

“An Arbitrary Bit of Economic Make-Believe:” Price and the Problem of Abundance in the
Global Oil Industry, 1921-1973*

Gregory Brew

Yale University

Draft Manuscript, Not for Distribution

*Note: This paper is a draft manuscript and represents a work-in-progress. It is based on research that went into my first book project, as well as research conducted in the last six months. I am interested in comments, criticisms, or suggestions pertaining to the article's structure and argument, as both are in states of incompleteness. I would also be interested in comments on the periodization, whether the paper attempts to cover too much ground chronologically as well as substantively, and whether certain sections need to be removed/edited or reduced.

In October 1951, Secretary of State Dean Acheson and Policy Planning director Paul H. Nitze attended a meeting with Iranian prime minister Mohammed Mosaddeq. The seventy-two year-old premier was an idiosyncratic figure—inclined to take meetings in bed dressed in silk pajamas, Mosaddeq often punctuated negotiations with jokes and asides—but the substance of their discussion that day was deadly serious: the future of the global oil economy. Six months earlier, Iran had nationalized its foreign-owned oil industry. Mosaddeq was now threatening to sell oil without the assistance of major Western oil companies, defying the postwar petroleum order and threatening to upend the system of U.S. and British oil concessions throughout the Middle East and Latin America. Acheson and Nitze were there to convince him that Iran needed to work with the companies. The key issue was price. While other oil-producing states like Iraq, Kuwait, and Saudi Arabia received around \$0.70 per barrel, Mosaddeq insisted that Iran had the right to sell at the full “posted price” of Persian Gulf crude, \$1.75 per barrel. After several days of fruitless discussion, Policy Planning director Paul Nitze finally relented, telling Mosaddeq that the posted price was not the “real price,” but a “purely a fictitious price...very little oil moved at \$1.75 a barrel.”¹ The prime minister did not believe this. Why, he asked, would the companies

¹ Memos of Conversation from Memo of Conversation, Memo of Conversation, October 24, October 25, October 29, and October 30, 1951, RG 59 Box 5505A, USNA; *Foreign Relations of the United States, 1952-1954, Vol. X, Iran 1951-1954*, No. 113, Memo of Conversation, October

post such a price as the value of a barrel of crude oil if the oil was not *actually* worth that amount?

Mosaddeq, who was removed two years later through a CIA-assisted *coup d'état*, had uncovered an under-discussed aspect of oil's international political economy—that the value of a barrel of oil was often not what it appeared. Determining what oil was really worth would produce decades of discussion, negotiation, and confrontation between the major Western oil corporations and oil-producing states, often led by Mosaddeq's successor the shah of Iran, culminating in the “oil shocks” of the 1970s when the states of OPEC (The Organization of the Petroleum Exporting Countries) seized control and caused a dramatic increase in prices.² By the end of the twentieth century, the value of oil resulted from a complex combination of factors determined by computerized futures' exchanges, OPEC production decisions, and geopolitical risk factors. The question of oil's value continues to enjoy a pre-eminent position in public discourse, despite the imperatives of climate change threatening to reduce petroleum's significance as a strategic and economic commodity.³ Colloquially, it is the only commodity price that can make headlines whenever it moves up or down.

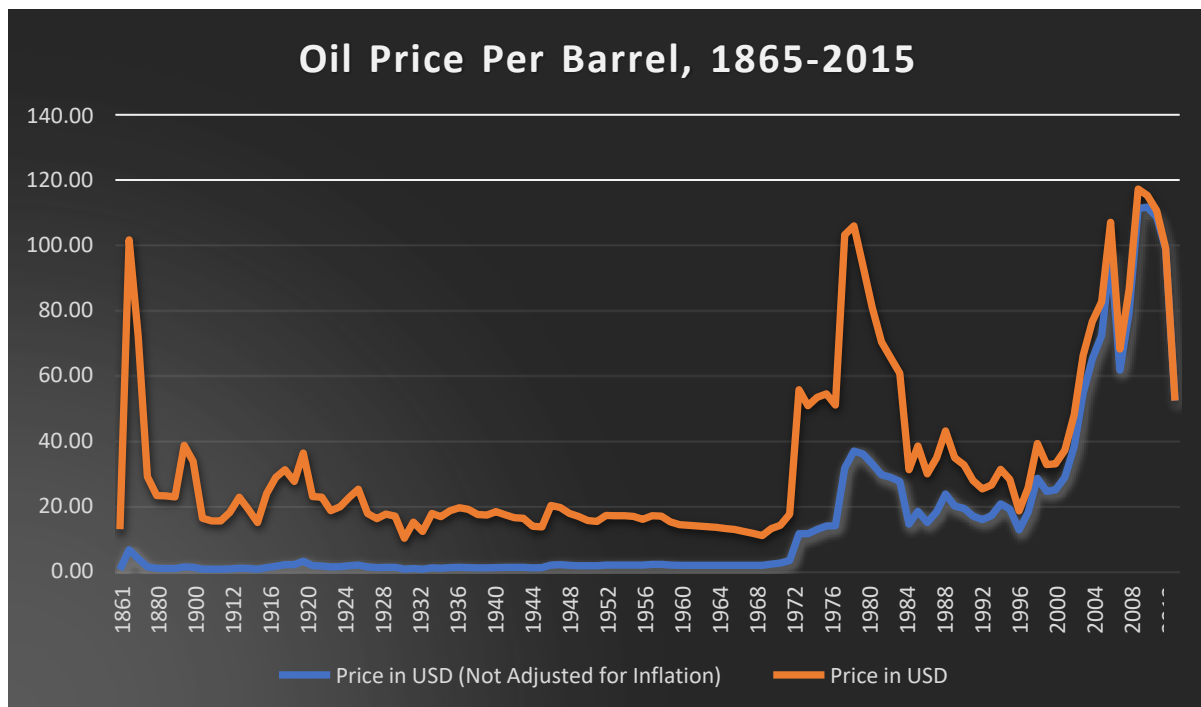
In the historiography of Cold War America, the abundance of “cheap oil” is cited as an important foundation for the economic growth, suburbanization, and social transformations of

15, 1951, No. 117, Memo of Conversation, October 223, 1951, No. 118, Memo of Conversation, October 28, 1951.

² Giuliano Garavini, *The Rise and Fall of OPEC in the Twentieth Century* (New York: Oxford University Press, 2019), 216-253, Rudiger Graf, *Oil and Sovereignty: Petro-Knowledge and Energy Policy in the United States and Western Europe in the 1970s* (New York: Berghahn Books, 2018), 123-202, Meg Jacobs, *Panic at the Pump: The Energy Crisis and the Transformation of American Politics in the 1970s* (New York: Hill and Wang, 2016), Daniel Sargent, *A Superpower Transformed: The Remaking of American Foreign Relations in the 1970s* (New York: Oxford University Press, 2015), 131-164.

³ Robert McNally, *Crude Volatility: The History and the Future of Boom-Bust Oil Prices* (New York: Columbia University Press, 2017), 170-192.

the Bretton-Woods era.⁴ Adjusted for inflation, a barrel of crude oil was approximately \$20 between 1945 and 1970. The consistency of this price, which apart from slight changes in 1945-1948 and 1957 remained virtually unchanged, supported a dramatic increase in the consumption of petroleum products and the proliferation of petroleum-based technologies both in the United States and throughout the Western world, what historian Daniel Yergin called the dawn of “Hydrocarbon Man.”⁵



Control of oil provided the basis for American dominance of the international state system, as American corporations provided access on favorable terms to the oil fields of the Middle East and Latin America.⁶ The importance of oil and fears over losing access fueled a

⁴ Brian C. Black, “Oil for Living: Petroleum and American Conspicuous Consumption,” *The Journal of American History* 99, no. 1 (June 2012): 40-50; Lizabeth Cohen, *A Consumer’s Republic: The Politics of Mass Consumption in Postwar America* (New York: Knopf, 2003),

⁵ Daniel Yergin, *The Prize: the Epic Quest for Oil, Money and Power* (New York: Simon and Schuster, 1991) 523-542.

⁶ David S. Painter, *Oil and the American Century: the Political Economy of U.S. Foreign Oil Policy, 1941-1954* (Baltimore MD: Johns Hopkins University Press, 1986), Simon Bromley,

preoccupation with maintaining control, part of what social scientist Roger Stern has termed “oil scarcity ideology,” and motivated an activist foreign policy that saw the United States intervene repeatedly in the internal affairs of oil-producing states.⁷

Despite the prevalence of oil scarcity ideology in policymaking circles, the period of 1925 to 1973 was characterized by oil’s abundance. It was scarcity of markets, not supply, that was the main issue for Western oil companies and oil-producing states in the Middle East and Latin America.⁸ The oil shocks of the 1970s proved oil’s volatility and the danger that came from high prices, but these events appear divorced from the previous decades’ experience, where industry leaders, policymakers, and the sovereign governments of oil-producing states grappled with prices that appeared too low and supply that threatened to exceed demand, producing instability and sapping oil of its potential value. The partial success to cope with abundance, based upon a system that kept the price of crude oil artificially high yet stable enough to meet corporate, consumer, producer, and U.S. strategic needs left the United States and the international oil industry unprepared for the challenges of the 1970s, when oil suddenly and unexpectedly became more scarce and the terms of its price were set by the states of OPEC rather than in the boardrooms of the oil majors.⁹

The problem of oil’s abundance engaged four distinct groups of actors. First, there was the oil industry, broken into two factions. The first faction, the so-called “majors,” were large

American Hegemony and World Oil: The Industry, the State System, and the World Economy (Cambridge: Polity Press, 1991).

⁷ Roger Stern, “Oil Scarcity Ideology in US Foreign Policy, 1908-97,” *Security Studies* 25, no. 2 (2016): 214-257.

⁸ Peter F. Cowhey, *The Problems of Plenty: Energy Policy and International Politics* (Berkeley, CA: University of California Press, 1985), 1-45.

⁹ Martin Melosi, *Coping with Abundance: Energy and Environment in Industrial America* (Philadelphia, PA: Temple University Press, 1985).

vertically integrated companies that dominated the industry both within the United States and abroad. These large firms were chiefly interested in cooperating with one another to manage supply, stabilize price, and maximize profitability. Among their number were the infamous “Seven Sisters” of Exxon, Socony-Mobil, BP, Gulf, Texaco, Chevron, and Shell, as well as 10-20 other large companies (mostly American).¹⁰ Competing for influence were the “independents,” referred to here as the “domestics,” which were smaller, more numerous, and focused on operations within the United States.¹¹ The third group were oil-producing states who provided access to the majors. While initially weak and divided, producer states gradually exerted themselves through the Organization for Petroleum Exporting Countries (OPEC), asserting sovereign control over production and influence over prices by the end of the 1960s.¹² Finally, the United States government attempted to mediate between all three groups, balancing national security concerns with the needs to maintain access to overseas oil, support the domestic

¹⁰ The literature on the majors is fairly exhaustive. A small sampling of important works includes Edith Penrose, *The Large International Firm in Developing Countries: the International Petroleum Industry* (London: Allen and Unwin, 1968), John Blair, *The Control of Oil* (New York: Pantheon Books, 1976), Neil H. Jacoby, *Multinational Oil: A Study in Industrial Dynamics* (New York: Macmillan, 1974), Anthony Sampson, *The Seven Sisters: The Great Oil Companies and the World They Shaped* (New York: Hodder and Stoughton, 1975), and Robert Engler, *The Politics of Oil: A Study of Private Power and Democratic Directions* (New York: The Macmillan Company, 1961).

¹¹ For consideration of the politics and perspectives of the American independents, see Lawrence Goodwyn, *Texas Oil, American Dreams: A Study of the Texas Independent Producers and Royalty Owners Association* (Austin, TX: Texas State Historical Association, 1996), Joseph A. Pratt, William H. Becker, and William M. McClenahan, *Voice of the Marketplace: A History of the National Petroleum Council* (College Station, TX: Texas A&M Press, 2002), and Darren Dochuk, *Anointed with Oil: How Christianity and Crude Made Modern America* (New York: Basic Books, 2019).

¹² Giuliano Garavini, *The Rise and Fall of OPEC in the Twentieth Century* (New York: Oxford University Press, 2019), Christopher Dietrich, *Oil Revolution: Anticolonial Elites, Sovereign Rights and the Economic Culture of Decolonization* (New York: Cambridge University Press, 2017), Victor McFarland, *Oil Powers: A History of the U.S.-Saudi Alliance* (New York: Columbia Press, 2020).

oil industry, and meet the needs of American consumers so that economic growth and carbon-intensive standards of living could be maintained, all while ostensibly refraining from interfering in the workings of a competitive marketplace.

During the age of oil's abundance, the domestics leveraged political power within the United States. While consumer advocates worried about scarcity and pushed for conservation, the domestics consistently argued through their main organ the Independent Petroleum Association of America (IPAA) that American oil would remain in abundance forever, so long as the proper support was provided—support that would primarily come from keeping the price of American oil high enough to encourage new investment in exploration. By rejecting the scarcity thesis while simultaneously leveraging fears of shortage tied to dependence on imported oil, the domestics pushed for import quotas on the grounds that they would protect national security. What the quotas actually did, however, was preserve a higher domestic crude oil price and limit the majors' access to the domestic oil market. Globally, the majors cooperated to maintain a so-called "posted price" for crude that was artificially inflated, upon which they based revenue sharing with the producing states of OPEC. The result were crude oil prices that floated above what a competitive market would have produced. Eventually, producer states forced the companies to maintain high posted prices through nationalist pressure, while the influence of the domestics declined during the 1960s as political power swung toward consumer groups. During the years of the Nixon Administration, oil's abundance disappeared and the pricing systems collapsed, upending the status quo and ushering in an age of price volatility and uncertainty which has endured into the twenty-first century.

The Origins of Abundance, 1911-1941

The oil industry that emerged in the United States in the late nineteenth century was characterized by small operators, “wildcatters” armed with rudimentary geological knowledge and backed by limited capital. The peculiarities of American law, which stipulated oil belonged not to the owner of the land above it but to whomever drilled it first (the so-called “rule of capture”), compelled producers to drill as quickly as possible. Disorder prevailed until larger corporations, dominated by the Standard Oil trust of John D. Rockefeller, brought most of the domestic industry under their control, allowing production and prices to stabilize. To achieve economies of scale and ensure supply balanced demand, Standard adopted vertical integration, where each constituent part of oil’s lifecycle—from crude oil production to refining, transportation, distribution, and marketing—fell under the influence of a single corporate entity.¹³

Progressive Era reformers condemned Standard on the grounds that it gouged customers and corrupted the system of free enterprise. Ida Tarbell, the journalist who helped to mobilize opposition to Standard, condemned its methods “in restraint of free trade.”¹⁴ In 1911, the U.S. Supreme Court ruled Standard had violated the Sherman Anti-Trust Act and ordered it broken up into thirty-four smaller companies, among them companies that would become Exxon, Chevron, and Socony-Mobil.¹⁵ Despite its unpopularity, Standard’s success at stabilizing a volatile market was acknowledged within the industry, which now divided into vertically integrated “majors,” some of which descended from Rockefeller’s original trust. George Stocking, a professor of

¹³ Yergin, *The Prize*, 3-61.

¹⁴ Ida M. Tarbell, *The History of the Standard Oil Company*, Vol. I (New York: McClure, Philips & Co., 1904), viii.

¹⁵ Originally the Standard Oil Company of New Jersey, Standard Oil Company of California, and Standard Oil Company of New York, respectively.

economics at Dartmouth College, contended that the proliferation of competition produced “such excessive duplication of equipment and sales effort” that the resulting effort “is uneconomical, wasteful, and inefficient.”¹⁶ Large firms that could control oil’s flow from wellhead to market could ensure against waste and keep prices stable, benefitting both customers and producers, and their dominance was preferable to the free-for-all which had prevailed in the days before Standard.

Stocking undertook his study at a time when fears of scarcity dominated discussions of America’s energy future. Geologists deploying inexact techniques had been predicting the depletion of the nation’s oil reserves since the late nineteenth century. Estimates in 1909 predicted the exhaustion of American oil within ten years.¹⁷ Concerned that foreign companies were beating U.S. firms to gain access to overseas deposits, the government urged the majors to secure access to oil overseas so as to avoid potential shortages at home.¹⁸

But within the industry, the debate of the 1920s was not over oil’s shortage, but its persistent abundance. In 1925, the American Petroleum Institute, the major lobbying group for the American oil industry, published a report concluding that there was “no immediate danger” of reserves being depleted, provided prices remained high enough to drive continued investment.¹⁹ “Exhaustion of the world’s supply is a bugaboo,” remarked oilman Harry F.

¹⁶ George W. Stocking, *The Oil Industry and the Competitive System: A Study in Waste* (Houghton Mifflin Company: Boston MA, 1925), 3, 275.

¹⁷ David T. Day, “The Petroleum Resources of the United States,” *Report of the National Conservation Commission*, vol. 3 (Washington DC: Government Printing Office, 1909): 446-64.

¹⁸ Michael Hogan, “Informal Entente: Public Policy and Private Management in Anglo-Asian Petroleum Affairs, 1918-1924,” *The Business History Review* 28, no. 2 (Summer, 1974): 187-205.

¹⁹ American Petroleum Institute, *American Petroleum Supply and Demand* (New York: McGraw Hill, 1925), 3.

Sinclair. “It has no place in practical decisions.”²⁰ Driven by new discoveries inside the United States, which made up more than 60% of global oil production in 1927, output worldwide increased by a considerable margin during the 1920s.²¹ While a brief surge in scarcity fears had driven the per-barrel average to over \$3.00, by 1922 prices in the United States had fallen back to as little as \$1.20, producing fears that a market glut would sap profitability and bring back the volatility of the days before Standard Oil.

Discussions of the glut took on moral dimensions, with Stocking warning that “unrestricted competition” that would produce “waste on a scale sufficiently grand to excite the admiration of the most profligate.”²² The byword for those following Stocking’s advice was “conservation,” a term which came with Progressive *bona fides* and hinted at the widely held fears of shortage that dominated discourse outside the industry. Geologist Everette DeGolyer, who had helped Standard uncover oil fields in eastern Mexico, warned readers of *Finance & Trade* that the trend in the global industry was toward declining production, as available reserves were being depleted too quickly.²³ “The old proverb that haste makes waste,” warned former-Secretary of the Interior Hubert Work in 1928, “is nowhere more evident than in present practices in the production of liquid and gaseous fuels,” where output far exceeded “the demand of essential use.”²⁴ The matter of over-production in the United States was not therefore a question of imminent scarcity but of declining profits and destructive competition due to scarcity

²⁰ *API Bulletin*, December 9, 1921, quoted in Nordhauser, “Origins of Federal Oil Regulation,” 57.

²¹ Federal Trade Commission, *Petroleum Industry: Prices, Profits, and Competition* (December 1927), 11.

²² Stocking, *The Oil Industry and the Competitive System*, 303.

²³ “World Oil Production is Expected to Decline,” *Finance & Trade* Vol. 59, No. 5, March 1926.

²⁴ *The Lamp*, June 1928, “Co-Operate or Legislate: Overproduction of Oil Not a Debatable Issue, Warns Conservation Chairman.”

of markets. Contributors to *The Lamp*, Exxon's official quarterly publication, were frank on this matter. "The inescapable fact is that the oil industry has just so much of a market to supply," went one editorial from December 1928, "too much crude produced means oversupply of products and this results in inadequate returns."²⁵

Facing price wars in overseas markets, the majors chose to cooperate with one another to manage the global flow of oil. Meeting at Achnacarry Castle in Scotland (ostensibly to shoot quail) in September 1928, John Cadman of BP (at the time known as the Anglo-Persian Oil Company), Walter Teagle of Exxon and Henry Deterding of Shell overcame mutual distrust to reach an agreement on restraining global oil production. "Excessive competition has resulted in the tremendous overproduction of today," the agreement stated. Recognizing the "fundamental oversupply" which had affected the industry, the three largest majors agreed to leave market share "as is," while holding down production.²⁶ The majors also agreed to control output from fields in the Middle East through the so-called "Red Line" agreement, formally restricting access in order to manage competition and ensure "orderly production."²⁷

While cartelizing the international market, the majors suggested that falling prices stemmed from the "uneconomic" output of smaller companies operating "stripper" wells that produced less than ten barrels a day. Such accusations were expressed by the majors' lobbying

²⁵ *The Lamp*, December 1928, "If We Are to Have Equilibrium."

²⁶ Pool Association Agreement, September 17, 1928, from Federal Trade Commission (FTC), *The International Petroleum Cartel: Staff Report Submitted to the Subcommittee on Monopoly of the Select Committee on Small Business, United States Senate* (Washington DC: U.S. Government Printing Office, 1952), 200.

²⁷ William Stivers, "A Note on the Red Line Agreement." *Diplomatic History* 7, no. 1 (1983): 23-34, Walter Adams, James W. Brock, and John M. Blair, "Retarding the Development of Iraq's Oil Resources: An Episode in Oleaginous Diplomacy, 1927-1939," *Journal of Economic Issues* 27, no. 1 (1993): 69-93.

arm, led by the American Petroleum Institute (API), founded in 1919.²⁸ In April 1929, API's Committee on World Production and Consumption of Petroleum argued that over-production "through the premature and excessive development of existing fields" was depriving the world of oil's full economic value.²⁹ While the majors were against government regulation on principle, they were open to voluntary programs of pro-rationing, or production control, that would ease the glut by squeezing high-cost stripper wells and smaller domestics out of business.

In June 1929, oil executives and federal officials met in Colorado Springs to discuss policies for bringing production under control. The summit ended in failure, however, with representatives from the domestics refusing to compromise over pro-rationing measures. The domestics left the conference and founded a new organization, the Independent Petroleum Association of America, or IPAA, through which they could articulate their grievances and protect their interests. According to the IPAA, the real cause for over-production was not domestic output—which IPAA President Wirt Franklin noted had fallen short of domestic demand by 30 million barrels in 1928—but waves of imports facilitated by the majors.³⁰ The IPAA grew quickly to include many smaller associations scattered across the oil industries of Texas, Oklahoma, Louisiana, and elsewhere.

The Great Depression saw frantic efforts from both the majors and domestics to preserve favorable access to markets. When Congress convened in 1930, Wirt Franklin of the IPAA lobbied President Hoover personally for a tariff on imported oil worth \$1 per barrel to be included in the Smoot-Hawley tariff bill.³¹ In October a huge new field was discovered in East

²⁸ Engler, *Politics of Oil*, 60.

²⁹ *The Lamp*, April 1929, from American Petroleum Institute, *Petroleum Facts and Figures* (Baltimore, MD: Lord Baltimore Press, 1929): 14.

³⁰ Olien, *Oil and Ideology*, 178-179.

³¹ "Independents Ask Congress for Oil Duty," *Dallas Morning News*, February 5, 1930.

Texas and by 1931 the price of a barrel of Texas crude had fallen from \$1 to \$0.06.³² On August 17, 1931 the governor of Texas declared the oil fields to be “in a state of insurrection” and sent National Guard troops to shut down wells that produced oil in excess of quotas established by the Texas Railroad Commission (TRC), the state pro-ration agency. State violence thus served to limit competition in order to boost prices.³³ The effort was successful, as by 1933 prices in East Texas had rebounded to around \$1.00 per barrel.

The majors continued to blame out-of-control production by undisciplined domestics for the glut. “The fundamental cause of low prices” lay in persistent abundance, while the “fundamental need” was a system “to balance supply with demand,” wrote Humble Oil president and future Exxon chairman W.S. Farish.³⁴ The IPAA, admittedly unprepared for its first foray into Congressional lobbying in 1930, had matured into a more organized lobbying group by 1933, with a monthly newsletter and the lawyer Russell B. Brown of Tulsa, Oklahoma as its official spokesman. Vowing to bring “organized support” from the whole industry to Washington that summer, Brown insisted upon the necessity for protection against imports “produced so cheaply that American labor cannot compete with them.”³⁵ While there were groups within the industry who either supported full federal control of oil production or complete de-regulation, the IPAA advocated for a “middle position” where the Federal government would

³² Yergin, *The Prize*, 229-230.

³³ Matthew Huber, “Enforcing Scarcity: Oil, Violence, and the Making of the Market,” *Annals of the Association of American Geographers* 101, no. 4 (2011): 816-26.

³⁴ W.S. Farish, “What the Oil Industry Needs,” *The Lamp*, Vol. XV, No. 1, June 1932.

³⁵ “Oil Tariff in Special Session of Congress,” Russell B. Brown, *The Independent Petroleum Association of America Monthly*, February 1933.

act as “umpire.” Failure to exert additional control, warned Brown, would result in production “far exceeding demand.”³⁶

Though the majors possessed superior financial resources and market power, as well as support from divisions of the federal government including the State, Commerce, and Interior departments, by the 1940s the IPAA, together with other groups like the Texas Independent Producers and Royalty Owners Association (TIPRO), had succeeded in mobilizing Congressional support for policies that supported their interests. Aiding them was the broad suspicion of “Big Oil” and the cartelistic activities the majors used to protect their market position. In 1941, a Senate investigation found that the majors’ support for pro-rationing had nothing to do with conservation, “since there is no apparent danger of exhausting our crude reserves,” but was instead driven by the desire “to obtain a stabilize price structure to the disadvantage of independents.”³⁷ When the State Department tried to establish an Anglo-American committee where the majors would cooperate to manage global output, IPAA leaders warned of a “super-state cartel” and international management of American commerce. The State Department withdrew the agreement in 1944 and its final ratification failed in 1947 amidst Senate opposition.³⁸

The domestics broadly resisted industry regulations that weren’t related to limiting imports. “The petroleum industry must be on its guard,” wrote IPAA president Frank Buttram in 1941, against any program or law “[used] as a smokescreen under which to force otherwise

³⁶ Committee on Mines and Mining, *Federal Petroleum Act*, Statement of R.B. Brown, General Counsel IPAA, April 16 and 17, 1935, 15.

³⁷ Temporary National Economic Committee, *Investigation of Concentration of Economic Power, Monograph No. 39: Control of the Petroleum Industry by Major Oil Companies* (Washington DC: Government Printing Office, 1941), 18.

³⁸ Painter, *Oil and the American Century*, 67-74

unsupportable outside control upon the industry.”³⁹ Conservation through regulation was challenged by emerging literature on market-based resource management, most notably a landmark 1931 article by economist Harold Hotelling, who argued that increases in price would naturally conserve resources while encouraging the development of more expensive reserves, ensuring abundance in perpetuity—the United States would never run out of oil, so long as the market operated unimpeded.⁴⁰ The domestics nevertheless saw support from state authorities as necessary to preserve a market in which they could compete with the majors. They acquiesced to pro-rationing production through the Texas Railroad Commission, as this preserved a stable crude price within the United States. They focused their attention on the issue of imports, which would indirectly support the TRC and maintain a high domestic oil price. And while issues of waste, conservation, competition, and monopoly had dominated the discussion within the industry in the 1920s and 1930s, by the late 1940s both majors and domestics had adopted the discourse of national security, arguing that the price of oil featured in the protection of the United States from internal and external threats.

The Creation of the Posted Price, 1941-1951

During World War II, the U.S. government concluded that overseas oil would play an oversized role in the postwar economic recovery. A national petroleum strategy drafted in April 1944 suggested a policy of backing the majors in their postwar efforts to increase production, particularly in the Middle East, in order to preserve domestic U.S. oil reserves from being

³⁹ “Let Us—Be Calm, Be Rational, Be Practical,” *The Independent Petroleum Association of America Monthly*, February 1941.

⁴⁰ Harold Hotelling, “The Economics of Exhaustible Resources,” *Journal of Political Economy* 39 (1931): 137-175.

drained.⁴¹ The majors possessed access to large reserves, but the oil was unevenly distributed. Some companies had insufficient markets for their products: AIOC produced 20 million tons from the Abadan refinery in Iran yet could market only 11 million tons.⁴² Rather than compete, in late 1946 the majors agreed to a set of arrangements, long-term purchasing agreements, and concession-sharing deals that ensured close alignment of interests. The agreements transformed the pre-war cartel into an informal oligopoly, with the majors cooperating to restrain production while competing with one another on limited terms for markets.⁴³

Price was the crucial component that allowed the new system to function as needed. Crude from the Persian Gulf, where output increased from 532,000 barrels per day in 1945 to 2.4 million barrels per day in 1953, could be produced at a very low cost: between \$0.10 and \$0.32 per barrel, compared to \$0.30 in Venezuela and \$1.18 in the United States.⁴⁴ Differences in the delivered price of Persian Gulf and Western Hemisphere crude required adjustments in the majors' price formulas.⁴⁵ The final equation produced a price equal to the cost of Gulf of Mexico crude delivered to the East Coast of the United States, roughly \$2.75, minus the freight charge to the Persian Gulf.⁴⁶ In 1950, Socony-Vacuum "posted" the figure of \$1.89, later equalized to \$1.75, as the price of oil departing the Persian Gulf.⁴⁷ Other American companies followed suit.

⁴¹ Michael B. Stoff, *Oil, War, and American Security: The Search for a National Policy on Foreign Oil, 1941-1947* (New Haven, CT: Yale University Press, 1980): 22-33; Painter, *Oil and the American Century*, 32-47.

⁴² BP 72339 "AIOC Policy in Iran," July 22, 1946,

⁴³ Painter, *Oil and the American Century*, 102-110; Yergin, *The Prize*, 392-394.

⁴⁴ Issawi and Yeganeh, *The Economics of Middle East Oil*, 54, 64-65, Leeman, *Price of Middle East Oil*, 89-93, 269.

⁴⁵ Helmut J. Frank, *Crude Oil Prices in the Middle East* (New York: Praeger, 1966), 29-60.

⁴⁶ Frank, *Crude Oil Prices*, 54.

⁴⁷ Nuno Luis Madureira, "Squabbling Sisters: Multinational Companies and Middle East Oil Prices," *Business History Review* 91 (Winter 2017): 686.

By 1951, it was generally believed that oil shipped from Persian Gulf ports was worth \$1.75 per barrel—because that was how much the companies said it was worth.⁴⁸

In reality, the posted price was a fiction of corporate accounting. The majority of oil that moved globally was not sold in commercial transactions, but passed through levels of a single integrated company, moving from affiliate to affiliate, or from one major to another at a discounted price through a long-term contract.⁴⁹ Of the 30 million tons of oil produced in Iran in 1950, for instance, 74% was “purchased” by BP, the owner of the Iranian oil concession, through affiliates, while another 22% went to other majors at a discount.⁵⁰ Experts determined that between 70% and 80% of all global crude oil moved through “imaginary” transactions at the posted price, which was far higher than the market price that prevailed when the majors did business with one another or third parties. Hence the common industry expression: “Only fools or affiliates paid posted price.”⁵¹

The majors were able to do this due to their nature as a production oligopoly that had enough market power to restrain competition.⁵² There were incentives to maintaining consistent prices and avoiding direct competition. One BP report noted that while the company could price Iranian crude lower than the American price quoted for Saudi oil, “there is no advantage to be gained by deliberately undercutting the whole range of prices quoted by competitors.”⁵³

⁴⁸ For an analysis of how the posted price was created and how it functioned, see Wayne A. Leeman, *The Price of Middle East Oil: An Essay in Political Economy* (Ithaca, NY: Cornell University Press, 1962), 142-144, Cowhey, *Problem of Plenty*, 109-110.

⁴⁹ Penrose, Edith. “Vertical Integration with Joint Control of Raw-Material Production: Crude Oil in the Middle East.” *Journal of Development Studies* 1 (April 1965): 251-268.

⁵⁰ BP 28341 AIOC’s Customers, June 19, 1951.

⁵¹ FTC, *Petroleum Cartel Report*, 365.

⁵² Theodore H. Moran, “Managing an Oligopoly of Would-Be Sovereigns: The Dynamics of Joint Control and Self-Control in the International Oil Industry Past, Present and Future,” *International Organization*, 41, no. 4 (Autumn 1987): 576-607.

⁵³ BP 72339 “AIOC Policy” July 22, 1946

Entangled with one another through a system of shared concessions and long-term purchase deals, the majors did not wish to start destructive price wars.

What price Middle East crude would fetch on an unrestricted market was open to debate, though an oil executive later speculated the market price for Saudi oil could have fallen to as little as \$0.90 per barrel, or roughly half the price the U.S. companies posted.⁵⁴ Richard Loftus, petroleum advisor to the State Department, concluded that the market price for Persian Gulf oil shipped to the East Coast was roughly \$1.39/barrel. Persian Gulf oil was overvalued at \$1.75, which meant that incentives for the majors to market Middle East output on the East Coast was “virtually non-existent.”⁵⁵ Orville Harden of Jersey Standard explained to State officials that the deals served Jersey’s larger goal of meeting Eastern Hemisphere demand from Middle East sources, “retaining Western Hemisphere oil exclusively for their Western Hemisphere markets.”⁵⁶ The posted price meant that Middle Eastern oil was competitive in Europe and East Asia, but could not match Eastern Hemisphere suppliers, thus maintaining an equilibrium between the oligopoly’s various hemispheric interests.

With their operations now depending on oil produced overseas, the majors were conscious of the danger posed by resource nationalism and acknowledged the need to improve the terms of their concessions with oil-producing states. This was the case following an agreement between the majors’ affiliate Aramco and the Saudi Arabian government in December 1950, which substituted the previous per-ton royalty with an income tax arrangement that split profits “fifty-fifty.” In December 1951, BP executive Neville Gass broke down the new

⁵⁴ *Multinational Oil Corporations and US Foreign Policy*, Committee on Foreign Relations, US Senate (Washington: 1975), Part 7, 78-80, 82.

⁵⁵ Memo From Loftus to Linder, October 29, 1951, RG 59 Box 5506, USNA.

⁵⁶ Memo of Conversation, December 3, 1946, RG 59 891.6363/1-247, USNA.

arrangement for officials from the World Bank. The utility of the fifty-fifty formula lay in its separation of “producer’s profits” from profits earned on shipping, distribution, and marketing. Crude oil production accounted for the largest part, “perhaps 70%,” of total profits, said Gass. This required an “arbitrary formula” that maintained a consistent price for crude oil in order to ensure that producer states were placated without permitting them a share—and thus an interest—in the rest of the industry.⁵⁷

The shift to the posted price and fifty-fifty concession system came with other benefits. American companies successfully argued that income tax payments constituted a form of double-taxation and therefore qualified for deduction from the domestic tax liability. Taxes paid by the U.S. majors to the United States’ Treasury fell to virtually nothing by the 1960s.⁵⁸ The majors thus erected a system for dividing the profits of oil which rested, in the words of economist Edith Penrose, on an “arbitrary, though convenient, bit of economic make-believe,” one that saved the companies money at the same time.⁵⁹ The use of the posted price and fifty-fifty concession system ensured that a suitable portion of the profits from these operations were directed to local oil-producing states, which all saw concurrent increases in oil revenues, theoretically mollifying resource nationalism and preventing the expropriation of the companies’ assets.⁶⁰

⁵⁷ Notes of a Meeting at AIOC Office, December 4, 1951, Draft Paper, December 15, 1951, Iran—General—Calculations—Correspondence, 1806456, World Bank Group Archives.

⁵⁸ Glenn P. Jenkins and Brian D. Wright, “Taxation of Income of Multinational Corporations: The Case of the United States Petroleum Industry,” *The Review of Economist and Statistics* 47, no. 1 (Feb. 1975): 1-11.

⁵⁹ Edith Penrose, “Middle East Oil: The International Distribution of Profits and Income Taxes,” *Economica* 27, no. 107 (August 1960): 208-209.

⁶⁰ Between 1948 and 1955, earnings from oil increased from \$9 million to \$206 million in Iraq; \$14 million to \$282 million in Kuwait; \$53 million to \$275 million in Saudi Arabia; and \$417 million to \$596 million in Venezuela. See Issawi and Yeganah, *Economics of Middle Eastern Oil*, 129.

Now organized into an oligopoly, the majors linked rising production in the Middle East to markets in Western Europe and Japan, facilitating the rapid economic reconstruction of those areas. The construction of this new arrangement benefitted the majors commercially while also facilitating the economic reconstruction of Western Europe through the Marshall Plan, for which oil deliveries from the oligopoly constituted ten percent of total expenditures.⁶¹ Preserving the oligopoly's dominance thus constituted an important element in U.S. Cold War national security strategy, albeit one that came with domestic political complications, particularly where the domestics were concerned.

The Import Question

While the companies disguised most of their cooperation through unofficial arrangements, they continued to attract criticism within the United States, despite their role within U.S. Cold War policy. A poll conducted by API in 1946 found that most Americans believed the industry to be dominated “by monopolistic groups,” that were engaged in price-fixing and other policies “adverse to the true interests of the American people.”⁶² In 1948, Yale professor Eugene V. Rostow advocated for a new national oil policy based on a “more competitive form of organization.” Rostow called for the majors to be “disintegrated,” as Standard Oil had been in 1911, and for all restrictions on imports to be dropped so that consumers could enjoy access to the cheapest oil.⁶³ That same year, the United States ceased to

⁶¹ David S. Painter, “Oil and the Marshall Plan,” *The Business History Review* 58, no. 3 (Autumn, 1984): 359-383.

⁶² *Cooperatives in the Petroleum Industry, Part One: Observations on the Cooperative Movement* (New York: Petroleum Industry Research Foundation, 1947), 102.

⁶³ Eugene V. Rostow, *A National Policy for the Oil Industry* (New Haven, CT: Yale University Press, 1948), xiii.

be a net exporter of oil. The Senate investigation into the majors spawned a more in-depth investigation by the Federal Trade Commission, which uncovered evidence of the companies' cooperative agreements and subsequent deals to share markets and balance production. The FTC published its report in 1952, prompting Truman's Department of Justice to open a criminal anti-trust case against the five largest U.S. companies.⁶⁴ Concern over safeguarding the majors' position overseas linked to resurgent fears of scarcity at home. In June 1952, President Truman's Materials Policy Commission warned that the nation's stocks of important resources and minerals were being depleted.⁶⁵

The suit came at a time when support for the majors within the U.S. government was very strong. This was partially due to the companies' speedy response to a crisis in Iran, where the government of prime minister Mohammed Mosaddeq nationalized BP's assets in May 1951. Following Mosaddeq's action, the British declared an embargo of Iranian oil exports, which before nationalization accounted for about 38% of total Middle East output. The embargo, which the majors supported by ceasing purchases of Iranian oil, left a gap in supply which had to be filled from other sources to prevent shortages.⁶⁶ With demand for oil products high thanks in part to U.S. needs in Korea, the majors organized a committee through the Department of the Interior's Petroleum Administration for Defense (PAD) in 1951 and instituted a plan to redirect

⁶⁴ Federal Trade Commission, *The International Petroleum Cartel: Staff Report Submitted to the Subcommittee on Monopoly of the Select Committee on Small Business, United States Senate* (Washington DC: U.S. Government Printing Office, 1952).

⁶⁵ RG 312 PAD FSTD, Box 3, Report on Energy Security, re-printed from "Resources for Freedom," President's Material Policy Commission, June 1952

⁶⁶ Mary Ann Heiss, "The International Boycott of Iranian Oil and the Anti-Mosaddeq Coup of 1953," in *Mohammed Mosaddeq and the 1953 Coup in Iran*, Mark J. Gasiorowski and Malcolm Byrne, eds. (Syracuse, NY: Syracuse University Press, 2004), 178-200.

crude and products supplies to compensate for the loss of Iran. According to a study by the World Bank, global oil markets were back in balance by early 1952.⁶⁷

Those involved in the effort considered it a triumph of private-public partnership. It was “unnerving,” wrote PAD administrator D.H. West, to imagine the “dislocations...caused by the loss of Iran,” without the aid of the companies.⁶⁸ Thus, when the FTC published its report, PAD and Interior rose to the companies’ defense. “Major sources of foreign oil are now indispensable to the economy of Europe,” Interior Secretary Oscar Chapman argued, “and in the future may become indispensable even to the peacetime economy of the United States.”⁶⁹ Chapman and others deployed the rhetoric of national security. The Iran crisis, argued PAD’s Charles Raynor, proved the global oil economy was “one entity, integrated and interdependent.”⁷⁰ An interruption in one area would cause disruptions throughout the global energy economy. This was particularly true in wartime, as the vulnerable fields of the Middle East would become inaccessible in the event of war with the Soviet Union.⁷¹ Writing to the IPAA’s Russell B. Brown, Bruce K. Brown of PAD argued that increasing global oil production was necessary to containing communism: “[achieving] national security in part by achieving security throughout the world.”⁷² It was unrealistic to imagine the United States could insulate itself from the global energy system.

⁶⁷ “Importance of Iran in World Oil Industry,” January 28, 1952, Iran—General—Calculations—Correspondence 1806456, World Bank Group Archives.

⁶⁸ RG 312 PAD FSTD, Box 6, West to Gately, 12 March 1952, West to Snodgrass, March 6, 1952, “Value and Accomplishments of the FPSC Program,” Memo by West, July 24, 1952.

⁶⁹ FRUS 1952-1954, General: Economic and Political Matters, Vol. I Part 2, No. 159, NSC 138/1, January 6, 1953.

⁷⁰ RG 312 PAD ADA, FPO, Box 4, Raynor to Snodgrass, May 26, 1952.

⁷¹ FRUS 1951, National Security Affairs, Foreign Economic Policy, Volume I, No. 342 Report to the President by the NSC, December 13, 1951.

⁷² RG 312 PAD ADA, FPO, Box 4, Letter from Bruce K. Brown to Russell B. Brown, January 5, 1952.

Personally conflicted over whether to continue the anti-trust suit, Truman ordered Justice to downgrade the case against the majors to a civil action in late 1952, citing national security concerns.⁷³

The IPAA and other associations did not support the anti-monopoly campaign of the FTC, which threatened further government regulation of the industry. They did, however, fully embrace the national security rhetoric that had become commonplace in the context of the Cold War. “Nothing will please the Kremlin more,” argued Dr. Karl Ettinger, a prominent geologist, “than the disintegration of the peacefully built system of world oil supply developed as the result of American corporate world-wide business.”⁷⁴ While defending the majors against anti-monopoly attacks, the domestics continued to push for limits on imports. The five largest American companies made up roughly three-quarters of total imports, and while the price of global oil was artificially high it still exceeded the price for oil within the United States.⁷⁵ In its report to the National Security Council in January 1953, the Justice Department argued that the majors’ collusion “is a serious threat to our national security,” as it depressed production from the domestic industry while encouraging imports which could be cut off in time of war.⁷⁶ The domestics utilized similar language, arguing that preserving the domestic oil industry from competition with cheap imports served U.S. national security interests.

⁷³ FRUS 1952-1954, General: Economic and Political Matters, Vol. I, Part 2, No. 132, Memo by Thorp for Acheson, March 3, 1952; FRUS 1952-1954 FRUS The Near and Middle East, Vol. IX, Part 1, No. 282, Memo by Bohlen to Secretary of State, January 9, 1953; Kaufman, *The Oil Cartel Case*, 38-49.

⁷⁴ Truman Library, Stephen J. Spingarn Papers, Box 47, Speech by Dr. Karl Ettinger, “What Does the FTC Cartel Report Mean?” September 29, 1952.

⁷⁵ M.A. Adelman, *The World Petroleum Market* (Baltimore, MD: Johns Hopkins University Press, 1972), 151.

⁷⁶ FRUS 1952-1954 FRUS The Near and Middle East, Vol. IX, Part 1, No. 281, Report by the Department of Justice, January 6, 1953

In 1952, the National Petroleum Council declared domestic oil and gas supplies to be “greater than ever before.”⁷⁷ The IPAA released its own report later that year, arguing that the crisis in Iran offered “conclusive proof” that relying on overseas sources of oil was dangerous. “National security depends upon oil to which this Country has assured and immediate access,” and the IPAA’s estimates concludes that the Western Hemisphere possessed sufficient resources “to meet increasing consumer requirements.” There was no reason to worry about draining domestic reserves. To ensure that output was maximized, however, “an upward adjustment in the price of crude oil” would be needed, “to generate sufficient income” that would then fund drilling and investment in new production.⁷⁸ In October the IPAA adopted a resolution endorsing legislation to install import quotas. According to one member, “there must be a reduction of imports, an increase in price, or both,” if the domestic industry was to survive.⁷⁹

Russell B. Brown, still IPAA spokesman twenty years after the first import tariffs were proposed in 1930, testified before the House Ways and Means Committee in May 1953, arguing that the majors “determine the market outlet and price of every barrel of oil produced,” and were driving smaller domestics out of business by importing cheap crude.⁸⁰ From 4.7% of total consumption in 1946, by 1954 imports accounted for 9.4%.⁸¹ Most of this oil came from Western hemisphere sources, particularly Venezuela, though Canada became an important source after

⁷⁷ Committee on Oil and Gas Availability, *Petroleum Productive Capacity: A Report on Present and Future Supplies of Oil and Gas*, presented to the National Petroleum Council, January 29, 1952.

⁷⁸ IPAA, *Petroleum in the Western Hemisphere: Report of the Western Hemisphere Oil Study Committee* (Tulsa, OK: 1952), 3-5, 5-6, 20.

⁷⁹ “Oil Imports Hit by IPAA,” *Dallas Morning News*, October 26, 1952.

⁸⁰ House Ways and Means Committee, *Customs Simplification Act of 1955*, May 23 and 24, 1955 (Washington DC: Government Printing Office, 1955), 1291.

⁸¹ Cabinet Task Force on Oil Import Control, *The Oil Import Question: A Report on the Relationship of Oil Imports to the National Security* (February 1970), Appendix 1, “Cabinet Committee on Energy Supplies and Resources Policy,” November 24, 1954.

1955. A very small amount came from the Middle East. The surge in imports drove IPAA rhetoric to loftier heights, with Brown testifying in 1955 against allowing “the welfare of the American consumer, and...the Nation’s security” to depend on imports managed by “a few large international oil companies.”⁸²

Within the Eisenhower administration, divisions formed over whether policy ought to serve the large overseas companies or the interests of the domestics. Discussions on oil policy would frequently become combative, with officials attempting to “insulate the oil industry from trends abroad in the world,” according to one State Department official.⁸³ The national petroleum strategy approved in November 1953 recognized the “increasing importance of the Middle East as the greatest known source of petroleum,” but suggested only allowing imports from Western hemisphere sources, ostensibly because the Iranian crisis indicated Middle East oil was less secure.⁸⁴ To mollify the domestics, Eisenhower established an Advisory Committee on Energy Supplies and Resources. The committee concluded in February 1955 that rising imports would deter economic growth. Oil prices would fall, which would encourage consumption, yet at the same time would produce “an inadequate incentive for exploration and the discovery of new sources of supply.” It was therefore necessary to restrict imports and maintain high prices “in the interest of national defense.”⁸⁵ This prompted further handwringing from within the administration, especially from Secretary of State John Foster Dulles, who worried that

⁸² *Customs Simplification Act of 1955*, 1292.

⁸³ FRUS 1952-1954 The Near and Middle East, Vol. IX, Part 1, No. 298, Memo by Funkhouser to Hart, July 3, 1953.

⁸⁴ FRUS 1952-1954, General: Economic and Political Matters, Vol. I, Part 2, No. 64, Statement of Policy by the National Security Council, November 16, 1953.

⁸⁵ *The Oil Import Question*, Appendix 1, White House, “Report on Energy Supplies and Resources Policy,” February 26, 1955; FRUS 1955-1957, Foreign Aid and Economic Defense Policy, Vol. X, No. 195, Report of the Cabinet Committee on Energy Supplies and Resources Policy, January 27, 1955.

government action to restrain imports would produce “a degree of socialism” and drive further regulation of industry, something which the Republican administration found ideologically distasteful.⁸⁶ “National security is a convenient cloak,” what Dulles regarded as “window dressing,” concealing the domestics’ desire to reduce competition from “cheap foreign oil” and maintain high prices.⁸⁷

In July 1956, thirty-one Senators sent a letter to the Office of Defense Mobilization requesting import restrictions, spurred on by petitions from IPAA. The Suez crisis of October 1956 illustrated what would happen “if we became even partially dependent on remote oil supplies,” argued IPAA President Robert L. Wood.⁸⁸ On July 29, 1957, Eisenhower’s task force released their findings. The lower cost of imported oil was “attractive,” but this would be offset by the increasing risk to national security. The idea that increasing imports would preserve domestic reserves for future use was refuted, as doing so would lead to a “sharp decline” in domestic production. Domestic prices would not produce enough profit to justify further exploration: “the industry would have no assurance of an adequate market.”⁸⁹ Imports had exceeded 11% of demand in the aftermath of Suez and would reach 20% if restrictions were not put in place.⁹⁰

Bowing to the recommendations of his task force, Eisenhower ordered importing companies to implement quotas on a voluntary basis. The IPAA kept up the pressure, with

⁸⁶ FRUS 1955-1957, Foreign Aid and Economic Defense Policy, Vol. X, No. 200, Memo of Discussion of the 242d Meeting of the NSC, March 24, 1955.

⁸⁷ FRUS 1955-1957, Foreign Aid and Economic Defense Policy, Vol. X, No. 259, Memo from Kalijarvi to Dulles, June 26, 1957, No. 260, Telephone Conversation, July 9, 1957.

⁸⁸ “IPAA President Views Year Ahead Hopefully,” *Dallas Morning News*, January 20, 1957

⁸⁹ *The Oil Import Question*, Appendix C-2, “Petroleum Imports,” July 29, 1957.

⁹⁰ Douglas R. Bohi and Milton Russell, *Limiting Oil Imports: An Economic History and Analysis* (Baltimore, MD: Johns Hopkins University Press, 1978), 40-42.

Gordon Simpson and Jerome J. O'Brien, the heads of the IPAA and TIPRO, appearing before Congress. The decline in domestic production and exploration did not mean "we are running out of oil," but that producers were "running out of money and incentive to find it," due to the disparity in domestic prices and that of imported crude, according to Simpson.⁹¹ Free imports "would entail a complete collapse of the United States crude oil price structure," by wiping out stripper wells, argued O'Brien. O'Brien also expressed a leering toward the national security requirements of protecting Middle East oil. "The Soviet Union," he argued, "does not need and could not use the oil of the Middle East." The real threat to national security was not losing access to oil overseas, but introducing imported oil in such quantities that domestic production was affected.⁹²

Eisenhower imposed mandatory import quotas on March 10, 1959. In his formal announcement, Eisenhower cited national security concerns, including the threat of a "foreign oil" being cut off "to our military, political, and economic detriment" or to influence "our foreign policy." Yet his announcement also recognized the danger posed by "surplus of world producing capacity," which had tended to "disrupt free world markets." Restricting imports would presumably protect the nation's security at the cost of higher prices.⁹³

It is difficult to determine what impact imports had on the state of the domestic oil industry. Throughout the 1950s, as IPAA representatives warned of an imminent collapse brought on by competition with cheap imports, the domestic oil industry had been booming, driving a national increase in production from 5.4 million bpd to 7 million bpd between 1950 and

⁹¹ Committee on Ways and Means, House of Representatives, *Renewal of Trade Agreements Act, Part I* (Washington DC: Government Printing Office, 1958), 1030-1033, 1051-1055, 1085-1093.

⁹² *Renewal of Trade Agreements Act*, 1085, 1091, 1093.

⁹³ *The Oil Import Question*, 195-196, Appendix C-3, Presidential Proclamation, March 10, 1959.

1960. The number of stripper wells increased from 291,979 in 1946 to 372,519 in 1957. After a spike in prices after the Suez Crisis, the boom began to slow. Drilling activity declined in 1957, dropping from 57,000 to 52,000, beginning a trend that would last eleven years.⁹⁴ Nevertheless, the import quotas resulted in a stable U.S. price of roughly \$3.28/barrel, while Middle East was traded in third-party deals at a market price close to \$1.84/barrel, roughly in line with what the companies claimed the oil was worth through the posted price.⁹⁵

The policy was a compromise solution designed to mollify the industry while maintaining imports at a level that was deemed politically acceptable. An unforeseen effect of the quotas was the way in which American consumers were shielded from changes in supply-demand that might affect price. “Unlike Sherlock Holmes, who was alert to the significance of the non-barking dog, the consumer failed to notice the non-falling oil price,” according to one study.⁹⁶ While the majors used their power to maintain high prices on the global markets, the IPAA deployed its political leverage to maintain higher prices within the U.S. domestic market. Neither of these price structures survived for very long, however.

The Companies in Retreat, 1957-1968

In 1957, the American oil industry reached its peak. Private companies held \$58 billion in gross assets, annually sold \$24.4 billion in products, and employed 2 million workers. The United States accounted for 56% of non-Soviet production and 41% of refining capacity.⁹⁷ The

⁹⁴ Degolyer and McNaughton, *Twentieth Century Petroleum Statistics* (1984), 5, 26-27, 49-50, 88-89, 100.

⁹⁵ Seymour, *OPEC: Instrument of Change*, 12; Ruhāni, *A History of OPEC*, 189-190.

⁹⁶ Bohi and Russell, *Limiting Oil Exports*, 15.

⁹⁷ Melvin G. de Chazeau and Alfred E. Kahn, *Integration and Competition in the Petroleum Industry, Petroleum Monograph Series, Volume 3* (New Haven, CT: Yale University Press, 1959), 4-5.

global oil trade increased rapidly over the course of the 1950s. According to a BP internal assessment, between 1951 and 1961 trade in oil “was over 75% greater than the aggregate increase in movements of all other commodities.” Consumption in Western Europe grew from 73 million tons in 1951 to 225 million tons in 1961, nearly all of which was imported.⁹⁸ The companies reached their peak of profitability in the late 1950s, as high prices and low production costs ensured the majors’ return on investment far exceeded the norm in other American industries.⁹⁹ On the list of the world’s most valuable companies, two out of the top three were major oil firms.¹⁰⁰

The wealth of the large companies concealed weaknesses. As one BP report argued, the posted price had been introduced and incorporated into the fifty-fifty profit-sharing system “because [it] could be regarded as genuinely representative of going market prices.”¹⁰¹ Yet that correlation weakened over time, for reasons tied to the global surplus and the lack of markets. In 1957, the Soviet Union began exporting oil in commercial quantities. Offered at competitive prices, Soviet oil found a market in Western Europe, despite U.S. resistance.¹⁰² Meanwhile, oil-producing states like Iran began offering new concessions to smaller companies, to earn additional revenue and as a means to pressure the majors into improving the fifty-fifty profit-sharing system. Eisenhower’s import quotas restricted majors’ access to the U.S. consumers, forcing more crude to compete for a smaller market and whittling away at the dominance of the

⁹⁸ BP 100334 BP Memo, “The Price of Oil,” July 18, 1962.

⁹⁹ Moran, “An Oligopoly of Would-Be Sovereigns,” 595.

¹⁰⁰ Priest, *The Offshore Imperative*, 22.

¹⁰¹ BP 100334 “Middle East Concession and Tax-Paying Arrangements: Posted Prices,” August 13, 1962.

¹⁰² Elisabetta Bini, “A Challenge to Cold War Energy Politics? The US and Italy’s Relations with the Soviet Union, 1958-1969,” in *Cold War Energy*, ed., Perovic, 201-230.

postwar oligopoly.¹⁰³ Oil economist Paul Frankel warned in 1957 that a glut could place pressure on the existing system, “result[ing] in prices which could no longer be rationalized by world-market-price theories.”¹⁰⁴

This is in fact what took place. Downward pressure on oil prices throughout the 1960s was irresistible. At the refinery at Abadan in Iran, the price of fuel oil fell twenty percent from 1955 to 1961, while gasoline fell seventeen percent.¹⁰⁵ On the spot market, which accounted for about twenty percent of the total amount of crude moving internationally, sellers began offering heavy discounts—sometimes as much as \$0.30 off the posted price—to entice buyers.¹⁰⁶ The majors, as they had done in the past, blamed competition from upstart domestics. “The proliferation of concessions and production in hands that have no assured and steady access to market outlets,” went one BP memo, had induced “a needless and, in the broadest sense, an uneconomic deterioration of real returns and income.”¹⁰⁷

The fact that the realized price was falling had no effect on the fifty-fifty concessions with producer states, which were pegged to the posted price. From the majors’ point of view, the inflated posted price meant that what was now paid to producing states exceeded fifty percent of crude oil’s value: the fifty-fifty division was now closer to sixty-forty, and the companies’ profit margins were being squeezed, though they continued to deduct payments to producers from their domestic taxes.¹⁰⁸ The artificiality of the posted price gave rise to confusion regarding the true

¹⁰³ Wall, *Growth in a Changing Environment*, 600-601.

¹⁰⁴ Paul Frankel, “A Turning Point,” in *Paul Frankel: Common Carrier of Common Sense*, ed. Ian Skeet, 92.

¹⁰⁵ BP 100334 BP Memo, “The Price of Oil,” July 1962.

¹⁰⁶ Leeman, *The Price of Middle East Oil*, 3.

¹⁰⁷ BP 100334 BP Memo, “The Price of Oil,” July 1962.

¹⁰⁸ Francesco Petrini, “Public Interest, Private Profits: Multinationals, Governments and the Coming of the First Oil Crisis,” *Business and Economic History* 12 (Jan., 2014): 8-9. The decline in profitability would continue through the 1960s: according to Joseph Stork, in 1969 the majors

value of oil. For the majors, the posted price was now too high. By contrast, producing governments felt that the companies kept prices too low, depriving sovereign nations the full value of their exports.

The discontent among oil producing states mirrored the rise of post-colonial nationalism that spread in the wake of the Bandung Conference in April 1955, where Indonesian President Sukarno denounced the modern political economy as colonialism in “modern dress.”¹⁰⁹ According to nationalists like Venezuela’s Juan Pablo Pérez Alfonso and Saudi Arabia’s ‘Abdullah al-Tariki, the companies used their market power to manipulate oil’s value, while consuming countries in the West levied taxes on imported petroleum, realizing more of oil’s potential value.¹¹⁰ At the Arab Petroleum Congress in 1958, Tariki argued that posted prices had been artificially suppressed by the companies, depriving the producers of \$2.73 billion in lost revenue.¹¹¹

Despite the pressure from resource nationalists, the majors followed their commercial instincts to bring the posted price into alignment with the market price. With two rounds of cuts in February 1959 and August 1960, the majors reduced the posted price for Persian Gulf oil from \$2.05 to \$1.80. In response, Tāriqī and Pérez Alfonso signed the Baghdad Agreement in September 1960 creating the Organization of Petroleum Exporting Countries (OPEC).¹¹² At its fourth annual meeting in June 1962, OPEC passed a resolution calling for a return to the pre-

earned the same profit (\$1.6 billion) on twice the output, indicating a 50% reduction in profits per barrel. See Joseph Stork, *Middle East Oil and the Energy Crisis* (New York: Monthly Review Press, 1975): 120.

¹⁰⁹ Simpson, *Economists with Guns*, 18.

¹¹⁰ Dietrich, *Oil Revolution*, 67-77; Seymour, *OPEC: Instrument of Change*, 15-16;

¹¹¹ Hartshorn, *Politics and World Oil Economics*, 29.

¹¹² Bamberg, *Vol. III*, 147-151; Wall, *Growth in a Changing Environment*, 603-605; Ruhāni, *A History of OPEC*, 75-77; Seymour, *OPEC: Instrument of Change*, 25.

1960 price, while also arguing for a new price mechanism divorced from the majors' control. Utilizing the language of scarcity, the OPEC argued that it was the role of governments "to channel competition into courses most productive for the long-run." "Oil is a non-renewable natural resource which, once used, cannot be replaced," the producers argued. Cutting prices unilaterally at a time when industrial goods and imports were becoming more expensive was tantamount to economic warfare.¹¹³ Speaking in 1963, OPEC's Francisco Parra denounced the companies' arguments for a price system managed by private capital as "completely unrealistic." The management of a resource as important as oil "cannot be entrusted indefinitely to a handful of international oil companies whose primary motivation is commercial."¹¹⁴

The concept that posted prices represented oil's true market value was a conceit which had "worn so thin as to deceive nobody," particularly the producer states, according to Shell. While the realized price was likely to decline due to the glut of supply and a lack of markets, Shell conceded the "complete freedom to move posted prices" had come to an end, a result of the "political environment in which we have to operate."¹¹⁵ Like Shell, Socony-Mobil conceded that the companies could never again cut the posted price without inviting a full-scale revolt among producer states.¹¹⁶ A joint memo from BP and Shell recognized that assurances would have to be provided to producers "that their revenues will not be reduced as a result of further reduction in posted prices." This implied the formal separation of posted prices from the market.¹¹⁷

¹¹³ FO 371/164220 EP 1532/10 NO. 1696 Amuzegar for Velders, July 11, 1962, UKNA; BP 100334 Memorandum: Government Revenues and the Price of Crude Oil in the Middle East.

¹¹⁴ BP 6133 "OPEC—Further Developments, July 1963 to September 1964."

¹¹⁵ BP 100334 Shell Memo, "Middle East Concession and Tax-Paying Arrangements—Posted Prices," August 13, 1962, "O.P.E.C. Resolutions, Part I," August 30, 1962.

¹¹⁶ BP 100334 Socony-Mobil Paper, "Assured Value Plan: A Response to Recent OPEC Demands," August 20, 1962.

¹¹⁷ BP 100334 BP and Shell Memo, "The Approach to OPEC Resolutions 32, 33, and 34," August 23, 1962.

It was clear that the producer states no longer regarded the posted price as a genuine indicator of oil's true value. During discussions with oil company representatives in Paris, Iranian negotiators insisted that posted prices "are not determined by forces independent of the companies' control." Investment occurred not because of competitive pricing, "but for reasons of security of supply." On the other hand, Iran depended on the value of oil exports to offset the rise of imported manufactured goods. "In a free competitive system there would be nothing to prevent [prices] from dropping to the level of operating costs," particularly as the present glut showed no signs of disappearing. If the companies wished to continue making such windfall profits while retaining security from disruptions, they would have to offer Iran a bigger piece of the pie.¹¹⁸ The companies fired back, claiming at a meeting in Saudi Arabia that the producers were responsible for the glut by offering new concessions to domestics which had "no markets" for their crude.¹¹⁹ While the majors could order supply to demand, smaller companies—including several mid-sized firms which had begun operating concessions in Libya—lacked such discipline and would sell oil for less than it was worth in order to recoup their investment. This well-worn argument had no effect on the producer states, which continued to demand increased revenues throughout 1962 and 1963.

Despite the rhetoric, OPEC was playing a weak hand. The organization was divided between states that favored radical action, including nationalization, and pro-Western states like Iran and Saudi Arabia that were willing to compromise with the companies. According to Fu'ad Rouhani, the shah's oil advisor and the first Secretary-General of OPEC, Iran was after a settlement "which would improve their income per barrel," and was willing to forego a

¹¹⁸ BP 77987 Addison to BP, No. 2614, Notes from October Meetings, October 8, 1962.

¹¹⁹ BP 100219 Notes for Meeting, September 27, 1962.

settlement on posted prices, so long as they were not cut a second time.¹²⁰ While they acknowledged the end of the posted price as a representation of oil's actual market value, the majors were not ready to dispense with it entirely, in part because they hoped to retain the payments as tax deductions.¹²¹ In 1964, Iran and Saudi Arabia accepted a compromise solution that allowed producers to expense royalty payments rather than credit them against taxes—a bookkeeping adjustment that would net each producer several extra cents per barrel.¹²² T OPEC states continued to talk in terms of low prices and unequal exchange. Abdul Aziz al-Wattari, Iraq's oil minister, declared power over posted prices to be the “ultimate goal,” while noting the recent victory in securing royalty expensing was simply a step toward “a future price hike.”¹²³ This pressure was mitigated by the persistent market glut and the conservative tendencies of states like Iran, Saudi Arabia, and Kuwait, who were content with higher production and rising revenues. Saudi oil minister Ahmed Zaki Yamani, for instance, spoke in 1966 on the need for “stabilization” of prices.¹²⁴ While the OPEC states complained that posted prices remained low, it was impossible to deny that the price was inflated when compared to market prices, which gave the producer states little incentive to market oil on their own—a lesson the shah of Iran learned in 1965, when he attempted to sell oil to Yugoslavia and found Marshal Tito would pay no more than \$1.25.¹²⁵

¹²⁰ BP 100369 Memo of Conversation, October 10, 1962.

¹²¹ BP 100219 Unmarked Note on OPEC Resolutions, Undated; BP 100334 Memo, “Middle East Concession and Tax Paying Arrangements—Posted Prices,” August 17, 1962; BP 100369 Note for Drake, “O.P.E.C.,” October 9, 1962.

¹²² Gregory Brew, *Petroleum and Progress in Iran: Oil, Development, and the Cold War* (New York: Cambridge University Press, forthcoming).

¹²³ PET 3 OPEC US Embassy Caracas A-559, March 20, 1964, RG 59 USNA.

¹²⁴ PET 3 OPEC US Consul Dhahran A-1, July 6, 1966, PET 3 OEPD Dharan to State, No. 181, October 2, 1966, RG 59 USNA.

¹²⁵ PET 2 Iran US Embassy Tehran A-239, October 31, 1966, RG 59 USNA.

Discussion of “price” between the majors and OPEC henceforth referred to the metric used to calculate payments by the companies to OPEC states. According to petroleum economist Maurice A. Adelman, the price ceased to be a measure of oil’s value and instead became a “tax collection” tool for the countries.¹²⁶ It was a “shadow price,” while the market price was much lower—in some cases \$0.45 or \$0.65 below the posted price.¹²⁷ The companies still realized large profits. In 1964, a report from the US embassy in London calculated production costs in Iran at just under \$0.22 per barrel, producing a profit margin of over \$1.40 from the posted price and \$1.18 from the realized price.¹²⁸ Yet their profitability declined from the lofty heights of the late 1950s, as competition increased, payments to producer states ate up a larger share of profits, and prices fell in real terms.¹²⁹

As the majors retreated in the face of OPEC pressure, the domestics were put on the defensive as the balance of power shifted in favor of oil consumers, especially in the gas-guzzling and fuel oil dependent Northeast. In 1963 the Kennedy administration concluded that protecting national security required “an obligation to avoid actions which will weaken [allies’] economies,” and suggested that changes be made to allow more imports of residual fuel oil.¹³⁰ In 1962 Interior changed the restriction from 9% of demand to 12.2% of estimated production.¹³¹ Under Secretary Stewart Udall, the Department of the Interior began offering exemptions to

¹²⁶ MA Adelman, “Oil Prices in the Long Run (1963-75),” *The Journal of Business* 37, no. 2 (April 1964): 143-161.

¹²⁷ Helmut J. Frank, *Crude Oil Prices in the Middle East: A Study in Oligopolistic Price Behavior* (New York: Praeger, 1966), 114-115.

¹²⁸ PET 3 OPEC US Embassy London A-02, July 2, 1964, RG 59 USNA.

¹²⁹ Moran, “Oligopoly of Would-Be Sovereigns,” 595.

¹³⁰ Bohi and Russell, *Limiting Oil Imports*, 154-55.

¹³¹ Bohi and Russell, *Limiting Oil Imports*, 107.

companies on grounds that rarely had connections to national security.¹³² A report to Governor Tom Connally of Texas noted the loopholes in the import system allowed the larger companies to import more oil, while nothing was done to protect “more marginal or higher cost of production.”¹³³

From the highpoint of 1959, the domestics’ political influence inside the United States gradually declined. By 1964 contributors to *The TIPRO Reporter* worried about a general “oil crisis,” castigating Udall’s dismissal of the falling reserve rate and the drop in drilling activity.¹³⁴ New production came on-line in the 1960s, but it was driven by expensive and technically sophisticated offshore operations, which only the wealthier majors could afford to pursue. While the price of crude oil slowly declined in real terms over the course of the decade, competition for products markets (particularly motor gasoline) encouraged greater investment in “downstream” operations. The domestics’ market position gradually declined throughout the decade, as the majors expanded their hold over the national oil industry: from 55.7% in 1950, the majors’ share of U.S. oil production increased to 69% in 1970.¹³⁵

In June 1967, an attempted embargo of the United States by several Arab oil producers failed to cause shortages in the United States, in part due to spare capacity in Texas utilized to meet the supply shortfall. Assistant Secretary of the Interior Cordell Moore used the crisis as vindication for the import program: “the national security basis...is to be able to meet a

¹³² Subcommittee on Mines and Mining, *Mandatory Oil Import Control Program, Its Impact Upon the Domestic Minerals Industry and National Security* (Washington DC: Government Printing Office, 1968), 31-32.

¹³³ “Report to the Governor of Texas,” December 1963, Papers of Lyndon Baines Johnson (WHCF), Box 20, LBJPL.

¹³⁴ “Frustrated Independents Left Wondering How Long U.S. Oil Crisis Can Be Denied,” *TIPRO Reporter*, Summer 1964, 15-17, in WHCF, Box 20, LBJPL.

¹³⁵ Jacobs, *Panic at the Pump*, 34.

contingency exactly like the contingency that occurred.”¹³⁶ Interior officials were optimistic in 1968 that U.S. production would be able to meet the lion’s share of demand, though the U.S. Geological Survey expressed some concern in 1968 about the declining rate of discoveries.¹³⁷ Nevertheless, Interior’s Oil and Gas Division confidently predicted a 10% reserve production cushion in 1970, equal to 2 million barrels-per-day of spare capacity.¹³⁸ The domestics argued the success in 1967 had come despite the import program’s deficiencies and warned that reserve replacement and exploration faced a precipitous decline.¹³⁹ But such warnings were ignored, as federal policy shifted further toward satisfying consumers at the expense of the oil companies.

Prelude to a Shock, 1969-1973

Pre-occupied with reducing inflation and boosting economic growth, President Richard M. Nixon looked at the import program as an unnecessary drag on the economy. Upon entering office, Nixon established a special task force headed by Labor Secretary George P. Shultz to investigate whether the controls should be dropped. The State Department, formerly a vocal skeptic of the quotas, now warned that ending import requirements would bring about dependence on imports, the cheapest of which would come from Arab producers. This raised concerns about security given the events of 1967 and the widespread opposition in the Arab world to the U.S. policies in support of Israel.¹⁴⁰ Nixon’s Interior Secretary Walter J. Hickel and Commerce Secretary John N. Nassikas were opposed to ending the import quotas, as doing so

¹³⁶ Subcommittee on Mines and Mining, *Mandatory Oil Import Control Program, Its Impact Upon the Domestic Minerals Industry and National Security* (Washington DC: Government Printing Office, 1968), 37.

¹³⁷ Graf, *Oil and Sovereignty*, 62.

¹³⁸ Oil and Gas Division, Dept. of the Interior, *US Petroleum through 1980* (1968), 30-32.

¹³⁹ *Mandatory Oil Import Control Program*, 184-185.

¹⁴⁰ FRUS 1969-1976, 36: No. 7, Draft Paper Prepared in the Department of State, Undated.

would discourage domestic exploration while leaving the nation “at the mercy of distant supplying countries.”¹⁴¹

The task force ultimately determined that imported oil was necessary to maintain consumption. The national security justification used in 1959 was used to disguise a rationale for keeping the price of crude oil high. “In the absence of import restrictions,” the task force found that crude prices in the United States would have declined from \$3.30 to \$2.00. If they were eased slowly and replaced by tariffs in the short-term, the increase in imported oil would be manageable—only a lengthy embargo by all Middle East oil producers would appreciably impact consumption in the United States.¹⁴² Officials in the CIA suggested oil would remain abundant “for many years to come,” and even with imports it appeared “highly unlikely” that the United States would have any problems meeting its energy requirements “over the next 10 to 20 years.”¹⁴³ There were, moreover, political gains to be made. Estimates of the costs imposed on American consumers through the inflated price of oil ranged from \$2 billion to \$5 billion per year. A separate report by the consulting firm Charles River & Associates concluded that imports cost consumers \$6.2 billion in lost income while transferring \$3.9 billion to American producers and \$500 million to refiners.¹⁴⁴

The only way to increase domestic output would be to “raise substantially the real price of oil,” according to Nixon’s task force.¹⁴⁵ The potential risk of increasing imports appeared less

¹⁴¹ FRUS 1969-1976, 36: No. 34, Minority Report, January 9, 1970

¹⁴² *The Oil Import Question*, 20, 131-132.

¹⁴³ FRUS 1969-1976, 36: No. 8, Memo Prepared in the CIA, August 28, 1969, No. 9, Memo from Katz to Trezise, September 26, 1969, No. 12, Memo from Freeman to Areeda, October 21, 1969.

¹⁴⁴ *An Analysis of the United States Oil Import Quota*, Charles River & Associates (1970), 168.

¹⁴⁵ *The Oil Import Question*, 41, 58.

than the political risk of allowing oil prices to rise. Still, Nixon hesitated to address such a politically fraught issue and chose to delay action until after the 1972 election.¹⁴⁶

At the time of Nixon's decision, the contract selling price for Persian Gulf oil remained low, averaging between \$1.20 and \$1.50, while the posted price had remained firmly in place at around \$1.80 since 1960.¹⁴⁷ Very quickly, a combination of factors combined to push market prices for crude oil up between 1969 and 1971. The first was vanishing spare capacity outside of OPEC, which tightened the supply-demand balance. The second was rapidly increasing oil demand in 1970-1972, which exceeded all previous estimates and was driven in part by above-average industrial activity in the United States and Japan.¹⁴⁸ The third was rising awareness of environmental concerns and new regulations which limited the use of heavier crudes.¹⁴⁹ The result was a situation where the posted price for global oil fell behind the market price for the first time. The conditions were thus perfect for a move by producer states to seize control of price and push it up, far past the artificially inflated yet stable price that had endured since the 1950s.

After years of playing it safe, producer states began applying more pressure on companies to raise prices. The companies complied, in part because they worried about maintaining access and because the increased number of affected companies—from the original seven majors in 1955, in 1970 there were nineteen companies operating in Libya alone—made it

¹⁴⁶ FRUS 1969-1976, 36: No. 35, Memo from Bergsten to Kissinger, January 9, 1970.

¹⁴⁷ Figures estimated by *Petroleum Intelligence Weekly*, September 1, 1980, cited in Congressional Research Service, *The Energy Factbook: Data on Energy Resources, Reserves, Production, Consumption, Prices, Processing, and Industry Structure* (Government Printing Office: Washington DC, 1980), 349.

¹⁴⁸ Vernon, ed., *The Oil Crisis*, 18.

¹⁴⁹ Paul Sabin, "Crisis and Continuity in U.S. Oil Politics, 1965-1980," *Journal of American History* 99, no. 1 (June 2012): 179.

much more difficult to assemble a united front. In April 1971, OPEC producers forced the companies to raise the posted price in the Persian Gulf to from \$1.80 to \$2.18 while the price of North African oil increased to \$3.46, with a formal increase in payments from 50% to 55% of profits.¹⁵⁰ On August 15, 1971, Nixon made the surprising decision to suspend dollar's convertibility into gold and implement a system of wage and price controls. The policy capped the price of domestic crude, eventually separating "old" oil produced at a lower price from "new" oil that was priced higher, but generally sought to protect consumers. The United States, meanwhile, reached full production that year, with the Texas Railroad Commission allowing producers in 1972 to pump whatever they could for the first time since pro-rationing began in the 1930s.¹⁵¹ So while prices worldwide were increasing, federal policy worked to keep domestic prices protected, despite the lack of sufficient domestic crude to maintain consumption.

Within a year of its publication, the task force's report on imported oil had become obsolete. While the report had warned of oil imports reaching 27% of consumption by 1980, falling domestic production and exemptions in the quotas meant that imports were nearing that level in 1972, and would exceed it the following year.¹⁵² The National Security Council's report on the world oil situation in January 1971 concluded that oil's abundance had vanished and that it was now a "seller's market."¹⁵³ With the price of imported oil rising while domestic price controls kept refined products prices artificially low, refiners were less inclined to buy more

¹⁵⁰ FRUS 1969-1976, 36: No. 88, Telegram from State to Certain Diplomatic Posts, April 2, 1971

¹⁵¹ Goodwyn, *Texas Oil, American Dreams*, 112-114.

¹⁵² *The Oil Import Question*, 125.

¹⁵³ FRUS 1969-1976, 36: No. 80, Paper Prepared by the National Security Council Staff, NSSM 114, "World Oil Situation January 24, 1971," January 24, 1971

expensive foreign crude, which created spot shortages in some markets.¹⁵⁴ A general “energy crisis” began dominating discourse. The National Petroleum Council warned that imports would quadruple by 1975 if more was not done to stimulate domestic production.¹⁵⁵

Raising the specter of shortages and potential interruptions from overseas suppliers, domestics began calling for higher prices to promote increased exploration. A spokesperson for the IPAA suggested to Senator Henry M. Jackson’s committee in August 1972 that prices would need to reach at least \$4.00 to ensure U.S. “self-sufficiency” by 1980.¹⁵⁶ API met in Chicago in November 1972 to discuss “specific actions” in the face of the crisis. Oil expert Walter Levy suggested the nation was now becoming dependent on imported oil, yet the cost of that oil “is likely to escalate continuously,” and would soon exceed the cost of developing domestic alternatives.¹⁵⁷ Despite the unavoidable fact that U.S. energy output was failing to keep up with demand, faith in resource abundance was expressed by economists like Maurice Adelman, who regarded the energy crisis as a “fiction” produced by ineffective policies, and expressed confidence that improved technology would eventually spur new production.¹⁵⁸ This posited dramatically higher domestic prices, which were sure to harm consumers and might even depress demand for oil in the near-term. Adelman also admitted that in the short term, the power wielded by OPEC states could not be denied: “the genie was out of the bottle.”¹⁵⁹

¹⁵⁴ “Price Controls and International Petroleum Product Prices,” February 1980 (U.S. Department of Energy), 3.

¹⁵⁵ National Petroleum Council, *U.S. Energy Outlook: An Initial Appraisal, 1971-1985, Vol. I* (Washington DC: National Petroleum Council, 1971), 4.

¹⁵⁶ Committee on Interior and Insular Affairs, *Estimates of the Economic Cost of Producing Crude Oil* (Washington DC: Government Printing Office, 1976), Statement from Sen. Jackson, 95.

¹⁵⁷ “Action Policy for Oil Urged,” *Dallas Morning News*, November 16, 1972.

¹⁵⁸ MA Adelman, “Is the Oil Shortage Real? Oil Companies as OPEC Tax Collectors,” *Foreign Policy* 9 (Winter 1972-73): 69-107.

¹⁵⁹ Adelman, “Is the Oil Shortage Real?” 85-86.

Nixon won re-election in 1972. A few weeks after his victory, his aide Peter Flanigan warned him that energy shortages were anticipated that winter, exacerbated by the price controls (which were producing market irregularities) and the continued restrictions on imports.¹⁶⁰ A report completed for National Security Advisor Henry Kissinger concluded that rising imports were inevitable in the near-term owing to the lack of domestic capacity and available alternatives.¹⁶¹ In his address on energy on April 18, Nixon declared he would end import quotas, but argued new production would soon come online in Alaska. “The single most effective means of encouraging energy conservation,” said Nixon, “is to ensure that energy prices reflect their true cost.” The new system would “contribute to our national security.”¹⁶² While the IPAA denounced the administration’s move, others expressed alarm over the accepted dependence on oil imports. Nixon “made no bones about his belief that prices must and should go up,” wrote the *New York Times*, even if imports would meet domestic demand and keep prices relatively low “for the next several years.”¹⁶³ William E. Simon, deputy secretary of the U.S. Treasury and chairman of Nixon’s Oil Policy Committee, suggested doing away with import controls and all other regulations. “What is needed is a system that will allow the free market to operate so that the price of domestic crude oil...can begin to reflect the costly expenditures that are required to find and produce them,” said Simon.¹⁶⁴

¹⁶⁰ FRUS 1969-1976, 36: No. 146, Memo from Flanigan to Nixon, December 26, 1972.

¹⁶¹ FRUS 1969-1976, 36: No. 172, Memo from Odeen to Kissinger, March 13, 1973, No. 175, Paper Prepared in the Office of Economic Research, March 30, 1973.

¹⁶² FRUS 1969-1976, 36: No. 177, Editorial Note; “Special Message to Congress on Energy Policy,” April 18, 1973, *The American Presidency Project*
<https://www.presidency.ucsb.edu/documents/special-message-the-congress-energy-policy>.

¹⁶³ “Energy Program Neglects Demand,” *New York Times*, April 22, 1973.

¹⁶⁴ “Oil Official Calls for Free Market,” *AP*, re-printed in *Dallas Morning News*, May 10, 1973.

In the prelude to the oil shock of October 1974-January 1974, the Nixon administration acknowledged that the cost of oil consumption would increase in the form of more expensive imports. Given the fact that the largest reserves were in a few countries—Saudi Arabia and Iran being the two most important—the Nixon administration tailored its policy toward meeting the needs of those states, in order to ensure that both continued to produce oil the United States and its Western allies would need in the near future.¹⁶⁵ Some within the administration welcomed a shift toward a “free market” system, though it would take a full decade until this view became consensus.¹⁶⁶ Nixon, meanwhile, put on a brave front in public addresses on the issue. “Oil without a market, as Mr. Mossadeq learned many, many years ago, does not do a country much good,” he said, an implicit warning to any OPEC state that threatened to cut off access.¹⁶⁷

Though it exuded confidence, Nixon’s words did not reflect reality. From maintaining high prices at home and abroad in the face of a persistent glut, the majors and domestics now faced a tight market further restricted by geopolitical factors. The policy tools deployed by the Nixon administration between 1969 and 1973 were used to keep oil prices from rising, yet consequently produced a situation where a rapid increase in the price of oil both within the United States and on the global market became very likely. The prevailing question in late 1973 was not whether prices should increase, but by how much.

Conclusion

In his seminal article for *Foreign Affairs*, “The Oil Crisis: This Time the Wolf is Here,” James Akins concluded that the predictions of the oil industry and Nixon’s import task force,

¹⁶⁵ FRUS 1969-1976, 36: No. 193, Memo from Odeen to Kissinger, August 15, 1973.

¹⁶⁶ Jacobs, *Panic at the Pump*, 271-308.

¹⁶⁷ FRUS 1969-1976, 36: No. 202, Editorial Note.

“that we could count on an ample supply of oil as long as we would need it,” had proven to be “spectacularly wrong.”¹⁶⁸ The price of oil by April 1973 had already risen significantly from the stable level of the 1960s. Within a year, it would more than quadruple, as imported oil from the Persian Gulf increased from \$2.10 to \$10.40.¹⁶⁹ Gloating over the triumph of OPEC producers, who had forced companies to raise the posted prices to more than \$11.00 and thus cause an energy shock that would ripple through the global economy, the shah of Iran chastised Westerners for their complacency. “The industrial world will have to realize,” he said, “that the era of their terrific progress and even more terrific income and wealth based on cheap oil is finished...If you want to live as well as now, you’ll have to work for it.”¹⁷⁰

The price of crude oil fluctuated after the shock of 1973-1974, buffeted by inflation, economic depression in the developed world, rising debt in the developing world, wars, and revolution (including in Iran in 1978-1979). As a casual glance at published posted price statistics illustrate, the global price of crude never returned to its pre-1973 stability and has instead oscillated wildly between periods of boom and bust. It is, in other words, “free” from the controls of a single group or entity, as Secretary Simon and others had hoped in the early 1970s. This is due to many factors, including the breakdown of the Bretton-Woods economic system and the rise of a new, neoliberal economic order predicated on computerized financial markets, debt allocation, and the flow of commodities and securities, many of them linked to petrodollars. Yet the disorder which has reigned on both the domestic and international oil markets has been exacerbated by the dramatic change in circumstances witnessed at the end of the 1960s, when the

¹⁶⁸ James Akins, “The Oil Crisis: This Time the Wolf is Here,” *Foreign Affairs* 51 (April 1973): 462-490.

¹⁶⁹ *Energy Factbook*, 275.

¹⁷⁰ “Oil Price Doubled by Big Producers in Persian Gulf,” *New York Times*, December 24, 1973.

state of abundance companies had been grappling with since the 1920s suddenly and unexpectedly turned to one of shortage.

Within the abundance that dominated the global oil economy, both the majors and domestics carved out spheres of influence. For the majors, successful cooperation allowed them to manage global production and establish a pricing system that offered revenue sharing to oil-producing states. The result was sustained profitability and a higher price than would have resulted from increased competition. The domestics, meanwhile, successfully lobbied Congress and the federal government for protection against imported oil, thus preserving a higher price and a protected market. Both the majors and the domestics leveraged national security arguments to make their cases with the federal government. This delicate system began to crumble in the 1960s, however, as the states of OPEC gradually asserted pressure on the majors while the domestics lost their previous political influence.