1

RUSSIA RETURNS

On the night of December 25, 1991, Soviet president Mikhail Gorbachev went on national television to make a startling announcement—one that would have been almost unimaginable even a year or two earlier: "I hereby discontinue my activities at the post of the President of the Union of Soviet Socialist Republics." And, he added, the Soviet Union would shortly cease to exist.

"We have a lot of everything—land, oil and gas and other natural resources—and there was talent and intellect in abundance," he continued. "However, we were living much worse than people in the industrialized countries were living and we were increasingly lagging behind them." He had tried to implement reforms but he had run out of time. A few months earlier, diehard communists had tried to stage a coup but failed. The coup had, however, set in motion the final disintegration. "The old system fell apart even before the new system began to work," he said.

"Of course," he added, "there were mistakes made that could have been avoided, and many of the things that we did could have been done better." But he would not give up hope. "Some day our common efforts will bear fruit and our nations will live in a prosperous, democratic society." He concluded simply, "I wish everyone all the best."[1]

With that, he faded out into the ether and uncertainty of the night.

His whole speech had taken just twelve minutes. That was it. After seven decades, communism was finished in the land in which it had been born.

Six days later, on December 31, the USSR, the Union of Soviet Socialist Republics, formally ceased to exist. Mikhail Gorbachev, the last president of the Soviet Union, handed over the "football"—the suitcase with the codes to activate the Soviet nuclear arsenal—to Boris Yeltsin, the first president of the Russian Federation. There were no ringing of bells, no honking of horns, to mark this great transition. Just a stunned and muted—and disbelieving—response. The Soviet Union, a global superpower, was gone. The successors would be fifteen states, ranging in size from the huge Russian Federation to tiny Estonia. Russia was, by far, the first among equals: it was the legatee of the old Soviet Union; it inherited not only the nuclear codes, but the ministries and the debts of the USSR. What had been the closed Soviet Union was now, to one degree or another, open to the world. That, among other things, would redraw the map of world oil.

Among the tens of millions who had watched Gorbachev's television farewell on December 25 was Valery Graifer. To Graifer, the collapse of the Soviet Union was nothing less than "a catastrophe, a real catastrophe." For half a decade, he had been at the very center of the Soviet oil and gas industry. He had led the giant West Siberia operation, the last great industrial achievement of the Soviet system. Graifer had been sent there in the mid-1980s, when production had begun faltering, to restore output and push it higher. Under him, West Siberia had reached 8 million barrels per day—almost rivaling Saudi Arabia's total output. The scale of the enterprise was enormous: some 450,000 people ultimately reported up to him. And yet West Siberia was part of an even bigger Soviet industry. "It was one big oil family throughout all the republics of the Soviet Union," he later said. "If anyone had told me that this family was about to collapse, I would have laughed." But the shock of the collapse wore off, and within a year he had launched a technology company to serve whatever would be the new oil industry of independent Russia. "We had a tough time," he said. "But I saw that life goes on."[2]

"THINGS ARE BAD WITH BREAD"

One of the lasting ironies of the Soviet Union was that while the communist system was almost synonymous with force-paced industrialization, its economy in its final decades was so heavily dependent on vast natural resources—oil and gas in particular.

The economic system that Joseph Stalin had imposed on the Soviet Union was grounded in central planning, five-year plans, and self-sufficiency—what Stalin called, "socialism in one country." The USSR was largely shut off from the world economy. It was only in the 1960s that the Soviet Union reemerged on the world market as a significant exporter of oil and then, in the 1970s, of natural gas. "Crude oil along with other natural resources were," as one Russian oil leader later said, "nearly the single existing link of the Soviet Union to the world" for "earning the hard currency so desperately needed by this largely isolated country."[3]

By the end of the 1960s, the Soviet economy was showing signs of decay and incapacity to maintain economic growth. But, as a significant oil exporter, it received a huge windfall from the 1973 October War and the Arab oil embargo: the quadrupling of oil prices. The economy further benefitted in the early 1980s when oil prices doubled in response to the Iranian Revolution. This surge in oil revenues helped keep the enfeebled Soviet economy going for another decade, enabling the country to finance its superpower military status and meet other urgent needs.

At the top of the list of these needs were the food imports required, because of its endemic agricultural crisis, in order to avert acute shortages, even famine, and social instability. Sometimes the threat of food shortages was so imminent that Soviet premier Alexei Kosygin would call the head of oil and gas production and tell him, "Things are bad with bread. Give me three million tons [of oil] over the plan."

Economist Yegor Gaidar, acting Russian prime minister in 1992, summed up the impact of these oil price increases: "The hard currency from oil exports stopped the growing food supply crisis, increased the import of equipment and consumer goods, ensured a financial basis for the arms race and the achievement of nuclear parity with the United States and permitted the realization of such risky foreign policy actions as the war in Afghanistan."[4]

The increase in prices also allowed the Soviet Union to go on without reforming its economy or altering its foreign policy. Trapped by its own inertia the Soviet leadership failed to give serious consideration to the thought that oil prices might fall someday, let alone prepare for such an eventuality.

"DEAR JOHN—HELP!"

Mikhail Gorbachev came to power in 1985 determined to modernize both the economy and the political system without overturning either. "We knew what kind of country we had," he would say. "It was the most militarized, the most centralized, the most rigidly disciplined; it was stuffed with nuclear weapons and other weapons."

An issue that infuriated him when he came into office—women's pantyhose—symbolized to him what was so wrong. "We were planning to create a commission headed by the secretary of the Central Committee . . . to solve the problem of women's pantyhose," he said. "Imagine a country that flies into space, launches Sputniks, creates such a defense system, and it can't resolve the problem of women's pantyhose. There's no toothpaste, no soap powder, not the basic necessities of life. It was incredible and humiliating to work in such a government."

But Gorbachev had very bad luck in timing. In 1986, one year after his ascension, oversupply and reduced demand on the world petroleum market triggered a huge collapse in the oil price. This drastically reduced the hard currency earnings that the country needed to pay for imports.

Even though the Soviet oil industry—which was now centered in West Siberia—continued to push up output, it was not enough to bail out the sinking economy. At the same time, Gorbachev was relaxing the grasp of communist repression on the society.[5]

While the collapse in oil prices was the "final blow," as Yegor Gaidar has written, the failure was of the system itself. "The collapse of the Soviet system," he said, "had been preordained by the fundamental characteristics of the Soviet economic and political system," which "did not permit the country to adapt to the challenges of world development in the late twentieth century. "High oil prices was not a dependable foundation for preserving the last empire."

By the end of the 1980s and the beginning of the 1990s, the word "crisis"

in government and party documents was being replaced by "acute crisis," and then by "catastrophe." Food shortages were severe. At one point, the city of St. Petersburg nearly ran out of dairy products for children.

In November 1991, Gorbachev asked one of his aides to send British prime minister John Major, at that time head of the G7 group of industrial nations, a three-word message—"Dear John, Help!"[6]

It was just a month later that Gorbachev went on television to announce the dissolution of the Soviet Union.

A NEW RUSSIA: "NO ONE'S AT THE CONTROLS"

From January 1, 1992, Russia was an independent state, a huge one, traversing eleven time zones. The centrally planned socialist economy of the Soviet Union, where virtually every action in the entire economy was the result of bureaucratic decisions, had disintegrated, leaving economic chaos and uncertainty. There was no rule of commercial law, no basis for contracts, no established channels or rules for trade. Barter became the order of the day, not just for newly emerging traders and merchants out on the streets or working out of their apartments, but also factories, which traded goods and output back and forth as though it were all currency. It was also a free-for-all, a mad scramble, as most of the commercial assets of the state and of the *narod*—the Soviet people—were now up in play. It was a frightening time for the populace and a time of great hardship: their pensions and salaries, if paid at all, lost their value; and the low, but guaranteed, level of economic security on which they counted was disappearing before their eyes.

It was also frightening for the young reformers who came to power under Russian president Boris Yeltsin. "A nuclear superpower was in anarchy," said Gaidar, who was Yeltsin's first finance minister. "We had no money, no gold, and no grain to last through the next harvest, and there was no way to generate a solution. It was like travelling in a jet and you go into the cockpit and you discover that there's no one at the controls." The reformers couldn't even get into government computers because the passwords had been lost during the collapse.

There were two urgent needs in those days. One was to stabilize the economy, renew the flow of goods and services, keep people fed and warm, and establish foundations for trade and a market economy. The other was to figure out what to do with all the factories and enterprises and resources—the means of production that the government owned—and somehow move them into some other form of ownership—private ownership, which was more productive and appropriate to a market economy. Since the state owned most everything, it meant that all the assets of the Soviet Union were up for grabs.

And they were being grabbed. As President Yeltsin put it, the economic assets of the state were being privatized "wildly, spontaneously, and often on a criminal basis." He and his team of reformers were determined to regain control, to break up whatever remained from the command-and-control economy, and to replace it with a new economic system based upon private property. The objectives of privatization were not only economic; they also wanted to forestall any return to the communist past by removing assets from state control as quickly as possible. To make matters even more difficult, this economic upheaval took place against a backdrop of political turmoil: a standoff between the Yeltsin administration and the State Duma, or parliament, including a violent "siege" of the Duma; the first Chechnya war; and a 1996 presidential election that, until late in the campaign, seemed likely to end with a victory by resurgent communists.

The Soviet system had left many valuable legacies—a huge network of large industrial enterprises (though stranded in the 1960s in terms of technology); a vast military machine; and an extraordinary reservoir of scientific, mathematical, and technical talent, although disconnected from a commercial economy. The highly capable oil industry was burdened with an ageing infrastructure. Below ground lay all the enormous riches in the form of petroleum and other raw materials that Gorbachev had cited in his farewell address.[7]

RECONSTRUCTING THE OIL INDUSTRY

These natural resources—particularly oil and natural gas—were as critical to the new Russian state as they had been to the former Soviet Union. By the middle 1990s, oil export revenues accounted for as much as two thirds of the Russian government's hard currency earnings. What happened to these revenues

"dominated Russian politics and economic policy throughout the 1990s and into the 2000s." Yet the oil sector was swept up in the same anarchy as the rest of the economy. Workers, who were not being paid, went on strike, shutting down the oil fields. Production and supply across the country were disrupted. Oil was being commandeered or stolen and sold for hard currency in the West. No one even knew who really owned the oil. Individual production organizations in various parts of West Siberia and elsewhere were busily declaring themselves independent and trying to go into business for themselves. The industry was suddenly being run by "nearly 2000 uncoordinated associations, enterprises and organizations belonging to the former Soviet industry ministry." Amid such disruption and starved for investment, Russian oil output started to slip, and then collapse. In little more than half a decade, Russian production plummeted by almost 50 percent—an astonishing loss of more than 5 million barrels a day.

Privatization here, too, would be the answer. But how to do it? The oil industry was structured to meet the needs of a centrally planned system. It was organized horizontally, with different ministries—oil, refining and petrochemicals, and foreign trade—each controlling its segments of the industry. The resources industry was as important to the new state as to the old and had to be handled differently from the other privatizations.

One person with clearly thought-through ideas about what to do was Vagit Alekperov. Born in Baku, he had worked in the offshore Azerbaijani oil industry until transferring at age twenty-nine to the new heartland of Soviet oil, West Siberia. There he came to the attention of Valery Graifer, then leading West Siberia to its maximum performance. Recognizing Alekperov's capabilities, Graifer promoted him to run one of the most important frontier regions in West Siberia. In 1990, Alekperov leapfrogged to Moscow, where he became deputy oil minister.

On trips to the West, Alekperov visited a number of petroleum companies. He saw a dramatically different way of operating an oil business. "It was a revelation," he said. "Here was a type of organization that was flexible and capable, a company that was tackling all the issues at the same time—exploration, production, and engineering—and everybody pursing the common goal, and not each branch operating separately." He came back to Moscow convinced that the typical organization found in the rest of the world—vertically integrated companies with exploration and production, refining and marketing all in one company—was the way to organize a modern oil industry. Prior to the collapse of the Soviet Union, his efforts to promote a vertically integrated state-owned oil company were rebuffed. Opponents accused him of "destroying the oil sector." He tried again after Russia became an independent state. For to stay with the existing setup, he said, would result in chaos.[8]

In November 1992, President Yeltsin adopted this approach in Decree 1403 on privatization in the oil industry. The new law provided for three vertically integrated oil companies—Lukoil, Yukos, and Surgut. Each would combine upstream oil production areas with refining and marketing systems. They would become some of the largest companies in the world. The state would retain substantial ownership during a three-year transition period, while the new companies tried to assert control over now semi-independent individual production groups and refineries; quell rebellious subsidiaries; and capture control over oil sales, oil exports, and the hard currency that came from these transactions. The controlling shares for other companies in the oil industry were also parked for three years in what was to be a temporary state company, Rosneft, buying time for decisions about their future.

This restructuring would have been hard to do under any circumstances. It was very hard to do in the early and mid-1990s, when the state was very weak and law and order was in short supply. There was violence at every level, as Russian *mafyias*—gangs, scarily tattooed veterans of prison camps, and petty criminals—ran protection rackets, stole crude oil and refined products, and sought to steal assets from local distribution terminals. As the gangs battled for control, a contract, all too often, referred not to a legal agreement but to a hired killing. In the oil towns, the competing gangs tried to take over whole swaths of the local economy—from the outdoor markets to the hotels and even the train stations. The incentives were clear: oil was wealth, and getting control of some part of the business was the way to quickly amass wealth on a scale that could not even have been dreamed about in Soviet days, just a few years earlier.[9]

But eventually the state reasserted its police powers, and the newly established oil companies built up their own security forces, often with experienced veterans of the KGB, and the bloody tide of violence and gang wars began to recede.

LUKOIL AND SURGUT

Meanwhile, following on Yeltsin's privatization decree, the Russian oil majors were beginning to take shape.

The most visible was Lukoil. Vagit Alekperov, equipped with a clear vision of an integrated oil company, set about building it as quickly as possible. The first thing was to pull together a host of disparate oil production organizations and refineries that had heretofore had no connection. He barnstormed around the country trying to persuade the managements of each organization to join this unfamiliar new entity called Lukoil. In order for Lukoil to come into existence, every single entity had to sign on. "The hardest thing was to convince the managers to unite their interests," said Alekperov. "There was chaos in the country, and we all had to survive, we had to pay wages, and keep the entities together. Without uniting, we would not be able to survive." They heard the message, all signed on, and Lukoil became a real company.

Alekperov recognized the heavy burdens that the new Russian companies carried—what he called their "Soviet legacy" of "aged equipment along with obsolete manpower and production management systems." Lukoil had to target "the best international practices." From the beginning, Alekperov put in place international standards and used international law firms, accountants, and bankers. In 1995 the chief financial officer of the American oil company ARCO came across an article about Lukoil in the *Economist* magazine. He found it intriguing enough that he followed up, and ARCO subsequently bought a share of Lukoil. From the early days, Lukoil also pursued an international strategy, first in the other new nations of the former Soviet Union and then in other parts of the world.

If Lukoil was the most international of the new Russian majors, Surgut was the most decidedly Russian. Its CEO, Vladimir Bogdanov, was called the "hermit oil man" by some. He had been born in a tiny Siberian village, made his name as a driller in Tyumen, and the enterprise he managed there became the basis of what emerged as Surgutneftegaz, better known by its short name, Surgut. He never moved to Moscow, instead keeping Surgut's headquarters in the city of Surgut. As he once explained, he liked to walk to work.[10]

Both Lukoil and Surgut were run by people who would have been qualified as "oil generals" under the Soviet system.

YUKOS: THE SALE OF THE CENTURY

Very different was a company called Yukos. It was one of the first oil companies to be run by one of the new oligarchs who had emerged not from the oil industry but out of the chaotic barter economy.

Mikhail Khodorkovsky had started off with orthodox Soviet ambitions: as a child, he announced that his objective was to rise to the highest levels of the Soviet industrial system and achieve the vaunted position of factory director. Later, while a student at the Mendeleev Institute for Chemistry, he jumped into business as a leader of the school's Komsomol, the communist youth organization, turning it into a commercial organization. He then moved into trading in imported computers and software and then, in the late 1980s, set up a bank called Menatep, which would soon be regarded as serious enough to be entrusted with government accounts. It also provided finance to one of the new oil companies, Yukos.

Khodorkovsky soon concluded that oil was an even better business than banking. The timing was right. By 1995 the Russian government was desperately short of funds, and some of the new businessmen and the Yeltsin government came up with a solution that went by the name of "loans-for-shares." Businessmen would loan the Russian government money, taking highly discounted shares in petroleum and other companies as collateral. When the government, as anticipated, defaulted on the loans, the shares would end up as the property of the lenders. They would thus control these new companies. The government meanwhile got the short-term funding it needed to keep afloat prior to the 1996 presidential election. It was certainly an unusual way to privatize assets, and loans-for-shares was immortalized as the "sale of the century." Khodorkovsky lent the Russian government $309 million and won control of Yukos's shares.[11]

Khodorkovsky set about task number one, which was to gain control of the flows of oil and money, which seemed to be going in all directions. Khodorkovsky had never attended the Gubkin Institute or any of the other Soviet oil academies, and he had no particular attachment to the Soviet approach to field development. And so he turned to Western oil field service companies to come in and apply Western development techniques, rather than Soviet techniques, to the oil fields. This would lead to dramatic improvements in output. (It would also, in later years, come back to haunt him, during his confrontation with the Russian government, with charges that he had violated recognized and sound "Russian" oil field production practices.) As his wealth and influence magnified, so did his ambitions.

These companies—Lukoil, Surgut, and Yukos—were the three majors. They were not alone by any means. There remained the state company, Rosneft; six "mini-majors"; and a number of other companies, including those owned or sponsored by oil-rich regional governments.

One of the mini-majors was TNK. A consortium of owners, the AAR group, came together to buy the company in 1997. They would become among the country's most prominent oligarchs. Three of them came from the Alfa Bank. Mikhail Fridman was a graduate of the Institute of Steel and Alloys. He had worked for a couple of years in a factory, but when it became possible to go into business in the late 1980s, he jumped in, starting a dizzying host of enterprises, ranging from a photo coop to window washing. Despite the chaos and being told that his businesses could not succeed, Fridman later said, "we did have an internal conviction." His partner German Khan, another graduate of the Institute of Steel and Alloys, ran what became the oil trading part of their new enterprise and would remain the most focused on the oil business itself. The money they made from trading commodities enabled them to set up the Alfa Bank. A third partner was Peter Aven, who had already established his reputation as an academic mathematician and had been minister of foreign trade in the early 1990s.

The other members of the consortium included Viktor Vekselberg, who trained in transportation engineering, and Len Blavatnik, who had emigrated to the United States at age 21 and worked his way through Harvard Business School after a stint as a computer programmer. Blavatnik made his first trip back to the Soviet Union in 1988. It was a different country. He returned again in 1991—now it was Russia—and became serious about investing in a newly independent Russia, which led him to join up with the others in TNK. For its part, TNK controlled half the Samotlor oil field in western Siberia. It was a most desirable jewel—among the half dozen largest oil fields in the world.

There was another prominent company—Sibneft, as in Siberian Oil.

This was the most classic of the loans-for-shares deals. Roman Abramovich, who had been trading everything from oil to children's toys, teamed up with Boris Berezovsky and lent $100 million to the impoverished Russian government for half the company. When, as anticipated, the government failed to repay the loans, these oligarchs had control. Berezovsky went into political exile after falling out with President Vladimir Putin. Abramovich followed a different path. He took on the additional duties of governor of an impoverished region in the Russian Far East. Abramovich eventually sold Sibneft to the Russian gas giant Gazprom and moved to England, where he was said to be the second-richest person in the country, exceeded only by the Queen herself.[12]

Overall, by 1998, within six years of the collapse of the Soviet Union, the Russian oil industry had gone from a system run by a series of ministries and subordinated to central planning to a system of large vertically integrated companies, organized, at least in rough outline, similarly to the traditional companies in the West. During these years, they all operated largely autonomously from the state. Eventually the Russian Federation would have five large energy companies, each of whose oil reserves were comparable to the size of the largest western majors.

The development of these companies was more than just a wholesale reconstruction of the Russian oil industry. It also brought visible changes in the larger cities. In Soviet times, those few lucky enough to own automobiles had to search out the rare and hard-to-find dingy service stations on the outskirts of the city. But now new, modern service stations were springing up at intersections and alongside the highways, bedecked with shiny corporate logos—Lukoil, Yukos, Surgut, TNK, and a number of others. The stations came equipped not only with high octane gasoline of dependable quality, but also in many cases things that people never expected to see, like convenience stores and, even more remarkable, automatic car washes. All of that would also have been unimaginable in Soviet times.

OPENING UP

How did this new Russian oil industry look to the rest of the world? In 1992 the head of one of the world's largest state-owned oil companies was asked what he thought about Russia and all the changes that were happening there. His

answer was very simple. "When I think of Russia," he said without a pause, "I think of it as a competitor."

Others saw opportunity. For many decades after the 1917 Bolshevik Revolution, the Soviet Union had been closed off, an almost forbidden place, another world. The Soviet oil industry operated largely in isolation, with little of the flow of technology and equipment that was common in the rest of the world.

In the late Gorbachev years, at the end of the 1980s, the Soviet Union started to open the doors to joint ventures with Western companies. The objective was to bring in the technology it needed to improve the performance of the Soviet industry. Then came the collapse of the Soviet Union. This provided a vast new prospect to Western companies: the potential to participate in a region rich with hydrocarbons, perhaps comparable to the Middle East in the scale of resources, and world-class opportunities. They dispatched teams to research these opportunities.

Some concluded that, whatever the "Russian risk," they simply could not afford not to be in Russia. "When you looked at the opportunity, you became enthusiastic," recalled Archie Dunham, then CEO of the U.S. major Conoco. "It was just a huge opportunity." But, as time went on, the Western companies learned how difficult it was to work in the Russian Federation. As Dunham added, "You had a rule of law problem, you had a tax problem, and you had a logistical problem."

The uncertain political environment, the shifting cast of characters, the corruption, the security risks, the opaque and constantly changing rules, the uncertainty as to "who was who" and "who was behind who"—all of these made others more reluctant. "We had opportunities all over the world," said Lucio Noto, CEO of Mobil. "Once you sink a couple of billion dollars into the ground, you can't move it."[13]

When the Western companies looked across the panorama—at the operating conditions, the equipment, and the fields—they saw an industry that was suffering from decades of isolation and that lacked the most up-to-date equipment, advanced skills, and sufficient computing power. They recognized that Russian geoscientists were at the forefront of their disciplines, but that, in Russia, "theory" was quite separated from "practice." They also saw the dire situation in the Russian oil fields and the desperate need for investment. The Westerners were convinced that they would be welcome because they brought technology, capital, expertise, and management skills. That is not how Russian oil people looked at it, however. They took great pride in what the Soviet industry had accomplished, they were confident in their own skills, and they enormously resented the implication that they were not up to world standards. The Russian industry, in their view, did not need outsiders telling them what to do. Nor did it need substantial direct foreign participation in order to transfer technology. If the Russians needed technology, they could buy it on the world market from service companies.

Neither the government nor the emerging Russian business and political classes saw any reason to give up control over any substantial resources to Western companies. They may not have agreed among themselves as to who would ultimately own those resources and control the wealth so generated, but the one thing on which they could all agree was that it should not be the foreigners.

The major Western companies could not operate on any scale (with one major exception) in the core; that is, the traditional areas of current large production, the "brown fields" of West Siberia. Rather it was in those the areas where there was little development and major technical challenges to be overcome and where the Western companies thus had competitive advantage in terms of technology and execution of complex projects.

THE PERIPHERIES

In partnership with Lukoil, Conoco took on a project in the northern Arctic region. Conoco brought the know-how to Russia it had learned from Alaska, where new technologies had been developed in order to minimize the footprint in Arctic regions. Even so, the Polar Lights project was constantly bedeviled by an endless profusion of new tax charges and new regulations. The local regional boss, a former snowmobile mechanic, was known to demand a payment every time a new permit came up. Finally, Conoco had to tell Moscow that it was going to pull out altogether if the "extra-contractual" demands did not cease.[14]

Both Exxon and Shell went to Sakhalin, the six-hundred-mile-long island off the coast of Russia's far east, north of Japan, where there was some minor onshore production. While the technical challenges were immense there, so was the apparent potential, especially offshore. Though the region was almost totally devoid of the infrastructure that the planned megaprojects would need, it had other important advantages. Sakhalin was as far from Moscow as one could get and still be in Russia. It was also on the open sea, so that output could be exported directly to world markets.

Exxon became the operator for a project that also included the Russian state company Rosneft, Japanese companies, and India's national oil company. Within ExxonMobil, some considered this the most complex project that the company had ever undertaken up to that time—working in a remote, undeveloped subarctic area, where icebergs are a chronic problem, winds are hurricane strength for several months a year, and temperatures can drop to −40° or even lower. The conditions were so difficult, in fact, that work could only be done for five months a year. In the middle of development, as new complexities emerged, the engineers concluded that they needed to go back and redesign the whole project. The project, initially scoped out in the early 1990s, took a decade before it produced "first oil" and a decade and a half before it reached full production—all this at a cost approaching $7 billion.[15]

Shell's Sakhalin-2 also began in the early 1990s with the same environmental challenges. It would prove to be the largest combined oil and gas project in the world, not just a megaproject, but equivalent to five world-class megaprojects in scale and complexity. Shell faced the additional challenges of building two five-hundred-mile pipelines—one oil and one gas—that had to cross more than a thousand rivers and streams, through terrain frozen in the winter and soggy in the summer. To get the oil and gas to export facilities ended up costing more than $20 billion.

IN THE HEARTLAND

Only one Western company managed to gain a significant position in the heartland, West Siberia. Sidanco was a second-tier Russian major that had been bought by a group of oligarchs in one of the loans-for-shares deals in 1995. It had one jewel: partial ownership (along with TNK) of Samotlor, the largest oil field in West Siberia. BP bought ten percent of Sidanco for $571 million in 1997. Some members of BP's board thought it was a harebrained scheme; it was hard to make the case that Russia was a country with rule of law. But BP chief executive John Browne argued it was the only obvious way to get into West Siberia, and Russia was central to BP's overall global strategy. Nonetheless, he added, "we should consider it an outright gamble. We could lose it all."[16]

It soon appeared that Browne's caveat was even more warranted than he might have anticipated. For strange things began to happen. Under the guise of a newly approved Russian bankruptcy law, subsidiaries of Sidanco kept disappearing in a series of bankruptcy proceedings in various out-of-the-way Siberian courts. It became apparent that these were manufactured bankruptcies. The "creditors" were proving very adept at taking advantage of provisions in Russia's new bankruptcy law to take ownership of the subsidiaries. It looked as though Sidanco might end up a shell, and BP with little or nothing to show for its $571 million.

In due course it emerged that what was going on was a struggle between two groups of oligarchs who had jointly participated in the original loans-for-shares acquisition of Sidanco and then had a bitter falling-out. The AAR group believed that its partner, Interros, had tricked it into selling out at a greatly discounted price prior the BP deal. And now AAR wanted back in. BP was really a bystander, but its prospects for protecting its position in Russia did not look at all good. Outside Russia was a different matter. AAR also owned TNK. At this point, TNK had very few financial resources of its own but needed considerable investment to maintain and develop its share of Samotlor. So it was turning to Western credit markets to finance its activities. But then Western credit lines, on which TNK depended, were one after another shutting down. TNK could certainly prevail within Russia, but BP held high cards and influence outside Russia. That was sufficient to force the parties to the negotiating table: the dissident oligarchs and their company TNK gained a major share of Sidanco. Yet BP had preserved its role as the only Western company to have found a way into a significant position in the heartland of Russian oil—in West Siberia.

By this time, politics in Russia had changed, and so had the position of the Russian government.

"A GREAT ECONOMIC POWER"

With the end of the Cold War, Vladimir Putin, who had been a KGB officer stationed in Dresden in East Germany, returned to his home town of St. Petersburg and joined the city government. When the reformist mayor for whom he worked as a deputy mayor was defeated, Putin was without a job. Then his country house burned down. He enrolled to do a doctorate in the St. Petersburg Mining Institute. His studies there would help shape his view of Russia's future.

In 1999, Putin published an article in the institute's journal on "Mineral Natural Resources" that argued that Russia's oil and gas resources were key to economic recovery and to the "entry of Russia into the world economy" and for making Russia "a great economic power." Given their central strategic importance, these resources had to be, ultimately, under the aegis, if not direct control, of the state.

By the time the article was in print, Putin himself was already in Moscow, rapidly ascending in a series of jobs—including head of the FSB, successor to the KGB, and then prime minister. On the last day of December 1999 Boris Yeltsin abruptly resigned and Vladimir Putin, without a job just three years earlier, became Russia's acting president.

In July 2000, two months after his official election, Putin met in the Kremlin with some of the rich and powerful businessmen known by then as oligarchs. He very clearly laid down the new ground rules. They could retain their assets, but they were not to cross the line to try to become kingmakers or in other ways control political outcomes. Two of the oligarchs who did not listen closely were soon in exile.

TNK-BP "50/50"

Once its deal with TNK had been concluded, BP began looking at the possibility of a merger of interests. Given their recent struggle over Sidanco, there was wariness on both sides. After intense negotiations, the two groups agreed to combine their oil assets in Russia with 50/50 ownership of the new firm, TNK-BP. BP wanted 51 percent, but this was never going to be possible. As

John Browne later said, "We could not have it." On the other hand, it could not go ahead in a minority position of 49 percent. The result was equal ownership. President Putin gave his approval, though with a word of advice. "It's up to you," he said to Browne. But he added, "An equal split never works." The deal went forward. At a ceremony in Lancaster House in London in 2003, Browne and Fridman signed documents for the new company, with Vladimir Putin and British Prime Minister Tony Blair standing behind them, overseeing the signatures. The new TNK-BP represented the largest direct foreign investment in Russia. At the same time it was a Russian company. The new combination modernized the oil fields and increased production rapidly. It also increased BP's total reserves by a third, and it pushed BP ahead of Shell to be the second largest company, after ExxonMobil. But a few years later, bearing out Putin's adage, a fierce battle erupted over control and as to exactly what 50/50 meant. Eventually, after much tension, the two sides came to a new compromise that modified the governance, shifting the balance toward the Russian partners while preserving BP's position. Mikhail Fridman became the new CEO.[17]

YUKOS

By the time of Putin's election in 2000, Mikhail Khodorkovsky of Yukos was already on his way to becoming the richest man in Russia. He had the reputation as an aggressive and ruthless businessman; but with the beginning of the new century he seemed to be remaking himself. He would compress three generations—ruthless robber baron, modernizing businessman, and philanthropist—into one. He brought in Western technology to transform Yukos into a far more efficient company. By importing Western-style corporate governance and listing his company on Western exchanges, he could greatly increase the valuation of Yukos and thus multiply his wealth several times over. Through his Open Russia Foundation, he became the biggest philanthropist in Russia, supporting civic and human rights organizations.

His spending on politics was also well known, indeed almost legendary in its extent, most notably in the money spent to ensure that deputies in the Duma voted exactly the way he wanted on tax legislation in May 2003. He seemed to be pursuing his own foreign policy. He negotiated directly with China on building a pipeline, bypassing the Kremlin on something of great strategic importance, and on which Putin had very different views. He was moving fast to acquire Sibneft, one of the other new Russian oil majors, which would make Yukos possibly the largest oil company in the world. And he was in talks with both Chevron and ExxonMobil about selling controlling interest in Yukos. When Putin met with the CEO of one of the western companies, he had many, many questions about how a deal would work and what it would mean. For it would have moved control over a substantial part of the country's most important strategic asset, oil, out of Russia, which ran exactly counter to the principle that he had laid down in his 1999 article.

While moving on all these fronts at the same time, Khodorkovsky let it be widely known that he was prepared to spend money to move Russia toward being a parliamentary rather than a presidential democracy, with the implication that he intended to become prime minister. Selling part of Yukos would give him many billions of dollars that could go into that campaign.

And then there was what turned into a heated exchange with Putin at a meeting with the industrialists that was captured on video. "Corruption in the country is spreading," said Khodorkovsky. To which an angry Putin reminded him that he had won control over huge oil reserves for very little money. "And the question is, how did you obtain them?" said Putin. He then added, "I'm returning the hockey puck to you."[18]

Several months later, in July 2003, one of Khodorkovsky's business partners was arrested, and then others. Some of his advisers, fearing that he was becoming increasingly unrealistic, warned him to proceed with care, but he seemed to disregard them. On a visit to Washington in September 2003, he said that he thought there was a 40 percent chance he would be arrested. But he gave the impression that he did not believe that the real odds were anywhere near that high.

In the autumn of 2003, Khodorkovsky embarked on what looked like a campaign swing, with speeches and interviews and public meetings in cities across Siberia. In the early morning of October 23, his plane was on the ground in Novosibirsk, where it had stopped for refueling. At 5 a.m. FSB agents burst in and arrested him. In the spring of 2005, after a lengthy trial, Khodorkovsky was convicted of tax fraud and sent to a distant and isolated Siberian prison camp. In 2011, a second trial for embezzlement extended his sentence. By then, the case had become an international cause, exemplified when, after the trial, Amnesty International selected him as a "prisoner of conscience."

As for Yukos, it was no more. It was dismantled and became a noncompany and was absorbed into Rosneft, which is now Russia's largest oil company and, largely owned by the government, the national champion.

"STRATEGIC RESOURCES"

"Strategic resources" came to the fore in other ways as well. ExxonMobil's Sakhalin-1 project had a Russian company as partner, Rosneft. But Shell's Sakhalin-2 did not. Gazprom may have been the largest gas company in the world, but it had no representation in liquefied natural gas (LNG), and no capacity to market to Asia. Over several months in 2006, the Sakhalin-2 project was charged with a litany of various environmental violations that carried a variety of penalties, some of them severe. At the end of December 2006, Shell and its Japanese partners accepted Gazprom as majority shareholder. The project thereafter continued on course and in 2009 began exporting LNG to Asia and even as far away as Spain.

OIL AND RUSSIA'S FUTURE

By the second decade of the twenty-first century, Russia was back as an oil producer. Its output was as high as it had been in the twilight of the Soviet Union, two decades earlier, but on very different terms. The oil industry was integrated technologically with the rest of the world; and it was no longer the province of a single all-encompassing ministry, but rather was operated by a variety of companies with many differences in leadership, culture, and approaches. When it was all added up, Russia was once again the largest producer of oil and the second largest exporter in the world.

Once, as Russian production and oil revenues were ramping up, Vladimir Putin was asked if Russia was an energy superpower. He replied that he did not like the phrase. "Superpower," he said, was "the word we used during the Cold War," and the Cold War was over. "I have never referred to Russia as an energy superpower. But we do have greater possibilities than almost any other country in the world. If put together Russia's energy potential in all areas, oil, gas, and nuclear, our country is unquestionably the leader."

Certainly Russia's energy resources—and its markets—put it in a position of preeminence; and with a new uncertainty about the Middle East, it took on a renewed salience as an energy supplier and in terms of energy security.

Oil and gas were also what powered its own economy. As Putin had written in his 1999 article, they had indeed been the engine of Russia's recovery and growth—and the number one source of government revenues. High prices meant even more money flowing into the nation's treasury. The country's demographics made those revenues even more critical—in order to meet the pension needs of an aging population.

But the heavy reliance on oil and gas stirred a national debate about the country's heavy dependence on that one sector and about the need for "modernization," which meant, in part, diversification away from hydrocarbons. But modernization was hard to achieve without broad-ranging reforms of the economy and legal and governmental institutions, along with a nurturing of a culture of entrepreneurship. Some argued that high oil prices, by creating a cushion of wealth, made it easier to postpone reform. Whatever the progress on modernization, oil and gas would continue to be the country's greatest source of wealth for some years to come, as well as an arena in its own right for advanced technology.

But the very importance of oil and gas highlighted a different kind of risk: would Russia be able to maintain its level of output or was another great decline in the offing? The latter would threaten the economy. Some argued that Russia would not be able to sustain production without big changes—a step up in new investment, a tax regime that encouraged investment, augmentation of technology, and, of critical importance, the development of the "next generation" of oil and gas fields. One of the major targets for that next generation was the offshore, particularly in the Arctic regions, off the northern coast of Russia.

Developing those frontier regions would be challenging and costly and even more complex than the Sakhalin projects. Once again, here was the potential for a significant role for international companies. These would be the projects for which Western partners would be sought, especially the large majors with their capabilities to execute projects on that scale. Yet undertaking them would require considerable confidence on both sides. For these would be very long-term relationships; the development time would be measured not in years, but decades, and their full impact would likely be felt nearer the middle of the twenty-first century, rather than the beginning. But that was still prospect.

For the Western companies—save for those long-range projects in places like the Arctic—there was not much more in the way of large opportunities beyond what had already been launched in the 1990s. As things had turned out, the early expectations about Russia had proved to be much larger than the reality.

When it came to oil and gas, however, there had been more opportunity to be found in the former Soviet Union than just in the Russian Federation. Much more. And it was to the rest of the region that attention had also turned in the late 1980s and early 1990s as the Soviet system was disintegrating.

2

THE CASPIAN DERBY

In the late 1980s and the beginning of the 1990s, as the Soviet Union started to come unhinged, the first Western oil men had begun to drift down toward the south, to the Caspian and into Central Asia, into what would after 1991 become the newly independent countries of Azerbaijan, Kazakhstan, and Turkmenistan.

Historically, the most important city on the Caspian coastline was Baku. A century earlier, Baku had been a hub of great commercial and entrepreneurial activity, with grand palaces, built by nineteenth-century oil tycoons, and one of the world's great opera houses. But what these arriving oil men now found instead, amid the splintering of the Soviet Union, were the remnants of a once-vibrant industry and what seemed almost like a museum of the history of oil.

The interaction between these oil men and the newly emerging nations would help wrest these countries out of their isolated histories and connect them to the world economy. The results would redraw the map of world oil and bring into the global market an oil region that, by the second decade of the twenty-first century, would rival such established provinces as the North Sea, and would include the world's third-largest producing oil field.

The development of the Caspian oil and natural gas resources was inextricably entangled with geopolitics and the ambitions of nations. It would also help define what the new world—the world after the Cold War—would look like and how it would operate.

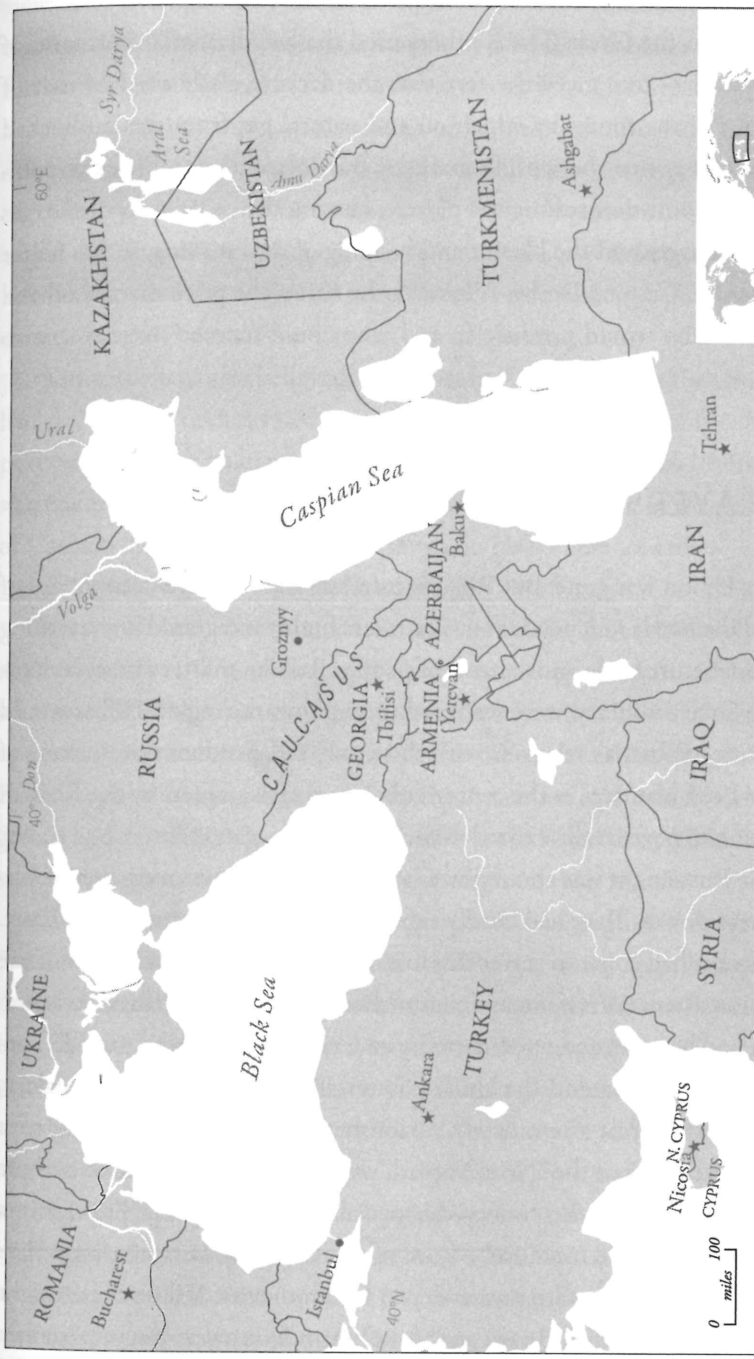
At the center is the Caspian Sea itself, the world's largest inland body of water, with 3,300 miles of coastline. Though not connected to any ocean, it is salty, and also subject to sudden, violent storms. Azerbaijan is on its western shore. To the west of Azerbaijan are Georgia and Armenia—the three together constituting the South Caucasus. On the northwest side of the Caspian, above Azerbaijan, are Russia and its turbulent North Caucasus region, including Chechnya. On the northeast side of the Caspian is Kazakhstan; and, on the southeast, Turkmenistan. On the southern shore is Iran, with ambitions to be a dominant regional power and with interests going back to the dynasties of the Persian shahs.

THE NEW GREAT GAME

The fierce vortex of competing interests in this region came to be known as the new "Great Game." The term had originally been attributed to Arthur Conolly, a cavalry officer in the British army in India turned explorer and spy, whose unfortunate end in 1842—he was executed by the local ruler in the ancient Central Asian town of Bukhara—captured both the seriousness and futility of the game. But it was Rudyard Kipling who took up the phrase and made it famous in *Kim,* his novel about a British spy and adventurer, at the front line in the late nineteenth century in the contest with the Russian Empire.[1]

But this purported new round in the Great Game, at the end of the twentieth century, included not just Russia and Britain, the two main contenders from the first round in the nineteenth century, but many more—the United States, Turkey, Iran, and, later, China. And of course the newly independent countries themselves were players, intent on balancing among these various contending forces to establish and then preserve their independence.

Then there were the oil and gas companies, eager to add major new reserves and determined not to be left out. And hardly to be overlooked was the jostling of the wheelers-dealers, the operators, the finders, and the facilitators, all of them out for their cut. This is a grand tradition established in the first decades



CASPIAN SEA AND THE CAUCASUS: THE "NEWLY INDEPENDENT STATES"

The breakup of the Soviet Union reconnected a resource-rich region to world energy markets.

of the twentieth century by the greatest oil wheeler-dealer of them all, Calouste Gulbenkian, later immortalized as "Mr. Five Percent."

Rather than the Great Game, others used the less dramatic shorthand of "pipeline politics" to convey the fact that the decisive clash was not that of weapons but of the routes by which oil and natural gas from the landlocked Caspian would get to the world's markets. But to some, watching the collisions and the confusion among the players, hearing the cacophony of charges and countercharges and the bluster and banging of deal making, it was better described as the Caspian Derby. Whatever the name, the prize was the oil and natural gas—who would produce it, and who could succeed in getting it to market.

THE PLAYERS

The Soviet Union was gone. But Russian interests were not. The economies of Russia and the newly independent nations were highly integrated in everything from infrastructure to the movements of people. Russian military bases, as legatees of the Soviet military, were scattered throughout the region. What would be the nature of Russia's relations with the newly independent states, many of which had been khanates in the centuries before their conquest by the Russian Empire but had never really existed as modern nation-states?

For the Russians, it was about power and position and restoring their country as a great power. They had hardly expected the Soviet Union to fall apart. Many Russians had come to regret this loss and regarded the dissolution of the Soviet Union as a nation (if not as a communist state) as a humiliation, as something that had been foisted upon them by malevolent forces from outside, specifically in the view of some, the United States. Immediately after the breakup, they began to describe these newly established countries as belonging to a newly conceived region, the "Near Abroad," over which they wanted to reassert control. That very name also conveyed a special status with special prerogatives for Russia—and all the more so because of the large numbers of ethnic Russians who lived in what were now independent countries. While there might now be formal boundaries, Russia and these new nations were bound together by history, education, economic and military links, the Russian language, and

ideology and common culture—and a multitude of marriages. In Moscow's view, they belonged very much in Russia's sphere of influence and under its tutelage. Russians saw Western influence in the Near Abroad as an attempt to further undermine Russia and retard the restoration of its Great Power status.[2]

And there was the specific matter of oil. From the Bolshevik Revolution onward, the Caspian's petroleum resources had been developed by the Soviet oil industry with Soviet technology and Soviet investment. The Soviets had begun to bring on a very large, if also very difficult, new field in the Republic of Kazakhstan, and the Soviet oil generals had been talking, before the breakup, about renewed focus on the Caspian as a production area.

Some Russians also believed, or at least half believed, that the United States had deliberately orchestrated the collapse of the Soviet Union for the specific purpose of getting its hands on Caspian oil. Once, in the mid-1990s, the Russian energy minister was innocently asked what he thought of the development of Caspian oil. He pounded his fist down on his conference table.

"Eta nasha neft," he replied. "It's our oil."

For the United States and Britain, the consolidation of the newly independent nations was part of the unfinished business of the post–Cold War and what was required for a new, more peaceful world order. This was these nations' opportunity to realize the Wilsonian dream of self-determination. An exclusive Russian sphere of influence would, in the American and British view, be dangerous and destabilizing. Moreover, there was the risk of Iran's filling a vacuum, which, though not often stated, was very much on their minds.

The energy dimension also loomed large for Washington in the early 1990s. Saddam's grab for Kuwait and the Gulf War, just concluded, had once again demonstrated the risks of the world's overdependence on the Persian Gulf. If the Caspian could be reintegrated into the world energy industry, as it had been prior to World War I, if major new petroleum resources from the region could be brought to the world market, that would be a very large step in diversification of petroleum supplies, making a most significant contribution to global energy security. To be prevented was the flip side—these resources slipping back under exclusive Russian sway or, even worse, under Iranian influence.

Yet at the same time, building a new relationship with Russia was at the very top of the priorities of the Clinton administration, and so there was little desire to have that relationship damaged by competition for Caspian oil and a modern Great Game. In a speech called "A Farewell to Flashman" (Flashman being a fictional swashbuckling British military man in the nineteenth-century Great Game), U.S. Deputy Secretary of State Strobe Talbott sketched out the goal of stable economic and political development in a critical crossroads of the world, and warned against the alternative—that "the region could become a breeding ground of terrorism, a hotbed of religious and political extremism, and a battleground for outright war." He added, "It has been fashionable to proclaim . . . a replay of the 'Great Game' in the Caucasus and Central Asia . . . fueled and lubricated by oil." But, he said, "Our goal is to actively discourage that atavistic outcome." The Great Game, he added firmly, belonged "on the shelves of historical fiction." Yet it would be very challenging to modulate the clash of interests and ambitions in this strategic terrain.[3]

For Turkey, locked out of the region for centuries, the breakup of the Soviet Union was a way to expand its influence and importance and commerce across the Black Sea into the Caucasus and onto the Caspian Sea and beyond—and also to connect with the Turkic peoples of Central Asia. And, for the Islamic Republic of Iran, here was the opportunity to expand its political and religious influence north into the other countries on the Caspian Sea and into Central Asia and to seek to proselytize among Islamic peoples whose access to Islamic religion had been tightly constrained during Soviet times.

Azerbaijan was of particular importance to Iran. Over 7.5 million ethnic Azeris lived there, now with the opportunity to interact with the outside world, while an estimated 16 million Iranians, a quarter of Iran's total population, were also ethnically Azeri. Though generally tightly policed by Iran's ruling theocracy, many Iranian Azeris had direct family relations in Azerbaijan. So for the regime in Tehran, an independent Azerbaijan, as an example of a more tolerant, secular and potentially prosperous society and one connected to the West, was something to be feared as a threat to its own internal control.

China's interests developed more slowly, but they became progressively more significant as the rapid growth of its economy made energy an increasingly important issue. The Central Asian states were "next door," and they could be connected by pipelines, providing critical diversification. China increasingly made its impact felt, but less through politics and more through investment.

The newly independent states were hardly mere pawns. Their leaders were determined to solidify their power. Although there were considerable

differences among them, at home that meant what were essentially one-party states with power consolidated in the hands of the president. In foreign policy, the strategic objectives of these nations were very clear: maintain and consolidate their independence and establish themselves as nations. Whatever the differences in their views of the Kremlin, they did not want to find themselves reabsorbed one way or the other by the new Russian Federation. On the other hand, they were in no position to disengage from Russia or stoke its ire. They needed Russia. The connections were so many and so strong, and the geography so obvious. Moreover, they had to be concerned about their own ethnic populations in Moscow and the other Russian cities, whose remittances would become important components of their new national GNPs.

For many of the countries, oil and natural gas were potentially critical, an enormous source of revenues and the major driver of recovery and economic growth. The development of oil could bring in companies from many countries and generate not only cash but also political interest and support. As the Azeri national security adviser put it, "Oil is our strategy, it is our defense, it is our independence."[4]

If oil was the physical resource they needed for their survival as nation-states, they also required another kind of resource—wily diplomacy. For the game, always, required extraordinary skill in balancing in a difficult terrain. Azerbaijan, a secular Islamic state, was squeezed between Iran and Russia. Kazakhstan, with a huge territory but relatively small population, had to find its balance between Russia and an increasingly self-confident and rapidly growing China.

Yet in all the discussions about oil and geopolitics and great games, one could not lose sight of the more practical matters: that oil development took place not only on the stage of world politics but on the playing fields of the petroleum industry—on the computer screens of engineers and spreadsheets of financial analysts, in the fabrication yards where the rigs were built, and on the drilling sites and offshore platforms—where the key considerations were geology and geography, engineering, costs, investment, logistics, and the mastery of technological complexity. And the risk for the companies was large—not just political risk, but the inherent risk in trying to develop new resources that might be world class but also posed great enormous engineering challenges.

The companies had to operate against extremes of expectations. For at one point, the Caspian was celebrated as a new El Dorado, a magical solution, another Persian Gulf, a region of huge riches in oil and gas resources eagerly waiting for the drill bit. At another time, it was a huge disappointment, a giant bust, one great dry hole beneath the wet seabed. So in terms of expectations, too, one had to stay sober and keep one's balance.

"THE OIL KINGDOM"

In the late nineteenth century and early twentieth century, the Russian Empire, specifically the region around Baku on the Caspian Sea, had been one of the world's major sources of oil. Indeed, at the very beginning of the twentieth century, it had overtaken western Pennsylvania to be the world's number one source. Families with names like Nobel and Rothschild made fortunes there. Ludwig Nobel—brother of Alfred, the inventor of dynamite and endower of the Nobel Prizes—was known as the "Russian Rockefeller." It was Ludwig Nobel who conceived and built the world's first oil tanker, to transport petroleum on the stormy Caspian Sea. Shell Oil had been founded on the basis of oil from Baku, audaciously brought to world oil markets by an extraordinary entrepreneur and onetime shell merchant named Marcus Samuel. They shared the stage with prominent local oil tycoons of great influence.

The ascendancy of Baku would be undermined by political instability, beginning with the abortive revolution of 1905, what Vladimir Lenin dubbed the "great rehearsal." In the years immediately after, the region continued to be shaken by revolutionary activity. Among those most active was a onetime Orthodox seminarian from neighboring Georgia, Iosif Dzhugashvili, better known to the world as Joseph Stalin. As Stalin later said, he honed his skills as "a journeyman for the revolution" working as an agitator and organizer in the oil fields. What he did not add were his additional activities as a sometime bank robber and extortionist. It was thus with good reason that Stalin, recognizing the wealth that was to be extorted, anointed Baku as the "the Oil Kingdom."[5]

With the collapse of the Russian Empire at the outbreak of the Bolshevik Revolution during World War I, the region west of the Caspian Sea, including Baku, declared itself the independent Azerbaijan Democratic Republic. It established one of the first modern parliaments in the Islamic world. It was also the first Muslim country to grant women the right to vote (ahead of such

countries as Britain and the United States). But Lenin declared that his new revolutionary state could not survive without Baku's oil, and in 1920 the Bolsheviks conquered the republic, incorporating it into the new Soviet Union and nationalizing the oil fields.

That same year, however, Sir Henri Deterding, the head of Royal Dutch Shell, confidently declared, "The Bolsheviks will be cleared, not only out of the Caucasus, but out of the whole of Russia in about six months." It soon became evident, however, that the Bolsheviks were not going anywhere soon, and that Western companies had no place in the new Soviet Union.

When, in June 1941, Hitler launched his invasion of the Soviet Union, Azerbaijan was one of his most important strategic objectives—he wanted to get his hands on an assured supply of oil to fuel his war machine. "Unless we get the Baku oil, the war is lost," he told one of his generals. His forces got very close to Baku, but not close enough, owing to fierce resistance by the Soviets and the natural barriers imposed by the high mountains of the Caucasus. The failure was costly for Nazi Germany, for its severe shortage of oil crippled its military machine and was one of the reasons for its ultimate defeat.[6]

By the 1970s and 1980s, the Caspian had become an oil backwater of the Soviet Union, thought to be depleted or technologically too difficult; its once prominent role had been assumed by other producing regions, most notably West Siberia. In the late 1980s and early 1990s, however, as Soviet power crumbled and Azerbaijan, Kazakhstan, and Turkmenistan were moving toward, and then into, independence, the region's potential—buttressed by advances in technology—once again loomed very large.

HISTORY ON DISPLAY

Baku and its environs stood at the historic center of what had been the Russian and then Soviet oil industry, and that entire history was on display for the wide-eyed Western oil men who were beginning to show up.

Some of it was at sea. A rickety network of wooden walkways and platforms, connected like a little city, extended out from the seafront in Baku. Farther offshore, 40 miles from the coastline, where the seabed became shallow again, was Oily Rocks, a great network of walkways and platforms, "a wooden and steel oil town on stilts, 15 miles long and a half mile wide," with 125 miles of road and a number of multistory apartment buildings built on artificial rock islands. Once it had been regarded as one of the great achievements of Soviet engineering, a "legend in the open sea." But now Oily Rocks was so dilapidated that parts of it were crumbling and falling into the sea, and some parts were considered so treacherous that they had been abandoned and closed off altogether.[7]

Onshore, in and around Baku, were innumerable antique "nodding donkeys," still bobbing up and down, helping to pump up oil from wells that had been drilled in the late nineteenth and early twentieth centuries. Hiking into the wide, dry Kirmaky Valley just north of Baku would take one back even earlier in time. There one would step over pipelines and clamber up barren hills that were pockmarked with hundreds of pits that been dug by hand in the eighteenth and nineteenth centuries. In those days, one or two men would be lowered into each of these narrow, dangerous pits, past walls reinforced with wood planks, 25 to 50 feet down to the claustrophobic bottom, where they would fill buckets with oil that would be hoisted out with primitive rope pulleys.

Down on the other side of the hill was the Balachanavaya Field, where a gusher had been drilled in 1871. That field was still crowded with old rigs, densely packed up against one another, some of them going back to the days of the Nobels and the Rothschilds. Altogether 5 billion barrels of oil had been extracted from the field, and it was still modestly producing away, while gas leaking from a nearby mountainside continued to burn in an "eternal flame."

Thus, awaiting the arriving oil men in Azerbaijan was an industry deep into decline and decay, starved of investment, modern technology, and sheer attention. Yet what the oil men also saw, if not altogether clearly, was the opportunity—though tempered by many risks and uncertainties.

"ALL ROADS ARE THERE"

Azerbaijan was ground zero for the Caspian Derby. As a Russian energy minister put it, it was the "key" to the Caspian, for "all roads are there." Every kind of issue was at play, and so many of them the result of geography. The most immediate problem was to the west, the newly independent state of Armenia,

with which war had broken out over the disputed enclave Nagorno-Karabakh. Armenia, with some Russian support, was victorious; 800,000 ethnic Azeris, primarily from Nagorno-Karabakh, became refugees and "internally displaced peoples," living in tent cities and corrugated tin huts and whatever else Azerbaijan could find for them. This displacement—equivalent to 10 percent of the Azeri population—added to the woes of what was already an impoverished country, with a broken-down infrastructure and teetering on economic collapse.

In the first years of the 1990s, various consortia of international oil companies pursued what has been described as "disruptive and complex negotiations" with successive Azeri governments, which had largely come to naught. The country itself seemed to be entrapped in endemic instability and insurgencies, and, as various clans struggled for power, headed toward civil war.[8]

"THE NATIVE SON"

During Soviet times, Heydar Aliyev had risen to the pinnacle of power in Azerbaijan, initially as a KGB general and then head of the local KGB, and then as first secretary of the Azeri Communist Party. He had subsequently moved to Moscow and into the ruling Politburo, becoming for a time one of the most powerful men in the Soviet Union. But after a fiery falling-out with Mikhail Gorbachev and a spectacular fall from power, he was expelled not only from the Politburo but also from Moscow, and denied even an apartment back in Baku. He returned to his boyhood home, Nakhichevan, an isolated corner of Azerbaijan, which, after the collapse of the Soviet Union, was cut off from the rest of the country by Armenia and was reachable only by occasional air flights from Baku. While in this internal exile, he discovered his new vocation and identity—no longer as a "Soviet man," but, as he put it, as a "native son." He bided his time.

With the political battle in Baku getting even hotter and the country teetering on civil war, he returned to the capital city and, in 1993, amid an attempted insurrection, took over as president. At age seventy, Aliyev was back in power. He brought stability. He also brought great skill to the job. "I've been in politics a long time, and I've seen it all from inside out as part of the core leadership of a world superpower," he said not long after taking power. He was now an Azeri nationalist. He was also a proven master of tactics and a brilliant strategist. He would use Azerbaijan's oil potential to turn the country into a real nation, and to enlist key nations in support of its integrity, and, in the process of doing all of this, ensure his own primacy and control. But he also knew the Russians and the mentality of Moscow as well as anyone, and he understood clearly how to deal with the Russians and how far he could safely tread out on his own path.[9]

"THE DEAL OF THE CENTURY"

In September 1994, Aliyev assembled a host of diplomats and oil executives in the Gulistan Palace banquet hall in Baku for the signing of what he proclaimed the "deal of the century." The signatories included ten oil companies—representing six different nations—that belonged to what was now the Azerbaijan International Operating Company (AIOC) plus the State Oil Company of Azerbaijan Republic (SOCAR), the Azeri state company. BP and Amoco were the dominant Western companies, but also, and of great significance, in the deal was Lukoil, the Russian company. Later the Japanese trading company Itochu joined the AIOC, bringing the number of national flags to seven. Given the complexities and uncertainties, some mumbled that a better sobriquet than "deal of the century" would be "Mission Impossible." After all, how was this going to get done? And how was landlocked Azerbaijan ever going to get its oil to the world market? Yet as the CEO of one of the Western companies put it, "the oil had to go somewhere."[10]

Moreover, even with Aliyev in power, the political situation was far from stable. Baku was under nightly curfew, and, shortly after the signing of the "deal of the century," two of Aliyev's closest aides were assassinated, including his security chief, to be followed by a failed military coup.

The object of the "deal of the century" was the huge Azeri-Chirag-Gunashli field (ACG) in the Aspheron trend, seventy-five miles offshore. It had been discovered prior to the collapse of the Soviet Union, but it was a mostly undeveloped project, and a very challenging one. Much of it had proved well beyond the technological capabilities of the Soviet oil industry. However, during Soviet times, development had started in a more shallow corner of the field, and if the platform could be successfully refurbished and upgraded to international standards, some early production would be possible. This would become known as Early Oil. It was desirable, because it would create an early income stream and, perhaps even more important, build confidence among the AIOC shareholders.

WHAT ROUTE FOR EARLY OIL?

But Early Oil was also highly contentious, for it would create a big and immediate problem. How to get the oil out? Once ashore, some of it could be shipped in railway tank cars, just as in the nineteenth century, but that was a limited and hardly satisfactory alternative.

The only obvious answer was a pipeline. And, with that answer, the Caspian Derby turned clamorous. By reversing directions, the oil could go north through the existing Russian pipeline system, which is of course exactly what the Russians wanted. But that would also have given Russia very considerable leverage over Azerbaijan's economic and political fate, and the United States strenuously opposed it.

The other option for the Early Oil pipeline was to go west into Georgia and to the Black Sea, where tankers would pick up the oil and carry it through the Bosporus to the Mediterranean—a route that tracked what had been the main outlet for nineteenth-century Baku oil. But that would make Azerbaijan dependent on Georgia, which was wracked by separatist struggles and which had a very tense and uneasy relationship with Russia. This route would also be a great deal more expensive, entailing much more construction in difficult terrain. The AIOC was under great pressure to choose. The Azeris needed revenues; the companies needed clarity. But the United States and Russia were at loggerheads. Yet something needed to be done. One way or the other, Early Oil was coming.

THE TWO-TRACK STRATEGY: "OFFEND NO ONE"

In a nondescript conference room in central London, some senior AIOC staff and a small group of oil and regional experts debated the choices—"Early Oil

Goes North" and "Early Oil Goes West"—and the likely backlash to each. It was recognized that "an unequivocal choice in either direction would be perilous from the standpoint of political risk."

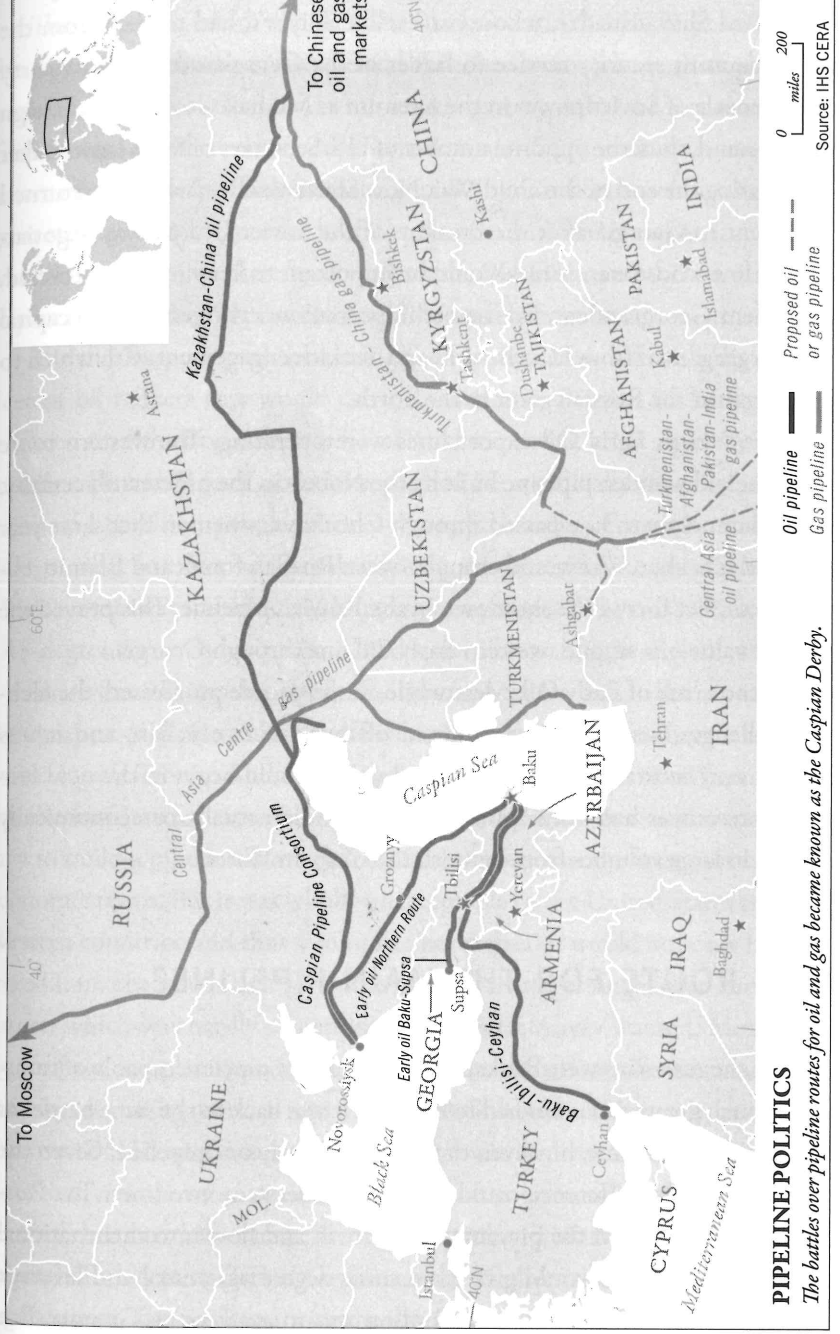
Finally, one of the participants who had sat quietly in the corner spoke up. Why choose? he asked. Why not do both? The more pipelines, the better. Even if the cost was higher, dual pipelines would provide more security. It would be a great insurance policy. That approach would also help assure speed and discourage foot dragging—since the AIOC could always threaten to go with the "other" option. So taken together, two routes made a lot of sense.[11]

Of course, one had to start somewhere. And that meant starting with the Russian route. After all, a pipeline was in place. The politics were right.

Heydar Aliyev saw it that way. On a dreary, cold February night in 1995, in his office in the hills above Baku, Aliyev gave his marching instructions both to Terence Adams, the head of the AIOC, and to the head of SOCAR. Nothing should be done that would "alienate" the Russians, said the president. It was too risky. A contract had to be signed with the Russians before anything else was done. "The geopolitical imperative could not have been made clearer for Baku oil diplomacy," Adams later said. The president made one other thing very clear. Failure in any form would be a major disaster for Azerbaijan, and thus would certainly also be a disaster for AIOC and personally for all those involved. He looked hard at both men. At the same time, Aliyev emphasized that the relationship with the United States was also essential to his strategy. His message to the oil companies was challenging but clear: "Offend no one."

Things were also changing with the United States. There had been a very sharp debate in Washington between those highly suspicious of Russia, who favored an "anything but Russia" pipeline policy, and those who believed that a collaborative approach with Moscow was required for the development of energy resources and transportation in the former Soviet Union. And, in the latter view, that development was necessary to meet the two objectives: helping to consolidate the nationhood of the newly independent states and enhancing energy security by bringing additional supplies to the world market. In due course, matters were generally—although never completely—resolved in favor of the more collaborative approach. In February 1996, the northern route won official approval.[12]

Agreement for the western Early Oil route soon followed. For its part, the



PIPELINE POLITICS

The battles over pipeline routes for oil and gas became known as the Caspian Derby.

Georgian route offered a counterbalance to the Russians. Getting this plan done drew upon the personal relationship between Aliyev and Georgian president Eduard Shevardnadze, whose career, like Aliyev's, had tracked from the local communist security service to leader of the Georgian communist party to the pinnacle of Soviet power in the Kremlin as Mikhail Gorbachev's foreign minister—and, thus, the opposite number of U.S. Secretary of State James Baker in negotiating the end of the Cold War. Now Shevardnadze, who had returned as president to Georgia after the breakup of the Soviet Union, was negotiating a pipeline whose transit fees would be important to keeping impoverished, independent Georgia afloat. Even more important was the geopolitical capital that Georgia gained from U.S., British, and Turkish engagement with which to balance against the Russian giant to the north.

By 1999 both Early Oil export lines were operating. The western route tracked the old wooden pipeline built by the Nobels in the nineteenth century. The Russian northern line passed through Chechnya, where in that same year the second Chechen War would erupt between Russian forces and Islamic rebels. That conflict forced the shutdown of the Russian pipeline. This proved the insurance value of a second, western Early Oil line through Georgia.

That took care of Early Oil. Meanwhile, as the decade progressed, the technical challenges were being surmounted offshore of Azerbaijan, and it was clear that very substantial additional production would begin in the new century. The resources had been "proved up": oil could actually be economically extracted in large volumes from beneath the Caspian Waters.

WHAT ROUTE FOR THE MAIN PIPELINE?

Now that the resources were bankable, a main export pipeline capable of transporting much greater volumes had to be built. It was back to the same battles as over Early Oil. This time, however, there could be only one pipeline. Given the costs and scale, the difference could not be split between two lines. The Russians, of course, wanted the pipeline to go north and flow into their national pipeline system, which would give them some degree of control and leverage over the Caspian resources. Another option was to go through Georgia. But in both cases, the oil would have to be picked up by tankers that would carry it

across the Black Sea and then sail through the Bosporus, the narrow strait that runs through the middle of Istanbul. And that was a big problem.

The Bosporus, which connects the Black Sea and the Mediterranean and is the demarcation between Europe and Asia, has loomed large throughout history. It was on its banks that, in the fourth century A.D., the Roman emperor Constantine established his new eastern capital—Constantinople—in order to better manage the far-flung Roman Empire. In more recent centuries, it was of great strategic importance for both the Russian and Soviet empires, as the only warm-water ports for their fleets were on the Black Sea, and their warships had to pass through the Bosporus to reach the world's oceans.

But the Bosporus was becoming increasingly crowded with the growing fleet of oil tankers that would carry Russian and Caspian oil to the world's markets. And the Bosporus was no isolated waterway; it ran right through the middle of Istanbul (as Constantinople had been officially renamed in 1930), a city of 11 million people. Turkey was apprehensive of a major tanker accident in what in effect was Istanbul's living room. And with good reason. The 19-mile waterway has 12 turns. Its narrowest point is 739 yards, which requires a 45-degree turn. Another turn is 80 degrees, almost a right angle.[13]

There was still another option for the main outlet, and in dollars and cents, the cheapest of all. Go south and deliver oil to refineries in northern Iran, which would supply Tehran. And then swap an equivalent amount of oil from fields in the south of Iran for export via the Persian Gulf. Hence, it would not be necessary to build a pipeline through Iran. Such a swap was the least cost option in economic terms. But it was wholly unacceptable to the United States and other Western countries, and thus a complete nonstarter. It would not only have bolstered Iran, but would have given the nation the trigger finger over Azerbaijan's future, which was hardly something that Heydar Aliyev wanted. Moreover, it would have completely undercut the whole quest for diversification and energy security by putting more oil into the Persian Gulf and increasing dependence on the Strait of Hormuz, when the whole point was to diversify away from it.

There was one more option—go west, skirting around Armenia into Georgia, and then turn left near the Georgian capital of Tbilisi and head south down through Turkey to its port of Ceyhan on the Mediterranean. This was the most logical route. The problems with the proposed BTC pipeline—Baku to Tbilisi to Ceyhan—were two: First, it would be one of the longest oil export pipelines in the world, and the engineering challenges over the tall peaks of the Caucasus were enormous. And, second, it was by far the most expensive route. It was very difficult to make the economics work.

As decision time approached, the arguments over the main pipeline became increasingly fierce. The Russians were out to scuttle the project. The Azeris clearly wanted it, as did the Turks. Both pressed BP to push it forward. For a time, it seemed that the United States was most vociferous proponent of all for Baku-Tbilisi-Ceyhan. Its representatives took every opportunity to argue the case, sometimes with a force that surprised and even shocked other participants in the debate. For Washington, the thought that the main export pipeline could possibly go through Russia was unacceptable. The risk was too great.

Madeleine Albright, Bill Clinton's secretary of state, privately summed up the matter at the time. One afternoon, sitting in a little room on the seventh floor of the State Department, she said, "We don't want to wake up ten years from now and have all of us ask ourselves why in the world we made a mistake and didn't build that pipeline."

"NOW IS THE MOMENT"

For half a decade, an annual conference, the "Tale of Three Seas" (Caspian, Black, and Mediterranean), had been convening in Istanbul each June. It would start in the evening, as the sun went down, in a hillside garden overlooking the Bosporus, with a soothing outdoor concert by what was called the "Orchestra of the Three Seas." Its music was meant to symbolize the healing of all the historic breaches that needed to be healed, for its members were drawn from the Caucasus and Central Asia and from a number of Arab countries, as well as Israel.

And then, the next day, all the harmonies would disappear as the raucous Caspian Derby began in earnest. Year after year, the conference sessions and the corridors were the scene of agitated arguments and increasingly vocal debate over pipeline routes—and, at least once, a shoving match among very senior people.

The conference dinner, on a warm summer night in June 2001, was held in the Esma Sultan Palace, with a sweeping view over the Bosporus. The speaker

was John Browne, the chief executive of BP, now the dominant company among the shareholders of the AIOC. He stressed that the Bosporus simply could not take any more tanker traffic. "The risks of relying solely on this route would become too high. Another solution is necessary," he said. And that solution was "a new export pipeline"—the Baku-Tbilisi-Ceyhan line.

The oil companies, he announced, were ready to begin the engineering, with the objective of beginning construction as soon as possible. As he made this declaration, almost as if on cue, on the dark historic waters behind him the shadowy silhouette of a large tanker glided by, illuminated only by its own lights. Its silent message seemed to be, How many more of these tankers could the Bosporus take? The pipeline had to be built.

Many obstacles had to be overcome. The first was to convince a sufficient number of the AIOC partners that the pipeline was commercial and get them to sign up for it. Another was the sheer enormity of negotiating so many incredibly complex multiparty agreements that were required to build and operate and finance the pipeline, involving countries, companies, localities, engineering firms, banks, and financing agencies, among other parties. Here the United States played a key role by facilitating an intergovernmental agreement, and myriad other agreements, which otherwise, in the words of one of the company negotiators, would have taken "years to arrange and negotiate."[14]

Another continuing obstacle was the opposition of nongovernmental organizations (NGOs) on various environmental and political grounds. Would the pipeline be buried three feet underground, where it was accessible to repairs, or fifteen feet, where it would not be? (Three feet won out.) Much intense debate ensued as to whether the proposed route was a threat to the Borzhomi springs, the source of Georgia's most famous mineral water. One tense negotiating session with the president of Georgia went on until 3:00 a.m., and then had to be extended another hour when a functioning photocopier could not be found in the presidential palace. The route, in the end, was not changed, but the consortium ending up paying the Borjomi brand water company about $20 million to cover the potential "negative reputational impact" of the pipeline. As it turned out, the reputational impact was surprisingly positive; the head of the Borjomi water company is said to have later described the episode as the best global advertising the mineral water could have ever gotten, and, better yet, it was free advertising.[15]

"OUR MAJOR GOAL": PETROLEUM AND THE NATION-STATE

The BTC pipeline has been described as "the first great engineering project of the twenty-first century." The 1,099-mile-long pipeline had to cross some 1,500 rivers and water courses, high mountains, and several major earthquake fault zones, while meeting stringent environmental and social impact standards. Four years and $4 billion later, the pipeline was finished. The first barrels arrived at the Turkish oil port Ceyhan, on the Mediterranean coast, in the summer of 2006, where they were welcomed in a grand ceremony. It had been twelve years since the "deal of the century" had been signed.

As would be expected, an Aliyev was there at the very forefront among the dignitaries who proclaimed the importance of the day for the countries involved, the region, and the world's energy markets. But it was not Heydar Aliyev; it was his son Ilham, the new president of Azerbaijan. Heydar Aliyev had not lived to see that day. For Aliyev, the KGB general and Soviet Politburo member who had gone on to become Azerbaijan's premier "native son," had passed away three years earlier at the Cleveland Clinic in the United States. But this day was the demonstration that his strategy had worked, that oil—and how he had played it—had given Azerbaijan a future that in 1994 had seemed almost unattainable. Petroleum had consolidated Azerbaijan as a nation and established its importance on the world stage. Or, as Ilham Aliyev had put it before taking over as president, "We need oil for our major goal." Which was, he said, "to become a real country."[16]

Azerbaijan is also strategically important because it is a secular, Muslim-majority state situated between Russia and Iran. Today Azerbaijan's offshore ACG field—a $22 billion project—ranks as the third-largest producing oil field in the world. Petroleum flows ashore at the new $2.2 billion Sangachal Terminal, just south of Baku, then moves into a forest of pipes and a series of tanks where it is cleaned and prepared for transit. Then the oil, now fit for export, all converges into a single forty-two-inch, crisp white pipeline. That is it—the much-debated Baku-Tbilisi-Ceyhan pipeline. The pipeline extends flat out on the ground for fifty feet and then curves down into the earth and disappears from sight. It bends and twists its way, mostly underground, until it

surfaces again, 1,768 kilometers—1,099 miles—later at Ceyhan, where more than a million barrels a day flow into the storage tanks that fleck the Mediterranean shore, waiting for the tankers that will pick up their cargoes and take them to world markets. After all the battles of the great game, all the clash and clamor of the Caspian Derby, all the maneuvering and diplomacy, all the negotiating and trading and deal making, it all comes down to science and engineering and construction—the platforms and oil complexes in the Caspian Sea, and the $4 billion underground steel tubular highway that has reconnected Baku to the global market. As it carries oil, that pipeline also seems to be carrying the cargo of history, connecting not only Baku and Ceyhan but also the beginning of the twenty-first century back to the beginning of the twentieth.

Subsequently, a second pipeline was built parallel to the BTC to carry gas from the offshore Caspian Shah Deniz field, one of the largest gas discoveries of recent decades, to Turkey. The pipeline, known as the South Caucasus Pipeline, was no less challenging technically, but politically a good deal easier. The hard work had been done by the oil line. The South Caucasus Pipeline further consolidated the Caspian with the global energy market.

But Azerbaijan was only part of the Caspian Derby. Another round was being played out across the Caspian Sea.

3

ACROSS THE CASPIAN

In the summer of 1985, spy satellites spinning high above the earth picked up something startling—a huge column of flames on the northeastern corner of the Caspian Sea, with plumes that stretched a hundred miles. It was an oil field disaster on a scale visible from space. A well being drilled—Well 37—in the newly opened oil field of Tengiz, in the Soviet Republic of Kazakhstan, had blown out, sending up a powerful gusher of oil, mixed with natural gas. It had caught fire, creating a flaming column that reached 700 feet or more into the air. The gas was laden with deadly hydrogen sulfide, which inhibited recovery efforts. The USSR Ministry of Oil had neither the capability nor the equipment to bring it under control. At one point the Ministry, desperate and at wit's end, considered an "atomic explosion" to get the well under control.

That option was never implemented. "We managed to intercede in time," said Nursultan Nazarbayev, then the republic's premier.

Eventually American and Canadian experts were recruited to help. It took two months to put out the fire and four hundred days to get the well fully under control. This disastrous and costly blowout underlined the technical challenges facing the Soviet oil industry. But the burning "oil fountain" also illuminated something else: Kazakhstan might have world-scale petroleum potential.[1]

KAZAKHSTAN AND THE "FOURTH GENERATION" OF OIL

Kazakhstan today, one of the newly independent countries of the former Soviet Union, is a large nation in terms of territory, physically almost the size of India, but with a population of 15.5 million. A little over half is ethnically Kazakh, 30 percent ethnically Russian, and the rest other ethnic groups. With the exception of the new capital Astana, most of the population lives on the periphery of the country; a good part of the country is grassy steppe. During Soviet times, "each of the Union republics occupied a particular place in the division of labor," as Nazarbayev put it, and Kazakhstan's role was as "a supplier of raw materials, foodstuffs, and military production." A quarter of its population had died during Stalin's famine in the early 1930s. It was where Stalin exiled ethnic groups he did not like, where Nikita Khrushchev unleashed his disastrous "virgin lands" program to try to rescue Soviet agriculture, and where the Soviet Union tested its nuclear weapons. It was the place from whence the Soviet Union launched its spy satellites and where Russia today shoots tourists into space, at $20 million a shot.

Kazakhstan had had a small local oil industry going back to the nineteenth century, an eastern extension of the great Azeri boom that had made the Nobels and the Rothschilds into oil tycoons. If West Siberia had been the giant "third generation" of Soviet oil, then it was expected that Kazakhstan, centered in Tengiz, would be a key part of the "fourth generation."

But Kazakhstan's development was held back in the 1980s by lack of investment and technology in the face of difficult and unusual challenges, as evidenced at Tengiz. As former Soviet oil minister Lev Churilov wrote: "Exploration and production equipment stood frozen in time, with few technological advances after the 1960s." In the effort to bolster the faltering economy and facilitate technology transfer, in the final years of the Soviet Union, Mikhail Gorbachev had tried to lure in foreign investors. Under that umbrella, a controversial American promoter named James Giffen brought together a group of U.S. companies that would serve as an investment consortium.[2]

TENGIZ: "A PERFECT OIL FIELD"

One of the companies in the consortium was Chevron, which after looking around the Soviet Union came to focus on Tengiz. The company was deeply impressed by the huge potential. A "perfect oil field" is the way one Chevron engineer described it. With what was finally estimated as at least 10 billion barrels of potential recoverable reserves, Tengiz would rank among the ten largest oil fields in the world.[3]

There were, unfortunately, a few ways in which it was not quite perfect. One was the problem of the "sour gas," so-called because of the heavy concentrations of poisonous hydrogen sulfide. Sickeningly noxious with its rotten-egg-like smell, hydrogen sulfide is so toxic in large concentrations that it deadens the sense of smell, potentially dulling the ability of people to respond to inhaling it before it is too late. It would take considerable engineering ingenuity and a good deal of money to solve that problem. Other problems included the generally poor condition of the field and the enormous investment that would be required. There was an additional problem that would come to loom quite large—location. Tengiz was a far-off field with no real transportation system.

In June 1990, the Soviets signed a pact with Chevron that gave the company exclusive rights to negotiate for Tengiz. It was a very high-priority deal. For in the words of Yegor Gaidar, Moscow regarded Tengiz as "the Soviet Union's trump card in the game for the future."

But the Soviet Union was experiencing what Nazarbayev called "the distinctive symptoms of clinical death throes. The state organism sank into a coma." When it collapsed altogether, Nursultan Nazarbayev became president of the independent nation of Kazakhstan. His communist days were over. He was now a nationalist, who would now look not to Marx or Lenin for his role model, but to Lee Kuan Yew and the emergence of modern Singapore. And never again, he said, would Kazakhstan be "an appendage."

The Tengiz field loomed as absolutely crucial to the new nation's future; it was what Nazarbayev called the "fundamental principle" underpinning the country's economic transformation. But it was in very poor shape. In many parts of the oil field, electric power was available only two hours a day. Tens of billions of dollars of investment would be required to bring the field up to its potential.[4]

THE PIPELINE BATTLE

After arduous negotiations, Kazakhstan and Chevron came to agreement on how the immense and immensely expensive field would be developed. It would be a 50-50 deal in terms of ownership but not in terms of the economics. Eventually, after various costs were recovered, the government take would be about 80 percent of the revenues. Chevron would fund much of the estimated $20 billion investment until Kazakhstan started receiving cash flow, which would fund its share. Nazarbayev hailed this as "truly . . . the contract of the century." It was certainly a very big deal, with the objective of increasing output tenfold. Extraordinarily complex engineering was necessary to produce from very deep, very high-pressure structures, and then to treat the sour gas and separate the toxic hydrogen sulfide from petroleum.

Geography presented an additional challenge—getting the oil out of the country to world markets. The route was obvious—a 935-mile putative pipeline that would go north out of Kazakhstan, curve west over the top of the Caspian Sea, and then straight west for 450 miles to the Russian port of Novorossiysk on the northern coast of the Black Sea. From there oil would be transshipped by tanker across the Black Sea through the Bosporus Strait and into the Mediterranean. In other words, the pipeline would have to traverse Russian territory.

What was not obvious was how to get it done—not physically, but commercially, and even more so, politically. The battle would be no less contentious than the struggle over the pipelines out of Azerbaijan, no less complicated in the clash of ambitions and politics. It would also be caught up in the complex post–Cold War geopolitical struggle to redefine the former "Soviet space" and the relationships among Moscow, the Near Abroad, and the rest of the world. The players here would include Kazakhstan, Russia, the United States, and, later, China; Chevron and other oil companies; as well as the Persian Gulf oil-producing nation of Oman. Improbably, at the center of it all, at least for a time, was a flamboyant Dutch oil trader, John Deuss, whose penchant for high living included stables with champion jumping horses, two Gulfstream jets, yachts, ski resorts, and a variety of homes. His involvement in Kazakhstan was bankrolled by Oman, with which he had developed a very close relationship.

Chevron, so focused on the Tengiz field itself and also the risks that went with it, had left it to Kazakhstan to finance and organize the pipeline. "We hadn't planned on building a pipeline," said Richard Matzke, the head of Chevron Overseas Petroleum. "We felt that the pipeline would be a national asset, and there would be objections to foreign ownership across Russian territory."

Kazakhstan, still building its institutional capability as an independent nation-state, had turned to Deuss, who, with Oman, would be the "principal sponsor" of the pipeline. What, one might ask, was a Dutch oil trader with Omani money doing trying to build a pipeline across Russia? Deuss had been functioning as a senior oil adviser to the newly independent nation of Kazakhstan and had helped arrange an Omani line of credit for Kazakhstan in its first months of independence. Deuss had won the Kazakhs' trust. His Omani backer put up the money to initiate what would be called the CPC—the Caspian Pipeline Consortium.

Deuss and Chevron were soon at loggerheads. Chevron now realized that Deuss would be able to extract high tariffs and make a huge profit on the pipeline and also get what he was really after—control of the pipeline. "That wasn't going forward," said Matzke.

What followed has been called "one of the most prolonged and bitter confrontations of the era."

Kazakhstan loomed large to Russia. The two countries shared a 4,250-mile border, and the large ethnic Russian population testified to Kazakhstan's close links. The Russians resented the growth of U.S. influence in the newly independent states, including in Kazakhstan, and what they saw as an American initiative to cut them out of the action in their natural sphere, the Near Abroad.

More specifically, the Russians regarded Tengiz as "their oil." They had found it, they had drilled for it, they had begun to develop it, they had put money and infrastructure into it—and it would have been the great new field. But it had been snatched from their hands by the collapse of the Soviet Union. They were determined to extract maximum recompense and ensure that they participated in Tengiz. The two sides were constantly at odds. "It took six years to talk the Russian side round to building the oil pipeline," recalled Nazarbayev. "The oil lobby in Russia put tremendous pressure on Boris Yelstin to get him to convey the ownership of the Tengiz oil field to Russia. I had many disagreeable conversations . . . about this."

Once, at a meeting in Moscow, Yeltsin said to Nazarbayev, "Give Tengiz to me."

Nazarbayev looked at the Russian president and realized that he was not joking. "Well," Nazarbayev replied, "if Russia gives us Orenburg Province. After all, Orenburg was once the capital of Kazakhstan."

"Do you have territorial claims on Russia?" Yeltsin shot back.

"Of course not," Nazarbayev replied.

With that, the presidents of independent countries, both of whom had risen up together in the Soviet hierarchy, burst out laughing. But Nazarbayev had no intention of giving way. For, if he did, Kazakhstan would have become Russia's "economic hostage"—and, once again, "an appendage."[5]

"THE MAIN THING IS THAT THE OIL COMES OUT"

But with no progress on resolving the ownership and economics of the pipeline, Kazakhstan's frustration was growing. It needed a go-ahead on oil; its economic situation was desperate. GDP had shrunk almost 40 percent since 1990, and its nascent enterprises could not get international credit. Nazarbayev's anger over the impasse between Deuss and Chevron mounted. "The problem is that the money has to be invested," the irate Nazarbayev declared. "What difference is it to me if it is Americans, Omanis, Russians? The main thing is that oil comes out."[6]

As it was, the oil was coming out, but only with great difficulty and improvisation. As production rose, Chevron started shipping 100,000 barrels a day by tanker across the Caspian to Baku. Then, what seemed to be the entire Azerbaijani and Georgian rail systems were mustered to move the oil on to the Black Sea. Chevron was also leasing six thousand Russian rail tank cars to move additional oil to the Black Sea port of Odessa, which, to make things more complicated, was now part of Ukraine. Once again, it seemed back to the nineteenth century in terms of logistics. And that just would not do.

John Deuss had a particular patron in Oman, the deputy prime minister. But then this minister was mysteriously killed in an auto collision in the middle of the desert. Thereafter Oman's support for Deuss dwindled away at remarkable speed. At the same time, Kazakhstan canceled Deuss's exclusive rights to negotiate for financing for the pipeline. The United States was becoming alarmed at the delay in getting the transportation issue settled and the resulting risks to the financial stability and thus the nationhood of Kazakhstan, which had been very cooperative on a number of issues—most notably in disposing of the nuclear weapons left behind in its territory after the collapse of the Soviet Union. Without the oil pipeline, this particular "newly independent" state was certainly going to be less independent. Having a freebooter—oil trader John Deuss—ending up with control of something so strategic and significant for global energy security as the major export route for Kazakh's future oil was definitely seen as a problem. Finance would be key to whether Deuss's plan would go ahead. It became clear that Western loans were never going to be available to finance John Deuss to become the pipeline arbiter of Kazakh oil. With that, Deuss faded out of the picture.

But Moscow still needed to agree to a pipeline running through Russian territory. United States Vice President Al Gore used his co-chairmanship of a joint U.S.-Russian commission to successfully convince Premier Viktor Chernomyrdin that this was in Russia's interests. It also became very apparent that Russian participation in the project itself would be an asset. Russia's Lukoil, in partnership with the American company ARCO, came in and purchased a share of Tengiz.

Meanwhile, Kazakhstan had asked Mobil to help put up money for the pipeline. "I finally said we were not going to help on the pipeline in order to help Chevron crude to get out of Tengiz," said Mobil's CEO, Lucio Noto. "Tengiz was an absolutely world-class opportunity." Mobil paid a billion dollars, part of it up front, and bought a quarter of the oil field itself.[7]

In 1996 a new agreement dramatically restructured the original consortium. The oil companies were now members in a 50-50 partnership with the Russians, the Kazakhs, and Oman. The companies paid for the construction of the new pipeline—$2.6 billion—while Russia and Kazakhstan contributed the right-of-way and such pipeline capacity as was already in place. There was still much that was difficult to get done, including securing the actual route.

Matzke and Vagit Alekperov, the CEO of Lukoil, barnstormed by plane, visiting the interested parties all along the proposed pipeline route. Each stop required a banquet or a heavy reception, which sometimes meant as many as eleven meals a day for the traveling oil men, leaving them stuffed and groggy by nighttime. With the door thus opened, the Caspian Pipeline Consortium had to follow up and go into every locality and to negotiate right-of-way agreements for the new pipeline.[8]

Nonetheless, in 2001 the first oil from Tengiz passed into the pipeline. This was a landmark. Kazakhstan now, too, was integrated into the global oil industry. In the years that followed, there were many points of contention about Tengiz, which continue to the present day, but they were about the traditional issues—about how much the government's "take," or share of revenues and profits, would increase. By 2011 production was up to about 630,000 barrels of liquids per day—ten times what it had been when Chevron had begun to work in the field a decade and a half earlier—and planning was well advanced for the next stage of increase. The difficulties of dealing with the sour gas, laden with hydrogen sulfide, had, however, driven the price tag for Tengiz up from the anticipated $20 billion to more like $30 billion.

Tengiz is not the only supplier into the Caspian Pipeline. Another significant field, Karachaganak, feeds into it, as do other smaller fields.

KASHAGAN

The largest single oil field discovered in the world since 1968 is also in Kazakhstan. This is the immense Kashagan field, fifty miles offshore in the waters in the northeast of the Caspian. The Soviet oil industry had done seismic testing there but did not have the technology to explore the offshore region. In 1997 a consortium of Western companies had inked a deal with the Kazakh government to explore and develop the northern Caspian. In July 2000 they struck oil. Subsequently, Kashagan's recoverable reserves have been estimated at 13 billion barrels, as big as the North Slope of Alaska.

Kashagan's potential may be great, but it has also been the subject of continuing contention and discord among the international partners—ENI, Shell, ExxonMobil, Total, ConocoPhillips, and Japan's Inpex—and between all of them and the Kazakh government. For while Kashagan may be immense, so are its challenges. They dwarf by far those of Tengiz. A whole new production technology has had to be designed for the complex, fragmented field in what has been described as "the world's largest oil development." The petroleum resources are buried two and a half miles beneath the seabed, under enormous pressure and suffused with the same dangerous hydrogen sulfide found onshore at Tengiz. After many difficulties and setbacks, and in the face of ballooning costs and much acrimony and debate, the companies had to start over and reallocate roles. The project has taken almost a decade longer than anticipated to complete; first oil is not expected before 2012; and anticipated costs have increased to more than $40 billion for the first phase. All of this has infuriated the Kazakh government, which is having to wait years longer than it had anticipated for Kashagan revenues to start flowing into its treasury. But when Kashagan does start up production, it could add 1.5 million barrels of oil a day to world supplies.[9]

ONE MORE DEAL

There was one other notable Kazakh deal, though not understood as such at the time. In 1997 China National Petroleum Corporation, a state-owned oil company little known to the outside world at the time, bought most of a Kazakh oil company called Aktobe Munaigas, and committed to build a pipeline to China. Production in 1997 was only about 60,000 barrels a day, but the Chinese have since doubled it. Little attention was paid to that first entry of China into Kazakhstan, and even that attention was mixed with much skepticism about the pipeline and the overall prospects. As one keen observer of Caspian oil was to note almost a decade and a half later, "How wrong we were."

But, then, centuries earlier a Russian geographer had caught a glimpse of the future. He had written that the people of the steppes would also need to look to the East for the markets for their natural resources.[10]

TURKMENISTAN AND THE PIPELINE THAT NEVER WAS

One other major source of hydrocarbons was, at least potentially, unleashed by the breakup of the Soviet Union—Turkmenistan. There, too, a plan emerged for major pipelines. It would connect the world in new ways. But that project, too, was complicated and even more contingent, and ever since wrapped in many legends, including that it was part of a grand strategy. In fact, it was much more of a great flyer—a Hail Mary pass of transcontinental proportions.

Turkmenistan sits on the southeast corner of the Caspian, immediately north of Afghanistan. It was highly isolated in Soviet times. Endowed with significant oil resources, it is truly rich in natural gas. This was recognized even in the early 1990s—and even more so today, as Turkmenistan now ranks as the fourth-largest holder of conventional natural gas resources in the world. Immediately after the breakup of the Soviet Union, Turkmenistan managed to earn some money and barter for goods by delivering gas into the Russian pipeline system, just as it had supplied gas to the Soviet system. This was the new country's major revenue source. But then, in 1993, the Russians abruptly shut down such imports. With their economy in freefall, the Russians did not need the Turkmen gas. Turkmenistan managed to stay afloat economically—just barely—by selling cotton and its limited output of oil.

TAP AND CAOP

Turkmenistan's entire existing pipeline system, built for the integrated Soviet economy, flowed north into Russia. An alternative export route looked like a very good idea. But given the geography and the neighbors, it was just very hard to see what the alternative route might be. As one Western oil man put it at the time, "Certainly there is no easy way out of Central Asia." The U.S. government lent support to a project to ship gas from Turkmenistan across the Caspian Sea to Azerbaijan and on to Europe, but that never eventuated.

There was one possibility that recommended itself, but, along with all the other normal inputs of money and engineering capabilities and diplomatic skills, this particular transit route would require something else—very substantial amounts of political imagination. For the envisioned track would take the gas south through Afghanistan and into Pakistan, where some of it would be used domestically and some exported as liquefied natural gas (LNG). The rest would be exported farther south by pipeline into India. Moreover, the proposed 1,040-mile oil pipeline could help move the landlocked petroleum resources of Central Asia south to global markets, closer to Asia, but without having to go through Iran and the Persian Gulf. "Only about 440 miles of the pipeline would be in Afghanistan," one oil man optimistically said in congressional testimony. And the route had one more decided advantage: it looked to be "the cheapest in terms of transporting oil."

It was a very big idea that appealed to a company called Unocal, one of the smaller of the U.S. majors. Started as a California company, it had already developed a significant position as a natural gas producer in Southeast Asia, and had also been one of the pioneers of the AIOC, of which it owned about 10 percent. Once the Baku-Tbilisi-Ceyhan Pipeline project got going, recalled John Imle, Unocal's president, "We asked ourselves, What's the next project? Turkmenistan had a lot of gas, but all the pipelines were going north, and the Russians were not taking the gas. Our premise was that Central Asia needed an outlet to the Indian Ocean." So convinced was Unocal of the potential of additional transport routes that it embraced what became a famous slogan, "Happiness Is Multiple Pipelines."

For Unocal, a project with Turkmenistan could be the game changer, an enormous opportunity that could leapfrog Unocal into the front ranks of international companies. Marty Miller, the Unocal executive with the responsibility for the project, described it as the "moon shot" in the company's portfolio of possible future projects. It was an $8 billion idea, for it would also be a "twofer"—twin natural gas and oil pipelines. The natural gas line was dubbed the Trans-Afghan Pipeline; and the oil, the Central Asian Oil Pipeline.

Together TAP and CAOP (the latter pronounced as "cap") would open global markets to Turkmen resources; they would provide significant transit revenues to Afghanistan, an alternative to the revenues that the nation derived from opium cultivation. TAP would deliver natural gas to the growing economies of Pakistan and India, where, the economics indicated, it would be cheaper than imported LNG. CAOP would move a million barrels per day of oil south from Turkmenistan and elsewhere in Central Asia, perhaps even Russia.[11]

Unocal could already clearly see that the great growth markets of the twenty-first century would be in that region. Yet reflecting the perspectives of the times, the main markets for Turkmen oil were thought to be Japan and Korea. China, as a market at that point, was still little more than a footnote. After all, it was only two years earlier that China had stopped exporting oil and become an importer. The gas project was particularly compelling to some policymakers in India, who hoped that a natural gas link would tie India and Pakistan together with common interests that would help to offset decades of conflict and rivalry. They called it a "peace pipeline."

To say the project was "challenging" was an understatement.

TURMOIL EN ROUTE

The main transit country for TAP and CAOP was Afghanistan, but Afghanistan in the mid-1990s was hardly a functioning country. For ten years the country had been torn apart by a war between Soviet troops, which had invaded in 1979, and Afghan mujahedeen, supported by Pakistan, the United States, and Saudi Arabia, among others. "The greatest mistake [of the Soviet intervention] was failing to understand Afghanistan's complexity—its patchwork of ethnic groups, clans and tribes, its unique traditions and minimal governance," Soviet president Mikhail Gorbachev later said. "The result was the opposite of what we had intended—even greater instability, a war with thousands of victims and dangerous consequences for our own country." Gorbachev knew of what he spoke. The retreat of the last Soviet troops over the Termez Bridge back into the Soviet Union in February 1989 was the final act in the projection of Soviet military power beyond its borders, and it had failed—that retreat would be a grim landmark on the way toward the collapse of the Soviet Union.[12]

But, then, with the war over, and the world caught up in both the collapse of communism and the Gulf War, Afghanistan slipped off the international agenda and was forgotten—an omission that would have enormous global consequences a decade later. The country degenerated into civil war and lawlessness as warlords struggled for primacy. In 1994 a group of Islamists—the "students" or "Taliban"—came together as vigilantes to take matters into their own hands and restore order, but also, as it turned out, to establish a very strict Islamic order. They rallied supporters in a campaign against corruption and crime and hated warlords. Very quickly, operating with a cavalry of Toyota pickup trucks equipped with machine guns, they turned themselves into a zealous militia, already battle-hardened by the war against the Soviets. They gained control over much of the southern part of the country, largely dominated by the Pashtuns, which they renamed the Islamic Emirate of Afghanistan.[13]

There was yet another obstacle to TAP and CAOP—the historic enmity, sometimes punctuated by war, between India and Pakistan, the two countries that were intended to be the main outlet for the gas and oil flowing from Turkmenistan. Their militaries were designed mainly to fight each other, and conflict too often seemed imminent.

Pakistan itself, with its very contentious politics, was in a state of continuous political turmoil. The ISI, the Pakistani security services, was sponsoring the Taliban to pursue what it saw as Pakistan's own strategic interests—in particular, as a Pashtun buffer against what they feared would be an India-dominated government in Kabul. Events would later demonstrate that this was a mistake of historic proportions. For Al Qaeda and a combined Afghan and Pakistan Taliban would, a decade and half later, challenge the very legitimacy of Pakistan as a nation and seek to destabilize and overturn it and replace it with an Islamic caliphate.

THE "TURKMENBASHI"

In Turkmenistan itself, there was one additional issue: the resources had to be secured. And that meant dealing with one of the most unusual figures to emerge from the collapse of the Soviet Union—Saparmurat Niyazov, the former first secretary of the Turkmenistan Communist Party, who had, after the Soviet breakup, taken over as president and absolute ruler. He had also anointed himself "Turkmenbashi"—"the Leader of All the Turkmen." His cult of personality rivaled any in the twentieth century. (He once privately explained that it was part of his drive to create identity and legitimacy for the new Turkmen

nation.) His picture was everywhere; his statues, plentiful. He renamed the days of the month after his mother and other members of his family, all of whom had been killed in a 1948 earthquake. Niyazov himself had been raised in an orphanage. He had been selected as head of the Community Party in Soviet times after his predecessor was removed because of a nepotism scandal involving many relatives; it was said that Niyazov's accession was helped because he had no relatives. Once Turkmenistan became independent, Niyazov emptied school libraries, refilling them with his *Ruhnama,* a rambling combination of autobiography and philosophical rumination on Turkmen nationality. Medical doctors had to renounce the Hippocratic oath and instead swear allegiance to him. He also ordered a reduction in the number of school years for children, banned opera and ballet as "alien," and prohibited female television news anchors from wearing cosmetics on air.

While highly authoritarian in most ways, Niyazov was rather liberal in one way—and that was with the country's physical resources. For Turkmenistan was thought to sell the same natural gas to more than one buyer. In this particular case, Unocal thought it had obtained rights to export key gas resources. But so did Bridas, an Argentine company, which had additional support from Pakistan. Unocal worried that Niyazov did not understand, as one Unocal negotiator put it, what was required to "implement a project of such magnitude."[14]

HOPE AND EXPERIENCE

Nevertheless, by the autumn of 1995, Unocal had a preliminary agreement with Turkmenistan. Niyazov was in New York City for the fiftieth anniversary of the United Nations, and Unocal organized a signing ceremony at the Americas Society on Park Avenue. The ceremony was immediately followed by a lunch in the grand Salon Símon Bolivar. Dominating the room was a large map of the region, set up on easels, that showed the proposed routes for TAP and CAOP. The lunch was presided over by John Imle, Unocal's president, a man of some enthusiasm. Struggling to find common ground with the Turkmenbashi, which was not at all an easy thing to do, Imle came up with at least one thing they absolutely and indubitably shared in common—both were fifty-five years old, he declared with a big smile.

The guest of honor was former Secretary of State Henry Kissinger, who was escorted to the map, which he spent some time examining, including the route by which TAP and CAOP would snake down from Turkmenistan through Afghanistan, over the mountains into Pakistan, and then branch to the sea and down farther into India. After the meal, Kissinger delivered the luncheon address. He offered best wishes on the project. He then added his own assessment of its prospects. "I am reminded," he said, "of Dr. Samuel Johnson's famous comment on second marriages—that they are 'the triumph of hope over experience.'"

Imle turned a little white. He wasn't sure if it was a joke or a prophecy.

"NO POLICY"

There was little interest in the project on the part of the U.S. government, which was much more preoccupied with the breakup of the Soviet Union and the other energy initiatives involving Azerbaijan and Kazakhstan and that possible gas pipeline across the Caspian. This mirrored the larger disinterest toward Afghanistan, so different from just a few years earlier, when it had been the last battleground of the Cold War. Once that struggle was over in 1989, the United States just packed up and seemed to forget about Afghanistan and its postwar reconstruction. Much of Afghanistan's educated middle class was long gone, and the country fell back into battle among the warlords who had led the mujahedeen. As the U.S. ambassador to Pakistan later said, "There basically was no policy" toward Afghanistan in the 1990s.

Unocal recognized that it could not operate in a vacuum. It needed someone to negotiate with—that a condition for the implementation of the pipeline project is "the establishment of a single, internationally recognized entity" running the country that is "authorized to act on behalf of all Afghan parties." Who would it be? Trying to implement this transformative project both for the region and itself, Unocal was struggling to understand the competing factions, especially the Taliban. Were the Taliban "pious people" who would bring some order and stability to the chaotic, violence-wracked country? Or were they militants and fanatical zealots with an altogether incompatible agenda?

It often happens that when a U.S. oil company is entering a new country, the company will invite representatives from that country to the United States

to tour its facilities and learn more about how the company and the industry operates—and to begin to establish the kind of working dialogue that is required when hundreds of millions and then billions of dollars start getting invested. But in Afghanistan, this was much more challenging than is typically the case. In an effort to build some bonds—"these guys had never seen the ocean," said Imle—Unocal brought a delegation of Taliban to the United States. Included was a trip to Houston to show them the modern oil and gas industry, and to Washington for a visit to the State Department. But Unocal recognized at the time, "no high level US involvement [had] materialized." Unocal similarly helped sponsor a visit by the Taliban's hated rival, the Northern Alliance, that followed the same route. Imle gave a similar message to both groups. "We can only deal with you when you stop fighting, form a government that is representative of all factions, and recognized by the United Nations." Unocal also gave both sides the same present, a piece of communication technology that was a very practical symbol of the advancing technology of the 1990s—a fax machine. The message to both groups was the same: Stay in touch.[15]

WHICH SCENARIO?

In the spring of 1996, Unocal examined a report outlining several scenarios, with a range of probabilities, for the future of Afghanistan. None of them were promising. The highest probability was "a continuation of the warlordism scenario." In another the non-Pashtuns would break off and form their own state, Khorastan, which would orient itself toward Central Asia. There was also a scenario in which Iran and Pakistan would become much more directly involved on the ground in Afghanistan.

The least likely scenario in the report was a "triumphant Taliban." Under that unlikely scenario, it was thought, the Taliban would need economic development to consolidate its hold and "gain popular support"—which, rationally, would lead it to "seek foreign aid and investment." But that effort would be hampered by the Taliban's "major human rights violations in their dealings with women, Shiites, and Tajiks." Yet a Taliban victory seemed dubious, impeded among other things by factionalism and infighting among the Taliban. But the Taliban's odds might improve for a variety of reasons, including if it were to "receive a substantial increase in outside assistance without similar increase in support" for the government in Kabul.

One source of support was the ISI, Pakistan' intellegence agency, which stepped up to offer the Taliban "unlimited covert aid." But in the spring of 1996, another source materialized. Unbeknownst to most of the world, the virtually unknown Osama bin Laden, avoiding extradition by Saudi Arabia, had moved his retinue from Sudan to Afghanistan and set up shop. He began to substantially bankroll the Taliban. There he also built his own organization, Al Qaeda. It was from his new redoubt in Afghanistan that, in the summer of 1996, he issued his then-obscure fatwah—his "declaration of Jihad against Americans Occupying the Two Sacred Places" and an attack on the Saudi royal family as "the agent" of an alliance of imperialistic Jews and Christians—a document that was faxed to newspapers in London, though with little notice.

Months later, in the largest mosque in Kandahar, Mullah Omar, the one-eyed leader of the Taliban, would, during his sermon, embrace Bin Laden as one of "Islam's most important spiritual leaders."[16]

THE END OF THE ROAD

By the early autumn, the formerly least likely of the scenarios examined by Unocal now seemed the most likely. On September 27, 1996, the Taliban captured Kabul. They wasted no time imposing their strict version of Islamic law. No cigarettes, no toothpaste, no television, no kite flying. Eight thousand women were summarily expelled from Kabul University, and religious police would beat women pedestrians who were unaccompanied by men.

But the battle for Afghanistan was not over. The Taliban was still at war with the Northern Alliance; the country was not consolidated; and perhaps there was still the opportunity to engage with some factions within the Taliban. At the same time, Turkmenistan president Niyazov was stoking Washington's alarm by threatening to turn to Iran as a major export market and transport route for Turkmen gas. Toward the end of 1996, Unocal mustered its confidence and, in an effort to build momentum and diplomatic support, announced that, with partners from Saudi Arabia, South Korea, Japan, and Pakistan, it hoped to start building a pipeline by the end of 1998.

But this plan was becoming increasingly problematic. In the United States, the entire project was becoming a target of criticism, including from a movement, which was led by the wife of talk-show host Jay Leno, that attacked Unocal for associating with a regime so repressive of women. Unocal sponsored skill training for Afghan women as well as men. It retained an Islamic scholar to try to communicate with the Taliban what the Koran really said about women, but the Taliban wasn't interested. "Once we understood who the Taliban were, and how radical, this project didn't look so good," said Marty Miller.

Many years earlier, in 1931, a British scholar of Central Asia had observed: "In Afghanistan, both European clothing and unveiling are anathema, and there has been a strong reaction in favor of Islam, the old customs and the old abuses." That still seemed true 65 years later. The Westerners could not fully grasp how deep-seated were the cultural antagonisms into which they were treading—and how much these antagonisms resonated across history—and what was ahead. Nor did they know how much money Osama bin Laden was already spending on the Taliban—nor what he was brewing in the Afghan city of Kandahar.

On August 7, 1998, two teams of suicide bombers hit U.S. embassies in Kenya and Tanzania. The attacks were highly coordinated, just nine minutes apart. Kenya was worst hit, with 211 dead and 4,000 wounded. The attack had been masterminded from Afghanistan by Al Qaeda. A few days later, the United States retaliated with cruise missiles aimed at a suspected chemical weapons facility in Sudan and at an Al Qaeda training camp in Afghanistan.

"It didn't take us five minutes to know that it was all over," said Unocal's John Imle. "We were in regular contact with the U.S. embassy in Pakistan, and no one had ever said anything about terrorism. But now we understood what Bin Laden was doing in Kandahar." Imle called Unocal's chief representative, who happened to be on vacation in the United States, and told him to forget about going back to Islamabad, Pakistan, let alone to Kandahar. It was too dangerous for any U.S. businessman promoting a project that so clearly was anathema to the Taliban. A few months later, instead of starting construction, Unocal declared that it was withdrawing altogether from the project.

Thus, TAP and CAOP were finished before they started. A project that would have opened a wholly new route for Central Asian resources to the great growth market of Asia was never to be. The moon shot never got off the ground. It was aborted before launch by the Taliban and its ally, Al Qaeda, both armed with a militant ideology and a version of religion that was determined to return to the middle ages.[17]

What happened in the 1990s—with the offshore field in Azerbaijan and the Baku-Tbilisi-Ceyhan Pipeline, and Tengiz and the Caspian pipeline—was very significant for the supplies they brought to the markets. Today the total output of Azerbaijan and Kazakhstan is 2.8 million barrels of oil—equivalent to more than 80 percent of North Sea production, and four times what they were producing a little more than a decade earlier. But these deals were significant as turning points—for the way in which they redrew the map of world oil, for their geopolitical impact, for the consolidation they provided to the newly independent states, and for the way in which they reconnected the hydrocarbons of the Caspian to the world economy—on a scale that could never have been imagined during the first great boom a century earlier.

More than a decade later, Turkmenistan is still negotiating with Western companies over the development of its natural gas resources. Pakistan is struggling with a domestic Taliban insurgency. And NATO forces, primarily American, are fighting in Afghanistan.

4

"SUPERMAJORS"

Asia had been the target market for TAP and CAOP—the "pipelines that never were." For Asia was booming. But in July of 1997, one of the most buoyant of the economies, that of Thailand, was slammed by a financial crisis that threatened to destroy much of the country's recent economic progress. Soon the crisis spread, threatening the whole region and the entire Asian Economic Miracle, with far-reaching impact on global finance and the world economy. It would also detonate a transformation in the oil industry.

THE "ASIAN ECONOMIC MIRACLE"

The title of a popular business book, *The Borderless World,* captured the abounding optimism about the process of globalization in the 1990s that was knitting together the different parts of the world economy. World trade was growing faster than the world economy itself.[1] Asia was at the forefront. The "Asian tigers"—South Korea, Taiwan, Hong Kong, and Singapore, and behind them the "new tigers" of Malaysia, Indonesia, Thailand, and the Philippines, plus China's Guangdong Province—were emulating Japan's great economic success.

The Asian Economic Miracle was providing a new playbook for third world economic development. Instead of the inward-looking self-sufficiency and the