



The Burma Pipeline

Politics often bubbles to the surface in the oil business. . . .¹

In early 1997, John Imle, president of Unocal Corporation, was confident about his firm's prospects in the emerging markets of Southeast Asia. With over 30 years of experience in the region, Unocal had already established successful energy production facilities in Thailand, the Philippines, and Indonesia and was continuously exploring for new resource extraction opportunities. Anticipating that significant increases in energy demand would accompany the rapid economic growth and development occurring throughout the region, the company had recently added Burma to its growing list of Southeast Asian partners. As he considered Unocal's first large-scale project in the country, Imle was optimistic that this new relationship would generate large returns and future business opportunities.

Structured as an investment consortium including the French oil company Total, Unocal, and the national energy companies of Thailand and Burma, the \$1.2 billion project revolved around the construction of a 416-mile pipeline to transport natural gas from the offshore Yadana ("treasure" in Burmese) gas field into both countries. Once completed in mid-1998, the project would yield an estimated 650 million cubic feet of natural gas per day (mmcf/d) and over \$400 million in annual revenue well into the twenty-first century.² In hopes of extending this good fortune, Unocal and its French co-investor had also signed a second agreement with the Burmese government to explore an additional 4,427 square mile block around the Yadana field.³ With pipeline construction nearly complete and promising exploration contracts on the horizon, Unocal was well-poised to continue its expansion into the emerging markets of Southeast Asia.

Increasingly, though, Yadana and Unocal had become a source of controversy, not only in Burma and Thailand, but in North America and Europe as well. Defense of the pipeline against attacks from anti-government guerrilla forces was reportedly exacerbating refugee problems along the Burma-Thai border; exiled Burmese groups were suing Unocal for alleged human rights abuses incurred in the ongoing construction of the project; U.S. labor unions were calling for investigations into Unocal's involvement with the Burmese government, a supposed conduit for drug money laundering; non-governmental organizations in Thailand and the United States were protesting the pipeline's environmental impact; and U.S. consumer boycotts were successfully pressuring several prominent firms to withdraw business operations from Burma. Even the U.S. government had recently become involved, imposing sanctions on investment in Burma to protest the ruling military junta's repression of pro-democracy movements. Imle knew that the Burma pipeline had enormous

Lane T. La Mure (Ph.D. candidate, Harvard University) prepared this case under the supervision of Professor Debora Spar as the basis for class discussion rather than to illustrate either effective or ineffective handling of an administrative situation.

Copyright © 1998 by the President and Fellows of Harvard College. To order copies or request permission to reproduce materials, call 1-800-545-7685, write Harvard Business School Publishing, Boston, MA 02163, or go to <http://www.hbsp.harvard.edu>. No part of this publication may be reproduced, stored in a retrieval system, used in a spreadsheet, or transmitted in any form or by any means—electronic, mechanical, photocopying, recording, or otherwise—without the permission of Harvard Business School.

resource and profit potential for his firm. He also knew that the project could easily become a public relations nightmare and a liability for Unocal.

Unocal

Founded in 1890, the Union Oil Company of California (Unocal) was the product of a merger between three California oil companies: Sespe Oil, Torrey Canyon Oil, and Hardison and Stewart Oil. The partnership was fragile until 1894, when Lyman Stewart assumed control of the small company and guided its steady expansion until his retirement in 1914. Replacing his father as company president, Will Stewart expanded Unocal's refining capacity and holdings of local service stations, boosting the company's annual sales to \$90 million by the end of the 1930s. Over the next several decades, the corporation continued to grow, despite two takeover attempts, a number of failed exploration ventures, and a series of public relations disasters associated with a large oil spill off the California coast in 1969. When oil shocks convulsed Western markets in the 1970s, Unocal invested substantial sums in the research and development of alternative energy resources. It also continued an aggressive global search for traditional oil reserves.⁴

This joint strategy paid off handsomely in the 1980s. The company entered the decade with sizable oil and gas holdings and a very strong financial position. In 1985, these assets enabled the firm to survive a hostile takeover attempt by the infamous raider T. Boone Pickens. The defense, however, forced Unocal to increase its debt holdings from \$1.2 billion to \$5.3 billion. CEO Richard Stegemeier responded by closing Unocal's unprofitable production and refining facilities, selling real estate properties that did not hold oil or gas, and rebuilding reserves that had dwindled in the aftermath of the takeover bid.⁵ Aggressive restructuring continued under CEO Roger Beach, who assumed office in mid-1994 and led Unocal in selling its low return refining and marketing assets, buying back \$1.2 billion in debt and company stock, and streamlining business divisions for international energy projects.⁶

By 1997, the company was tightly reorganized and poised again for aggressive expansion. With a growth strategy focused explicitly on overseas operations, Unocal no longer considered itself "a U.S. company with foreign operations, but a global energy company with strong U.S. operations."⁷ As such, it remained heavily engaged in exploration projects, seeking to expand its growing reserves, extraction capacity, and profits. In 1997, with company stock averaging \$40 a share, Unocal described itself as the world's largest publicly traded, independent energy resource company, ranking first in production, reserves, and private geothermal energy output.⁸

Between 1995 and 1996, Unocal's holdings of foreign oil and gas reserves as a percentage of its total reserves increased by 25 percent. In 1996, the company's exploration and development yielded more than 268 million BOE (barrels of oil equivalent) in new reserves, 94 percent of which were in foreign projects. Eighty-seven percent of the new reserves were in Asia (113 million BOE in Thailand, 73 million BOE in Burma, and 46 million BOE in Indonesia), where the company anticipated significant growth opportunities.⁹ Accordingly, in early 1997, Unocal opened a "twin corporate headquarters" in Kuala Lumpur, Malaysia.

With this base, Unocal made Southeast Asia the center of its global focus. It was a logical and compelling choice. Along with many of its competitors, the company anticipated that the region's emerging economies would continue to grow at a projected 7 percent a year, generating higher standards of living, increased energy consumption, and the continued development of vast, unexploited resources. With over 30 years of experience in the region, Unocal already operated six oil and gas fields in Indonesia, two major geothermal projects in the Philippines, an exploration project in Vietnam, and several large natural gas facilities in Thailand.¹⁰ In early 1993, it had added to this regional portfolio by signing a production sharing contract with the Burmese government.

Burma¹¹

Slightly smaller in size than Texas, Burma lies at the heart of Southeast Asia. Situated in a predominantly tropical climate, the country possesses vast natural resources, including coal, natural gas, petroleum, timber, copper, tin, zinc, precious stones, and opium. The economy is mixed, with private activity prevailing in agriculture and light industry, while the state maintains control in energy, foreign trade, and heavy industry. The country's 47 million inhabitants include over 135 separate ethnic groups and mountain tribes, many of which speak languages other than the official Burmese.¹²

Modern Burma boasts a checkered and tumultuous past. In 1948, national hero Aung San led Burma to independence after more than a century of British colonial rule, establishing a parliamentary democracy and open elections. Just over a decade later, in March 1962, General Ne Win and the armed forces staged a coup d'etat that overthrew the ruling democracy and implemented instead a distinctive national ideology and plan of action termed "The Burmese Way to Socialism." In 1974, the military drafted the national constitution, effectively codifying its control over the country. Under the "Burmese Way," the country moved from an outright military dictatorship to a more subtle constitutional dictatorship. The military fused governmental powers in the creation of a unitary state, allowing a single political party (the Burma Socialist Programme Party) to run the regime-controlled legislature (the People's Assembly). Despite the trappings of institutional autonomy, Burma remained a totalitarian society, run by the military in line with its own interests.¹³ Although he formally ceded power in 1981, the eccentric Ne Win was widely thought to exert significant influence over subsequent military leaders and policies.¹⁴

By 1988, twenty-six years of Ne Win's "Burmese Way to Socialism" had brought the economy to a standstill. Buried under nearly three decades of incompetent administration and unsuccessful centralized economic planning, Burma was on the brink of bankruptcy, with chronic shortages of essential goods and brewing discontent over ineffective government policies. In March of 1988, when riot police shot a student outside a Rangoon teahouse, economic frustration exploded into social unrest. Throughout the capital and other parts of the country, student and citizen protests erupted, sparking demands for democracy and change. Daw Aung San Suu Kyi, daughter of the celebrated independence hero Aung San, quickly emerged as the leader of the National League for Democracy (NLD) and mounted a powerful campaign against the suddenly besieged military government.¹⁵

In September 1988, after five months of political protest and organized demonstrations, a group of military leaders banned the country's only existing political party and established a "temporary" ruling junta, organized under the Orwellian acronym of SLORC (State Law and Order Restoration Council). In the ensuing crackdown, an estimated ten thousand citizens were killed and thousands imprisoned. The SLORC closed universities, banned public gatherings, established strict curfews, and sought to reinstate totalitarian control over the once peaceful society.¹⁶ In an effort to destroy any remaining opposition, the junta confined Aung San Suu Kyi to house arrest and imprisoned or killed several of her followers. Despite these brutal efforts and sustained repression, however, support for the democracy movement remained strong.

When legislative elections were finally held in May of 1990, the National League for Democracy won an overwhelming 80 percent of the seats, leaving the military's favored party in the minority. The embarrassed SLORC promptly nullified the results, promising to hold new elections only when the military and Burma's 135 recognized ethnic minorities approved a new national constitution. Now a Nobel Peace Prize laureate, Aung San Suu Kyi remained defiant and under house arrest, refusing to participate with the SLORC in the drafting of a non-democratic constitution.

The country's economic outlook was equally tenuous. Since 1988, the SLORC's rule had brought little in the way of economic prosperity. The government's four-year plan (1992-1996) to boost agricultural output had produced disappointing results and efforts to increase exports of the country's abundant commodities, such as rice and teak, had faltered badly.¹⁷ By December 1996, poor

economic conditions and frustration over the lack of promised elections threatened to ignite another cycle of social unrest and bloody crackdown. In response to spiraling food prices and a depreciating currency (kyat), students and farmers took to the streets in protest. Once again, the SLORC closed universities and arrested several hundred citizens.¹⁸ In public pronouncements, the ruling junta reaffirmed its commitment to "annihilate any internal elements who [were] trying to disrupt the country."¹⁹

Yet somehow, in the midst of this turmoil and repression, foreign direct investment (FDI) in Burma was steadily increasing. Between 1990 and 1995, FDI grew from \$286 million to \$1.3 billion; by 1996, this figure was projected to reach nearly \$3.8 billion. Singapore accounted for the largest percentage of Burma's FDI, followed by the United Kingdom, Thailand, France, Malaysia, and the United States.²⁰ Nearly half of the investments were in the oil and gas sectors, followed by hotels and tourism, fisheries, real estate, mining, and manufacturing. Having signed production and/or exploration agreements with Unocal, Total, Texaco, Premiere Oil, Nippon Oil, and ARCO (Atlantic Richfield Co.), the ruling junta was optimistic that its vast and unexploited reserves of natural gas and oil would lead to economic salvation.

Natural Gas

Natural gas, a simple hydrocarbon typically found in porous underground reservoirs, generally consists of methane, ethane, propane, butane, pentane, and associated impurities, such as nitrogen, carbon dioxide, and hydrogen sulfide.²¹ Like oil, gas originates in organic shale, the byproduct of millions of years of pressurized heat chemically transforming the remains of prehistoric plants and animals into modern fossil fuels. Accordingly, gas deposits exist in both associated (mixed with oil) and non-associated (isolated from oil) forms. By virtue of its chemical composition, natural gas combustion produces comparatively lower levels of carbon dioxide and sulfur emissions than do other fossil fuels, such as oil or coal.

The production and transportation of natural gas occurs in three basic stages. First, the gas is gathered from well bores in small diameter pipelines for simple separations of water, formation sediments, and condensate (liquid hydrocarbons similar to crude oil). Second, inert gases or vapor pressures that do not meet pipeline specifications are removed. Third, the gas is pressurized and transported via pipeline to market. In areas where large reserves exist beyond pipeline distance from a ready market, the gas may be liquefied at -161 degrees Celsius and transported by oceangoing tanker. In its final form, natural gas is generally used to produce heat or electricity for industrial and residential purposes.²²

As of January 1990, worldwide proven natural gas reserves measured 132,897 billion cubic meters (885,980 million "barrels" equivalent), compared to a global reserve of 988,425 million barrels of oil.²³ Approximately 70% of the world's natural gas was held in Eastern Europe and the Middle East, with the remaining reserves scattered across Africa, Asia, Latin America, North America, and Western Europe.²⁴ Although natural gas production had grown steadily since World War II, consumption was still concentrated in just three regions: North America, Europe, and the Far East. Several prominent studies, however, predicted significant changes in these consumption patterns.

As of 1997, most energy forecasts suggested that the production and consumption of oil and gas would continue to increase between 1996 and 2015, establishing several prominent trends. First, many predicted that advances in extraction and transportation infrastructure would move the gas industry from a regional market to a global one, dramatically expanding trade and output. Second, as gas production around the world increased, the three top consuming regions would meet their rising demands with imports from emerging markets, particularly the Middle East, Latin America, Africa, and the former Soviet Union. Third, as these patterns manifest themselves, gas would gain significant market share over competing fossil fuels (coal and oil), with power generation and

industrial output driving appreciable demand growth in every region of the world.²⁵ As a result, by 2015, worldwide natural gas demand was projected to grow by more than 76 percent over 1996 levels.²⁶ These demand increases were expected to be especially large in developing countries, where progress and modernization depended on access to energy.

Asia's soaring economies typified many of these trends. Political and economic liberalization, coupled with average annual GDP growth rates of 7 percent, led to the widespread belief that overall gas demand in Asia would grow at 7.5 percent a year between 1995 and 2010. Although the region was largely self-sufficient in 1995, the emergence of these trends meant that as much as 40 percent of liquefied natural gas (LNG) in the region would need to be imported.²⁷ Not surprisingly, publication of these forecasts had brought about intensified exploration efforts across Asia and a concomitant boom in the development of the region's natural gas infrastructure.²⁸ Armed with similar projections, Unocal considered Southeast Asia and Burma's Yadana Project a critical part of its growth strategy.

The Yadana Project²⁹

Holding 5 trillion cubic feet of reserves, the Yadana natural gas field was located in 150 feet of water in the Andaman Sea, approximately 43 miles off the coast of Burma. Originally discovered by the state-owned Myanma Oil and Gas Enterprise (MOGE) in 1982, Yadana remained unexploited for over a decade. It was not until 1992, after a mature gas market began to emerge in Thailand, that Total signed a production-sharing agreement with the Burmese government. Scouring for additional reserves in Southeast Asia, Unocal immediately recognized the project's potential. As company president John Imle noted, "It involves the development of a known, abundant natural gas field, using off-the-shelf technology and serving a market with rapidly expanding demand. There are no technological or economic hurdles to developing the Yadana field."³⁰ Accordingly, in early 1993, Unocal readily accepted Total's invitation to join a development consortium.

With Total as the project operator, the pipeline was scheduled to commence operation in mid-1998. For 30 years thereafter, a set of four offshore platforms would produce approximately 525 million cubic feet of natural gas per day (mmcf/d), most of which would flow through a 416-mile pipeline to the Ratchaburi power plant in Thailand. In addition to meeting part of Thailand's 120 percent projected increase in electrical power demand, the pipeline would also double Burma's natural gas production, providing it with 125 mmcf/d for power projects near the capital city of Rangoon. The \$1.2 billion project was sponsored by four co-venturers: subsidiaries of Unocal (28.26%) and the Paris-based Total Corporation (31.24%), Thailand's PTT Exploration & Production Public Co. Ltd (25.5%), and Burma's MOGE (15%). In February 1995, the four companies signed a 30-year sales contract for the supply of natural gas to Thailand's Petroleum Authority and a separate sales agreement extending natural gas to Burma. In February 1997, Total, Unocal, and MOGE signed an additional production-sharing contract for a 4,427 square mile area near the Yadana field that could also be accessed by the pipeline project.

The pipeline to Ratchaburi was planned in three sections. Thirty-six inches in diameter and composed of 5,000 four and a half ton lengths of pipe, the line's first section began at the offshore platform complex and extended 215 miles along the ocean floor to Daminseik, a small coastal village in Burma. Installation was slated to begin in mid-1997. The second section, started in late 1996, included a pipeline center, pressure stations, and a metering facility. Extending through Burma's Tenasserim region, it ran 39 miles from landfall at Daminseik to the Burma-Thai border and was completed in May of 1997. The third section, to be developed by the Petroleum Authority of Thailand in late 1997, extended 161 miles from Ban-I-Tong, on the Burma-Thai border, to Ratchaburi (just outside Bangkok). In July 1998, the entire project would become operational.

Even before the pipeline was built, Unocal and Total had recognized the sensitivities that might surround it. Accordingly, the four consortium members had pledged themselves to monitor

and evaluate the full impact of their construction activities. They started in May of 1994, by hiring teams of specialists to select the most environmentally responsible path for the onshore pipeline route. This portion of the project would cut a temporary 13 meter wide path, as well as a permanent 4 meter wide access road, from Daminseik across the neck of Burma to Bon-I-Tong, traveling through a forested region dotted with rural villages. According to Unocal representatives, the route that was ultimately selected minimized contact with vulnerable populations and vegetation. It traversed through some deciduous and evergreen forests, avoiding nearby rainforests and villages. Much of the area had already been subjected to previous slash-and-burn farming and logging by local inhabitants. The additional environmental impact of the project would therefore be minimal. Teams of contract specialists performed similar evaluations for the offshore and coastal portions of the pipeline, claiming to provide "the most comprehensive regional environmental review of the area ever conducted."³¹

In addition to these environmental surveys, the consortium undertook a variety of community development initiatives in the thirteen Burmese villages located near the pipeline's planned route. After establishing village communications committees to assess the needs of people living in the area, the companies implemented a three-year, \$6 million socioeconomic development program. The initiative provided nineteen doctors to an area which had none, offered free medical services to the 35,000 local inhabitants, renovated nearby hospitals, planned seven health centers, built and furnished six new schools, established several farming projects, undertook efforts to develop local infrastructure, and waived gas transportation charges to meet the energy requirements of the affected villages. As one of Unocal's general manager's noted, "We remain fully committed to supporting these projects. Not only will they build the local economy and provide people with greater job opportunities, but they promote long-term economic self-sufficiency for the people in this region."³²

To construct the pipeline, the Yadana consortium employed two thousand local workers at higher than prevailing market wages. They also established the tuition-free Yadana Technical School in Rangoon, training 74 Burmese nationals to begin pipeline monitoring and maintenance in March 1998. As a matter of policy, all participants promised strict adherence to the fair treatment of workers, local inhabitants, and the environment. Throughout Unocal's involvement in the pipeline, the board of directors conducted periodic reviews, concluding that ". . . from moral, ethical, economic and human development perspectives, the Yadana project represents a significant opportunity to bring sustainable, long-term benefits to the people of Myanmar."³³

As of late 1997, the Yadana Project was well underway. A temporary Burmese base camp had been built, the onshore portion of the pipeline had been completed, and offshore platform construction had advanced into its final stages. Further exploration was already underway in offshore areas near the Yadana gas field, and similar developments were occurring nearby. U.S.-based Texaco, Britain's Premier Oil, and Nippon Oil of Japan were jointly constructing a natural gas extraction facility to access Burma's offshore Yetagun gas field, and ARCO, which had already entered a production sharing agreement with the Burmese government, had begun drilling in the Bay of Bengal. Amidst all of this activity and excitement, however, the Yadana project had become mired in controversy and confusion. None of the problems stemmed directly from the project or the contractual arrangements that had created it. Yet the controversy that emerged around Yadana quickly became serious enough to put Unocal's involvement in the project—and the firm's reputation—into serious jeopardy.

Endless Controversy

Ever since the project's inception in 1992, Unocal's involvement in Burma had made headline news. As the largest U.S. investor in Burma, constructing the country's largest foreign investment and infrastructure project, the company had been widely criticized by a broad coalition of human

rights groups, environmental organizations, and consumer advocates. Repeatedly, Unocal reiterated its commitment to the region and its adherence to widely accepted codes of conduct. But by 1997, the criticisms had reached a fever point. They focused, in particular, on four critical aspects of the Yadana project: pipeline security, human rights, drugs, and environmental impact.

Pipeline Security³⁴

In March 1995, five Burmese members of a Yadana survey team had been killed by anti-SLORC forces operating in the area. Subsequent attacks on Total's base camp reportedly occurred on two other occasions, injuring six project workers.³⁵ In response, and to fend off further attacks, the SLORC allegedly sent 4,000 troops to patrol the pipeline construction area.³⁶ North of the pipeline route, an additional 100,000 troops engaged in eliminating the remaining jungle strongholds of the Karen National Union (KNU), a predominantly Christian ethnic group that had been fighting for autonomy from the government since 1949. When a faction of the KNU vowed to destroy the pipeline, the SLORC launched one of its most aggressive military offensives of the past decade, driving 15,000 refugees into bordering Thailand.³⁷ With 90,000 Burmese already taking shelter along the border, Thai officials began repatriating thousands of unarmed men, women, and children back to the neighboring zone of conflict in February 1997. Aid workers and rebel leaders feared that continued repatriation would allow the SLORC to complete its drive toward total annihilation of the Karen ethnic community.³⁸

By March 1997, for the first time since World War II, the Burmese government controlled most of the Burma-Thai border and the critical area surrounding the pipeline corridor. Notably, however, the SLORC still faced several pockets of resistance, and most of the previously signed cease-fire agreements with ethnic insurgents were near collapse.³⁹ In an effort to solidify their control of the area, SLORC authorities were thought to be planning continued offensives against any remaining KNU strongholds near the Yadana project. Rebel groups within Burma and protesters in the United States partially blamed Unocal for many of the ensuing events, claiming that security for the pipeline project had provoked the SLORC's onslaught.⁴⁰ Opponents argued that "the pipeline [had] effectively furthered SLORC economic as well as military agendas in Southern Burma, as the contract [was] being used to legitimize SLORC military activities throughout the entire Tenasserim region."⁴¹

In response, officials at Total denied that the two subsequent attacks had occurred, noting only that "the government has told us that they will make the area safe."⁴² Similarly, Unocal cited its policy of political neutrality and suggested that "the general vicinity of the pipeline has not been the scene of ethnic conflict reported elsewhere in the region." In a 1995 discussion with anti-SLORC activists, Imle had also expressed his concern that guerrilla threats against the project would incite the SLORC to more violence: "Let's be reasonable about this. What I'm saying is that if you threaten the pipeline, there's going to be more military. If forced labor goes hand-in-glove with the military, yes, there will be more forced labor. For every threat to the pipeline, there will be a reaction."⁴³ In the provision of security for the Yadana project, however, SLORC military forces were allegedly committing atrocious human rights violations.

Human Rights

Reports of the SLORC's human rights abuses were not new. In fact, since its takeover in 1988, the SLORC had been repeatedly condemned by the international community for its disregard of human rights and prolonged confinement of Aung San Suu Kyi. As of 1997, hundreds of political prisoners remained in detention or awaited sentencing without due process of law. Basic rights in most countries--such as freedom of speech, press, association, and religion--were regularly denied Burmese citizens. Under the SLORC's iron-fisted rule, the government allegedly relied on the forced displacement of Burmese village populations, arbitrary seizure for forced labor, extrajudicial execution, kidnapping, torture, arbitrary arrest, and other means of physical repression.⁴⁴ According

to critics of the SLORC and Unocal, such abuses had regularly occurred in the construction and defense of the Yadana pipeline project.

Opponents of Yadana primarily focused their criticisms on three related claims. First, they claimed that the SLORC was forcing villagers in the region to serve as unpaid porters and laborers for military and infrastructure projects related to pipeline security. For example, several human rights groups credibly reported that thousands of men, women, and children were being forced to build the Ye-Tavoy Railway, which they said would be used for transporting SLORC security battalions and military supplies to the pipeline area. Poorly treated workers routinely lacked access to adequate healthcare, housing, nutrition, or clean water.⁴⁵ Second, critics argued that the forced portering contributed to additional, systematic human rights abuses. Beyond widespread confirmation by several non-governmental organizations operating along the Burma-Thailand border, Yozo Yokota, the United Nations Special Rapporteur for Burma, reported that "arbitrary killings, beatings, rapes, and confiscation of property by the SLORC [were] most commonly occurring in the border areas where the Army [was] engaged in military operations or regional development projects."⁴⁶ Finally, opponents claimed that in early 1992, the SLORC had destroyed or forcibly relocated several villages to clear the pipeline route.⁴⁷

In addition to publicizing reports of these abuses, critics of Yadana argued that Unocal and Total were liable for the atrocities being committed: "Since the pipeline project [was] the direct cause of troops moving through the area, it [was] also the indirect cause of the corresponding increase in portering and associated abuses."⁴⁸ Two class-action lawsuits filed in United States federal court made precisely this argument.

In September 1996, the National Coalition Government of Burma (NCGB) and the Federation of Trade Unions of Burma filed a lawsuit against Unocal and Total. The NCGB, which consisted of exiled parliamentary members originally elected in 1990, alleged that Unocal's use of SLORC security forces had resulted in the systematic destruction and relocation of villages, the widespread use of forced labor, and a series of human rights atrocities, including murder and rape. For example, the suit claimed that in their efforts to relocate one village, SLORC soldiers kicked and beat a woman, causing her to fall into a fire with her month-old baby. By the time she and her husband reached a hospital, the baby had died from an infected head wound. The suit sought an undisclosed amount in monetary damages and an injunction against Unocal's participation in the pipeline project.

In a second lawsuit against Unocal, Total, and the SLORC, fifteen plaintiffs representing the people of Burma also sought undisclosed monetary compensation for alleged physical abuses by the military.⁴⁹ Using the nineteenth century Alien Tort Claims Act to sue multinational companies in U.S. courts for actions outside the United States which violated international law, the suit argued that Unocal and Total should have foreseen the human rights abuses that were caused by their associated security forces. While a federal judge in the case dismissed the claims against the SLORC and the state-owned MOGE, he allowed the suit to proceed against the oil companies.⁵⁰

As they fought their legal battles, Unocal and Total vehemently denied any wrongdoing. Unocal said that the lawsuits were "false, irresponsible, and frivolous."⁵¹ President Imle explained the company's position: "We believe the lawsuits are politically motivated. We believe they are totally without merit. And we plan to defend ourselves to the fullest extent possible. But those suits are not going to affect our business."⁵² The companies also used satellite photography to argue that no villages had been destroyed or relocated in the construction of the pipeline route. Unocal and Total stated that all landowners were fairly compensated for acquired lands and that pipeline workers were paid above market wages, as formalized under signed agreements. Throughout construction of the project, both Unocal and Total voiced a strong commitment to the fair treatment of workers and villagers living in the area affected by the Yadana pipeline. In addition, Imle noted that while the SLORC may have used forced labor to build the Ye Tavoy, the railroad remained incomplete and far from operational. He also claimed that Unocal protests to the SLORC had actually decreased human rights abuses, with the government agreeing to curb the use of forced labor in railway construction.⁵³

Drugs

In addition to human rights concerns, critics of the regime also alleged that the SLORC profited from an illicit narcotics trade that flourished in isolated regions of northern Burma. Not only did the country produce an estimated 60 percent of the heroin consumed in the United States, but critics claimed that the ruling junta was instrumental in drug production and trafficking. The U.S. Assistant Secretary of State for International Narcotics concluded that drug traffickers were among the top financial backers of infrastructure projects in Burma, easily laundering money in SLORC-controlled banks.⁵⁴ More importantly, a 1996 investigation by Geopolitical Drugwatch in Paris suggested that the MOGE, Unocal's Burmese partner in the Yadana Pipeline, was "the main channel for laundering the revenues of heroin produced and exported under the control of the Burmese Army."⁵⁵ These allegations spurred small groups of Unocal shareholders and members of the U.S.-based Oil, Chemical, and Atomic Workers International Union (OCAW) to submit a shareholder resolution demanding an independent investigation into the MOGE and its drug-related activities.⁵⁶

Unocal issued a strong public response to the charges, calling them "an unfounded and reckless attempt to smear Unocal and its thousands of honest, dedicated employees. The allegation that any Unocal executive would ever condone drug money laundering is totally untrue and outrageous."⁵⁷ While Imle acknowledged the illegal drug problem in Burma, he questioned the credentials of Geopolitical Drugwatch and denied any allegation that the SLORC was responsible for drug money laundering.⁵⁸ The company also petitioned the Securities and Exchange Commission to legally exclude the resolution from its proxy statement, claiming that it would violate the Myanmar Official Secrets Act, which "makes it illegal for any person, for purposes prejudicial to the safety or interests of the State to obtain, publish or communicate to any other person information which might be directly or indirectly useful to an enemy."⁵⁹ Ultimately, the resolution was overwhelmingly defeated by a shareholder vote of 19 to 1.

Environmental Impact

Despite the early-stage evaluations that the investment consortium had conducted, international environmental groups had also lined up to attack the Yadana project. Seizing on offshore drilling as essentially detrimental, they argued that the drilling process produced toxic muds that could de-oxygenate the water and kill bottom dwelling marine life. Drilling also generated large quantities of toxic brine, which could damage fish and marine life in the area.⁶⁰ Above the water, critics claimed, daily emissions from offshore drilling rigs were equally harmful, producing waste equivalent to 7,000 cars driving fifty miles.⁶¹

The bulk of the environmentalists' concern, however, centered on the environmental impact of the onshore pipeline. Even with the carefully chosen route from Daminseik to Ratchaburi, groups such as the Earth Rights Network, the International Rivers Network, and Greenpeace claimed that construction of Yadana would result in "destruction to wetlands and mangrove ecosystems, forest clearing, fragmentation of habitat and disruption of biological corridors, establishment of logging concessions, and increased poaching of endangered species."⁶² Critics also worried that the project could damage the Tenasserim watershed and a wildlife area protected by the Karen, which contained tigers, rhinoceros, elephants, and other protected species. Most importantly, perhaps, environmental groups asserted that the opaque operations of the SLORC, coupled with an apparent lack of environmental regulation, would give Unocal and Total free reign in destroying and polluting Burma's fragile ecosystem. As one report noted, "the environmental costs of [the] Yadana natural gas development scheme may be enormous. Without adequate mechanisms for protection, marine life and wildlife as well as human populations are at risk."⁶³ While they conceded that both companies had conducted environmental evaluations, opponents noted that neither company had publicly released the findings.

On the Thai side of the border, environmental opposition was even stronger. As designed, the pipeline would cut through a pristine watershed zone and a series of national parks and wildlife sanctuaries which formed the largest conservation area in mainland Asia. In the process, it would allegedly destroy large tracts of undisturbed forest and almost certainly affect the 120 species of land mammals (45 of which were considered threatened in Thailand and 15 of which were internationally classified as threatened) living in the area. The pipeline would also cause severe soil erosion, which could threaten regional villages with large landslides. Even more dramatically, the pipeline's planned route crossed two active geological faults, raising the possibility of gas leakage or a major explosion in the event of renewed seismic activity. According to regional ethnic leaders, "If the pipeline was damaged, natural gas made up of between 80-95 percent methane would leak and cause extensive damage, not only to people living in the vicinity but also to wildlife and other natural resources."⁶⁴ Opponents noted that between 1983 and 1988, Thai officials had recorded earthquake epicenters near the project site six times, registering between 4.1 and 5.8 on the Richter scale.⁶⁵ Although the National Environment Board of Thailand had conducted environmental impact and seismic evaluations of the pipeline route, critics suggested that the studies ignored the project's effects on wildlife and forest ecology.

The Free Burma Coalition

Taken by themselves, each of the criticisms against Yadana was fairly significant, and each was voiced by activist groups with their own levers, and levels, of influence. What made these criticisms particularly powerful, however, was the ability of the various groups to coordinate their opposition and present a united front against the Yadana pipeline. Until the mid-1990s, such concerted protests were relatively rare. Environmental groups focused on their set of problems and pressure points, human rights groups on their own network of information and influence, and so on. But the advent of the Internet changed these standard patterns. Suddenly activist groups were able to join forces and exchange information with unprecedented ease. Grassroots connections, long the backbone of activism, became, quite literally, electrified.

Given the breadth of activist interest in Burma, coalition occurred rapidly. In the early 1990s, the Free Burma Coalition was formed, a diverse mix of high school, university, environmental, human rights, religious, and labor organizations, which soon comprised one of the world's largest single student movements. Modeled after the anti-apartheid movement in South Africa, the Free Burma Coalition had two explicit objectives: "1) To weaken the grip of the State Law and Order Restoration Council (SLORC) by cutting its substantial flow of foreign currency provided by multinational corporations such as Total, Unocal, Texaco, and ARCO among others; and 2) To strengthen the position of the democratic forces within Burma by building up an international movement calling for the end of totalitarian rule under [the] SLORC."⁶⁶ In pursuit of these objectives, the coalition organized peaceful protests, publicized consumer boycotts, and lobbied for federal sanctions as well as state and local selective purchasing laws.

A logical focal point for all of these activities was Unocal, Burma's largest U.S. foreign investor. The Coalition sponsored consumer boycotts and writing campaigns, urging members to send letters and mutilated gas credit cards to company CEO Roger Beach. Opponents also took more direct action. In one demonstration at a Unocal shipping terminal in Los Angeles, for example, several protesters from the Free Burma Coalition were arrested after chaining themselves to company trucks and storage tanks.⁶⁷ Eventually, the group's influence began to spread. In addition to Unocal, opponents also targeted Texaco and ARCO, protesting outside shareholder meetings, organizing consumer boycotts and letter writing campaigns, proposing shareholder resolutions demanding withdrawal from Burma, and urging investors to sell their holdings of company stock.⁶⁸ By early 1997, the Free Burma Coalition could claim at least partial responsibility for the withdrawal of several U.S. companies from Burma, including Apple Computers, Eastman-Kodak, Eddie Bauer, Hewlett-Packard, J. Crew, Levi-Strauss, Liz Claiborne, Motorola, PepsiCo, Walt Disney, and Wentz Vineyards.

The Coalition also pressured city councils and state legislatures to adopt selective purchasing laws. By early 1997, 13 cities, including New York City and San Francisco, and the state of Massachusetts had passed laws barring government agencies from purchasing goods or services from any company that maintained operations in Burma. Several other states, such as Texas and Connecticut, were considering similar legislation.⁶⁹ Organizers hoped that the laws would encourage firms to remove operations and foreign exchange from the country. Although the legality of the selective purchasing laws remained under dispute, their mere passage pointed to an increasingly powerful consumer voice and activist presence.

Eventually, the influence of the Burma protesters reached the national level. In July 1996, the U.S. Congress passed the Cohen-Feinstein amendment to the Foreign Operations Appropriations Act of 1997, requiring a ban on new U.S. investment in Burma if the Clinton Administration determined that the SLORC had harmed Aung San Suu Kyi or engaged in "large-scale repression" of its democratic opposition. Referring to the SLORC as "an ugly acronym for an ugly government," Secretary of State Madeleine Albright suggested that the conditions for the investment ban had been met in early 1997, as the junta continued to disrupt NLD gatherings and restrict Suu Kyi's freedom of movement.⁷⁰ In May of 1997, President Clinton formally imposed sanctions, arguing that "the actions and policies of the SLORC regime constitute an extraordinary and unusual threat to the security and stability of the region, and therefore to the national security and foreign policy of the United States."⁷¹ This followed similar actions by the European Union, which stripped the country of its preferential trade status to condemn the use of "slave labor" practices.⁷²

Response

Meanwhile, of course, Unocal had not sat idly by. As early as 1992, it had started to lobby aggressively—in Washington, in Burma, and at the state level. In 1996, company representatives journeyed to Washington to demonstrate Unocal's efforts to help the 35,000 Burmese villagers living along the pipeline route. The company's representatives pointed out that the project partners had hired doctors, immunized over 1,000 children, undertaken different farming projects, rebuilt clinics and schools, and enhanced local water and electricity infrastructure. As company president Imle asserted, "We are proud of the Yadana project because it does what current government policy fails to do: improve the lives of others. It is an outstanding model of responsible economic development that can make a difference to the people of Myanmar and Thailand. For the first time in many villagers' lives, our project brings hope and the chance of a better way of life. . . . To those who ask how we can remain in Myanmar, we respond, 'How can we ever justify leaving?'"⁷³

Unocal also contributed to, and participated in, several groups with interests in Southeast Asia. One of them, the Asia-Pacific Exchange Foundation, was attacked for sponsoring trips to the pipeline project site for House majority whip Tom DeLay and three other members of Congress.⁷⁴ Responding to criticism of this relationship, the company claimed that it had "every right to support an organization that encourages a balanced view of foreign policy issues and supports educational endeavors pertaining to Asia. Asia is the future. It certainly is an important part of Unocal's strategy."⁷⁵ The company also worked with the National Foreign Trade Council to create USA Engage, a coalition that included 600 companies and claimed former U.S. trade representative Clayton Yeutter as one of its spokespersons. The purpose of the organization was to demonstrate the harmful effects of international sanctions on American corporate sales and profits.⁷⁶ USA Engage argued that unilateral sanctions generally hurt local populations and U.S. corporations, exerting little pressure on target governments.⁷⁷ Unocal also sought to increase the interest of policy groups and think-tanks on the issue of sanctions. The company and the investment consortium held briefings and site visits for European, Asian, and American reporters, two non-governmental organizations, several U.S. Congress members, and State Department officials.

On announcement of the U.S. sanctions, CEO Roger Beach responded ". . . We are terribly disappointed because we feel that engaging in other infrastructure projects for Myanmar at this time would be very beneficial to the development of the economy of Myanmar."⁷⁸ A company spokesman similarly noted that "These sanctions are going to do nothing to speed change in Burma, but they are going to speed up the departure of U.S. companies."⁷⁹ Although Unocal decided to forego two additional Burmese exploration possibilities in compliance with the sanctions, the firm remained focused on Asia: "The Administration's action will not change the company's long-term strategic direction of developing major energy-related projects throughout this region."⁸⁰

Imle felt particularly strongly about the sanctions, as he had been an vocal opponent throughout the lobbying process. While he understood the rationale behind the consumer boycott movements and U.S. government sanctions, he questioned whether any of these efforts would touch the well-entrenched SLORC. He also believed that if Unocal pulled out of the project, any number of European or Asian oil companies would probably take its place. Imle's explicit goal for Unocal and Burma was constructive engagement of the SLORC: "If Washington wants to influence the future of Myanmar, it must make it possible for U.S. companies to increase their investment, not reduce it. That would strengthen American influence by speeding the transfer of U.S. business principles, fair labor practices, health and safety and environmental standards and technologies."⁸¹

Activists in the Free Burma Coalition, however, praised the sanctions as moving the Burmese people one step closer to democracy. Robert E. Wages, president of OCAW, argued that "The decision [to impose sanctions] reflect[ed] a major victory in the struggle to make multinational corporations accountable for their actions at home and abroad."⁸² While noting that Unocal had agreed to abandon exploration efforts in two offshore areas, opponents vowed to continue pressuring Unocal and Total to "withdraw their shares in the gas pipeline project. We ask that all corporations not engage in any business in Burma until a democratic government is in place. Foreign revenue only lines the pockets of SLORC officials and helps keep the brutal regime in power."⁸³

As he thought about the Yadana pipeline, Imle considered several issues. While the lucrative project formed a critical component of Unocal's global focus, it continued to pose several problems. In recent months, the brutal SLORC had responded to civil protests by tightening its grip and arresting pro-democracy supporters. These actions had revved up activity on the Internet and within the Coalition, as activists re-affirmed their commitment to the anti-Yadana campaign. In the foreseeable future, at least, human rights and environmental concerns would continue to play a prominent role in the pipeline project—and thus, in Unocal's plans for expansion across Asia.

Exhibit 1 Regional Map

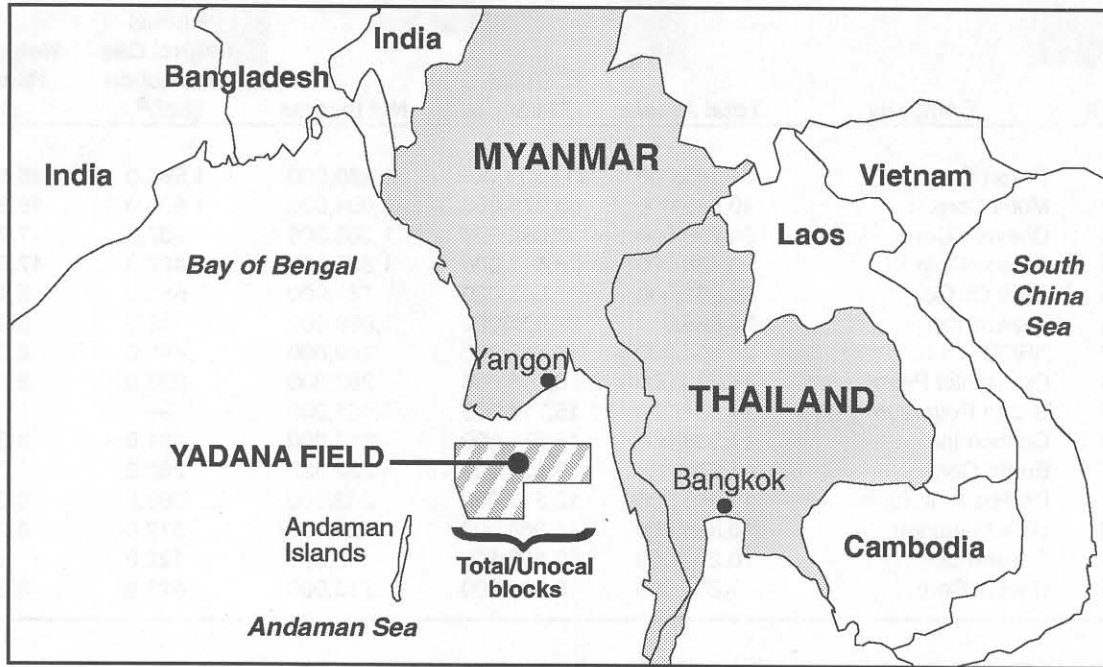
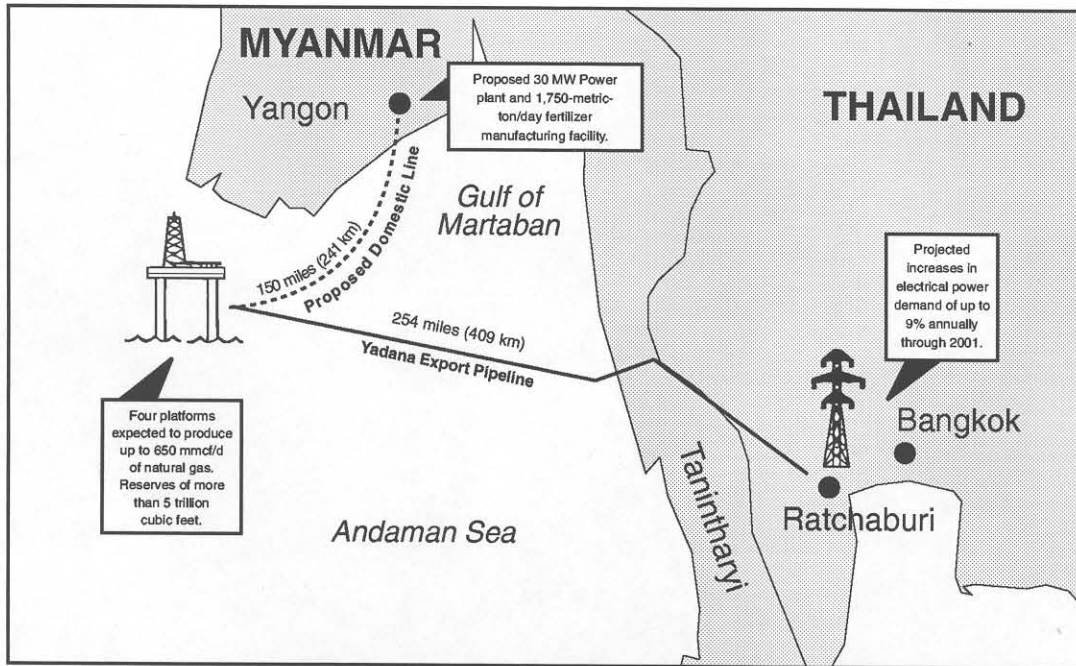


Exhibit 2 Map with Pipeline Route



Source: Unocal, Yadana Project, November 1995

Exhibit 3 Top 15 Oil Companies by Total Assets, 1993 (thousand US\$)

Rank	Company	Total Assets	Total Revenues	Net Income	Annual Natural Gas Production (bcf) ^a	Natural Gas Reserves (bcf)
1	Exxon Corp.	84,145,000	111,211,000	5,280,000	1,583.0	25,816.0
2	Mobil Corp.	40,585,000	63,975,000	2,084,000	1,665.0	16,959.0
3	Chevron Corp.	34,736,000	37,082,000	1,265,000	902.0	7,741.0
4	Amoco Corp.	28,486,000	28,617,000	1,820,000	1,487.0	17,650.0
5	Shell Oil Co.	26,851,000	21,092,000	781,000	553.0	5,199.0
6	Texaco Inc.	26,626,000	34,071,000	1,068,000	748.0	5,970.0
7	ARCO	23,894,000	19,183,000	269,000	449.0	8,005.0
8	Occidental Petroleum	17,230,000	8,544,000	283,000	238.0	2,136.0
9	British Petroleum (USA)	14,864,000	15,714,000	1,461,000	—	—
10	Conoco Inc.	11,938,000	15,771,000	812,000	481.0	3,680.0
11	Enron Corp.	11,504,315	8,003,393	332,522	262.2	1,772.2
12	Phillips Petroleum	10,868,000	12,545,000	243,000	509.0	6,069.0
13	USX Marathon	10,806,000	11,962,000	(29,000)	317.0	3,748.0
14	Coastal Corp.	10,277,000	10,136,100	115,800	122.0	925.5
15	Unocal Corp.	9,254,000	8,344,000	213,000	623.0	6,632.0

Source: *Oil and Gas Journal Databook*, (Tulsa, Oklahoma: Pennwell Books, 1995) pp. 8-9.

^abcf=billion cubic feet

Exhibit 4 Unocal Corporation Consolidated Balance Sheets, 1992-1995^a (thousand US\$)

	1995	1994	1993	1992
Cash	94,000	148,000	205,000	157,000
Receivables	920,000	897,000	877,000	1,039,000
Inventories	360,000	341,000	326,000	326,000
Other current assets	202,000	142,000	170,000	138,000
Total current assets	1,576,000	1,528,000	1,578,000	1,660,000
Net PP&E	7,109,000	6,823,000	7,175,000	6,896,000
Investments and adv. to subs	1,101,000	895,000	847,000	788,000
Deferred charges	25,000	30,000	30,000	NA
Deposits and other assets	80,000	61,000	76,000	108,000
Total assets	9,891,000	9,337,000	9,706,000	9,452,000
Accounts payable	804,000	688,000	735,000	712,000
Current long term debt	NA	NA	54,000	151,000
Accrued expenses	285,000	313,000	300,000	391,000
Other current liabilities	227,000	256,000	107,000	182,000
Total current liabilities	1,316,000	1,257,000	1,196,000	1,436,000
Deferred charges/inc	1,340,000	1,182,000	1,461,000	1,339,000
Long term debt	3,698,000	3,461,000	3,468,000	3,546,000
Other long term liabilities	607,000	622,000	NA	NA
Total liabilities	6,961,000	6,522,000	6,125,000	6,321,000
Preferred stock	513,000	513,000	513,000	513,000
Common stock, net	247,000	244,000	241,000	241,000
Capital surplus	319,000	237,000	163,000	149,000
Retained earnings	1,874,000	1,847,000	2,230,000	2,234,000
Treasury stock	NA	NA	452,000	NA
Other equities	(23,000)	(26,000)	(18,000)	(6,000)
Total shareholders' equity	2,930,000	2,815,000	3,581,000	3,131,000
Total liabilities and net worth	9,891,000	9,337,000	9,706,000	9,452,000

Source: Unocal Corporation Annual Reports, 1993-1996.

^aAll statements from December 31.

Exhibit 5 Unocal Corporation Consolidated Statements of Income, 1992-1995^a (thousand US\$)

	1995	1994	1993	1992
Net sales	8,133,000	7,797,000	8,077,000	9,887,000
Cost of goods sold	4,993,000	5,694,000	5,813,000	7,428,000
Gross profit	3,140,000	2,103,000	2,264,000	2,459,000
R&D expenditures	199,000	200,000	164,000	238,000
SG&A	1,457,000	555,000	489,000	703,000
Depreciation and Amortization	1,022,000	947,000	963,000	964,000
Non-operating Income	292,000	168,000	267,000	174,000
Interest expense	291,000	275,000	304,000	379,000
Income before tax	463,000	294,000	611,000	349,000
Provision for income tax	203,000	170,000	268,000	153,000
Extraordinary items and disc. ops.	NA	(277,000)	(130,000)	24,000
Net Income	260,000	(153,000)	213,000	220,000
Shares outstanding	247,310	244,199	241,324	240,671
Share price ^b	27.625	27.625	28.0625	24.6875

Source: Unocal Corporation Annual Reports, 1993-1996.

^aAll statements from December 31.

^bAverage of annual high and low.

Exhibit 6 Unocal Sales and Earnings Data by Category, 1992-1996 (million US\$)

	1996	1995	1994	1993	1992
Crude oil and condensate	2,495	1,964	1,996	1,928	2,270
Natural gas	1,482	1,031	1,109	1,104	1,033
Agricultural products	514	486	373	319	292
Geothermal	131	120	135	145	197
Natural gas liquids	95	97	96	101	116
Petroleum products	16	84	89	458	1,236
Minerals	97	95	79	62	80
Consumer excise tax	—	—	5	87	283
Other	161	58	95	134	427
Total	4,991	3,935	3,977	4,338	5,934
Operating revenues	110	176	141	137	164
Other revenues	227	278	154	255	149
Total revenues from continuing operations	5,328	4,389	4,272	4,730	6,247
Discontinued operations	4,271	4,036	3,693	3,614	3,814
Total revenues	9,599	8,425	7,965	8,344	10,061

Source: Unocal Corporation, 1996 Annual Report.

Note: Total revenues include 'Nonoperating income,' which is excluded from Net sales under Exhibit 6.

Exhibit 7 Annual Economic Indicators for Burma, 1991-1996

	1996	1995	1994	1993	1992	1991
GDP at current prices (Kyat bn)	751.8	613.2	473.1	360.3	294.4	186.8
Real GDP growth (%)	5.5	9.8	7.5	6.0	9.7	(0.6)
Consumer price inflation (%)	16.2	25.2	24.1	31.8	21.9	32.3
Population (m)	47.0	46.2	45.4	44.6	43.7	42.7
Exports (\$ m)	820.0	750.0	810.0	696.0	590.7	430.6
Imports (\$ m)	2,300.0	2,010.0	1,497.0	1,302.0	1,010.2	842.3
Current account (\$ m)	(806)	(603)	(173)	(194)	(204)	(344)
Reserves excluding gold (\$ m)	200.0	561.1	422.0	302.9	280.1	258.4
Total external debt (\$ m)	NA	6,988	6,502	5,730	5,327	4,853
Debt-service ratio (%)	NA	51.5	51.4	39.8	42.8	50.9
Official exchange rate (av.) Kyat:\$	5.87	5.67	5.97	6.16	6.10	6.28

Source: Adapted from Economist Intelligence Unit, *EIU Country Report: Myanmar*, fourth quarter 1996 and first quarter 1997.

Exhibit 8 1996 Foreign Direct Investment in Burma by Country of Origin

Country	Rank	Number of Enterprises	Total Approved Investment (US\$millions)
Singapore	1	50	1,158.85
United Kingdom	2	25	1,011.16
Thailand	3	33	946.16
France	4	2	466.37
Malaysia	5	16	446.27
United States	6	15	243.57
The Netherlands	7	5	237.85
Japan	8	11	183.42
Austria	9	1	71.50
Hong Kong	10	17	64.44
Republic of Korea	11	9	60.59
Australia	12	10	39.00
Canada	13	9	32.53
Indonesia	14	2	21.00
China	15	6	15.95
Total		211	4,998.66

Source: Adapted from *Myanview*, January, 1997, p. 11.

Exhibit 9 Foreign Investment in Burma by Sector, April 1996

Sector	Number of Projects	Foreign Capital (US\$millions)
Agriculture	1	2.69
Fisheries	15	252.04
Mining	27	319.73
Manufacturing	53	193.53
Oil and Gas	24	1,435.42
Transportation	7	121.22
Hotels and Tourism	34	647.63
Real Estate	6	251.45
Industrial Estate	1	12.00
Others	1	1.67
Total	169	3,237.38

Source: Adapted from *Myanmarview*, July, 1996, p. 11.

Note: The discrepancy between FDI totals in Exhibits 9 and 10 reflects a difference between approved and actual investment.

Exhibit 10 World Energy Outlook Projections of Natural Gas Demand (million tons of oil equivalent)

Area	1991	2000	2010
World	1,727	2,020	2,718
OECD	828	964	1,231
OECD North America	516	571	700
OECD Europe	247	313	404
OECD Pacific	65	80	127

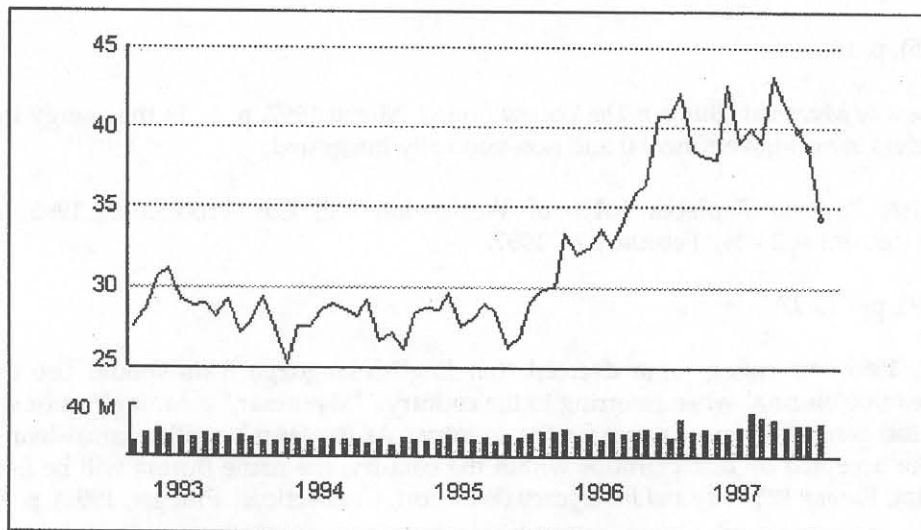
Source: OECD, *Natural Gas Transportation: Organisation and Regulation*, (Paris: OECD, 1994), p. 12.

Exhibit 11 Average Annual Growth Rates in Fossil Fuel Demand, 1971-1992

Region	Solids (%)	Oil (%)	Gas (%)
North America and Mexico	2.7	0.6	—
OECD Europe	-0.1	-0.1	5.4
OECD Pacific	1.8	1.2	12.9
Former Soviet Union	-1.1	1.1	5.7
East Asia	4.7	6.3	17.5
South Asia	5.7	5.3	10.3
China	5.2	5.9	7.3
Middle East	12.3	7.4	8.6
South and Central America	5.0	2.2	6.3
Africa	3.8	4.2	13.3

Source: *Petroleum Economist*, February, 1996, p. 2.

Exhibit 12 Unocal Stock Price, 1993-1997



Endnotes

- ¹ "Total Shrugs off Burma Politics," *The Financial Times*, July 23, 1996, p. 23.
- ² Unocal, *The Yadana Project*, November 1995, pp. 4-5.
- ³ Michael Richardson, "Unocal Expands Burma Investment as Others Pull Out Over Rights," *International Herald Tribune*, January 31, 1997, p. 13.
- ⁴ Fred L. Hartley, *'The Spirit of 76: The Story of the Union Oil Company of California*, (New York: The Newcomen Society in North America, 1977); Richard J. Stegemeier, *A Century of Spirit: The History of Unocal* (New York: The Newcomen Society of the United States, 1991); Union Oil Company of California, *Sign of the 76: The Fabulous Life and Times of the Union Oil Company of California* (Los Angeles: Union Oil Company of California, 1976).
- ⁵ Douglas Sun, "Unocal Corporation," *International Directory of Company History*, vol. 4 (Chicago: St. James Press, 1991), pp. 569-571. On Total, Unocal's co-venturer, see William Pitt, "Total Compagnie Francaise des Petroles S.A.," *International Directory of Company History*, vol. 4 (Chicago: St. James Press, 1991), pp. 557-561.
- ⁶ <http://www.unocal.com/newucl/ahead.html>.
- ⁷ Unocal (1995), p. 16.
- ⁸ Unocal, *Unocal in Myanmar (Burma): The Yadana Project*, March 1997, p. 1. In the energy industry, 'independent' refers to non-governmental and non-vertically integrated.
- ⁹ PR Newswire, "Unocal Replaces 101% of Worldwide Oil, Gas Production 1996; Foreign Production Replacement at 234%," February 13, 1997.
- ¹⁰ Unocal (1997), pp. 25-27.
- ¹¹ On May 27, 1989, the ruling junta decreed that English-language texts should use the term "Myanmar" instead of "Burma" when referring to the country. "Myanmar," meaning fast or strong in Burmese, is the indigenous Burmese name for the country. As the term is neither consistent with its English usage nor accepted by many groups within the country, the name Burma will be used. See Michael Fredholm, *Burma: Ethnicity and Insurgency* (Westport, Connecticut: Praeger, 1993), p. 7.
- ¹² U.S. Central Intelligence Agency, *The World Factbook*, September 7, 1995.
- ¹³ Chi-shad Liang, *Burma's Foreign Relations: Neutralism in Theory and Practice* (New York: Praeger, 1990), p. 43.
- ¹⁴ Like many in Burma, Ne Win was extremely superstitious, frequently consulting a personal astrologer to determine economic policy. In 1987, for example, the Burmese currency was reissued in 45 and 90 kyat bills to reflect Ne Win's lucky number 9 (4+5=9). Similarly, the government changed the official name of the country from Burma to Myanmar on May 27, 1989 (2+7=9). Fredholm (1993), pp. 243-246.
- ¹⁵ Fredholm (1993), pp. 58-59.
- ¹⁶ Fredholm (1993), pp. 64-65.

¹⁷ Economist Intelligence Unit, *EIU Country Report: Myanmar*, first quarter 1997; *Myanview: A Quarterly Review of Economic and Political Trends in Myanmar*, January 1996, pp. 4-5; July 1996, pp. 10-11; January 1997.

¹⁸ Economist Intelligence Unit (first quarter 1997).

¹⁹ Economist Intelligence Unit (first quarter 1997), p. 12.

²⁰ See *Myanview* (January 1996), p. 4. Official statistics list Unocal's investment under Total of France and Texaco's under Premier of the United Kingdom, suggesting that the United States may actually be the largest foreign investor in Burma.

²¹ International Energy Agency, *Natural Gas Transportation: Organization and Regulation* (Paris: OECD, 1994), p. 32.

²² The author is grateful to Michael Thacher, of Unocal, for technical clarifications on natural gas processing and extraction.

²³ International Energy Agency, *Natural Gas: Prospects and Policies* (Paris: OECD, 1991), p. 211. Two technical notes: 1) one cubic meter of natural gas under normal pressure contains approximately one-thousandth of the energy of the same volume of crude oil. 2) "Proven reserves are estimated quantities that analysis of geological and engineering data demonstrate with reasonable certainty to be recoverable in future years from known reservoirs under existing economic and operating conditions," Energy Information Administration, *International Energy Outlook 1996* (Washington D.C.: U.S. Department of Energy, May 1996).

²⁴ See International Energy Agency (1994), pp. 11 and 31.

²⁵ Energy Information Administration (1996); Neil E. Foreman, "Global Production through 2005," *World Oil*, December 1996; International Energy Agency (1991); George Ives, "Operating Companies to Install 18,800 Miles of Lines in 1997," *Pipe Line and Gas Industry*, January 1997; Mostefa A. Ouki, "Pipelines Still to Provide Supply to Remote Markets," *The Petroleum Economist*, February 1996, p. 4; Warren True, "World Pipeline Construction Looks to Remain Robust to Century's Turn," *Oil and Gas Journal*, February 10, 1997.

²⁶ Energy Information Administration (1996), p. 35.

²⁷ Derek Bamber, "Full Steam Ahead for New Generation of LNG Schemes," *Petroleum Economist*, November 1996, pp. 4-6; International Energy Agency (1996).

²⁸ "Natural Gas Spurring Southeast Asian E&P," *Offshore*, February 1997; "Far East .Ê.Ê. Natural Gas Activity Leads Regional Construction Work," *Pipe Line and Gas Industry*, November 1996, pp. 32-36; Peggy Williams, "The Cold Wars," *Hart's Oil and Gas Investor*, February 1997, pp. 33-36.

²⁹ This section draws heavily from Total, "The Yadana Gas Development," July 1996; and Unocal (1995, 1997).

³⁰ John F. Imle, Jr., "Testimony to Senate Banking Committee Hearing on S. 1511," May 22, 1996, p.Ê1.

³¹ Unocal (1995), p. 10. See also Total (1996), p. 11.

- ³² Unocal Board of Directors, quoted in David Garcia, "Yadana Project Brings Jobs, Services to Villages," *Seventy Six*, First Quarter, 1996, p. 6.
- ³³ Garcia (1996), p. 6.
- ³⁴ For a very broad discussion of security (e.g., economic, supply, physical, etc.) issues and natural gas, see International Energy Agency, *The IEA Natural Gas Security Study*, (Paris: OECD, 1995).
- ³⁵ Earth Rights Network and Southeast Asian Information Network, "Total Denial: A Report on the Yadana Pipeline Project in Burma," Chapter 2, <http://sunsite.unc.edu/freeburma/docs/totaldenial/td.html>, July, 1996. In an interview with the author, consortium members denied that this second attack had occurred.
- ³⁶ *Periscope Daily Defense News Capsules*, "SLORC Ensures Security for Gas Pipeline Laying," January 30, 1997.
- ³⁷ Seth Mydans, "In Thai Camps, Fear of Burmese Troops Grows," *New York Times*, March 1, 1997, p. 3A.
- ³⁸ *Periscope Daily Defense News Capsules*, "Economic Gains Driving Burmese Military Offensive," February 28, 1997.
- ³⁹ Economist Intelligence Unit (first quarter 1997), p. 15.
- ⁴⁰ *Periscope Daily Defense News Capsules* (February 28, 1997).
- ⁴¹ Earth Rights Network and Southeast Asian Information Network (1996), Chapter 2.
- ⁴² Earth Rights Network and Southeast Asian Information Network (1996), Chapter 2.
- ⁴³ <http://www.irm.org/burma/unocal.html>, "Unocal: Making a Killing in Burma."
- ⁴⁴ See Amnesty International, "Myanmar: Human Rights Still Denied," November 1994; Human Rights Watch Asia, "Burma/Thailand: The Mon: Persecuted in Burma, Forced Back from Thailand," December 1994; The U.S. Department of State, *Country Reports on Human Rights Practices for 1996* (Washington D.C.: U.S. Government Printing Office, January 1997); The U.S. House of Representatives, "Recent Developments in Burma, Hearing Before the Subcommittee on Asia and the Pacific, September 7, 1995" (Washington D.C.: U.S. Government Printing Office, 1996).
- ⁴⁵ Earth Rights Network and Southeast Asian Information Network (1996), Chapter 4.
- ⁴⁶ <http://www.un.org/rights/>. Yokota, Yozo. "Situation of Human Rights in Myanmar." *Human Rights Questions: Human Rights Situations and Reports of Special Rapporteurs and Representatives*, February 1995. Imle suggests that Yokota was not referring to the pipeline region in this quote.
- ⁴⁷ Earth Rights Network and Southeast Asian Information Network (1996), Chapter 5.
- ⁴⁸ Earth Rights Network and Southeast Asian Information Network (1996), Chapter 4.
- ⁴⁹ Ted Bardacke, "Oil Companies are Sued Over Burmese Gas," *Financial Times*, October 4, 1996, p. 9; Nigel Holloway, "Long Arm of the Law," *Far Eastern Economic Review*, September 19, 1996.

- ⁵⁰ Christian Berthelsen, "Unocal/Burma Suit," City News Service, March 26, 1997. The judge cited sovereign immunity in his decision to drop the suit against the SLORC and MOGE.
- ⁵¹ Unocal, "Unocal Statement in Response to Press Release from Law Offices of Cristobal Bonifaz," <http://www.unocal.com/newsvws/96html>, September 3, 1996.
- ⁵² *Asiaweek*, "'Sanctions Hurt People: Unocal Tries to Defend a Controversial Project,'" February 21, 1997, p. 24.
- ⁵³ Personal communication with John Imle, August 12, 1997.
- ⁵⁴ PR Newswire, "According to OCAW Unocal Tries to Block Union Request for an Investigation of Link to Burmese Heroin Trade," February 27, 1997. See also Christopher Cox, *Chasing the Dragon: Into the Heart of the Golden Triangle* (New York: Henry Holt and Co., 1996).
- ⁵⁵ Quoted in Jim Lobe, "Burma-U.S.: SLORC may be in Albright's Sights," Interpress Service, December 20, 1996.
- ⁵⁶ PR Newswire, "SEC Accepts Retired Oil Worker's Shareholder Resolution to Investigate Unocal's Links to Drug Money Laundering; OCAW President Expects Further Roadblocks from Unocal," March 20, 1997.
- ⁵⁷ Unocal, "Unocal Responds to OCAW Allegations Concerning Yadana Project in Myanmar," <http://www.unocal.com/newsvws/96html>, December 23, 1996.
- ⁵⁸ Personal communication with John Imle, August 12, 1997.
- ⁵⁹ PR Newswire (February 27, 1997).
- ⁶⁰ <http://www.irn.org/burma/total.html>. and <http://www.irn.org/burma/unocal.html>.
- ⁶¹ Earth Rights Network and Southeast Asian Information Network (1996), Chapter 7.
- ⁶² <http://www.irn.org/burma/unocal.html>.
- ⁶³ Earth Rights Network and Southeast Asian Information Network (1996), Chapter 7.
- ⁶⁴ *The Bangkok Post*, "Burma Gas Deal Seen as Threat to Thailand's Forests," March 12, 1995, p. 4.
- ⁶⁵ Burma News Network, "Ecological Disaster (TERRA): The Yadana Pipeline Route Controversy," <http://www-uvi.eunet.fr/asia/euro-burma/total>, January 1, 1997.
- ⁶⁶ <http://danenet.wicip.org/fbc/mission.html>.
- ⁶⁷ *Reuters Financial Service*, "Protesters in Los Angeles Against Burma Pipeline," December 12, 1996.
- ⁶⁸ David Chance, "Political, Environmental Groups Target Texaco," *The Reuter Business Report*, May 11, 1997; Jim Lobe, "U.S.-Burma: Sanctions Campaign Keeps Rolling," Interpress Service, May 15, 1997.
- ⁶⁹ Veronica Smith, "Burma Boycott Movement Fells Biggest Prize Yet: Pepsi," Agence France Presse, January 30, 1997.

⁷⁰ Economist Intelligence Unit (first quarter 1997), pp. 6-7; Interpress Service, "Burma-U.S.: PepsiCo's Pullout Leaves Focus on Oil Companies," January 28, 1997.

⁷¹ <http://www.usia.gov/regional/ea/burma/invsanc.html>, "Clinton Message to Congress on Burma Sanctions," May 20, 1997.

⁷² Kimberley Music, "U.S. Wavers on Myanmar Investment Ban as EU Punishes Slave Labor Practices," *The Oil Daily*, December 19, 1996, p. 3.

⁷³ Imle, "Testimony" (1996).

⁷⁴ U.P.I., "Congressional Trip Criticized," March 14, 1997.

⁷⁵ Quoted in Ed Timms and Susan Feeney, "Foes of Burma Regime Question DeLay's Visit Sponsor, Lawmaker's Spokesman Deny Impropriety," *The Dallas Morning News*, March 14, 1997, p. 1A.

⁷⁶ Paul Magnusson, "A Troubling Barrage of Trade Sanctions From All Across America," *Business Week*, February 14, 1997, p. 59.

⁷⁷ Imle, "Testimony," (1996), p. 7; "A Case for Investment in Burma," *International Herald Tribune*, February 6, 1997; "Keep Door Open in Myanmar," *Journal of Commerce*, February 28, 1997; National Association of Manufacturers, *A Catalog of New U.S. Unilateral Economic Sanctions for Foreign Policy Purposes 1993-1996*, March 1997.

⁷⁸ *Oil and Gas Journal*, April 28, 1997, p. 2.

⁷⁹ Tim Shorrock, "Rights, Drugs Issues Spark Ban on Myanmar; US Prohibits Investment, Citing Concern Over Illegal Narcotics Trade," *Journal of Commerce* April 23, 1997, p. 1A.

⁸⁰ <http://www.usia.gov/regional/ea/burma/invsanc.html>, May 20, 1997.

⁸¹ John Imle, Jr. "Keep Door Open in Myanmar," *Journal of Commerce*, February 28, 1997.

⁸² *Oil and Gas Journal*, April 28, 1997, p. 2.

⁸³ <http://www.irn.org/burma/unocal.html>