Exxon and the Control of Oil

Joseph A. Pratt

American history texts often portray the large international oil companies as one-dimensional and unchanging agents of the dark side, exercising monopoly power here, corrupting politics there, and despoiling the environment everywhere. These companies have another important, though often-neglected dimension: they supply energy that fuels our economy and shapes our lives. They are hardly unchanging, having survived from the days of kerosene lamps to the days of jet airplanes by adapting their internal operations to vast changes in markets and governments. The pace of change accelerated in the last forty years, when the major oil-producing nations asserted control over their domestic reserves and created national oil companies to manage their development.

A good place to start in the quest for a fuller understanding of Big Oil is the biggest of them all, Standard Oil, the predecessor of ExxonMobil. For almost 130 years, John D. Rockefeller's company has ranked among the largest and most profitable of the major oil companies. Rockefeller left a dual legacy, making Standard Oil both the best run and the most hated oil company. Stressing the core operating principles of financial discipline, organizational innovation, and technical leadership, he created a model of efficiency that remains embedded in the corporate DNA of ExxonMobil more than a century later. The behavior and the tone of his company, however, also made it an enduring symbol of corporate excess and power. During the century since Rockefeller's departure, the company has sought to remain true to his basic approach to internal operations while adapting to external, societal demands he did not face.[1]

John D. Rockefeller's Company

When Rockefeller entered the oil business in 1863, soon after the initial discovery of oil in 1859 in northern Pennsylvania, he found a world of cutthroat competition with almost no government oversight. The rapid discovery and depletion of new fields fed cycles of boom and bust in oil prices, creating chaos for investors and operators. The refining,

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[1] Big Oil is used here to designate the largest international oil companies. Standard Oil (New Jersey) and Standard Oil (New York) were original members of the Standard Oil Trust formed in 1882. They became separate companies in the 1911 dissolution of Standard Oil. In 1975 Standard Oil Company (New Jersey) consolidated its operations under a new name: the Exxon Corporation, which merged with Mobil in 1999 under the new name ExxonMobil.

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transportation, production, and marketing of oil each spawned separate industries with little coordination among them. From the 1860s through the end of the century, Rockefeller relentlessly imposed his own brand of order on the oil business. In the process he established core operating principles that made Standard Oil the dominant economic force in this vital industry.[2]

Financial discipline guided the company's efficient use of capital. Rockefeller used an early form of cost accounting to root out all chances to cut costs: "Many of the brightest [businessmen] . . . did not actually know when they were making money on a certain operation and when they were losing. . . . We knew how much we made and where we gained or lost." He reduced costs obsessively, knowing that in a continuous process industry, a penny saved through improvements in manufacturing processes was a penny saved again and again. Strict cost controls systematically enforced at every level helped produce the competitive advantages at the heart of Standard Oil's long-term strategy. The success of this strategy allowed the company to use internally generated funds for expansion, freeing it from the control of outside investors and allowing a relatively small group of like-minded leaders to pursue long-term goals. Budgetary discipline in good times prepared the company to seize opportunities during downturns in the industry, when other companies often could be acquired at bargain prices.[3]

To make his company an industry leader, Rockefeller focused sharply on oil: "We devoted ourselves exclusively to the oil business and its products. The company never went into outside ventures, but kept to the enormous task of perfecting its own organization." This "enormous task" required finding a path to orderly expansion amid the chaos of the early years of the oil industry. Rockefeller cleared his own path with vertical integration, an organizational innovation that became a defining characteristic of the modern petroleum industry.[4]

First, he took control of the Cleveland refining industry—by any means necessary. He then asserted dominance over other refining centers. Rockefeller acquired the largest and best refineries, centralized their administration, and improved their operations to increase efficiency. Professional economists later called the lower unit costs that resulted "economies of scale." But Rockefeller was not done. To protect his large investments in refineries, he built or bought pipeline transportation into and out of the plants, acquired large markets for refined products, and, finally, moved into crude-oil production. By the turn of the twentieth century, he had consolidated large segments of the oil industry into a single vertically integrated company with overwhelming market power.[5]

Late in his career at Standard Oil, Rockefeller led his industry in the application of scientific knowledge to oil refining by hiring a professional chemist to remove sulfur from

[2] Ron Chernow, *Titan: The Life of John D. Rockefeller Sr.* (New York, 1998), 3–95; Allan Nevins, *Study in Power: John D. Rockefeller, Industrialist and Philanthropist* (2 vols., New York, 1953), I, 1–55.

[3] John D. Rockefeller, *Random Reminiscences of Men and Events* (New York, 1909), 74. See also Chernow, *Titan*. For the company's corporate history under John D. Rockefeller, see Ralph W. Hidy and Muriel E. Hidy, *Pioneering in Big Business, 1882–1911: History of Standard Oil Company (New Jersey)* (New York, 1955).

[4] Hidy and Hidy, *Pioneering in Big Business,* 169–200, esp. 88. Alfred D. Chandler Jr., "The Standard Oil Company—Combination, Consolidation, and Integration," in *The Coming of Managerial Capitalism: A Casebook on the History of American Economic Institutions,* ed. Alfred D. Chandler Jr. and Richard Tedlow (Homewood, 1985), 343–71.

[5] John McLean and Robert Haigh, *The Growth of Integrated Oil Companies* (Boston, 1954); Hidy and Hidy, *Pioneering in Big Business,* 40–121.

crude oil, paving the way for making commercial products from crude that previously could not be refined. The company also remained at the cutting edge of pipeline and tanker technology, either through its own research or the purchase of the work of others. New technology helped it grow while also driving down the cost of its refined goods.[6]

Looking back from a century later, the creation of Standard Oil seems almost inevitable. To many contemporaries, however, its scale and power appeared both radical and frightening. Competitors first felt the pain as Rockefeller took control of the industry. They voiced indignation at the competitive abuses and the arrogance of the "Standard Oil gang." But some paid grudging respect to the company's ruthless efficiency. Testifying before the U.S. Congress, the railroad leader William Vanderbilt said of the company's leaders: "I never came into contact with any class of men as smart and able as they are in their business. . . . They will be on top all the time."[7]

Standard's leaders relished competition. Viewing it as a fight to the death between "us" and "them," they remained highly confident of the outcome. With few laws to restrain him, Rockefeller made his own rules and zealously enforced them with his company's economic power. He demanded and received rebates on his posted railroad rates and drawbacks on those of his competitors, which meant that a portion of their rate secretly went to Standard Oil. He made use of industrial spies and destroyed competitors with predatory pricing. Long after Standard had won near-monopoly control in oil, laws passed partly in response to its abuses outlawed many of these practices. But changes in the law did not remove the outrage engendered by Standard Oil's behavior.[8]

Public fury grew at the turn of the twentieth century. The historian and muckraker Ida Tarbell recognized Standard Oil's "legitimate greatness" in building an efficient organization but condemned its behavior as excessive and unnecessary. The muckraker Henry Demarest Lloyd captured the company's reputation for political corruption in memorable language: "The Standard had done everything to the Pennsylvania legislature except refine it." The *New York World,* a part of Joseph Pulitzer's chain, did not exhibit prize-winning standards of objectivity: "There has been no outrage too colossal, no petty meanness too contemptible for these freebooters to engage in. From hounding and driving prosperous business men to beggary and suicide, to holding up and plundering widows and orphans . . . all this has entered into the exploits of this organized gang of commercial bandits." More than the company's hard-edged competitive practices fed this fear and loathing. Many Americans worried that its near monopoly spelled the end of traditional free markets and of American democracy. Others, including Theodore Roosevelt, made use of this potent symbol to organize support for political reform. Some simply found Rockefeller to be a compelling villain.[9]

In response to this avalanche of criticism, "The Great John D." counseled his compatriots to focus on their work and "Let the world wag." The efficient production of useful products would answer critics. Those within the company viewed political leaders as opportunistic and insincere. The public seemed ignorant or at least economically illiterate.

[6] Chandler, "Standard Oil Company," 365; Hidy and Hidy, *Pioneering in Big Business,* 155–68.
[7] Peter Collier and David Horowitz, *The Rockefellers: An American Dynasty* (New York, 1976), 38.
[8] Ron Chernow, "The Lady and the Titan," *Vanity Fair* (May 1998), 225–39.
[9] Hidy and Hidy, *Pioneering in Big Business,* 639–70, esp. 648; Ida M. Tarbell, *The History of the Standard Oil Company; Briefer Version,* ed. David M. Chalmers (New York, 1969), 196–208, 144–53. Collier and Horowitz, *Rockefellers,* 28. Nevins, *Study in Power,* II, 467–76.

Accustomed to the logic of engineering, Standard's executives appeared baffled by the logic of political change. Failing to take seriously the rhetoric and symbolism of democratic politics, Rockefeller and others underestimated the political risks from the antitrust movement. The dissolution decree by the U.S. Supreme Court in 1911, which broke up Standard Oil, hammered home the cost of their insularity, forcing them to look beyond their disdain for politicians to the potential impacts of political change.[10]

Standard Oil (New Jersey): King of the Oil World, 1911–1973

The battle over antitrust in the United States, one of the world's first major oil-producing nations, foreshadowed events in other nations. One of the first encounters with producer nationalism experienced by Standard Oil (New Jersey)—the largest of the thirty-four companies created in the breakup of Standard Oil—came in the 1920s and 1930s in Mexico, then a major exporter of oil to the United States and Europe. In that era of unabashed exploitation, the company joined other international oil companies in defying the Mexican government's power regarding taxes, the treatment of labor, and the ownership of subsoil rights. The control of Mexico's oil by foreigners inflamed public opinion. In 1938 the government finally expropriated the properties of the international oil companies. This stunning reversal came to symbolize the ultimate cost of failing to meet the legitimate demands of producing nations.[11]

After World War II the company used lessons learned in Mexico to try to accommodate growing demands for better working conditions and a greater "take" from oil production in both Venezuela and Saudi Arabia. To maintain control over oil production and oil prices, Standard Oil (New Jersey) expanded training for host country workers, split profits fifty-fifty, and improved wages and benefits at Creole (Venezuela) and Aramco (Saudi Arabia), where the company worked in a joint venture with Mobil, Socal, and Texaco. These were very profitable ventures for the company, and sharing the wealth with these important producing nations helped it retain control over the level of production and the pricing of these giant foreign reserves into the 1970s.[12]

The steady discovery of new oil fields produced a glut of oil that the so-called Seven Sisters (Exxon, Mobil, Gulf, Texaco, Chevron, British Petroleum, and Royal Dutch–Shell) successfully managed for a time. They played nations against each other while controlling the supply of oil through a system of overlapping ownership ties in the major producing nations. Critics have long focused on one result of the oil companies' strategies: the propping up of dictators with oil revenues, which assured access to reserves. But a fuller historical understanding should acknowledge that during the Cold War, governments of the major consuming nations—led by the United States—supported these

[10] "The Rockefellers," prod. and dir. Elizabeth Deane (episode of *American Experience,* ex. prod. Margaret Drain), WGBH (PBS, 2000), transcript, http://www.pbs.org/wgbh/amex/rockefellers/filmmore/pt.html. Bruce Bringhurst, *Antitrust and the Oil Monopoly: The Standard Oil Cases, 1890–1911* (Westport, 1979); Nevins, *Study in Power,* II, 328–436. *Standard Oil Co. of New Jersey v. United States,* 221 U.S. 1 (1911).

[11] Lorenzo Meyer, *Mexico and the United States in the Oil Controversy, 1817–1942* (Austin, 1977).

[12] For accounts from within the company, see Henrietta M. Larson, Evelyn H. Knowlton, and Charles S. Popple, *New Horizons, 1927–1950* (New York, 1971), 618–27; and Bennett H. Wall, *Growth in a Changing Environment: A History of Standard Oil Company (New Jersey), Exxon Corporation, 1950–75* (New York, 1988), 396–430. On Venezuela, see also Terry Lynn Karl, *The Paradox of Plenty: Oil Booms and Petro-states* (Berkeley, 1997). On Aramco, see Robert Vitalis, *America's Kingdom: Mythmaking on the Saudi Oil Frontier* (Stanford, 2007).

arrangements with tax breaks and the threat of military action to keep oil flowing to their citizens. This practice was clearest in Iran in the early 1950s, where U.S. and British government operatives orchestrated the overthrow of the regime of Mohammed Mossadeq and the return of the pro-Western Mohammed Reza Shah Pahlavi to power. Complicating U.S. foreign policy were growing tensions between supporting Israel and the need for Middle Eastern oil to rebuild Western Europe and Japan and fuel a postwar boom in the United States. For a quarter century after World War II, channeling oil revenues to Middle Eastern producing nations through the major oil companies helped keep U.S. policies regarding oil and U.S. policies toward Israel more or less separate. As global oil production rose from about 10 million barrels per day in 1950 to over 55 million barrels per day in 1973, Standard Oil (New Jersey) remained king of the international petroleum industry. As late as 1970 it produced almost 15 percent of the oil consumed in the noncommunist world.[13]

Refocusing on Core Operating Principles in the Age of Producer Power

In October 1973, war in the Middle East forcibly brought together the issues of Israel and oil. Arab members of the Organization of Petroleum Exporting Countries (OPEC) placed an embargo on oil exports to the United States in retaliation for the aggressive U.S. support of Israel. The resulting crises in world oil markets made it painfully obvious that world oil supplies were stretched thin. OPEC then asserted control of oil production and quadrupled oil prices, which had been in the $3 per barrel range before the embargo. The nationalization of foreign oil companies by most major producing nations followed quickly, as did the growth of national oil companies. In 1979 cuts in global oil supplies after the Iranian Revolution and the hostage crisis more than doubled oil prices again into the mid-$30 per barrel range and increased speculation about the end of the age of oil.[14]

The OPEC nations contain most of the world's proved oil reserves, and once they asserted control of their own oil, Exxon's position in the global oil industry changed abruptly. Producer power dethroned the king. Nationalizations in Venezuela, Saudi Arabia, Libya, and Iran reduced Exxon's production of crude oil from 6.8 million barrels per day in 1973 to about 1.7 million in 1985, or only about 3 percent of global supply. In this era, Big Oil lost ownership and control of vast reserves; instead of controlling the oil under leasing agreements, it became primarily a contractor and a purchaser of crude oil.[15]

Exxon first sought to adapt by expanding its search for non-OPEC oil and using revenue from higher oil prices to diversify into businesses outside oil. When internal conflicts in the early 1980s undermined OPEC's capacity to manage production, however, crude flooded the market and oil prices plunged below $10 per barrel. In response, Exxon

[13] Peter Odell, *Oil and World Power: A Geographical Interpretation* (New York, 1970), 95–129; Fiona Venn, *The Oil Crisis* (London, 2002); Anthony Sampson, *The Seven Sisters: The Great Oil Companies and the World They Shaped* (New York, 1975), 119–21; Daniel Yergin, *The Prize: The Epic Quest for Oil, Money, and Power* (New York, 1991), 456–70. The 15% figure is based on an estimate of free world production at 40 million barrels per day and Standard (New Jersey) production of about 6 million barrels per day. Standard Oil Company (New Jersey), *1970 Annual Report* (New York, [1971]), 1, 8.

[14] On the October War, see Abraham Rabinovich, *The Yom Kippur War: The Epic Encounter That Transformed the Middle East* (New York, 2004). On the impact of the embargo, see Karen R. Merrill, *The Oil Crisis of 1973–1974: A Brief History with Documents* (New York, 2007). On the Organization of Petroleum Exporting Countries, see Sampson, *Seven Sisters,* 297–357.

[15] Exxon Corporation, *1973 Annual Report* (New York, [1974]), 5; Exxon Corporation, *1985 Annual Report* (New York, [1986]), 6.

changed course, refocusing on its oil business. The company had lost focus on its core operating principles during the long era of postwar expansion made possible by "easy oil" from Venezuela and the Middle East and then in the era of diversification in the 1970s. But Rockefeller's approach to the efficient operation of an oil company proved as effective in the chaotic conditions of the 1980s as it had been in the 1880s.[16]

The first wave of deep cuts in employment and costs came as the company "refocused on the core" by divesting its nonpetroleum businesses. Next came sustained efforts to capture a new generation of economies of scale, as Exxon systematically closed its least efficient refineries and increased the size and efficiency of those that remained. The benefits of this renewed emphasis on financial discipline were clearest in the company's merger with Mobil in 1999. Exxon had avoided major acquisitions in the decade after the oil-price bust, but near the bottom of a long downturn in the industry in the late 1990s, it acquired Mobil on favorable terms. The successful consolidation of the two largest companies formed from the break up of Standard in 1911 created ExxonMobil, the world's largest oil company not owned by a government in the early twenty-first century.[17]

The merger accelerated the pace of change within ExxonMobil. Managing its greatly expanded global empire required organizational innovations. In the 1980s the company created its first system for ranking exploration prospects around the globe instead of only within individual nations or regions as it previously had done. It also sought to improve the management structure for its sprawling operations by extending Rockefeller's signal innovation, vertical integration, to a global level. The coordination of the worldwide management of each key function—downstream operations (refining, marketing, and transportation), exploration, development, production, and chemicals—gave Exxon a leg up on its international competition.[18]

In the late twentieth century the application of new technologies became increasingly important at Exxon. As a part of a sprawling fraternity of oil companies, oil supply and service companies, and university researchers, it contributed to an astonishingly creative period of technological advances following the energy crises of the 1970s. Making use of the growing power of computers, geophysicists worked miracles with new seismic processes that produced increasingly detailed underground mappings. Other technical advances revolutionized the production of petroleum by greatly extending the capacity to find and produce oil in deeper waters offshore and in the Arctic. Chemists and engineers revamped refineries to meet economic and societal demands for cleaner-burning gasolines, more flexible chemical products, and cleaner and more fuel-efficient refineries and petrochemical plants. Such innovations, backed by the company's proven capacity to manage efficiently the planning and construction of giant projects, became the calling cards of ExxonMobil in its quest for access to reserves around the world.[19]

[16] On Exxon's diversification and strategy in the 1980s, see John A. Byrne, "The Rebel Shaking Up Exxon," *Business Week,* July 18, 1988, pp. 104–7, 110–11.

[17] Exxon Corporation, *1984 Annual Report* (New York, [1985]), 2, 14; Exxon Corporation, *1990 Annual Report* (New York, [1991]), 14–15. Christopher Cooper and Steve Liesman, "Exxon Agrees to Buy Mobil for $75.3 Billion," *Wall Street Journal,* Dec. 2, 1998, p. A8.

[18] On the merger and ExxonMobil's new strategies, see Daniel Yergin, *The Quest: Energy, Security, and the Remaking of the Modern World* (New York, 2011), 83–105.

[19] See, for example, Fred S. Ellers, "Advanced Offshore Oil Platforms," *Scientific American,* 246 (April 1982), 39–42, 45–50, 162.

Extending or Adapting Core Values

The core corporate values and operating principles put in place by Rockefeller thus proved useful a century later in reviving efficient operations. The world obviously had changed dramatically in the intervening years, and Exxon had to adapt inherited values and attitudes to new conditions. The company also needed to extend those values and attitudes to areas not addressed in the company's formative years. For example, a strong tribal sense remained an important part of Exxon's corporate culture, but increased flexibility was important in the management of joint ventures with others, including national oil companies. In the giant high-risk, high-reward projects of the late twentieth century, such ventures became the norm. Exxon could not afford to take the "us versus them" attitude of the old Standard Oil gang. It had to become more adept at working with outsiders—or at least at convincing them that its approach produced the best results.[20]

In another key area of operations, safety, health, and environment (or SH&E), Exxon learned to apply its core operating principles to an increasingly important set of issues slighted in Rockefeller's era. The 1960s and 1970s were trying times for Exxon and other oil companies as they responded to a wave of environmental laws backed by powerful new regulatory agencies, notably the Environmental Protection Agency and the Occupational Safety and Health Administration (both created in 1970). Exxon often resisted the passage of these types of laws, which at times challenged their traditional autonomy over both production processes and investments. New laws mandated the removal of lead from gasoline, demanded compliance with improved standards of air and water quality, increased concern for workplace safety, and required advanced planning to minimize the environmental impact of major projects. In lobbying and testimony before Congress, Exxon argued that many of these laws were not backed by good science and were inefficient ways to meet regulatory goals. Again and again, it lost these legislative battles, and Congress passed strong new environmental regulations. The company then went about absorbing the new mandates into its operations while trying to shape their implementation in regulatory rule making and in the courts.[21]

A turning point in the company's approach to SH&E came in March 1989 after the disastrous *Exxon Valdez* oil spill in Prince William Sound in southern Alaska. At the time, it was the largest spill in American waters, and it occurred in one of the most beautiful places in the world. The events that caused the spill, as well as the company's early responses, made a mockery of Exxon's self-image as the best-run company in its industry. Scathing public criticism made it public environmental enemy number one, sullying its reputation for decades. Strict new laws regulating both the Port of Valdez and the oil tanker business in the United States followed.[22]

The big change within Exxon, however, occurred not through new laws but through determined internal effort to improve the company's performance. In the year after the *Exxon Valdez* oil spill the company suffered a deadly refinery explosion and another large spill near New York City. These events kept the company in the public spotlight and

[20] Pam Kevelson, "A Journey of a Thousand Miles: Historic Investment in China," *Lamp* (no. 2, 2007), 7–9.

[21] Hugh S. Gorman, *Redefining Efficiency: Pollution Concerns, Regulatory Mechanisms, and Technological Change in the U.S. Petroleum Industry* (Akron, 2001).

[22] Peter A. Coates, *The Trans-Alaska Pipeline Controversy: Technology, Conservation, and the Frontier* (Anchorage, 1993).

shook Exxon to its core. There it found its historical commitment to efficient operations and launched a systematic effort to apply it to the issues raised by SH&E. The result was an innovative approach to the management of safety called the Operations Integrity Management System (OIMS) that steadily improved the company's performance on safety, health, and the environment. Regular, rigorous internal evaluations of the performance on these issues of every major unit in the company's global organization, forcefully established that safety, health, and the environment were now top priorities. The company enforced individual accountability for meeting best practices through its personnel evaluation system, with good results a prerequisite for career advancement. Although it took years to change corporate culture on this issue, the value of doing so came into clear focus after BP's giant Macondo well oil spill in the Gulf of Mexico in 2010. In the investigation of this spill, William Reilly, the cochair of President Barack Obama's National Commission on the BP *Deepwater Horizon* Oil Spill and Offshore Drilling, cited the safety culture and systems Exxon developed after the *Exxon Valdez* spill as the "gold standard for safety in environment protection" to which other companies should aspire.[23]

A similar approach proved effective in addressing another issue not high on Rockefeller's list of priorities: curbing corruption. A much-publicized bribery scandal in Italy in the early 1970s convinced Exxon to strengthen its stance on political "donations." It aggressively established a distinctive "brand" in its international operations: the biggest and the best international oil company would not pay bribes. It would earn the right to do business through its advanced technology, ample investment capital, and access to global markets. This stance undoubtedly weakened the company's competitive position in parts of the world, but Exxon remained convinced that long-term profitability would be enhanced by removing the corrosive effects of bribery.[24]

Since the fall of the Soviet Union, political issues beyond bribery have tested the company's capacity to adapt through managing political risks in a variety of nations with different systems and histories. In Russia in the 1990s Exxon confronted a nation in flux, with no clear legal or regulatory framework and great uncertainty about its political future. The company responded by demanding explicit government guarantees in its contract to develop giant oil and gas reserves on Sakhalin Island, off the nation's eastern coast. A Russian joint venture partner provided local knowledge. The use of Russian contractors when possible for equipment and supplies bought good will. Advanced technology then enabled Exxon to complete the project, producing much-needed revenues for Russia.[25]

In African nations, Exxon encountered the lingering effects of colonialism, poverty, civil war, and political unrest. In the late twentieth century, events in Nigeria bolstered the "oil curse" argument, which held that the discovery of oil could yield more harm than benefit in nations ill-prepared to absorb its impact. Exxon searched for antidotes for the

[23] For a report that describes the inner workings of the Operations Integrity Management System and includes statistics on regulatory compliance, oil spills, and air emissions, see ExxonMobil, "Safety, Health, and Environment," in *Corporate Citizenship in a Changing World* (Irving, 2002), 6–15. William Reilly repeated this assessment of Exxon's safety culture and systems in the commission's report and in the media. For a video that shows Reilly making this statement, see Day 2, Panel V, *National Commission on the BP* Deepwater Horizon *Oil Spill and Offshore Drilling: Meeting 5,* http://www.oilspillcommission.gov/meeting-5/meeting-details. See also Jeffrey Ball, "Lessons from the Gulf," *Wall Street Journal,* March 7, 2011, p. R5.

[24] Wall, *Growth in a Changing Environment,* 717–29. In 1977 the United States passed an act that established legal penalties for bribery in foreign nations. See Foreign Corrupt Practices Act, 15 U.S.C. sec. 78dd-1, et seq. (1977).

[25] Thane Gustafson, *Capitalism Russian-Style* (Cambridge, Eng., 1999); Tom Bower, *Oil: Money, Politics, and Power in the Twenty-First Century* (New York, 2009).

oil curse in its development of reserves in Chad, one of the poorest countries in Africa, and Angola, a nation devastated by a prolonged civil war. In the late 1990s, an Exxon-led consortium in Chad teamed with the World Bank in an innovative oil revenue management plan designed to assure the flow of most of these revenues into projects for national economic development. In an agreement for funding a major pipeline and associated oil fields, the government accepted strict limits on its sovereignty, including greater transparency and the management of the development fund by the World Bank. The bank's leverage declined, however, after the completion of the pipeline. After a sharp spike in oil prices in the mid-2000s and an attempted coup, the government altered the terms of the agreement. Unable to restore the original agreement, the World Bank withdrew. The consortium did not have that option, since its multibillion-dollar pipeline could not be moved. The project continues to produce oil and revenues for both the consortium and the government, while serving as a symbol of failure for critics and an interesting case study of a worthwhile experiment for others.[26]

In Angola, ExxonMobil took an even broader approach, bringing to bear all it had learned over more than a century of foreign operations to try to build a durable partnership with the government—and its citizens—in the development of giant offshore reserves. It made use of joint ventures with Angola's national oil company, training programs for Angolan workers, and local contractors as called for by law as well as custom. In both Chad and Angola, Exxon made substantial contributions to local educational institutions and health clinics and partnered with other international institutions in efforts to eradicate malaria.[27]

The company's reputation for technical and operational excellence helped Exxon gain entry to producing nations with high political risks, but more than its reputation was required to remain for decades and reap long-term profits. Rockefeller-style internal efficiency simply was not enough in the new era of producer power. The company also could not count on the strong U.S. government support that it had often received during the Cold War. To earn long-term profits on its massive investments, it had to adjust to societal demands within imperfect and evolving political systems—and amid a chorus of criticism. This tested the limits of Exxon's adaptability. How far could the company go in fulfilling broad social responsibilities without reducing its effectiveness in performing its central function—finding and producing energy, and making the profits needed to fund its operations?

As it seeks practical answers to this important question, ExxonMobil is still plagued by its historical image as the symbol of the abuses of Big Oil. Why? Its size and power are never far from view, as witnessed by its record profits in the last decade. Its tone in public relations still strikes critics as arrogant, as best exemplified in the recent past by its aggressive stance on the incompleteness of the science of climate change. The company's important role in providing a product vital to national security brings additional scrutiny. ExxonMobil remains a potent political symbol used by U.S. politicians to build support

[26] For a discussion of the oil curse in Africa, see Ricardo Soares de Oliveira, *Oil and Politics in the Gulf of Guinea* (New York, 2007); Pauline Jones Luong and Erika Weinthal, *Oil Is Not a Curse: Ownership Structure and Institutions in Soviet Successor States* (Cambridge, Eng., 2010); and Stephen V. Arbogast, "Project Financing and Political Risk Mitigation: The Singular Case of the Chad-Cameroon Pipeline," *Texas Journal of Oil, Gas, and Energy Law,* 4 (no. 2, 2008–2009), 2–22.

[27] Tony Hodges, *Angola: Anatomy of an Oil State* (Bloomington, 2004).

for reforms and by officials in other countries as a villain useful in rallying the masses against American influence.[28]

Historical memory also plays an important role in the condemnation of ExxonMobil, and Big Oil in general. Mexicans still celebrate expropriation day; Iranians lament the overthrow of Mossadeq; Russians remember the foreign oil rush of the 1990s. These memories confront new generations of ExxonMobil executives as they manage political risks around the world. Above it all looms the shadow of Rockefeller—the robber baron, not the business innovator. The collective memory of the *Exxon Valdez* disaster does not include the largely unknown story of OIMS creating a safety culture now used as a benchmark by other companies.

Historians did not create this negative image, but we have done little to provide a fuller, more nuanced portrait of Big Oil. Academic history as now practiced in the United States largely omits economic history, much less energy history. At times we allow our skepticism of Big Oil to blind us to the importance of the petroleum products that have become such vital parts of modern life. We focus on the dark side of oil companies, as if there is no other story. No production of energy. No job creation. No legitimate greatness, as even Ida Tarbell conceded. Our static image of Big Oil slights our stock-in-trade as historians—the analysis of change over time.

As we ponder our energy future, we need a fuller historical understanding of the evolution of the major oil companies. The first step is to acknowledge the sharp decline in their power to control prices and production levels in the global oil industry since 1973. The next step is to accept our complicity in our historical dependence on oil. It is easy to fill our tanks, ignore energy-related issues until gasoline prices rise, and then blame Big Oil. It is an enormous task, indeed, to reduce our energy consumption and push our democracy to frame long-term energy policies that establish a realistic framework for our energy future—one that acknowledges the historical contributions of the major oil companies and the reality that we will need them to continue to produce oil and natural gas for generations.

[28] On ExxonMobil's stance on climate change science, see Judith A. Layzer, "Deep Freeze: How Business Has Shaped the Global Warming Debate in Congress," in *Business and Environmental Policy: Corporate Interests in the American Political System,* ed. Michael E. Kraft and Sheldon Kamieniecki (Cambridge, Mass., 2007), 93–125.