NATURAL RESOURCES JOURNAL

Volume 56
Issue 2 *Mexico Energy Reform*

Summer 2016

From South of the Border, Down Mexico Way: The Past, Present, and Future of Petroleum Development in Mexico, Part I

Owen L. Anderson

J. Jay Park

Owen L. Anderson* & J. Jay Park†

SOUTH OF THE BORDER, DOWN MEXICO WAY: THE PAST, PRESENT, AND FUTURE OF PETROLEUM DEVELOPMENT IN MEXICO,‡ PART I

ABSTRACT

Mexico is estimated to have 9.8 billion barrels of untapped oil reserves, or about 10 percent of the world's crude oil; however, much remains undeveloped and production is declining as a result of dysfunction in the structure of Mexico's petroleum regime. Until recently, Mexico's Constitution and laws limited oil and gas activities to those of its state oil company, Petróleos Mexicanos (Pemex), which struggled to invest in new drilling and technology. In 2013, however, Mexico reopened its petroleum sector to foreign investment. Although 75 years in the making, Mexico is taking a bold new path toward developing its petroleum resources. Mexico stands to benefit from foreign investment and new technology to develop its remaining resources, which include shale deposits, deepwater reserves, and reserves only recoverable through modern enhanced recovery techniques.

This two-part article has two objectives: Part I reviews the history of petroleum in Mexico—much of it unhappy—as a reminder of the long and tortuous pathway that led to Mexico's current initiative to open its petroleum sector to foreign investment. The Mexican economy was built on oil in the early 1900s, but a combination of nationalism, petroleum-investor arrogance, and eventual over-dependence on petroleum revenues all served to undermine the Mexican oil industry. It is important for petroleum investors to understand and appreciate this history in order to ease the transition of new oil production in Mexico. At the same time, the people of Mexico should take a long-term, forward-looking view

---

* When this article was written, Owen Anderson was the Eugene Kuntz Chair in Oil, Gas and Natural Resources and the George Lynn Cross Research Professor at the University of Oklahoma (OU). Upon his retirement, he received emeritus status at OU and began serving a Professor and Distinguished Oil and Gas Scholar at the Kay Bailey Hutchison Center for Energy Law and Business at the University of Texas School of Law. Professor Anderson thanks Kathie Anderson for her editorial advice and Marilyn K. Nicely for her assistance in finding and translating certain sources from Spanish to English.

† J. Jay Park QC is a Managing Partner of Park Energy Law and Petroleum Regimes Advisory Ltd. Jay wishes to thank Dilek Deniz Kuban, Partner of Park Energy Law, for her assistance in the research conducted to support this article.

of Mexico's oil and gas future, which should be bright.

Part II, published in another journal, discusses the current reform of Mexico's petroleum laws, including its initiative to resume direct foreign investment in the upstream petroleum sector.[§]

§ 20.01 INTRODUCTION

Oil built up Mexico's economy, only to undermine it.

-Daniel Yergin[1]

Mexico has an estimated 9.8 billion barrels of untapped oil reserves,[2] and its total petroleum resources, including shale oil and shale gas, may be second only in size and scope to the resources in the Arctic.[3] Nevertheless, much of this oil remains undeveloped owing to the dysfunctional structure of Mexico's petroleum regime. Until recently, Mexico's Constitution and laws have restricted the conduct of oil and gas activities to the state oil company, Petróleos Mexicanos (Pemex). Pemex has had a great deal of success in exploring and developing Mexico's petroleum resources, with oil production peaking at about 3.4 million barrels per day in 2004.[4] Nevertheless, within the last decade, oil production has steadily declined.[5] Despite Mexico's similar geology to that of its NAFTA (North American Free Trade Agreement) partners, production in the United States and Canada, until the recent oil price collapse, has steadily increased since 2008, while Mexico's oil production has steadily decreased.[6] To satisfy projected natural gas demand, Mexico must import gas equal to its domestic production by 2027.[7] This disparity in oil and gas production is due to the development of new oil and gas recovery technology widely used in the United States and Canada that Mexico has been unable to access as a consequence of a long, sordid relationship with foreign oil companies. In order to

§ Owen L. Anderson & J. Jay Park, *South of the Border, Down Mexico Way: The Past, Present, and Future of Petroleum Development in Mexico—Part II*, 61 ROCKY MTN. MIN. L. INST. 20–21, 20–22, 20–33 to 20–34 (2015).

1. DANIEL YERGIN, THE PRIZE: THE EPIC QUEST FOR OIL, MONEY AND POWER 14 (1st ed. 1991).

2. U.S. ENERGY INFO. ADMIN. [EIA], U.S. DEP'T OF ENERGY, MEXICO: INT'L ENERGY DATA AND ANALYSIS 1 (2015), https://www.eia.gov/beta/international/analysis_includes/countries_long/Mexico/mexico.pdf.

3. Adam Critchley, *Mexico's oil, gas reserves could be second only to Arctic reserves – EY*, *BUSINESS NEWS AMERICAS* (Sept. 26, 2014), http://www.bnamericas.com/en/news/oilandgas/mexicos-oil-gas-reserves-could-be-second-only-to-arctic-ey/.

4. Jon Bosak, *Keys to Understanding the Petroleum Situation*, IBIBLIO, http://ibiblio.org/tcrp/sidebars/extraction.html (last updated Oct. 16, 2010); *Mexico Crude Oil Production by Year*, INDEX MUNDI, http://www.indexmundi.com/energy.aspx?country=mx&product=oil&graph=production (last visited Mar. 13, 2016).

5. EIA, *supra* note 2.

6. Andy Bergmann et al., *World's Top Oil Producers*, CNN MONEY, http://money.cnn.com/interactive/news/economy/worlds-biggest-oil-producers/ (last updated Feb. 11, 2016) (interactive map showing U.S. and Canada increases and Mexico decreases).

7. Mike Ford, *Mexico's Energy Ministry Projects Rapid Near-Term Growth of Natural Gas Imports from U.S.*, U.S. ENERGY INFO. ADMIN., U.S. DEP'T OF ENERGY (May 29, 2014), http://www.eia.gov/todayinenergy/detail.cfm?id=16471.

overcome stagnant development and to become more independent from foreign hydrocarbons imports, Mexico has reconsidered its long and embattled relationship with foreign oil investment.

In 1938, the Mexican government expropriated the petroleum assets of foreign oil investors and established a new state-owned oil company, Petróleos Mexicanos (Pemex), to carry out exploration and production activities. Pemex's successes enabled the Mexican government to rely on oil and gas revenues as the country's single largest revenue source, at the cost of depriving Pemex of revenues needed to find new petroleum reserves in order to sustain itself.[8] Much of the capital Pemex secured for future development has been borrowed, further burdening the company with a substantial debt.[9] Pemex also struggled to modernize effectively because internal dysfunction, together with legal barriers, discouraged partnerships with private companies that had access to investment capital, modern technology, and the expertise needed to develop deep-water[10] and unconventional[11] petroleum resources. Pemex's inability to invest sufficient funds in promising deep-water areas in the Gulf of Mexico, for example, has robbed it of a promising opportunity to generate substantial new revenues.

After a decade of minor oil reforms, Mexico began major reforms to its petroleum regime in 2013, including amendments to its Constitution.[12] Recognizing that Mexico's inability to make use of its petroleum reserves lay not within Pemex but in the structure of the state's petroleum regime, the Mexican government began a comprehensive revision of its energy policy. Between 2013 and 2015, Mexico amended the energy provisions in its Constitution, enacted related legislation and regulations, and developed new petroleum investment contract models.[13] Following

---

8. Paul A. Sánchez Campos, *Whatever happened to the Mexican Oil Bonanza? The Challenges of Mexico's New Oil Fund*, 56.2 NAT. RESOURCES J. 291 (2016); *see also* Adam Williams, Pemex Sees Total Debt Rising Above $100 Billion Next Year, BLOOMBERG (Dec. 2, 2015), http://www.bloomberg.com/news/articles/2015-12-02/pemex-sees-total-debt-rising-above-100-billion-next-year.

9. Anthony Harrup, *Moody's Downgrades Mexican Oil Company Pemex*, WALL STREET J. (Nov. 24, 2015), http://www.wsj.com/articles/moodys-downgrades-mexican-oil-company-pemex-1448424567.

10. Deep water generally refers to "[e]xploration activity located in offshore areas where water depths exceed approximately 600 feet [200 m], the approximate water depth at the edge of the continental shelf. While deep-water reservoir targets are geologically similar to reservoirs drilled both in shallower present-day water depths as well as onshore, the logistics of producing hydrocarbons from reservoirs located below such water depths presents a considerable technical challenge." Definition of "Deepwater Play," SCHLUMBERGER OILFIELD GLOSSARY, http://www.glossary.oilfield.slb.com/en/Terms/d/deepwater_play.aspx (last visited Mar. 13, 2016) (definition).

11. "At present, the term unconventional resources is used in reference to oil and gas resources whose porosity, permeability, fluid trapping mechanism, or other characteristics differ from conventional sandstone and carbonate reservoirs." Definition of "Unconventional Resource," SCHLUMBERGER OILFIELD GLOSSARY, http://www.glossary.oilfield.slb.com/Terms/u/unconventional_resource.aspx (last visited Mar. 13, 2016). The term is also used to refer to any high-cost exploration and development operations that require modern and expensive technology, such as Arctic, deepwater, and ultra-deepwater drilling. *See, e.g.*, Unconventional Oil and Gas Series: Deepwater and Arctic Drilling Webinar, http://www.sustainalytics.com/unconventional-oil-and-gas-series-deepwater-and-arctic-drilling-webinar (last visited May 26, 2016).

12. *See generally* CLARE RIBANDO SEELKE ET AL., CONG. RESEARCH SERV., R43313, MEXICO'S OIL AND GAS SECTOR: BACKGROUND, REFORM EFFORTS, AND IMPLICATIONS FOR THE UNITED STATES 4 (Sept. 28, 2015), https://www.fas.org/sgp/crs/row/R43313.pdf.

13. *Id.* at 4–5.

the earlier lead of other Latin American states, such as Brazil in 1997[14] and Colombia in 2003,[15] that have successfully changed their petroleum regimes, Mexico now invites private investment to explore onshore and offshore areas. In 2015, the first new contracts were awarded under the new regime.[16] The new petroleum regime has restructured Pemex into a state-owned *productive enterprise* that will compete for oil and gas prospects in Mexico while retaining its existing oil and gas producing resources and most of its undeveloped discoveries.[17] In addition, the Reform modernizes Mexico's administrative and regulatory bodies and intends to improve transparency and accountability, secure sustainable (durable) development of its petroleum resources, and maximize government take.[18]

This article has two objectives: First, it reviews the history of petroleum in Mexico—much of it unhappy—as a reminder of the long and tortuous pathway that led to Mexico's current initiative to open its petroleum sector to foreign investment.[19] While we hope that the people of Mexico will take a long-term view of the future, and not dwell on this history, petroleum investors should understand and remember it. If properly implemented, the new Mexican energy policies and reforms offer a bright and beneficial future for Mexico.

Second, Part II of this article discusses Mexico's current reform of its petroleum laws, efforts to revitalize Pemex into a modern petroleum company, and initiatives to resume direct foreign investment in the upstream petroleum sector. The parallel reforms in Mexico's electricity sector are beyond the scope of this article. Part II was previously published in another journal.[20]

The Mexican economy was built on oil in the early 1900s, but nationalism, petroleum-investor arrogance, and the national government's over-dependence on petroleum revenues combined to fetter replacing reserves and undermine the

14. *See generally* Marilda Rosado de Sá Ribeiro, *The New Oil and Gas Industry in Brazil: An Overview of the Main Legal Aspects*, 36 TEX. INT'L L. J. 141 (2001).

15. *See generally* Claro Manuel Cotes Ricciulli, *Colombian Petroleum Policy: Oil and Gas Policy and Its Regulatory Entities Before and After 2003—Ecopetrol and the Creation of the National Hydrocarbons Agency (ANH) in Colombia.*

16. Owen L. Anderson & J. Jay Park, *South of the Border, Down Mexico Way: The Past, Present, and Future of Petroleum Development in Mexico—Part II*, 61 ROCKY MTN. MIN. L. INST. 20–21, 20–22, 20–33 to 20–34 (2015).

17. *See generally* Francisco Rivero, Pemex's Makeover: What You Need to Know About Pemex's Changing Corporate Structure, Oil and Gas Monitor (Dec. 15, 2014), http://www.oilgasmonitor.com/pemexs-makeover-what-you-need-to-know-about-pemexs-changing-corporate-structure/ (last visited May 26, 2016).

18. For an overview of the full package of energy reforms, including electricity, *see generally* Adrian Lajous, *Mexican Energy Reform*, CNTR. ON GLOBAL ENERGY POLICY, Columbia Univ. (June 2014), http://energypolicy.columbia.edu/sites/default/files/energy/CGEP_Adrian%20Lajous_Mexican%20Energy%20Reform_Final.pdf (last visited May 26, 2016).

19. *See generally* YERGIN, *supra* note 1; *see* LORENZO MEYER, MEXICO AND THE UNITED STATES IN THE OIL CONTROVERSY, 1917–1942, at 6–19 (Muriel Vasconcellos trans., Univ. of Tex. Press 1977); DANIEL YERGIN, THE QUEST: ENERGY, SECURITY, AND THE REMAKING OF THE MODERN WORLD (2011); Walter D. Hawk, *Legal Features of the Oil Question Involved in Mexican-American Diplomacy*, 22 ILL. L. REV. 150 (1927). For an excellent historical summary, including a timeline of Mexican energy policy to the year 2000, *see* Ewell E. Murphy, Jr., *The Prospect for Further Energy Privatization in Mexico*, 36 TEX. INT'L LAW J. 75 (2001).

20. Anderson & Park, *supra* note 16.

Mexican economy. After seventy-five years in the making, Mexico is taking a bold new path toward developing its petroleum resources. Questions remain as to whether the new petroleum regime will lead to the anticipated investment and increased petroleum production, revenues, and reserves. The answers will come over time, as new contracts are awarded and new exploration and development activities begin. Unfortunately for Mexico, the reforms coincidentally occurred at a time of low oil and gas prices, which has required Mexico to reduce its fiscal terms to encourage investors to participate in Mexican bid rounds.

§ 20.02 EARLY MEXICO MINERAL LAW HISTORY

> We Spaniards know a sickness of the heart that only gold can cure.
>
> -Hernán Cortés[21]

Mineral exploration in Mexico began with Spanish conquests in the sixteenth century. In 1519, Hernán Cortés began his conquest of central Mexico with an army of 500 men.[22] Although he did so in the name of Charles I of Spain (Charles V of the Holy Roman Empire), Cortés and his army were primarily interested in personal gain, and Cortés financed his venture with what remained of his own wealth.[23] By 1521, Cortés conquered central Mexico and the Aztec civilization, and in 1535, Charles I established a colonial government.[24] In 1556, Charles I abdicated in favor of his son, Phillip II,[25] who began a period of Spanish mineral exploration. Although Castile[26] decrees relating to minerals were made as early as the 1380s,[27] it was not until 1584 that Phillip II issued the first Spanish decree authorizing a mining ordinance.[28] The decree repealed all prior conflicting decrees and also granted people, including foreigners, the right to prospect and mine certain minerals upon registration of claims and payment of royalty to the crown.[29] Phillip II's successor, Carlos III, followed by issuing the first mining decree specific to Mexico, the

21. 1 THE CAMBRIDGE HISTORY OF LATIN AMERICA [hereinafter Bethel], 180 (Leslie Bethel ed., 1984).

22. *Id.*

23. PHILIP L. RUSSELL, THE HISTORY OF MEXICO: FROM PRE-CONQUEST TO PRESENT [hereinafter RUSSELL], 116 (1st ed., 2010).

24. Bethel, *supra* note 21, at 205.

25. *Id.* at 287.

26. Castile was a medieval kingdom located on the Iberian Peninsula. It was one of several kingdoms that formed Spain. Bethel, *supra* note 21, at 158.

27. John C. Lacey, *The Mining Ordinances of New Spain: A Study of Colonial Administration of the Mining Industry*, 10 BULL. OF THE PEAK DISTRICT MINES HIST. SOC'Y 236, 236 (1988), http://www.pdmhs.com/docs/default-source/bulletins/bulletin-10-4/bulletin-10-4---the-mining-ordinances-of-new-spain---a-stud.pdf; FRANCIS XAVIER DE GAMBOA, 1 COMMENTARIES ON THE MINING ORDINANCES OF SPAIN 17–18 (Richard Heathfield trans., 1830) (noting a mineral grant as early as 1297).

28. GAMBOA, *supra* note 27, at 5, 18–20.

29. A COLLECTION OF MINING LAWS OF SPAIN AND MEXICO 70, 75 [hereinafter HALLECK] (H. W. Halleck ed. & trans., 1859) (quoting the 1584 decree of Phillip II). Between 1780 and 1793, various decrees were issued concerning the royalty-free mining of coal, but these laws were applicable only in Spain, not Mexico. MERRILL RIPPY, OIL AND MEXICAN REVOLUTION 7–9 [hereinafter RIPPY] (1972); LACEY, *supra* note 27, at 239.

Ordenanzas de Aranjuez, in 1783.[30] The 1783 decree declared mines, whether on public or private land, to be the property of the crown—subject to the people's right to prospect and mine upon payment of royalty to the crown[31] and specifically mentioned bitumen, mineral tars, and "jugos de la tierra" (juices of the earth).[32] Although the 1783 decree did not expressly mention petroleum, most jurists would have likely concluded that the law included petroleum.[33]

> It's time for our emancipation; this is the hour of our freedom, and if you know its great value, you will help me defend it against the claw of ambitious tyrants.
>
> -Don Miguel Hidalgo y Castillo (1810)[34]

Much of the substance of earlier royal Spanish mineral decrees remained intact even after Mexico's independence. On September 16, 1810, the eleven-year struggle for Mexico's independence from Spain began with a cry for revolution by Creole Catholic priest Miguel Hidalgo y Costilla.[35] The Creoles (Spaniards born in the new world) resented royal administration, the expulsion of the Jesuits, the ending of their participation in the colonial government when Spaniards were sent from Spain to run colonial offices and commercial enterprises, increased taxes, various economic restrictions, the burden providing and funding compulsory local military forces, lower living standards despite economic growth, trade restrictions, and a debt consolidation decree.[36] They were also alarmed by French and U.S. liberalism and by France's influence over Spain.[37] The Creoles were eventually successful in ousting Spanish officials.[38] Mexico gained independence from Spain in 1821[39]—the same year in which Stephen F. Austin was allowed to colonize Tejas (Texas).[40] Mexico became an official republic in 1824.[41]

Under the Treaty of Córdoba of August 24, 1821, Spanish civil laws—including the mineral ordinance of 1783—generally remained the law of Mexico,

---

30. HALLECK, *supra* note 29, at 222–23 (quoting Royal Ordinances, May 22, 1783).
31. *Id.*
32. HALLECK, *supra* note 29, at 230 (quoting Royal Ordinances, May 22, 1783).
33. *See* RIPPY, *supra* note 29, at 1–7.
34. Loose translation of El Grito de Dolores (The Cry of Dolores), announcing the start of the Mexican War of Independence. Don Miguel Gregorio Antonio Ignacio Hidalgo-Costilla y Gallaga Mandarte Villaseñor (more commonly known as Don Miguel Hidalgo y Costilla), September 16, 1810 (now celebrated as Mexican Independence Day). *Mexican Independence*, SONS OF DEWITT COLONY TEXAS, http://www.tamu.edu/faculty/ccbn/dewitt/mexicanrev.htm (last visited Mar. 14, 2016).
35. RUSSELL, *supra* note 23, at 117.
36. *See id.*
37. *See id.*
38. *Id.*
39. *Id.*
40. *Austin's Colony*, SONS OF DEWITT COLONY TEXAS, http://www.tamu.edu/faculty/ccbn/dewitt/adp/history/hispanic_period/tenoxtitlan/austins_colony.html (last visited Mar. 14, 2016).
41. *See Mexican Constitution of 1824*, SONS OF DEWITT COLONY TEXAS, http://www.tamu.edu/faculty/ccbn/dewitt/constit1824.htm (last visited Mar. 14, 2016).

despite independence from Spain.[42] It was not until 1836 that Spain's claim to Mexico's mineral wealth was finally vested in the Mexican government by the Treaty of Peace and Amity.[43] Because Mexico had a federal system, it was unclear whether the states of Mexico or the federal government exercised control of lands, waters, and minerals. In 1857, the Constitution settled the issue, granting control to the federal government.[44] In 1884, Mexico's Congress passed a landmark law granting subsoil rights in certain minerals to overlying landowners.[45] To understand the 1884 law, it is critical to understand U.S.-Mexico relations in the 1800s.

§ 20.03. U.S.-MEXICO RELATIONS IN THE MID-NINETEENTH CENTURY

> The American continents . . . are henceforth not to be considered as subjects for future colonization by any European powers.
>
> -James Monroe (1823)[46]
>
> The untransacted destiny of the American people is to subdue the continent . . .
>
> -William Gilpin (1846)[47]
>
> He who walks with wolves learns to howl.
>
> -Mexican Proverb[48]

By the mid-1800s, the Monroe Doctrine had been transformed from a warning to European powers to cease colonial expansion into a manifesto of U.S. dominance over the Western Hemisphere. This period was not a time of friendly U.S.-Mexico relations.

In 1836, Texas settlers and immigrants—mostly from the U.S.—defeated Dictator-General Antonio López de Santa Anna at the Battle of San Jacinto, enshrining their own independence through the signing of the Treaties of Velasco.[49] Despite subsequent Mexican leaders' refusal to recognize these treaties (as they were

42. Treaty of Córdoba, Mex.-Spain, art. 12, 24 de agosto de 1821 (Aug. 24, 1821), http://www.juridicas.unam.mx/infjur/leg/conshist/pdf/tratcord.pdf (last visited Mar. 14, 2016).

43. ANTONIO J. BERMÚDEZ, THE MEXICAN NATIONAL PETROLEUM INDUSTRY 1–2 (1963). Although of questionable validity, state control over minerals was reaffirmed by decree of Emperor Maximilian in 1865. *Id.* at 2. *See also* RIPPY, *supra* note 29, at 11.

44. RIPPY, *supra* note 29, at 48.

45. Código de Minas de Los Estados Unidos Mexicanos (Mining Code of the United Mexican States) [hereinafter "Código de Minas"], DO, art. 10 (IV), 22 de noviembre de 1884.

46. James Monroe, U.S. President, 7th Annual Message to Congress (Dec. 2, 1823).

47. WILLIAM GILPIN, MISSION OF THE NORTH AMERICAN PEOPLE, GEOGRAPHICAL, SOCIAL, AND POLITICAL 124 (1873).

48. *Mexican Proverbs, Famous Proverbs*, SPECIAL DICTIONARY, http://www.special-dictionary.com/proverbs/source/m/mexican_proverb/179403.htm (last visited Mar. 14, 2016).

49. ALAN C. HUFFINES, THE TEXAS WAR OF INDEPENDENCE 1835–1836: FROM OUTBREAK TO THE ALAMO TO SAN JACINTO 60–61, 80–81 (2005).

not ratified by Mexico's Congress), Texas became a U.S. state in December 1845.[50] Because the treaties have not been officially recognized, some Mexicans continue to view the loss of Texas as a U.S. intrusion on Mexican sovereignty that mirrors the theme of exploitation of Mexico's natural resources by U.S. investors,[51] thus helping to explain the nationalist sentiment against U.S. involvement in the Mexico petroleum sector.

Craving California, New Mexico, and an expanded Texas border to the Rio Grande, the U.S. declared war on Mexico in 1846 in the midst of hostilities that began the prior year. U.S. forces seized Mexico City under the command of General Winfield Scott, pressuring Mexico into negotiations for a peace treaty. On February 2, 1848, the U.S. achieved its "Manifest Destiny" through the Treaty of Guadalupe Hidalgo, ending the Mexican-American War (known in Mexico as la Primera Invasión/Intervención Estadounidense en México ("the First U.S. invasion/intervention in Mexico"). In return for this territory, the U.S. agreed to pay Mexico $15 million, assuming another $3.25 million in private American claims against Mexico.[52] Taking advantage of Mexico's financial and political turmoil, the U.S. purchased additional lands in what is now southwest New Mexico and southern Arizona for $10 million in 1853.[53] The Gadsden Purchase or Venta de La Mesilla (Sale of La Mesilla) was made to facilitate construction of a railroad from Texas to California.[54] Although postponed due to the American Civil War, the Southern Pacific Railroad was completed in 1883 as the second transcontinental line, serving to further unite U.S. territories from coast to coast while furthering resentment by Mexico owing to the loss of yet more land to the U.S.[55]

Eight years after the Gadsden Purchase, while the U.S. was embroiled in civil war, the French, Spanish, and British invaded Mexico.[56] The Franco-Mexican War, also known as the Segunda Intervención Francesa en México (Second French Intervention in Mexico),[57] was waged to coerce Mexico into paying its foreign debts despite the fact that Mexico had been virtually bankrupted by the Mexican-American War.[58] Although the Spanish and British forces withdrew after negotiating an agreement with President Benito Juárez,[59] the French forces invaded Mexico City.[60]

---

50. *Id.* at 88.

51. RUSSELL, *supra* note 23, at 210 ("To this date, Mexicans resent the loss of roughly 30 percent of 'their' territory.").

52. *See generally* JOHN C. DAVENPORT, THE U.S.-MEXICO BORDER: THE TREATY OF GUADALUPE HIDALGO 48 (2005).

53. DAVID DEVINE, SLAVERY, SCANDAL, AND STEEL RAILS: THE 1854 GADSDEN PURCHASE AND THE BUILDING OF THE SECOND TRANSCONTINENTAL RAILROAD ACROSS ARIZONA AND NEW MEXICO TWENTY-FIVE YEARS LATER 77 (2004).

54. RUSSELL, *supra* note 23, at 213–14.

55. *See id.* For an example of the how some Mexicans view the U.S. as an aggressor, *see, e.g.*, http://www.strategic-culture.org/news/2012/08/28/mexico-so-far-from-god-so-close-to-the-united-states.html (last visited May 25, 2016).

56. For more discussion *see generally* RUSSELL, *supra* note 23, at 223–26.

57. *See generally* RENÉ CHARTRAND, THE MEXICAN ADVENTURE 1861–67, at 272 (Lee Johnson ed., 1994).

58. *See* RUSSELL, *supra* note 23, at 223.

59. *Id.* at 224.

60. *Id.*

Though never able to conquer Mexico, France temporarily installed Emperor Maximilian as the Habsburg monarch of Mexico from 1864–67.[61] After the U.S. Civil War, the U.S. used diplomatic pressure and threatened military force to help bring an end to the French occupation (citing the Monroe Doctrine).[62] Although this is an example of the U.S. coming to Mexico's assistance, the underlying reason was the U.S. desire to retain dominance in the Western Hemisphere.

§ 20.04. PETROLEUM AND THE PORFIRIATO

Poor Mexico, so far from God and so close to the United States.

-Porfirio Díaz, President of Mexico, 1876–1911

One of the Mexican military heroes of Mexico's struggles with the U.S. and France was José de la Cruz Porfirio Díaz Mori, the figure most responsible for promoting petroleum development in Mexico. Prior to the Mexican-American War, José de la Cruz Porfirio Díaz Mori (Porfirio Díaz) trained to become a priest,[63] but enlisted in the military to repel the American invasion in 1846.[64] After the war, Díaz became a radical liberal and studied law, later helping to overthrow Dictator-General Antonio López de Santa Anna, who had recently seized power in a coup.[65] When Santa Anna was exiled, Díaz was offered a political post, only to return to the military to battle the French to oust Emperor Maximilian.[66] Díaz later rebelled against two liberal presidents, President Benito Juárez and President Lerdo de Tejada.[67] Díaz was elected President in 1876 and would remain in office until 1911[68]—the longest term of any Mexican President. The extended presidency (known in Mexico as the "Porfiriato"), has been simultaneously interpreted as a period of relative stability and economic growth and as a dictatorship whose inequality and political suppression eventually erupted into the Mexican Revolution.[69]

---

61. *Id.* at 225–27; M. M. MCALLEN, MAXIMILIAN AND CARLOTA: EUROPE'S LAST EMPIRE IN MEXICO (2014).

62. *Id*; *see also* RUSSELL, *supra* note 23, at 224.

63. JAVIER A. GALVÁN, LATIN AMERICAN DICTATORS OF THE 20TH CENTURY, THE LIVES AND REGIMES OF 15 RULERS 18 (2012).

64. *Id.*

65. *Id.* at 18–19.

66. *Id.* at 19.

67. *Id.* at 20.

68. Díaz handpicked his successor, who served until 1884 under Díaz's thumb. *See id.* at 22. Díaz ran again for reelection and won in 1884, after which he obtained an amendment to the Constitution repealing the bar to reelection. *Id.* at 22–23. His downfall came when he pledged not to run for reelection in 1910 but changed his mind. *Id.* Díaz did allow Francisco Madero, a man with similar political leanings, to run against him; however, prior to the election, Díaz jailed Madero. *Id.* Officially-announced election results proclaimed Díaz had been re-elected by a wide margin, but Madero alleged fraud and encouraged a revolution. *Id.* at 27–28. Díaz fled Mexico in 1911 and somewhat ironically lived the remainder of his life in France—the country he fought against in the 1860s struggle that helped him rise to prominence. *Id.* at 28, 19. For alternative economic characterizations of the Porfiriato, *see* RUSSELL, *supra* note 23, at 282–83.

69. For further biographical information, *see generally* GALVAN, *supra* note 63. For discussion of the concentration of wealth and the growing power of the small elite class in Mexico during the Porfiriato, *see* RUSSELL, *supra* note 23, at 239–43.

The Mexican Congress enacted a new petroleum law in 1884, giving landowners the right to exploit petroleum resources on their land.[70] The nature and effect of the 1884 law would become the subject of long debate and controversy. One interpretation is that the 1884 law rejects the Spanish civil law concept of sovereign title over mineral resources in favor of the U.S. private-ownership approach to minerals, hastening the development of petroleum resources.[71] Article 10 provided:

> The following are the exclusive property of the owner of the land, who will therefore be able to exploit and use to their advantage without the need of a notification or special adjudgment: . . . The salts existing on the surface, pure and salt water on the surface or in the subsoil; the petroleum and gaseous springs or thermal and medicinal water.[72]

Merrill Rippy argues that Article 10, along with Article 731 of the Mexican Civil Code, provided the surface owner with the right to exploit the subsoil and secure possession of produced petroleum but withheld title to the petroleum *in situ*.[73] Rippy also notes that some Mexican scholars believe that the Mexican government did not have authority to divest itself of mineral rights, as the 1857 Constitution empowered the government to regulate minerals, but not to divest them.[74] An 1888 organic law later confirmed federal control of public lands, navigable waters, and rivers and lakes forming boundaries between states, but neglected to repeal, amend, or clarify the 1884 law.[75]

While federal control of public minerals remained in flux, the federal government clarified landowners' rights to exploit in an 1892 law[76] providing that landowners could exploit oil without having to secure government permission.[77] The law declared that "the owner of the soil may exploit freely, without the necessity of a special concession in any case, the following mineral substances: Combustible

70. Código de Minas, DO, art. 10 (IV), 22 de noviembre de 1884.

71. *See* BERMÚDEZ, *supra* note 43, at 2.

72. Código de Minas, DO, art. 10 (IV), 22 de noviembre de 1884 ("son de la exclusiva propiedad del dueño del suelo, quien por lo mismo, sin necesidad de denuncio ni de adjudicación especial, podrá explotar y aprovechar: . . . IV. Las sales que existan en la superficie, las aguas puras y saladas, superficies o subterráneas, el petróleo y los mananatiales gaseosos o de aguas termales y medicinales . . . .").

73. RIPPY, *supra* note 29, at 18 (citing Sindicato de Trabajadores Petroleros de la República Mexicana, *Comité Ejecutivo General, La Cuestión Petrolera: Sus Diversos Aspectos*, 43–45 (1939), and like-minded commentators to support his argument). RIPPY, *supra* note 29, at 18–20. The term "in situ" means that the owner of the soil owns any minerals in place beneath the land as a possessory estate in land. Companies were apparently not content to argue for the more limited profit à prendre interest in which the owner of petroleum rights has the exclusive non-possessory property right to find and capture petroleum from beneath his land, acquiring possessory title as personal property only when the petroleum is actually produced.

74. RIPPY, *supra* note 29, at 20.

75. *Id.* at 48.

76. MEYER, *supra* note 19, at 24.

77. *Id.*

Minerals[,] Oil and mineral water . . . ."[78] It further provided that "[m]ining property legally acquired and that which may be acquired under this law shall be irrevocable . . . ."[79] and that exploitation

> in lands of private ownership of mineral explorations cannot be made without permission of the owner . . . [b]ut in case he cannot obtain this permission he shall be able to ask the appropriate administrative authority who shall give it in accordance with the established Regulation. . . .[80]

The 1892 law also imposed a property tax, the nonpayment of which could result in loss of exploitation rights.[81] Some scholars cite the 1892 law as conferring on landowners a free petroleum concession to exploit petroleum but not ownership *in situ*.[82] Indeed, it arguably granted irrevocable exploitation rights only after the lands are exploited for petroleum. That the government claimed a right to grant administrative permission to exploit petroleum on private lands where private permission could not be obtained further indicates that the government had not fully divested itself of title to petroleum *in situ*, although today such a law might be regarded as regulatory in nature.

In 1901, Mexico enacted a petroleum law that confirmed the rights of private landowners and authorized the federal government to grant concessions to federal and vacant land.[83] The 1901 law included the beds of navigable waters, rivers, and lakes that formed a boundary between states.[84] This law later fueled controversy when oil companies often drilled wells on private lands and drained nearby federal lands.[85] Further, when third parties obtained concessions for federal lands overlaying productive oil fields, private lands were also subject to drainage.[86] Though not expressly recognized in law, the rule of capture existed in fact. A proposed 1905 law would have reasserted government control of subsoil resources in line with Spanish Civil Law.[87] This proposal was never enacted due to an opinion expressed by the

---

78. Ley Minera de los Estados Unidos Mexicanos [Mining Law of the United Mexican States], DO, art. 4, 4 de junio de 1892 ("el dueño del suelo explotará libremente sin necesidad de concesión especial en ningún caso, las substancias minerales siguientes: Los combustibles minerales. Los aceites y aguas minerales . . . ."); *see also* RIPPY, *supra* note 29, at 21; MEYER, *supra* note 19, at 24.

79. Ley Minera de los Estados Unidos Mexicanos, *supra* note 78, at art. 5; *see also* RIPPY, *supra* note 29, at 21.

80. Ley Minera de los Estados Unidos Mexicanos, *supra* note 78, at art. 13 ("En terrenos de propiedad particular no podrán hacerse exploraciones mineras sin el permiso del dueño o de quien lo represente. Pero en el caso de que no se obtenga ese permiso, podrá pedirse a la autoridad administrativa correspondiente, quién lo dará de acuerdo con lo que establezca el Reglamento . . ."); *see also* RIPPY, *supra* note 29, at 21.

81. *See* Ley Minera de los Estados Unidos Mexicanos, *supra* note 78, at arts. 5, 29; *see also* RIPPY, *supra* note 29, at 22.

82. *See* RIPPY, *supra* note 29, at 21.

83. Ley del Petróleo [Petroleum Law], DO, 24 de diciembre de 1901; *see also* BERMÚDEZ, *supra* note 43, at 3.

84. *See* Ley del Petróleo, art. 1, DO, 24 de diciembre de 1901.

85. *See* BERMÚDEZ, *supra* note 43, at 2.

86. *Id.* at 3.

87. RIPPY, *supra* note 29, at 23.

Mexican Academy of Legislation and Jurisprudence, which concluded after debate that the law was impermissibly retroactive and thus contrary to the 1857 Constitution.[88]

Political debate about the meaning and effect of the 1884 law granting landowner mineral exploitation rights led the Mexican Congress to create a new mining law in 1909.[89] The 1909 law affirmed and more clearly granted surface owners and their assignees exclusive property rights in subsoil petroleum resources that were previously stated in the 1884 law.[90] Although the validity and exact meaning and effect of the 1884 and 1909 laws continued to be debated,[91] oil companies and landowners interpreted it as a grant of irrevocable title to petroleum *in situ* beneath private lands, whether under lease or deed.[92]

Although Díaz wanted to develop Mexico's petroleum resources to reduce reliance on imported oil and oil products from Standard Oil Trust affiliate, Waters-Pierce,[93] the underlying motive for supporting these mineral laws was likely to cement his power. Díaz had previously participated in revolts to oust several conservative rulers and led revolts against two liberal presidents, and his ambiguous political loyalties suggest that he may have had early personal leadership aspirations. Díaz proved to be a master politician,[94] courting favor and loyalty from the owners of haciendas (large estates or plantations), which became even larger under his presidency through mineral resources grants. The hacienda owners, apparently lacking the capital, expertise, and risk tolerance for petroleum exploration, were most willing to allow foreign capitalists the rights to explore for and exploit petroleum resources in return for a share of the wealth.[95] Nevertheless, no major discoveries would be made until the 1900s.

> Oil had come into the hole in such quantity as to lift the tools off the bottom and interrupt drilling.
>
> -Edward Doheny, American Oilman[96]

---

88. *Id.* at 26.

89. *Id.* at 26–28.

90. *Id.* at 26.

91. *Id.* at 27–28 (offering a brief discussion of subsequent debate in Mexico among the legal academy as to the meaning and effect of the 1909 law).

92. *See* RIPPY, *supra* note 29, at 26–27.

93. *See* JONATHAN C. BROWN, OIL AND REVOLUTION IN MEXICO 13, 9–29 (1993); *see also* MEYER, *supra* note 19, at 4 (noting that Díaz was also anxious to reduce imports of coal). Díaz's distrust of Standard was mutual, as during the Díaz regime, Standard Oil was the only American business that was anti-Díaz. RUSSELL, *supra* note 23, at 323.

94. For the next twenty-six years, Díaz ruled essentially as an authoritarian dictator, eliminating local government and federalism, controlling the legislative and judicial branches, and suppressing the press. GALVAN, *supra* note 63, at 21–28. He maintained power through pacifying the lower classes with political patronage, halting suppression of the native population, being neutral regarding the Roman Catholic Church, and allowing the wealthier classes to maintain their wealth. *Id.* at 21–22, 25–26. Much of this was inconsistent with his prior radical liberalism. *Id.* at 21. He also embraced European culture, art, and architecture, transforming Mexico City into a European-style capital city. *Id.* at 25.

95. RUSSELL, *supra* note 23, at 279.

96. BROWN, *supra* note 93, at 29 (recounting his first Mexican well).

In 1900, Edward Doheny, an American oilman already famous for commercially developing the Los Angeles City oil field in the 1890s,[97] began exploring for oil in Mexico. Doheny was asked to investigate rumors about oil pits near Tampico, along the Mexican Central Railroad's right-of-way.[98] To facilitate oil exploration, Doheny secured a right to import equipment duty free and, except for a stamp tax, a tax exemption on oil production for ten years.[99] In return, Doheny gave Díaz 508 preferred shares of stock in his company.[100] Doheny drilled the first commercial oil well in Mexico in 1901 in what would become the El Ebano oil field in the state of San Luis Potosí.[101] In 1916, he drilled the giant Cerro Azul No. 4 well near Casiano, then the world's largest well, initially producing 260,000 barrels per day.[102] Doheny's oil holdings were held in the Pan American Petroleum and Transport Company, which held the Mexican production in two affiliates, Mexican Petroleum and Huasteca.[103]

Being a deft politician, Díaz did not wish to become overly beholden to or dependent upon American investors. For good reasons, including the annexations of Texas, California, and the now-U.S. Southwest, Díaz cautiously promoted American investment. Díaz also encouraged European investors to counter balance American investment, causing English engineer, Sir Weetman Pearson, to become a major oil investor and Díaz favorite.[104]

> I entered lightly on this enterprise, not realizing its many problems, but only feeling that oil meant a fortune and that hard work and application would bring satisfactory results.
>
> -Sir Weetman Pearson, British Industrialist[105]

Sir Weetman Pearson was a leading global construction engineer and entrepreneur.[106] What initially brought Pearson to Mexico were his prior involvements in several Mexican projects for President Díaz including the construction of the first Mexican coast-to-coast railroad, the harbor at Vera Cruz, and Mexico City's Grand Canal.[107]

---

97. YERGIN, *supra* note 1, at 82, 229. *See, e.g.*, Discovering Los Angeles Oilfields, AMERICAN OIL & GAS HISTORICAL SOC'Y (2016), http://aoghs.org/states/los-angeles-oil-fields.

98. BROWN, *supra* note 93, at 27.

99. *See* BROWN, *supra* note 93, at 28; RUSSELL, *supra* note 23, at 280 (mentioning the stamp tax exemption).

100. RUSSELL, *supra* note 23, at 280.

101. BROWN, *supra* note 93, at 29.

102. *Id.* at 128.

103. *Id.* at 132. Doheny would later become embroiled in the infamous Teapot Dome scandal in the United States, but notwithstanding rather damning evidence, he was acquitted of bribery charges in connection with the scandal. *See id.* at 135; *see also* YERGIN, *supra* note 1, at 229; *see* Edward L. Doheny, WEST ADAMS HERITAGE ASS'N, http://www.westadamsheritage.org/read/472 (last visited May 27, 2016).

104. *See* YERGIN, *supra* note 1, at 230.

105. YERGIN, *supra* note 1, at 231.

106. *Id.* at 229.

107. *Id.* at 230.

Pearson began investing in Mexico oil prospects in 1901 when he missed a rail connection into Mexico at Laredo, Texas.[108] While in Laredo, Pearson observed the oil frenzy that had spread across south Texas due to the Spindletop discovery near Beaumont earlier that year.[109] Pearson's Mexican oil prospects included properties in the Tabasco region.[110] Pearson even enlisted the aid of Captain Anthony Lucas, who was responsible for the Spindletop discovery, to help manage his operations in Mexico.[111] Díaz granted Pearson "a 50-year oil concession on national lands, lakes, and lagoons in six states including oil-rich Veracruz."[112] By 1906 Pearson claimed to own about 600,000 acres that were prospective for oil and leases covering an additional 200,000 to 300,000 acres[113] He also received a 50-year tax exemption.[114] Both Pearson and Doheny were further protected by tariffs on imported crude,[115] and both acquired exploration and development rights from private landowners and concessions from the government for federal and vacant land. Together their respective oil holdings would provide over 90 percent of Mexican oil production by 1911.[116]

Until 1910, Pearson—by then also known as "Lord Cowdray"—experienced little success, although he drilled one spectacular well that caught fire and cratered in 1908.[117] However, through the work of Pearson's new geology consultant, Everette DeGolyer,[118] Pearson completed the Potrero del Llano # 4 drill which flowed at 110,000 barrels per day.[119] As a result of this discovery, Pearson's year old enterprise, Compañía Mexicana de Petróleo El Aguila SA (Mexican Eagle), became one of the world's leading oil companies.[120] Mexico would also become a major petroleum nation due to the ensuing development of oil production in Mexico's "Golden Lane" near Tampico.[121] By 1911, Mexico was major oil producer.[122] The timing of Mexico's oil boom came just in time to provide fuel for a very fuel-thirsty World War I and valuable political capital for Mexico.

Despite (and perhaps in part due to) his success in stimulating oil production in Mexico, President Díaz was ousted and the Mexican Revolution began only one

108. *Id.* at 230–31.

109. *Id.* at 230.

110. *Id.* at 231.

111. YERGIN, *supra* note 1, at 231.

112. RUSSELL, *supra* note 23, at 280.

113. *Id.*

114. Stephen Haber et al., *When the Law Does Not Matter: The Rise and Decline of the Mexican Oil Indus*try, 63 J. ECON. HIST. 5 [hereinafter Haber] (2003), http://stephen-haber.com/wp-content/uploads/2014/02/Haber-Maurer-Razo-When-the-Law.pdf.

115. *Id.* at 1, 4.

116. *Id.*

117. RUSSELL, *supra* note 23, at, 280–81.

118. *See* Biography of Everette Lee DeGolyer, Sr., TEXAS ARCHIVAL RESOURCES ONLINE, SOUTHERN METHODIST UNIV., http://www.lib.utexas.edu/taro/smu/00003/smu-00003.html (last visited May 27, 2016).

119. YERGIN, *supra* note 1, at 231.

120. *Id.*

121. *See generally id*. at 229–33.

122. RUSSELL, *supra* note 23, at 281.

year before the completion of the Potrero del Llano #4.[123] Díaz fled into exile on May 25, 1911, the very day that significant volumes of oil were first exported from Mexico,[124] and the year when Mexico became the fourth largest oil producer in the world.[125]

Although Díaz remains controversial in Mexican history, his contributions to the Mexican economy were significant. During his presidency, he used his exceptional political prowess to build a coalition of support that led to over thirty years of relative stability in a country that had previously suffered protracted political turmoil. Thanks to this stability, the Mexican economy flourished in large part due to foreign investment, especially in the petroleum sector. Nevertheless, the seeds of destruction for foreign petroleum investors had been sown as political opposition to private ownership grew during the intellectual debate over the meaning and effect of the 1884 mining law.[126] "The goals of the Mexican Revolution lacked clarity,"[127] but the desires for agricultural reform, uplifting labor, and protecting Mexico's indigenous peoples[128] were contrary to the interests of hacienda owners, including their asserted private ownership of mineral rights.[129] Private ownership of petroleum resources ended by law with the revolutionary constitution in 1917, but that change would not be fully implemented for another twenty-one years when private investors' oil properties were expropriated by the government.

§ 20.05. THE MEXICAN REVOLUTION AND THE GOLDEN LANE

The ensuing violence of the Mexican Revolution,[130] which included some acts against foreign oil managers and disruption of the oil fields,[131] served to slow oil development for a time, but by and large, the oil industry flourished and prospered during the Revolution.[132] The oil industry weathered the Revolution in part due to the oil industry's mostly coastal location and because the quarreling revolutionary factions apparently understood that oil development and oil exports were vital to Mexico's future.[133] While overall U.S. investment declined in the early years of the revolution, oil investment increased.[134] Indeed, "[a]ll of the revolutionary leaders refrained from damaging oil production facilities because they hoped to tax petroleum."[135] Moreover, "no revolutionary leader wanted to offend the U.S. and

---

123. *Id.* at 280.

124. *See* BROWN, *supra* note 93, at 100.

125. RUSSELL, *supra* note 23, at 282.

126. For a discussion of the consolidation of land into large haciendas during the Díaz presidency, *see* MEYER, *supra* note 19, at ch. 2; *see also* RIPPY, *supra* note 29; BERMUDEZ, *supra* note 43.

127. RUSSELL, *supra* note 23, at 315 (noting the lack of "overall coordination of combatants, some of whom fought for opposing goals").

128. *Id.*

129. *Id.* at 296–98; MEYER, *supra* note 19, at ch. 2.

130. The Revolution might be better described as a series of revolutions and movements. RUSSELL, *supra* note 23, at 313.

131. YERGIN, *supra* note 1, at 231.

132. *See id.*

133. *See* YERGIN, *supra* note 1, at 232.

134. *See* RUSSELL, *supra* note 23, at 317.

135. *Id.* at 320.

British governments by attacking property of their citizens."[136] Indeed, Mexico became the world's second largest producer in 1915[137] and then again in 1921, estimated to supply about 25% of the world's petroleum.[138] The Mexican Revolution began in 1910 and lasted until about 1920, and coincided with the Mexican oil boom in the oil-rich Golden Lane.[139] From 1910 to 1921, the oil investors' rate of return on their capital investments has been estimated to have risen from 8% in 1910 to 60% by 1921.[140]

From the time of the ouster of Díaz in 1911, Mexico would remain politically unstable until 1929—suffering revolution, civil war, coups and attempted coups, and the assassination of a president. The first post- Díaz President, Francisco Madero, imposed Mexico's first real taxes on petroleum production and exports.[141] Otherwise, he was not outwardly antagonistic to the foreign oil companies;[142] however, the oil companies were outraged by the tax, called it confiscatory, and eventually negotiated a lower rate.[143]He also decreed that the oil companies should register their holdings and provide information about their value.[144] For the most part, oil companies ignored or evaded the increased taxes and largely refused to register their claims.[145] Madero tried to be moderate leader and saw the revolution as about free elections.[146] While a National Agrarian Commission only studied land reform, it caused both land-reform revolutionaries and the elite to oppose him.[147] Madero was killed in February 1913.[148]

José Victoriano Huerta Márquez, one of Madero's generals who had turned against him, took power in 1913 with the backing of elite classes, including the British oil interests and U.S. business interests.[149] Venustiano Carranza soon led a revolt of "Constitutionalists."[150] Carranza and the competing revolutionary Pancho Villa forced Huerta to resign in July 1914.[151] Following the fall of Huerta, Mexico

---

136. *Id.*

137. *Id.*

138. Haber, *supra* note 114, at 1; *see generally* Stephen Haber, Noel Maurer, and Armando Razo, When Institutions Don't Matter: The Rise and Decline of the Mexican Oil Industry (unpublished manuscript presented at the Economic History Seminar at UC Berkeley, September 2001), http://web.stanford.edu/class/polisci313/papers/Haber-RazoFeb25.pdf.

139. Haber, *supra* note 114, at 1.

140. MEYER, *supra* note 19, at 13.

141. RUSSELL, *supra* note 23, at 323 ("When Madero announced the new tax . . . oilmen became furious. They clamed [sic] the tax was confiscatory and equaled 17 percent of their profits. This was an outrageous lie, but it made good newspaper copy.").

142. MEYER, *supra* note 19, at ch. 2. The establishment of a national oil company was considered in 1913. RIPPY, *supra* note 29 at 29 (citing MANUEL FLORES, APUNTES SOBRE EL PETRÓLEO MEXICANO 33 (1913)).

143. RUSSELL, *supra* note 23, at 323.

144. MEYER, *supra* note 19, at ch. 2.

145. *See* BROWN, *supra* note 93, at 231.

146. *See* RUSSELL, *supra* note 23, at 300.

147. *Id.*

148. *Id.* at 302.

149. *Id.* at 303.

150. *Id.*

151. RUSSELL, *supra* note 23, at 307.

suffered two years of civil war as various competing groups fought for power.[152] During brief periods during the 1910s, but especially in this period of civil war, various revolutionaries would occupy oil territory and interfere with tax collection,[153] while simultaneously coercing oil companies to give them "loans."[154] In other instances, oil personnel were simply robbed.[155] During the civil war period, Carranza largely controlled the area along the Golden Lane and thus secured a steady supply of oil revenues.[156] When he finally defeated his enemies, he began to rebuild a centralized state,[157] which led to a new Constitution in 1917.[158]

During this tumultuous period, oil companies sought both diplomatic and military aid from the U.S. and Great Britain. Thus, the numerous Mexican governments of this period were constantly faced with the prospects of foreign military intervention or inability to collect taxes whenever considering implementing new taxes and duties.[159] Even U.S. President Wilson—who typically favored moral over dollar diplomacy—briefly invaded Mexico in 1914; although he did so to topple President Huerta rather than protect oil companies.[160] While in power, Huerta tried to substantially raise oil taxes, which caused U.S. oil interests to turn against him as President Wilson had already done.[161]

In 1914, the next ruler and later president José Venustiano Carranza Garza began to take steps to restore ownership of oil in the nation,[162] and levied a bar tax payable in gold.[163] In 1915, he ordered all oil development halted that was not done with permission of the Constitutionalist government, pending a new oil law and even tried to embargo oil exports to force payment of taxes by the oil companies.[164] In 1916, foreign oil companies were advised by decree that they could claim no greater privileges than Mexican nationals and that they would have to declare themselves Mexican, a decree similar to the Calvo Doctrine, first enunciated by Carlos Calvo, an Argentine jurist in 1868.[165] Additional taxes, including special taxes on exported oil, were levied in 1917.[166] When the oil companies ignored these decrees, President Carranza threatened occupation of the Tampico oilfields.[167] Following vigorous diplomatic protests from the U.S. and Great Britain, Carranza cancelled his

---

152. *Id.* at 307–312.

153. BROWN, *supra* note 93, at 186–90 (discussing taxation efforts and failures during the presidency of José Victoriano Huerta Márquez in 1913–1916).

154. *See* BROWN, *supra* note 93, at 178–79, 181–84, 186. *See also* RUSSELL, *supra* note 23, at 320.

155. *Id.* at 209.

156. RUSSELL, *supra* note 23, at 309.

157. *Id.* at 312.

158. *Id.* at 312.

159. *See* BROWN, *supra* note 93, at 177–90; MEYER, *supra* note 19, at 52.

160. *Id.* at 192–94. In 1916, Wilson ordered General John J. Pershing to invade northern Mexico to capture General Francisco "Pancho" Villa for a raid on Columbus, New Mexico. Pershing failed to find Villa but this invasion damaged U.S.-Mexico relations. MEYER, *supra* note 19, at ch. 3.

161. MEYER, *supra* note 19, at ch. 2; *See* RUSSELL, *supra* note 23, at 325.

162. MEYER, *supra* note 19, at ch. 3.

163. *Id.* at ch. 3.

164. BROWN, *supra* note 93, at 216–19; *see also* MEYER, *supra* note 19, at ch. 4.

165. RIPPY, *supra* note 29, at 32; *see id.* at 86; *see also* MEYER, *supra* note 19, at ch. 3.

166. *Id.* at 33.

167. *Id.*

occupation plans.[168] The threat of U.S. military intervention on behalf of the oil companies ended with the U.S.'s entry into World War I.

§ 20.06. THE 1917 CONSTITUTION AND AFTERMATH

> [I]t is necessary to revise in a manner complete and radical the petroleum legislation of the country . . . .
>
> -Venustiano Carranza, President of Mexico, 1917–1920[169]

1917 was a pivotal year for the world and for Mexican oil. The static trench warfare of World War I was finally over and the collapse of the Russian Empire brought Lenin and his Marxist Bolsheviks to power.[170] And although the U.S. was the world's largest petroleum producer—producing over two-thirds of world output—U.S. officials were worried that the country was running out of oil: "in 1917, the surging demand for American oil began to hit the limit of available supplies. The gap was being closed only by using up inventories and by importing more oil from Mexico."[171] British politicians were even more concerned about oil supplies, as Great Britain relied on oil imports from distant oil-producing regions in the Middle East, Asia, the U.S., and Mexico.[172] The concern over oil supplies was both strategic and economic, as the U.S. and Great Britain had already converted their navies from coal to petroleum prior to the outbreak of World War I.[173]

Amidst World War I, on February 5, 1917, the revolutionary Mexican Constitutional Congress enacted a new Constitution.[174] Article 76 created a strong presidency,[175] but Article 83 prohibited re-election.[176] Article 3 decreed compulsory free education, but provided no means of accomplishing this goal.[177] Article 23 provided strong labor rights and protected "legal" strikes.[178] Article 27 of the Constitution, previously approved during the early hours of the days before, addressed land reform and asserted government sovereign title over petroleum resources thereby revoking the Díaz concept of private ownership:

---

168. *Id.*

169. RIPPY, *supra* note 29, at 30 (quoting Decree, President Venustiano Carranza (Jan. 1915)).

170. *See* YERGIN, *supra* note 1, at 237.

171. *Id.* at 178.

172. *See* YERGIN, *supra* note 1 at 173–78; *see* RUSSELL, *supra* note 23, at 320.

173. *See* YERGIN, *supra* note 1, at 173. The strategic importance of this decision was proven during the war, as the German navy still depended largely on coal, which limited maneuverability, speed, and distance of travel. *Id.* Petroleum and Sea Power, AMERICAN OIL & GAS HIST. SOC., http://aoghs.org/petroleum-in-war/petroleum-and-sea-power/ (last visited May 26, 2016) (the U.S. began the switch before GB after the Spanish American War).

174. Constitución Política de los Estados Unidos Mexicanos [C.P.], *Edición Oficial*, DO, 5 de febrero de 1917.

175. RUSSELL, *supra* note 23, 335.

176. *Id.* at 335.

177. *Id.*

178. *Id.*

> In the nation is vested direct ownership of all minerals or substances which in veins, layers, masses, or beds constitute deposits whose nature is different from components of the land. Such as minerals from which metals and metalloids used for industrial purposes are extracted; beds of precious stones, rock salt and salt lakes formed directly by marine waters, products derived from decomposition of rocks when their exploitation requires underground work; phosphates used for fertilizers; solid mineral fuels; petroleum and all hydro-carbons—solid, liquid, or gaseous.[179]

Article 27 authorized the federal government to issue concessions to private investors, including foreign investors.[180] The general intent was to return control over subsoil petroleum to the government, as had been the case prior to creation of the 1884 mining law. However, the text remained ambiguous about whether the amendment was intended to have retroactive effect in established and prospective fields. One provision of the Constitution, Article 14, provided that "no law shall be given retroactive effect to the prejudice of any person whatsoever[,]"[181] while Article 27 permitted the federal government to exercise "direct dominion over *all* minerals or substances . . . ."[182] These seemingly inconsistent provisions, coupled with oil company resistance backed by the threat of American and British intervention on the companies' behalf, resulted in a sort of "Mexican standoff."[183] Another twenty-one years would lapse before this question was finally settled. Nevertheless, to the foreign oil investors, Article 27 was a line in the sand that came to represent a coming world-wide struggle between sovereignty over natural resources on the one hand and the sanctity and stability of contracts on the other hand. This struggle got underway in earnest during and after World War II and continued on through the 1980s, including in South America, Africa, Asia, and the Middle East.

Carranza was the first president elected under the 1917 Constitution.[184] Overall, he was not a reformer,[185] but he did increase oil taxes by seven-fold and

179. C.P., *Edición Oficial*, art. 27, párrafo 4, DO, 5 de febrero de 1917 ("Corresponde a la Nación el dominio directo de todos los minerales o substancias que en vetas, mantos, masas o yacimientos, constituyan depósitos cuya naturaleza sea distinta de los componentes de los terrenos, tales como los minerals de los que se extraigan metals y metaloides utilizados en la industria; los yacimientos de piedras preciosas, de sal de gema y las salinas formadas directamente por las aguas marinas. Los productos derivados de la descomposición de las rocas, cuando su explotación necesite trabajos subterráneos; los fosfatos susceptibles de ser utilizados como fertilizantes; los combustibles minerales sólidos; el petróleo y todos los carburos de hidrógeno sólidos, líquidos o gaseosos . . ."); *see also* translation in Hawk, *supra* note 19, at 152, by H.N. Branch as revised by Hawk (stating that "el dominio directo" could be translated as "direct dominion" or "direct domain," but not "direct ownership"). Another translation uses "direct authority." Robert Philip Payne, Jr., *Mexican Constitution of 1917*, *in* ALBERT P. BLAUSTEIN & JAY A. SIGLER, EDS., CONSTITUTIONS THAT MADE HISTORY 283–336, 297 (1988) ("To the Nation belongs direct authority over all minerals or substances . . . .").

180. *See* C.P.

181. C.P. at art. 14.

182. C.P. at art. 27.

183. *See* RIPPY, *supra* note 29, at 35–46 (discussion of debate about Article 27).

184. RUSSELL, *supra* note 23, at 335.

185. *Id.* at 338.

tried to implement Article 27.[186] To counter Article 27, oil companies formed several lobbying organizations. The principal groups were the Association of Foreign Oil Producers, the National Association for the Protection of American Rights in Mexico, and the American Association of Mexico (AAM).[187] These organizations lobbied in both Mexico and the U.S., in the latter case seeking diplomatic and sometimes military intervention.[188] To counter the threat of military intervention, Mexican governments threatened to destroy the oilfields before the American military could secure them.[189] Mexican governments also remained fearful that the U.S. might supply arms to revolutionaries opposed to the government.[190] Moreover, in feeding this unease, the U.S. failed to recognize formally most of the governments that came to power during the period after Carranza.[191] After Carranza was assassinated in 1920[192] and following a brief provisional presidency of Adolfo de la Huerta, General Álvaro Obregón, a former Carranza ally who turned against him, was elected president.[193] Obregón implemented limited land reform and embraced in rhetoric labor unions.[194] His hand-picked successor, Plutarco Elías Calles,[195] was elected with over 90% of the vote in 1924.[196] He implemented further land reform but became more conservative near the end of his term.[197] After the Calles term ended in 1928, the Constitution was amended to allow Obregón to return to office for a six-year term;[198] however, Obregón was assassinated before he took office.[199] Calles's Interior Minister, Emilio Portes Gil, became provisional president.[200] Calles then formed the PNR (Nationalist Revolutionary Party)[201] and served as the power behind the throne for the remainder of Gil's term and for the term of Pascual Ortiz Rubio,[202] who appears to have been fraudulently elected.[203] After a disagreement with Calles, Rubio was replaced by Abelardo Rodriquez in 1932[204] and served until 1934.

---

186. *Id.*
187. *See* BROWN, *supra* note 93, at 239, 245.
188. *Id.* at 239, 243–44.
189. *Id.* at 193.
190. *Id.* at 280–81.
191. *Id.* at 246. During the revolution, the U.S. recognized Díaz and Madero but secretly backed a Huerta plot to overthrow Madero, then only to refuse to recognize the Huerta government. The U.S. also recognized the Carranza government. *See* RUSSELL, *supra* note 23, at 322–331.
192. RUSSELL, *supra* note 23, at 338.
193. *Id.* at 338.
194. *Id.* at 339.
195. *Id.* at 340.
196. *Id.*
197. Russell, *supra* note 23, at 341.
198. *Id.* at 342–43.
199. *Id.* at 343.
200. *Id.*
201. *Id.*
202. RUSSELL, *supra* note 23, at 344.
203. *Id.* at 344.
204. RUSSELL, *supra* note 23, at 345.

Between 1918 and 1925, a series of presidential decrees attempted to implement Article 27.[205] Implementation failed when oil companies refused to comply with the decrees and Mexican officials were unable to agree upon a uniform interpretation of Article 27 of the Constitution. The Mexican government would have likely compromised during this period, but the oil companies' firmly insisted that the oil *in situ* belonged to them, preventing all efforts to implement Article 27. Instead, the companies, along with the U.S. and British governments, vigorously protested any effort to implement Article 27.

The oil companies eventually litigated their claims. The Texas Company sought and secured what it regarded as a favorable ruling from the Mexico Supreme Court on the question of retroactivity.[206] The court held in 1921 that in order for Article 27 to be applied retroactively, retroactive intent must be clearly contemplated by the language of the provision and then enforced retroactively by appropriate authorities.[207] By 1919, the courts had taken approximately eighty *recursos de amparo* (writs of protection)[208] against the decrees issued to implement Article 27.[209]

Seemingly bringing to an end the series of abortive attempts, the first law implementing Article 27 was finally enacted in 1925.[210] The 1925 law provided a means by which companies could acquire new concessions from the government consistent with Article 27. Regarding company rights that pre-dated the 1917 reforms, the new law provided for the issuance of confirmation concessions at no cost (1) for rights "arising from lands in which works of petroleum exploitation were begun prior to May 1, 1917" and (2) for rights "arising from contracts made before May 1, 1917 by the surface owner . . . for express purpose of exploitation of petroleum" for not more than fifty years.[211]

Despite the conciliatory nature of the law, many companies refused to request confirmatory concessions. This resulted in part because some oil companies were concerned that "works of petroleum exploitation" (or "positive acts") required actual drilling[212] and found unacceptable the fifty-year limit under the alternative means of confirmation (despite the fact that a fifty-year period would have exceeded

205. BROWN, *supra* note 93, at 230–231, 235–36.

206. RIPPY, *supra* note 29, at 38.

207. *Id.* at 38–39. The interpretation of the retroactivity provision turned on whether that provision applied to the constitution itself, a matter not resolved until 1939, when the Mexican Supreme Court held that the constitution and laws made retroactive in accordance with a constitutional provision were not subject to the non-retroactivity provision. *Id.* at 38. Even this case did not resolve the question of whether the Congress had intended to make the implementing secondary legislation retroactive. *Id.*

208. Carlos Sánchez Mejorada, *The Writ of Amparo: Mexican Procedure to Protect Human Rights*, 243 ESSENTIAL HUM. RIGHTS 107, 107 (1946) (providing that a writ of amparo is used to guarantee private rights against abuses of government authority, especially human rights violations).

209. RIPPY, *supra* note 29, at 46.

210. Ley Reglamentaria del Artículo 27 Constitucional en el Ramo del Petróleo [Law Regulating Constitutional Article 27 in the Petroleum Sector], DO, 31 de diciembre de 1925. Regulations implementing the 1925 law were issued in 1926. Reglamento de la Ley del Petróleo de 26 de diciembre de 1926 [Regulation of the December 26, 1925 Petroleum Law], DO, 8 de abril de 1926 .

211. RIPPY, *supra* note 29, at 58 (citing and translating Documents Relating to the Petroleum Law of Mexico, with Amendments of January 3, 1928).

212. Haber, *supra* note 114, at 7–8.

the economic life of any existing reservoirs). [213] Even the U.S. Senate urged that the matter be resolved by international arbitration.[214] President Calles responded by cancelling drilling permits and referring the matter to his Attorney General for enforcement.[215]

The companies responded by drilling without permits.[216] When Calles sealed the wells, the companies broke the seals.[217] Troops entered and resealed the wells.[218] To end the stalemate, oil companies reached out to the U.S. to intervene, suspended drilling operations, and provoked a financial crisis by withdrawing their Mexican bank deposits.[219] In 1927, the Mexican government enacted a new regulation providing a more liberal definition of "works of petroleum exploitation," in the hope that the regulation would defuse the situation.[220] The regulation failed to satisfy the companies. Also in 1927, the Mexican Supreme Court, perhaps at President Calles' urging, held that oil companies' pre-existing contract rights could be limited in duration only as specified in the contract,[221] thus freeing the oil companies from the fifty-year production limit.[222] Despite an amendment of the 1927 regulation to comply with this decision, the oil companies continued to resist, perhaps believing that they could exact greater concessions from the then-weak Mexican government.[223]

In 1927, President Calles considered the threat of American military intervention so serious that he ordered General Lázaro Cárdenas to make preparations to set the oilfields on fire if the U.S. invaded.[224] Ironically, American bankers, who had previously loaned money to the Mexican government and viewed petroleum revenues as a means of repayment, may have prevented a military intervention.[225] Calles entered into negotiations with the U.S. after President Coolidge reaffirmed that American business interests in foreign countries were entitled to U.S. protection and threatened to arm revolutionaries opposing Calles.[226]. The 1928 U.S.-Mexico Calles-Morrow agreement resulted.[227] This agreement

213. *See* RIPPY, *supra* note 29, at 58–59.

214. *See generally* GEORGE PHILIP, OIL & POLITICS IN LATIN AMERICA: NATIONALIST MOVEMENTS AND STATE COMPANIES 38 (1982).

215. Haber, *supra* note 114, at 8.

216. *Id.*

217. *Id.*

218. *Id.*

219. RIPPY, *supra* note 29, at 59.

220. *See* Haber, *supra* note 114, at 9.

221. RIPPY, *supra* note 29, at 61.

222. *See id.*

223. *See id.* at 58.

224. YERGIN, *supra* note 1, at 272.

225. *Id.* at 232–33.

226. Haber, *supra* note 114, at 8–9.

227. Alan Knight, *The Politics of the Expropriation*, *in* THE MEXICAN PETROLEUM INDUSTRY IN THE TWENTIETH CENTURY 90–91 (Jonathan C. Brown & Alan Knight eds., 1992).

allowed oil firms to retain their pre-1917 holdings but also largely affirmed the 1925 law as amended.[228]

In the period between 1917 and 1925, control of Mexican oil production passed to other oil companies. The lack of stability in Mexico caused Pearson to become so disillusioned that he sold a substantial interest in and turned over management responsibilities for Mexican Eagle to Royal Dutch Shell in 1918.[229] Shell's investment would quickly turn sour when salt water intrusion greatly diminished production in mature wells.[230] Doheny, too, remained in Mexico only until 1925, when he sold Pan American to Standard Oil of Indiana,[231] which later sold its Mexican and other foreign production to Standard Oil of New Jersey.[232] Jersey had already made substantial investments in Mexico in the 1910s.[233] By 1925, most of Mexico's oil production was controlled by major companies, including Royal Dutch Shell, Standard Oil of New Jersey, Gulf Oil Corporation, Sinclair, City Services, and Warner-Quinla.[234] Small foreign and Mexican independents were also active in Mexico but they collectively produced less than 10% of Mexico's oil from 1901 to 1938, and Mexican investment capital was never more 3% of total oil investments.[235]

A number of conclusions can be drawn from the resistance that arose from the adoption of Article 27 in 1917. Due to the uncertainty of investments, owing to the many interpretations of Article 27 and a series of new taxes and regulations, the oil companies were reluctant to address the salt-water intrusion problem with more capital, improved technology, and additional exploration.[236] Mexican oil production peaked in 1921, the same year Mexico became the world's second largest producer.[237] Daniel Yergin concludes that the tensions of the 1920s caused oil production in Mexico to plummet because foreign investors moved new capital to Venezuela, where the oil companies had found new reserves and a more favorable investment climate.[238] Because of declining Mexican production and the movement

228. *Id.*; *see also* OFFICE OF THE HISTORIAN, U.S. DEPT. OF STATE, MEXICAN EXPROPRIATION OF FOREIGN OIL, 1938, https://history.state.gov/milestones/1937-1945/mexican-oil (last visited May 27, 2016).

229. YERGIN, *supra* note 1, at 232. Pearson went on to engage in other successful ventures, including journalism. His business holdings would come to include the "Financial Times" and the "The Economist" magazine. *Id.* at 230; *see also* Wolfgang Saxon, *Lord Cowdray, Developer of the Pearson Conglomerate*, N.Y. TIMES (Jan. 21, 1995), http://www.nytimes.com/1995/01/21/obituaries/lord-cowdray-84-developer-of-the-pearson-conglomerate.html.

230. YERGIN, *supra* note 1, at 232.

231. MARGARET LESLIE DAVIS, DARK SIDE OF FORTUNE: TRIUMPH AND SCANDAL IN THE LIFE OF OIL TYCOON EDWARD L. DOHENY 186 (1998); STEVEN C. TOPIK & ALLEN WELLS, THE SECOND CONQUEST OF LATIN AMERICA: COFFEE, HENEQUEN, AND OIL DURING THE EXPORT BOOM 1850–1930, at 204 (1997).

232. TOPIK & WELLS, *supra* note 231.

233. *See* MEYER, *supra* note 19, at 18.

234. *Id*.

235. MEYER, *supra* note 19, at 5.

236. *See* YERGIN, *supra* note 1, at 232.

237. GEORGE GRAYSON, THE POLITICS OF MEXICAN OIL 13 (1980); YERGIN, *supra* note 1, at 232.

238. YERGIN, *supra* note 1, at 233.

of investment capital to Venezuela, Venezuela quickly replaced Mexico as the world's second largest oil producer.[239]

Although petroleum production increased through 1921 and petroleum investment increased through 1925, reservoir depletion, continuing investor concern over the stability of entitlements, and new larger oil discoveries in Venezuela and elsewhere all created a strong enough disincentive to weather the uncertainty in Mexico. By 1930, Mexican production had declined to 20% of the 1921 peak.[240] In nine years, Mexico fell from supplying 25% of the world's oil production to just 3%.[241]

It is difficult to identify any singular cause. Political instability, the end private ownership, and increased taxes all played a role in this decline, though some recent studies have concluded that reservoir depletion was the main contributing factor.[242] On the other hand, some scholars have argued that reservoir depletion could have been arrested with investment in new technology.[243] Investors preferred the more favorable investment climate in Venezuela, in light of Mexico's uncertain political atmosphere.[244] Others argue that both political instability and reservoir depletion played roles.[245] While saltwater intrusion had caused a sharp decline in production, the question remains whether oil companies would have invested more in exploration and modern production practices if the political environment in Mexico had been less hostile.

The Haber economic study rejects the idea that production declined due to company fears about the implementation of Article 27. Rather, companies continued to invest until they realized that Mexico had simply run out of oil.[246] The Mexican governments of this period were weak compared to the large, foreign-owned, mobilized, and well-organized oil companies.[247] These circumstances empowered oil companies with what the authors cite as "two powerful weapons:"[248] first, the ability to seek diplomatic intervention, the threat of military intervention to protect their interests and the threat that the U.S. might arm opposition revolutionary forces within Mexico;[249] and second, at a time when the government lacked the expertise and

---

239. *Id.* at 233, 236. Yergin states that to protect their upstream investments in petroleum-producing countries, the events in Mexico caused oil companies to produce crude oil for export in oil-rich nations but to construct refineries elsewhere—a strategy that began with Venezuela and continued into the 1950s. *Id.*

240. Haber, *supra* note 114, at 1 (2003).

241. *Id.*

242. *See, e.g.*, *id.* at 2; MEYER *supra* note 19, at 8–9.

243. *See, e.g.*, LINDA B. HALL, OIL, BANKS, AND POLITICS: THE UNITED STATES AND POST-REVOLUTIONARY MEXICO, 1917–1924 (1995); YERGIN, *supra* note 1, at 232.

244. *See* HALL, *supra* note 243; YERGIN *supra* note 1, at 233.

245. *See* BROWN, *supra* note 93, at 372.

246. *See* Haber, *supra* note 114, at 2.

247. Haber, *supra* note 114, at 3. The authors point out that Royal Dutch Shell, which controlled El Aguila and owned La Corona, was not fully cooperative with the other companies, as it did register its claims and also reached other compromises with the government; *id.* at 6. In 1937, El Aguila received a major new concession from Mexico to develop the Poza Rica field, which it had discovered in 1929; RIPPY, *supra* note 29, at 64.

248. Haber, *supra* note 114, at 3.

249. *Id.*

technology to operate the oilfields on its own, the companies threatened production boycotts and curtailments[250] to reduce government tax revenues.[251] The Haber study examines production data,[252] petroleum export data,[253] drilling data,[254] land data,[255] investment data,[256] and petroleum equipment import data.[257] Comparing petroleum profits and tax burdens, the study also concludes that increasing tax burdens during the Carranza presidency did not significantly affect profits.[258]

Although the Haber Study is compelling, the divestment was not due to a single cause. For example, the drilling data shows a drilling success rate ranging from 60% to 76% with an initial per-well capacity ranging from 9,100 to nearly 25,000 barrels per day from 1918 to 1922.[259] These figures suggest that the companies were drilling development wells to increase drainage and thus maximize their production during the time remaining before implementation of Article 27. This drilling may have accelerated the saltwater intrusion and ultimate decline in production thereafter. After 1922, drilling success rates declined substantially, both in terms of dry holes and initial per-well productive capacities to lows of 36% and 1,900 barrels per day respectively in 1927, suggesting that more step out or exploration wells were being drilled[260] By then, oil companies were more confident that Article 27 would be implemented in a manner that would protect their investments. Moreover, the companies were able to hedge their bets by showing "positive acts" to preserve their rights.[261] The Haber study does, however, demonstrate that overproduction contributed to oil companies' loss of interest. Scholars can only speculate about whether oil companies would have continued investing in drilling in new regions and formations in Mexico had Article 27 not been implemented.

Despite Article 27, oil development expanded through the 1930s, once the Mexican political climate settled. 1929 marked the beginning of a new era of relative political stability under the leadership of leftist presidents, in particular Lázaro Cárdenas del Río, who took office in 1934.[262] Mexican production increased by 1934[263] after discovery of the El Aguila (Mexican Eagle) oil field at Poza Rica in 1929.[264] Production increased again through 1937.[265] The oil struggles of past years

---

250. This was the response when President Obregon tried to increase taxes in 1921. *Id.* at 7.

251. *Id.* at 3.

252. *Id.* at 10.

253. Haber, *supra* note 114, at 10.

254. *Id.* at 11.

255. *Id.* at 12.

256. *Id.* at 13–14.

257. *Id.* at 15.

258. *Id.* at 16–22. Their tax data does show, however, that taxes as a percent of total revenues, ranged from a low of 5 percent in 1917 to a high of 31 percent in 1922, a six-fold increase. *See id.* at 17 tbl. 5. In contrast, in 1922, oil prices were slightly more than double the 1917 price. *See id.* at 18 tbl. 6.

259. Haber, *supra* note 114, at 11 tbl. 2.

260. *Id.*

261. *See id.* at 8.

262. RIPPY, *supra* note 29, at 177.

263. Haber, *supra* note 114, at 10 tbl. 1.

264. *See id.* at 9.

265. *Id.* at 10.

seemed to have subsided. However, a rise in the popularity of agrarian land reform led to labor unrest in the oil fields, and the ultimate expropriation of oil company investments in 1938,[266] which arguably represents the true culmination of the Mexican Revolution.

With increased production in the 1930s, consolidation of Mexico labor unions in the petroleum sector, and left-leaning governments with agrarian-based agendas, even the modest gains made by oil companies in the Calles-Morrow agreement began to unravel.[267] During this time, Mexican Eagle had been fully transferred to Royal Dutch Shell and accounted for about 65% of Mexican production.[268] American oil companies, including Jersey, Sinclair, Cities Service, and Gulf, provided approximately 30% of production.[269] Despite the Mexican oil industry's remaining concentrated in foreign companies, the oil companies overestimated their political capital and the effectiveness of ignoring undesirable Mexico government mandates. Times had changed.

§ 20.07 THE 1938 EXPROPRIATION AND AFTERMATH

> [The oil company officials were] men without respect who were unaccustomed to speaking the truth.
>
> -Jesús Silva Herzog, Review Commission Member[270]
>
> The matter was so important as a precedent in other areas that the company would prefer to lose everything it had in Mexico rather than acquiesce in a partnership which might be regarded as a partial expropriation.
>
> -Eugene Holman, Jersey Production Manager[271]

Several factors facilitated a government takeover of Mexican petroleum resources. These include the Great Depression and massive production in the East Texas field, which caused oil prices to fall precipitously after 1930; the rise of Nazi Germany; the confiscation of Jersey properties in Bolivia in 1937; renewed revolutionary fervor in Mexico; the consolidation of Mexican labor unions in the petroleum sector in 1935; and President Franklin Roosevelt's Good Neighbor Policy. General Lázaro Cárdenas, who had orders to prepare to set fire to the oil fields a decade earlier, was now president and in a position to complete what had begun with the Constitution of 1917.[272] For Mexican nationalists, Cardenas was the right person at the right time.

266. RIPPY, *supra* note 29, at 65, 183, 203, 208.

267. Josephus Daniels, *The Oil Expropriation*, *in* THE MEXICO READER: HISTORY, CULTURE, POLITICS 452–455 (Gilbert M. Johspeh & Timothy J. Henderson, ed.. 2002).

268. YERGIN, *supra* note 1, at 272.

269. *Id.*

270. *Id.* at 274–75.

271. *Id.* at 274.

272. *Id.* at 272; RIPPY, *supra* note 29, at 177.

President Cárdenas fashioned a political machine, the Partido Revolucionario Institucional (PRI), that would run Mexico through the 1980s. Cárdenas's nationalist rhetoric included a jealous protection of Mexico's oil. The U.S. government's disinterest in Mexican oil during the period helped to bolster Mexican control over its oil interests. U.S. President Franklin Roosevelt was more immediately concerned with the U.S. economy in the midst of crisis and early signs of World War II in Europe. Given the low cost and plentiful supply of oil in the 1930s, Mexican oil was no longer a crucial resource for the U.S.[273] Roosevelt's attention turned to preserving relations with Mexico, fearing long-term consequences more than the immediate loss of oil.[274]

By 1935, the major oil producing states in the U.S. had been given regulatory authority to curtail production under the Interstate Oil Compact.[275] Supply was so plentiful that major oil producers colluded in the Red Line Agreement to discourage exploration within the old Ottoman Empire, and a few had colluded in the "As Is Agreement" to freeze their world market shares.[276] In short, the world was awash in oil and causing oil companies to be less concerned about their Mexican holdings. Free from pressure from the U.S. government and American oil companies, the Mexican government had the opportunity to amend oil production laws according to the nationalist agenda.

In 1937, in the midst of heightened nationalist popularity, the Mexican oil workers' union went on strike.[277] Wages for Mexicans working in the oil industry had long been approximately half of what foreign oil workers in Mexico earned.[278] Mexican oil workers also lacked job security. The Federal Board of Conciliation and Arbitration appointed a government commission, headed by Jesus Silva Herzog, to recommend terms for settlement of the strikes.[279] In view of the disparities, Silva Herzog's commission suggested substantially increased wages, a forty-hour work week, six weeks of vacation, retirement pensions at age fifty, and the gradual replacement of all foreign workers with Mexican workers within a two-year span.[280] Oil companies, however, rejected the commission's recommendations in their entirety, grossly underestimating Cárdenas's willingness to expropriate Mexican oil production.[281]

Cárdenas affirmed the commission's recommendations in all respects, adding retroactive interest,[282] and the Mexican Supreme Court reaffirmed the commission's recommendations.[283] Cárdenas then entered negotiations with oil

---

273. *See id.* at 247. This was thanks to the Giant East Texas oilfield, which drove oil prices to historic lows of just a few cents per barrel. *Id.*

274. RIPPY, *supra* note 29, at 220–21.

275. *See* Interstate Oil & Gas Compact Commission, *80 Years of History and Accomplishments*, http://iogcc.ok.gov/history-and-accomplishments (last visited Apr. 7, 2016).

276. YERGIN, *supra* note 1, at 205.

277. *Id.* at 274.

278. *Id.*; RIPPY, *supra* note 29, at 186–189.

279. RIPPY, *supra* note 29, at 189.

280. *Id.* at 275; *see also* RIPPY, *supra* note 29, at 186–189.

281. *See* YERGIN, *supra* note 1, at 275.

282. *Id.*

283. *Id.* at 276.

companies, which ended in a stalemate. On March 16, 1938, Cárdenas declared oil companies "in rebellion."[284] He formally expropriated their holdings two days later.[285] On June 7, 1938, Cárdenas replaced Petromex, a partially state-owned company that controlled approximately two percent of Mexican oil production, with a new state-owned oil company, Petróleos Mexicanos (Pemex).[286] In 1940, the law implementing Article 27 of the Mexico Constitution was amended to prohibit the granting of new hydrocarbon concessions.[287]

British companies responded by leading a market embargo of Mexican oil and by refusing to provide materials, equipment, supplies, and services to Pemex.[288] The embargo damaged the Mexican economy and its oil sector, while at the same time bolstering nationalist opposition to foreign oil companies.[289] The embargo induced Mexico to make use of its own oil resources, ultimately enabling Mexico to industrialize.[290] It also fueled demand for Mexican oil in Nazi Germany, Fascist Italy, and Imperial Japan, Mexico's best oil customers.[291] The British government aggressively defended Mexican Eagle and other British investors, causing Mexico to sever diplomatic relations.[292]

Fearing German, Italian, and Japanese influence in Mexico, the U.S. government was less willing to come to the aid of American oil companies operating in Mexico.[293] Shortly before the Japanese attack at Pearl Harbor, the Roosevelt administration pushed for a settlement of American claims. In 1942, a joint U.S.-Mexico commission awarded U.S. oil companies $30 million of the total $408 million asserted.[294] The U.S. oil companies grudgingly accepted the award in October, 1943.[295] British oil companies fared substantially better, prolonging settlement with the Mexican government until 1947. Mexican Eagle, alone, was awarded $132.8 million.[296] While oil companies, generally, notably the U.S.

---

284. *Id.*

285. *Id.*

286. *See* Ley Orgánica de Petróleos Mexicanos y Organismos Subsidiarios [Organic Law of Petróleos Mexicanos and Subsidiary Entities], DO, art. 2, 16 de julio de 1992.

287. Ley Reglamentaria del Artículo 27 Constitucional en Materia de Petróleo [Law Regulating Constitutional Article 27 Regarding Petroleum], DO, 9 de noviembre de 1940 . In 1941, a new law confirmed concessions previously granted under the 1925 petroleum law, as amended in 1928. Ley Reglamentaria del Artículo 27 Constitucional, en el Ramo del Petróleo [Law Regulating Constitutional Article 27 in the Petroleum Sector], DO, 18 de junio de 1941 .

288. *See* YERGIN, *supra* note 1, at 276. Enduring anger about this embargo could even be found in the 2010 proposed draft of the Integrated Services Contract—specifically in Cláusula 25.5, which prohibits embargo and in Cláusulas 16.3 and 2.4 that prohibit the booking of reserves by the contracting companies.

289. YERGIN, *supra* note 1, at 276.

290. *See id.* at 278–79.

291. *Id*. at 277.

292. *Id.* at 276.

293. *Id.* at 277.

294. *Id.* at 278.

295. *Id.*

296. Noel Maurer, *The Empire Struck Back: Sanctions and Compensation in the Mexican Oil Expropriation of 1938*, at 71 THE J. OF ECON. HIST. 590, 610 (2011). Britain did not have the same urgency in encouraging its companies to settle due to its concern that other nations might follow Mexico's example. *See id.* at 607. It was particularly concerned about Venezuela, which by then supplied about 40 percent of British demand. *See id*.

companies, believed the settlements were inadequate, one economic scholar has concluded that the companies were actually over-compensated, considering their declining profits and production at the time of the expropriation.[297]

Mexico continues to celebrate the expropriation of March 18, 1938 as a day of great historical importance and a symbol of national sovereignty. However, Mexico and its oil workers also paid a heavy price for expropriation: Mexican oil workers never received wage increases[298]—in fact, wages were cut.[299] Only during the heightened demand of World War II did Mexico export significant amounts of oil to the Allies. The lack of exports led to a shortage of capital, thereby reducing access to skills and technologies used to exploit and discover oil. By comparison, at the end of World War II, Venezuela received seven percent more per barrel from foreign oil investors than Mexico received from Pemex.[300] Venezuelan production was also six times that of Mexico.[301]

What are the long-term lessons of the 1917 and 1938 events in Mexico? Through protracted struggle, foreign oil investors and oil-importing nations realized the trend towards sovereign control over oil resources. The United Nations Resolution No. 1803,[302] adopted in 1963 and backed by the U.S., was an expression of a state's right to assert sovereignty over its petroleum resources, including the right to expropriate natural resources in the national interest upon payment of appropriate compensation. Conversely, oil-producing governments came to understand that oil was a commodity that may be best managed by private investors and regulated and taxed by government. In Mexico's case, outright expropriation of foreign investments in oil also proved to be an ineffective bargaining tool. With these lessons in mind, most governments sought to renegotiate concessions, secure profit sharing and participation with oil investors through government-owned national oil companies, and increase their take through the imposition of additional taxes.

§ 20.08 MEXICO OIL POST WORLD WAR II

The 1938 Mexican expropriation was a major turning point for Mexican oil, though it did not immediately halt foreign investment in Mexican oil. Until the prohibition of concessions in 1940, the Mexican government did grant some concessions to foreign oil companies, followed by what might today be called risk-service contracts.[303] However, foreign investment interest in Mexico declined due to oil companies' dissatisfaction with the risk-service contracts and fiscal terms offered by the Mexican government compared to drilling opportunities elsewhere.

297. *See id.* at 612.

298. YERGIN, *supra* note 1, at 278.

299. *Id.*

300. YERGIN, *supra* note 1, at 436.

301. *Id.*

302. Permanent Sovereignty over Natural Resources, G.A. Res. 1803 (XVII), U.N. Doc. A/RES/1803 (XVII) (Dec. 14, 1962).

303. Ley Reglamentaria del Artículo 27 Constitucional en Materia de Petróleo [Law Regulating Constitutional Article 27 Regarding Petroleum], DO, art. 9, 9 de noviembre de 1940.

In 1958, leftist President Adolfo López Mateos ceased offering any contracts to petroleum investors, initiating a complete ban on foreign investment.[304] The ban was in apparent retaliation to Pemex Director General's refusal to provide copies of contracts made by Pemex with foreign companies during his tenure from 1946 to 1958.[305] In 1960, existing concessions were terminated by further constitutional amendments.[306] After 1958, future oil contracts with foreign enterprises were limited to the payment of fixed sums of money for the performance of specified technical services rendered by oil companies on behalf of Pemex.[307] Because oil companies were not interested in performing services for money, Pemex was forced to employ expensive service companies. In 1973,[308] in response to the failure of foreign service contracts, President Luis Echeverría Álvarez erected the so-called "Echeverrían Wall"—laws greatly restricting all foreign investment in Mexico.[309] By the time of the 1973 Arab oil embargo, Mexico furnished only 1% of U.S. oil imports.[310]

Aside from exploiting the Poza Rica field discovered by El Aguila in 1930, Pemex had done little to develop new reserves.[311] In 1972, however—at an opportune time when the Mexican economy was near collapse—Pemex discovered the Reforma Field.[312] Mexico was once again a net exporter by 1974. After a fisherman complained of an oil sheen in the Bay of Campeche, which turned out to be from

304. *See* Ley Reglamentaria del Artículo 27 Constitucional en el Ramo del Petróleo [Law Regulating Constitutional Article 27 in the Petroleum Sector], DO, art. 2, 29 de noviembre de 1958; *see also* Reglamento de la Ley Reglamentaria del Artículo 27 Constitucional en el Ramo del Petróleo [Regulation of the Law Regulating Constitutional Article 27 in the Petroleum Sector], DO, art. 3, 25 agosto de 1959.

305. George Baker, *Mexico's Energy Reform of 2014: When Will It Lead to Market Dynamics* 2, RICE UNIVERSITY'S BAKER INST. FOR PUBLIC POLICY (June 28, 2014), http://bakerinstitute.org/files/8321/.

306. *See* Decreto que Reforma los Párrafos Cuarto, Quinto, Sexto y Séptimo Fracción I del Artículo 27 y los Artículos 42 y 48 de la Constitución Política de los Estados Unidos Mexicanos [Reformation of Paragraphs Four, Five, Six and Part One of Paragraph Seven of Article 27 and Articles 42 and 48 of the Constitution of the United Mexican States], DO, 20 de enero de 1960, http://dof.gob.mx/nota_to_imagen_fs.php?cod_diario=198696&pagina=1&seccion=0; *see also* Decreto que Declara Adicionado el Párrafo Sexto del Artículo 27 de la Constitución Política de los Estados Unidos Mexicanos [Decree Declaring Added the Sixth Paragraph of Article 27 of the Constitution of the United Mexican States], DO, 29 de diciembre de 1960.

307. *See* Isidro Morales, *The Consolidation and Expansion of Pemex, 1947–1958*, *in* THE MEXICAN PETROLEUM INDUSTRY IN THE TWENTIETH CENTURY, *supra* note 227, at 210.

308. In 1971 a new law governing Pemex replaced the 1938 expropriation. *See* Ley Orgánica de Petróleos Mexicanos [Organic Law of Petróleos Mexicanos], DO, trans. 3, 6 de febrero de 1971; *see also* Reglamento de la Ley Orgánica de Petróleos Mexicanos [Regulation of the Organic Law of Petróleos Mexicanos], DO, 10 de agosto de 1972 .

309. *See, e.g.*, Ley Para Promover la Inversión Mexicana y Regular la Inversión Extranjera [Law to Promote Mexican Investment and Regulate Foreign Investment], DO, 9 de marzo de 1973.

310. *Forty Years After the Oil Embargo*, INSTITUTE FOR ENERGY RESEARCH (Oct. 16, 2013), http://instituteforenergyresearch.org/analysis/forty-years-after-the-oil-embargo/.

311. *See* Paul Enos, *Cretacious Debris Reservoirs, Poza Rica Field, Veracruz, Mexico*, *in* CARBONATE PETROLEUM RESERVOIRS 455–69 (Perry O. Roehl & Phillip W. Choquette eds., 1985).

312. A.A. Meyerhoff, *Geology of Reforma-Campeche Shelf*, 78 OIL & GAS J. 16 (1980).

natural seeps of oil in the bay, Pemex discovered the enormous Cantarell field in 1976.[313]

> The capacity for monetary digestion is like that of a human body. You can't eat more than you can digest or you become ill. It's the same way for the economy.
>
> -José López Portillo, President of Mexico, 1976–1982

Thus, Mexico—like many oil countries—enjoyed a new oil boom in the mid-1970s and early 1980s. The oil boom was not without its costs, however, as production from Reforma, Cantarell, and other fields led the government to become overly dependent on oil revenues, while depriving Pemex of capital necessary to find replacement reserves. Under the assumption that oil revenues would enrich Mexico, the Mexican government borrowed money.[314] When oil prices collapsed in the mid-1980s, the debt led to an economic crisis that nearly caused the collapse of the Mexican economy and their lenders, including several major American banks.[315]

> We thought we were rich. We had oil.
>
> -Jesús Silva Herzog, Minister of Finance

Mexico avoided collapse through the efforts of Finance Minister Jesús Silva Herzog, the son of the man who chaired the Mexican review commission in 1937.[316] Herzog made several secret trips to the U.S. in 1982 to meet with Chairmen of the U.S. Federal Reserve, Paul Volcker, the Treasury Secretary, Donald Regan, and several bank creditors.[317] Together they negotiated a financial bailout package—creatively termed "rollover" refinancing—which was really a euphemism for partial default.[318] The bailout proved to be much needed, as the peso became significantly devalued, and the Mexican economy remained stagnant throughout much of the 1980s.

Despite the woes of the Mexican economy, the Echeverrían Wall continued to restrict foreign investment. However, the government of President Carlos Salinas de Gortari began to gradually relax the foreign investment law in 1989.[319] The

313. *See* Scott Weeden, *Meteoric History of Cantarell Field Continues for Pemex*, E & P MAGAZINE (May 1, 2015, 9:00 AM), http://www.epmag.com/meteoric-history-cantarell-field-continues-pemex-792716.

314. *See id.* at 730.

315. *See id.* at 730–731.

316. *Id*.

317. *Id.*

318. YERGIN, *supra* note 1, at 730–32. 1982 was also the year of the Penn Square energy loan debacle in the United States, which led to a banking crisis and the collapse of one of the largest banks in the United States, Continental Illinois. *See generally* PHILLIP L. ZWEIG, BELLY UP: THE COLLAPSE OF THE PENN SQUARE BANK (1986); MARK SINGER, FUNNY MONEY (2004).

319. Reglamento de la Ley para Promover la Inversión Mexicana y Regular la Inversión Extranjera [Regulation of the Law to Promote Mexican Investment and Regulate Foreign Investment], DO, 16 de mayo de 1989 ; *see also* Decreto que Reforma el Artículo 11 del Reglamento de la Ley Reglamentaria del

changes permitted limited investment in the natural gas and petrochemical industries via Mexican trusts that held legal title in Mexican banks for the benefit of foreign-investor beneficiaries.[320] To facilitate this program, Salinas divided Pemex into four subsidiaries: Pemex-Exploration and Production, Pemex-Refining, Pemex-Gas, and Pemex-Petrochemicals.[321] Salinas also attempted to reign in the power and influence of labor unions, particularly the Union of Oil Workers of the Mexican Republic.[322] His greatest achievement came in 1994 with NAFTA, which substantially improved the Mexican economy.[323] The following year, when Salinas was forced into exile due to a corruption scandal, new President Ernesto Zedillo Ponce de León permitted limited direct foreign investment in some activities involving natural gas and petrochemicals.[324]

Nevertheless, foreign investment remained limited in the upstream oil sector, consistent with the NAFTA exception protecting Mexican oil resources from the operative provisions of NAFTA.[325] After NAFTA, in the 1990s, privatization and further relaxation of foreign investment in the petroleum sector occurred, but not in the upstream sector.[326] Therefore, after more than a century of strife between the

---

Artículo 27 Constitucional en el Ramo del Petróleo, en Materia de Petroquímica [Decree Reforming Article 11 of the Regulation of the Law Regulating Constitutional Article 27 in the Petroleum Sector Regarding Petrochemicals], DO, 8 de enero de 1990 ; Ley Orgánica de Petróleos Mexicanos y Organismos Subsidiarios, *supra* note 286; Decreto que Reforma, Adiciona, y Deroga Diversas Disposiciones del Reglamento Interior de la Secretaria de Energía, Minas e Industria Paraestatal [Decree Reforming, Adding, and Repealing Various Provisions of the Internal Regulation of the Ministry of Energy, Mines, and State Industry], DO, 25 de noviembre de 1993 ; Ley de Inversión Extranjera [Foreign Investment Law], DO, arts. 32–36, 27 de diciembre de 1993 ; *see also* Decreto que Reforma, Adiciona, y Deroga Disposiciones de Diversas Leyes Relacionadas con el Tratado de Libre Comercio de América del Norte [Decree Reforming, Adding and Repealing Provisions of Various Laws Related to the North American Free Trade Agreement], DO, 22 de diciembre de 1993 ; and Decreto por el que se crea la Comisión Reguladora de Energía como un Órgano Administrativo Desconcentrado de la Secretaria de Energía, Minas e Industria Paraestatal [Decree Creating the Energy Reg. Comm'n as an Admin. Body Separate from the Ministry of Energy, Mines and State Indust.], DO, 4 de octubre de 1974.

320. *Id.*

321. Ley Orgánica de Petróleos Mexicanos y Organismos Subsidiarios, *supra* note 286, at art. 3; *see also* David Shields, *Mexican Pipeline: The Future of Oil Under Vicente Fox*, NORTH AMERICAN CONGRESS ON LATIN AMERICA, https://nacla.org/article/mexican-pipeline-future-oil-under-vicente-fox (last visited Mar. 17, 2016).

322. *Mexico Organized Labor*, http://www.photius.com/countries/mexico/government/mexico_government_organized_labor.html.

323. North American Free Trade Agreement, U.S.-Can.-Mex., Dec. 17, 1992, 32 I.L.M. 289 (1993).

324. *Leading Mexico to a New Era*, OFFICE OF DR. ZEDILLO (Jan. 1998), http://zedillo.presidencia.gob.mx/welcome/PAGES/OFFICE/office_admon.html.

325. North American Free Trade Agreement, *supra* note 323, at Annex 602.3.

326. *See, e.g.*, Decreto por el que se Reforman y Adicionan Diversas Disposiciones de la Ley Reglamentaria del Artículo 27 Constitucional en el Ramo del Petróleo [Decree Reforming and Adding Various Provisions of the Regulatory Law of Constitutional Article 27 in the Petroleum Sector], DO, art. 4, 11 de mayo de 1995; Reglamento Interior de la Secretaria de Energía [Internal Regulations of the Ministry of Energy], DO, 1 de junio de 1995; Ley de la Comisión Reguladora de Energía [Law of the Energy Regulatory Commission], DO, 31 de octubre de 1995; Reglamento de Gas Natural [Natural Gas Regulation], DO, art. 3, 8 de noviembre de 1995; Directiva Sobre la Determinación de Precios y Tarifas para las Actividades Reguladas en Materia de Gas Natural DIR-GAS-001-1996 [Directive About Price and Tax Determinations for the Regulatory Activities Regarding Natural Gas DIR-GAS-001-1996], DO, 20 de marzo de 1996; Resolución del Pleno de la Comisión Reguladora de Energía Sobre la Solicitud de

Mexican government and oil companies, the 2013 Reform represents a compelling new arrangement, which may balance the benefits of retaining sovereign control over Mexican oil resources with the advantages of foreign technology and investment.

§ 20. 09 CONCLUSION

Because of President Díaz's 1884 mining law, Mexico's twentieth century began with U.S.-type private exploitation of oil by largely foreign oil investors who regarded the oil as privately owned, real property. However, the Mexican people never embraced the notion of private mineral ownership, as private mineral ownership ran counter to traditional Spanish and Mexican legal concepts. Although private ownership was not a major reason for the Mexican Revolution, the oil boom that occurred in Mexico's Golden Lane occurred simultaneously with a violent revolution that ultimately led to the nationalization of minerals under the provisions of the revolutionary 1917 constitution. Due to the stubbornness and arrogance of oil investors, backed by the U.S. and British governments, a twenty-year struggle ensued between a series of conciliatory Mexican governments more concerned about retaining power than about ideology and oil investors over the resolution of their pre-existing oil claims. In 1938, a stronger President Lázaro Cardenas nationalized the oil industry, with further constitutional reform and subsequent legislation that led to the expropriation of oilfields and creation of Pemex. After World War II, ensuing nationalist governments reduced foreign investment and further tightened the restrictions on private investment and services in the oil sector. Even NAFTA—which entered into force in 1994 and led to a huge increase in foreign investment generally—contained an exception that continued to restrict foreign investment in Mexico's oil sector.[327] By the mid-1990s, however, limited investment was allowed in natural gas and in petrochemicals. This small opening gradually evolved into the revolutionary 2013 reforms—the focus of Part II of this article.[328]

Readers who think that the history of foreign investment in Mexico's petroleum industry is old news to be ignored should remember that Expropriation Day, March 18, continues to be celebrated as a national holiday. Public opinion polls show that the 2013 reforms are becoming less—not more—popular.[329] While a reversal of the reforms (discussed in Part II) is unlikely, investors must continue to be mindful of Mexico's tortured oil history as they embark on what we hope will be

---

Aprobación del Programa Gradual de Acceso Abierto 1996–1997, presentada por Pemex Gas y Petroquímica Básica [Resolution of the Entire Energy Regulatory Commission About the Approval Request of the Gradual Open Access Program 1996–1997, presented by Pemex Gas y Petroquímica Básica], DO, 7 de agosto de 1996; and Reglamento de la Ley de Inversión Extranjera y del Registro Nacional de Inversiones Extranjeras [Regulation of the Law of Foreign Investment and of the National Register of Foreign Investments], DO, 8 de septiembre de 1998; *see also* Decreto por el que se Aprueba el Programa de Desarrollo y Reestructuración del Sector de Energía, 1995–2000 [Decree Approving the Development Program and Restructuring of the Energy Sector, 1995–2000], DO, 19 de febrero de 1996.

327. NAFTA Annex 602.3.

328. Anderson & Park, *supra* note 16.

329. *Mexican President Peña Nieto's Ratings Slip with Economic Reform*, PEW RESEARCH CENTER (Aug. 26, 2014), http://www.pewglobal.org/2014/08/26/mexican-president-pena-nietos-ratings-slip-with-economic-reform/.

a "win-win" era of oil exploration and development for foreign investors and the Mexican people.