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Middle East and the global oil pricing system: 1945-1950.

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Preface

When looking closely at Middle East oil industry what puzzled me most was the attention conveyed to oil price formation through profit sharing agreements hammered out between big multinationals and national governments. For sure, this was a noticeable event sequence marked by purposeful intentions and achievements, involving conflicting actors assisted by global geo-strategical forces. Debates, negotiations, and disputes left a persuasive track record in petroleum history. However, state-companies' compromises do not explain how the Middle East became a new geographical basepoint for petroleum transactions and the hub of the global pricing system. Something else must have happened that changed the oil pricing system. It is this silent and uncharted side of the story that this book addresses.

Overall, the ensuing pages constitute an extended version of the article entitled "Squabbling Sisters: Multinational Companies and Middle East Oil Prices", published in *Business History Review*, 2017 (91) 4, pages 681-706. I gratefully acknowledge the Luso-American Development Foundation (FLAD) research grant, the insightful comments made by three anonymous referees and BHR editorial team, as well as for Editorial Académica Española support.

Introduction

In October 1950, the first posting of Middle East crude prices went almost unnoticed by the western media. In the United States, only the more attentive readers of the New York Journal of Commerce, along with the key managers of industrial and financial institutions enrolled in corporate mailing lists, would have noticed the emergence of this new petroleum trading market. Nonetheless, this event constituted a historical turning point given it established a new geographical basepoint for petroleum transactions. Alongside the global benchmark set by the daily quotations for Mexican Gulf and Caribbean crude, businessmen and companies now had access to an alternative official trading spot, located some 10,000 nautical miles away in the Persian Gulf, at the heart of the Arabian Peninsula. The global commodity of petroleum henceforth revolved around two axes, one located in the Western hemisphere and the other in the Eastern hemisphere. But just how were these markets interconnected? The ensuing pages explain how the Middle East became a new geographical basepoint for petroleum transactions and the hub of the global pricing system.

The sudden discovery of several Middle East giant oilfields (1943-1947) along with the disclosure of the region's reserves potential, turned the global pricing equilibrium harder to sustain. US oil multinationals were key actors in this

process. They faced an extreme divide between their foreign and internal situations: first, new business opportunities emerged because of the discovery of huge reserves with low extraction costs; second, an adverse political environment of public outcry against big business and cartel practices was fuelled by the media, the US Department of Justice, the Congress, and sectors of the US Federal Government. The outcome of this process was the release of a report by the Federal Trade Commission (FTC) in 1952, in which major companies were indicted for cartel practices¹.

This FTC report provided a good account of collusive mechanisms based upon the interlacing of interests: the joint ownership of concession rights shaped a web of common property rights in Iraq, Kuwait, Bahrain, Saudi Arabia and, later on, in Iran and Abu Dhabi. These rights were reinforced by joint ownership of stock facilities, refineries, and pipelines. In addition, these interests became even more closely interwoven through the execution of long-term contracts for the sale of crude oil². Seven multinational companies took hold of the oil resources through the control of upstream operations (from exploration to

¹ B. I. Kaufman, "Oil and Antitrust: The Oil Cartel Case and the Cold War," *The Business History Review* 51, No. 1 (1977):35-56; *United States policies with respect to petroleum*, Foreign Relations of the United States (FRUS), 1951, (Washington, 1986), Vol.1,966-992.

² Staff Report to the Federal Trade Commission, released through the Subcommittee on Monopoly of the Select Committee on Small Business, *The International Petroleum Cartel*, U.S. Senate, 83rd Cong., 2nd sess. (Washington, DC, 1952), 37-58.

extraction) and held significant sway over the downstream activities (from refining to distribution).

Several authors have remarked on how there was little need to formalize secret paper agreements to limit competition and uphold prices when the very productive structure fostered the natural convergence of shared common assumptions about prices and the rate at which the industry should expand³. Wayne Leeman, for instance, claimed that the appropriate classification for the seven multinational companies should be 'natural oligopoly'⁴. Competition was naturally circumvented because there were such large economies of scale in finding, producing, refining and distributing oil. Only a few firms with optimum scales could supply the financial sums demanded⁵. Edith Penrose furthermore noted the role of vertical and horizontal linkages as preventive barriers to entry as these precluded the accumulation of large amounts of crude in the hands of sellers⁶.

³ Wayne Leeman, *The price of Middle East oil: an essay in political economy*, (Ithaca-N. York, 1962), John Blair, *The Control of Oil*. (New York, 1976).

⁴ Leeman, *The price of Middle East oil*, 56-62.

⁵ Jahangir Amuzegar, *Managing oil wealth: OPEC's windfalls and pitfalls* (New York, 2001), 12-13; Leeman, *The price of Middle East oil*.

⁶ E. Penrose, (1968), *The Large International Firm in Developing Countries: The International Petroleum Industry*, (Cambridge-MA, 1968), 182-193.

Anthony Sampson's book, *The Seven Sisters*, published in 1975, cleared the path for a turnaround. The catchword title was taken from a declaration made some years before by Enrico Mattei, an independent cartel dissenter from the Italian oil company Ente Nazionale-ENI. Sampson felt that 'oligopoly' simply represented too weak a concept to account for the sheer might secured by oil multinationals. He claimed that much more was at stake than mere interdependence and market control. The fate of each oil major was linked with its peers because the fortunes of each impacted upon the fortunes of the others. Hence, their relative positioning proved similar to the economic and social links nurtured by family ties. More than independent juridical entities acting in tacit collusion, each oil major actually resembled a fraternity of sisters: 'the seven sisters'. This multinational fraternity was less committed to keeping prices high than it was to keeping prices down by holding a steady front against the claims of producer nations: if the multinationals acted as a cartel their 'principal purpose was to screw the producers'⁷. Oil majors were thus expected to close ranks not so much against consumer interests as against Arab nations who were the owners of the natural resources.

Despite the overarching influence of Sampson's book, not everybody agreed with his viewpoint. Some authors still held that the primary goal of multinationals involved limiting upstream competition, balancing demand and

⁷ Anthony Sampson, *The Seven Sisters* (New York, 1975), 174.

supply, and boosting profits. As classical cartel theory underlines, profits are maximized by jointly restricting output and increasing prices, ideally to that set by a monopolist⁸. Drawing on this line of inquiry, Edith Penrose and Francisco Parra have shown how the offtake agreements hammered out by the big oil companies actually worked as a mechanism for restricting production⁹. As long as these agreements handed down explicit rules—written, signed and kept secret (as in Saudi Arabia and Iran)—they closely resembled the documentation trails hidden from legal authorities by hard-core cartels. For this reason, Parra labels the seven sisters a quasi-cartel¹⁰.

Under the vertically and horizontally integrated concession system, oil trading, to a large extent, became a question of inter-company exchanges with most transactions made within the scope of company controls¹¹. In contrast to these internalized (transfer) prices were the posted prices, in which selling companies made public the dollar value they were prepared to accept in

⁸ Morris Adelman, *The World Petroleum Market* (Baltimore: 1972), 87-88.

⁹ Penrose, *The Large International Firm*; Francisco Parra, *Oil Politics: A Modern History of Petroleum* (New York, 2004).

¹⁰ Parra, *Oil Politics*, 4, 67.

¹¹ Robert Mabro, *On Oil Price Concepts*, WPM3, Oxford: Oxford Institute for Energy Studies, (Oxford, 1984); Bassam Fattouh, "The Origins and Evolution of the Current International Oil Pricing System," in *Oil in the 21st Century*, ed. Robert Mabro (Oxford, 2006), 41-100.

exchange for a barrel of crude oil. Later, posted prices served above all as a fiscal parameter¹².

The study examines the historical emergence of the Middle East oil pricing system from an ‘inside-out’ perspective¹³. In this respect, the inter-continental cost asymmetry that surfaced after World War II, along with the Arab oil-boom, set incentives for the formulation of independent pricing strategies. There was also an environment that eased the disclosure of private practices. It is worth remembering that the dawn of the Middle East petroleum industry (1947–1951) coincided with the Marshall Plan audit (an American initiative to financially assist Western Europe after the war) through the assignment of orders to supply the deprived European nations. David Painter’s¹⁴ analysis has shown that the procurement of petroleum and petroleum products from ‘offshores sources’, under the European Recovery Program, revealed divergences and inconsistencies in the pricing schemes of the various companies. Long-term

¹² Robert Mabro, “The International Oil Price Regime. Origins, Rationale and Assessment”, *The Journal of Energy Literature* XI, No. 1 (2005): 3-20 quotation on 4.

¹³ . Espen Storli, “Cartel Theory and Cartel Practice: The Case of the International Aluminum Cartels, 1901–1940,” *Business History Review*, 88 No. 3 (2014): 445 – 467

¹⁴ David S. Painter, “Oil and the Marshall Plan,” *The Business History Review*, 58, No. 3 (1984): 359-383; David S. Painter, “The Marshall Plan and Oil”, *Cold War History* 9, No. 2 (2009): 159-175; David S. Painter, *Oil and the American Century: The Political Economy of US Foreign Oil Policy, 1941-1954* (Baltimore, 1986).

contract prices, transfer prices, and official prices were placed under the scrutiny of the authorities. The act of external regulation impacted on the relationships among those experiencing supervision, as so often proves the case.

Global Players and the Middle East

Considering the seven multinational firms, we may differentiate between the historical hub, formed by the largest enterprises that first seized a share of the global market in the 19th century, and the second generation of national companies that evolved towards the multinational stage after World War I moving gradually into full international expansion. While Jersey Standard-Exxon and Royal Dutch-Shell belong to the historical hub, Anglo-Iranian-BP, Socony-Mobil, Gulf Oil, Texaco and Standard of California-Chevron fall into the latter group of 20th century latecomers.

Table 1 depicts the market share for crude extraction and refining in 1947 with the two historical companies, which were clearly ahead of the others. The striking point, however, was the difference between the thresholds to globalization. Incumbent market leaders, such as Jersey-Exxon and Royal Dutch-Shell, displayed a strong presence not only in the US but also in other regions, including Indonesia, Romania, Austria, Venezuela, Peru, Colombia,

Canada and the Middle East (not to mention their former stakes in Russia and Mexico wiped out by nationalizations). However, the other companies, with the partial exception of Gulf Oil, operated mainly in the Arab and Persian regions, or in the US and Arab regions. In terms of market heterogeneity, the key fissure thereby divides the historical companies, forced to streamline supply from different sources and pursue a global pricing strategy, and the group of latecomers, whose supply and pricing strategies had to be Middle East centered.

There are two important issues. First, the huge quantities of oil produced in the US were primarily absorbed by its internal market as North America no longer produced a petroleum surplus to feed world markets. Second, the historical companies (plus Gulf Oil), with their production scattered worldwide, returned the highest export surpluses from the rich oilfields of Lake Maracaibo, Venezuela (Table 1, Other regions column / Jersey-Exxon, Royal Dutch-Shell, Gulf Oil). This important pool, explored in close cooperation and explicit collusion, was interconnected with the giant refineries and terminals located on the Caribbean islands of Curacao (Shell) and Aruba (Jersey).

Table 1
Crude oil production under control of the seven sisters and their respective
refining capacities in 1947

Oil Company	Crude oil production under corporate control*					Refining capacity*	
	US (1)	Middle East (2)	Other regions (3)	Total crude oil production (4) = 1+2+3	Percentage of world production (5)	Refining capacity (6)	Crude oil production / refining capacity (7) = 4/6
Anglo-Iranian / BP	0	399.4	66.1	465.5	5.6	489	0.95
Standard Oil California / Chevron	263.1	100.1	35.4	398.6	4.8	327	1.22
Texas Co	289.4	100.1	44.1	433.6	5.2	492	0.88
Standard Oil New Jersey / Exxon	465	95.2	640.3	1200.5	14.5	1348	0.89
Socony / Mobil	172	34.2	29.3	235.5	2.8	560	0.42
Royal Dutch-Shell	195.5	6.5	444.5	646.5	7.8	917	0.71
Gulf Oil	216.1	70.0	102.6	388.7	4.7	360	1.08

*in thousand barrels per day

Sources: Estimates based on National Archives – Washington (NARA), ECA, *Preliminary Report of Prices paid in ECA-financed petroleum transactions*, 24 October 1949, Record of the U.S. Foreign Assistance Agencies, Arab Oil Litigation #43; DeGolyer and MacNaughton. *Twentieth Century Petroleum Statistics*. Dallas: DeGolyer and MacNaughton, 2005.

The greater the depth of corporate separation between historic (Western hemisphere) surplus exporters and latecomer (Eastern hemisphere) surplus exporters, the greater the risk of plain price competition. Given the differences in extraction costs, the long-term result could be advantageous to the latter group only. Nevertheless, market heterogeneity may serve to identify potential fault lines among the seven sisters but not how these lines came about in practice. The potential clash between the vintage and the latecomer multinationals was offset by the robust interlacing of interests. An analysis of the concession rights, long-term contracts, joint marketing organizations and petroleum exchange arrangements will reveal how Socony-Mobil assets appeared closely tied up with those of Jersey-Exxon in the same way that Royal Dutch-Shell's interests proved closely interrelated to those of Anglo-Iranian-BP¹⁵. Such close-knit relationships fundamentally resulted from attempts to broaden the pattern of vertical integration globally by joining forces in international marketing and distribution¹⁶. The American companies, Jersey-Socony and the European Royal Dutch-Shell and Anglo-Iranian-BP, pooled their resources with the intent to extend the geographical range of retail outlets

¹⁵ Leeman, *The price of Middle East oil*, 15-38; Penrose, *The Large International Firm*; J.H. Bamberg, *The History of the British Petroleum Company. The Anglo-Iranian years, 1928-1954* (Cambridge, 1994), Vol.2, 277-307.

¹⁶ A. D. Chandler, *The Visible Hand: The Managerial Revolution in American Business* (Cambridge-MA, 1977), 352-353.

and size-premium gasoline markets. This revealed the quasi-cartel dynamics. When market heterogeneity and interlocking affinities are equally taken into consideration, the distinction becomes that between the solid nucleus (formed by the above-mentioned four majors) and the detached fringe: Texaco, Standard of California-Chevron and Gulf Oil.

Overall, the statistics displayed in Table 1 portray a transition stage in the Middle East. Bold plans designed by imperial powers to take hold of resources and exert significant leverage upon local governments proved hard to apply in the field. After 1946, Moscow was compelled to relinquish its claims over Northern Iran, while London had to recognise that it could no longer oversee the whole region owing to financial and logistical shortcomings¹⁷. Washington, on the other hand, stepped in as the events unfolded, moving quickly to fill the power vacuum. The peculiar project to acquire a control interest over the Middle East oil business envisioned by the Department of the Interior was however discarded¹⁸. According to the precautionary guidelines set down by

¹⁷ O. Sanchez-Sibony, *Red Globalization: The Political Economy of the Soviet Cold War from Stalin to Khrushchev* (Cambridge, 2014); Paul W. T. Kingston, *Britain and the Politics of Modernization in the Middle East, 1945-1958* (Cambridge, 1996).

¹⁸ Irvine H. Anderson. *Aramco, the United States, and Saudi Arabia: A Study of the Dynamics of Foreign Oil Policy, 1922–1950* (Princeton, 1981); A Documentary history of the Petroleum Reserves Corporation, 1943-1944 Subcommittee on Multinational Corporations of the Committee on Foreign Relations, United States Senate (Washington, 1974).

US President Harry Truman, Middle East foreign policy should streamline three priorities: (i) provide assistance and aid; (ii) install overseas military bases; and (iii) promote economic development through private American oil businesses¹⁹. The latter point implied that prosperous oil exploration was vital in deepening the drive for modernizing and strengthening existing regimes. As a consequence, American foreign policy became entangled with the outlook of US multinationals. It felt to the government to protect the long term interests of US oil business²⁰ and to the companies to secure a stream of revenues for Arab and Persian governments by the means of concession rights, royalty rates and the payment of other taxes. Similar to the post-war strategy pursued in Europe and Japan, economic growth was supposed to bolster strong governments and raise a curtain of development to offset the Soviet Union's iron curtain.

¹⁹ Toru Ozonawa, "Formation of American Regional Policy for the Middle East, 1950–1952: The Middle East Command Concept and Its Legacy", *Diplomatic History* 29, No 1 (2005): 117–148; Edward W. Chester. *United States oil policy and diplomacy: a twentieth century overview*. (Westport, Connecticut: 1983), 230-252; *Interests of the U.S. in questions of Economic and Military assistance to Saudi Arabia*, FRUS, 1950, Volume V, *The Near East and Saudi Arabia*, 1112- 1200.

²⁰ Meetings of U.S. Committees and correspondence Paul G. Hoffman to Walter Levy, 14 March 1949, University of Wyoming-American Heritage Center (UW-AHC), Walter J. Lewis papers, Box 21, file 5. I would like to express my deepest thanks to David Painter for the access to this documentation.

Diplomatically, the redesign of the oil economy required the end of the restrictive Red Line Agreement of 1928, which was designed to protect undercapitalized firms from companies with financial muscle²¹. An international bidding rule was at stake, which limited each participant in a conjoint oil pool from searching new reservoirs outside the legal boundaries of their concessions. The context of post-war expansion rendered the Agreement an unbearable burden, particularly for the integrated multinational firms with ambitious plans but with low levels of self-production. With the abolition of the Red Line Agreement, the companies were finally free to invest in the production and refining of crude in Anatolia, Turkey, the Arabian Peninsula, Syria, Palestine, Mesopotamia, and Kurdistan. In corporate terms, the post-war changeover involved further access by historical majors to low-cost Arab oil, enhancing the stakes of Jersey Standard-Exxon, Socony-Mobil and Royal Dutch-Shell in Middle East petroleum surplus. Thanks to inter-company contracts, a new equilibrium came into effect among crude-long multinationals, with spare oil for the existing retail outlets, and crude-short multinationals, with scarce reserves for their own distribution networks.

Ultimately, the diplomatic and corporate bargaining process realigned the share of Middle East oil taken by the central multinationals. Jersey Standard-

²¹ G.P. Nowell, *Mercantile States and the World Oil Cartel, 1900-1939* (Ithaca: Cornell, 1994), 186-187.

Exxon acquired reserves of 291,500 barrels (bbl)/day (a long-term supply contract with Anglo-Iranian-BP), 52,000 bbl/day (firm offtake from a joint concession with Saudi Arabia) and 10,000 bbl/day (a medium term exchange contract for Indonesian Seria crude agreed with Standard of California); Socony-Mobil acquired reserves of 73,000 bbl/day (a long-term supply contract with Anglo-Iranian-BP) and 24,200 bbl/day (firm offtake from a joint concession with Saudi Arabia); and Royal Dutch Shell secured the acquisition of 275,000 bbl/day (a long-term supply contract with Gulf Oil)²².

As shown in Table 1, these figures provide a contextualized idea of ongoing changes. In a short time span, the marked imbalance between the foremost Western/Eastern hemisphere corporations reduced, which reinforced cooperation and strengthened common interests. Although the threat of open competition was largely reduced, the difference in interests still persisted within the quasi-cartel environment. Despite Jersey Standard-Exxon and Royal

²² *Aramco crude price study*, July 17, 1947, Multinational Corporations and U.S. Foreign Policy, Hearings before the subcommittee on multinational corporations. (MCUSFP-HBPMC) (Washington 1975), vol. 8, 196-205; *Principal Agreement between the Shell Petroleum Company Limited and Standard Oil Company of California* 14 December 1950, National Archives and Records Administration, College Park, Md. [NARA], Record of the U.S. Foreign Assistance Agencies (RUSFAA), Arab Oil Litigation #42, Freight Documents from Caltex; *Letter from the Secretary of State to the embassy in the United Kingdom*, 20 August 1954, FRUS 1952–1954, Economic and Political Matters, Volume I, Part 2, 284-285.

Dutch-Shell's reinforcement of their Middle East positions, their main source of supply to Europe and the US continued to be in the Caribbean: in 1948, the total petroleum obtained by different means in the Arabian and Persian oilfields accounted for just 65% and 70% of Jersey Standard-Exxon and Royal Dutch-Shell production in Venezuela, respectively²³. Consequently, Maracaibo heavy oil had to withstand export market competition from the Arabian Gulf light crudes marketed by the fellow sisters. In contrast, the new acquisitions, long-term contracts, and concession-sharing agreements did not resolve the overall problem of petroleum shortages, which materialized in persistent deficits between own production and refinery capacity (Table 1, column 7). For decades, Jersey Standard-Exxon remained crude-short and Royal Dutch Shell crude-hungry; both were heavily reliant on buying crude from third parties and paid a supplementary cost and a trading premium over the competitive transfer price of Middle East oil²⁴.

In summary, the historical multinationals stood to gain considerably from an international pricing system based on prices set to equalize costs at the destination. Such prices would return extra profits for low-cost regions while

²³ American Embassy Caracas, *Annual Report Petroleum Venezuela*, 10 March 1949, [NARA], RUSFAA, Deputy Director for Management #NDD 917756, oil pricing 1948-54, Box 1.

²⁴ Stephen Howarth and Joost Jonker, *Powering the Hydrocarbon Revolution, 1939-1973. A History of Royal Dutch Shell* (Oxford, 2007), Vol. 2; Bennett H. Wall, *Growth in a Changing Environment: a History of Standard Oil Company (New Jersey) 1950-1975* (New York, 1988) Volume 4.

defending the investments already made in countries with mature oilfields. However, the competition also depended on the costs of getting crude oil from the wells to the refineries and the centres of consumption. In reality, this proved to be the crux of the matter, as shown in the last section.

Regional and Global Prices

By 1945, the international oil pricing system was crumbling. For a brief period, competition and decentralized exchange prevailed over the economies of integrated multinationals and their organizational hierarchies. In the Persian Gulf, an Anglo-Iranian-BP manager reported that prices were beginning to get settled on an 'ad-hoc basis'. The practice was for 'buyers and sellers to negotiate a price based upon their individual assessments of competitive parity with crude oils in the Mexican Gulf', which naturally resulted in a series of different prices²⁵. American sources reiterated the same point in stressing the drift of Arab Gulf prices²⁶. Not only was there a revival in short-term transactions, but also the same quality crude was being sold for different values over short periods.

²⁵ W.D. Brown, *Course of the Middle East Oil Prices*, 15 April 1959, British Petroleum Archives – Warwick- UK [BPA], History of BP- subject prices, file 115920.

²⁶ William J. Hull, *History of ECA Pricing Policy*, 25 July 1950, 8, [NARA], RUSFAA, Arab Oil Litigation #43 Freight documents, Box 1.

The immediate post-war events marked a departure from the preceding Gulf-Plus cartel system. As the title suggests, Gulf-Plus was a benchmark for worldwide transactions based on published quotations from Texas oilfields ‘plus’ the respective transport costs from the Mexican Gulf. Emerging at a time when American crude supplied the world²⁷, this single basing point presumed the calculation of transport costs as if all oil had come from the Mexican Gulf alongside the acceptance of Texas wellhead prices as the universal yardstick. In practical terms, the buyer paid the same delivered price for oil irrespective of the shipping port of origin: from wherever the crude had been extracted, the delivered price was always determined by the Gulf-Texas gauge. Any possible competition, whether between oil regions or between companies, was eradicated by this means.

The foundations of Gulf-Plus—standardized oil prices and fictitious transport costs—began to fade away during World War II. The system’s erosion was caused by the cumulative effect of five independent factors: (i) the weakening of the Achacarry cartel rules²⁸; (ii) the re-routing of tankers due to submarine

²⁷ Helmut J. Frank, *Crude oil prices in the Middle East. A study in oligopolistic price behavior*, (New York-London, 1966), 10-12.

²⁸ Ranvir Singh Kanwar, *(States, firms, and oil: British policy, 1939-54*. PhD thesis (Coventry, University of Warwick, 2000), 121-124; 142-152. Daniel Yergin, *The Prize* (New York 1991), 266-268.

and naval warfare²⁹; (iii) opportunistic Middle East sales with discounts that deviated significantly from Gulf-Plus³⁰; (iv) the establishment of a new basing point in the Persian Gulf for bunker oil³¹; and (v) close cooperation and supervision between government agencies and petroleum businesses³². Most of these exceptional events resulted from the context of war. However, afterwards, there was to be no return to 'normality'. Competitive markets, non-parallel pricing and 'ad-hoc' transactions went hand in hand with the corporate oil economy assured by internal asset transfers undertaken between multinationals and their affiliates.

Although the 'plus' of the Gulf-Plus system (i.e. the fictitious input of a transport cost) faded away, some linkages between Middle East oil and US-Texas prices stubbornly persisted. For instance, some contracts signed in 1946 and 1947 contained a clause prescribing that the price paid for delivered oil should not

²⁹ Kanwar, (2000) *States, firms, and oil*, 114 -121.

³⁰ Frank, *Crude oil prices in the Middle East*, 18-19.

³¹ The International Petroleum Cartel, Staff Report, 355-356.

³² Michael B. Stoff, "The Anglo-American Oil Agreement and the Wartime Search for Foreign Oil Policy," *The Business History Review* 55, No. 1 (1981): 59-74; Edward W. Chester, *United States Oil Policy and Diplomacy*: Kanwar, *States, firms, and oil*.

exceed the price in effect for the equivalent US crude³³. When prices began to rise in America, another indexing clause ensured that Middle East contract prices should move in line with future Texas prices³⁴, thus allowing for short-term adjustments. However, as long as each company was free to set its own independent dollar value for the delivered crude, the North American yardstick became just a relative orientation. Even in cases where contracts accepted the absolute benchmark of Gulf of Mexico–Texas prices as often happened with Anglo-Iranian-BP contractual arrangements³⁵, the freight charges were estimated on a real-travel basis, rather than as fictitious distance costs, which opened the way for charging different prices at different destinations.

Out of this singular context grew a fresh reflection on pricing. The point stemmed from the negotiations for the admission of Jersey Standard-Exxon and Socony-Mobil into the Saudi Arabian concession. A general agreement stipulated the division of the stock in the joint exploration subsidiary, Aramco,

³³ *Crude oil sales agreement between Compagnie Française des Pétroles and Pantaptec Oil Company of Venezuela*, 26 October 1946, [NARA], RUSFAA, Executive Secretariat #209, Correspondence to and from oil companies - Gulf and Esso, Box 2.

³⁴ *Crude oil sales agreement between Caltex Oceanic Limited and Comitato Italiano Petroli Ufficio Rifornimenti*, 31 October 1947, [NARA], RUSFAA, Executive Secretariat #209, Correspondence to and from oil companies - Caltex, Box 1.

³⁵ *Letter Anglo Iranian to Norsk Braendseloljg*, 28 February 1947, BPA – Norsk, file 77416; *Oil prices in India-Report Bombay*, 2 February 1969, [BPA], Correspondence files, file 138989.

into 30% shares allocated to both of the initial stockholders, Standard of California-Chevron and Texaco, plus 30% to Jersey Standard-Exxon and 10% to Socony-Mobil, the new stockholders. In the second quarter of 1947, the debate took a new turn and centred on finding a mutually satisfactory price for Aramco crude.

In starkest terms, the discussion revolved around the price that each partner should pay for the offtake crude acquired in proportion with the respective capital stock in Aramco. Under such circumstances, it was no wonder that the minority shareholders, with constraints on their initial offtakes (e.g. Jersey Standard-Exxon and Socony-Mobil), would rationally bet on the proposed upper band to squeeze the maximum profit out of total sales³⁶. However, strategic interests beyond those short-term objectives impaired the talks and resulted in entrenched positions. The clash was shortened by the proposition of two pricing formulas: cost-plus and netback price.

Standard of California-Chevron and Texaco, grouped into the Caltex joint venture to heighten the common interest in Aramco exports, supported the advantages of a cost-plus formula. Cost included the expense of operations, royalties, the cash required for working capital, capital investments, taxes and payments, dividends to stakeholders, and exceptional expenditures incurred by the Saudi Arabian government. Therefore, Caltex recommended the price

³⁶ On the weight of these financial issues, see Anderson, *Aramco, The United States*, 183; 202-203.

of \$1.02/bbl for Arabian crude—a value that heightened the sales in expanding markets and that could undercut competition from the other companies in Europe while simultaneously ‘permitting shipments to the USA without loss against competition from South America’³⁷. Hence, if \$1.02/bbl ensured a very competitive price throughout the Eastern hemisphere,³⁸ it was because the price was designed to compete with production costs in more distant markets: it reached North America and swept Europe.

The standpoints of Jersey Standard-Exxon and Socony-Mobil varied sharply. Far-reaching competitive prices could only push Saudi Arabian oil into competing with their Venezuelan subsidiaries in Western hemisphere markets, hurting the companies’ outlets. As stated by its opponents, ‘Jersey is undoubtedly interested in continuing to move products to Europe from the Caribbean.’³⁹ An earmarked and non-competitive price for Saudi oil was needed in the sense of (i) only attaining markets in the nearby area of the Mediterranean (a high crude price could cope with short distance travel costs)

³⁷ *Letter California Texas Oil Co., Ltd., New York*, 13 June 1947, MCUSFP-HBSCMC, Appendix to part 7, 191-192.

³⁸ The \$1.02 bbl suggested by Caltex for Saudi prices faced the \$1.40-\$1.48. bbl range from Iraqi and Iranian sources of output as adopted by Jersey, Socony, Shell and Anglo-Iranian. *Memorandum, 25 June 1947*, MCUSFP-HBSCMC, Appendix to part 7, 192-193.

³⁹ *Correspondence, T.L. Lenzen to R.C. Follis*, 27 May 1948, MCUSFP-HBSCMC, Appendix to part 7, 274-276.

and (ii) enabling moderate market share growth. The proper manner of having this both ways was to devise a target price defined at the destination rather than the origin. Jersey Standard-Exxon and Socony-Mobil suggested the dollar value of approximately \$1.48/bbl designed to match the price of similar quality crude from Venezuela (Jusepin) delivered to the South of France⁴⁰. In this manner, French consumers received the same price but from different geographical sources. More importantly, the Arabian crude price was set to equalize the incumbent competitor at the place of destination. To arrive at the estimate of \$1.48/bbl for Saudi Arabian light crude entailed summing the price of Maracaibo crude in Venezuela with the travel costs to the final destination (in this case Maracaibo-Bordeaux) and then subtracting the transport costs from Saudi Arabia (Ras Tanura) to Bordeaux. The final result expressed the netback price of Arabian crude in relation to the Southern Mediterranean. It ascertained how crude oil should be priced free on board (fob) at the Saudi shipping port of Ras Tanura in order to equalize the customs, insurance, and freight (cif) price of Venezuelan crude at the Bordeaux destination. As a mirror-price, the netback reflected the difference in transportation and production costs for a benchmark commodity. The formula couched the encirclement of

⁴⁰ *Correspondence Standard Oil Export Corp., E. Soubry to S.P. Coleman, March 1947, MCUSFP-HBSMC, Appendix to part 7, 177-180.*

the Arabian competitive boundary within the Mediterranean, leaving the more distant North European markets to alternative (Caribbean) suppliers.

At the critical juncture of 1947, the choices were clear: Aramco could opt for either a cost-plus regional price (totally independent of the Gulf of Mexico and Caribbean quotations) or a global price calibrated by the costs of the other exporting regions. As long as Caribbean prices remained indexed to US-Mexican Gulf prices, the netback method would pave the way for a return to a global petroleum pricing system that once again revolved around the Western hemisphere. In contrast, the acceptance of the cost-plus formula would contribute to cementing an independent basing point for transactions in the Middle East.

The fringe multinationals grouped in Caltex (Standard of California-Chevron and Texaco), which are dependent upon the Saudi concession for building and consolidating a distribution network, strove for a competitive cost-plus pricing strategy relatively independent of world prices. In contrast, the core sisters, Jersey Standard-Exxon and Socony-Mobil, attempted to preserve the equilibrium that was fairly attained and to defend world price stability through netback equalizing formulas interlinked with the global yardstick of Gulf of Mexico prices. As avowed by a Socony executive director, a higher Saudi price

could 'lead to the stabilization of the world price by preventing oil from being offered on the market'⁴¹.

In the end, the Aramco Committee decided against Jersey Standard-Exxon and Socony-Mobil. With the victory of the cost-plus formula, Arabian crude was bought by shareholding companies towards the lower limit of the price range: \$1.02/bbl. The outcome represented a green light for the expansion plans of Caltex in Europe⁴² and a potential breach in the collusion around non-competitive prices.

However, this corporate separation was partially circumvented. Surprisingly, a win-win solution was devised, which led to the compromise of a double-pricing system: while Aramco's transfer sales to multinational subsidiaries continued to be carried on a cost-plus basis, their official sales to non-subsidiaries started being held on a netback basis.

Taking advantage of a steady increase in oil prices, which spread from Texas to the Middle East during the second half of 1947, Aramco kept the low price for offtake crude acquired by shareholders, but raised the official market price in line with other competitors. By the close of that year, the gap between

⁴¹ Socony-Mobil executive board statement quoted in *Multinational Oil Corporations and U.S. Foreign Policy - Report together with individual views, to the Committee on Foreign Relations by the Subcommittee on Multinational Corporations* (Washington, 1975), 34.

⁴² Caltex, Freight absorption on ECA financed products originating in the Persian Gulf, 5-7, [NARA], RUSFAA, Arab Oil Litigation #42, Freight Documents from Caltex, Box 1.

transfer prices and market prices had widened to such an extent that a clear-cut double-pricing policy had come into effect: Caltex and Socony-Mobil sold their stocks of Arabian crude at \$1.29/bbl and sometimes \$1.57/bbl while the subsidiary Aramco had moved steadfastly to the upper plateau of the market at \$2.22/bbl, which was also the running price for the Anglo-Iranian-BP competitor⁴³. Overall, there was one concessionary company with four shareholders and two prices: the official price recognized by the oil business community, and the private transfer price (kept secret between the shareholders and their affiliates), which allowed for more competitive sales.

The massive investments required to build a new pipeline to the Mediterranean and the expansion of local refinery facilities pressed Aramco to raise the transfer price to \$1.30/bbl (January 1948) and \$1.43/bbl (June 1948)—a value deemed to be ‘a fair measure of the market value of Arabian crude at *Ras Tanura* for import into the United States’⁴⁴. By this time, the official price of Saudi light crude had fallen back to \$2.03/bbl due to the Caltex initiative (May 1948)⁴⁵.

⁴³ *Statistical Data Total Shipments to France and Italy 1947-1948*, [NARA], RUSFAA, Deputy Director for Management - Price Branch #NDD917756, Subject files-oil reports, Box 1.

⁴⁴ *Correspondence*, S. P. Coleman to J. W. Connolly, 19 July 1948, MCUSFP-HBSCM, Appendix to part 7, 278-279.

⁴⁵ Painter, *Oil and the Marshall Plan*, 364

Netback Prices and the Marshall Plan

Between April 1948 and December 1951, millions of tons of economic aid arrived in Europe under the Marshall Plan. The task of economic reconstruction involved the extensive procurement of food, raw materials, consumer goods, equipment and fuels. Among the commodities dispatched, oil held the leading position, accounting for 10% of the total economic aid. At a time of hard currency shortages, the Plan provided the dollar's that European countries needed and the dollar's that US companies needed. All purchases had to comply with tight rules regarding contracts and pricing, plus the accounting controls set forth by Marshall Plan agencies and additional scrutiny exercised by US Senators. Such preventive supervision eased the control of undesired side effects of the European Recovery Program—corruption, bribery, influence peddling and black marketeering—and became the hallmark of the Assistance program⁴⁶.

Despite the straightforward legal directives established for the independent agency (the European Cooperation Administration - ECA), its director soon

⁴⁶ Barry Machado, *In Search of a Usable Past: The Marshall Plan and Postwar Reconstruction*

Today (Lexington-Virginia, 2007), 41-47; Barry Eichengreen, *Lessons from the Marshall Plan*,

World Development Report, April 2010. available at: <

<http://documents.worldbank.org/curated/en/907961468155715855/pdf/620420WP0Lesso0BOX0361475B00PUBLIC0.pdf> > (accessed 20 May 2015).

realized that petroleum supply was one of the most difficult issues to solve. The legal framework compelled the ECA to guarantee the procurement of petroleum and petroleum products 'from sources outside the United States', at a price not higher 'than the market price prevailing in the United States at the time of purchase' and also not surpassing 'the price regularly charged by the supplier company in comparable transactions with other customers'⁴⁷. These guidelines raised several practical problems. From the outset, American companies requested relief from the uniform pricing rule that was stipulated for exports, stressing that they were charging 'different prices in comparable transactions'⁴⁸. In view of the urgent situation in Europe, the ECA's management had no other option than to temporarily grant the companies a waiver on this requirement. The decision, however, left the ECA on a razor's edge: it could not take the price set by each multinational for granted, nor could it act as a price setting agency and issue reference values for oil (a legal restraint set by Congress). Torn between accepting declared commercial prices and fixing prices, the Marshall Plan agency had to carve out some middle ground and devise new operational criteria for consistently allocating oil purchases.

⁴⁷ Hull, *History of ECA Pricing policy*, July 25 1950, 4-7.

⁴⁸ H.P. Morrison, *ECA and MSA relations with oil companies concerning petroleum prices*, 13 August 1952, [NARA], RUSFAA, Arab Oil Litigation #43 Freight documents, Box 1.

In keeping with the strategy to recruit experts directly involved in specialized business areas⁴⁹, Walter Levy was appointed and invited to come up with a solution. His track record of collaboration with state agencies, in particular the petroleum sections of the US Office of Strategic Services and the State Department, plus his private business experience at Socony-Mobil, made him a respected figure in oil-trading circles. His vision of post war development fostered by free-initiative, big business and private investment in the Middle East was strikingly at odds not only with some of the statist New Dealer visions but also with the strong anti-monopolistic stands that held significant sway in the early years of the Truman administration⁵⁰. To some extent, Levy's appointment as consultant was in itself a counterweight to the trustbusters and an attempt to resume dialogue with oil interests. At the ECA's request, Levy wrote a memorandum on petroleum export prices. Delivered in May 1948, this document opened the way for the full-time appointment of the external consultant as head of the ECA petroleum department. The nomination broke

⁴⁹ Michael J. Hogan. *The Marshall Plan: America, Britain and the Reconstruction of Western Europe, 1947-1952* (New York, 1987), 137.

⁵⁰ Nathan J. Citino., "Internationalist Oilmen, the Middle East, and the Remaking of American Liberalism, 1945–1953," *Business History Review* 84 (2010): 227–251; Walter Isaacson, Evan Thomas. *The Wise Men: Six friends and the world they made* (New York, 2013 [1986]), 6th edition, 419-438; Truman Library Oral History, Clark Clifford 1945-1950 interview, available at: <<http://www.trumanlibrary.org/oralhist/cliford1.htm> >, (accessed 1 June 2015).

new ground in the search for a solution, not least because it foreclosed the ECA's efforts to flatten oil prices.

To surmount all institutional constraints, Walter Levy envisaged a double strategy: in the short term, the agency should streamline Marshall Plan procurements under the minimal rule of netback prices, thereby accepting the Jersey Standard-Exxon viewpoint in the debate with Caltex. The pricing alternative based on the cost of production was side-lined "... because it would lead to a variation of the landed cost of different source oil in the importing country, with unpredictable repercussion on the competitive position of the various marketers"⁵¹. Contrariwise, price equalization at the destination could preserve the structure of global pricing, uphold the Mexican Gulf-Caribbean area as the reference basepoint and guarantee sufficient returns on company investments. Most importantly, the netback pricing formula provided the necessary business latitude for determining prices, which enhanced the ECA's monitoring and regulating roles. In the medium term, Walter Levy foresaw the danger of pricing formulas geared by monopolies, and consequently added a second remark calling for deeper negotiations with the companies 'in order to establish a competitive price'⁵².

⁵¹ Walter Levy, *Memorandum on export prices for petroleum*, 19 May 1948, UW-AHC, Walter J. Lewis papers, Box 21, file 5.

⁵² Hull, *History of ECA Pricing Policy*, 25 July 1950, 3-6; Citino, *Internationalist Oilmen*, 227–251.

The criteria suited the viewpoints of the core globalized multinationals as they received dollars for sales to Europe (all companies except British Anglo-Iranian-BP benefited from Marshall Plan funds). A few weeks after the submission of Levy's memorandum, Eugene Holman, Jersey-Exxon's president, announced to the press his commitment towards netback prices with Caribbean oil as the key basing point. Jersey-Exxon effectively pledged to ascertain the free on board (f.o.b.) Persian Gulf oil price to meet competition from Venezuelan oil in Northern Europe, where its main distribution centre, the Fawley Refinery in Southampton, Britain, was located⁵³. The main emphasis was placed on disclosing the rationale behind oil prices. Holman's statement underpinned Jersey-Exxon's engagement in standardized prices, prices equalized with alternative sources of supply and 'prices arrived at independently'⁵⁴. The key purpose was to reply to the crossfire unleashed in the Senate and in Congress⁵⁵. In all likelihood, Jersey-Exxon knew that the netback justification was eligible for endorsement by the Marshall Plan agency and, therefore, the time was ripe for a public rejoinder. Transparent prices

⁵³. *Correspondence Eugene Holman to Senator Joseph C. O'Mahoney*, 1 July 1948, [NARA], RUSFAA, Executive Secretariat #209, Correspondence to and from oil companies - Gulf and Esso, Box 2.

⁵⁴ Holman to Mahoney, 1 July 1948, [NARA].

⁵⁵ Henrietta M. Larson, Evelyn H. Knowlton, Charles S. Popple, *New Horizons: History of Standard Oil Company (New Jersey) 1927- 1950* (New York, 1971), 672; 681-682.

became a trump card. In fact, in the ensuing months, the ECA concurred with the view that Jersey-Exxon's netback pricing formula could be 'qualified as a competitive price'⁵⁶. In the end, the Lewis–Holman line-up proved mutually beneficial: the pricing dilemma had been solved.

Although less affected, the foreign oil companies, Anglo-Iranian/BP and Dutch Shell, also praised the clarification. The 'Holman policy' not only assured a return for Middle East crudes in 'those Mediterranean markets nearer the Persian Gulf'⁵⁷ but also stalled the globalized competition whose '...first effect would be to produce an unnatural demand from oil coming from the cheapest source' so that the 'surplus from this source would rapidly become exhausted ... leading to wholly unstable conditions ... and ultimately to the shutdown of all producing companies other than those with the lowest cost'⁵⁸. For European eyes, what seemed most bizarre was the very hypothesis of a competitive tide sweeping across the globe.

Caltex was much less convinced about the fairness of netback pricing. Again and again, the Standard of California-Chevron and Texaco joint venture questioned what they dubbed a 'rigid system of price fixing by arbitrary

⁵⁶ Hull, *History of ECA Pricing policy*, 8.

⁵⁷ W.D. Brown, *Middle East crude oil prices, explanatory notes in regard to the Controversy with ECA-USA*, 1 September 1952, [BPA], Subject files - History of BP, file 115920.

⁵⁸ *Memorandum on World Pricing*, 24 September 1952, [BPA], Subject files - History of BP, file 115920.

formulae⁵⁹. Challenging the ECA's declarations, these companies held that the approved rules ran against the very nature of competition in which oil prices draw upon differential allowances to enable the supplier to adapt to competition, irrespective of its proximity to various markets. Caltex stressed that price allocation should always rest with private initiative: 'the netback formula is not a price: a netback is merely a figure which results if the amount of freight allowance or other allowances is deduced from the f.o.b. price'⁶⁰. Forced to play the single f.o.b. price matchup and earn its oil-dollars, Caltex was a persistent deviant force within the petroleum industry.⁶¹

The Shadow of American Netback Prices

In the second semester of 1948, there were plenty of reasons to hold the line on the \$2.03/bbl price for Saudi Arabian 36° API: uniform pricing was becoming a reality; shipments to Europe were picking up pace; core US multinational practices had received validation in the ECA's own pricing rules; British and

⁵⁹ *Correspondence H.M. Herron to Robert Dechert, 24 September 1948, [NARA], RUSFAA, Executive Secretariat #209, Correspondence to and from oil companies - Caltex, Box 1.*

⁶⁰ *Correspondence W.H. Pinckard - California Texas Company to Paul G. Hoffman-ECA Administrator, 5 September 1950, [NARA], RUSFAA, Executive Secretariat #209, Correspondence to and from oil companies - Caltex, Box 1.*

⁶¹ *Correspondence Pinckard to Hoffman, 5 September 1950, [NARA].*

British–Dutch oil companies were striving to maintain parallel Iraq and Kuwait marketing prices; and, most importantly, ‘US taxpayer dollar’ expenditure was now justified by the application of a formula, a rationale and a ceiling price. Generally, the Marshall Plan foundations seemed sound and robust. Nevertheless, the entire architecture would soon be shattered through its own backdoor with the onset of US petroleum imports.

When the Persian Gulf surplus became large enough to flow into North America, a second equalization point surfaced. Middle Eastern crude had to be priced at a level that also enabled it to compete on the US East Coast. This figure was necessarily below the original North European netback price, which drove a new cycle of price asymmetries. Henceforth, all companies stuck to the official ECA-financed prices of \$2.03, \$1.97 and \$2.76/bbl for the Arabian, Kuwait and Iraq crudes, respectively, which were exported to Europe⁶². However, they simultaneously charged \$1.43, \$1.30 and \$1.75/bbl, respectively, for similar shipments, which were accounted for as intra-company transactions, directed to the US East Coast.⁶³ As long as these transactions were not subject to arm’s length bargaining, they could remain undisclosed and

⁶² *Crude prices April 1948- February 1949*, [NARA], RUSFAA, Executive Secretariat #209, Correspondence to and from oil companies - Gulf and Esso, Box 2.

⁶³ *Correspondence Paul Hoffman to Walter Faust director Socony company, 14 February 1949; Correspondence Walter Faust to William C. Foster, January 29 1951*, [NARA], RUSFAA, Executive Secretariat #209, Correspondence to and from oil companies - Socony, Box 3.

under the seal of commercial secrecy. But keeping such a conspicuous trade flow concealed for a long time proved difficult. Oil company declarations to US Customs left a track record that could not be erased and, through them, the ECA took notice of the shadow prices charged for Middle East exports⁶⁴. This discovery sent shockwaves throughout America. In hindsight, the debate about netback prices appeared merely as a cover for overcharging the European aid program while the companies pursued a policy of competitive transfer pricing in corporate business dealings with the United States. Homeland discontent again mounted in many quarters, spearheaded by organizations representing independent oil companies. The annual meeting of independent producers approved a resolution stating that the ‘... ECA program is subsidizing with American taxpayer money a few private concerns permitting them to dump surplus oil into America ... Information as to the future plans makes it increasingly clear that the program threatens to make serious inroads upon the domestic petroleum industry’⁶⁵. Price equalization at European levels backfired on price equalization at the US Gulf level, opening up one more front against the majors.

⁶⁴ P. Brooks, *The realized price*, 2 June 1954, [NARA], RUSFAA, Arab Oil Litigation #43 Freight documents, Box 1.

⁶⁵ *Resolution on the ECA Program adopted at the annual meeting of the Independent Petroleum Association of America, 3-4 October 1949*, [NARA], RUSFAA, Petroleum Branch-subject files #UD 734, Socony – Standard Oil, box.7.

Forced onto the defensive, the web of organizations woven around Middle East oil went to great lengths to justify the current state of affairs: oil companies reassured the public that such shipments were sporadic and temporary, only ‘designed to meet crude shortages in the US’⁶⁶.

Walter Levy subscribed to this temporary thesis wrapping it in a sophisticated theory of pendulous prices. Middle East petroleum inroads into the U.S. market were justified as the result of an abnormal overproduction cycle: according to the theory, after demand softened unexpectedly in 1948, the surplus pushed for a “low” phase in which the Persian Gulf crude “naturally” reached the more distant and higher priced U.S. market. Overall, oil prices tended to fluctuate “between a high that will be a price which will just permit Western Hemisphere crude oil to be shipped to western Europe and a low which will just permit Middle east crude oil to move into the western Hemisphere” ⁶⁷. We return further ahead to this pendulous theory, customized by the Jersey-Exxon and Socony explanations⁶⁸. For the moment, the core point stems from the

⁶⁶ *Correspondence Paul Green ECA controller to W.H. Pinckard- California Texas Company*, 12 August 1950, [NARA], RUSFAA, Petroleum Branch-subject files #UD 734, Correspondence to oil companies, box 1.

⁶⁷ Walter J. Levy, *The Role of American Petroleum in the World, Address to the National Petroleum Council*, 25 October 1949, [NARA], RUSFAA, Petroleum Branch-subject files #UD 734, Socony–Standard Oil, box.7.

⁶⁸ Morrison, ECA and MSA relations with oil companies, 9.

concomitant appearance of an alternative standpoint inside the ECA that urged for an unyielding stance on pricing. This represented a challenge to the pro-business arguments of Walter Lewis. The opportunity arose in March 1949, when the ECA appointed a group of five consultants with the mission of determining whether to retain the netback price formula system.

One of the consultants, George W. Stocking, Dean of Economics at the Vanderbilt University, presented the group's recommendations regarding the cessation of the "formula based on European needs of Western Hemisphere oil"⁶⁹, but moved later far beyond this conclusion to stress the need for a cost plus formula and the fairness of the \$1.34 /bbl competitive price for 36° API crude Ras Tanura⁷⁰. The agency's administration preferred instead to support a reach out strategy and search for voluntary price adjustments with the companies.

All endeavours resulted in greater pressure upon the oil majors to close the gap between the intra-company transfer prices and the official ECA-financed prices⁷¹. In February 1949, Paul Hoffman, the agency's director, advised companies that the price charged for Middle East crude oil sales to the United

⁶⁹ Morrison, *ECA and MSA relations with oil companies*, 9.

⁷⁰ *Correspondence Glenn H. Craig to Richard Bissel, Memorandum dated 10 September 1949, 28 September 1949; George W. Stocking, The pricing of Middle Est oil, 10 September 1949, [NARA], RUSFAA, Petroleum Branch-subject files #UD 734, Commodities oil reports Box 1.*

⁷¹ Frank, *Crude oil prices in the Middle East*, pp. 36-60.

Sates had an important bearing on determining the competitive market price, and requested a global re-examination of this issue. The reactions were contradictory with Jersey Standard-Exxon and Caltex blatantly refusing any decline in the netback price of \$2.03/bbl, while Socony-Mobil agreed to think the issue over. The unprecedented backing of higher prices by Caltex should be understood in the context of the enhanced commercial flexibility, which was secured by the company in the meantime. Indeed, this commitment reflected the willingness to maintain the equilibrium between the \$2.03/bbl official price, which was valid for ECA shipments and for Aramco sales, and the shadow \$1.43/bbl price, which was effective for intra-company transfers. Once the double-pricing arrangement was in force, there were no reasons to give up on the dollars earmarked for the European assistance program.

The Gulf Oil attitude was even more surprising. Retracting from parallel pricing, Gulf Oil broke with the oligopolistic consent and yielded two price reductions: the first was 15 cents in April 1949; the second was 13 cents in July 1949. With the downward adjustment of official Kuwait crude 31^o API oil prices to \$1.75/bbl, all majors were compelled to follow suit and pushed the marker for crude, Saudi light, to \$1.71/bbl.

Gulf Oil's historical deviation in pricing best illustrates the prevalence of corporate self-interests over collusive practices and invariably stands out as the utmost deviant firm, at least in potential terms. In contrast with its other 'sisters', the company explored the fastest growing oilfields in the Middle East,

supplied the residual demand for crude and petroleum products in Europe (i.e. the available portion of market demand not supplied by other firms in the market), and met the core demand for crude in the United States where it operated a highly integrated business based on its East Texas oilfields⁷². For these reasons, Gulf Oil would only marginally be affected by any possible change in the ECA pricing policy while enjoying the freedom to replace European sales for American sales. Although the European markets had only a marginal bearing upon Gulf Oil's overseas exports, they also had more transactions with independent refining companies rather than with their own affiliates⁷³, and made use of official crude prices rather than transfer prices⁷⁴. The company was ranked as the top Middle East oil exporter to the United States at the time, with a 41% share of total crude invoices⁷⁵. The Kuwait concession held by Gulf Oil (in joint partnership with Anglo-Iranian-BP) was not held back by any restrictive offtake clause similar to those found in Iraq or Saudi Arabia; therefore, the concessionaires were entirely free to lift unlimited quantities of crude oil at cost. Similarly, the concentration of the whole

⁷² John G. McLean and Robert W. Haigh. *The Growth of Integrated Oil Companies* (Boston, 1954).

⁷³ Sidney A. Swensrud, *Gulf Oil-the first fifty years, 1901-1951* (New York, 1951), 23.

⁷⁴ *Correspondence Petroleum attaché in the U.K. to the Chief of the Petroleum Staff*, 20 August 1954, FRUS 1952-54, Vol. 9, 847-850.

⁷⁵ *Middle East shipments to the U.S., October 1949-September 1950*, [NARA], RUSFAA, Executive Secretariat #209, Correspondence to and from oil companies - Gulf and Esso, Box 2.

exploration operation into the single giant Burgan oilfield enhanced productivity and rapid production growth. In every aspect of market heterogeneity, Gulf Oil stood out as one of a kind. If the company acted swiftly to break the collusive chain, siding conspicuously with the ECA authorities⁷⁶, this stemmed from its willingness to favour further inroads into the US market to absorb the swelling Kuwait production without any rebound effect on the profits earned in Europe. Additionally, Gulf Oil was quite sensitive to the mood of American political circles and public opinion, and was unwilling to jeopardize its US business. Because the company was the supplier for the residual demand in the ECA's incumbent European market, it was also positioned to overturn the rules of the game and achieve its own ends.

Ironically, all efforts to objectify a pricing policy by grounding decisions on formulas ended up in prices being set by successive calibrations and negotiations. From the viewpoint of the authorities, while the \$2.03/bbl ceiling rested upon a system of logic (the main trade flows to Europe) and a principle of equity (netback equalization), the \$1.75/bbl Gulf Oil price was simply a 'token reduction'⁷⁷ imposed by the circumstances. In terms of straightforward norms,

⁷⁶ Besides the debate with the ECA, there were further intercompany misunderstandings between Caltex and Gulf Oil as to the price to be charged in Europe. W.D. Brown, *Course of the Middle East oil prices*, 15 April 1959, [BPA].

⁷⁷ *Pricing Middle East Oil, correspondence George W. Stocking to Walter J. Levy*, 6 October 1949, [NARA], RUSFAA, Petroleum Branch-subject files #UD 734, Commodities oil reports, Box 1.

the ECA was now back where it had started and had little margin to challenge the new plateau for official crude oil prices, which endured until July 1953.⁷⁸

The scope for fixing a global and interconnected price for crude was partially misunderstood by contemporary oilmen. The anchor of the world system, the Texas–Caribbean price, proved deeply stable after 1948. In contrast, freight tanker rates imparted growing volatility to the final prices. This was something both new and unexpected because standard fixed rates had remained the norm for over a decade. During World War II, governments had been compelled to requisition tankers from the major private oil companies, conceiving a uniform system based upon equal treatment: after allowing for port costs, bunker costs and canal expenses, the net daily revenue was the same for all voyages regardless of departure and destination⁷⁹. These tanker voyage schedules remained in effect until 1948. The rate was identified by the issuing institution acronyms: USMC represented the rates published under the United States Maritime Commission authority; MOT represented the rates published by the British Ministry of Transport.

When government shipping controls ended, an effervescent market developed and the trade soon evolved towards negotiated shipping prices, in terms of USMC or MOT, plus or minus a percentage dictated by supply and demand. A

⁷⁸ *Middle East crude oil prices, statement no. 1-3*, [BPA], Subject files, file 106331.

⁷⁹ Peter Brodie, *Commercial Shipping Handbook*, (New York, 2006), 2nd edition.

specialized information business service soon flourished to report current USMC and MOT market rates for tanker charters along with the number of fixtures, inquiries for prompt vessels placed by oil companies, tonnage in demand and general shipping information: Lincoln Ship Brokerage, Ocean Freight and Brokerage Corporation, SA Long Incorporated or Platt's Oilgram provided the most reputable weekly bulletins. However, this was only the tip of the iceberg.

In contrast with the reports on independent charter vessels, the bulk of deadweight trade was undertaken by company-controlled oil tankers and did not enter the public domain. Under such circumstances, the calculus of netback prices continually raised disputes about the accuracy of the USMC rate selected⁸⁰. Moreover, owing to the different distances to Europe and the US, FOB Middle East prices tended to fluctuate inversely with tanker rates: the higher the tanker rates, the lower the netback price at the shipping port.

To ascertain whether the Eastern and Western hemisphere prices were connected or cut off by the course of events, Figure 1 shows three time-series: (i) the official price of Arabian crude; (ii) the price at which Arabian crude equalized Venezuelan competition in Northern Europe; and (iii) the price suited to equalize US-Texas crude on the New York market. The greater the convergence among the three lines in the graph, the greater the

⁸⁰ The International Petroleum Cartel, 1952, 368.

synchronization of the global pricing system. The estimates draw upon archival data sources from the Caltex Oil Tanker Company, which depicts the lowest haulage freights among the arm's-length subsidiaries⁸¹. Similarly, these figures are closer to ECA assessments⁸².

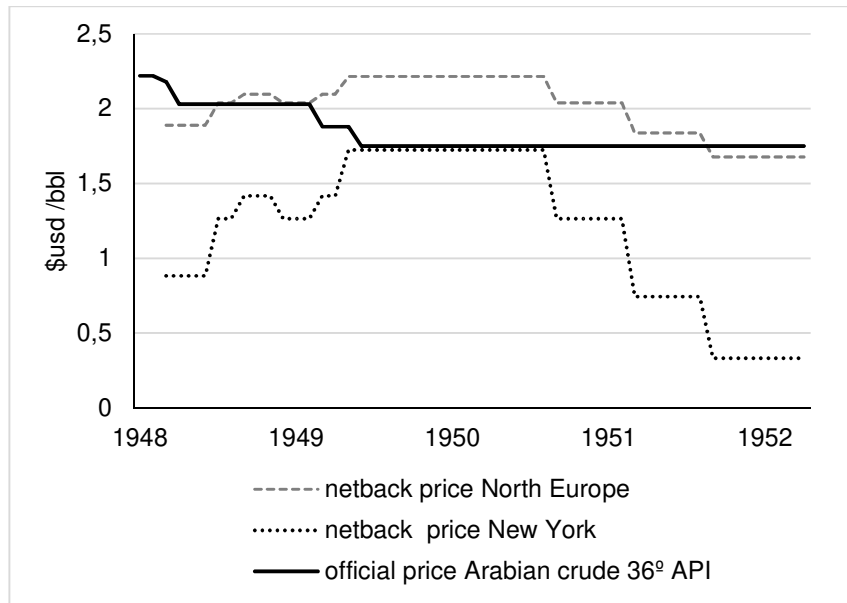


Figure 1
Arabian crude oil: official prices, netback price in Northern Europe and netback prices on the New York market (January 1948 to May 1952) according to Caltex freight rates.

Sources Figure 1: *Platt's Oil Handbook 1947-1953*, Platt, New York; *Petroleum Press Service 1949-1953*; *Bremer Jahrbuch der Weltschifffahrt Bremen World Shipping Yearbook 1952/53 1954/55*, Springer-Verlag Berlin; *Caltex Freight Rates, Jersey Freight Rates*, The National Archives -

⁸¹ Arthur Syran, Harry J. Miller, *Voluntary tanker pool meeting*, 10 January 1951, [NARA], RUSFAA, Arab Oil Litigation #43 Freight documents, Box 1.

⁸² Morrison, *ECA and MSA relations with oil companies concerning petroleum prices*, 12.

Washington, Record of the US Foreign Assistance Agencies, Arab Oil Litigation #43, Freight Documents.

The consecutive overlapping of the dotted and the solid lines conclusively proves that both the Jersey Standard-Exxon endorsement of \$2.03/bbl and the Gulf Oil endorsement of \$1.75/bbl were almost perfect matches with North Europe and North America netbacks through to the last quarter of 1950 at least. The ECA's doubts regarding meaningless prices, which were arrived at by ad-hoc adjustments (e.g. Gulf Oil's voluntary price cuts), were thus ill-founded. The critical juncture of April–July 1949 was a turning point in the history of the world's prices because it shifted the point of equalization from North Europe to the East Coast of the United States. Indeed, given the potential oil reserves in the Persian Gulf, April–July 1949 constituted the breakthrough moment when the Middle East became the central axis of the world petroleum economy. With the official price at \$1.75/bbl, Middle East producers could beat—or at least equal—the competition everywhere. When prices were aligned by the US netback, a new yardstick ultimately emerged. To the best of our knowledge, Paul Frankel, a petroleum economist and consultant, had the foresight to see what was coming. In 1948, Frankel predicted that with exports to the US 'the tendency for only one FOB price level to be effective to all destinations would be inevitable'⁸³.

⁸³ Paul Frankel, Oil forum, quoted in *The International Petroleum Cartel*, 1952, 367.

The above conclusions are based upon efficient tanker freight rates. However, the hypothesis can be tested more accurately. Figure 2 represents the same data but uses a weighted average for the tanker rates. Three groups are considered: Caltex and Royal Dutch-Shell rates returned the most efficient haulage charges; Jersey Standard-Exxon freight rates were taken as indicative of less efficient company-controlled transportation fleets, while the average prices published annually by Platt's Oil Handbook provided a thorough account of the third group of independent long-term charters (i.e. non-company controlled shipping services that constituted a type of spot market for petroleum transportation). Because Platt's data were gathered from ship brokers and tank steamer chartering agents, they comprised only on-the-spot transactions undertaken by decentralized agents and tanker terminal operators⁸⁴. Lastly, the statistical information available on the number of ships in each of these groups was compiled from different sources⁸⁵, and the weights for the Caltex index, the Jersey index and the long-term charter index were made proportional to

⁸⁴ Platt's Oil Handbook 1947-1953, (New York, 1948-1954); ECA Price Branch, *Preliminary report on prices paid in ECA-financed Petroleum Transactions*, October 1949, 13-14, [NARA], RUSFAA, Arab Oil Litigation #43, Freight documents, Box 1.

⁸⁵ *World Tanker Fleet of Aramco Partners, March 1 1948*, MCUSFP-HBPMC, 1975, 17; Bamberg, *The History of the British Petroleum Company*; Howarth and Joost Jonker, *Powering the Hydrocarbon Revolution*.

their total number of ships, which were measured in equivalent standard T2 tankers with 12,000 tons deadweight.

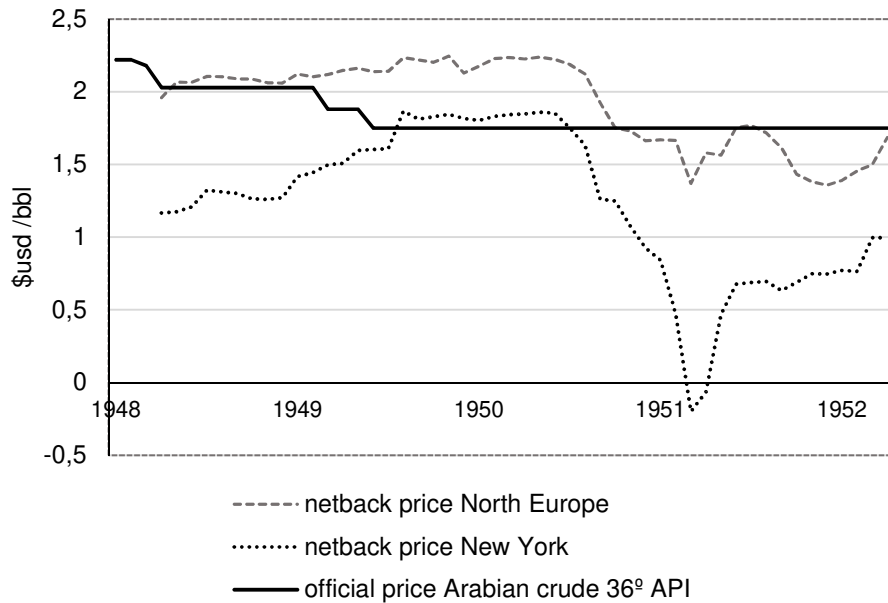


Figure 2
Arabian crude oil: official prices, netback price in Northern Europe and netback price in the New York market (January 1948 to May 1952) using weighted average freight rates.

Sources Figure 2: *Platt's Oil Handbook 1947-1953*, Platt, New York; *Petroleum Press Service 1949-1953*; *Bremer Jahrbuch der Weltschiffahrt Bremen World Shipping Yearbook 1952/53 1954/55*, Springer-Verlag Berlin; *Caltex Freight Rates, Jersey Freight Rates*, The National Archives - Washington, Record of the US Foreign Assistance Agencies, Arab Oil Litigation #43, Freight Documents.

Overall, Figure 2 corroborates the conclusions drawn so far concerning the effective matching of ECA official prices with netback estimates, the turn towards New York equalization and the momentous nature of the \$1.75/bbl crude price adjustment. The contrast between the two graphs was obvious in the collapse of netback prices by the close of 1950, which was caused by the spike in tanker freight rates⁸⁶. After this shortage, the shipbuilding industry witnessed a building boom that paved the way for the first generation of super-tankers⁸⁷. As mentioned earlier, one of the consequences of the inverse relationship between tanker rates and netback prices (the higher the tanker rates, the lower the netback price at the shipping port) was the contraction in the geographical penetration of Middle East crudes. This narrowed its competitive range to Mediterranean and Indian Ocean ports where high transport costs still could be more easily accommodated. As Figure 2 applies a weighted average that also accounts for less efficient tankers, Middle East crude oil was then arriving onto the New York market with a much higher customs insurance freight (c.i.f.) price. Within this framework, the equalization of US crude sank the Persian Gulf prices at their origins to such an extent that exports to the Western hemisphere completely lost their competitive edge.

⁸⁶ *Petroleum Press Service*, 1950-1951.

⁸⁷ Leonard G Fay. *Tanker directory of the world* (London, 1959); Mike Ratcliffe., *Liquid gold ships: a history of the tanker, 1859-1984* (London -New York :1985).

In conclusion, periods of record freight rates associated with wide uncertainty tended to narrow the market inroads of the Middle East crudes. It was this turbulent 'shipping market cycle,'⁸⁸ rather than the pendular motion between low and high crude prices, that ended up determining the market range for Persian Gulf petroleum.

Core Cartel and Deviant Firms

The collapse of the Gulf-plus system, combined with outstanding discoveries of new reservoirs across the Arabic Peninsula and Persia, awoke latent competitive forces within the oligopolistic oil economy. After World War II, business differences regarding global vertical integration, market priorities and Western–Eastern hemisphere competition heightened the fracture between the 'historical core' cartel (Jersey Standard-Exxon and Royal Dutch-Shell), which had diversified investments in supply around the world and thus an interest in pursuing a global pricing strategy, and the group of 'fringe' or 'latecomer' companies (Texaco, Standard of California-Chevron [grouped into Caltex] and Gulf Oil). These latter companies upheld the pricing strategies centred on the Middle East production, where most of their export surplus was

⁸⁸ Stopford, Martin, *Maritime Economics* (Boston, 1988); T.C.E. Cheng et al., *Oil Transport Management* (London, 2013).

located. As a result of successive deviations from dominant collusive behaviour, a new price system surfaced. The first breach came with Caltex's opposition to a global standard, which was grounded on the usage of netback formulas. The netback method hindered competition because it envisaged the equalization of Arabian crude prices in Europe with the prices from Western hemisphere exports, especially Venezuela and the US, where core companies held their grip. To loosen the Gulf of Mexico straitjacket, Caltex insisted on a 'cost-plus' formula, which provided for a low, competitive price for Arabian crude, and thus expanded the independent Eastern hemisphere market. The fringe company represented the newcomer's perspective, which favoured competitive prices set at the origin rather than at the destination, with regional, non-uniform ranges rendered flexible through variable allowances. Ultimately, the crude pricing controversy ended up with the creation of a double-pricing system, based on the official or posted price, and a lower private transfer price set between the shareholding company and their affiliates.

Next, the Gulf-Oil Copernican revolution displaced netback prices from their European equalization axis towards the gravity force of the US market. As mentioned earlier, this was the breakthrough moment when the Middle East became the keystone of the world petroleum economy, beating the competition at destinations all around the world. Therefore, the official \$1.75/bbl price stands as a historical landmark. Certainly, the fact that Caltex was the major Middle East exporter to Europe (and was the ECA supplier), while Gulf Oil was

the major supplier to the United States, were powerful incentives for their misalignments.

A global oil pricing system briefly emerged from this chain of events, interlinking Middle East production centres in the Eastern hemisphere with the American and Caribbean oilfields in the Western hemisphere. Under stable freight tanker rates, this system ensured the global competitiveness of the Persian Gulf petroleum area.

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