 45314-19). 330 Shell also explicitly rejected the notion that the price of Alberta crude could be lowered to improve the position of Ontario refineries (Document # 45318). 331 This course of action,

as the following Shell excerpt claimed, was not feasible because it would have upset the delicate balance of interests the United States had established in its import policy vis-à-vis Canada and Venezuela:

"In this connection it was important to bear in mind that the present pattern of supply represented a more or less acceptable compromise between the interests of Canada and Venezuela with respect to U.S. import requirements. It would not therefore be a satisfactory solution for Canada to appear to take advantage of its overland supply privilege by reducing the price of Alberta crude in order to improve the position of the Ontario refineries."

(Document # 45318, March, 1966, Shell)332

Shell's threat to break the National Oil Policy culminated in the issuance of Privy Council Order #1964-1952 on December 15, 1964 (Document #45283).³³³ This order set dumping duties on product brought into Canada and thereby offered protection to Shell both in Ontario and in Eastern Canada.

These duties proved to be ineffective. The large multinational companies were able to set up offshore trading companies to source profits abroad. Evidence suggests the small importers did the same to circumvent having to list the value of product on customs invoices at prices so low that dumping duties would be imposed. Shell's analysis of foreign f.o.b. product prices and f.o.b. prices reported by Canadian importers claimed this was a widespread practice. Therefore the dumping duties did not provide the degree of protection that Shell had envisaged (Document # 45284-5).³³⁴

As was demonstrated previously, Shell admitted that, in 1964, its crude costs were higher than arm's-length prices being paid by independent companies. Between 1963 and 1967, Shell's Venezuelan crude costs remained virtually unchanged (see Table 23). Prices in the world market, however, continued to fall. Adelman reported that the price of Middle Eastern Gach Saran equivalent fell from \$1.59 per barrel to \$1.23 per barrel during this period—a decrease of 36 cents per barrel. Shell's price fell by only 8 cents. Shell was not unaware of this trend. In 1964, while arguing for protection, Shell predicted that world prices for crude would continue to fall:

"There is every indication that crude oil availability and ocean transport capacity also will remain in surplus for some years to come and it can therefore be assumed that independents and newcomers to the European scene will continue to exercise a disruptive price influence."

(Document # 45317, March, 1966, Shell)335

^{1.} Adelman, The World Petroleum Market, p. 183.

If Shell's position was difficult in 1963, it must, therefore, have worsened in the next three years. Yet, in 1967, Shell entered into a contract for Venezuelan crude that essentially froze its crude prices for five years — except for OPEC tax increases in the early nineteen seventies. Previously, its contract had permitted renegotiation of prices to a level which was "mutually agreeable". In 1967, Shell gave up its right to do so. As a result Shell's crude costs remained fixed for the rest of the decade. During the late nineteen sixties, its Venezuelan crude became increasingly less competitive as freight rates fell from their post-1967 highs and new lower cost tankers were introduced. Shell acknowledged this trend, when, in late 1969, it argued that a continental oil policy would require U.S.-Canadian coordination. This would, in turn, necessitate special protection for Venezuelan oil. Shell noted:

"In particular some preferential treatment will almost certainly have to be given to relatively high cost Venezuelan crudes which are becoming less competitive on the Eastern Seaboard of North America as the supply of large crude carriers continues to grow."

(Document # 37532, October 31, 1969, Shell)³³⁶

Therefore Shell was locked into a relatively high cost crude source during this period. While its Venezuelan crude costs may have been equal to or lower than the other major importers operating in Eastern Canada, they were still above third-party prices for Venezuelan crudes. Its price for 31° Lagomar type crude was \$2.01 per barrel.² Sun listed the alternate or market value for a comparable crude as \$1.65-\$1.70 per barrel for 1969 (Document # 83956).³³⁷ Similarly, Exxon quoted a market value figure of \$1.65 to \$1.70 per barrel for T.J. Light (31°) in 1970 (Document # 123963).³³⁸ Shell Canada was not unaware of the discrepancy between its crude costs and market value as the following excerpt indicates:

"Shell Canada could have a tax exposure of \$17M for the period 1967 to 1970 under the present contract with CSV [a Shell company] as a result of known lower cost crude purchases by other majors from Venezuelan sources for the Montreal Refining Orbit."

(Document # 40889, March 5, 1971, Shell)³³⁹

(c) Pricing History After 1970

As market prices began to escalate in the early nineteen seventies, Shell's long-term contract protected it initially from the market hardening increases that the other major Canadian petroleum importers were forced to

^{1.} See Appendix Table B-2.

^{2.} See Table 23.

pay. Table 24 compares the increases in the f.o.b. price of Venezuelan crude incurred by Gulf and by Shell. By April, 1971, Gulf's increases were about 30 cents per barrel more than those borne by Shell. However, by 1972 this differential had disappeared.

TABLE 24

ESCALATION IN F.O.B. COSTS OF SPECIFIC CRUDES FOR GULF AND SHELL
(¢U.S./bbl.)

Period	Gulf (Ceuta) (31-32°)	Shell (Lagomar) (31-32°)
1969-71 (April)	64.5	33.3
-72 (Jan.)	64.5	58.0
-72 (Feb.)	79.5	58.0
-72 (July)	62.4	55.1
-73 (Jan.)	69.6	66.8 (63.4)1
-73 (Dec.)	359.5	356.4 (316.4)!

Note: 1) The lower figure for 1973 refers to loadings in ships of greater than 80,000 tons. Gulf does not report this category.

Source: Exhibits T-19, Shell, 340, and T-28, Gulf, 341 Toronto Hearings, 1975.

A similar pattern emerges when the escalation in average landed costs for Texaco, Imperial, and Shell is examined. Table 25 shows that, initially, both Imperial and Texaco experienced greater escalations in their crude costs than Shell did, but that the difference had narrowed by 1972.

TABLE 25

ESCALATIONS IN AVERAGE LANDED COSTS OF CRUDE OIL FOR TEXACO, IMPERIAL, AND SHELL (\$Cdn.)

Period	Texaco Imports for Montreal	Imperial Imports at Portland	Shell Imports Quebec
1969-71	.23	.32	.12
1969-72	.40	.53	.41

Source: Exhibit T-17, Texaco,342 Exhibit 0-38, Imperial,343 Toronto Hearings, 1975 and Document # 28050, Shell.344

Thus Shell's escalation, by late 1972 and early 1973, would have placed it in a similar position to that of the other majors who observed that they were being forced to bear market hardening premiums.

That Shell Canada did not initially experience the same escalation in crude costs does not mean that it was free of the control that had kept its prices above market levels in the nineteen sixties. While the parent corporation still had control, it did not quickly abrogate the 1967 contract when crude prices began to rise in the early nineteen seventies. The reason for this may not lie simply in the inviolability of the contract. The contract between Shell Canada and the Shell Venezuelan subsidiary could have been changed to reduce the advantage accruing to the Canadian subsidiary. Indeed, Shell Canada considered doing so (Document # 40889-93).345 But the benefits that would have accrued to the Shell organization if the price paid by Shell Canada had been increased were offset by the costs of doing so. Increasing the margins in 1970 and 1971 to 20 to 30 cents, as was done by the other majors, would have transferred about \$19 million from Canada to the Shell parent. However, abrogation of the contract would have increased the risk of having to pay back taxes on income earned during the nineteen sixties (Document # 40889).347 Canadian tax authorities had begun to investigate Shell's transfer pricing policies, and Shell calculated its tax exposure from not having paid the lowest f.o.b. and transportation costs as \$17 million for 1967 to 1970 and \$3 million for 1961 and 1962 (Document # 40889)³⁴⁸ or together about \$20 million. There was, therefore, good reason not to change the contract in mid-term. (See also Document # 26991-2³⁴⁹ for Shell's appreciation of its tax exposure.)

The 1972 renewal date for the 1967 contract gave the parent company the opportunity to change the terms of the contract. Shell Canada's interpretation of its contract was that it provided for crude at the existing prices, "without escalation due to increases in income tax, up to September, 1977" (Document # 40889). Soc C.S.V. (a Shell Venezuelan subsidiary) wanted to reduce the volumes and increase the price of Venezuelan crude delivered to Shell Canada (Documents # 29316, # 24196). Soc Apart from the fact that the 1967 contract now favoured Shell Canada, two other reasons for this attitude were given. First, C.S.V. was having production difficulties in Venezuela (Documents # 24306, #28293). Soc Secondly, as of early 1972, Shell Canada was receiving its crude at prices 15-25 cents per barrel less than the other majors were charging for Venezuelan crude, and the Venezuelan Government was pressuring C.S.V. to increase its prices (Document # 29314). Shell Canada, however, recognized the advantages now accruing to it from a contract that, during the late nineteen sixties had held its crude costs above market prices. As such, Shell noted that:

^{1.} Shell imported 62,465,355 barrels of crude during 1970 and 1971 (Exhibit T-19, Shell, Toronto Hearings, 1975).³⁴⁶

^{2.} This illustrates the role of foreign governments (particularly the Venezuelan) in harmonizing the behaviour of the firms operating in Canada. In this case three of the big four (Imperial, Texaco, and Gulf) were all paying "market hardening premiums". The fourth — Shell — was pressured by the Venezuelan government to do the same.

"It would be impossible for Shell Canada to give up this contract without very good reasons."

(Document # 40889, March 5, 1971, Shell)³⁵⁶

In the end Shell Canada agreed to reduce the volumes taken from Venezuela and began to import Middle Eastern crudes. Ostensibly, it argued that this would increase its security of supply. Shell argued that "the value of a multiple supply source is that the loss of any one source would minimize risk of interruption of operations at MER [Shell's eastern marketing region] and leave a base from which supply could be increased with a minimum of delay" (Document # 29314).357 Whether this argument was genuine or whether it was made for the taxation authorities who were examining Shell Canada's taxation returns (Document # 29310-1)358 is not clear. The argument, to be valid, requires, amongst other things, that the risk of disruptions of Middle Eastern crude not be greater than that of Venezuelan crude, that price fluctuations of Middle Eastern crudes not be greater, and that the type of disruption not be foreseen and planned for in the event it occurred. There are grounds for questioning all three assumptions. In fact, Shell Canada explained its reason for the change in a way that suggests the security argument was for public consumption. In a meeting in London, Shell Canada explained their decision as involving an element of 'public posturing':

"Shell Canada feel they currently have a good contract but wish to change not only to accommodate CSV but to give a *public posture* of diversifying their crude supply provided it does not cost them any additional money i.e. is justifiable."

(Document # 24196, October 14, 1972, Shell, emphasis added)³⁵⁹

This excerpt also suggests that diversification in and by itself was not justifiable; it was apparently desirable only as long as it did not increase crude prices.

Table 26 shows that diversification eventually lead to greatly increased crude costs for Shell Canada. In early 1973, the landed cost of Middle Eastern crude (Oman) was 16 cents (Cdn.) per barrel more than that of Venezuelan. By 1974 Shell Canada paid \$1.00 to \$1.70 (Cdn.) per barrel more for crude oil from the Middle East. Therefore the Shell Group was eventually able to extract itself from the unfavourable contract it had with Shell Canada and take advantage of the market conditions that had forced the mark-up on crude to levels that had not been seen since the late nineteen fifties.

Shell Canada was not unaware of the magnitude of the mark-ups it was being forced to bear. In April, 1973, it noted that, by going outside the Shell organization for crude, it "may be possible for us to eliminate some of the margin we now pay SIPC [a Shell subsidiary] for our Middle East Crude" (Document # 28276). Table 27 illustrates the margins the Shell Group obtained by switching Shell Canada to Middle Eastern crude. This table compares the tax-paid costs of Middle Eastern crude to the price eventually

charged Shell Canada in 1972. On Oman crude, a margin of 45 cents per barrel was obtained. Iranian crude, which could be purchased from British Petroleum at tax-paid cost plus 15 cents (Document # 24168)³⁶¹, was then offered to Shell Canada with a mark-up of some 22 cents per barrel as Table 27 shows.

TABLE 26

SHELL DELIVERED PRICES AT PORTLAND
(\$Cdn./bbl.)

Period	Venezuelan (Lagomar 31°)	Persian Gulf (Oman 33°)
1972	2.581	2.821
1973 (Jan. 1)	2.932	3.09^{3}
1974 (Jan. 1)	9.37	10.38
1974 (July)	10.13	11.34
1974 (Dec. 31)	10.49	12.19

Note: Exchange Rate: 1973-.99977, 1974-1.02257 \$U.S./Cdn.

Source: 1. Document # 28050, Shell³⁶²—price delivered Montreal.

- 2. Exhibit T-19, Shell, Toronto Hearings, 1975.363
- 3. Exhibit T-19, Shell, Toronto Hearings, 1975.364

TABLE 27

THE SHELL GROUPS' CRUDE ACQUISITION COSTS AND THE PRICES CHARGED TO SHELL CANADA (1972)

(\$U.S./bbl.)

Cost Basis	Iranian Light	Abu Dhabi	Oman
Tax Paid Cost ² (TPC)	1.547	1.632	1.588
Acquisition Cost ² ex B.P. (TPC + 15¢)	1.697	1.782	
May 1972 Prices (ex SIPC) ²	1.92	2.12	2.04
Shell Canada August Prices	1.99	2.19	2.11

Source: 1. Document # 28152, Shell365

2. Document # 24391, Shell366

These premiums were the size of those mark-ups that Shell evaluated as not having been seen since the nineteen fifties. Shell Canada noted that the market was such that, between the summer of 1972 and 1973, the f.o.b. price on Persian Gulf crudes increased by about \$1.00 per barrel of which "less than half represents HGT [host government take] increases borne by the producing

companies under the Tehran, Geneva and participation formulae" (Document # 30203).³⁶⁷ In general, margins, in mid-1972 on Persian Gulf crude, according to an expert consultant were pushed to about 30 cents per barrel or a return of almost 75 per cent (Document # 33125).³⁶⁸ By early 1973, industry margins had reached 40 cents per barrel (Document # 1278).³⁶⁹ The Shell Group, too, ultimately was successful in extracting these high margins from its Canadian subsidiary by switching it to Middle Eastern crude.

In summary, apart from a brief episode in the early nineteen seventies, Shell Canada was charged prices for its crude, for most years since the 1957 Suez crisis, that were higher than arm's-length world market prices. Only in the early nineteen seventies were the constraints imposed upon Shell's Canadian subsidiary weakened, and then because of the potential tax liability. That Shell's crude pricing history was similar to that of the other majors is significant. First, its objectives in not contributing to a weakening of the market were the same as for Imperial. Secondly, because of its size, Shell's adoption of the same high transfer pricing policy, would have contributed substantially to the achievement of these common goals and helped to influence the level of product prices in Eastern Canada.

7. The Transfer Pricing Policies of Sun Oil, and Irving

The crude import market share of Imperial, Shell, Texaco, and Gulf was large enough that their 'unrealistic' transfer pricing policies would have served to influence the Canadian market even if other importers had been more aggressive. For as a group, the national majors were apparently willing to cede market share slowly to these more aggressive firms, all the while holding an umbrella over the industry. However, many of the fringe firms simply tucked themselves under this umbrella in a way that served to reinforce the policies of the largest four importers.

Sun Oil, in contrast with the four biggest importers of crude oil, was not faced with the constraint of having minority shareholders in its Canadian subsidiary. As such, its parent corporation might very well have been expected to have been more assiduous in following a crude pricing policy that was in its own best interests by charging as high a transfer price as the Canadian authorities would allow. Indeed, this is what happened. Sun Limited (the Canadian subsidiary) admitted that, throughout the nineteen sixties, its crude prices were "normally higher than arm's-length, world-market crude oil prices" (Document # 83938)³⁷⁰ since this benefitted the consolidated Sun organization (Document # 83926).³⁷¹ Moreover, during the period 1968-70, Sun noted that its "crude costs were the highest of all companies on both Venezuelan and Persian Gulf crudes" (Document # 83947).³⁷²

Table 28 presents a comparison of the prices charged to Sun Limited and other purchasers of the Sun organization's Venezuelan crude. Other comparable large non-Canadian buyers such as Petrobras in Brazil consistently paid about 20 to 30 cents per barrel less than the Canadian company, even though the volume of crude shipped to it was not very different from that shipped to Sun's Canadian subsidiary. However, the disadvantage suffered by the Canadian subsidiary was even greater than Table 28 indicates. The Sun organization also granted independent purchasers rebates off normal freight rates. For instance, a sale was made by the Venezuelan arm of Sun to a German refiner at \$2.20 per barrel f.o.b. with a freight rebate of 60 cents. As a result, the true f.o.b. price was only \$1.60 per barrel (Document # 83889).³⁷³ Sales were made to Brazil at \$2.08 per barrel with a rebate of 37 cents for a net of \$1.71 per barrel (Document # 83889).³⁷⁴ Therefore, relative to these sales, the Canadian subsidiary was being overcharged by about anywhere from 52 to 70 cents per barrel in 1965 and 1966.

Sun Limited recognized that, throughout this period, its corporate ties prevented it from purchasing oil from a cheaper source. There is no doubt that both the source and the cost of crude oil were determined by its parent. Indeed, it suffered "a sizeable penalty" in its crude acquisition costs. In a letter to the Sun President, a company official admitted:

"The fact that Sun Limited is not free to purchase these crudes in the open market of course creates a sizeable penalty in crude costs for us."

(Document # 83917, March, 1968, Sun Limited)375

TABLE 28

A COMPARISON OF VENEZUELAN PRICES CHARGED SUN LIMITED AND OTHER FIRMS BY THE SUN SUBSIDIARY IN VENEZUELA (\$U.S./bbl.)

Company	1962	1963	1964	1965	1966
Sun Oil	2.48	2.48	2.50	2.50	2.23
Sun Limited (Canada)	2.48	2.48	2.30	2.30	2.23
Petrobras (Brazil)	2.16	2.16	2.08	2.075	2.04
Manguinnos (Brazil)		2.16	2.075	2.075	
Wesseling (Germany)	2.34	2.25	2.22	2.22	2.20
D.E.A. (Germany)	2.34	·			
Petrofina	2.25	_			_
California Oil	2.30			_	
Ivers (Ecuador)		2.20	_	_	
Melanol (Europe)	2.34				
Trade Cargoes (Spain)	2.30	2.25	2.25		
Western Cargoes (Spain)		_	2.22	2.20	2.20
Space Petroleum (Spain)	_		2.22	2.20	_
Daisy Tankers (Spain)	_		_		2.20

Note: Freight discounts not included. Source: Document # 84030, Sun Limited.³⁷⁶ Sun Limited has provided an estimate for the period from 1962 to 1970 of the difference between world market prices or 'alternate' values to the Sun organization and the prices actually charged the Canadian organization. Table 29 presents these estimates for both the Venezuelan and Arabian crude actually imported by Sun Limited. The difference between world prices and prices charged to the Canadian subsidiary range from a high of 90 cents on Venezuelan oil at the beginning of the nineteen sixties to 48 cents at the end of the decade. During the last two years of the decade, when Sun began to import Arabian crude, the cost of this crude was about 28 cents per barrel above market values. Between 1968 and 1970, Sun Limited calculated that the restriction of having to purchase from its own parent cost it \$5.6 million or some 41 cents per barrel (Document # 84109-10).³⁷⁷

TABLE 29

COMPARISON OF CRUDE PRICES PAID BY SUN LIMITED AND ITS ESTIMATE OF ALTERNATE OR MARKET VALUES, 1962-1970

(\$U.S./bbl.)

Year		Venezuela			Middle Eas	t
-	Price to Sun	Alternate or Market Value	Difference	Price to Sun	Alternate or Market Value	Difference
1962	2.50	1.60	.90			
1963	2.501	1.60	.90			
1964	2.281	1.63	.65			
1965	2.281	1.63	.65			
1966	2.21	1.63	.58			
1967	2.24	1.63	.61			
1968	2.24	1.80	.44			
1969	2.18	1.70	.48	1.58	1.30	.28
1970	2.18	1.70	.48	1.58	1.30	.28

Note: Some years later a refund was received by Sun Limited for the difference between the price paid and the value accepted by National Revenue of \$2.24 per barrel.

Source: Documents # 83925,378 # 83927,379 Sun Limited.

Irving too apparently suffered from high crude prices being imposed upon it. In 1962, K.C. Irving wrote to Socal (his crude supplier) informing it that the contract that kept Irving tied to posted prices was unrealistic in light of world market conditions. Comparing Irving's costs to those for imported product, Irving calculated that it paid about 3.2¢ per gallon too much in the twelve months ending January 31, 1962 and 3.2¢ per gallon too much in the six

months ending July 31, 1962 (Document # 2262-63).³⁸⁰ Using the conversion factor of 35 gallons per barrel, this translates to an excess of about \$1.12 per barrel.

Thus Sun and Irving followed the four large majors in adopting a policy of bringing crude oil into Canada at prices that were inflated above market values. The manner by which each supported the general policy of using high transfer prices varied. Apparently, Sun was simply charged 'unrealistic' prices by its parent.

Irving apparently followed both policies at different times. Although it paid high prices in the early nineteen sixties, by the early nineteen seventies it was using a Bermuda based trader — Bomag, later named Irving California (Document # 768)³⁸¹ which "remitted..." a dividend to Irving (Document # 915, # 949).^{382, 382a} Whether it was the payment of 'unrealistic' prices or the use of a trader, both policies would have served to support high Canadian product prices — as long as the tax authorities provided the binding constraint by focusing on operating results. The importance of these actions lies in the fact that they were not isolated events followed only by an insignificant subset of the firms operating in the Eastern Canadian market. Together Sun, Irving,

Imperial, Gulf, Texaco, and Shell dominated the imported crude market in Eastern Canada in the nineteen sixties. They accounted for over 90 per cent of the crude imported into Quebec in 1960, 89 per cent in 1965 and 84

^{1.} British Petroleum's transfer pricing policies throughout the period under examination cannot be fully elaborated because B.P. reported that it had no record of the prices it paid for crude imports prior to 1971. Notwithstanding B.P.'s inability to provide the Director with actual prices for its crude importations to Canada prior to 1971, both B.P. and the Director of Investigation and Research possess copies of contracts between B.P. Canada Limited and B.P. Trading Limited which suggest that arm's-length prices should have governed crude transactions between the two companies from February 1960 through, at least, 1967. Because B.P. cannot confirm that such apparently arm's-length prices were indeed used for its crude imports during the pre-1971 period, it would be inappropriate to include a merely hypothetical analysis of B.P.'s transfer pricing policy.

per cent in 1969. In the Maritimes, they accounted for over 90 per cent during the same period. Thus the practice of charging Canadian subsidiaries 'sizeably' higher than arm's-length crude prices was sufficiently widespread that for all intents and purposes it may be ascribed to the market as a whole.

TABLE 30

COMPARISON OF CRUDE PRICES PAID BY AND SUN'S EVALUATION OF ALTERNATE OR MARKET PRICES

(\$U.S./bbl.)

Year	Price ¹ (33° Lagomedio)	Alternate or Market Value as estimated by Sun ²	Difference
1960			
1961			
1962		1.60	
1963		1.60	
1964		1.63	
1965		1.63	
1966		1.63	
1967		1.63	
1968		1.80	
1969		1.70	
1970		1.70	

Notes: 1. No correction has been made to the f.o.b, price to correct for excess charges that might have been hidden in freight rates.

2. Sun's estimate of an alternate or market value (Document # 83927)³⁸³ was for Venezuelan crude. Sun's Venezuelan crude was Lagomedio (Document # 83925)³⁸⁴ which had a typical gravity of 32-32.9° API (Document # 83982).³⁸⁵

Source: Documentation collected by the Petroleum Inquiry and Documents # 83925-26,386 83927.387

D. An Evaluation of the Detrimental Effect of High Crude Transfer Prices

1. The Level of Transfer Prices to Canadian Subsidiaries as Compared to World Market Prices.

The foregoing sections indicate that, for each company examined, the transfer prices charged Canadian subsidiaries for crude oil were above world market levels in the late nineteen fifties and nineteen sixties. Throughout this period, each company, on separate occasions, clearly stated that the price it was charged was above open-market levels. But such admissions are not the only evidence that Canadian imported crude was priced at 'unrealistic' levels. A comprehensive comparison of the crude oil prices of each company and world market prices presented below, confirms the existence of 'unrealistically' high crude costs for the major Canadian importers.

Since the statistics generally available to evaluate arm's-length world prices are f.o.b. country of origin, the landed crude costs of the Canadian companies must be translated into an 'implicit' f.o.b. value of crude purchased. To do this, an appropriate freight rate must be chosen in order to translate the landed cost into an 'implicit' f.o.b. value. Neither the actual freight rates paid nor what are referred to as AFRA freight rates are appropriate for this purpose.

The actual freight rates paid by the Canadian companies cannot be accepted in all cases because some companies used freight rates as a convenient way of achieving a high landed cost without reporting f.o.b. prices to the taxation authorities that appeared too 'unrealistic'. For instance, Texaco noted that the freight rates reported by some Canadian companies must be viewed with suspicion because of the possibility "that the other companies could be claiming lower f.o.b. values in Venezuela for tax purposes and charging marine freight at AFRA rates" (Document # 6685-6). This statement also implies that what are referred to as AFRA rates were inappropriate since they could be used to arrive at a high landed cost. Imperial's supplier, Creole informed it that "some companies charge their affiliates artificially high rates to offset discounts on F.O.B. crude prices" (Document # 90644). See Gulf, when discussing the desirability of creating its own offshore trader, felt that it could hide the increased charges that would result in the freight rate charged:

"The optimized benefits of this transaction [an offshore trader] rely on the prices charged between the parties withstanding attack by the Canadian tax authorities. . . . the increased price does not have to be shown as part of the crude element but can be shown as an increase in the cost of freight since the trader will sell on a C & F basis."

(Document # 75741, April 8, 1969, Gulf)³⁹⁰

Indeed, at least one major Canadian subsidiary utilized this device to source profits offshore that could then be repatriated tax-free to Canada. Imperial used an offshore shipping subsidiary, Caribbean Oil and Tranport, for this purpose, and over its lifetime, it returned 23.5 per cent to Imperial (Document # 114707).³⁹¹ An indication of the 'artificially high' nature of this return is provided in a confidential Gulf memorandum which evaluated the risk in ocean transportation as requiring no more than 10 per cent D.C.F. on equity (Document # 63491).³⁹³ As a result, the freight rates reported by Imperial cannot be accepted at face value.

While actual freight rates can be meaningless unless carefully analyzed, another standard — referred to as AFRA — is equally troublesome. AFRA is a weighted average of all charters in effect during a given period whether or not the contracts were entered into in that period. Adelman provides

^{1.} Imperial's hurdle rate on investment was in the range of 8 to 9 per cent on average (Documents # 101204-208).³⁹²

four reasons for its rejection. First, it is not made up entirely of arm's-length transactions. Therefore the accounting manipulations referred to above will affect its value. Second, it mixes different sorts of rates — spot and longer term. Third, its averaging procedure includes both product and crude transportation freight rates. Finally, by averaging in rates negotiated in previous periods, it is irrelevant to the determination of the current long-term charter rates. Since tanker rates were falling during most of the nineteen sixties, this means that AFRA rates would have been generally higher than market rates during this period.

Evidence suggests that the oil companies concurred that AFRA was unrealistic. Imperial, in 1964, claimed that its "owned and chartered transportation coverage on either a short or long term basis is at rates well under the current AFRA quotations" (Document # 117868). Again, in 1968, Imperial estimated that if it were to cost the landed price of its competitors' crude oil imports using AFRA rates, this "would result in significantly higher costs for all competitors relative to the estimated average costs of the affiliated major" (Document # 88547). In addition, Shell indicated that its freight costs in the late nineteen sixties for Venezuela were below AFRA rates (Document # 28058). Similarly, although Texaco presented AFRA as a reasonable rate to the taxation authorities for reporting purposes (Document # 6729), it argued otherwise when its parent attempted to charge it AFRA rates:

"At no time has TexCan agreed to pay for its crude oil freight at AFRA rates because of the impossible position this puts us in with respect to product pricing....to our knowledge, nobody uses monthly AFRA rates on long term charters for the type of tonnage we use."

(Document # 53898, February 25, 1970, Texaco)³⁹⁸

Finally, Gulf Canada commented upon its parent's attempt to use AFRA by saying "if AFRA is used GOTCO will earn an effortless and ever increasingly exhorbitant profit" (Document # 75673).³⁹⁹ Therefore the AFRA quotations can be rejected as being appropriate for this analysis.

An estimate of competitive freight rates is required to permit comparison of transfer prices of crude landed in Canada and Middle Eastern or Venezuelan open-market prices. In the long-run, the competitive price for transportation should equal the long-run transportation cost of the marginal vessel required for the oil trade. In this connection Adelman argues:

"Of the tankers old and new which could be relied upon and planned for, it was neither the best nor the average tanker which was relevant to the determination of price, but rather the incremental tanker, or the highest cost new tanker which was needed in order to insure the flow of oil."

^{1.} Adelman, The World Petroleum Market, pp. 113-6.

^{2.} Adelman, The World Petroleum Market, p. 110.

Of course, in the short-run, even a freely operating competitive market may fluctuate around this level. Emergencies that disturb the pattern of trade for a short period of time will push rates well above this level. However, since the focus here is on the long-run trend in the relationship between Canadian and competitive prices, the use of the long-run average transportation cost, as defined above, is appropriate.

Using this definition, Adelman calculated that long-run freight costs during this period fell from I-45 (Intascale minus 45) in 1960 to I-57 or W53 (Worldscale 53) in 1967. This is equivalent to a fall in rates from about 72 cents to 56 cents per barrel during this period for the Middle East to Portland route (see Appendix A). During the late nineteen sixties, the long-term charter rate continued to fall — from W53 in 1967 to W32 by early 1969. However, in the early nineteen seventies, long-term rates moved upwards to a level around W60.² Adelman noted that, for the early nineteen seventies, increases in operating and building costs, to the extent they were not the result of short-run demand pressures, would "forecast a long-term rate half again as large as the Worldscale 40 of late 1969, i.e., around 60".³

Evidence from the files of the Canadian oil companies substantiates Adelman's calculations (see Appendix A). In 1963, he calculated the long-term rate as I-47; Imperial indicated it was I-45. In 1966, Adelman's estimate was I-55; Imperial's was I-57. In 1969, Adelman suggested the long-term marginal rate was W36-39. Gulf chartered two ships from Canadian Pacific for W34 at this time (Document # 75684-6).⁴⁰⁰ Finally, as noted above, Adelman suggested the new long-term rate might be as high as W60 starting in the early nineteen seventies. Gulf predicted rates based on 'long term' costs would be around W60 for the marginal VLCC⁴ ship (Document # 75679).⁴⁰¹ Similarly, Exxon calculated, in early 1972, that the marginal class vehicle would be between 60 and 160 MDWT (Document # 113080)⁴⁰² while the expected costs for this ranged from W42 to W60 respectively (Document # 113091).⁴⁰³ Along with Adelman's estimates, these figures provide a set of the freight costs, listed in Table 31, for transportation from the Middle East and Venezuela to Portland.

Together, the landed crude costs of the major companies operating in Canada and these freight rates can be used to calculate a series of 'implicit' f.o.b. prices — either on a Middle Eastern or Venezuelan basis (See Appendix B). Tables 32, 33, and 34 report these 'implicit' f.o.b. prices, first on a Middle Eastern, and then, on a Venezuelan basis. Even though much of the crude that

^{1.} Ibid., p. 109.

^{2.} Adelman, The World Petroleum Market, pp. 124-5.

^{3.} *Ibid.*, p. 126.

^{4.} VLCC means: Very Large Crude Carrier, being 200 MDWT or larger.

was imported into Canada was from Venezuela, equivalent Middle East 'implicit' f.o.b. prices are calculated for this crude because arm's-length prices are more readily available for this area.

TABLE 31

COMPETITIVE FREIGHT COSTS FOR CRUDE IMPORTED INTO CANADA (PORTLAND)

(¢ U.S./bbl.)

Year	Venezuelan	Middle Eastern
1960	18.2	71.6
1961	18.2	71.6
1962	17.6	69.0
1963	17.6	69.0
1964	15.5	59.9
1965	15.5	59.9
1966	14.8	58.6
1967	15.0	56.0
1968	15.3	56.0
1969	14.9	56.3
1970	15.0	55.5
1971	16.3	60.3
1972	17.3	62.9
1973	18.6	72.0

Source: Appendix A

Before Canadian 'implicit' f.o.b. prices for crude purchases can be evaluated, a standard of comparison must be chosen. Two standards are available. Each provides a different but meaningful reference point. First, there are third-party prices. These prices characterize transactions between arm's-length parties and are not merely the internal prices used for bookkeeping arrangements between subsidiaries and parent major multinational companies. It has sometimes been erroneously charged that the prices established in this market have little meaning. Since most of the world's crude oil trade passed through integrated channels, the third-party market has been termed unrepresentative. This argument involves two fallacies. First, the fact that this market does not encompass all transactions is not, by itself, particularly relevant. Housing prices are determined each year by transactions in a very small percentage of the total stock. What is important is that transactions in the third-party or arm's-length market be sufficiently large in absolute number that

^{1.} Adelman, The World Petroleum Market, pp. 161-164 for a discussion of the criticisms that have been levied against the use of arm's-length prices and subsequent analysis.

they represent a meaningful sample. That this condition was satisfied is borne out by the fact that the major oil companies used prices generated in this market to represent the opportunity cost of using the oil themselves. For instance, Exxon does so in evaluating the desirability of Imperial's purchase/sale agreement with Mobil (Document # 123963).⁴⁰⁴

These open-market prices are a particularly attractive standard for comparison when it can be shown or argued that they represented the long-run competitive solution. Imperial presents corroborative evidence to this effect. In a 1964 study, Imperial calculated what Middle Eastern prices would be if they were set equal to costs plus "a reasonable producing rate of return" (Document # 89058)⁴⁰⁵ — by definition, the long-run competitive equilibrium. Imperial noted that the calculated prices, using this method, were "approximately the same as current 'arms length' prices" (Document # 89060).⁴⁰⁶ Thus, comparison of Canadian 'implicit' f.o.b. prices on crude purchases with the arm's-length transactions for crude provides an indication of the degree to which Canadian prices were above the long-run competitive norm.

Estimates of third-party prices for Venezuelan and Middle Eastern crude are presented in Appendix C. Tables 32, 33 and 34 provide comparisons of the 'implicit' f.o.b. prices of Imperial, Gulf, Shell and Texaco calculated first, for the Middle East, and then, for Venezuela. The last column in each table contains a point estimate of third-party or arm's-length prices in each area for easy reference.²

Reference to Appendix C shows that throughout the nineteen sixties, Middle Eastern prices declined steadily. In 1960, Kuwait crude was quoted at \$1.34 per barrel. In 1964, it had reached a price of between \$1.24-\$1.29 per barrel, by 1968, \$1.15 per barrel. Other crudes experienced similar declines. Light Iranian (Agha Jari) was quoted at \$1.43 in 1960, \$1.29 to \$1.34 in 1965, and \$1.20 in 1969. Light Arabian was priced at \$1.60 in 1959, \$1.40 in 1963, \$1.30 in 1966, and \$1.20 in 1970. Heavy Iranian (Gach Saran) was quoted at \$1.23 to \$1.30 in 1965, \$1.18 to \$1.23 in 1966, and \$1.15 in 1969. Between 1961 and 1967, Adelman reported that large South American buyers were purchasing crude with 'implicit' f.o.b. prices that ranged from \$1.10 to \$1.30 per barrel.³

^{1.} While no one figure covered all third-party transactions, for the purpose of simplifying the exposition, a point estimate is chosen from the range quoted for the relevant year.

^{2.} More extensive estimates are reported in Appendix C.

^{3.} Adelman. The World Petroleum Market, p. 285.

TABLE 32

IMPLICIT MIDDLE EAST PRICES FOR IMPERIAL, SHELL, AND TEXACO (\$U.S./bbl.)

Year	Imperial ¹		Shell ¹	Texaco ¹		Derived Persian Gulf Price2	Third-Party Prices	
	Guanipa (30°-32°)	Arabian Lt. (32°-34°)	Venezuelan (30°-33°)	Arabian Lt. (34°-35°)	Mata (30°-31°)	(31° Gach Saran Basis)	(Light Iranian)	
1960			2.02	2.01	2.10	1.50	1.43	
1961	1.78		1.71	1.95	2.13	1.50	1.43	
1962	1.85		1.66	1.88	2.07	1.61	1.38	
1963	1.87		1.64	1.76	1.86	1.59	1.38	
1964	1.88	1.64	1.64	1.86	1.91	1.29	1.34	
1965	1.81	1.64	1.64	1.76	1.85	1.17	1.34	
1966	1.83	1.71	1.65	1.77	1.84	1.27	1.34	
1967	1.78	1.63	1.64	1.78	1.90	1.23	1.34	
1968	1.81		1.57	1.82	1.87	1.83	1.34	
1969	1.80	1.91ª	1.55	1.78	1.84	1.27	1.20	
1970	1.94		1.56	1.67	1.63	1.44	1.20	
1971	2.18		1.90-1.92	2.32	2.15			
1972	2.45		2.13-2.16	2.31	2.20			

Note: a) The 1969 figure is for Libyan crude imports made by Imperial.

Sources: 1) Gravity corrected figures are taken from Appendix B.

- 2) Adelman, The World Petroleum Market, pp. 183, 190.
- 3) Estimate derived from Appendix C.

TABLE 33

IMPLICIT MIDDLE EAST PRICES FOR GULF
(\$U.S../bbl.)

Year	Iranian ¹	Kuwait ¹	Nigerian ¹	Venezuelan ¹	Derived Persian Gulf Price ²	Third-Party or Arm's-Length Price ³		
	(31° Gach Saran)	(31°)	(33°-37°)	(31°) ^a	(31° Gach Saran Basis)	(Light Iranian)	(Kuwait)	(Gach Saran)
1960		1.82		2.33	1.50	1.43	1.34	
1961	,				1.50	1.43		
1962		1.71		2.09	1.61	1.38	1.31	
1963	1.89	1.54		2.09	1.59	1.38	1.29	1.38
1964	1.96	1.62		2.15	1.29	1.34	1.26	
1965	1.48	1.39	1.55	1.87	1.17	1.34	1.25	1.23
1966	1.39	1.39	1.42		1.27	1.34	1.25	1.21
1967	1.58	1.42	1.43	1.55	1.23	1.34		
1968	1.41	1.36	1.46	1.50	1.83	1.34		
1969	1.55	1.42	1.52	1.41	1.27	1.20	1.20	1.15
1970		1.65	1.54	1.42	1.44	1.20		
1971	1.77		2.28	1.77				
1972	1.85	1.78	2.40	1.87				

Note: a) East Venezuelan 31º crude 1960-67; Ceuta (31º) crude 1968-1972.

Sources: 1) Gravity corrected figures are taken from Appendix B.

2) Adelman, The World Petroleum Market, pp. 183, 190.

3) Estimate derived from Appendix C.

TABLE 34
IMPLICIT VENEZUELAN PRICES FOR IMPERIAL, GULF, SHELL AND TEXACO (\$U.S./bbl.)

Year	Imperial Guanipa ¹ (30°-31°)	Gulf ¹ (31°)	Shell	Texaco ^t Mata (31°)	Effective Venezuelan Price ²	Sun Estimate of Market or Alternate Value ³
	1	11	111	lV	V	VI
1960		2.86	2.56	2.64	2.03	
1961	2.31		2.24	2.66	2.03	
1962	2.36	2.61	2.18	2.58	2.12	1.60
1963	2.38	2.60	2.16	2.37	2.10	1.60
1964	2.33	2.60	2.09	2.36	1.73	1.63
1965	2.25	2.31	2.09	2.29	1.61	1.63
1966	2.27		2.08	2.28	1.71	1.63
1967	2.19	1.96	2.05	2.31	1.64(1.95)	1.63
1968	2.22	1.93	1.98	2.28	2.25	1.80
1969	2.21	1.82	1.97	2.26	1.68	1.70
1970	2.35	1.83	1.96	2.03	1.83(2.40)	1.70
1971	2.63	2.21	2.34-2.36	2.58		
1972	2.90	2.33	2.59-2.62	2.65		,

Note: The Shell figure is for its average crude slate of Venezuelan. The Guff figures for 1960-67 are for 31° East Venezuelan; for 1968-72 they are for 31° Ceuta. The Sun estimate relates to 32° Lagomar, Lagomedio type crudes.

Sources: 1) Gravity corrected figures are taken from Appendix B, Table B-5.

- 2) Calculated using Adelman's Derived Persian Prices' and the difference in freight rates reported in Appendix A for Venezuela and Middle East.
- 3) Document # 83927, Sun Limited.407

It is clear from Tables 32 and 33 that the Canadian subsidiaries of Exxon, Texaco, Shell, and Gulf paid much more than Middle Eastern third-party prices. On its Venezuelan imports, Imperial's 'implicit' Middle Eastern f.o.b. price was \$1.78 in 1961 and \$1.81 per barrel, in 1965. Compared to third-party prices for Light Iranian crude, Imperial's disadvantage was some 35 cents in 1961 and 47 cents in 1965. Its implicit f.o.b. price on Light Arabian in 1966, at \$1.71 cents per barrel was about 40 cents higher than the \$1.30 prices quoted for third-party purchases of this crude; but Imperial was only permitted to purchase limited quantities of this crude. Between 1965 and 1969, Imperial experienced virtually no change in its Middle Eastern 'implicit' f.o.b. price on Venezuelan crude although third-party Light Iranian crude prices fell to \$1.20 per barrel leaving Imperial with a disadvantage of 60 cents. However, Imperial's pre-tax costs on Venezuelan crude actually fell about 10 cents with the implementation of an offshore trader. In summary, Imperial's disadvantage on

its Venezuelan crude was about 35 cents in 1961, some 47 cents in 1965, and 50 cents (60 cents if the pre-tax savings of its offshore trader are ignored) in 1969.

Like Imperial, Shell's disadvantage on its Venezuelan crude purchases remained positive over the decade. In 1960, its Middle Eastern implicit f.o.b. price was \$2.02 per barrel compared to a third-party Light Iranian crude price of \$1.43, leaving it with a disadvantage of some 59 cents. By 1961 this differential had fallen to 28 cents per barrel. In 1965, it was 30 cents and by 1969 it had reached 35 cents. Since, apart from some Middle Eastern crude purchases early in the decade, Shell imported only Venezuelan crude, this indicates that Shell experienced no real improvement in its position relative to third-party Middle Eastern prices from 1961 onwards.

An evaluation of Gulf's position is more difficult than for either Shell or Imperial because of the variety of crude types that Gulf purchased and the variance in the disadvantage that Gulf experienced on each of these crude types. In the first four years of the nineteen sixties, Venezuelan crude accounted for between 70 and 80 per cent of Gulf's imports. The implicit Middle Eastern f.o.b. price that Gulf paid for its East Venezuelan blend was substantially above third-party Middle Eastern prices. In 1960, the implicit Middle Eastern f.o.b. price Gulf paid for this Venezuelan crude was \$2.33 per barrel compared to the third-party price of \$1.43 for Light Iranian crude — for a disadvantage of 90 cents. Relative to Light Iranian third-party prices of \$1.38 in 1962, \$1.38 in 1963, and \$1.34 per barrel in 1964, Gulf's disadvantage on its Light Venezuelan crude for these years was 71 cents, 71 cents, and 81 cents per barrel respectively. The other portion of the slate from 1960 to 1964 consisted of Middle Eastern crude. Gulf's disadvantage on this crude was only about half that of the disadvantage suffered on Venezuelan crude. Using third-party Kuwait prices of \$1.34 in 1960, \$1.31 in 1962, \$1.29 in 1963 and \$1.26 per barrel in 1964, Gulf's disadvantage on its Kuwait imports was 48 cents, 40 cents, 25 cents and 36 cents per barrel respectively. A weighted average of Gulf's net disadvantage can be calculated using the assumption that the differentials referred to above were generally representative of each of the crudes imported from Venezuela and the Middle East. This average indicates that Gulf had a disadvantage relative to Middle Eastern third-party prices of about 81 cents in 1960, 63 cents in 1962. 57 cents in 1963, and 48 cents per barrel in 1964.

During the years 1963 through 1966, the relative proportions of different crudes in Gulf's slate changed dramatically. Venezuelan crude imports fell until they made up less than one-third of the total. These were initially replaced with Middle Eastern crude until it accounted for almost three-quarters

^{1.} If the tax savings of 20 cents are added, Imperial would have been at a disadvantage of 40 cents. But this is not the relevant figure. What is at issue here is the extent of the 'unrealistic' premium, not the extent to which this was reduced by tax avoidance.

of the total in 1964; however, gradually this source too was replaced until in 1966 it accounted for only about half the total. By the latter year, Nigerian crude, which had entered the slate in 1965, accounted for over 40 per cent of the total.

At the same time as the slate was being changed, Gulf's crude prices were also decreasing. The disadvantage of Gulf's Venezuelan crude, which was 81 cents per barrel in 1964, fell to 53 cents in 1965 relative to third-party Light Iranian crude prices. In 1963, Gach Saran crude imported by Gulf suffered a disadvantage of some 51 cents per barrel compared to third-party prices of about \$1.38 for this crude. By 1965, Gulf's 'implicit' f.o.b. price on Gach Saran was \$1.48 per barrel compared to the third-party prices of about \$1.23 for a disadvantage of 25 cents. In 1964, Gulf's Kuwait crude netted back at \$1.62 per barrel for a disadvantage of 36 cents compared to third-party prices for Kuwait crude of \$1.26. In 1965, Gulf's Kuwait netback of \$1.39 per barrel relative to third-party prices for this crude of \$1.25 had a disadvantage of 14 cents. Finally, in 1965, the Nigerian crude imported by Gulf had a 21 cent per barrel disadvantage relative to Light Iranian third-party crude prices of \$1.34. The result was that the weighted average, calculated as previously, using East Venezuelan, Kuwait, and Nigerian crudes, fell from some 48 cents in 1964 to about 27 cents per barrel in 1965.

The final four years of the decade, 1967 to 1970, once more saw a change in Gulf's crude slate. Venezuelan crudes were increased to about 40 per cent of the slate; Middle Eastern crudes declined to less than 10 per cent; and Nigerian crudes, after declining from 43 per cent in 1966 to 14 per cent in 1968, were increased once again to 48 per cent in 1970. The disadvantage that Gulf experienced on its Venezuelan crudes declined to around 20 cents per barrel for the rest of the decade — relative to third-party Light Iranian prices of \$1.34 in 1967-68 and \$1.20 in 1969-70. However, the disadvantage on Nigerian crudes relative to Light Iranian third-party prices increased somewhat — to about 34 cents per barrel by 1970. Similarly, differentials on both Gulf's Gach Saran and Kuwait imports increased somewhat. Gulf's Kuwait prices increased from a differential of some 14 cents per barrel in 1966 relative to the third-party Kuwait prices of \$1.25 in this year to about 22 cents per barrel relative to a third-party Kuwait price of \$1.20 in 1969. The Gach Saran differential, which had been some 18 cents per barrel in 1966 relative to a third-party price of \$1.21 for this crude, increased to some 40 cents per barrel relative to a third-party price of \$1.15 for this crude in 1969. As a result, the weighted average disadvantage (using Ceuta as representative of Venezuelan crudes and Kuwait for Middle Eastern), which had been around 27 cents per barrel in 1965, had decreased only slightly to about 25 cents by 1969. Gulf, therefore, started the decade with a disadvantage that was greater than Shell but ended slightly below this company.

Texaco's position was not greatly dissimilar from that of the other companies at the beginning of the decade. In 1960, its disadvantage on Venezuelan crude netted back to the Middle East was some 67 cents per barrel relative to third-party prices for Light Iranian crude. On its Middle Eastern crude imports, its disadvantage was some 58 cents per barrel on the same basis. By 1965, its disadvantage on Venezuelan crude had fallen to about 51 cents per barrel and on Middle Eastern to about 42 cents per barrel. However, between 1965 and 1969. Texaco's implicit Middle Eastern f.o.b. prices for both its Venezuelan and Middle Eastern crude remained relatively constant while third-party prices fell another 14 cents. Therefore its position relative to the third-party market deteriorated. By 1969, Texaco's disadvantage on its Venezuelan imports had reached some 64 cents per barrel and on its Middle Eastern imports some 58 cents per barrel. Only in 1970 was any progress made. By this year, Texaco's Venezuelan disadvantage fell to 43 cents per barrel and its Middle Eastern disadvantage declined to 47 cents per barrel. Thus, Texaco's position remained, relatively, unchanged for the last half of the decade.

In summary, when the 'implicit' f.o.b. prices that each of the Canadian subsidiaires of the majors were being charged for imports is compared to Middle Eastern third-party prices, it is apparent that each company was paying 'unrealistically' high prices. Moreover, while some progress was made in reducing the excess being paid by some companies, this was done neither universally nor completely. Gulf reduced its excessive payments from some 81 cents in 1960 to 48 cents in 1965 to about 25 cents per barrel in 1969-70. Shell reduced these payments from 59 cents in 1960 to 30 to 35 cents per barrel over the last half of the decade. Nevertheless, both companies still paid more than third-party Middle Eastern prices at the end of the decade. In contrast, Texaco did little to diminish its disadvantage for most of the period. Its Middle Eastern crude suffered a disadvantage of 58 cents in 1960, 42 cents in 1965 and 58 cents per barrel by 1969. While Texaco made little progress, Imperial's performance for its Venezuelan imports worsened during the decade. Starting with a disadvantage in 1961 of some 35 cents, this gradually widened to 47 cents in 1965 and 50 cents per barrel (60 cents if the pre-tax savings of its offshore trader are ignored) by 1969.

Therefore in comparison to third-party prices — the standard that Imperial recognized as approximating costs plus a reasonable return on investment — the major Canadian importers were charged between 35 cents and 81 cents too much at the opening of the sixties and about 25 cents to 58 cents too much at the end of the decade. Admittedly, these comparisons are based only on the crude oil price corrected for differences in gravity, while the value of different transactions could differ for other reasons. Credit terms varied.

^{1.} Imperial, in a 1968 study of its competitiveness included credit terms as the only additional factor considered in the cost comparison (Document # 88532).408

Vaporization during transport might be borne by the seller. Insurance might be borne by the seller. None of these factors singly or jointly are likely to account for the differentials reported above. Gulf, in 1972, evaluated the worth of 120 days' credit at 5 cents per barrel (Document # 62984).⁴⁰⁹ Imperial, in 1968, evaluated each 30 days' credit at 1 cent per barrel¹ (Document # 88529).⁴¹⁰ Since Imperial's own credit was about 100 days (Document # 88530),⁴¹¹ this meant its net prices would have been about 3½ cents per barrel better than a third-party that was receiving no credit. Of course, to the extent that credit was available to third-parties, then the reduction in Imperial's disadvantage is even less. In any case, all "'fringe benefits' of quality differentials, credit terms buy-back provisions, etc." did not generally amount to more than 5 cents per barrel.² As such they do not serve to offset the difference between third-party Middle Eastern prices and the amount paid by the Canadian subsidiaries of the multinational oil companies.

This analysis of the majors' performance has relied upon a comparison of implicit Middle Eastern f.o.b. prices paid for Canadian crude imports and third-party Middle Eastern prices. Alternately, 'implicit' f.o.b. prices can be calculated for Venezuela and compared to third-party prices in this area. Table 34 provides these 'implicit' f.o.b. prices for Imperial, Gulf, Shell and Texaco in columns I-IV. Sun's appreciation of the alternate or market value of 32° Venezuelan crude is provided in column VI for comparison. The excess paid by Imperial for its Venezuelan crude relative to third-party prices in 1962, 1965, and 1969 was 76 cents, 62 cents and 51 cents per barrel respectively (41 cents in 1969 if the 10 cent discount obtained by its offshore trader is considered). For these same years, the excess paid by Gulf was 101 cents, 68 cents, and 12 cents per barrel respectively; by Shell—58 cents, 46 cents and 27 cents per barrel respectively; by Texaco—98 cents, 66 cents and 56 cents per barrel respectively. Therefore, whether the standard chosen is Middle Eastern or Venezuelan arm's-length prices, the majors paid more than third-party prices for their crude imports.

A second standard exists to which Canadian crude prices can be compared. While arm's-length transactions are representative of the competitive norm, they will not indicate the speed with which the industry approached the norm. The speed of adjustment would have depended upon the degree to which the arm's-length segment of the crude market influenced the final product market. Although some firms were obtaining crude at competitive prices, their impact on the final product market may have been negligible. Fortunately, there

^{1.} The Gulf and Imperial estimates differ because of changes in both prices and interest costs between the dates of the two estimates.

^{2.} Adelman, The World Petroleum Market, p. 162.

is a price series that overcomes this difficulty. Adelman subtracts long-run refining and transportation costs from the product realizations obtained in the competitive European wholesale market at Rotterdam to obtain Europe's 'Derived Persian Gulf Price'. This series, therefore, provides a price for crude oil derived from one of the more important competitive final product markets. A comparison of Canadian 'implicit' f.o.b. prices for crude imports to this series provides us with a measure of how well Canadian crude prices performed in comparison to this European market. Should they have lagged behind realizations obtained in the competitive European wholesale market, then more evidence will have been provided that Canadian crude prices did not adequately reflect long-run trends in a competitive world market. Tables 32, 33 and 34 contain Europe's 'Derived Persian Gulf Prices' and the 'implicit' f.o.b. prices for Canadian crude imports. If the Canadian companies' 'implicit' f.o.b. prices are compared to Europe's 'Derived Persian Gulf Price' a picture equally unfavourable to that portrayed above emerges. In 1961, Imperial's 'implicit' f.o.b. price for Venezuelan crude, calculated on a Middle Eastern basis, was 28 cents per barrel above the European figure derived by Adelman; by 1965, it was 64 cents per barrel higher. Shell's 'implicit' f.o.b. disadvantage, calculated on the same basis, was some 52 cents per barrel in 1960, declined for several years thereafter, but was 47 cents per barrel by 1965. Gulf's disadvantage on its Venezuelan crude, which accounted for about three-quarters of its slate in the early nineteen sixties, decreased from 83 cents per barrel in 1960 to 70 cents per barrel in 1965. A weighted average, constructed as before using Kuwait, Nigerian and Venezuelan crude, of Gulf's cost disadvantage fell from about 70 cents to about 40 cents per barrel over the same period. Texaco's disadvantage increased from 60 cents to 68 cents per barrel on its Venezuelan crude while its Arabian disadvantage increased from 51 cents to 59 cents per barrel over the same period.

Adelman's estimates are less representative of long-run tendencies for 1967 and 1968 because of the short-run market fluctuations caused by the 1967 Middle East war. However, by 1969, this source of instability had disappeared. In that year, he calculated the European 'Derived Persian Gulf Price' as \$1.27 per barrel. In the same year, Imperial's 'implicit' Middle Eastern f.o.b. price on its Venezuelan imports was \$1.80 per barrel for a disadvantage of some 53 cents per barrel (43 cents if the offshore trader's premium of some 10 cents is deducted). Gulf's 'implicit' Middle Eastern f.o.b. prices were \$1.41 per barrel for Venezuelan Ceuta, \$1.52 per barrel for Nigerian, \$1.42 per barrel for Kuwait, and \$1.55 per barrel for Iranian Gach Saran giving disadvantages of 14 cents, 25 cents, 15 cents, and 28 cents per barrel respectively. Shell's 'implicit'

^{1.} Adelman, The World Petroleum Market, p. 183.

Middle Eastern f.o.b. price was \$1.55 per barrel for a disadvantage of some 28 cents per barrel. Texaco's 'implicit' Middle Eastern f.o.b. price was \$1.84 per barrel on Venezuelan and \$1.78 per barrel on Middle Eastern for disadvantages of 57 cents and 51 cents per barrel respectively. Thus this method of evaluation of the performance of the majors reveals a pattern similar to that reported previously. Gulf and Shell reduced their disadvantage, but did not eliminate it. Texaco's disadvantage remained relatively unchanged. Imperial's position deteriorated. Therefore the Canadian market, on average, made virtually no progress in improving its relative competitive position during the decade.

No matter which of the two standards of comparison is chosen, both show that Canadian crude prices were 'unrealistically' high during the period under study. They were above third-party prices and, therefore, above what can be considered as the long-run competitive price of this period. They were also above the level that reflected competitive product realizations in the European market. Thus, the Canadian market for imported crude can be described as imperfect. Nevertheless, as was emphasized at the beginning, crude acquisition is only one stage in this vertically integrated industry, and it is the effect of this crude acquisition policy that is of greatest concern. It is to this topic that the paper now turns.

2. The Effect of the Transfer Pricing Structure

The crude transfer pricing policy of the multinational petroleum companies ultimately is of interest because of its effect on the Canadian industry. At issue is the extent to which Canadian product prices were influenced by the level of transfer prices. High transfer prices need not imply high product prices. The transfer pricing policy may only have reduced what would have been a competitive rate of return to an amount less than that. However, before this matter is examined, the effect of 'unrealistically' high transfer prices on productive capacity will be investigated. If the level of transfer prices was unimportant, we should expect to find neither an influence on product prices nor a distortion in the investment decisions of the multinationals' Canadian subsidiaries. Should the level of transfer prices have affected productive capacity — either in terms of quantity or type of capacity — there is, then, evidence supporting the suggestion that transfer prices were non-neutral. This, in turn, would support any conclusion that they also affected the product price structure.

There is no doubt that distortions between crude and product prices or distortions in specific product markets can affect refining decisions. Ontario provides an example. Because of the National Oil Policy, this market used Canadian crude. The price of this crude was held above world market levels.

^{1.} The manner in which this occurred is developed at length in the volume entitled The Production Sector.

Shell noted that, in the Ontario market during the nineteen sixties, refineries concentrated on gasoline because the price of distillates was influenced by imports and was, therefore, close to world market levels:

"We stated that in our opinion Ontario refiners would tend to further maximize gasoline rather than increase distilling capacity. Hence with the distillate market being depressed by the competition from import material refiners would find it uneconomic to invest additional capital to run increased Canadian crude and maintain current gasoline and distillate yields."

(Document # 45288, March, 1966, Shell)412

Therefore, in a market where there was clearly a distortion — high crude prices relative to product prices of middle distillate and bunker, the investment in refining was affected.

The relevant question this section must address is whether or not the transfer pricing policy in the international sector affected refining investment decisions in Eastern Canada. High crude import costs relative to world prices could have had the effect of stifling refinery development in Eastern Canada. Imperial indicated that, at least in its own case, its parent's transfer pricing policy had this result. Evidence that Imperial's crude prices were above world market levels has already been adduced. Imperial itself, in a 1964 study, referred to the relationship between its Venezuelan crude costs and product prices in general as being in "a non-equilibrium state" (Document # 89070).⁴¹³ The relationship between its crude costs and the price of bunker fuel was described as "artificial" (Document # 89069).⁴¹⁴ At the time, Imperial predicted that if this continued, the result would be a reduction in its refinery capacity relative to market demand and an increase in imports of products. This outcome was described in the following terms:

"Also it should be mentioned the continuation of the current Venezuelan crude/product relationship into the future would leave insufficient margin to justify installation of 'grassroots' refining equipment in Eastern Canada...."

"If contrary to the foregoing, Venezuelan crude prices continue to be overly high relative to products and if for a variety of reasons the refiner cannot use cheaper Middle East crude, then product importing may be the preferred alternate."

(Document # 89061-2, October, 1964, Imperial)415

While crude prices for the large Canadian subsidiaries fell during the nineteen sixties they decreased less rapidly than did world prices. Imperial's predictions, outlined above, were borne out. Imports of product grew rapidly in the early nineteen sixties. Product imports into Quebec amounted to 12.1 per cent of crude imported in 1961, 14.9 per cent in 1962, 16.1 per cent in 1963 and 22.3 percent in 1964. By 1965, 25 per cent of the total import requirement for the industry in Eastern Canada consisted of products (Document # 91079). Imperial explained that the reason for this was the high price being paid for crude in Eastern Canada relative to the price of product imports:

"This high proportion of product imports is a result of the market demands being weighted to distillate and heavy fuel oil, coupled with prevailing offshore prices. For example, in Imperial's case marginal Venezuelan crude currently has essentially the same F.O.B. cost as the distillate and heavy fuel yielded on a marginal basis, after adjusting for duty on the products. This leaves only efficiencies of crude versus product transportation to the end market to carry domestic refining for distillate and heavy fuel oil."

(Document # 91079-80, October 24, 1966, Imperial)417

Once again, it was the level of its imported crude prices relative to the world market product prices that Imperial emphasized as having led to the distortion. This state of affairs persisted through the nineteen sixties. In 1968, Imperial attributed its failure to invest in new facilities in Eastern Canada to the transfer pricing policy of its parent:

"Jersey pricing practices for crude and products have precluded to date major expansion at Montreal or Halifax."

(Document # 91929, May 8, 1968, Imperial)418

Therefore the transfer pricing policy of Imperial's parent constrained the Canadian subsidiary at least with respect to its refining investment.

Like Imperial, Shell felt that transfer prices had a distorting effect. But Shell complained not so much about the amount of refining capacity as about the mix of product that resulted from the pricing practice of its parent. In the following excerpt, a Shell official commented on what he regarded as an 'anomalous situation'—the fact that Shell Canada was not producing much heavy refined products:

"It is certainly true that there is an apparent anomaly in a situation in which Shell Canada engages in deep refining of Venezuelan crude, while heavy fuel produced from shallow refining of Venezuelan crude at Group refineries in the Caribbean is imported into the Montreal marketing area."

(Document # 44217, July 8, 1971, Shell)419

The relationship between the price paid for crude and that realized for heavy fuel oil in the Montreal area made processing for the lower ends (the heavier products) uneconomic (Document # 44219).⁴²⁰ Since Shell's price of crude was higher than world levels, this may have been sufficient to generate this condition. Shell pointed out that:

"... the new Golden Eagle Refinery at Quebec City, presumably based on more current crude/heavy oil price relationship, is designed to yield 50% heavy fuel from a design similar to some Group refineries."

(Document # 44218, July 8, 1971, Shell)421

The more current crude/heavy oil relationship referred to here was the result of heavy fuel prices having increased. But, Golden Eagle also faced a very different

crude/product price ratio than Shell did, since the former purchased its crude at world market or third-party prices. This, rather than the sudden increase in heavy fuel prices, must have had a bearing on the investment decision as to product mix since the refinery decision would have been taken well in advance of the heavy fuel price increase referred to in this quotation.

Imperial noted a similar problem with refinery mix. In its 1964 study of the Eastern Canadian market, Imperial noted that, if its crude prices were equal to what were described as "current arms length" prices, then coking was described as not being "attractive to Imperial" (Document # 89069).⁴²² However, Imperial went on to note that "current prices for Venezuelan crude are artifically related to bunker so as to make coking worthy of serious investigation" (Document # 89069).⁴²³

Whether these developments were natural or the result of high transfer prices for crude can only be answered by examining the economics of refinery investment in Eastern Canada. A 1964 Imperial study indicated that high transfer prices were the cause of Imperial's problem. The manufacturing advantage of refining in Montreal over refining in the Caribbean amounted to 28 cents per barrel. This was made up of a transportation differential of 12 cents per barrel, an import duty of 20 cents per barrel and a by-product differential of 6 cents per barrel less a manufacturing disadvantage of 10 cents per barrel (Document # 89092).424 Adding the Caribbean refinery margin of 60 cents per barrel provided a margin for Canadian refineries of 88 cents per barrel sufficient to yield a DCF return of 20 per cent before taxes (Document # 89061).425 Imperial noted that for planning purposes an "adequate refining margin" is defined as 10 per cent — DCF before taxes (Document # 89060).426 Therefore, using what it regarded as realistic prices for Middle Eastern crude prices that were the same as the then prevailing arm's-length prices (Document # 89060)⁴²⁷ — refining in Eastern Canada more than met the profitability cut-off criterion. The fact that Imperial did not find it profitable to expand must be attributed to the fact that its crude prices stayed above world market prices. That Imperial should note some four years later that it was the "pricing practices" of its parent that precluded refinery expansion in Eastern Canada (Document #91929)⁴²⁸ only strengthens this conclusion.

Whether or not the transfer pricing policy also caused Canadian refineries to concentrate on the light end products (gasoline, distillates) as Shell contended, is more difficult to determine. There may have been a tendency for the Canadian subsidiaries of the multinationals to concentrate on refining the lighter gravity crudes, which produce more light products, even if crude imports had been priced at world market prices. Table 35, taken from a 1964 Imperial study, compares the company's incentive to use different crudes. This incentive is defined as the difference between the laid down cost of crude (using what Imperial described as reasonable prices) and the import replacement value (the

cost of importing products). It is evident that the refining margin increased as the gravity of the crude increased. However, the refining operation also changed. The heavy crude produced a large amount of bunker fuel; the light crude a small percentage. The more light ends that are produced, the more costly is the refining operation. A rough estimate suggests the difference in the refiner's margin did no more than just compensate for these varying costs. Simple refineries in Europe producing a low proportion of gasoline operated at 35 cents per barrel or less.\(^1\) Independent U.S. refineries which produced more light end products reported a refining margin of 62 to 77 cents per barrel.\(^2\) The difference is similar to the differential margin reported in Table 35 for the lighter crudes (i.e. — higher gravity) that produced very little bunker and the heavier crudes (i.e. — lower gravity) that produced more bunker. Nevertheless, the Imperial study that produced Table 35, concluded that if crude prices approached the long-run competitive equilibrium, there would have been a tendency for lighter crudes to be used in Canada:

"... the forecast relatively small margin between crude and bunker and the low forecast crude differential of 1ϕ /° A API would place more emphasis on lighter crudes and less emphasis on conversion processes in Eastern Canada."

(Document # 89061, 1964, Imperial)⁴²⁹

"If petroleum prices reach an equilibrium between crude and products and Middle East and Venezuelan supply in Eastern Canada, we can conclude that there will be an incentive to Imperial to run lighter crudes."

(Document # 89070, 1964, Imperial)⁴³⁰

TABLE 35
IMPERIAL'S ESTIMATE OF ITS INCENTIVE TO USE DIFFERENT FOREIGN CRUDES

	Safaniya	Kuwait	Agha Jari	Qatar
Gravity	27°	32.3°	34°	41°
1) Overhead	49.0	61.6	75.3	83.1
Yield				
2) Bunker	44.0	31.4	17.7	9.9
Import Replacement	2.79	3.02	3.28	3.40
Value at Montreal \$/bbl.				
Laid-Down Cost \$/bbl.	2.25	2.28	2.30	2.39
Refiners Margin \$/bbl.	.54	.74	.98	1.01
Forecast Crude	.09	.17	.34	.43
Discount Included Above \$/bbl.				

Note: Yield refers to the percentage of light (overhead) products versus heavy (bunker) produced.

Source: Document # 89097, Imperial.431

I. Adelman, The World Petroleum Market, p. 375.

^{2.} Adelman, The World Petroleum Market, p. 375.

That transfer prices had an influence on at least the total amount of capacity is, therefore, clear. Why they should have done so is less obvious. A vertically integrated industry should remove the distortions that are caused by 'unrealistic' transfer prices. Otherwise distortions occur in investment and pricing decisions that reduce the total profits available to a vertically integrated firm. Vertically integrated firms can remove distortions that would otherwise arise if monopolistic prices were used, by organizing production decisions on the basis, not of monopolistic transfer prices, but of opportunity costs or arm's-length prices. The Canadian subsidiaries, as one link in the vertically integrated concerns, might, therefore, have looked through the transfer prices that were used by their parents and used arm's-length world prices in their decisions.

The answer to why this did not occur must lie in the minority shareholder arrangements that Texaco, Gulf, Shell, and Imperial all had. Refinery investment when costed at world prices would have been justified, but only for the organization as a whole. The Canadian companies would not have been able to justify it to their minority shareholders or to the taxation authorities. If this was the case, those subsidiaries which were wholly-owned and not subject to minority shareholder constraints, generally should have expanded more rapidly in Quebec than the big four. As the earlier section on market shares indicated, this was indeed the case. British Petroleum, Fina, and Golden Eagle increased their market share over the period under study.

The transfer pricing policy of the multinationals, therefore, did have an effect on the refining decisions. This, in turn, suggests that product prices would also have been affected. The critical issue at hand is the extent to which high transfer prices resulted in high product prices. As has been argued elsewhere, high crude costs, in and by themselves, may not have resulted in high product prices. The use of 'unrealistically' high transfer prices may only have reduced the profits reported as earned in Canada and, therefore, the multinationals' tax liabilities to the Canadian Government. But an argument similar to that used above suggests the multinational firm could not costlessly incur losses in Canada. Both minority shareholder and taxation authorities would have limited the multinationals' ability to do so. The investment decision has already provided evidence that this constraint existed. Imperial provides corroborating evidence that it considered this constraint to exist. An official of Imperial stated:

"As a Canadian company with a 30% minority stockholder interest we must expect to make a profit for Imperial on each individual piece of business obtained. Doing business on any other basis would leave us open to severe legal and tax liabilities as well as being poor business practice."

(Document # 89356, February 8, 1966, Imperial)⁴³²

Moreover, the Chief Executive of Imperial during the nineteen sixties also testified that in the long-run Imperial had to reflect high crude costs in the product price level (Testimony, Imperial, Toronto Hearings, 1975).⁴³³

The reason that high crude costs would have been passed on to high product prices can be found in more than just the constraints imposed upon the multinationals' subsidiaries by minority shareholder considerations or by the taxation authority. In the case of Texaco, instructions emanated from the parent company not to be competitive. In 1965, Texaco complained to its parent company that in light of its high crude costs, it would have to take a loss in the 'competitive' consumer and jobber markets (Document # 6727).⁴³⁴ In response, the representative from the parent company commented that the Canadian subsidiary should avoid this market—"you don't have to bid at a loss, ..., just pass it up" (Document # 6727).⁴³⁵

Texaco was not the only company to recognize that its high crude costs made it uncompetitive. In 1971, Gulf cut back its refinery output in Montreal, principally, because they were "non-competitive" (Document # 65313).⁴³⁶ Gulf argued that its problem stemmed from the high crude prices it was having to pay to its parent:

"... we would have to have a more favourable pricing arrangement if we are to remain competitive in the Quebec market."

(Document # 65315, April 1972, Gulf)⁴³⁷

Statements such as this indicate that the high crude costs of the major Canadian subsidiaries affected the downstream market. If high crude costs had simply been a fictitious price used only to transfer revenues to other jurisdictions, then neither Imperial nor Gulf should have felt either their investment or their production decisions were critically dependent upon the level of crude prices. If the transfer price for Texaco was not meant to govern its product pricing decisions, it would not have been told to avoid bidding "at a loss". All of this indicates that high crude prices were passed through to high product prices.

Other companies also felt crude prices would have to be passed along to high product prices. In 1971, a representative from the parent Texaco firm in talking about Texaco's competitors in Eastern Canada agreed "that their increases in product prices will likely reflect their actual cost of crude increases" (Document # 6628). Similarly, in 1972, British Petroleum recognized that crude cost increases necessarily meant product price increases (Document # 11624).

Shell too felt that crude costs were generally passed along to product prices. It cited two reasons for this belief. The first was that the majors had similar crude costs.' The second was that the smaller importers of crude who may have had lower crude costs suffered from other cost disadvantages that still

^{1.} This emphasizes why harmonization of crude pricing policies was sufficient to coordinate downstream pricing policies.

left their net return low. These companies could not afford lower prices and therefore, failed to exert much of an influence on product prices. Both of these factors are noted in the following excerpt from a 1971 Shell document that explained why product price increases would be expected to follow crude price increases:

"With regard to the import orbit, we have assumed that other majors, over time, have similar crude cost increases built into their raw material costs. While it is anticipated that minor majors such as Fina, BP, and Golden Eagle may from time to time have some advantage on their crude costs, their currently low return on investment in Canada should provide them with the incentive to achieve higher product prices. At the time of the price adjustment in April, we found that all refiners were reasonably quick to respond to the higher prices once the lead was set by Imperial Oil."

(Document # 33106, September, 1971, Shell)440

In addition to statements emanating from the major importers, there is evidence on market performance which confirms that high crude costs were passed on to high product prices. The first such evidence is provided by the existence of product imports. These should not have taken place if crude had been priced competitively or if product prices had not reflected to some extent the high, 'unrealistic' crude costs. A 1964 Imperial study, quoted previously, observed that a refinery located in Montreal had a cost advantage over Caribbean product imports of some 28 cents per barrel. This consisted of a transport differential, an import duty, a by-product advantage and a refining cost disadvantage (Document # 89092).⁴⁴¹ This provided Canadian refineries with a potential margin before imports would be attracted of some 88 cents per barrel. This was sufficient to yield a DCF return of 20 per cent before taxes (Document # 89061).⁴⁴² Therefore that product was imported despite its disadvantage is indicative of the extent to which Canadian product prices were kept at inordinately high levels as a response to 'unrealistically' high crude prices.

There is other even more direct evidence that shows Canadian product prices were affected by the 'unrealistically' high transfer prices of crude. The effect of transfer prices on the performance of the market can be gauged by a comparison of Canadian product prices and costs. If the rate of return at the beginning of the period chosen for this comparison was not abnormally low and if product price changes then closely followed crude oil cost movements, it may be concluded that the high transfer prices maintained similarly high product prices. In this case, the adoption of analogous high transfer prices by the major importers affected not just the amount of taxes transferred out of the country, but also the product market, and, the total amount of profits that were earned in Canada.

Product price and crude cost series are available for Imperial Oil—the largest importer $\frac{1}{1}$ to show the deleterious effect that the high level of

transfer prices had upon on the product market. Imperial, as the volume dealing with marketing demonstrates, was the price leader in the industry. The majors generally did not compete with one another on the basis of price. They tended to set very similar product prices. Therefore Imperial's margins should closely approximate the course of product prices in the industry. Table 36 contains product price and crude cost series for Imperial's Dartmouth refinery for the years 1957 to 1966. The price series represents total product realizations at the refinery level. Two cost series are presented. The first includes both crude and refining costs. The second includes only the average cost of crude oil. Subtracting each of these two cost series from the product realization series produces two estimates of margins. It is evident from Table 36 that both margins increased from 1958 to 1961. They then declined in 1962, but approximately regained their 1960 levels by 1966.

TABLE 36

IMPERIAL OPERATING RESULTS, DARTMOUTH 1957-1966
(\$Cdn./bbl.)

Year	Estimated Realizations at the Refi- nery Level	Refining Cost Per Barrel	Average Cost of Crude Oil	Margin Over Refining	Margin Over Crude
Column	I	11	III	IV	V
1957	4.76	4.00	3.13	.76	1.63
1958	4.39	3.90	2.92	.49	1.47
1959	4.31	3.43	2.62	.88	1.69
1960	4.15	3.23	2.52	.92	1.63
1961	4.30	3.24	2.46	1.06	1.84
1962	4.14	3.39	2.64	.75	1.50
1963	4.10	3.36	2.63	.74	1.47
1964	4.05	3.37	2.67	.68	1.38
1965	4.08	3.30	2.55	.78	1.53
1966	4.16	3.30	2.40	.86	1.76

Source: Columns I, II — Document # 120994, Imperial⁴⁴³
Column III — Documents # 121013,⁴⁴⁴, # 121009,⁴⁴⁵, Imperial

An interpretation of the significance of these movements requires evidence on the rate of return associated with these margins. Table 37 presents Imperial's net earnings as a percentage of capital employed for the Atlantic Provinces as a whole. Documentation indicates that Imperial felt an acceptable level of earnings for all corporate operations lay in the range of 8 to 10 per cent (Document # 117948).⁴⁴⁶ However, Imperial also recognized that some parts of its operations were riskier (i.e., exploration and production) and required higher rates of return (Document # 101208).⁴⁴⁷ In turn, other parts of the corporation

such as marketing used rates as low as 7 per cent in evaluating investments (Document # IGDS 1394).⁴⁴⁸ Hence, the tabular data presented below shows no indication that Imperial was consistently earning unacceptable rates of return on its Atlantic operations. In turn, this implies that high crude costs were reflected in high product prices.

IMPERIAL NET EARNINGS AS A PERCENTAGE OF CAPITAL EMPLOYED
FOR ATLANTIC PROVINCES

Year	%
1957	8.6
1958	5.2
1959	9.0
1960	10.3
1961	10.1
1962	7.2
1963	7.4
1964	7.5
1965	9.8
1966	10.8

Source: Document # 120926, Imperial449

This conclusion is reinforced by evidence from a second Imperial study that contained sales realizations and product costs for the entire Atlantic region as well as for Quebec. Table 38 contains these series and the margins earned for the years 1960 to 1967. It is evident that, when margins are calculated for the entire Atlantic region rather than just for the Dartmouth refinery as in Table 36, the previous conclusion still holds. While the margin between product prices and costs declined briefly between 1960 and 1963, it had completely recovered by 1964. 'Unrealistically' high crude transfer prices, therefore, were reflected in comparatively high product prices across the Atlantic Provinces.

Table 38 shows that the pattern of changes in the margin between product prices and costs was much the same in Quebec as in the Maritimes. Margins declined after 1960, but eventually began to return to their previous levels. Contrary to the Atlantic region, they did not regain their 1960 levels before 1967. However, the decline was not sufficient to offset the 'unrealistically' high crude transfer prices being charged Imperial. Imperial reported that its rate of return on Quebec operations in the first quarter of 1960 was 11.8 per cent (Document # 117959)⁴⁵⁰— in the 'acceptable' region. Therefore product prices in that year already reflected the excess over third-party prices that was being paid on crude oil. By 1966, the margin between product sales and product costs

had declined by only 0.24 cents (Cdn.) per gallon or about 8 cents (Cdn.) per barrel. This did not offset the excess of more than 35 cents per barrel being paid by Imperial for crude in 1960. Therefore these results show that Imperial's transfer prices served not only to keep product prices 'unrealistically' high in the Maritimes but also to do the same in Quebec.

TABLE 38

COMPARISON OF IMPERIAL NETBACKS AND MARGINS BY REGION, 1960-1967
(¢Cdn./gallon)

	ATLANTIC			QUEBEC			
Year	Sales Income	Purchase F.O.B. Supply	Margin	Sales Income	Purchase F.O.B. Supply	Margin	
1960	16.97	11.53	5.44	17.30	12.47	4.83	
1961	16.71	11.72	4.99	17.89	13.19	4.70	
1962	16.80	11.98	4.82	17.55	13.39	4.16	
1963	16.88	11.92	4.96	17.72	13.72	4.00	
1964	16.94	11.64	5.30	17.18	13.42	3.76	
1965	16.58	10.82	5.76	17.33	13.42	3.91	
1966	17.04	11.07	5. 9 7	17.79	13.20	4.59	
1967	17.85	11.66	6.19	17.75	13.32	4.43	

Source: Document # 174621-7811, Profitability Analysis Summary of Imperial Oil. 451

A second method can be used to estimate the effect that higher than world level crude transfer prices had on the Canadian market. The level of Canadian product prices can be compared to what would have occurred had Canadian prices reflected competitive forces at work in world markets. The latter can be approximated by taking the sum of the 'competitive' Middle East netbacks ('implicit' f.o.b. prices), estimated by Adelman from European wholesale prices, and adding to it the 'competitive' freight rates to Canada as calculated in Appendix A. The calculated series represents, not a perfect state of the world, but what would have happened if Canadian markets served by offshore crude had performed as well as the European — from which Adelman calculated his Persian Gulf netbacks.

^{1.} The somewhat greater decline of about 1 cent per gallon or 35 cents per barrel between 1960 and 1964 was a short-run phenomenon associated with the implementation of predatory pricing schemes. These predatory schemes are described at greater length in the study of the marketing sector.

^{2.} In 1961, Imperial was paying about 35 cents per barrel more than third-party prices (Table 32). But Imperial's Venezuelan crude was priced even higher in 1960 than 1961 (Appendix Table B-8) while third-party prices were about the same in 1960 as 1961 (Table 32). Therefore the excess being paid in 1960 would have been even higher than the 35 cents.

The preceding section showed that the cost of crude landed in Canada was substantially above arm's-length prices in the early nineteen sixties. Canadian product realizations would have to have fallen by this amount plus the actual fall in the 'competitive' world delivered rate, if it is to be concluded that transfer prices did not hold Canadian product prices up and that Canadian product prices eventually equated to the 'competitive' European wholesale market. The Canadian price series that is used for the comparison represents the value of product as it leaves the refinery and is referred to as the "value of product shipments". Derived from industry reports to Statistics Canada, it should approximate conditions in the wholesale market. Table 39 presents a comparison of the changes in the two series — world 'competitive' delivered prices and Canadian prices. Column I presents the decrease in the average value of product shipments in Eastern Canada — Quebec and the Maritimes — for each year from 1963 to 1970 using 1962 as a base. Column II does the same for the calculated world 'competitive' delivered price of crude. Column III presents the difference between the two series and thus permits an evaluation of the extent to which Canadian product prices fell relative to the 'competitive' delivered price — a negative sign on column III indicates this phenomenon; a positive sign, that Canadian product prices did not fall as rapidly as world prices of crude.

In 1962, the imported crude prices of Imperial, Gulf, Shell, and Texaco exceeded the 'competitive' European crude netbacks in the Middle East by amounts as high as 48 cents per barrel. A weighted average for these companies using the disadvantage on Venezuelan imports was some 27 cents per barrel above the 'competitive' estimates. Table 39 shows that in no year except 1968 did the fall in Canadian product prices, as represented by the value of refinery shipments, exceed the decrease in competitive delivered crude costs to Canada by an amount sufficient to equate Canadian product realizations from refined crude with these 'competitive' estimates of petroleum product prices. Therefore, in all but one year of eight, the majors' transfer pricing policy increased Canadian product prices.

In summary, both methods of investigating the effect of high transfer prices on the product price level yield the same conclusion. 'Unrealistically' high transfer prices did more than just permit the multinationals to transfer profits from Canada; they also interfered with the competitive process, and affected the level of profits generated in Canada.

E. Conclusion

Two facets of the Eastern Canadian market make its performance particularly interesting. First, multinational subsidiaries dominated the industry. Secondly, government policy left entry relatively free. Therefore an evalua-

TABLE 39

COMPARISON OF CHANGES IN EASTERN CANADIAN PRODUCT REALIZATIONS VERSUS CHANGES IN THE 'COMPETITIVE' COST OF CRUDE USING 1962 AS A BASE (\$Cdn./bbl.)

Year	Change in Value of Total Shipments of Product in Eastern Canada	Change in 'Competitive' World Price of Crude Delivered to Canada	Difference Column II - Column I
	I	II	III
1963	19	00	19
1964	16	42	+.26
1965	37	55	+.18
1966	63	46	17
1967	61	53	~.08
1968	58	+.12	70
1969	47	49	+.02
1970	54	38	~.21

Source: Appendix E and F

tion of the industry's performance in Eastern Canada addresses the issue of the performance of these firms in an environment relatively unhindered by government regulation. Any nation that hopes to implement an effective competition policy needs to be cognizant of the effect of the multinational firm—an organizational form that facilitates coordination of behaviour and collusion outside of national boundaries.

The monopolistic situation that governed the performance of the Eastern Canadian market arose because of the control over imports that was exerted by a small group of multinational firms with common or closely linked interests. Together, the extent of control exerted by the large multinational oil companies over crude sources and the close links that had developed among these firms, meant they had the potential to exploit downstream markets—especially ones such as Canada where the importation of crude was concentrated in the hands of only a few companies. The study of the interface between the Canadian subsidiaries of these multinationals and their parent firms that is contained in this volume reveals the extent to which the discretionary power possessed by the giant multinationals was used to exploit the Canadian consumer. It shows that the transfer pricing policies of the multinational oil companies were used to extract higher than arm's-length crude prices from the Canadian market and that these, in turn, served to increase Canadian product prices.

That the major Canadian subsidiaries were forced to pay higher than arm's-length prices for crude oil is demonstrated by numerous analyses of the world market that were made by these companies. Throughout the period, these

analyses show that the major Canadian subsidiaries were cognizant of the 'unrealistic' or excessive nature of the prices that they were paying by virtue of their demonstration of the extent of the difference between this price and arm's-length prices. The major Canadian subsidiaries were equally aware that high crude prices were felt downstream on high product prices. 'Unrealistic' or excessive crude transfer prices, therefore, were used to increase the product prices that Canadian consumers had to pay. Together, high crude and product prices, show that the monopolistic situation that existed during this period with respect to crude oil imports was inimical to the public interest.

It was not the fact that just one company followed the policy of extracting comparatively high transfer prices from its Canadian subsidiary that impacted so heavily upon the performance of the Canadian market. It was the fact that most of the majors followed a similar policy. It is, therefore, important to understand the arrangements that served to keep the various companies' policies in harmony one with another. It should be stressed that such harmonization was relatively easy because of the close links that existed between the multinational parents overseas. Nevertheless the multinationals were not able to rely on a single arrangement to produce harmony because of the varying competitive conditions in different downstream markets. Local conditions forced these firms to adapt their arrangements to best suit the local environment. Accordingly, a degree — albeit minor — of local harmonization was required.

In the international sector, no one instrument or type of arrangment was universally applied; rather the industry relied on a set of different arrangements which made individual behaviour both harmonious and predictable in the face of differing local circumstances. In the early period, the degree of concentration in the international producing sector and the existence of posted prices that were acceptable benchmarks for the state of the market made the harmonization of transfer prices relatively easy. The majors coordinated their subsidiaries' prices by linking them to the posted prices of each other at the production level. This type of arrangement directly constrained the actions of the Canadian subsidiaries and ensured their acting generally in a similar manner in response to similar circumstances.

By the middle nineteen sixties, a strategy of relying upon posted prices was no longer feasible. Continued successful harmonization, therefore, required that greater recognition be given to local conditions for two reasons. First, posted prices had become extremely unrepresentative of transaction prices. Secondly, tax authorities began to insist that transfer prices more closely approximate fair market value and, therefore, be lower than posted prices. This provided the industry with a new constraint that varied country by country depending upon the perspicacity of the local taxation authorities.

Thus, by the mid-nineteen sixties, instead of relying upon the price postings at the producing level, the industry concentrated on local conditions in

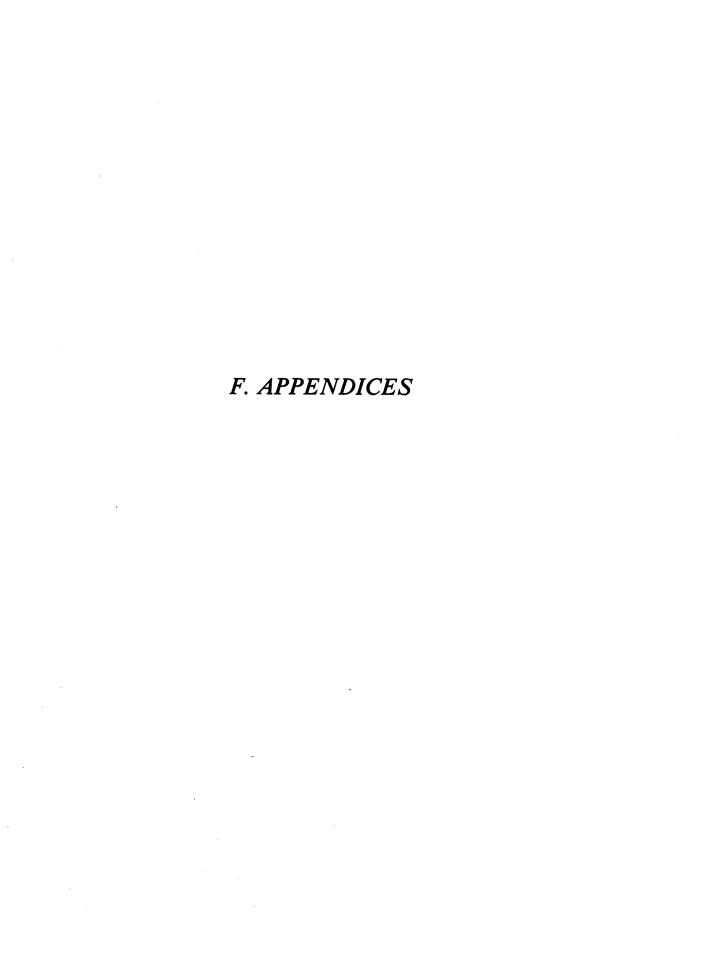
Eastern Canada as it harmonized transfer pricing policies. The manner in which coordination occurred involved aspects of 'independent' behaviour based on a recognition of mutual interdependence. While such recognized mutual interdependence between formally independent firms may manifest itself in any of several distinct behavioural patterns, one of the simplest responses for the interdependent firms is to acquiesce in the behavioural pattern established by an obvious 'leader' firm. Indeed, in the mid-nineteen sixties, just such a simple strategy appears to have been pursued by the industry inasmuch as most firms in the import dependent markets adopted the variant of Imperial's policy which, while it best suited individual circumstances, remained sufficiently consistent with the leader's behaviour to preclude the emergence of any significant, individual competitive advantage. In the result Imperial became the *de facto* leader and held a price umbrella over the import dependent markets of Eastern Canada.

The general adoption of high transfer prices for crude resulted from more than just independent activity in the face of recognized interdependence. While this interdependence arose from the historic monopolistic situation in 'world' oil markets, it was extended by inter-company crude swaps and by inter-company refinery agreements that tied the interests of companies together and led to coordination of crude transfer prices. For example, because Sun Oil was having its crude oil processed by Texaco, the price that Sun paid for foreign crude was tied by its parent to that of Texaco. All of this served to preserve the harmonized, high transfer pricing strategy established at the outset of the period and to delay the adjustment of imported Canadian crude prices to world arm's-length price levels.

At the same time, the development of policies that generally saw transfer prices set at higher than arm's-length levels was also accompanied by the growth of inter-company communications on the prices being paid for crude oil. Hence, the fact that most of the majors set high transfer prices for their Canadian subsidiaries cannot be ascribed simply to independent decision-making. Communications served to create a new arrangement that, while looser than the first, was just as effective in maintaining transfer prices above arm's-length prices in the world market.

It must, however, be stressed that the arrangements that affected the performance of the Eastern Canadian market extended beyond the common approach that was taken with respect to transfer pricing. The performance of any sector of this largely vertically integrated industry cannot be fully understood without an appreciation of the behaviour of the industry at other levels. Until now, the way in which the success of the high crude transfer price policy depended upon behaviour in other sectors has been omitted. However, a comprehensive explanation for the success of the transfer price policy cannot ignore the actions taken by the majors in other sectors.

The pre-eminent position in the world market of the multinationals that imported crude into Canada was the basis of the control that they developed in Canada. However, it was not the only source of the market power that evolved. While coordination of crude transfer prices at high levels may have provided an effective device for exploiting the Canadian market, it was not sufficient to eliminate competition completely. During the post-war period, new sources of foreign crude were developed in areas where the giant multinationals did not possess the same control and a competitive refining market developed in Europe from which non-integrated Canadian independents could import product. As a result, new firms were able to enter the Eastern Canadian market either by importing crude oil or refined product. The various ways in which competition from these sources was constrained and control maintained in Canada by the majors must be found in the practices that the industry adopted at the refining and marketing levels. As accompanying volumes demonstrate, inter-refinery agreements were used to mesh the interests of new refiners with the original group while predatory practices were used in marketing to discipline independent marketers who tried to expand in the marketing sector. Together these further monopolistic practices and conditions served to buttress the effects of the transfer pricing policies of the majors. Subsequent volumes of this submission will deal with common behaviour in the refining and marketing sectors. However, before turning to those sectors, it is essential to examine the manner in which the oligopolized industry took advantage of its monopolistic situation in the domestic production sector.



		,	
•			

APPENDIX A THE DETERMINATION OF COMPETITIVE FREIGHT RATES

Appendix A: The Determination of Competitive Freight Rates

Two sources are used to determine the level of competitive freight rates from Venezuela and the Middle East to Canada. The first is Adelman's estimates of the cost of the marginal size of vessel employed in crude transportation. This is the class that, in any one year, was still being ordered to handle the long-term requirements of the shipping industry. The second source is provided by the companies' estimates of their own costs. Not all the information on the freight costs of the Canadian subsidiaries is useful. Their actual costs in many instances were higher than the market rate either because their parent was using this cost category to account for 'unrealistic' transfer charges for crude; because the company had made contracts in previous years at higher prices; or because some companies, like Imperial, used offshore companies to reduce their Canadian tax liabilities. However, not all information provided by the companies is useless. Some companies do not appear to have been charged much more than the rates Adelman suggests were competitive. In this case, their cost structure provides important corroborative evidence for Adelman's estimates. In other instances, companies whose actual freight rates were well above the competitive norm provide estimates, in internal studies of what freight costs should have been — freight costs that disregarded the existence of offshore subsidiaries or the artificiality of the transfer freight prices they were charged. Again, this evidence can be used to substantiate the estimates of competitive freight rates generated from the costs of the marginal ocean vessel.

(a) Rates from Venezuela

The competitive long-term rates constructed by Adelman are reported in columns I and II of Table A-l. Since Exxon indicated that Venezuelan rates were generally five points of scale higher than those charged from the Middle East (see notes to Table), Adelman's estimates have been increased by this amount in column III. Column IV presents the approximate charges in cents per barrel represented by the adjusted scale rates in column III. Gulf's rates from Venezuela to Portland for the middle and late nineteen sixties are presented in column V. It is evident that where they overlap with the adjusted series in column IV, the two columns are similar. In 1966, Gulf's costs were 14.8 cents per barrel versus the 16.5 cents per barrel listed in column IV; in 1967, Gulf's costs were 15.0 cents per barrel as compared to the 15.9 cents per barrel estimate in column IV. Thus, since Gulf's rates were apparently cost-based over this period, they are used for the years 1966 to 1972 to represent the 'competitive' rate listed in column VI. In the earlier period from 1960 to 1965, Adelman's adjusted rates are reduced by an amount equal to the difference for the average of the years 1966 and 1967 and Gulf's rates for these same two years. Gulf's freight rates cannot be used for 1973 onwards because of the profit centre reorganization that took place in the parent company. Instead, a rate equal to W60—the rate Adelman calulated as the long-term cost and which Gulf estimated was close to the long-term AFRA rate at this time (Document # 75679)⁴⁵² — is used to generate the cost estimate for 1973.

Internal company studies by a number of the majors confirm the validity of the series constructed in this fashion. This corroborative evidence is presented in column VII. In 1964, Imperial estimated Venezuelan freight costs as I-52 or 15 cents per barrel in a study that analyzed the relative landed costs in Canada of Venezuelan as opposed to Middle East crude. The competitive cost-based rate for 1965 reported in column VI was 15.5 cents per barrel. In 1965, Adelman's adjusted rate as reported in column III is I-49 or 51I. In comparison, Gulf estimated the comparative laid- down costs of crude in 1965 using I-58.6—an even lower number than Adelman's adjusted estimate. Gulf, itself, signed a contract in 1965 for freight at I-55 for vessels greater than 35 MDWT (Document # 62200).453 Indeed, Esso International had informed Imperial as early as 1964 that in subsequent years freight rates would be I-55 from Venezuela. Similarly, in the late nineteen sixties, a Standard Oil (Exxon) study of the tanker market gave I-55 as the average cost of ships greater than 50 MDWT. According to Imperial, I-55 was about 15 cents per barrel in 1966 (Document # 89319)⁴⁵⁴ and, thus, the rates of 14.8 cents in 1966, 15.0 cents in 1967, and 15.3 cents per barrel in 1968 that are reported as competitive rates in column VI accord closely with Imperial's estimates. Finally, in 1968, the estimate of the competitive rate given in column VI is 15.3 cents per barrel. In the same year, British Petroleum reported a cost of 15 cents per barrel. Therefore the competitive estimates for this period correspond closely to the estimates of true costs used in internal company documents to evaluate the relative laid-down costs of Venezuelan as opposed to other crude oil.

Of course for various reasons discussed previously not all companies used cost-based rates. Table A-2 contains representative rates of most of those companies that imported crude.

Others added margins of between 6 and 10 cents per barrel to the cost-based rate.

The full series of competitive freight costs from Venezuela to Portland from 1960 to 1973 is summarized in Table A-5.

(b) Freight Rates from the Middle East

Estimates of the long-term freight rates from the Middle East to Canada are presented in Table A-3. Columns I and II contain Adelman's estimates of appropriate Intascale and Worldscale rates from 1960 to 1973. These have been translated into three different sets of competitive estimates in columns III through V. These series are similar from 1960 through 1967, but differ after 1967 for several reasons. First, it is not clear that Canada, or more

appropriately Portland, was able to take advantage of potential freight savings as the marginal ship class increased in size. Therefore, while the first estimate, column III, uses Adelman's estimates, the second estimate, column IV, holds freight rates constant at the 1967 rate for the rest of the decade. Support for the later approach can be derived from an examination of Gulf's freight rates from the Middle East and Nigeria (Table A-4). Rates in 1970 were not grossly dissimilar to those in 1966. Shell also reported freight at a constant level of W49.25 during this period (Document # 24196).455 A second difference that occurs between columns III and IV is the way in which the post-1970 years are derived. Column III uses Adelman's estimate that new building costs seemed to have increased by 1972 to W60. However, Adelman qualified his observation by noting that building costs may only have escalated because of short-run factors, thereby implying they might be lower in the long-run. Because of this uncertainty, column IV adopts a different assumption. Gulf documents provide the amount by which costs increased for the Canadian Pacific ships that it chartered (Table A-4). The absolute cent per barrel increases year by year in these costs are used to increase the 1970 freight rate to provide cost estimates for 1971, 1972, and 1973 in column IV.

The estimate of the competitive freight rate provided in column V is the same as columns III and IV until 1966. Then, rather than following Adelman's Worldscale estimate as in column III, or holding the rates constant as in column IV, it follows Gulf's Nigerian rates (Table A-4). This is the one trans-Atlantic freight rate series for a Canadian importer that is continuous from 1966 to 1974. An index of these rates was created using 1967 as the base. The estimate for 1967 (common to columns III and IV) was then multiplied by the index giving the estimates for 1967 to 1973 presented in column V. Since this latter estimate is the one most closely based on actual long distance rates into Canada, it will be used in deriving the 'implicit' f.o.b. prices or netbacks that are calculated in Appendix B. A comparison of column V to columns III and IV shows these freight estimates are reasonably close and, thus, the resulting estimates of netbacks would not change much if one of the alternative freight rate estimates provided in columns III or IV had been used.

As was the case with the estimates of Venezuelan freight rates, there is substantial evidence from internal company memoranda to support the freight series that has been estimated. These are reported in column VI. Imperial estimated that in 1963, the Canadian majors were being charged I-45. Adelman's estimate from column I is I-47. Imperial estimated freight costs from the Middle East in 1964 as I-60 or 59 cents per barrel. Adelman's estimate for the same year was I-54 which has been translated into 59.9 cents per barrel in column V. In 1965 Imperial claimed that its actual rates were about I-58 or 57 cents per barrel. In the same year Gulf signed a contract of affreightment for I-55. The competitive estimate that has been used here is I-54 or 59.9 cents per

barrel. In 1966 Imperial reported the Middle East rate as 52 cents per barrel. The estimate that is reported in column V is 58.6 cents for this year. In 1968, both British Petroleum and Imperial reported Middle East rates as I-60. British Petroleum estimated this as about 59 cents per barrel. The competitive estimate reported in column V is 56 cents per barrel. In 1971, Gulf's actual Middle East rate was 61.7 cents per barrel. The competitive estimate in column V for the same year is 60.3 cents per barrel. In 1972, Gulf estimated 'competitive' rates from the Middle East as 62 cents per barrel. The estimate in column V is 62.9 cents per barrel. Thus, it is evident that throughout the period, the competitive estimates presented in column V closely approximate those that the majors themselves recognized as reasonable.

The complete series of the estimated freight costs from the Middle East is summarized in Table A-3.

TABLE A-1
ESTIMATION OF COMPETITIVE FREIGHT RATES FROM VENEZUELA TO PORTLAND

		lman's mates	Adelman Adjusted		Gulf Rates	Competitive Rate	Corroborative Evidence	
Inta- Year scale	World- scale	Inta- scale	¢ U.S./ bbl.	eU.S./ bbl.	¢ U.S./ bbl.	Intascale or ¢U.S./bbl.		
	I	II	111	IV	V	VI	VII	
1960	1-45		601	19.5		18.2		
1961	1-45		601	19.5		18.2		
1962	I-47		581	18.9		17.6		
1963	1-47		581	18.9		17.6		
1964	1-54	W57	511	16.8		15.5	1-55,1 15¢2	
1965	1-54	W57	511	16.8		15.5	1-58.63	
1966	1-55	W56	501	16.5	14.8	14.8		
1967	1-57*	W53*	481	15.9	15.0	15.0	1-554	
1968		W32			15.3	15.3	15¢5	
1969		W36-39			14.9	14.9		
1970		W40*			15.0	15.0		
1971		W60			16.3	16.3		
1972		W60			17.3	17.3		
1973		W60				18.6		

Note: *For early part of the year only.

Column 1: Adelman, The World Petroleum Market, p. 109.

Column II: Ibid, p. 109 and pp. 124-25.

Column III: Since Adelman's estimates are for Middle East traffic and Imperial estimated Venezuelan to Portland costs to be 5 scale points higher than for Middle East traffic (Document # 89319),456 5 points are added to Adelman's estimates.

Column IV: This is calculated from column III using the Imperial estimate of 1-45 = 18¢/bbl; 1-55 = 15¢/bbl. (Document # 89319).457

Column V: Exhibit T-28, Gulf, Toronto Hearings, 1975.458

Column VI: 1) for 1966-72, these are the Gulf costs.

2) for 1973, Gulf's costs can no longer be assumed to be cost-based because of the Gulf profit centre reorganization. Therefore, Adelman's estimate of W60 is used. The actual estimate is derived using Gulf's estimate of W84 = 26¢ for 1973 (Document # 79487).⁴⁵⁹

3) for 1960-65, the estimates from column IV are adjusted downward by the difference between its average for the years 1966-67 and that for Gulf (column V) for the same years.

Column VII: 1) Esso International, in 1964, predicted freight rates for ten years would average 1-55 from Venezuela and 1-60 from the Persian Gulf (Document # 90582).460

- 2) Imperial in 1964 estimated average Venezuelan freight costs including both time and spot charters as 15¢ or 1-52 (Document #90581).461 Imperial noted that company owned time-charters of Esso International were as low as 1-55 or 13 cents (Document #90579-80).462
- 3) Gulf used 1-58.6 in a March 1965 study to estimate the cost of transportation from Venezuela (Document # 64942).463
- 4) Standard Oil of New Jersey provided Imperial with a 1967 operating manual that gave average operating costs by size category for all affiliate non-U.S. flag tonnage. I-55 was given as representing the average cost of ships greater than 50 MDWT (Document # 88543).464
- 5) These were the actual freight costs of British Petroleum (Document # 9323).465

TABLE A-2 REPORTED FREIGHT RATES FROM VENEZUELA TO PORTLAND (¢U.S./bbl.)

Texaco			Shell	Impe	rial	Gulf	
Year	Average	Mata	Lagomedio	Average	T.J. Light	Guanipa	Ceuta
	1	IJ	Ш	IV	V	VI	VII
1955	24.9						
1956	26.5						
1957	28.5						
1958	28.7	25.8					
1959	29.6	29.2					
1960	35.4	33.0					
1961	30.8	36.5			20.2	20.9	
1962	32.0	40.2			21.7	22.8	
1963	24.7	29.7			22.6	22.6	
1964		24.1		22.2	23.6	20.3	
1965		26.0		23.2	25.3	20.9	
1966		21.3		22.3	23.5	23.4	14.8
1967		21.3		19.5	22.8	22.7	15.0
1968		21.3		19.5	21.3	19.6	15.3
1969		18.6		17.6	21.1	20.1	14.9
1970				17.2	31.4	30.1	15.0
1971				20.8	29.4	28.2	16.3
1972				21.2	28.9	28.5	17.3
1973				25.0	43.2	42.5	26.1
1974				38.9			55.4

Note: 1) the 1966 figure is for T.J. Medium rather than Ceuta

Source: Column 1) Document # 575458466

- II) Exhibit T-17, Texaco, Toronto Hearings, 1975467
- III) Information collected by the Petroleum Inquiry

- IV) Exhibit T-19, Shell, Toronto Hearings, 1975⁴⁶⁹ and Information collected by the Petroleum Inquiry VI) Exhibit 0-38, Imperial, Toronto Hearings, 1975⁴⁶⁹ and Information collected by the Petroleum Inquiry VII) Exhibit 0-38 Imperial, Toronto Hearings, 1975⁴⁷⁰ and Information collected by the Petroleum Inquiry VII) Exhibit T-28, Gulf, Toronto Hearings, 1975⁴⁷¹

TABLE A-3
ESTIMATES OF COMPETITIVE FREIGHT RATES
FROM THE PERSIAN GULF TO PORTLAND

		Adelman's Estimates		Competitive Estimates		Corroborative Estimates
Inta- Year scale	World- scale	_	(¢ U.S	./bbl.)		
	1	11	111	IV	V	VI
1960	1-45		71.6	71.6	71.6	
1961	I-45		71.6	71.6	71.6	
1962	1-47		69.0	69.0	69.0	
1963	1-47		69.0	69.0	69.0	1-451
1964	I-54	W57	59.9	59.9	59.9	$1-60=59c^2$
1965	1-54	W57	59.9	59.9	59.9	59¢³; 1-58=57¢⁴; 1-55
1966	1-55	W56	58.6	58.6	58.6	$1-57=56c^6$; $52c^7$
1967	I-57	W53	56.0	56.0	56.0	
1968		W32	33.8	56.0	56.0	1-608; 59¢9; 1-6010
1969		W36-39	38.0-41.2	56.0	56.3	, , , ,
1970		W40	42.3	56.0	55.5	60.7¢11
1971		W60	63.4	59.2	60.3	61.7¢11
1972		W60	63.4	65.9	62.9	W5012; 62¢13
1973		W60	63.4	72.4	72.0	W6014; 62¢13

Column 1: Adelman, The World Petroleum Market, p. 109.

Column II: Ibid., p. 109, and pp. 124-25.

Column III: This estimate uses the scale estimates from columns I and II and the Imperial estimate that I-57 = 56¢ (Document # 90581).472

Column IV: The years 1960 to 1967 are derived as in column III.

The years 1968 to 1970 are held constant equal to 1967. Table A-4 shows that Gulf rates for Kuwait, Gach Saran, and Nigerian were not much different in 1970 from 1966 or 1967 rates. The years 1971 to 1973 are derived by adding to the 1970 rate the actual cost per barrel increase Gulf reported for its two chartered C.P. ships.

Column V: The years 1960 to 1967 are derived as in column 111.

The years 1968 to 1973 are derived by calculating an index of Gulf's Nigerian costs (Table A-4) with 1967 as the base and applying this index to the 1967 estimate of 56.0 cents per barrel.

- Column VI: 1) Imperial estimated that in 1963, the Canadian majors were being charged 1-45. (Document # 90595).⁴⁷³
 This is probably above long-run costs since for 1965 Imperial's estimate of the rates being charged was 1-42 whereas its estimate of costs was 1-55.
 - 2) In 1964, Imperial estimated freight costs from the Middle East as 1-60 = 59 cents (Document # 90590).474
 - 3) In January 1965, Imperial estimated freight costs from the Middle East as 59 cents per barrel in an analysis of the relative costs of Venezuelan and Middle East crude (Document # 90566).⁴⁷⁵
 - 4) Imperial quoted 1-58 = 57 cents as its actual rate for this year (Document # 89319). 476
 - 5) In 1965, Gulf Canada signed a contract of affreightment (October 1, 1965) which lasted for at least four years at 1-55 for vessels greater than 35 MDWT, 1-42.5 for vessels less than 35 MDWT (Document # 62200).477
 - 6) In 1964, Imperial estimated Middle Eastern freight costs would be 1-57 = 56 cents (Document # 90581).478
 - 7) Imperial quoted 52 cents as its actual rate for this year (Document # 89319).479
 - 8) A 1968 British Petroleum study that compared laid-down crude prices used 1-60 as the Middle East freight rate for this year (Document # 9319).480
 - 9) In 1968, a British Petroleum document estimates 59¢ as the appropriate freight rate from the Middle East (Document # 9322).⁴⁸¹
 - 10) In evaluating its long range competitive position, Imperial claimed that after "the ripples" from Suez disruptions abated, the long range freight rate would lie between 1-55 and 1-60 (Document # 91030).482 This cost assumption can be found as early as 1964 (Document # 90582).483
 - 11) These are Gulf's actual rates for 1971, 1972 (Document # 63045).484
 - 12) The Jersey Blue Book entitled "1972 Industry and Jersey Worldwide Marine Outlook, 1974 through 1980, Logistics" dated 1972, lists Jersey's expected marginal costs for 3/5 year-time charter as of 1974 as W128 for 21 MDWT, W95 for 38 MDWT, W73 for 50 MDWT, W50 for 74 MDWT, W47 for 90 MDWT, W44 for 120 MDWT, and W40 for 250 MDWT (Document # 113091).**5 The study also predicted the 60 to 160 MDWT class as the marginal class (Document # 113080).**6 Therefore, the equilibrium rate implicitly being predicted lay between W42 and W60 or about W50 on average.
 - 13) Gulf's estimate of 'competitive' rates for 1973, 1974 (Document # 63042).487
 - 14) In 1974, the Exxon organization estimated that the 74 MDWT class required W62 to build afresh (cost plus 8 per cent return) (Document # 113080).4xx It was predicted that by 1976 this class would be in equilibrium at W60 and the 250 MDWT would be at W50 (Document #113081).4x9

TABLE A-4 **GULF FREIGHT RATES** (¢U.S./bbl.)

Year	Kuwait Crude	Gach Saran Crude	Nigerian Crude	Estimated Cost of C.P. Ships Chartered by Gulf
	I	II	III	IV
1966			33.0	
1967	63.4	62.8	34.2	
1968	83.6	78.1	34.2	
1969	63.6	64.2	34.4	
1970	65.0		33.9	45.8
1971		61.41	36.8	49.0
1972		64.6 ¹	38.4	55.7
1973		73.01	44.0	62.2
1974		113.5-114.51	77.4	

Note: I. Freight rate to Point Tupper as opposed to Portland.

Source: Column 1: Exhibit T-28, Gulf, Toronto Hearings, 1975.490
Column 11: 1967-1969—Exhibit T-28, Gulf, Toronto Hearings, 1975.491 1971-1974—Information collected by

the Petroleum Inquiry.

Column III: Exhibit T-28, Gulf, Toronto Hearings, 1975.492

Column IV: 1970-71—Document # 75701.493 1972-73—Document # 63047.494

TABLE A-5 ESTIMATES OF COMPETITIVE FREIGHT COST FOR CRUDE **IMPORTED INTO CANADA (PORTLAND)** (¢U.S./bbl.)

Year	Venezuela	Middle East
1960	18.2	71.6
1961	18.2	71.6
1962	17.6	69.0
1963	17.6	69.0
1964	15.5	59.9
1965	15.5	59.9
1966	14.8	58.6
1967	15.0	56.0
1968	15.3	56.0
1969	14.9	56.3
1970	15.0	55.5
1971	16.3	60.3
1972	17.3	62.9
1973	18.6	72.0

Source: Tables A-1 and A-3.

APPENDIX B DERIVED F.O.B. PRICES OF IMPORTED CRUDE OIL

Appendix B: Derived F.O.B. Prices of Imported Crude Oil

Two standards of comparison are available to judge the reasonableness of Canadian imported crude prices. Canadian prices can be compared to estimates of market prices in either the Middle East or Venezuela. In order to do so, prices of crude landed in Canada have to be translated into 'effective' netbacks or implicit prices f.o.b. the Middle East or Venezuela. The 'implicit' f.o.b. price is calculated by subtracting estimates of the competitive freight rate (see Appendix A) from the cost of crude imported into Canada. Tables B-l through B-6 contain the calculations of these effective f.o.b. prices for the crude imported by Texaco, Shell, Gulf, and Imperial for the nineteen sixties and early nineteen seventies. Since some of the crude oil types reported in these tables differ in quality, the 'effective' netback is generally corrected to a 31? gravity basis. This is done using either 2 cents per degree API — the figure contained in most companies' contracts in the nineteen sixties — or other corrections deemed to be appropriate by the importing company's documentation. A more detailed description of the calculations as they were done for each of the majors follows.

(a) Texaco

Texaco's netbacks are reported in Table B-1. Texaco reported landed costs at Montreal and Halifax as well as prices as specified in their contracts with foreign suppliers. The former series is more comprehensive and is, therefore, used for comparisons in the main body of the paper. The latter is presented for comparisons and closely parallels the first until the early nineteen seventies. It was at this time that Texaco stated that it was not receiving the full reduction it felt it was entitled to receive (see the earlier section on Texaco). This may account for the divergence that developed at this time. Since Texaco reported their costs in Canadian dollars c.i.f. Montreal, corrections for the Montreal/ Portland Pipeline tariff, the exchange rate differential, and the competitive transportation charge had to be made to calculate the Middle East netback on light Arabian crude. The same is true for the Venezuelan crude netbacks reported in columns VI and VII except that the figures for 1972 and 1973 were derived using the c.i.f. price at Halifax/ Dartmouth rather than Montreal since the latter was not available. No corrections have been made for the higher gravity of Arabian Light as compared to 31° Venezuelan Mata since Texaco apparently evaluated the two to be equal in value (Document # 6651).495

(b) Shell

The calculation of 'implicit' f.o.b. prices for Shell presented two problems. First, this company reported the average value of its crudes without reference to the exact gravity. Various references to crude types in the summary

of contracts that Shell provided specify the typical crude between 1957 and 1961 was 33° Oficina, and subsequently was 30° to 32° Lagomar or Lagotreco.¹ Therefore the Venezuelan crude prices for Shell were considered sufficiently comparable to the 31° gravity prices reported for the other majors in the accompanying Tables that no gravity correction was required.

The second problem with the Shell netbacks arises since freight rates for 1960 to 1963 were not reported and crude prices for these years were given only on an f.o.b. basis. In order to calculate the landed cost in Canada of Venezuelan crude for Shell,² a freight series had to be constructed. This was done in two different fashions and the separate netbacks resulting from each method are reported in Table B-2. Method I used a straight line interpolation between freight rates reported in 1957 and 1964. Method II used the competitive freight rates estimated for Venezuela to Portland traffic (see Appendix A) but increased the estimates for 1960-63 by the amount by which Shell's reported Venezuelan rates exceeded these competitive rates on average for the years 1964 to 1966. A comparison of the 'effective' netbacks f.o.b. the Middle East (columns II and V) and f.o.b. Venezuela (columns III and VI) using each method shows they yield similar estimates.

As a check on the estimates derived from Shell's submission of its f.o.b. prices and freight rates, the Venezuelan crude netbacks are also calculated from documentary evidence on Shell's average landed crude costs for 1967 through 1971. The latter are reported in columns IV through VI for the years 1967-1971. The similarity between the two sets of netbacks confirms the validity of the estimates presented in columns II and III.

Calculation of crude oil netbacks for Shell's Middle Eastern crude imports (Table B-3) presented similar difficulties to the estimates for Venezue-lan crude for the early nineteen sixties. No freight estimates were reported for the Kuwait crude that Shell imported between 1959 and 1962. Shell reported that the contract signed in 1956 for Kuwait crude called for a 98 cent per barrel freight charge. The difference between the c.i.f. and f.o.b. rate for 1958 (Table B-3) implies a rate of \$1.10 per barrel. If the latter still prevailed in the early nineteen sixties, it would have been well above (by 20 to 30 cents per barrel) competitive rates at this time. Evidence is available to suggest that Shell's rates were indeed above competitive rates in the early nineteen sixties. In 1960 Shell's average freight rate for Venezuelan and Middle Eastern crude was 60 cents per barrel. If the competitive freight rates reported in Table A-5 are used to calculate a weighted average for Shell, the estimate derived is only about 44

^{1.} Exhibit T-19, Shell, Toronto Hearings, 1975.496

^{2.} The f.o.b. price reported cannot be used to establish a "true" f.o.b. netback since excess charges might have been buried in freight rates, thereby making the implicit netback higher than the reported f.o.b. price.

cents per barrel for 1960. The difference between Shell's actual average and this calculation is added to the reported f.o.b. price for Kuwait and reported in brackets in column IV of Table B-3. Unfortunately, no similar comparisons are possible for 1961 and 1962 and, therefore, the f.o.b. price is reported as a lower limit of the implicit price being charged Shell for Middle Eastern crude in these years.

(c) Gulf

Gulf reported landed crude costs in Canadian dollars for both its Montreal and Point Tupper refineries. The Montreal crude costs were used except for those years where a particular crude type was only imported for the Point Tupper refinery. Corrections are made to landed costs in Canadian funds at Montreal to yield an estimate of the cost at Portland in American funds. This was done using the exchange rates reported in Table B-7 and the Montreal/ Portland Pipeline tariff rate. The Middle Eastern and Venezuelan effective f.o.b. prices were then calculated by subtracting the estimates of competitive freight rates from Table A-5. Table B-4 reports the Middle Eastern 'effective' netbacks for crude imported from this area. Table B-5 presents the 'implicit' f.o.b. prices paid by Gulf for crude imported from Venezuela — netted back to both Venezuela and the Middle East. In the case of those crudes that differed substantially from 31° API, a gravity correction was made — where possible using the actual average gravity, and where not, using the typical gravity reported in the contract. Since Gulf indicated 2 cents per degree API was the appropriate correction factor (Documents # 65305, # 78183), 497, 498 this was the figure used for the corrections. These 'corrected' f.o.b. prices are reported in brackets in Tables B-4 and B-5.

(d) Imperial

Imperial reported the c.i.f. value of its crude imports at both Portland and Dartmouth for its Venezuelan and Middle Eastern crudes. Using the figures for Portland, except for the Middle East in 1969, those years that were reported in Canadian funds were adjusted to a U.S. currency basis using Table B-7, and the competitive freight rates from Table A-5 were then subtracted to yield the 'effective' netbacks reported in Table B-6, columns II, III, V, VI, and VIII. A correction to account for the difference in the average quality of its Middle Eastern crude in comparison to its Venezuelan crude was made and is reported in brackets. These corrections accord with Imperial's evaluation as contained in Documents # 88572⁴⁹⁹ and # 89254.⁵⁰⁰

TABLE B-1

TEXACO IMPLICIT F.O.B. PRICES ON MIDDLE EASTERN AND VENEZUELAN CRUDES (\$U.S./bbl.)

			Arabian Ligh	nt			Venezi	uelan (Mata	Type)	
Year	Landed Cost at Refinery, Montreal	Derived F.O.B. Middle East	Landed Cost as per Contracts Portland (34°)	Derrived F.O.B. Middle East	Landed Cost at Montreal	Derived F.O.B. Middle East	Derived F.O.B. Venezuela	Landed Cost as per Contracts, Portland (31°)	Derived F.O.B. Middle East	Derived F.O.B. Venezuela
	1	II	III	IV	v	VI	VII	VIII	IX	X
1956	2.92		2.82		3.122					
1957	3.25		2.83		3.262					
1958	3.12		3.00		3.31					
1959	2.94		3.00		3.08					
1960	2.84	2.01	2.68	1.96	2.93	2.10	2.64	2.78	2.06	2.60
1961	2.78	1.95	2.58	1.86	2.95	2.13	2.66	2.82	2.10	2.63
1962	2.68	1.88	2.58	1.89	2.86	2.07	2.58	2.85	2.16	2.68
1963	2.57	1.76	2.431	1.74	2.67	1.86	2.37	2.60	1.91	2.42
1964	2.58	1.86	2.431	1.83	2.63	1.91	2.36	2.54	1.94	2.39
1965	2.48	1.76	2.33	1.73	2.57	1.85	2.29	2.46	1.86	2.31
1966	2.47	1.77	2.33	1.74	2.54	1.84	2.28	2.41	1.83	2.27
1967	2.46	1.78	2.33	1.77	2.57	1.90	2.31	2.41	1.85	2.26
1968	2.48	1.82	2.33	1.77	2.53	1.87	2.28	2.41	1.85	2.26
1969	2.44	1.78	2.33	1.77	2.51	1.84	2.26	2.39	1.82	2.24
1970	2.34	1.67	2.28	1.73	2.29	1.63	2.03	2.23	1.68	2.08
1971	3.03	2.32	2.69-2.96-3.03	2.09-2.36-2.43	2.85	2.15	2.58	2.51	1.91	2.35
1972	3.05	2.31	2.90	2.27	2.943	2.20	2.65	2.51	1.88	2.34
1973	2.57	2.74	3.08-3.17-3.27		6.16^{3}	5.33	5.86			

Notes: 1) While contract lists \$2.43 as C.1.F. Montreal, Documents # 57545,501 57548502 indicate that \$2.43 applied to Portland, not Montreal.

²⁾ Guanipa (31°) rather than Mata.

³⁾ Landed Cost at Halifax rather than Montreal.

Sources: 1) Columns I and V are taken from Exhibit T-17, Texaco, Toronto Hearings, 1975 and are described as the landed cost ad the refinery in this exhibit. 503

²⁾ Columns III and VIII are taken from Exhibit T-17, Texaco, Toronto Hearings, 1975 and are described as the price specified in contracts. 503

³⁾ Columns II, VI, and VII are derived by subtracting the Montreal/Portland Pipeline tariff and the estimates of the competitive freight rates in Table A-5 from columns I and V.

⁴⁾ Columns IV, IX, and X are derived by subtracting the estimates of the competitive freight rates in Table A-5 from columns III, and VIII.

TABLE B-2
SHELL IMPLICIT F.O.B. PRICES ON VENEZUELAN CRUDES (\$U.S./bbl)

			Venez	uelan ¹		
		Method P			Method II	3
Year	Delivered Portland	Derived Middle Eastern Netback	Derived Venezuelan Netback	Delivered Portland	Derived Middle Eastern Netback	Derived Venezuelan Netback
	1	II	III	IV	V	VI
1960	2.74	2.02	2.56	2.67	1.95	2.48
1961	2.43	1.71	2.24	2.39	1.67	2.20
1962	2.35	1.66	2.18	2.34	1.65	2.16
1963	2.33	1.64	2.16	2.34	1.65	2.16
1964	2.24	1.64	2.09			
1965	2.24	1.64	2.09			
1966	2.23	1.65	2.08			
1967	2.20	1.64	2.05	2.22	1.66	2.07
1968	2.13	1.57	1.98	2.21	1.65	2.06
1969	2.12	1.55	1.97	2.20	1.64	2.05
1970	2.11	1.56	1.96	2.20	1.64	2.05
1971, April	2.52	1.91	2.35	2.45	1.85	2.29
July	2.52	1.92	2.36			
Oct.	2.50	1.90	2.34			
1972, Jan.	2.79	2.16	2.62			
April	2.77	2.15	2.60			
July	2.76	2.13	2.59			

Notes: 1) The typical crude from 1957 to 1961 was Oficina (33°), subsequently it became Lagotreco (32°), Lagomar/Bachaquero blend (30°), Lagotreco/Lagomar blend (30°) and Mesa (28°)

- 2) Since Shell freight rates for 1960-63 are not available and it reported its crude prices f.o.b. these years, a freight series had to be constructed. Method I used a straight line interpolation between 1957 and 1964.
- 3) Method II used a different method to calculate the C.1.F. values at Portland for 1960-63. It increases the 1960 to 1963 competitive freight rates estimated for Venezuela (see Table A-5) by the amount by which Shell's freight rates exceeded these competitive rates on average for the years 1964 to 1966. In addition, the actual average landed cost as reported in Document #41549505 for the years 1967-71 corrected to U.S. funds is used to provide a comparison for the numbers presented in columns I through III.

Source: Exhibit T-19, Shell, Toronto Hearings, 1975;506 Table A-5, Table B-7, and Document # 41549.507

TABLE B-3

SHELL IMPLICIT F.O.B. PRICES ON MIDDLE EAST CRUDES
(\$U.S./bbl.)

		Price	Basis		
Year	Crude Type	C.I.F. Portland	F.O.B.	– Derived Middle East Nethack	
	l	II	111	IV	
1958	Kuwait (31°)	2.84	1.74		
1959	11		1.68		
1960	**		1,63	1.63 plus or (1.79)	
1961	**		1.58	1.58 plus	
1962	11		1.58	1.58 plus	
1963	Iranian (34°)	2.20		1.51	
1964	` '				
1965					
1966	Nigerian (36°)	2.20		1.61	

Note: 1) Since Shell does not provide Middle East freight rates for the years 1960-63, the f.o.b. price for Venezuelan crude provides the lower limit for derived Middle East netbacks. They should be increased by an amount equal that by which Shell's freight rate exceeded the competitive rate. Unfortunately a three year series is not available. However, an estimate of the excess is available for 1960. In this year Shell's average rate for Venezuelan and Middle East crude was 60 cents per barrel and that which would have resulted using the competitive freight rates in Table A-5 is 43.7 cents per barrel. The difference is added to the 1960 f.o.b. price for Kuwait and reported in brackets for this year.

Source: Exhibit T-19, Shell, Toronto Hearings, 1975508 and Table A-5.

TABLE B-4GULF IMPLICIT F.O.B. PRICES ON MIDDLE EAST CRUDES

	Kuwai	t (31°)	Gach Sa	Gach Saran (31°)		ari (34°)	Nigerian (33°-36°)	
Year	Delivered Montreal (\$Cdn./bbl.)	Derived Middle East Netback (\$U.S./bbl.)						
	I	II	III	IV	V	VI	VII	VIII
1960 1961	2.57	1.82						
1962	2.68	1.71						
1963	2.54	1.54	2.92	1.89	3.07	2.03(1.98)2		
1964	2.53	1.62	2.89	1.96	3.04	2.10(2.04)2		
1965	2.28	1.39	2.37	1.48	2.43	$1.53(1.47)^2$	2.47	$1.57(1.55)^2$
1966	2.26	1.39	2.26	1.39	-	,	2.33	1.46(1.42)2
1967	2.26	1.42	2.43	1.58	2.66	1.79(1.73)2	2.33	1.49(1.43)2
1968	2.18	1.36	2.23	1.41	2.38	1.55(1.49) ²	2.37	$1.54(1.46)^2$
1969	2.25	1.42	2.39	1.55			2.44	1.60(1.52)2
1970	2.42	1.65					2.38	1.62(1.54) ²
1971			2.401	1.77	2.66	1.92(1.88)2	3.12	2.38(2.28)2
1972	2.391	1.78	2.461	1.85			3.21	2.50(2.40)2

Notes: 1) Delivered Point Tupper.

Source: Exhibit T-28, Gulf, Toronto Hearings, 1975;509 Table A-5; Table B-7; and Information collected by the Petroleum Inquiry.

²⁾ Bracketed figures include a correction of 2¢ per degree to equate this price to a 31° basis.

TABLE B-5GULF IMPLICIT F.O.B. PRICES ON VENEZUELAN CRUDES

	Eas	st Venezuelan (.	31°)	Tia.	Juana Medium ((27°)		_	
Year	Delivered Montreal (\$Cdn./bbl.)	Derived Middle East Netback (\$U.S./bbl.)	Derived Venezuelan Netback (\$U.S./bbl.)	Delivered Montreal (\$Cdn./bbl.)	Derived Middle Eası Netback (\$U.S./bbl.)	Derived Venezuelan Netback (\$U.S./bbl.)	Delivered Montreal (\$Cdn./bbl.)	Derived Middle East Netback (\$U.S./bbl.)	Derived Venezuelan Netback (\$U.S./bbl.)
-	I	II	III	IV	v	VI	VII	VIII	IX
1960 1961	3.06	2.33	2.86	2.62	1.87	2.41(2.49)2			
1962	3.09	2.09	2.61	2.85	1.87	2.38(2.46)2			
1963 1964	3.13 3.10	2.09 2.15	2.60 2.60	2.84 2.83	1.82 1.90	2.33(2.43) ² 2.35(2.43) ²			
1965 1966	2.79	1.87	2.31	2.57 2.57	1.66 1.68	2.11(2.19) ² 2.12(2.20) ²			
1967	2.40	1.55	1.96	2.47	1.62	2.03(2.11)2	2.25	1.60	1.02
1968 1969	2.34 2.30	1.51 1.47	1.92 1.88	2.49 2.49	1.65 1.65	2.06(2.14) ² 2.06(2.14) ²	2.35 2.23	1.52 1.41	1.93 1.82
1970 1971				2.42 2.84	1.65 2.10	2.06(2.14) ² 2.54(2.60) ²	2.18 2.40 ¹	1.42 1.77	1.83 2.21
1972				2.93	2.22	2.67(2.75)2	2.481	1.87	2.33

Notes: 1) This is the delivered price at Point Tupper.

2) Bracketed figures include a correction of 2¢ per degree to equate this price to a 31° basis.

Source: Exhibit T-28, Gulf, Toronto Hearings, 1975;510 Table A-5; Table B-7; and Information collected by the Petroleum Inquiry.

TABLE B-6

IMPERIAL IMPLICIT F.O.B. PRICES ON MIDDLE EASTERN AND VENEZUELAN CRUDES (\$U.S./bbl.)

		Venezuelan		Middle Eastern							
	G	Guanipa (30°-3	I°)	Tia J	uana Light (31	°-32°)	Arabian Light (32°-34°)				
Year	Delivered Portland	Derived Middle Eastern Netback	Derived Venezuelan Netback	Delivered Portland	Derived Middle Eastern Netback	Derived Venezuelan Netback	Delivered Portland	Derived Middle Eastern Netback			
	I	II	III	IV	V	VI	VII	VIII			
1961	2.50	1.78	2.31	2.43	1.72	2.25					
1962	2.54	1.85	2.36	2.43	1.74	2.25					
1963	2.56	1.87	2.38	2.55	1.86	2.37					
1964	2.48	1.88	2.33	2.43	1.83	2.28	2.261	1.661(1.64)3			
1965	2.41	1.81	2.25	2.39	1.79	2.23	2.26	1.66 (1.64)3			
1966	2.41	1.83	2.27	2.35	1.76	2.20	2.31	$1.73 (1.71)^3$			
1967	2.34	1.78	2.19	2.28	1.72	2.13	2.21	1.65 (1.63)3			
1968	2.37	1.81	2.22	2.32	1.76	2.17		` ,			
1969	2.36	1.80	2.21	2.33	1.77	2.18	2.49^{2}	I.932(1.91)3			
1970	2.50	1.94	2.35	2.44	1.88	2.29		` ,			
1971	2.79	2.18	2.63	2.81	2.21	2.65					
1972	3.08	2.45	2.90	3.03	2.41	2.86					

Notes: 1) Denoted by Imperial only as Middle East.

Source: Exhibit 0-38, Imperial, Toronto Hearings, 1975;514 Table A-5; Table B-7; and Information collected by the Petroleum Inquiry.

²⁾ Brega (Libyan 40°) delivered to Dartmouth, Nova Scotia. This price has been corrected to equate with the value of Light Arabian to Imperial in accord with documents # 88572511 and 89254.512

³⁾ Bracketed figures include a correction to equate these crudes with 31° Venezuelan crude (Document # 88572).513

TABLE B-7EXCHANGE RATES, 1955-1974

Year	\$ American per \$ Canadian
1955	1.014006
1956	1.016005
1957	1.042907
1958	1.030252
1959	1.042672
1960	1.031218
1961	.98760
1962	.93561
1963	.92699
1964	.92689
1965	.92743
1966	.92811
1967	.92689
1 9 68	.92801
1969	.92855
1970	.95785
1971	.99021
1972	1,00937
1973	.99977
1974	1.02257

Source: Statistics Canada # 67-201, various issues. Bank of Canada Review, various issues.

TABLE B-8

HISTORY OF IMPERIAL OIL CRUDE PRICING T.J. LIGHT—31-31.9° API (\$U.S./bbl.)

Period	F.O.B. Venezuela
955	2.55
956	2.55
957 —Jan. 1-14	2.55
957 —Jan. 15-Dec. 31	2.80
958	2.80
959	2.47
960 —JanMarch	2.47
— AprJuly	2.30
—AugDec.	2.20
1961	2.20
1962 —JanApr.	2.20
—May-Dec.	2.17
1963	2.15
1964	2.15
1965 —JanFeb.	2.15
— MarDec.	2.10
1966	2.10
1967 —JanMar.	2.10
—AprDec.	2.02
1968	2.12
1969	2.12
1970 —JanOct.	2.12
-Nov.	2.23
—Dec.	2.25
1971 — JanMar.	2.25
—April I	2.62

Source: Document # 125176, June 3, 1971 Imperial.515

APPENDIX C

THIRD-PARTY OR ARM'S-LENGTH PRICES

TABLE C-1
THIRD-PARTY OR ARM'S-LENGTH PRICES (\$U.S./bbl.)

Year		ht Arabian 32°-34°)			ı Kuwait 1°)		Iranian Iari 34°)	Heavy Iranian (Gach Saran 31°)	Brazilian and Latin American Purchases Middle East Crude	Venezuelan Logomedio (32°)
1958				1.654		1.794				
1959	1.601			1.474		1.564				
1960				1.344		1.434	1.4510		1.20-1.308	
1961				1.344		1.434			1.20-1.308	
1962				1.29-1.344		1.38-1.434				1.607
1963	1.401	1.3910		1.294		1.384				1.607
1964	1.4212	1.3010		1.24-1.294	1.2510	1.29-1.344				1.637
1965		1.31-1.3510		1.24-1.294	1.2510	1.29-1.344		1.23-1.3010	1.10-1.208	1.637
1966	1.301			1.24-1.294	1.206	1.29-1.344	1.20-1.356	1.18-1.236	1.10-1.208	1.637
1967				1.24-1.294		1.29-1.344	1.109			1.637
1968	1.28-1.352			1.155	1.18-1.242		1.28-1.352			1.807
1969		1.303	1.2316			1.2016	1.15-1.2011	1.1516		1.707
1970	1.201	1.30^{3}					•			1.707 1.65-1.7013
1971		1.703	1.6514							
1972							1.69715			
1973										
1974										

Appendix C: Third-Party or Arm's-Length Prices

Notes to Table C-1

- 1. U.S. Senate, Governmental Intervention in the Market Mechanism: The Petroleum Industry, p. 68.
- 2. Ihid., p. 75.
- 3. Sun's estimate of market or alternate value (Document # 83927). 516
- 4. U.S. Senate, Governmental Intervention in the Market Mechanism: The Petroleum Industry, p. 59.
- 5. Ibid., p. 173-This is the price quoted by British Petroleum.
- 6. Adelman, The World Petroleum Market, p. 186.
- 7. Sun's estimate of market or alternate value (Document # 83927).517
- 8. Adelman, The World Petroleum Market, p. 385 quotes Middle East netbacks on Latin American purchases.
- 9. Ihid., p. 189 quotes the price available on long-term contracts from the Iranian consortium 1966-68.
- 10. Ihid., pp. 388-93 culls the trade literature and reports average prices. These numbers are corrected to compare to 31° Gach Saran. These are higher than prices being established as the competitive margin that were reported as low as \$1.00
- 11. Sun Oil quotes the open market price of Light Iranian to be \$1.15 to \$1.20 in 1969 (Document # 83956).518
- 12. Imperial's estimates of what Middle East and Venezuelan prices should be using cost plus a "reasonable" return (Document # 89088-9). 519 Imperial noted these prices were approximately the same as then current arm's-length prices.
- 13. Exxon's estimate of alternate value or market price for T.J. Light (Document # 123963). 520
- 14. Imperial's estimate of third-party prices 1971 (Document # 101530).521
- 15. Price British Petroleum sale to Shell (Document # 24391)522—Tax Paid Cost + 15 cents.
- 16. Imperial's estimate of open-market value in 1969 (Document # 125843),523

	,	
·		

APPENDIX D

POSTED CRUDE OIL PRICES

TABLE D-1

POSTED CRUDE OIL PRICES
(\$U.S./bbl.)

	Arabian Light Ras Tanura, ^{B. C} (34°)	Tia Juana Amuay Bay ^A (31°)	Kuwait Mena Al Ahmadi ^{B,C} (31°)	Iranian Lt. Bandar Mashur ^B (34°)	Arabian Light Mediterranean ^B (34°)	Brega (Zalten) Marsa el Bréga ^{B, C} (40°)	Venezuelan Puerto La Cruz ^C (35°)	U.S. Gulf Houston ^C (35°)
July, 1948	2.031		2.022					
October, 1948	1.991		1.972					
April, 1949	1.841		1.822					
July, 1949			1.752					
September, 1949	1.711							
January, 1950			1.653				2.63	2.67
November, 1950	1.713,4				2,374,5			
July, 1952	••••	2.30			_,,,,			
February, 1953		2.00			2.255			
April, 1953			1.504		2.20		2.88	2.92
July, 1953	1.93	2.55	1.72		2.355			
OctDec., 1954	1.75	2.00	2	1.914	2.55			
February, 1956				****	2.425			
December, 1956					2.655			
January, 1957		2.80			2.00			
May-June, 1957	2.08	2.00	1.85	2.04			3.05	3.17
September, 1957	2.00		1.00	2.0.	2.555		5.05	J
January, 1958					2.456			
	(1.896		1.67	1.86	2.275		2.80	3.05
February, 1959	1.90	2.65	1.07	1.00	2.27		2.00	5.05
AugSept., 1960	1.80	2.55	1.59	1.78	2.175		2.80	
August, 1961	£ 1.00	2.33	,	1.70	2.17	2.234,8	2.00	
NovDec., 1965				1.794,7		2.20		3.05
1966				1.77				3.10
967								3.15
968								3.15
969	1.80		1.59			2.21		3.29
1970	1.80		1.68			2.51		3.54
971	2.29		2.19			3.38		3.60
1972	2.48		2.37			3.61	2.80	3.60

Sources: A - Aldelman, The World Petroleum Market, p. 340.

B - United States Senate, Governmental Intervention in the Market Mechanism: The Petroleum Industry p. 43.

C - Jacoby, Multinational Oil, p. 224.

Notes for Table D-1

- 1. These prices are adjusted for 34° API although in practice price quotations were given for 36° API until July, 1953.
- 2. Gulf Oil prices f.o.b. Mena al Ahmadi.
- 3. Price adjusted for 31° API. Sold without gravity price adjustments on shipments prior to 1:1:50 (average 31° API).
- 4. Initial posted price.
- 5. These prices are adjusted for 34° API although in practice price quotations for Iraq crude are for 35°/36° API and for Arabian Light 34° API has only been quoted by all sellers since February, 1959.
- 6. Flat price posted by Esso 13:2:59 changed to price of other sellers of \$1.90 gravity escalation basis 23:9:59.
- 7. Posted price f.o.b. Kharg Island which replaced Bandar Mashur as main export terminal for Iranian crude oil.
- 8. Initial posted price quoted as \$2.21 for 39° API. Subsequently quoted as \$2.23 for 40° API and above.

APPENDIX E

VALUE OF REFINERY PRODUCT SHIPMENTS

TABLE E-1

VALUE OF REFINERY PRODUCT SHIPMENTS*
(\$Cdn./bbl.)

Oue. &			Man. &			B.C. &	
Year	Marit.	Quehec	Marit.	Ontario	Sask.	Alta.	NWT.
1962	4.12			4.44	4.47	4.13	4.38
1963	3.93			4.35	4.55	4.17	4.40
1964	3.96	3.88	3.82	4.38	4.47	4.08	4.32
1965	3.75	3.71	3.65	4.33	4.30	4.18	4.29
1966	3.49	3.57	3.65	4.28	4.42	4.09	3.97
1967	3.51	3.60	3.70	4.29	4.44	4.13	4.25
1968	3.54	3.49	3.76	4.39	4.52	4.21	4.19
1969	3.65	3.32	3.46	4.27	4.55	4.28	4.17
1970	3.58	3.44	3.36	4.32	4.69	4.29	4.16
1971	3.98	3.90	3.58	4.85	4.85	4.45	4.54
1972	4.11	4.09	3.63	4.89	4.90	4.22	4.53

Note: *Contains Motor Gasoline, Aviation Turbine Fuel, Diesel Fuel, Light Fuel Oils, Heavy Fuel Oils and Kerosene which in 1972 accounted for 93.8% of the total value of refinery shipments in Canada.

TABLE E-2

VALUE OF REFINERY MOTOR GASOLINE SHIPMENTS (\$Cdn./bbl.)

Oue. &				Man. &			B.C. &
Year	Marit.	Quehec	Marit.	Ontario	Sask.	Alta.	NWT.
1962	5.11			5.27	5.13	4.58	5.26
1963	5.00			5.14	5.16	4.55	5.28
1964		4.83	5.14	5.08	4.99	4.44	5.05
1965		4.56	5.05	5.05	4.83	4.41	4.84
1966		4.45	4.90	5.01	4.88	4.46	4.81
1907	4.568	4.48	5.01	5.03	4.90	4.51	4.79
1968	4.611	4.44	5.01	5.13	5.04	4.56	4.82
1969	4.575	4.16	4.66	4.92	4.98	4.61	4.78
1970		4.29	4.54	5.00	5.12	4.65	4.72
1971		4.86	4.86	5.44	5.27	4.76	5.10
1972		5.12	5.11	5.39	5.35	4.55	5.09

TABLE E-3

VALUE OF REFINERY LIGHT FUEL OIL SHIPMENTS
(\$Cdn./bbl.)

	Que. &				Man. &		B.C. &
Year	Marit.	Quehec	Marit.	Ontario	Sask.	Alta.	NWT.
1962	4.02			4.11	4.29	3.95	3.91
1963	3.97			4.11	4.36	3.90	4.00
1964		3.99	3.85	4.21	4.34	3.68	4.19
1965		3.70	3.39	4.08	3.99	3.85	4.15
1966		3.50	3.37	4.03	4.35	3.84	4.22
1967	3.469	3.45	3.51	4.04	4.04	3.85	4.24
1968	3.542	3.48	3.74	4.24	4.07	3.84	4.27
1969	3.562	3.53	3.67	4.14	4.03	3.85	4.33
1970		3.58	3.51	4.18	4.12	3.84	4.29
1971		4.02	3.89	4.70	4.30	4.10	4.73
1972		4.20	4.33	4.67	4.31	4.12	4.66

TABLE E-4

VALUE OF REFINERY HEAVY FUEL OIL SHIPMENTS (\$Cdn./bbl.)

<u>-</u>	Que. & Man. &					B.C. &	
Year	Marit.	Quehec	Marit.	Ontario	Sask.	Alta.	NWT.
1962	2.09			2.47	2.01	1.30	2.45
1963	2.08			2.47	2.05	1.46	2.56
1964		2.05	2.17	2.56	1.85	1.45	2.49
1965		2.08	2.00	2.70	1.90	1.47	2.70
1966		2.10	2.03	2.67	1.91	1.60	2.66
1967	2.168	2.24	1.97	2.66	2.01	1.61	2.71
1968	2.062	2.08	2.00	2.55	1.76	1.52	2.58
1969	1.823	1.85	1.76	2.47	1.97	1.51	2.49
1970		2.09	1.84	2.46	2.07	1.52	2.53
1971		2.50	2.35	3.03	2.68	1.84	2.88
1972		2.87	2.65	3.36	2.81	2.02	3.04

APPENDIX F

CALCULATION OF COMPETITIVE WORLD PRICES
DELIVERED AT PORTLAND

TABLE F-1

Year	Middle East Competitive Netbacks "31° GACH SARAN"	Long Run Freight Rate	Delivered Price at Portland	Exchange Rate	Delivered Price at Portland	
	(\$ U.S./ bbl.)	(\$U.S./ bbl.)	(\$U.S./ bbl.)		(\$CDN./ bbl.)	
	ı	11	Ш	IV	V	
1960	1.50	71.6	2.216	1.031218	2.15	
1961	1.50	71.6	2.216	.98760	2.24	
1962	1.61	69.0	2.300	.93561	2.46	
1963	1.59	69.0	2.280	.92699	2.46	
1964	1.29	59.9	1.889	.92689	2.04	
1965	1.17	59.9	1.769	.92743	1.91	
1966	1.27	58.6	1.856	.92811	2.00	
1967	1.231	56.0	1.790	.92689	1.93	
1968	1.83	56.0	2.390	.92801	2.58	
1969	1.27	56.3	1.833	.92855	1.97	
1970	1.441	55.5	1.995	.95785	2.08	

Note: 1) Netback is for first part of year only.

Sources: Column I: Adelman, *The World Petroleum Market*, pp. 183, 190. Column II: Table A-5.
Column III: Column I & Column II.

Column IV: Table B-6.

HD 9574 •C22A25 •• †¥†•or/Auteur	0574 C22A25						
Title/ <i>Titre</i>	The state of competiti Canadian petroleum indus c1981.						
Date	Borrower	Room	Telephone				
	Emprunteur	Pièce	Téléphone				
April 27	to Swink	10E.	6-2361				
00123	the aughter	438-13					
Fet 1 /83	Yours Joses	36	61561				
0133-34.3 (10/76	D) 7530-21-029-4581 0						

