

A FIFTY-YEAR PERSPECTIVE ON WORLD PETROLEUM ARRANGEMENTS*

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I. INTRODUCTION

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The year 1988 marked the fiftieth anniversary of the Mexican expropriation of oil company property. During the past fifty years, the world petroleum market has changed dramatically. In 1938, the world's oil was largely controlled by seven international oil companies.¹ Known as the "Seven Sisters," these vertically integrated companies dominated not only the transportation, refining, and marketing of petroleum, but also to a considerable extent the world's oil reserves.² Although their control over United States reserves was limited by the presence of many smaller companies,³ the seven multinational companies⁴ enjoyed almost total dominance over foreign sources of supply.⁵ Their control over the petroleum reserves was assured by agreements--oil and gas leases in the United States, concessions in most other countries--that transferred the rights to develop petroleum in the ground.⁶

¹ R. ANDERSON, FUNDAMENTALS OF THE PETROLEUM INDUSTRY 33-34 (1984). Five of these companies, Gulf, Texaco, Mobil, Socal (Standard Oil of California), and Exxon, could fairly be labeled "United States companies;" the other two, Royal Dutch-Shell and British Petroleum, were British-Dutch and British.

² See *Id.*; R. KRUEGER, THE UNITED STATES AND INTERNATIONAL OIL 57 (1975).

³ For instance, in 1931 smaller independent producers held 32% of the acreage and produced 64% of the total output from the large East Texas field. They also played a significant role in affecting legislative and administrative decisions. See J. WEAVER, UNITIZATION OF OIL AND GAS FIELDS IN TEXAS 49, 60 (1986).

⁴ A multinational corporation is one that owns and manages business in several countries. Jacoby, *The Multinational Corporation*, in THE MULTINATIONAL ENTERPRISE IN TRANSITION 22 (A. Kapoor & P. Grub ed. 1972). The advent of such corporations is relatively recent. The great European trading companies of the seventeenth and eighteenth centuries were precursors of today's multinationals. The rise of the true multinational corporation dates from the formation in the early twentieth century of wealthy mining and petroleum companies that were willing and able to make substantial corporate investments outside their home countries and thereby subject themselves to the laws of foreign governments. *Id.* at 23.

⁵ As late as 1945 only six United States companies, other than the five United States majors, held any foreign concessions. See R. ANDERSON, *supra* note 1, at 53.

⁶ In the early years, most countries negotiated each arrangement separately with the individual companies. Very few of the acreage areas were put up for competitive bidding. For a discussion of government policy underlying the choice of

discretionary or competitive bidding processes for allocating the development of resources, see generally K. DAM, OIL RESOURCES: WHO GETS WHAT HOW? (1976).

In recent years, however, countries have implemented model contracts and petroleum codes to help standardize the process of selecting the recipient of the petroleum arrangement. See K. BLINN, C. DUVAL, H. LE LEUCH & A. PERTUZIO, INTERNATIONAL PETROLEUM EXPLORATION & EXPLOITATION AGREEMENTS: LEGAL, ECONOMIC, AND POLICY ASPECTS 33-42 (1986) [hereinafter INTERNATIONAL PETROLEUM AGREEMENTS]. For example, China has both a petroleum code and a model contract that provide for a competitive bidding process to select the company chosen to develop the offshore petroleum reserves. See Note, *American Oil Interests in China*, 6 LOY. L.A. INT'L & COMP. L.J. 119, 124-36 (1983).

Although some of these agreements exist today in name, their modern counterparts are very different from the original texts.⁷ The leases and concessions developed in the early years of petroleum development, which proved extraordinarily advantageous to the companies receiving the rights to develop the petroleum,⁸ have in almost every instance been terminated or modified. The downstream activities of transporting, refining, and distributing petroleum to the end user, which the

⁷ One example of the changes that have occurred in concession agreements is the requirement of arbitration. Many modern concessions contain clauses requiring both parties to submit disputes under the agreements to arbitration for resolution. *See, e.g.*, Abu Dhabi Specimen Draft Oil Concession Agreement, art. 34, *reprinted in* INTERNATIONAL PETROLEUM AGREEMENTS, *supra* note 6, app. at 1.18-1.19 [hereinafter Abu Dhabi Concession]; *see also* Oil Concession Agreement between the Government of Abu Dhabi and Amerada Hess Exploration Abu Dhabi Ltd. and Alpha Oil Corporation, Block B Concession, 9 November 1980, in D. VAGTS, TRANSNATIONAL BUSINESS PROBLEMS 448-64 (1986) (an example of a concession agreement incorporating the terms of the Draft Concession Agreement). In countries that do not embrace the concept of arbitration, governments usually insist that disputes be referred to the local courts. *See* INTERNATIONAL PETROLEUM AGREEMENTS, *supra* note 6, at 315-16. Some of these agreements also attempt to limit a sovereign's ability to modify the agreement unilaterally. It is still too soon to determine whether the arbitration panels and courts will be influenced by United States oil and gas decisions, which historically have tried to balance the rights of the lessor with those of the lessee.

⁸ Note, *From Concession to Participation: Restructuring the Middle East Oil Industry*, 48 N.Y.U. L. REV. 774, 776-77 (1973) [hereinafter Note, *Concession to Participation*]. For example, during the 1950s and 1960s, the major oil companies controlled the posted price of oil and thus the amount of the royalty paid to the countries. *See Id.* at 779-81.

Seven Sisters almost completely controlled fifty years ago, are now increasingly shared,⁹ and in some instances dominated,¹⁰ by oil companies owned by the very countries that fifty years ago had virtually given away their petroleum reserves. Even more notably, state agencies of some of these countries have acquired a stake in the oil reserves of the home countries of the multinational oil companies.¹¹

The processes by which these changes occurred differed greatly from country to country. In the United States, state courts and administrative agencies have struggled to balance the rights of landowner-lessors and producer-lessees.¹² The judicial decisions have produced a series of implied covenants that impose a duty upon the person or entity holding the right to explore a particular tract to develop it for the mutual benefit of both parties to the lease.¹³ Administrative regulations have also protected the rights of the landowner.¹⁴ Although the oil and gas lease still governs the relationship between the landowner and the lessee, the modern lease contains implied covenants and provisions largely unheard of when the earliest agreements were entered into.

⁹ The most highly publicized recent example of such arrangements is the agreement between Texaco, Inc. and Aramco Services Company, a company owned by Saudi Arabia, to form a joint venture controlling Texaco property in the United States that includes three refineries, almost 1500 service stations, and a distributor network of about 10,000 stations. *Texaco, Saudis Plan Downstream Venture*, OIL & GAS J., June 20, 1988, at 30; *see also* Petzinger, *Saudi Arabia, Texaco Disclose Gasoline Pact*, Wall St. J., June 17, 1988, at 2, col. 2 (Southwest ed.).

¹⁰ Kuwait Petroleum International, which operates almost 5000 retail service stations in Western Europe under the Q8 brand, is the market leader in Denmark and has a major retailing presence in Britain, Italy, the Netherlands, Belgium, and Luxembourg. It is in the process of acquiring interests in the French and West German markets. Vielvoye & Williams, *OPEC Members Push Campaigns to Diversify Their Economies*, OIL & GAS J., Jan. 18, 1988, at 17, 18.

¹¹ For example, the Kuwait Investment Office owns a 22% interest in British Petroleum Company, which holds licenses covering large portions of the United Kingdom's continental shelf. *Middle East Revamp*, OIL & GAS J., June 20, 1988, at 25.

¹² Note that in the United States, unlike most countries, minerals belong to the landowner, not to the sovereign. Of course, if the federal or state government owns the land, the government also owns the minerals under the land. The government may also retain by statute the mineral rights to land once publicly held but now privately owned. *See* J. LAITOS, *NATURAL RESOURCES LAW* 4-5, 287-91, 306-07 (1985).

¹³ *See generally* 5 H. WILLIAMS & C. MEYERS, *OIL AND GAS LAW* §§ 800- 803 (1986); Walker, *The Nature of the Property Interests Created by an Oil and Gas Lease In Texas*, 11 TEX. L. REV. 399 (1933).

¹⁴ *See Generally* J. WEAVER, *supra* note 3, at 137-96 (a review of Texas Railroad Commission actions designed to prevent waste, require conservation, and protect correlative rights).

Sovereign states have not had the option of turning to the courts or agencies to determine their rights under concessions.¹⁵ Thus, governments have turned to two quite different options. Some countries, notably Mexico, turned to nationalization as a means of regaining control over their natural resources.¹⁶ Other countries, notably Middle Eastern nations, managed to pressure the oil companies to renegotiate the original concessions.¹⁷ As a result of these actions, very few of the original arrangements are in place today.

This Article examines the evolution of international agreements dealing with the exploration and development of petroleum, from the early concessions to the modern arrangements. Part II compares early United States leases with the arrangements entered into by the oil companies in the Middle East and Mexico. From these comparisons, we conclude that the landowner in the United States was frequently in a more favorable legal position than were the countries that had granted concessions to the oil companies. The advantage held by the United States landowner resulted largely from the implied covenants developed by the courts. We also suggest that, by and large, the Middle Eastern countries fared better than Mexico in their arrangements with the oil companies.

Part III examines the 1938 Mexican expropriation and the movement from concession to participation that occurred in the Middle East. In this section, we offer reasons why a particular route to change may have been more desirable from the perspectives of the individual countries. Although these two events were the products of many underlying political undercurrents, they were primarily efforts to regain control over domestic natural resources.

In part IV, we present a brief overview of the petroleum arrangements in existence in the world today. The format of the United States oil and gas lease has remained relatively unchanged since the 1930s. The arrangements used by foreign nations, however, have undergone a radical transformation. Consistent with the countries' efforts to achieve greater control over the development of resources within their borders, governments have developed strong national oil companies. The form of modern agreements used within a specific country is often a product of the method used to change the original scheme; for historical reasons, the arrangements used in the Middle East generally differ from the arrangements used in Mexico. We suggest that one major difference between the various arrangements is the degree of control that the country wishes to maintain over its natural resources. In this section, we also briefly examine current trends in world petroleum arrangements.

The final part of this Article presents the consequences of the two basic methods used by foreign sovereigns in altering the original arrangements. Under our analysis of the costs and benefits of expropriation and renegotiation, it appears that choices made years ago about how to modify the original concessions have significantly affected the manner in which a particular country is currently involved in the world petroleum market. We conclude the Article by examining the probable future of the involvement of oil-exporting countries in light of current trends in the international petroleum industry.

¹⁵ For arguments that a variety of contractual remedies should be made available to the parties involved in disputes over concessions, see Dickstein, *Revitalizing the International Law Governing Concession Agreements*, 6 INT'L TAX & BUS. LAW. 54 (1988); Note, *Unilateral Action by Oil Producing Countries: Possible Contractual Remedies of Foreign Petroleum Companies*, 9 FORDHAM INT'L L.J. 63 (1985-1986) [hereinafter Note, *Unilateral Action*].

¹⁶ See generally A. Knight, *The Politics of the Expropriation*, paper presented at conference, *The Mexican Petroleum Nationalization 1938-1988*, at the University of Texas, Austin, Texas, Feb. 1988 (copy on file with the *Texas International Law Journal*).

¹⁷ See INTERNATIONAL PETROLEUM AGREEMENTS, *supra* note 6, at 44-50.

II. AN EXAMINATION OF EARLY PETROLEUM ARRANGEMENTS

This section offers a historical perspective on the early agreements executed by landowners to oil companies for the development of petroleum reserves. First, we compare the Middle Eastern concession with the typical oil and gas lease used in the United States. Second, in light of this comparison, we examine the interests granted to oil companies in Mexico before the expropriation. As this discussion indicates, foreign countries in the 1930s generally found themselves in a very unfavorable position with respect to the oil companies.

A. *A Comparison of the Middle Eastern Concession with the Oil and Gas Lease Used in the United States*

The archetypal Middle Eastern concession was obtained by William D'Arcy from the Shah of Persia in 1901.¹⁸ For a \$100,000 "bonus," another \$100,000 in stock in his oil company, and a 16% royalty, D'Arcy received exclusive oil rights to 500,000 square miles of Persia for the next sixty years.¹⁹ Other concessions in the region generally followed this format;²⁰ they were granted for very long terms and covered immense areas. The 1933 concession that the King of Saudi Arabia granted to Standard Oil Company of California for £ 50,000 was for a sixty-six-year term and ultimately covered almost as much territory as the D'Arcy grant.²¹ Six years later, the Ruler of Abu Dhabi granted a seventy-five-year concession covering the entire country to a consortium composed of five major oil companies.²² The Kuwait concession was also for a seventy-five-year term and covered the entire country.²³

These concessions did not specifically obligate the companies to drill on any of the lands granted or to release territory if exploration and drilling were not undertaken.²⁴ Moreover, the host countries

¹⁸ *Id.* at 44; Note, *Concession to Participation*, *supra* note 8, at 776 n.5.

¹⁹ R. ANDERSON, *supra* note 1, at 40. The company formed to exploit D'Arcy's concession was the forerunner of British Petroleum. *Id.* In 1933, negotiations between Persia and the Anglo-Persian Oil Company reduced the area covered by the concession to 100,000 square miles and extended its term to 1993. Note, *Concession to Participation*, *supra* note 8, at 776 n.5.

²⁰ For an example and discussion of the provisions of a typical Middle Eastern concession from the 1930s, see INTERNATIONAL PETROLEUM AGREEMENTS, *supra* note 6, at 57 (excerpts from a 1937 concession between the Sultanate of Muscat and Oman and a multinational corporation); *see also* Agreement Between Petroleum Concessions, Ltd. and Sultan of Muscat and Oman, art. 9 (1937) (cited portions of the Agreement are on file with the *Texas International Law Journal*).

²¹ *See* I. ANDERSON, ARAMCO, THE UNITED STATES, AND SAUDI ARABIA 25 (1981); R. LEBKICHER, G. RENTZ & M. STEINEKE, ARAMCO HANDBOOK 136 (1960) [hereinafter ARAMCO HANDBOOK]. The concession granted to Standard Oil Company of California covered 496,000 square miles. *See* Note, *Concession to Participation*, *supra* note 8, at 776 n.5.

²² Suleiman, *The Oil Experience of the United Arab Emirates and its Legal Framework*, 6 J. ENERGY & NAT. RES. L. 1, 3 (1988).

²³ *See* INTERNATIONAL PETROLEUM AGREEMENTS, *supra* note 6, at 56 (discussing the terms of the early concessions in the Middle East).

²⁴ Note, *Concession to Participation*, *supra* note 8, at 776-77.

had no right to participate in managerial decisions,²⁵ including decisions on drilling and development. After the initial consideration and, occasionally, other agreed-upon payments had been made, the sole financial benefit received by the countries or their rulers was the right to royalties. Many early concessions even freed the companies from all tax obligations other than those specifically provided for in the agreement.²⁶

²⁵ Suleiman, *supra* note 22, at 2.

²⁶ R. MIKESELL, PETROLEUM COMPANY OPERATIONS AND AGREEMENTS IN THE DEVELOPING COUNTRIES 21 (1984).

The royalty provisions in the Middle Eastern concessions granted in the 1930s were generally less favorable to rulers than those in the original grant to D'Arcy.²⁷ These later concessions typically provided for a royalty calculated as a flat rate per ton of oil rather than as a percentage of the value of the sale price of production.²⁸ Thus, both the Ruler of Abu Dhabi and the Sultan of Muscat and Oman received three rupees per English ton of oil produced from their respective concessions;²⁹ the Arabian concession set the royalty at four gold shillings per ton.³⁰

The Middle Eastern concessions were strikingly similar to the oil and gas leases granted in the United States in the first three decades of this century. By 1900, the conditions that had characterized mid-nineteenth century development in Pennsylvania--shallow, inexpensive wells drilled by operators willing to take oil leases on tracts of an acre or less--had largely disappeared in the United States.³¹ Lessees, faced with more costly drilling and the need to have greater established reserves for expanding markets, insisted on leasing larger tracts.³² Although United States oil and gas leases rarely, if ever, covered tracts as immense as those in the Middle East, this difference was attributable to the size of the farms and ranches owned by lessors, rather than to a greater skill in bargaining. Like the Ruler of Abu Dhabi, a landowner in Texas or Oklahoma typically entered into a single oil and gas lease covering all the property he owned, whether it was a forty-acre farm or an 85,000-acre ranch.³³ Moreover, many fixed-term leases, some for as long as ninety-nine years,³⁴ were still in effect, and new ones were occasionally executed.³⁵ Other leases, as written, might in theory last forever, even though production was never obtained. These no-term leases permitted the lessee to maintain the lease in effect indefinitely by paying an annual rental.³⁶ If oil production was obtained, however, royalty clauses in United States leases generally entitled the landowner to a fraction of the oil produced rather than a fixed payment per ton, although the percentages varied considerably from lease to lease.³⁷ In the case of natural gas, some leases did not base the payment

²⁷ One authoritative source offers the following perspective on the concession system:

[I]t is not the legal system *per se* which made for the terms of the early concessions, but the then prevailing general circumstances. It must be recalled that in those days, concessions were granted by Sovereigns with sometimes little authority, often under foreign political dominance. Also, the countries concerned were backward, sometimes nomadic, and in no case possessed a legal framework liable to govern such things as petroleum operations. Therefore, in order to fill that void, concessions were not only tilted in favor of [multinational oil corporations] but also written in such a way that they constituted self-sufficient charters for those areas of the world where [there] existed no infrastructure of any kind, nor any government control or capabilities of any sort. Hence, it is hardly surprising that the word "concession" became mentally associated with "underdevelopment" and "political dominance"; this explains, from a psychological standpoint, the hostility shown toward this type of agreements [sic].

INTERNATIONAL PETROLEUM AGREEMENTS, *supra* note 6, at 60-61 (citing El-Kosheri, *Le régime juridique cree par les accords de participation dans le domaine pétrolier*, [1975] IV RECUEIL DES COURS: COLLECTED COURSES OF THE HAGUE ACADEMY OF INTERNATIONAL LAW 219, 244-45).

²⁸ Suleiman, *supra* note 22, at 2.

²⁹ *Id.*; International Petroleum Agreements, *supra* note 6, at 57. This payment is estimated to have been approximately eight cents per barrel. Suleiman, *supra* note 22, at 2.

³⁰ See I. ANDERSON, *supra* note 21, at 25.

³¹ Veasey, *The Law of Oil and Gas* (pt. 2), 18 MICH. L. REV. 652, 653-55 (1920).

³² *Id.*

³³ For an example of a lease covering 85,000 acres, see *Waggoner Estate v. Sigler Oil Co.*, 118 Tex. 509, 19 S.W.2d 27 (1929).

³⁴ Veasey, (pt. 2), *supra* note 31, at 655-56.

³⁵ See *Gulf Oil Corp. v. Southland Royalty Co.*, 496 S.W.2d 547, 548 (Tex. 1973) (lease executed in 1925 contained a maximum term of 50 years).

³⁶ See, e.g., the lease described in *Consumers' Gas Trust Co. v. Littler*, 162 Ind. 320, 70 N.E. 363 (1904).

³⁷ Compare *Southern Oil Co. v. Colquitt*, 69 S.W. 169 (Tex. Civ. App. 1902, writ ref'd) (1/10th royalty) with *Consumers' Gas Trust Co. v. Littler*, 162 Ind. 320, 70 N.E. 363 (1904) (1/6th royalty).

on the volume of production, but merely provided for an annual payment of a fixed amount per gas well.³⁸

³⁸ *See, e.g.*, the lease described in *Consumers' Gas Trust Co. v. Littler*, 162 Ind. 320, 70 N.E. 363 (1904); *see also* E. KUNTZ, J. LOWE, O. ANDERSON & E. SMITH, *CASES AND MATERIALS ON OIL AND GAS LAW* 254-55 (1986) [hereinafter *CASES AND MATERIALS*].

By the 1930s, however, a standard United States oil and gas lease had emerged that differed significantly from its Middle Eastern counterparts of the same period. Leases covering all property owned by the lessor were still the rule, but fixed-term and to-term leases had disappeared. The lease term had assumed its modern form, providing that the lessee's interest would last for a specified time period, usually five or ten years, and so long thereafter as oil or gas might be produced.³⁹ Unless drilling and production occurred by the end of the primary term, the lease terminated.⁴⁰ Additionally, the royalty clause for both oil and gas had become standardized at one-eighth of production for oil and one-eighth of the sale price or market value for gas.⁴¹

Rather curiously, the midwestern farmer who leased his land to an oil company was in a better contractual position than the Middle Eastern sheik. Under the typical Middle Eastern concession, the oil company did not risk losing its concession if it failed to drill. The opposite was true under the United States oil and gas lease; the lease format, although it did not guarantee drilling, at least assured the landowner that his land would not be tied up indefinitely by the payment of a small annual rental. If oil was discovered, neither the Middle Eastern concession nor the United States lease imposed upon the oil company any express contractual duty to produce from the well. Under the concession, the company could safely shut in the well if it wanted to do so. The lessee in the United States, however, risked losing the lease for lack of production at the end of the primary term, at least if the shut-in well was the initial discovery well.⁴² Finally, if production was obtained, the

³⁹ See H. WILLIAMS, OIL AND GAS LAW § 603 (1986) (part of the H. WILLIAMS & C. MEYERS series).

⁴⁰ See R. HEMINGWAY, THE LAW OF OIL AND GAS § 6.4 (2d ed. 1983). Many leases contain clauses providing for an extension of the lease term if certain conditions are satisfied. See Lowe, *How to Keep Oil and Gas Leases Alive*, 4 OIL & GAS L. & TAX'N REV. 79, 79 (1986-1987). For example, shut-in royalty clauses allow a lessee to shut in a well and pay a certain sum for each period that production is suspended. See CASES AND MATERIALS, *supra* note 38, at 171; 8 H. WILLIAMS & C. MEYERS, *supra* note 13, at 907-08 (1987) (Manual of Terms) (defining shut-in royalty clauses).

⁴¹ See 3 H. Williams, *supra* note 39, § 642.1.

⁴² See *Id.* § 632.2. The only exception was for a gas well, since form leases almost invariably permitted them to be shut in pending a search for a pipeline connection. See R. HEMINGWAY, *supra* note 40, § 6.5.

A handful of jurisdictions developed a similar doctrine through judicial decisions. Under this view, a well capable of profitable production was deemed to hold the lease beyond the primary term, even though it was shut in. Most of these jurisdictions applied this doctrine only to gas wells, for which markets were frequently inaccessible because of the lack of an immediate pipeline connection. Some of the courts adhering to the minority view also applied it to oil wells. See CASES AND MATERIALS, *supra* note 38, at 169-70.

lessor was not limited to a flat sum per ton, but received one-eighth of the production or its sale price.⁴³

The lessor in the United States had not only the benefit of the lease format, but also the more significant benefit of the United States courts. The most widely used printed oil and gas leases were drafted for use by oil companies and contained relatively few provisions favorable to the lessor. The courts, however, had long shown their willingness to redress egregious imbalances in contractual rights between the oil companies and their lessors. Judicial hostility to the patent unfairness of the no-term lease was the principal factor leading to its discontinuance. Judicial suggestions that the no-term lease lacked consideration brought into question its enforceability,⁴⁴ and the emergence of the implied covenants doctrine assured its demise. Indeed, the judicial doctrine that the lessee impliedly covenants to perform as a reasonably prudent operator and to undertake the various obligations imposed by such a standard provided the lessor with his greatest protection.

⁴³ See 3 H. WILLIAMS, *supra* note 39, § 642.

⁴⁴ See, e.g., *National Oil & Pipe Line Co. v. Teel*, 67 S.W. 545 (Tex. Civ. App.), *aff'd on other grounds*, 95 Tex. 586, 68 S.W. 979 (1902). For a discussion of judicial hostility to the no-term lease, see 3 H. WILLIAMS, *supra* note 39, § 601.3.

By the turn of the century, United States courts had concluded that an oil and gas lessee impliedly covenants to explore, develop, and produce from the leased premises for the mutual benefit of both itself and the landowner. In 1905, the Eighth Circuit commented in *Brewster v. Lanyon Zinc Co.*⁴⁵ that's a covenant arising by necessary implication is as much a part of the contract--is as effectually one of its terms--as if it had been plainly expressed.⁴⁶ Although different rationales were suggested for implying covenants in oil and gas leases,⁴⁷ and disagreement existed over the obligations imposed by the implied covenants, the existence of the implied covenants doctrine itself was not open to serious challenge. By the early years of this century, courts had held that a lessee had an implied duty to drill offset wells to protect the leased premises from drainage by wells on adjacent tracts.⁴⁸ The courts had also construed the no-term lease to contain an implied covenant to drill an initial exploratory well.⁴⁹

The basic format of the modern lease reflected a direct reaction to these rulings.⁵⁰ By providing for a fixed, relatively short primary term, a payment for the privilege of deferring drilling during each year of that term, and automatic termination if no drilling or production occurred before the end of the primary term, the lease obviated the need for an implied duty to drill an initial exploratory well.⁵¹ The other implied covenants, however, were unaffected and remained intact under the

⁴⁵ 140 F. 801 (8th Cir. 1905).

⁴⁶ *Id.* at 812.

⁴⁷ Compare Walker, *supra* note 13, at 402-06 (covenants implied in fact) with M. MERRILL, THE LAW RELATING TO COVENANTS IMPLIED IN OIL AND GAS LEASES § 7, at 220 (2d ed. 1940) (covenants implied in law).

⁴⁸ See, e.g., *Davis v. Mose*, 112 Okla. 38, 239 P. 447 (1925).

⁴⁹ The reasoning in *Consumers' Gas Trust Co. v. Littler*, 162 Ind. 320, 70 N.E. 363 (1904), is typical. The court stated that the major inducement for the landowner's execution of the lease was the prospect of royalties on oil, and that the real, although unexpressed, intention of the parties was that the company should enter and drill an exploratory well within a reasonable time. The lessee's default in complying with this implied obligation entitled the lessor to assert a termination of the lease.

⁵⁰ See R. HEMINGWAY, *supra* note 40, § 8.1; see also J. LOWE, OIL AND GAS LAW IN A NUTSHELL 202-04 (2d ed. 1988).

⁵¹ See, e.g., *Eastern Oil Co. v. Beatty*, 71 Okla. 275, 177 P. 104 (1918).

modern oil and gas lease. In 1934, the United States Supreme Court had no difficulty in stating that the lessee's implied covenant to develop was a generally accepted rule.⁵²

The implied covenants gave a lessor in the United States significant legal advantages not available to his Middle Eastern counterparts. Whether the lessor was a Texas rancher or an Arabian sheik, the principal consideration for granting the lease was the right to royalties on production. But neither the concession nor the printed form lease contained express production or developmental obligations. In the Middle East, where some wells might produce over 40,000 barrels of oil a day, low-producing wells, including those producing "only" 10,000 or fewer barrels a day, were commonly shut in as a matter of course.⁵³ The country (or its ruler) was thus deprived of the income from those wells until the company holding the concession chose to begin production. The Texas rancher, if faced with such a situation, could invoke the implied covenant to operate a well capable of producing oil in paying quantities.⁵⁴

⁵² *Sauder v. Mid-Continent Petroleum Corp.*, 292 U.S. 272 (1934).

⁵³ R. ANDERSON, *supra* note 1, at 45.

⁵⁴ "While the lease [did] not expressly use the term 'paying quantities,' it [was] well settled that the terms 'produced' and 'produced in paying quantities' [meant] substantially the same thing." *Clifton v. Koontz*, 325 S.W.2d 684, 690, 160 Tex. 82, 89 (1959); *see also* CASES AND MATERIALS, *supra* note 38, at 204-05. In order for production to be in paying quantities, the lessee must make at least a minimal profit from production over the operating expenses. It is unnecessary for the lessee to be able to repay its drilling costs or for the enterprise as a whole to be profitable. *See Garcia v. King*, 164 S.W.2d 509, 139 Tex. 578 (1942). For a brief discussion of how production in paying quantities is ascertained, *see* CASES AND MATERIALS, *supra* note 38, at 206-11.

Virtually and commentators agree that the United States lessee had an implied duty to produce from a profitable well,⁵⁵ and this position found explicit judicial support.⁵⁶ As one early decision reasoned,

Even in respect of the first well, if oil or gas was found in paying quantity, there was no express engagement to operate it; but that it was intended to be operated was plainly implied in the engagement to pay royalties to be gauged according to the production of oil and the use of gas. Whatever is necessary to the accomplishment of that which is expressly contracted to be done is part and parcel of the contract, though not specified.⁵⁷

This obligation, which Professor Kuntz lists as part of the wider implied covenant of “diligent and proper operation,”⁵⁸ rendered the lessee liable in damages if it prematurely abandoned a producing well,⁵⁹ regardless of whether other producing wells were holding the lease.

The more common problem that lessors faced was a lessee’s failure to develop a field after initial drilling discovered a reservoir capable of production. As the leases and concessions were written, a company desiring to hold its proven reserves indefinitely, in hopes of a larger demand at a higher price, was free to do so. Indeed, this strategy was the rule. The Middle Eastern concessions were almost invariably held by consortia with partially overlapping memberships. This interrelationship of the major oil companies resulted in joint offtake agreements limiting the total amount of production from virtually all of the major concessions.⁶⁰ Because these agreements limited each company to production of a fixed amount of oil for market, the incentive to drill new wells into an established and proven reservoir was slight. Nothing in the early concessions prohibited these abusive practices by the companies.

⁵⁵ See, e.g., R. HEMINGWAY, *supra* note 40, § 8.9(B); 5 H. WILLIAMS & C. MEYERS, *supra* note 13, § 861.2; see also J. LOWE, *supra* note 50, at 343-44.

⁵⁶ See, e.g., *Brewster v. Lanyon Zinc Co.*, 140 F. 801, 811 (8th Cir. 1905); *Gallaspy v. Warner*, 324 P.2d 848 (Okla. 1958); *Okmulgee Supply Corp. v. Anthis*, 189 Okla. 139, 114 P.2d 451 (1940).

⁵⁷ *Brewster v. Lanyon Zinc Co.*, 140 F. at 811.

⁵⁸ 5 E. KUNTZ, A TREATISE ON THE LAW OF OIL AND GAS § 59.1 (1978).

⁵⁹ *Id.*

⁶⁰ See Note, *Concession to Participation*, *supra* note 8, at 779-80.

In the United States, however, the oil companies were faced with a much different legal environment. The antitrust laws made domestic offtake agreements illegal,⁶¹ and the implied covenant of reasonable development gave the lessor a remedy against a company that had failed to drill additional wells into a proven reservoir. As a general rule, the lessor was required to show that his lessee had delayed unreasonably in drilling additional wells, that the lessee had a reasonable expectation that such wells would be profitable, and that the lessor had given the lessee notice of breach and had demanded compliance.⁶² A landowner who successfully met this burden of proof might be entitled to a variety of remedies, ranging from damages⁶³ to outright cancellation of the undeveloped portions of the lease.⁶⁴ Alternatively, the lessor might obtain a conditional decree requiring the lessee to drill a specified number of wells within a specified period of time in order to maintain all or part of the lease.⁶⁵ No similar rights or remedies were found in contemporaneously executed Middle Eastern concessions.

⁶¹ Cf. J. WEAVER, *supra* note 3, at 42, 386 n.27. The antitrust laws were feared to be a legal barrier to unitization. See R. HARDWICKE, *ANTITRUST LAWS ET AL. V. UNIT OPERATION OF OIL OR GAS POOLS* 32 (rev. ed. 1961).

⁶² See, e.g., *Superior Oil Co. v. Devon Corp.*, 604 F.2d 1063 (8th Cir. 1979).

⁶³ See *Texas Pacific Coal & Oil Co. v. Barker*, 117 Tex. 418, 6 S.W.2d 1031 (1928).

⁶⁴ See, e.g., *Brewster v. Lanyon Zinc Co.*, 140 F. 801, 812-16 (8th Cir. 1905); *Doss Oil Royalty Co. v. Texas Co.*, 192 Okla. 359, 137 P.2d 934 (1943).

⁶⁵ See *Sauder v. Mid-Continent Petroleum Corp.*, 292 U.S. 272 (1934); cf. *Sun Exploration & Production Co. v. Jackson*, 31 Tex. Sup. Ct. J. 604 (July 13, 1988) (indicating that the trial court was incorrect in awarding unconditional cancellation of a lease, instead of conditional cancellation, for the breach of implied covenants). For an example of the type of conditions imposed when a court orders conditional cancellation of a lease, see *Sinclair Oil & Gas Co. v. Masterson*, 271 F.2d 310, 324-25 (5th Cir. 1959).

B. *Oil Company Rights in Mexico*

Although the contractual rights of Middle Eastern sovereigns under the concession agreements compared unfavorably with those of lessors in the United States, their rights in most instances were markedly superior to those the oil companies conceded to the Republic of Mexico. Whereas the concessions held by the oil companies in the Middle East were analogous to early United States oil and gas leases, the rights asserted by the oil companies to much of the oil-producing land in Mexico came close to the common law concept of fee simple ownership. The basis for the oil companies' claims lay in mining laws enacted in the late nineteenth century during the regime of Porfirio Díaz.⁶⁶

By far the most important of these were the Mining Law of 1884, which provided that petroleum and natural gas were the "exclusive property of the owner of the soil,"⁶⁷ and the Mining Law of 1892, which stated that ownership of mining property "shall be irrevocable and perpetual" and indicated that oil and gas could be exploited without first obtaining a concession agreement.⁶⁸

⁶⁶ Porfirio Díaz, who assumed power in 1876 through a military coup that ousted Sebastian Lerdo de Tejada, was the president of Mexico from 1876 to 1880 and from 1884 until the Mexican Revolution forced him out of office in 1911, and was probably the real power behind the presidency of Manuel Gonzalez (1880-1884). See T. FEHRENBACH, *FIRE AND BLOOD* 451-53 (1973).

⁶⁷ Código de Minería de 22 de noviembre de 1884, tit. 1, art. 10, *Diario Oficial*, Nov. 26, 1884. The relevant portions of the statute are reproduced in J. SILVA HERZOG, *HISTORIA DE LA EXPROPIACION DE LAS EMPRESAS PETROLELAS* 18-19 (1964). A partial English translation can be found in *STANDARD OIL CO., THE REPLY TO MEXICO* 8 (1940) [hereinafter *THE REPLY TO MEXICO*] (emphasis originates in this source).

⁶⁸ Ley Minera de 4 de junio de 1892, tit. 1, arts. 4, 5, in *LEY MINERA Y LEY DE IMPUESTO A LA MINERIA CON SUS RESPECTIVOS REGLAMENTOS* 3, 4-5 (1892). The first four articles of this statute are reproduced in J. SILVA HERZOG, *supra* note 67, at 19-21. An English translation of Article 5 can be found in *THE REPLY TO MEXICO*, *supra* note 67, at 8 (emphasis originates in this source).

Relying on these statutes, individual wildcatters and, later, British, Dutch, and United States oil companies purchased huge areas of Mexican land.⁶⁹ By the time of the Mexican Revolution, much of the subsoil was claimed by foreign companies.⁷⁰ The companies that had acquired the oil and gas rights interpreted the Díaz mining laws as giving them an “irrevocable and perpetual” interest in the oil and gas in place⁷¹ equivalent to a common law fee simple.⁷² The companies viewed the mining laws as having enacted the ownership-in-place doctrine, later to be adopted by several states in the United States.⁷³ This doctrine permitted a severance of surface ownership from oil and gas ownership.⁷⁴

Such common law concepts did not fit easily into Mexico’s civil law system. Indeed, Louisiana courts, which had considerable experience in adapting common law doctrines to a civil law system, specifically rejected the concept of a severable corporeal estate in oil and gas on the ground that it was contrary to civil law jurisprudence.⁷⁵ The oil companies, therefore, also had to rely upon an alternative construction of the Díaz legislation. Up to a point, these foreign corporations were willing to accept the Mexican government’s argument, advanced with increasing frequency after the Mexican Revolution of 1911, that the statutes granted the surface owner merely the right to exploit the oil and gas, rather than the outright ownership of the substances in the ground.⁷⁶ In the United States, this position had been adopted in Louisiana⁷⁷ and other states⁷⁸ that, like the Mexican government,⁷⁹ viewed migratory substances such as oil and gas as incapable of being owned.

The courts in the United States, however, had reduced the distinction between the two theories largely to one of terminology, and the rights of owners of oil and gas beneath the land varied little, whether located in an ownership-in-place or a nonownership jurisdiction.⁸⁰ In Texas, an ownership-in-place jurisdiction, the owner of a severed mineral estate had no obligation to drill and ran no risk

⁶⁹ See R. ANDERSON, *supra* note 1, at 45-47. Two California oil men, Edward Doheny and Charles Canfield, purchased 450,000 acres in what proved to be one of Mexico’s most prolific oil fields and later came to be the heart of Standard Oil Company’s holdings in the country. *Id.*

⁷⁰ See W. GORDON, *THE EXPROPRIATION OF FOREIGN-OWNED PROPERTY IN MEXICO* 5 (1941).

⁷¹ See *THE REPLY TO MEXICO*, *supra* note 67, at 8.

⁷² See W. GORDON, *supra* note 70, at 69; see also STANDARD OIL CO., *PRESENT STATUS OF THE MEXICAN OIL “EXPROPRIATIONS”* 1940 at 5-35 (1940) [hereinafter MEXICAN OIL “EXPROPRIATIONS” 1940].

⁷³ The oil companies’ position is articulated in Standard Oil Company’s publication. *THE REPLY TO MEXICO*, *supra* note 67, at 9. For a discussion of the ownership-in-place doctrine in the United States, see *Texas Co. v. Daugherty*, 107 Tex. 226, 176 S.W. 717 (1915); Veasey, *The Law of Oil and Gas* (pt. 1), 18 MICH. L. REV. 445, 462 (1920).

⁷⁴ United States courts had long recognized that a distinct estate could be created in subsurface minerals, *e.g.*, *Lillibridge v. Lackawanna Coal Co.*, 143 Pa. 293, 22 A. 1035 (1891), and had little difficulty in applying the same doctrine to oil and gas. See, *e.g.*, *Humphreys-Mexia Co. v. Gammon*, 113 Tex. 247, 254 S.W. 296 (1923); Veasey, (pt. 1), *supra* note 73, at 457.

⁷⁵ See *Frost-Johnson Lumber Co. v. Salling’s Heirs*, 150 La. 756, 91 So. 207 (1922) (on the second rehearing of the case, the Louisiana Supreme Court held that oil and gas in place cannot be owned separately from the soil and that a grant or reservation passed “only the right to extract” the oil and gas); *Wemple v. Nabors Oil & Gas Co.*, 154 La. 483, 97 So. 666 (1923); see also L. MCDUGAL, *LOUISIANA OIL AND GAS LAW* 25-26, 39-47 (1988).

⁷⁶ See J. COLOMO, *THE MEXICAN PETROLEUM LAW ITS BASIS AND ITS AIMS* 6- 9 (1927) (published by the Mexican Petroleum Bureau of the Secretaria de Industria, Comercio y Trabajo); *GOVERNMENT OF MEXICO, THE TRUE FACTS ABOUT THE EXPROPRIATION OF THE OIL COMPANIES’ PROPERTIES IN MEXICO* 24 (1940).

⁷⁷ See *Frost-Johnson Lumber Co. v. Salling’s Heirs*, 150 La. at 858, 91 So. at 243.

⁷⁸ *E.g.*, Oklahoma. See *Rich v. Doneghey*, 71 Okla. 204, 177 P. 86 (1918). Other states include California and Wyoming. See J. LOWE, *supra* note 50, at 30.

⁷⁹ See, *e.g.*, J. COLOMO, *supra* note 76, at 8.

⁸⁰ 1 E. KUNTZ, *supra* note 58, § 2.4; see also J. DZIENKOWSKI & R. PERONI, *NATURAL RESOURCE TAXATION: PRINCIPLES AND POLICIES* 36-40 (1988) (discussing and reprinting portions of *Burnet v. Harmel*, 287 U.S. 103 (1932), which held that no difference exists between the two theories of ownership for purposes of United States federal taxation).

of losing his mineral interest if he failed to do so.⁸¹ If production was obtained, it belonged to the owner of the mineral estate. Other private persons might have a right to royalties based upon deed provisions or contracts, but the owner of the mineral estate had no obligation to share the production with the state or federal governments.⁸² If the severed oil and gas interest was located in Oklahoma, the owner had virtually identical rights, even though Oklahoma had long followed the nonownership theory.⁸³

⁸¹ See *Loomis v. Gulf Oil Corp.*, 123 S.W.2d 501 (Tex. Civ. App.-- Eastland 1938, writ ref'd).

⁸² For a discussion of the incidents of the mineral estate, see J. LOWE, *supra* note 50, at 39-41.

⁸³ See, e.g., *Crain v. Pure Oil Co.*, 25 F.2d 824, 829 (8th Cir. 1928) (“[N]o effort need ever be made to discover the same if this is in fact a deed, . . . and grantees could hold the mineral rights indefinitely and never make any effort to discover oil or gas.”). *But see* *Gerhard v. Stephens*, 68 Cal. 2d 864, 442 P.2d 692, 69 Cal. Rptr. 612 (1968) (holding that a severed incorporeal interest in the minerals can be lost by abandonment).

Thus, the oil companies saw little difference between an interpretation of the Díaz legislation that gave them ownership of the oil and gas in the ground and one that gave them merely the right to exploit it. The oil companies preferred the security given by the ownership-in-place theory, but they could accept a doctrine giving them the perpetual right to exploit the oil and gas. As a Standard Oil Company spokesman stated, “[o]wnership carried with it the ownership of the petroleum subsoil and not merely the exclusive right to extract it, though in result there is no material difference.”⁸⁴ Under civil law, the right to exploit would be a servitude, more analogous to a common law profit à prendre than to a fee simple, and might require some positive act manifesting the owner’s intent to use or obtain the subsurface oil.⁸⁵ Regardless of classification, however, the mining legislation had granted “irrevocable” rights, and the owner of oil and gas rights in Mexico logically should have been in much the same position as the owner of a mineral fee in Texas or an incorporeal mineral interest in Oklahoma or California. He had no duty to drill and explore. If he did so, he might be required to pay the surface owner for injury or use of the land, but any production from a successful well would belong entirely to the owner of the rights in the subsoil. The Mexican government had no more right to require development or share in production than did the state of Oklahoma.⁸⁶

Of course, the oil companies had acquired rights other than subsoil ownership of oil and gas in the ground. In many instances in which no “severance” of subsurface rights had occurred, they owned the land outright; in others they had received leases from private landowners.⁸⁷ Of probably equal or greater importance were the concessions the Mexican government had granted over its own publicly owned territory before the Revolution. The 1901 petroleum law, which authorized the granting of such concessions, gave the companies liberal tax exemptions; the right to import machinery, equipment, and material duty-free; and other special privileges, including the right to

⁸⁴ THE REPLY TO MEXICO, *supra* note 67, at 9.

⁸⁵ See *Wemple v. Nabors Oil & Gas Co.*, 154 La. 483, 97 So. 666 (1923). Standard Oil relied upon Mexican Supreme Court decisions suggesting that subsurface rights acquired before the 1917 Constitution were not affected by the Constitution if their owners had previously drilled, leased, explored, entered into contracts relating to the subsoil, or otherwise manifested an intent to exercise their subsurface rights. MEXICAN OIL “EXPROPRIATIONS” 1940, *supra* note 72, at 23.

⁸⁶ See MEXICAN OIL “EXPROPRIATIONS” 1940, *supra* note 72, at 14 (“[S]ubsoil petroleum on properties owned or leased prior to May 1, 1917, was the exclusive preserve of the surface owner or lessee, even to the exclusion of the Government itself.”).

⁸⁷ See *id.* at 14. The royalties on such leases ranged from as low as 5% to as high as 15%. See G. PHILIP, OIL AND POLITICS IN LATIN AMERICA 28 (1982).

“expropriate” land necessary for their oil operations.⁸⁸ The royalty, apparently computed on a net profits basis, was often set at 10%.⁸⁹

Even with these generous provisions, the oil companies frequently abused the rights granted to them. For example, S. Pearson & Son, the predecessor of the British-controlled Mexican Eagle Oil Company, had been granted a concession covering virtually all of the nationally owned lands along the Gulf of Mexico. According to the Mexican government, the company used its tax examinations and its condemnation rights to develop its own privately owned land rather than the public concession, thereby avoiding the 10% royalty owed on production from the public lands.⁹⁰

III. CHANGES IN THE CONCESSION SYSTEM

⁸⁸ For a description of these special rights, see J. SILVA HERZOG, *supra* note 67, at 26.

⁸⁹ *Id.* at 27. The royalty was divided between the federal government, which received 7%, and the government of the state where the producing well was located (commonly Veracruz), which received the remaining 3%. *Id.* at 31-32.

⁹⁰ *Id.* at 27. For other examples of the company’s alleged misuse of its tax-free status and other privileges, see *Id.* at 27-32.

In the United States, the doctrine of implied covenants helped to balance the rights of the oil companies and the lessors. Lacking such judicial redress, foreign sovereigns inevitably turned to other methods to establish more equitable arrangements. Two principal options appeared available to accomplish this result: expropriation or renegotiation. In some instances no bright line existed between these two methods. Renegotiation under political duress may appear to a company as differing only marginally from outright nationalization; expropriation can take place so gradually that the process may not seem significantly different from ongoing renegotiation.⁹¹ Typically, however, both the changes in petroleum arrangements and the methods used to change them differed markedly.⁹² In many ways, the methods of change in Mexico and in the Middle East were at opposite ends of the spectrum of options that sovereigns could use to obtain control over the exploitation of their natural resources.

A. *Mexico's Expropriation of Oil Company Assets*

⁹¹ For example, Venezuela's expropriation of oil company assets occurred over many years so that few multinational corporations were surprised or severely displaced by the action. See Murphy, *Latin American Oil and Gas Law: Outline and Methodology*, 1983 INST. ON INT'L OIL & GAS L. at B, B-7 to B-8. For a discussion of the concept of "creeping expropriation," see Note, *Unilateral Action*, *supra* note 15, at 90-91; see also Weston, "Constructive Takings" under International Law: A Modest Foray into the Problem of "Creeping Expropriation," 16 VA. J. INT'L L. 103 (1975).

⁹² One major difference involves the issue of compensation. Presumably, most renegotiations implicitly settle the dispute between the oil company and the lessor, whereas if expropriation occurs the oil company usually expects compensation for lost assets. For an economic analysis of compensation for expropriated assets, see Hu, *Compensation in Expropriations: A Preliminary Economic Analysis*, 20 VA. J. INT'L L. 61 (1979).

In 1911, the Mexican Revolution brought the long reign of Porfirio Díaz to an end and, with it, the policies that had strongly encouraged and attracted foreign investment in Mexico. Indeed, the extraordinary concentration of Mexico's wealth in the hands of foreigners was one of the precipitating causes of the Revolution.⁹³ Little overt hostility was displayed toward the oil companies during the revolutionary period, however, and for a time they continued to operate much as they had during the Díaz regime.⁹⁴ Investment in the Mexican petroleum industry continued to increase,⁹⁵ and new concessions were granted.⁹⁶ The new taxes on petroleum, imposed in 1912 and again in 1914, and laws requiring the companies to register and value their property were widely resisted or simply ignored.⁹⁷ Nonetheless, the revolutionary government's new laws clearly signaled that the Mexican government would henceforth attempt to obtain some return on the nation's oil wealth. The controversy between the oil companies and President Venustiano Carranza over the enforcement of these laws foreshadowed the more serious dispute that would occur with President Lázaro Cárdenas twenty years later.

The legal controversy between the companies and the Mexican government focused upon article 27 of the Constitution of 1917. This article, an early precursor of the United Nations Resolution on Permanent Sovereignty over Natural Resources,⁹⁸ provided that direct ownership (*dominio directo*) of all natural resources, such as solid, liquid, or gaseous hydrocarbons, whose character is distinct from the components of the soil, was vested in the nation.⁹⁹ The registration requirement contained in legislation enacted during Carranza's presidency was widely seen as an attempt to force the oil companies into an implicit endorsement of this constitutional principle.¹⁰⁰

The Petroleum Law of 1925¹⁰¹ was even more explicit. It required that the companies confirm "by means of concessions" all rights derived from lands on which oil production had begun before May 1, 1917, and all rights "derived from contracts entered into before May 1, 1917, by the surface owner or his agents with the express intention of exploiting oil."¹⁰² The confirmation of rights granted under this statute was limited to a period of fifty years.¹⁰³ Although this legislation was modified three years later to provide for confirmation of rights in favor of the surface owner

⁹³ By the time of the Revolution, at least half of Mexico's total wealth was controlled by foreigners. *See* W. GORDON, *supra* note 70, at 3-8 (a discussion of the policies of the Díaz regime and the extent of foreign investment in Mexico).

⁹⁴ *See* Vernon, *An Interpretation of the Mexican View*, in HOW LATIN AMERICAN VIEWS THE U.S. INVESTOR 101-02 (R. Vernon ed. 1966); *see Also* GOVERNMENT OF MEXICO, *supra* note 76, at 17-24 (indicating that following the Revolution the oil companies continued, until 1917, to operate unrestrained as they had during the Díaz regime); W. GORDON, *supra* note 70, at 58-59 (recognizing that although the Mexican government attempted to exert more control over the oil companies, the new policies went unenforced).

⁹⁵ *See* the statistics and discussion in G. ORTEGA, EARLY HISTORY AND DEVELOPMENT OF THE OIL INDUSTRY IN MEXICO 26-29, 40 (1927) (published by the Mexican Petroleum Bureau of the Secretaria de Industria, Comercio y Trabajo).

⁹⁶ R. GAITHER, EXPROPRIATION IN MEXICO: THE FACTS AND THE LAW 3 (1940). The post-revolutionary concessions were less favorable to the oil companies than those they had received from the Díaz regime. These concessions were granted for a fixed period not to exceed thirty years and could be canceled if the company failed to comply with their stipulations. *See id.* at 4.

⁹⁷ *See* W. GORDON, *supra* note 70, at 58-63.

⁹⁸ G.A. Res. 1803, 17 U.N. GAOR Supp. (No. 17) at 15, U.N. DOC. A/5217 (1962); G.A. Res. 3171, 28 U.N. GAOR Supp. (No. 30) at 52, U.N. Doc. A/9400 (1973).

⁹⁹ CONSTITUCIÓN POLÍTICA DE LOS ESTADOS UNIDOS MEXICANOS art. 27, § 4.

¹⁰⁰ *See* Duran, *Pemex: The Trajectory of a National Oil Policy*, in LATIN AMERICAN OIL COMPANIES AND THE POLITICS OF ENERGY 145, 158 (J. Wirth ed. 1985).

¹⁰¹ Ley Reglamentaria del Artículo 27 Constitucional en el Ramo de Petróleo, in 5 LEGISLACIÓN PETROLERA: LEYES, DECRETOS Y DISPOSICIONES ADMINISTRATIVAS REFERENTES A LA INDUSTRIA DEL PETRÓLEO 51 (1925).

¹⁰² *Id.* art. 14, translated in W. GORDON, *supra* note 70, at 68.

¹⁰³ *Id.*

“without limitation of time” and in other instances “for the term stipulated in the contracts,” it still retained the concept of a concession rather than outright title to the oil in place.¹⁰⁴

Not surprisingly, the oil companies viewed these statutes as direct threats to their claims and refused to acknowledge their validity. The companies advanced two interrelated arguments in support of their position. The first rested upon article 14 of the Mexican Constitution, which provides that no law will be given retroactive effect to the prejudice of any person.¹⁰⁵ The companies argued that the legislation imposing a new condition (i.e., confirmation) upon previously granted property rights was retroactive and thus conflicted with this provision of the 1917 Constitution.¹⁰⁶ The second argument was based upon the oil companies’ interpretation of the types of rights they had acquired. They argued that since their rights amounted to ownership of the subsoil, they had no “concessions” to confirm.¹⁰⁷ Compliance with the statutory requirement would be tantamount to conceding that their rights fell short of absolute ownership.¹⁰⁸

¹⁰⁴ See W. GORDON, *supra* note 70, at 71.

¹⁰⁵ CONSTITUCIÓN POLÍTICA DE LOS ESTADOS UNIDOS MEXICANOS art. 14.

¹⁰⁶ See THE REPLY TO MEXICO, *supra* note 67, at 9-10.

¹⁰⁷ See *id.* at 7-12.

¹⁰⁸ W. GORDON, *supra* note 70, at 74.

The post-revolutionary government sharply disagreed with the oil companies' interpretation of the legal nature of their rights. The Díaz legislation upon which the companies based their arguments ran counter to a legal process that had begun in Spanish law at least as early as 1387.¹⁰⁹ In that year a royal decree provided that all gold, silver, and quicksilver mines belonged to the Spanish Crown. The royal prerogatives over mines steadily expanded over the next several centuries, and the Spanish mineral regime unquestionably applied to Mexico. The Leyes de Indias and the Nueva Recopilación de las Leyes de Indias made it clear that all mines in Mexico, whether or not discovered, passed to the Spanish Crown.¹¹⁰ Given the hostility felt by the new Mexican government toward the Díaz dictatorship it supplanted, it is hardly surprising that the government rejected the oil companies' literal reading of Díaz's mining legislation that appeared to reverse 500 years of legal history overnight.

During the twenty-year period following the adoption of the 1917 Constitution, the dispute between the government and the oil companies intensified as both sides became increasingly intractable. The government imposed new taxes, which the companies resisted.¹¹¹ The government-controlled labor unions demanded higher wages and better working conditions, which the companies claimed would bankrupt them. Curiously, it was the labor dispute, not the tax laws or the concept of "confirmatory concessions," that finally led to the expropriation.¹¹² In 1937, the oil companies' refusal to accede to the unions' demands for higher wages, better conditions, and increased fringe benefits led to a strike by the oil workers.¹¹³ The contract dispute was submitted to the Board of Conciliation and Arbitration. The Board's decision, which went entirely against the companies, was upheld by the Mexican Supreme Court. On March 14, 1938, the oil companies notified the government that they were unable to comply with the decision. The Board, in turn, announced that the new contracts established by its award were canceled, thereby entitling the workers to three months' discharge pay.¹¹⁴

¹⁰⁹ *Id.* at 56.

¹¹⁰ For brief discussions of the Spanish mineral law regime during the colonial period and its relevance to the controversy between the oil companies and the Mexican government, see J. COLOMO, *supra* note 76, at 5-8; W. GORDON, *supra* note 70, at 56-58; J. SILVA HERZOG, *supra* note 67, at 14-26.

¹¹¹ See W. GORDON, *supra* note 70, at 54-55, 74-75.

¹¹² For an informative history of the labor controversy, see *id.* at 104-23.

¹¹³ *Id.* at 106-07.

¹¹⁴ *Id.* at 117-18.

On March 18, 1938, the blow fell.¹¹⁵ Asserting that the contract cancellation would bring the entire oil industry to a halt, President Lázaro Cárdenas announced the expropriation of the oil industry.¹¹⁶ From that point on, the multinational oil companies were effectively banished from Mexico.¹¹⁷ The multinationals, however, remained in firm control of virtually all refining, transporting, and marketing activities outside of Mexico. They responded to the government's action with an international boycott of Mexican oil.¹¹⁸ Deprived of international markets and ready access to new technology and equipment,¹¹⁹ Mexico, which had been the second largest oil producer in the world in the early years of the century, saw its position in the world oil market decline steadily for twenty-five years following the expropriation.¹²⁰ Indeed, eight years passed before Mexican production even regained the levels achieved in 1937,¹²¹ and the country did not again achieve status as a major oil producer until the discovery of the Reforma field in 1972 and the massive offshore reserves in the mid-1970s.¹²²

In spite of the expropriation's initial negative impact upon its oil industry, Mexico had achieved two major accomplishments. First, Mexico demonstrated that a sovereign could effectively reclaim the right to its oil and mineral resources from the largest and most powerful international corporations in the world. Second, Mexico showed that it could develop those resources itself. Although Argentina's Yacimientos Petrolíferos Fiscales may claim to be the first "true" state oil company,¹²³ Petroleós Mexicanos (Pemex) was the first such company formed to take over assets seized from foreign oil companies and forced to operate them without external aid.¹²⁴ Although questions have been raised about its efficiency and its operational standards,¹²⁵ no real doubts exist as to Pemex's ultimate ability to explore and develop Mexico's oil reserves.

¹¹⁵ GOVERNMENT OF MEXICO, *supra* note 76, at 75.

¹¹⁶ *Id.*

¹¹⁷ The property of only those companies involved in the labor dispute was expropriated; however, those companies accounted for virtually all of Mexico's production. See W. GORDON, *supra* note 70, at 118.

¹¹⁸ See Duran, *supra* note 100, at 172.

¹¹⁹ For a discussion of some of the technological problems that the boycott caused Mexico after the expropriation, see generally F. Barbosa Cano, Technical, Economic, and Labor Problems of the Petroleum Industry, 1938-1949, paper presented at conference, The Mexican Petroleum Nationalization 1938-1988, at the University of Texas, Austin, Texas, Feb. 1988 (copy on file with the *Texas International Law Journal*).

¹²⁰ See Murphy, *supra* note 91, at B-6 to B-7; cf. K. DAM, *supra* note 6, at 12 (stating that Mexico has been the most successful example of nationalization of oil resources, although recognizing Mexico's weak international export position). The decline in exports was partially attributable to internal political considerations as well as urban and industrial domestic expansion. See G. PHILIP, *supra* note 87, at 333-38 (1982).

¹²¹ F. Barbosa Cano, *supra* note 119, at 8-10.

¹²² See Joyner, *Petroleós Mexicanos in a Developing Society: The Political Economy of Mexico's National Oil Industry*, 17 GEO. WASH. J. INT'L L. & ECON. 63, 79 n.143 (1982); G. PHILIP, *supra* note 87, at 352-53; Duran, *supra* note 100, at 145; R. ANDERSON, *supra* note 1, at 67.

¹²³ See G. PHILIP, *supra* note 87, at 162.

¹²⁴ For a discussion of the formation and structure of Pemex, see generally Joyner, *supra* note 122.

¹²⁵ See *id.* at 86-94.

B. *The Middle East: From Concession to Participation*

Although a few countries ultimately followed Mexico's lead in using expropriation to regain control over their domestic reserves,¹²⁶ their actions generally did not take place until thirty or more years after the Mexican expropriation.¹²⁷ Most countries turned to less drastic means of altering the existing agreements. In much of the Middle East, the original concessions were transformed by a process of renegotiation that ultimately resulted in the implementation of entirely new and significantly different arrangements.¹²⁸ Today, although some countries both in the Middle East¹²⁹ and elsewhere¹³⁰ still use the concession format, the provisions are much different from those of the original agreements.

¹²⁶ Libya's actions in gaining control over its petroleum reserves have been characterized as "creeping expropriation." Note, *Unilateral Action*, *supra* note 15, at 91-92.

¹²⁷ See G. Margadant, *La Expropiación Petrolera Mexicana en el Marco de la Política Petrolera Latino-Americana en General* 6-18 (1988) (copy on file with the *Texas International Law Journal*) (discussing the wave of nationalizations that took place in Latin America from 1968 to 1976).

¹²⁸ For a dated yet very informative work on the renegotiations between the OPEC nations and the oil companies, see Note, *Concession to Participation*, *supra* note 8, at 790-93.

¹²⁹ E.g., Abu Dhabi. See Barrows, *International Trends and Latest Changes in Oil Laws, Concession, and Production-Sharing Agreements Worldwide*, 1983 INST. ON INT'L OIL & GAS L. at A-1, A-1, A-14.

¹³⁰ E.g., Australia, France, Norway, Thailand, the United Kingdom, and the United States. 1 WORLD PETROLEUM ARRANGEMENTS: 1980, at 44 (1981) (published by the Barrows Company, Inc.).

Several factors may explain the turn toward renegotiation in the Middle East. The willingness of the oil companies to renegotiate the original Middle Eastern concessions may be partially attributable to their fear that other countries would take the same step as Mexico;¹³¹ however, other factors proved to be even more influential. First, several oil-producing nations joined together to form the Organization of Petroleum Exporting Countries (OPEC).¹³² The existence of one entity representing the interest of all similarly situated countries helped coordinate efforts to renegotiate the original concessions.¹³³ Second, it became increasingly obvious that it was unfair to tie the countries' royalties and other benefits to the "posted prices" controlled by the multinational oil companies.¹³⁴ Finally, OPEC facilitated the sharing of information among its members, and thus, as some members entered into newer agreements with terms more favorable to the host country, other members were able to use their knowledge of these agreements as further leverage to complain about the original concessions.¹³⁵ While the OPEC countries' bargaining power was steadily increasing, that of the original seven multinational companies was in decline as they faced increased competition from other United States oil companies and the national oil companies of several Western European nations.¹³⁶

¹³¹ See R. ANDERSON, *supra* note 1, at 47 (suggesting that the oil companies' fear of nationalization was a major factor in their agreeing to Venezuela's demands for higher taxes and royalties in the late 1930s). At the time of the renegotiations, the Seven Sisters were competing with many smaller independent companies willing to give countries significantly better terms and continue the flow of oil to the West. See R. MIKESSELL, *supra* note 26, at 23-24.

¹³² OPEC was formed in 1960 when five oil-producing nations met to address the question of falling oil prices. See Note, *OPEC as a Legal Entity*, 3 FORDHAM INT'L L.J. 91, 91-93 (1979-1980). Iran, Iraq, Kuwait, Saudi Arabia, and Venezuela, the founding members of OPEC, gathered in Baghdad to examine the control of petroleum exerted by the Seven Sisters. See A. DANIELSEN, *THE EVOLUTION OF OPEC* 4-7 (1982).

¹³³ It is interesting to note that initially, OPEC's principal objective was to ensure stable per barrel revenues for its members, who had seen posted prices fall during the late 1950s and early 1960s. A. DANIELSEN, *supra* note 132, at 128.

¹³⁴ See R. MIKESSELL, *supra* note 26, at 22-23.

¹³⁵ The OPEC nations also used the doctrine of changed circumstances to argue that the old concessions were no longer operable. See M. MUGHRABY, *PERMANENT SOVEREIGNTY OVER OIL RESOURCES* 193-95 (1966). Under this doctrine, one must look at the changes in surrounding circumstances, their magnitude, and the effect the changes have had on the mutual expectations the parties had when they entered into the concessions. *Id.* at 198.

¹³⁶ R. MIKESSELL, *supra* note 26, at 23-24.

Although several countries managed to renegotiate their concessions in the 1950s and the 1960s,¹³⁷ the major restructuring of the original arrangements occurred in the 1970s.¹³⁸ In 1971, the OPEC renegotiations resulted in an increase in the countries' share of income through additional income taxes (averaging 55%) and an inflation-indexed system for determining the posted price of oil.¹³⁹ In some instances, the companies agreed to maintain a minimum level of production.¹⁴⁰ Further, the oil companies agreed to establish schedules to release undeveloped acreage held by the concessions over a period of years.¹⁴¹ These released fields gave the countries new and productive

¹³⁷ See H. CATTAN, *THE EVOLUTION OF OIL CONCESSIONS IN THE MIDDLE EAST AND NORTH AFRICA* 4-14 (1967) (describing changes in the industry from 1950 to 1967). One of the earliest forms of renegotiation occurred after World War II when the oil companies allowed countries to tax oil company profits in addition to collecting the royalty on the posted price of oil. See Note, *Concession to Participation*, *supra* note 8, at 777-78 (tax and royalty payments amounting to 50% of the oil company profits); INTERNATIONAL PETROLEUM AGREEMENTS, *supra* note 6, at 46-47. Further changes were implemented with the efforts of OPEC in the 1960s.

¹³⁸ See generally Note, *Concession to Participation*, *supra* note 8, at 785-816 (discussing negotiations between OPEC countries and the oil companies in the 1970s, which led to restructuring the early concessions).

While OPEC was assisting in the collective negotiation of improvements in the financial terms of the major concessions, individual countries were negotiating various piecemeal changes in the structure of the arrangements. These modifications included: a few instances of relinquishment of undeveloped territory; some cases of company acceptance of a minimum output schedule; the agreement of some concessionaires to sell, or offer as royalty payments, limited amounts of crude to emerging state-owned oil companies for refining and marketing abroad, usually in barter deals, restricted to noncompetitive markets; increased, though far from controlling, representation of host governments on concessionaire boards; and some commitments to employ more nationals at technical and managerial levels, as well as to contribute to economic and social development around offtake sites.

Id. at 780-81.

¹³⁹ *Id.* at 785-86 & nn.51 & 57; see also R. MIKESSELL, *supra* note 26, at 22-25.

¹⁴⁰ See Note, *Concession to Participation*, *supra* note 8, at 781.

¹⁴¹ See *id.*; K. SAYEGH, *OIL AND ARAB REGIONAL DEVELOPMENT* 161-62 (1968).

acreage, which became the subject to completely new petroleum arrangements that in many instances were more favorable to the countries than the renegotiated concessions.¹⁴²

Even more significant, in 1972 the multinational corporations agreed to amend the existing concessions to provide for host country participation. Thus, beginning in 1972, the companies gave 25% of their ownership share to a state-owned oil company and further agreed that the country's share would increase 5% a year until it reached 51%.¹⁴³ The effect of this agreement was to convert many of the original concession agreements into participation agreements.¹⁴⁴

C. Politics, Changing Circumstances, and the Evolution of the Early Concessions and Leases

A casual observer of the international energy market may assume that the renegotiations of the early concessions resulted merely from international politics and the emergence of nationalism among developing nations and that any comparison between the evolution of the oil and gas lease in the United States and the change in foreign agreements is misplaced; however, one can view the lease as having undergone a similar transformation¹⁴⁵ for at least some of the same reasons.

¹⁴² See *infra* note 153 and accompanying text.

¹⁴³ See G. LENCZOWSKI, MIDDLE EAST OIL IN A REVOLUTIONARY AGE 10-11 (National Energy Study No. 10, 1976).

¹⁴⁴ For a description of the features of a participation agreement, see *infra* notes 185-88 and accompanying text.

¹⁴⁵ Note that the analogy to the United States oil and gas lease is more natural when one considers that under the typical lease both the lessor and the lessee have an economic interest in the oil and gas in place. The lessor has delegated the right to develop the oil and gas in place to the lessee, and he must look to the lessee for all income. See J. DZIENKOWSKI & R. PERONI, *supra* note 80, at 6-10.

World politics, nationalism, and oil wealth have openly contributed to the bargaining strength of petroleum-producing nations and their ability to force favorable changes in the original concessions.¹⁴⁶ United States domestic politics has played a powerful role in the development of the rights of lessors, but its presence has been less obvious. This difference results in part from the different legal mechanisms by which similar goals are achieved. In the United States, matters such as the rate at which a well is allowed to produce and whether development must be done on a fieldwide or a leasewide basis are deemed appropriate subjects of regulation, rather than of private contractual arrangements.¹⁴⁷ In most other countries, matters of this magnitude are typically incorporated into the agreement entered into between the government and the oil company. For example, fieldwide unitization, which is compelled by regulatory agencies in many United States oil-producing states,¹⁴⁸ is imposed by licensing agreements upon the oil companies receiving North Sea licenses from the United Kingdom.¹⁴⁹

The regulation of oil and gas in the United States is subject to political pressure, and this pressure has frequently come from landowners as well as from large and small oil companies;¹⁵⁰ that the regulatory and legislative action (or inaction) resulting from such political pressure is not part of the “text” of the leases does not diminish its importance to the lessor.

Political pressure contributed to the ability of United States lessors and foreign sovereigns to force modifications in their rights, but the need for change resulted in part from the failure of the original agreements. The early concessions and leases inevitably failed to address situations that arose in future years. One principal rationale for implying covenants in oil and gas leases was the inability of the parties to foresee future events and thus to include provisions relating to matters such as the number of wells to be drilled, the rate of production, the existence and size of a market, and the means of transportation to market. These subjects were “rationally left to the implication . . . that the further prosecution of the work should be along such lines as would be reasonably calculated to effectuate the controlling intention of the parties as manifested in the lease, which was to make the

¹⁴⁶ See R. MIKESSELL, *supra* note 26, at 23-25.

¹⁴⁷ See A. DANIELSEN, *supra* note 132, at 81-86. See generally D. PRINDLE, PETROLEUM POLITICS AND THE TEXAS RAILROAD COMMISSION 22-40 (1981) (describing the role of the Texas Railroad Commission in the political battle surrounding prorationing and fieldwide regulation in Texas).

¹⁴⁸ See J. WEAVER, *supra* note 3, at 37-38; see also R. HARDWICKE, *supra* note 61, at 168-70.

¹⁴⁹ See T. DAINITH & G. WILLOUGHBY, UNITED KINGDOM OIL AND GAS LAW §§ 1-102, 1-717 (1987). For examples of the unitization clauses of licensing agreements, see Clause 26, Model Clauses for Production Licenses in Landward Areas, in *id.* § 5-166; Clause 25, Model Clauses for Production Licenses in Seaward Areas, in *id.* § 5-195. These licensing agreements, although mostly contractual in form and substance, do retain some regulatory characteristics. *Id.* § 1-220. In the United States, leases on private land in jurisdictions that do not have compulsory unitization statutes may authorize unitization; some federal leases may require it. See Phillips Petroleum Co. v. Peterson, 218 F.2d 926 (10th Cir. 1954).

Other types of restrictions that appear as contractual obligations elsewhere are imposed in the United States almost exclusively by regulatory agencies. Thus, well spacing is provided for in the United States by specific regulations, such as the Texas Railroad Commission Regulation 37. Tex. R.R. Comm’n, 16 TEX. ADMIN. CODE § 3.37 (Hart Nov. 1, 1986) (Statewide Spacing Rule); see also J. WEAVER, *supra* note 3, at 102, 167 (discussing Rule 37 and well spacing in Texas).

In the United Kingdom, on the other hand, the licenses granted to oil companies typically contain clauses stipulating how far a well may be from the license boundary. See Clause 18, Model Clauses for Production Licenses in Landward Areas, in T. DAINITH & G. WILLOUGHBY, *supra*, § 5-163.

¹⁵⁰ See J. WEAVER, *supra* note 3, at 111-17 (arguing that opposition by royalty owners has been an influential factor in the Texas legislature’s failure to adopt a compulsory unitization statute, and that concern over royalty owners’ interests played a significant role in the revision of the original Oklahoma statute and the structure of the little-used Mississippi statute). See generally D. PRINDLE, *supra* note 147, at 145-205 (discussing the role of political pressure in shaping the policies of the Texas Railroad Commission).

extraction of oil and gas from the premises of mutual advantage and profit.”¹⁵¹ The absence of provisions in leases and concessions to deal with such matters, and a widely held perception that the original arrangements did not adequately protect the interests of the landowner or foreign sovereign, contributed strongly to the revision of the rights of the parties to those arrangements.¹⁵²

IV. DEALING WITH SOVEREIGNS FIFTY YEARS LATER

¹⁵¹ *Brewster v. Lanyon Zinc Co.*, 140 F. 801, 801-11 (8th Cir. 1905).

¹⁵² *See Pierce, Rethinking the Oil and Gas Lease*, 22 TULSA L.J. 445, 452-55 (1987).

As discussed in the previous section, in the 1930s many developing countries found themselves in a position similar to that of Mexico--they had given total control over their most valuable resource to foreign corporate interests through concessions covering the most highly productive acreage in their countries.¹⁵³ The development rights had been granted for long periods (usually fifty years or more) with limited compensation. In the fifty years since Mexico expropriated the private oil company assets and the process of renegotiating Middle Eastern concessions began, radical changes have taken place in the development and marketing of international petroleum. In an effort to obtain control over their oil reserves, the sovereigns, by and large, have chosen a path either of expropriation or renegotiation, and as a result completely new arrangements are in place today.

The degree of control that a sovereign now exercises over its reserves differs among countries, depending upon the type of exploitation and marketing arrangement employed. Methods of exercising control also differ. Control may be exercised directly through a governmental agency, indirectly through a state-owned oil company, or through both.¹⁵⁴ Interestingly enough, in the United States the basic format of the typical oil and gas lease has changed very little in this fifty-year period, and the emphasis upon the right to control production, development, and pricing, which has characterized the development of international petroleum arrangements, has been largely absent.¹⁵⁵

¹⁵³ Most of the concessions did not include any provisions requiring further exploration or abandonment of unexplored acreage. Today, most arrangements require that the oil company agree to a work program with a certain dollar commitment and to the abandonment of a specified percentage of acres on a fixed time schedule. *See generally* INTERNATIONAL PETROLEUM AGREEMENTS, *supra* note 6, at 121-52 (reviewing the work program, relinquishment, and other similar clauses common to modern agreements).

¹⁵⁴ The desire of petroleum-developing countries for more control and involvement in developing their reserves has led to an increased role for state oil companies. For a country to participate meaningfully in a production-sharing or participation agreement, government officials need to acquire information and expertise about the petroleum industry and markets. Furthermore, if the country seeks to explore on its own, its government will need to acquire the technical information and means to train the domestic labor force. These needs have led to the development of large and important state oil companies that are as sophisticated as their private counterparts. For discussions of the important role played by state oil companies in Latin America, see generally Saulniers, *The State Companies: A Public Policy Perspective*, in *LATIN AMERICAN OIL COMPANIES AND THE POLITICS OF ENERGY* 226-61 (J. Wirth ed. 1985); G. PHILIP, *supra* note 87, at 327-501.

¹⁵⁵ *See generally* Pierce, *supra* note 152, at 445-57 (discussing the persistent stability of the standardized oil and gas lease).

This section offers a brief survey of the principal arrangements currently in use for developing international petroleum.¹⁵⁶ It also offers a brief assessment of trends in the world energy market. This broad overview of the changing petroleum market should provide a better perspective on Mexico's decision to nationalize the oil industry and its effect on that country's participation in the petroleum market fifty years later.

A. *Modern Arrangements for Developing International Petroleum*

In the United States, the arrangements for developing oil and gas have changed very little in the past fifty years. Landowners, including the United States government, still rely exclusively upon private companies for the development of oil and gas reserves. The lease remains the only commonly used type of arrangement entered into between the parties.

Internationally, the picture is much different. Today almost all other petroleum-producing countries have state-owned oil companies. Additionally, there are four basic arrangements between host countries and multinational oil companies for developing petroleum: (1) the concession, (2) the production-sharing agreement, (3) the participation agreement, and (4) the service contract. Although each of these four arrangements can be used to accomplish the same purpose, they are conceptually different from each other. They provide for different levels of control by the company, different compensation arrangements, and different levels of state oil company involvement. It is important to note, however, that some existing agreements have borrowed clauses and concepts from two or more of the types of arrangements. Thus, precise categorization of a particular country's arrangements is not always possible.

1. The Modern Concession

¹⁵⁶ For a more comprehensive treatment of international petroleum arrangements, see generally INTERNATIONAL PETROLEUM AGREEMENTS, *supra* note 6.

The modern concession, exemplified by the concession agreement developed by Abu Dhabi, grants 'the exclusive rights to explore, search, and drill for, produce, store, transport, and sell Petroleum' within the designated concession acreage for a specified number of years.¹⁵⁷ This period is generally far shorter than the period of the early concessions.¹⁵⁸ In some instances, however, countries wishing to encourage development of areas requiring expensive technology or presenting difficult engineering, meteorological, or geographical problems have granted terms approaching fifty years.¹⁵⁹ In contrast, the United States oil and gas lease will last for so long as oil or gas is produced, deferring the lessor's resumption of control indefinitely.¹⁶⁰

¹⁵⁷ See Abu Dhabi Concession, *supra* note 7, art. 2.

¹⁵⁸ Article 3 of the Abu Dhabi Concession provides for a 35-year term. *Id.* art. 3. Licenses granted in the North Sea by Norway provide for a six-year term with a "period of prolongation" of 30 years. See Cameron, *North Sea Oil Licensing: Comparisons and Contrasts*, 3 OIL & GAS L. & TAX'N REV. 99, 102 (1984-1985).

¹⁵⁹ Licenses granted by the United Kingdom in 1984 for the "deep-water frontier areas" north and west of Scotland provided for an eight-year initial term followed by a further term of 40 years. T. DAINITH & G. WILLOUGHBY, *supra* note 149, § 5-176 general note.

¹⁶⁰ See CASES AND MATERIALS, *supra* note 38, at 127.

Unlike the earlier agreements, the modern concession contains clauses specifically imposing a scheme of development based upon a monetary commitment for each year of the term.¹⁶¹ A company holding the concession is obligated to a work program¹⁶² and to the relinquishment of a portion of the acreage on a specified schedule.¹⁶³ This scheme has a partial parallel in some modern oil and gas leases that incorporate provisions imposing some development obligations upon the lessee. Such provisions, often added to printed form leases by the lessor, are of two basic types. The retained acreage clause provides that a well will maintain the lease only as to a specified number of acres.¹⁶⁴ The continuous drilling clause is a more complex provision that commits the lessee to a drilling program and terminates the lease as to undrilled acreage after a specified time period elapses.¹⁶⁵ The use of such clauses is far from universal, however, and their scope is relatively limited when compared with the work programs imposed upon oil companies under modern concessions.

The modern concession's terms for compensation are considerably more generous than those of the early concessions and more sophisticated than the provisions in a typical modern lease.¹⁶⁶ The Abu Dhabi concession provides for bonus payments at the beginning of the concession and later upon attaining certain levels of production.¹⁶⁷ In addition, the concession provides for annual rental payments and a royalty based upon levels of production.¹⁶⁸ The government has the option to receive all or part of the oil royalty in kind rather than in cash.¹⁶⁹ Another provision relating to compensation, which is necessarily absent from a lease between two private parties, requires that the concessionaire pay to the host country a specified amount of tax on the income earned in the country.¹⁷⁰

2. The Production-Sharing Agreement

¹⁶¹ In the original concessions, the company was merely obligated to "conduct its operations in a workmanlike manner and by appropriate scientific methods." Agreement Between Petroleum Concessions, Ltd. and Sultan of Muscat and Oman, *supra* note 20, art. 9. The new concessions contain clauses requiring expenditures of a specified dollar amount for exploration, drilling, or development operations during specific periods. *See, e.g.*, Abu Dhabi Concession, *supra* note 7, art. 5. Failure to pay such amounts can result in forfeiture of the concession. *Id.* art. 35.

¹⁶² *See, e.g.*, Abu Dhabi Concession, *supra* note 7, art. 5.

¹⁶³ *See, e.g., id.* art. 12 (relinquishment terms of 25% within three years and another 25% within eight years).

¹⁶⁴ *See, e.g.*, the retained acreage clause litigated in *Humphrey v. Seale*, 716 S.W.2d 620 (Tex. App.-Corpus Christi 1986, no writ).

¹⁶⁵ *See, e.g.*, the clause in *Modern Exploration, Inc. v. Maddison*, 708 S.W.2d 872 (Tex. App.-Corpus Christi 1986, no writ). For a discussion of these kinds of clauses, see generally *Herd, Continuous Development and Retained Acreage Clauses*, TEX. ST. B. SEC. OIL, GAS & MIN. L. REP., Apr. 1986, at 1; *Smith, Developments in Nonregulatory Oil and Gas Law*, 38 INST. ON OIL & GAS L. & TAX'N 1-1, 1-22 to 1-23 (1987).

¹⁶⁶ There are, of course, exceptions in many specially drafted modern leases. *See, e.g.*, Form No. 6, Texas Landowner's Oil and Gas Lease, in E. KUNTZ, J. LOWE, O. ANDERSON & E. SMITH, FORMS MANUAL TO ACCOMPANY CASES AND MATERIALS ON OIL AND GAS LAW 27-62 (1987).

¹⁶⁷ Abu Dhabi Concession, *supra* note 7, art. 9.

¹⁶⁸ *Id.* arts. 10, 12.

¹⁶⁹ *Id.* art. 12.

¹⁷⁰ In the early concessions, it was unclear whether the multinational had to pay tax on the income, because the government had already been paid a royalty. In later years, companies fought efforts to impose an income tax. However, in light of the foreign tax credit given on United States income tax for taxes paid to foreign governments, United States corporations preferred to pay foreign taxes in lieu of royalties. Today, most modern concessions contain both royalty and tax provisions for compensation. Note that countries conceptually have a right to be paid both for their resource in the ground, through a royalty, and for the income earned within their borders, through an income tax. For a discussion of the foreign tax credits, see R. KAPLAN, FEDERAL TAXATION OF INTERNATIONAL TRANSACTIONS 81-131 (1988).

In the late 1950s and early 1960s Iran and Indonesia turned to the production-sharing agreement.¹⁷¹ Although a concession system can be carried out without the use of a state oil company,¹⁷² a production-sharing agreement virtually requires the creation of such an entity.¹⁷³ A production-sharing agreement bears some resemblance to a farmout transaction or carried interest arrangement in the United States.¹⁷⁴ The country grants a company a contractual right to explore and develop a specified area in exchange for the opportunity to recover its costs and a specified profit. The country contributes the acreage and receives a share of production. If the acreage is unproductive, however, the company receives no guaranteed profit.

¹⁷¹ See generally R. MIKESSELL, *supra* note 26, at 59-76; Fabrikant, *Production Sharing Contracts in the Indonesian Petroleum Industry*, 16 HARV. INT'L L.J. 303 (1975).

¹⁷² The United States, which has no state oil company, uses a form of the concession system to lease its continental shelf and onshore public lands. See J. LAITOS, *supra* note 12, at 294-96, 773-74 (discussing the competitive bidding process used for offshore fields and the differences between federal onshore leasing and federal offshore leasing system).

¹⁷³ There are sporadic exceptions. For example, Guatemala does not have a state oil company even though it uses production-sharing agreements for its oil development. See R. MIKESSELL, *supra* note 26, at 77-85.

¹⁷⁴ See generally J. DZIENKOWSKI & R. PERONI, *supra* note 80, at 505-08 (describing farmout agreements and carried interests). In the United States, many forms of carried interest arrangements have developed to take advantage of the tax benefits of the pool-of-capital doctrine. In a typical farmout arrangement, a lessee contracts to transfer acreage to a company if the company drills a well. Once payout occurs and the driller recovers all of the costs of drilling the well, the driller and the lessee share the proceeds of production according to a predetermined formula. For an exhaustive study of farmouts in the United States, see generally Lowe, *Analyzing Oil and Gas Farmout Agreements*, 41 SW. L.J. 759 (1987).

Indonesia, which has had production-sharing agreements since the 1960s, is viewed as a leader in this type of arrangement.¹⁷⁵ In the current version of the Indonesian Model Production Sharing Contract, a state-owned oil company, Pertamina, maintains control over all of the petroleum-producing properties in the country. Pertamina enters into the contract with a contractor for a thirty-year period.¹⁷⁶ The contractor agrees to contribute a specified amount of money to a work program for a six-year period. During each of the six years, the contractor must submit a proposal to Pertamina for its approval. The country maintains much closer continuing control through this approval system than in many modern concessions. In addition, the Indonesian contract requires that the contractor pay Pertamina a management fee for facilitating the work program; thus, the state oil company retains management control over the manner in which the work is performed.¹⁷⁷ This feature creates a resemblance between the production-sharing agreement and the typical joint venture.

As compensation, the Indonesian production-sharing agreement allows a contractor to deduct from gross production all operating costs plus an amount equal to 20% of the capital investments made by the contractor in production facilities.¹⁷⁸ The remaining production is then divided by giving Indonesia 65.9091% and the contractor 34.0909%.¹⁷⁹ In addition, the contractor shall pay Indonesia for information held by Pertamina and certain bonus payments once production reaches a certain specified level.¹⁸⁰ As in the case of the concession agreement, the company must pay taxes upon income earned from the production-sharing agreement.¹⁸¹

¹⁷⁵ For an extensive analysis of the Indonesian production-sharing agreement, see R. MIKESSELL, *supra* note 26, at 59-68.

¹⁷⁶ If petroleum is not discovered within six years, the production-sharing contract terminates in its entirety. *See* Model Production Sharing Contract Between Pertamina and Private Companies, § II, arts. 1.1-1.3, *reprinted in* INTERNATIONAL PETROLEUM AGREEMENTS, *supra* note 6, app. at 2.7 [hereinafter Pertamina Contract].

¹⁷⁷ *Id.* § V, arts. 1.2-1.3. In addition, this contract allows the state oil company to develop expertise in the equipment and facilities of the contractor.

¹⁷⁸ *Id.* § VI, arts. 1.2, 1.7.

¹⁷⁹ *Id.* § VI, art. 1.3. A provision giving the oil company a right to control the disposition of at least part of the production is frequently critical to a company's decision to enter into a production sharing agreement. *See, e.g., Egypt's Western Desert Stays Accessible to Foreign Operators*, OIL & GAS J., June 20, 1988, at 38.

¹⁸⁰ *See* Pertamina Contract, *supra* note 176, § VIII. The contractor must not include these costs in the operating budget; thus, they are paid solely from the contractor's share.

¹⁸¹ *See id.* § V, art. 1.2(s).

In theory, no reason exists why landowners in the United States could not enter into arrangements analogous to the production-sharing agreements used internationally.¹⁸² Indeed, some sophisticated leases contain express obligations to drill a test well, provisions for an increased royalty upon well payout, clauses giving the lessor access to well information and permitting the lessor to conduct his own well tests, and provisions for extensive development; these come reasonably close to the typical production-sharing arrangement.¹⁸³ One commentator has recommended joint development agreements, under which the landowner will share in net profits rather than receive a royalty, as a viable and possibly desirable alternative to the traditional oil and gas lease,¹⁸⁴ but these more complex arrangements represent a very small percentage of the arrangements in place for developing United States petroleum reserves.

3. The Participation Agreement

In both the concession and the production-sharing agreements, the country (or its state oil company) and the multinational corporation (or a subsidiary) have maintained separate entities.¹⁸⁵ In contrast, in a participation agreement¹⁸⁶ a joint operating company is formed between the country and the company to develop the petroleum reserves. Although it is difficult to generalize in the context of existing participation agreements, in theory the country contributes the acreage and the company contributes technology and expertise as well as a certain sum of capital to the jointly formed entity. This entity is then operated by a management committee composed of representatives from both the country and the company. In some cases, ownership and management are equally divided and in other cases the country retains a 1% advantage.

In theory, one could view a participation agreement as a partnership or corporation between the country and the multinational company. Historically, however, the participation arrangements have developed from the original concession agreements in the Middle East; thus, their structure has developed through compromise rather than an initial decision to create such an arrangement. Since very few of the participation agreements began with undeveloped and nonproducing properties, it is difficult to determine how such agreements would handle the risks and uncertainties of exploration.¹⁸⁷ Furthermore, participation is commonly included as an option to existing concession and production-sharing agreements. For example, the Indonesian production-sharing agreement provides that Pertamina may elect to purchase a certain percentage of the contract area for a share of the operating expenses already incurred by the contractor.¹⁸⁸ Although this option lapses within

¹⁸² In fact, some domestic oil companies have used net profits arrangements that are similar to the production-sharing agreements in use today. *See, e.g.*, the net profits arrangement at issue in *Burton-Sutton Oil Co., Inc. v. Commissioner of Internal Revenue*, 328 U.S. 25 (1946).

¹⁸³ *See* Form No. 6, Texas Landowner's Oil and Gas Lease, in E. KUNTZ, J. LOWE, O. ANDERSON & E. SMITH, *supra* note 166, at 27-62 (1987).

¹⁸⁴ Pierce, *supra* note 152, at 475-79.

¹⁸⁵ In some cases, as with the development of Saudi Arabian reserves, several oil companies have created a single corporation to spread the costs of development. *See* A. DANIELSEN, *supra* note 132, at 122-23; ARAMCO HANDBOOK, *supra* note 21, at 135-36.

¹⁸⁶ For a discussion of participation agreements, see INTERNATIONAL PETROLEUM AGREEMENTS, *supra* note 6, at 99-119.

¹⁸⁷ The Chinese Model Contract, which adopts many aspects of the concession, production sharing, and participation agreements, provides for China's national oil company to participate once production is attained. Note, *American Oil Interests in China*, *supra* note 6, at 131-33.

¹⁸⁸ *See* Pertamina Contract, *supra* note 176, § XVI, art. 6.1.

three months after the first discovery in the contract area, it nevertheless gives the Indonesian government a valuable right to participate in a significant discovery.

4. The Service Contract

In proceeding from concession to production sharing to participation, this discussion has been moving from arrangements permitting the most foreign involvement to the least, or alternatively, from the least host country participation in developing its resources to the most. The final form of arrangement in this analysis involves a service agreement between the country and a company. Essentially, under a service arrangement, the company agrees for a fee or a share of production to provide the country and its state oil company with services and information to help the country develop its own resources. Three basic types of arrangements have been developed to take advantage of the multinationals' technological and managerial expertise and capital resources while allowing the host country to maintain the appearance that its state oil company has control and ownership: (1) the pure service contract, (2) the technical assistance agreement, and (3) the risk service contract.

Under a pure service contract, the country's state oil company would contract with a foreign company to perform a specified service for a flat fee.¹⁸⁹ Although pure service contracts are widely used in the United States, they are unattractive to multinational oil companies as opportunities for the development of foreign petroleum reserves because they provide no right to production.¹⁹⁰ To make them more attractive, various nations refine the contracts to include buyback arrangements that allow the oil company to obtain crude oil instead of a flat fee.¹⁹¹ Some of these agreements resemble the arrangements used in the United States in which a geologist or other person or company performs services in exchange for the right to a specified fraction of production or an amount of production limited by a dollar sum or number of barrels.¹⁹²

The second form of service agreement, a technical assistance agreement, is in some ways a more sophisticated version of the service contract. In these agreements, the contractor agrees to provide technical assistance in the exploration, development, production, and, in some cases, refining of oil. The contractor's services may include providing equipment and training employees to operate the petroleum facilities. In return, the country agrees to reimburse the company for the expenses incurred plus a fee based upon the production obtained. For example, Venezuela, as part of its plan for nationalizing its oil industry, entered into technical assistance agreements under which several of

¹⁸⁹ See R. MIKESSELL, *supra* note 26, at 29, 92; Murphy, *supra* note 91, at B-17 to B-18.

¹⁹⁰ Barrows, *supra* note 129, at A-3.

¹⁹¹ *Id.* at A-3, A-142.

¹⁹² See J. DZIENKOWSKI & R. PERONI, *supra* note 80, at 121-22. In many cases, a partnership holding an oil and gas lease secures the financing and hires different contractors to perform geological and geographical services, drilling services, and production services if needed. The turnkey drilling contract is commonly used to compensate a driller for a price per foot drilled or per day of operation. *Id.*

the multinational oil companies agreed to help operate the facilities they had constructed in return for a per-barrel-produced fee.¹⁹³

¹⁹³ Technical Assistance Contract Between Petroven and Lagoven, art. 2, 12, *reprinted* in II A COLLECTION OF INTERNATIONAL CONCESSIONS AND RELATED INSTRUMENTS: CONTEMPORARY SERIES 288-90, 304-09 (P. Fischer & T. Waelde ed. 1982).

The third form of agreement for developing petroleum reserves, the risk service contract, finds its widest use in Latin America.¹⁹⁴ Under the risk service agreement, the oil company agrees to explore a specific area and evaluate its potential for discoveries. If the existence of petroleum reserves is suspected, the company is obligated to develop the reservoir. Throughout this period, the company invests only its own money with no expectation of payment unless commercial production results.¹⁹⁵ Thus, the company bears the entire financial risk without receiving any rights in the explored territory. If and when commercial production commences, the company has a right to be paid for its services with cash, or frequently has a right to take oil at a discounted price instead.¹⁹⁶ Although the risk service agreement contains features similar to a production-sharing arrangement,¹⁹⁷ it gives the oil company fewer rights in the acreage that is explored.

Modern arrangements, no matter what their form or conceptual basis, often include provisions designed to require reinvestment in the country for petroleum-related projects¹⁹⁸ and to favor domestic suppliers and employees.¹⁹⁹ The purpose of these additional clauses is to integrate the petroleum operations into the national economy and to maintain control over the reserves.

B. *Trends in World Energy Arrangements*

The current energy market is no longer dominated by the long-term supply contracts that characterized the old oil market. The growth in spot markets²⁰⁰ and the tremendous fluctuations in prices have imposed pressure upon countries to gain control over their destinies. It is no longer possible to rely on a few multinational oil companies to provide access to the market at the best price. Additionally, much of the profit from petroleum in recent years is located in the transportation, refining, and distribution of the end product.²⁰¹ These trends have led several countries to broaden their state oil companies' roles in exploring for and developing reserves.²⁰² This more aggressive attitude has been made possible because of the expertise and information that many of these state oil companies acquired from the participation arrangements with their multinational corporate partners.

¹⁹⁴ For discussions of the terms of the risk service contracts of two different Latin American countries, see generally R. MIKESSELL, *supra* note 26, at 92-107; Dabinovic, *The New Argentine Regime for the Petroleum Industry; Decree 1443 of 6 August 1985*, 3 OIL & GAS L. & TAX'N REV. 75, 75, 77 (1985- 1986); Neto, *Risk-Bearing Service Contracts in Brazil*, 3 J. ENERGY & NAT. RESOURCES L. 114 (1986).

¹⁹⁵ Neto, *supra* note 194, at 114-15.

¹⁹⁶ See Dabinovic, *supra* note 194, at 75. Such provisions, although occasionally politically controversial in the host country, are especially desirable for a country with an unfavorable balance of payments.

¹⁹⁷ See INTERNATIONAL PETROLEUM AGREEMENTS, *supra* note 6, at 82.

¹⁹⁸ See, e.g., Abu Dhabi Concession, *supra* note 7, art. 44 (requiring the company to conduct a feasibility study to determine whether hydrocarbon processing facilities are feasible once production has reached 100,000 barrels of production per day for 90 consecutive days).

¹⁹⁹ See, e.g., Pertamina Contract, *supra* note 176, at § V, art. 1.2(r), § XII, art. 1.1.

²⁰⁰ See Ibrahim, *A Romantic Era Wanes for Veteran Oil Traders*, Wall St. J., Mar. 6, 1986, at 6, col. 1 (Southwest ed.) (discussing the changing nature of the international oil and gas market).

²⁰¹ For a look at how varying levels of downstream activities have affected the profitability of some of the major private oil companies, see Phillips, *Four Big Oil Companies Report Profit Rose for 3rd Quarter; Net Fell at Three*, Wall St. J., Oct. 26, 1988, at B10, col. 3 (Southwest ed.).

²⁰² Some state oil companies have begun to develop oil reserves for other countries. For example, Statoil of Norway recently obtained a permit from the Chinese National Offshore Oil Corporation to explore 3740 square kilometers in the South China Sea off China's coast. See *Norway's Statoil to Explore Acreage Off China*, OIL & GAS J., Feb. 8, 1988, at 26. Libya and Algeria have agreed to establish a jointly owned oil company that will initially explore and develop petroleum reserves in the two countries and later expand into foreign exploration. See *North African Producers Cooperate to Improve Outlook*, OIL & GAS J., June 20, 1988, at 52, 54.

The more widely publicized and possibly more significant movement has been into downstream activities. By shifting into downstream activities, state oil companies invest capital in a very profitable end of the petroleum chain and protect the end market for their petroleum reserves. There are at least three types of downstream activities in which state oil companies are currently involved.

First, some state oil companies have begun to work with other countries to develop pipelines and other transportation systems to move the petroleum to the marketplace. For example, Saudi Arabia and Iraq have cooperated in the development of a pipeline system in the Middle East.²⁰³ The Nigerian National Petroleum Corporation is considering a joint venture with the Irish National Petroleum Corporation to reactivate a pipeline link between an Irish refinery and an Irish crude oil terminal.²⁰⁴

²⁰³ See *Oil Importers Seen Surviving Closure of Strait*, OIL & GAS J., Aug. 31, 1987, at 20-21.

²⁰⁴ Vielvoye & Williams, *supra* note 10, at 18.

Second, several countries have purchased refining systems in the United States and Western Europe. Kuwait, for example, operates refineries in the Netherlands and Denmark, and Venezuela's state oil company, Petroven, has likewise earmarked almost \$780 million for investments in refineries in Spain.²⁰⁵ Venezuela has also purchased a refinery in the United States,²⁰⁶ and Saudi Arabia has recently purchased a 50% interest in three of Texaco's refineries in the United States.²⁰⁷ In addition, the Abu Dhabi International Petroleum Investment Company recently paid \$123 million for a 10% interest in a Spanish refining company.²⁰⁸

Finally, retailing directly to the customer is part of this downstream movement. Libya owns interests in Italy's gasoline market, and Kuwait has opened a series of gasoline stations throughout Europe.²⁰⁹ The joint venture between Texaco and Saudi Arabia includes about 1450 service stations and a distribution network that reaches about 10,000 stations, all in the United States.²¹⁰

The full implication of these actions for the United States is far from clear. Some commentators have pointed to these changes as demonstrating a severe threat to the national security of the United States and other petroleum-consuming countries;²¹¹ others have argued that such changes add a dimension of stability to the marketplace that has been lacking for the last fifty years.²¹² The

²⁰⁵ *Id.*

²⁰⁶ See *Pdsva Acquires Rest of Champlin Refinery*, OIL & GAS J., Oct. 10, 1988, at 34.

²⁰⁷ Petzinger, *supra* note 9, at 2, col. 2. In addition, Kuwait has heavily invested in the recent public offering of British Petroleum stock. Vielvoye, *The Kuwait-BP Connection*, OIL & GAS J., NOV. 30, 1987, at 22.

²⁰⁸ *International Briefs: Processing*, OIL & GAS J., Feb. 1, 1988, at 29.

²⁰⁹ See Vielvoye & Williams, *supra* note 10, at 18.

²¹⁰ *Texaco, Saudis Plan Downstream Venture*, *supra* note 9, at 30.

²¹¹ See Williams, *OPEC Ventures Downstream: Industry Threa: or Stability Aid?*, OIL & GAS J., May 16, 1988, at 15. Canada has responded to excessive foreign investment in industries of national importance with the Foreign Investment Review Act. See generally G. HUGHES, FOREIGN INVESTMENT LAW IN CANADA 33-93 (1983).

²¹² J. ROBERTS, THE GULF, INTEGRATION, AND OPEC: OVERSEAS DOWNSTREAM ACTIVITIES 8 (International Research Center for Energy & Economic Development Occasional Papers No. 4, 1988); *OPEC Downstream Buys Called Welcome News*, OIL & GAS J., Mar. 14, 1988, at 81. An industry analyst comments that downstream acquisitions can "[t]each OPEC members about end-use products markets, 'which will make them much more reasonable sellers of crude[;]' [r]educe OPEC members' incentives to cut supplies[; f]orce OPEC to keep official prices in line with the market[, so that] '[a]ntiquated' government selling prices will 'slowly disappear[;]' [and i]mprove rationalization of the refining industry."

outcome of these developments will not become known for many years, but they are changing the entire character of the marketplace. Moreover, they are changing it in a way that will be highly disadvantageous to those oil-producing countries lacking the technical and managerial sophistication and the international contacts essential to vertical integration in an international market.²¹³

It should not be surprising that Kuwait, Venezuela, and Saudi Arabia are the countries that have moved most quickly and successfully toward intensive international downstream activities; they are also the countries that moved slowly in asserting their sovereign claims to their oil resources and were careful to maintain reasonably good relations with the companies holding the oil concessions. By the same reasoning, it is hardly surprising that Mexico's current participation in this process is comparatively slight. Although Pemex has operated as a fully integrated state oil company for almost five decades, it has not had the experience of joint participation in domestic development with purely profit-driven multinational oil companies. Indeed, Mexico's expulsion of foreign oil companies left Pemex without direct access to the international transportation and marketing network controlled by the Seven Sisters.

Id.

²¹³ One advantage of host country cooperation with the multinational corporations is that, because such corporations operate solely on the basis of a profit motive, state oil companies working with them are forced to focus on the profitability of ventures as well as the nonprofit goals of a government's national energy policy.

For many years after Mexico's expropriation of their property, the oil companies tried to deny Mexico access to virtually all foreign oil markets.²¹⁴ This has left Mexico far more isolated from traditional international petroleum markets than present-day Libya, which nonetheless has suffered some of the same consequences as a result of its partial nationalization of oil properties.²¹⁵ Although Pemex has for the past decade ranked as one of the world's largest oil companies and is frequently mentioned as a potential participant in international downstream integration,²¹⁶ its size and power are a consequence of its domestic production and operations. Pemex's international presence has been almost entirely limited to the export of crude oil.²¹⁷

V. CONCLUSION

After the passage of fifty years, one can view the effects of Mexico's outright nationalization of oil company assets from a somewhat clearer perspective than was possible in 1938. It now seems that the highly favorable rights²¹⁸ that the multinational oil companies held in Mexico, the Middle East, and other countries were inevitably destined to undergo a radical revision. Domestic politics and judicial doctrines had already altered the somewhat similar agreements entered into with United States landowners. The principal question regarding the international concessions was how the changes would be accomplished.

²¹⁴ See Duran, *supra* note 100, at 172; R. ANDERSON, *supra* note 1, at 47.

²¹⁵ See *North African Producers Cooperate to Improve Outlook*, *supra* note 202, at 54 (discussing the reluctance of foreign oil companies to deal with Libya).

²¹⁶ See, e.g., J. ROBERTS, *supra* note 212, at 9, 11, 13; Petzinger, *supra* note 9, at 2, col. 2 (commenting that Mexico has been identified as a possible joint venture partner with Chevron Oil Company in downstream activities).

²¹⁷ See G. Szekely, *Oil, Trade, and Diversification: Mexico's Relations with Industrial Powers*, paper presented at conference, *The Mexican Petroleum Nationalization 1938-1988*, at the University of Texas, Austin, Texas, Feb., 1988 (copy on file with the *Texas International Law Journal*).

²¹⁸ One commentator has offered the following reasons for the one-sidedness of the early concessions:

These original [concessions] . . . were negotiated in a period of colonialism, with the weight of home governments thrown behind their domestically based companies. In bidding for concessions the oil companies were united in overlapping consortia with restrictive exploration agreements, while the Middle Eastern states negotiated as separate entities. Given the minimal development of Middle East production until the forties, the governments were unaware of the potential value of the oil under their territories, and they lacked the capital and technology to explore for and produce the oil themselves.

Note, *Concession to Participation*, *supra* note 8, at 777.

The Mexican expropriation stands at one end of the spectrum of methods of forcing change in the oil companies' rights. Historically, the rights the multinational corporations obtained in Mexico were more favorable in many instances than those obtained in other countries; in fact, they permitted the companies to claim the equivalent of fee simple ownership in many of the oil-producing areas. In that respect, these perpetual grants to explore and produce oil were much more favorable than leases executed in the United States. From the companies' perspective, this did not mean that their rights were unfair or inequitable; they had obtained these rights without coercion. Similarly, in the cases in which they had been granted concessions, they viewed such concessions as having been fairly obtained and providing for adequate and continuing compensation to Mexico. Therefore, the oil companies viewed the reserves they discovered and the production they obtained simply as compensation for the risks they undertook.

From the Mexican government's perspective, the oil companies received far too favorable terms and often abused their privileges. The companies' interests often covered the most productive properties in the country, and their claims to Mexico's petroleum reservoirs were much greater than the rights they claimed in most of the rest of the world. In addition, Mexico realized that one of its most valuable resources had fallen under the control of foreign companies. Compromise and renegotiation became less possible because of the nature of the legislation that had permitted the claims to these resources, the companies' refusal to acknowledge that their rights should be reconfirmed after the adoption of the 1917 Constitution, and the ever worsening tax and labor disputes. Confiscation was not the inevitable result of such a conflict, but it was easily the most probable one.

The change in the concessions in the Middle East was accomplished quite differently. As discussed in Part III of this Article, many of the original concession agreements have been renegotiated. Most of the changes made during the transition to participation have taken place through the efforts of the OPEC countries, which used a combination of cajolery, international political pressure, and threats of nationalization. The success of this method of altering the original agreements was due in considerable part to the oil companies' fear that the example set by Mexico might be followed elsewhere.

Even where nationalization ultimately occurred, if the change was relatively gradual, the long-term effects were frequently not markedly different from those achieved through renegotiation. Although the companies do not like the loss of assets, they are more concerned about the loss of involvement in developing future reserves.²¹⁹ The prospect of competitive bidding and the sharing of their technology and information with the highest bidder frightens most multinational corporations. Thus, in the context of the Venezuelan expropriation, by the time the assets changed hands from the companies to the country's state oil company subsidiaries, all the parties knew exactly what their involvement would be in the new scheme.²²⁰ Further, Venezuela took care to protect company secrets and to involve the corporations in the new structure. In effect, in exchange

²¹⁹ In the case of Saudi Arabia in the 1970s, an abrupt expropriation of oil company assets would have been inconsistent with the economic system in place, the plans for full development of its resources, and the country's plans for investment of capital in the Western nations. *See id.* at 788-89.

²²⁰ *See* Lieuwen, *The Politics of Energy in Venezuela*, in *LATIN AMERICAN OIL COMPANIES AND THE POLITICS OF ENERGY* 189, 192-213 (J. Wirth ed. 1985). This is not meant to suggest that the oil companies were satisfied with the ultimate outcome. Indeed, Occidental Petroleum Company still maintains that it is owed compensation for Venezuela's 1976 nationalization of its assets. *See OGJ Newsletter*, OIL & GAS J., June 27, 1988, at 3.

for the symbolic “loss of assets,” many of the companies were assured of the right to continue their participation.²²¹

²²¹ A commentary on the Venezuelan technical assistance agreement makes the following observations:

While no definitive opinion can be formed on criticism voiced against the agreement in general and in detail, it clearly demonstrates that nationalization per se does not convey to the state effective control over previously foreign controlled operations nor full participation in the benefits thereof. However, also other nationalizations which tried to do away completely with the role of the foreign enterprise have not necessarily led to clearly better results, as national companies have faced serious problems almost universally in coping with access to international marketing, financing, managerial capacities, technology generation and technology use.

II A COLLECTION OF INTERNATIONAL CONCESSIONS AND RELATED INSTRUMENTS: CONTEMPORARY SERIES 281-82 (P. Fischer & T. Waelde ed. 1982) (citations omitted).

Mexico contributed significantly to the success of those countries that sought to force changes in their concessions through renegotiation or gradual nationalization. Mexico was, however, forced to pay a price for its own use of expropriation and in some respects is still suffering some of the consequences.²²² The major immediate detriment of an outright expropriation is the chilling effect placed upon all general foreign investment in the country. Furthermore, the oil companies are often hesitant to do business with the government that expropriated their assets.²²³ In Mexico's case, the resulting isolation from markets and new technology was exacerbated by Mexico's own opposition to the investment of foreign capital in the country. To the extent that Pemex has dealt with foreign oil companies, these companies have been relatively small and have lacked the economic power to provide Pemex with an international presence in downstream markets.²²⁴ Without a history of cooperation with the multinationals, Pemex will find it difficult to enter into those joint ventures that would provide Mexico with secure foreign outlets for its oil and with the profits obtainable from downstream activities. Ultimately, however, if Mexico hopes to free itself from the roller coaster ride of fluctuating demand and prices in the world petroleum market, Mexico must successfully move into those markets from which it has so long been excluded.

²²² See K. DAM, *supra* note 6, at 12 ("Mexico is perhaps the most successful example [of a nationalization], but there the state-owned oil company has not yet been able to reestablish Mexico's position as a major exporter of oil.").

²²³ Thus, it is not surprising that in the last fifty years Mexico has had limited foreign company involvement in the new petroleum regime while many of the Middle Eastern OPEC countries have begun to increase foreign company involvement.

²²⁴ See Duran, *supra* note 100, at 179.