

COPING WITH OIL

In 1965, when Esso secured the first license from Oslo for offshore oil exploration, hopes ran high that the North Sea fields would provide a stable source of energy for the West—and a stable source of income for Norway.

By the autumn of 1969, those hopes were fading. More than 200 exploratory wells dotted the seabed between Norway and Britain, and none had yielded enough petroleum to warrant commercial development.

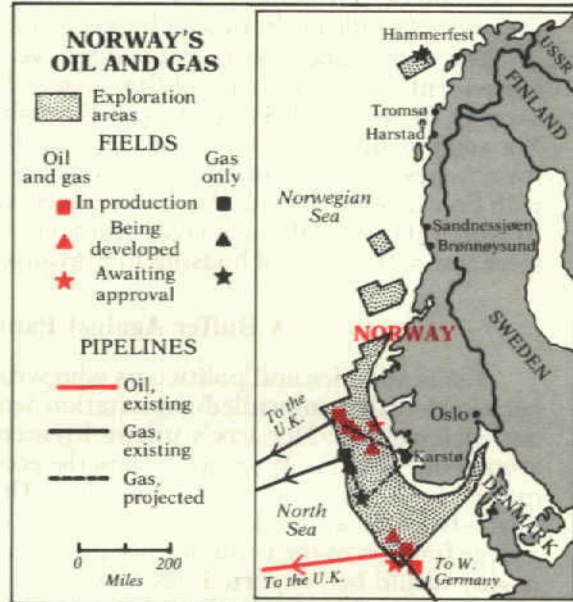
In December, workers on the Phillips Petroleum drilling rig "Ocean Viking" suddenly struck oil 180 miles off the Norwegian shore, two miles beneath the ocean floor. By 1971, Phillips was extracting 40,000 barrels per day from "Ekofisk"—a dome-shaped formation of limestone eight miles long and four miles wide. Within a few years, the North Sea would rank second only to the Middle East in "proven oil reserves." One-third of those reserves were under Norway's waters.

But there was no dancing in the streets of Oslo. The Norwegians, for the most part, reacted soberly to their windfall. Prime Minister Trygve Bratteli of the long-dominant Labor Party warned in 1974 that Norway's undersea blessing could become a curse; oil wealth had to be handled judiciously. The nation, he vowed, would not allow revenues from oil and natural gas to overheat the economy. It would not let the petroleum business displace traditional export industries, such as shipbuilding and forestry, leaving the country's prosperity hostage to fluctuations in the worldwide demand for energy. Only with great patience and self-discipline, he cautioned, could his fellow countrymen parlay their new-found inheritance into a sound economic future.

Oil Minister Ingwald Ulveseth concurred. "It is not our aim that every Norwegian have big automobiles," he told a correspondent for *Dun's Review* in the summer of 1974. "And we don't plan to become sheiks with golden furniture and so on. That's not the Norwegian way."

Yet, by the late 1970s, some Norwegians were caustically referring to their homeland as the "Kuwait of the North." The *Economist*, a British newsweekly, declared in 1978 that "the Norwegian nightmare of oil wealth drowning the existing industrial base is becoming a reality." Indeed, although oil money has kept Norway prosperous amid global recession, the underlying *health* of the Norwegian economy remains in doubt even today.

Ninety percent of Norway's estimated recoverable under-sea oil and natural gas reserves lie in fields not yet under development.



Once-robust industries—shipbuilding, aluminum, forestry—suffer from inflated costs. Some companies flounder; others stay competitive in world markets only with the help of government subsidies; still others have died.

Increasingly, Norwegian journalists and politicians wonder aloud whether such wrenching domestic changes are the inevitable by-product of exploiting the country's offshore Klondike—and, if they are not, how to cure or prevent them.

The drama is best viewed against the backdrop of the 1970s. It was then that the Norwegian petroleum policy, willy-nilly, began to suffocate the nation's private enterprises.

In a 1974 white paper, Bratteli laid out his government's policy on petroleum. The oil boom had not yet materialized. Mobil, Shell, Esso, Amoco, Phillips, and other multinationals had sunk hundreds of millions of dollars into the Norwegian sector of the North Sea but as yet were producing less oil per year than Norway consumed.* Even so, the eventual value of the nation's undersea assets was becoming clear. In October of 1973, the Or-

*Norway became self-sufficient in oil in 1975, and today it produces seven times as much petroleum and natural gas as it consumes. Under a 1964 agreement, the North Sea is divided into five sectors: Norwegian, British, Dutch, Danish, and West German. To date, most of the oil yielded by the sea has come from the British and Norwegian sectors. Production figures for 1982 were: Great Britain, 103.4 million metric tons; Norway, 24.5 million; West Germany, 4.9 million; the Netherlands, 1.9 million; Denmark, 1.7 million.

ganization of Petroleum Exporting Countries (OPEC) had raised the price of crude oil from \$3 a barrel to \$5.

The social repercussions of sudden wealth were also becoming evident. In the port city of Stavanger, shipbuilding and engineering firms hired Swedish and Finnish laborers to replace Norwegians lured out to oil rigs by pay three times as high as their wages on the mainland. Storeowners stocked their shelves with French's Cattlemen's barbecue sauce to please the palates of roustabouts and oil executives from Texas and Oklahoma. In three years, the price of housing in Stavanger doubled.

A Buffer Against Pain

The academics and politicians who wrote the 1974 white paper worried that unbridled exploitation would entail more serious dislocations. Norway's unemployment rate then hovered around one percent. With no slack in the economy, an influx of oil money could bring rampant inflation. The Labor government thus advocated a "moderate tempo" for drilling and argued that a large fraction of the revenues should be invested abroad. The oil money would be "exported" as loans to countries better able to absorb it. The Storting endorsed the proposal.

The ink on the white paper had hardly dried when Bratteli decided, in effect, to ignore the plan. The reason: The optimistic economic forecast on which it was based appeared less realistic with each passing day. As 1974 progressed, Norway began to feel the pinch of the OPEC-induced worldwide recession. Layoffs hit the shipping, shipbuilding, forestry, and fishing industries—all dependent on exports. Although the unemployment rate had not risen even to two percent, Labor Party leaders agreed that a new economic policy was in order.

Finance Minister Per Kleppe decided to use oil revenues as a buffer against the pain. And, since Norwegian oil was not yet flowing in abundance, the *anticipation* of oil revenues would

This essay is adapted by permission of the publisher from Petroleum and Economic Development: The Cases of Mexico and Norway by Ragaei El Mallakh, Øystein Noreng, and Barry W. Poulson. (Lexington, Mass.: Lexington Books, D. C. Heath and Company, Copyright 1984, D. C. Heath and Company). Ragaei El Mallakh is professor of economics at the University of Colorado, Boulder, and executive director of the International Research Center for Energy and Economic Development. Øystein Noreng teaches at the Norwegian School of Management, Oslo, and is research director of the Institute of Energy Policy. Barry Poulson is professor of economics at the University of Colorado, Boulder.

have to serve. Drawing on Norway's Triple A credit rating, the government would borrow enough money to stimulate the economy. When the oil began gushing, the debts could be repaid. The Storting approved the plan unanimously. Borrowing abroad, particularly from U.S. banks, accelerated. The 1974 white paper had called for channeling about 6 billion kroner of petroleum revenues into the Norwegian economy each year and sending the rest abroad. In fact, roughly twice that much annual domestic spending was financed by borrowing against untapped oil reserves between 1974 and 1977.

Much of the money went to prop up ailing industries. Subsidizing "endangered" enterprises, such as farming, had long been government policy. As the list of the needy grew, the cost of that policy soared. Oslo paid shipowners to mothball idle freighters rather than sell them at a loss abroad. Paper, aluminum, and steel mills kept producing in spite of sagging demand, secure in the knowledge that the government would pay them to stockpile their excess output until markets revived. By the beginning of 1978, about one-fourth of Norway's manufacturing jobs depended on direct government subsidies.

Blue-eyed Arabs?

Superficially, the borrowing plan seemed to work. From 1973 to 1980, full-time employment grew at an average of 1.3 percent annually—more than twice the historical rate. The quarterly rate of unemployment never edged above the 1.6 percent it reached in 1975.

The standard of living also rose. In early 1978, a visiting *New York Times* man reported that Oslo "reflects prosperity at every turn: Mercedes Benz taxicabs, shops bulging with fancy imported goods, and well-filled restaurants where the prices on the wine list look like telephone numbers."

Indeed, prices had jumped by 9.2 percent in 1977. More importantly, wages were rising faster still. Since shipbuilding and metallurgy firms were paid, in effect, to hoard labor, and the oil business consumed more and more man-hours, unions found themselves in a strong bargaining position. *Real* wages in the manufacturing sector rose by one-fourth from 1974 to 1977.

Also contributing to wage inflation was the infusion of government cash into the welfare system. Retirement pensions, aid to the handicapped, and other benefits became more generous. New hospitals were built, principally in rural areas. Doctors, nurses, and a host of new bureaucrats swelled the government payroll. Between 1973 and 1981, public employment grew by

NORWAY AND NATO

Two NATO members—Norway and Turkey—share borders with the Soviet Union. Sixty miles east of the Norwegian frontier lies Murmansk, home base for more than 400 Soviet naval vessels, including two-thirds of Russia's ballistic-missile submarines. This reality, Western analysts suggest, underlies Norway's importance in any conflict between the Soviet Union and the NATO nations.

"World War Three may not be won on the Northern Flank," American military commentator Robert Weinland has written. "But it could definitely be lost there."

In the event of a non-nuclear war, NATO could use listening posts in northern Norway to help track Soviet naval movements. Therefore, the Soviet Union, as NATO analysts see it, would begin any attack on Western Europe by trying to subdue Norway. That accomplished, Norway's dozen airfields and its sheltered fjords—kept ice-free by the Gulf Stream—could variously serve as staging points for air attacks on Britain or Central Europe or submarine forays against supply routes between Europe and the United States.

Advancing Red Army ground troops would encounter unfriendly terrain in northern Norway. The roads snake through easily defended mountain passes which, Norwegian military planners hope, would help stop Soviet armor columns. Each of the two 13,000-man Russian motorized rifle divisions routinely based on the Kola peninsula already includes 266 tanks.

In wartime, Norway would rely on NATO reinforcements, its own American-made F-16 fighters armed with locally produced Penguin missiles, and a small but agile navy, consisting mainly of corvettes, fast attack craft, and small submarines. Within 48 hours, 225,000 reservists could be mobilized. But the first shock would be borne by only 42,000 active duty troops—mainly one-year conscripts.

180,000, or 60 percent, further increasing the demand for labor.

Normally, companies competing in an international marketplace would feel the effects of higher labor costs immediately; forced to raise prices, they would lose business at home or abroad to more efficient foreign firms. But government subsidies insulated Norwegian industrialists from such painful repercussions. With a guaranteed market at home, they could afford to lose customers elsewhere. They did—in textiles, paper, and metals. Not until 1983 did exports of "traditional" goods climb back to 1973 levels. Meanwhile, worldwide demand for such products had grown by 30 percent. Norway had missed the boat.

Subsidies also left managers with little incentive to keep abreast of changing technology. Even as computerized record-keeping and automated production swept Japan, Western Europe, and the United States, the Norwegian government, in

Like Denmark, Norway has long prohibited the stationing of NATO troops and nuclear weapons on its soil. When NATO conducts joint exercises in Norway, allied forces are normally kept at least 300 miles from the Soviet border.

Such caution is partly a vestige of Norway's traditional neutralist sentiment and partly the result of an implicit bargain with Moscow. As a quid pro quo, some Western analysts believe, the Russians have limited troop deployments near the Norwegian border. But a recent Soviet build-up on the Kola Peninsula, as well as continuing disputes over boundary lines in the oil-rich Barents Sea, have made Oslo re-examine its neighborly policy. Last spring, a Norwegian frigate fired 10 rockets at an unidentified (but probably Soviet) submarine submerged in Hardanger Fjord. Despite Moscow's protests, the government has permitted the U.S. Marines to "pre-position" equipment in central Norway.



Soviet-backed repression in Poland and Afghanistan has also chilled Norway's relations with Russia. Many Norwegians see U.S. policy in faraway Central America as no better. Antinuclear protests by young Norwegians are aimed at both superpowers.

But most middle-aged Norwegians, remembering the Nazi invasion in World War II, endorse the Western Alliance. One poll found that more than 80 percent of all adults back continued NATO membership. Indeed, William Bogie wrote from Oslo last year in *National Defense*, "It is impossible to start a real debate on the subject."

effect, discouraged innovation. And the "boom" atmosphere may have eroded the national tradition of pride in one's work. If, as it seemed, oil offered a better life for less effort, why should employees exert themselves unduly? Already in 1978, a Norwegian economist, sensing the broader implications of the government's "countercyclical" policy, remarked that 1977 had been "a good year for Norwegians, but a bad year for Norway."

Worse still, the oil revenues against which Norway's leaders had mortgaged the country's future were slow to materialize.

To be sure, the government had cut itself a big slice of the pie. One provision of the 1974 white paper was faithfully followed. Oslo insisted that the multinational corporations that had mapped out and searched the ocean floor play second fiddle when harvest time came. The government's zeal in dealing with the oil giants earned Norwegians the nickname "blue-eyed

Arabs" among some of their multinational partners.

The government created its own oil exploration and recovery firm, Statoil, in 1972. Within a decade, Statoil would grow to be Norway's second largest corporation in terms of revenues—thanks largely to the enterprise of American oil companies.* It was given the option of claiming *at least* 50 percent of each petroleum find, regardless of whether it had invested in the search. (Even when Statoil located and retrieved oil unassisted, it had foreigners to thank; Statoil president Arve Johnsen hired a former Chevron executive to head the company's exploration program and a former Shell officer to oversee drilling operations.) In 1975, the government passed a steep tax on windfall petroleum profits. Between that levy and standard corporate taxes, Oslo aimed to take about 70 percent of net profit.

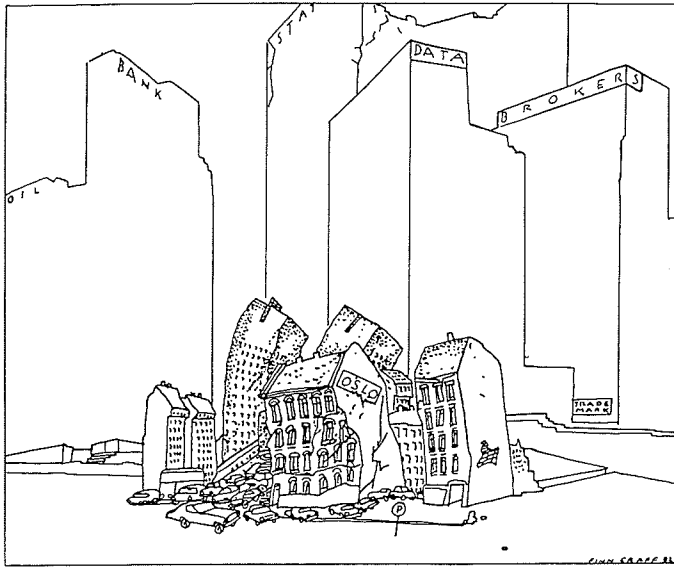
Neglecting Reality

But during the mid-1970s, there was precious little to tax. Facing long winter nights and storms that pushed waves as high as 80 feet, the oilmen found the job more time-consuming than expected—and more costly, in both financial and human terms. By the spring of 1977, accidents had claimed the lives of more than 80 workers on the North Sea oil rigs.

In that year, production reached only 107 million barrels, roughly half of what Oslo had projected. By midyear, the comfortable budget surplus that the government had expected by 1978 was nowhere in sight. The Ministry of Finance quietly pushed the date of the anticipated bonanza forward to 1981. During the spring of 1978, foreign debt reached \$20 billion, equal to half of the gross national product. Norway now had the highest debt ratio ever attained by a member of the 24-nation Organization for Economic Cooperation and Development.

The government's profligate ways drew fire not only from Conservatives, but also from Social Democrats. By 1978, Prime Minister Odvar Nordli of the Labor Party had decided that it was time to shift gears. He stepped up petroleum licensing, cut back on public spending, devalued the krone (which today is worth about 13 cents), and imposed a 16-month wage and price freeze—despite claims from spokesmen for leftist fringe parties that such measures constituted "the biggest treason since [that

*The government owns 100 percent of Statoil and appoints five of its seven directors; the other two are elected by Statoil's 3,000 employees. Norsk Hydro, the 51-percent state-owned company founded in 1905 to harness hydroelectricity, is the largest company in Norway. It manufactures fertilizer, processes metals, and now competes with Statoil for oil business. Saga Petroleum, a private firm, is the third major Norwegian oil company.



Norwegian cartoonist Finn Graf depicts the impact of oil wealth on Oslo. Norway's urban population grew by one-fifth between 1960 and 1980.

of the quislings in] the Second World War." This austerity program yielded some immediate benefits. Between 1977 and 1980, a trade deficit equal to 10.8 percent of the GNP was replaced by a surplus of 4.8 percent. And since 1980, accelerated oil production *has* begun to pull Norway out of debt.

But much damage has been done. To this day, Norway's industrial competitiveness lags. The loss of world market shares in shipbuilding and aluminum production continues.* Knut Lofstad, president of the Union of Industries, Norway's employers' organization, declared last year that "Norwegians have gradually developed a tendency towards neglecting the economic realities."

In the end, the Labor government created what it had at first tried to avoid—an economy, and a welfare state, addicted to oil revenues. The result was a sluggish private sector, more dependent than ever on government subsidies.

Yet, it would be wrong to lay all the blame for the obsolescence of Norway's manufacturing industries at the feet of the

*Oil is, however, spurring a few companies to new heights. Aker, a Norwegian shipbuilder, had by 1975 become the second largest oil rig builder in the world, breaking the longtime American monopoly of that business. And Statoil is gearing up for what its chairman, Finn Lied, has called "the Norwegian man on the moon project"—drilling in the Troll field, which lies under 984 feet of water.

Labor Party. Partly, the problem is one of culture.

Norway is an old, highly homogeneous Scandinavian society that places a premium on social and economic equality and on cultural continuity. The "good life" is not equated with conspicuous consumption, and the individual quest for material gain that spurs entrepreneurship in many countries is not so highly regarded in Oslo. Nor is competitive ingenuity; factory foremen and executives often view new ideas as threatening. Many firms are family owned, and company strategy sometimes amounts to preserving the status quo until a competitor's success clearly seems to warrant imitation. And "marketing" (which in some U.S. corporations seems to take precedence over quality control) plays only a minor role in Norway's commerce. Managers cling to the notion that "good products sell themselves."

A Morality Tale

Thus bound by tradition (and weakened by government paternalism), Norwegian businessmen were psychologically ill-equipped to cope with the worldwide recession and technological flux of the mid-1970s. This same psychology now makes it hard for the average Norwegian to accept the consequences of failure in the marketplace—the slow death of industries that date back to Norway's independence in 1905. Norwegians worry that the decline of factories and mines in the hinterland could lead to an exodus of the rural folk and of the strong culture that has survived modern times so far. Oslo, Trondheim, and other cities could overflow with people dependent on government make-work for their livelihood.

In some respects, of course, this is the specter haunting many Western industrialized nations on the brink of the "information age"—masses of well-paid workers rendered unemployable by the transition from a "manufacturing" to a "services" economy. But in Norway, that transition is lubricated by oil. Traditionalists fear what the *Financial Times* of London calls the "Venezuelan effect": The petroleum industry becomes "the only provider to a population left mainly, otherwise, to cut each other's hair."

The Conservative government of Prime Minister Kaare Willoch was elected in 1981 partly on the basis of his promises to halt the slide toward a stagnant, government-dependent services economy. The plan was simple. By slashing subsidies, Oslo would expose Norwegian companies to international competition, leaving them to sink or swim. If "sunset" industries died, "sunrise" industries would be born. One way or the other, the dead weight would be eliminated, and the private sector resuscitated.

In practice, such rigor has proven difficult to sustain. Norway has hundreds of tiny towns tucked away in the hinterland. The survival of each may depend on a single factory or mine. The vision of entire villages left without a local source of employment has proven politically forbidding—particularly now that the Conservative Party depends on the rural-based Christian People's and Center parties as partners in a ruling coalition.

In its early days, for example, the Willoch administration refused on grounds of principle to rescue a dying aluminum smelter in Tyssedal, a village in southern Norway with a population of 1,400. But as protest grew, the government could not leave the townsfolk to suffer the agonies of economic Darwinism. Oslo recently agreed to help build an ilmenite smelter there instead.

Thus, the long drift toward a state-financed economy is difficult to reverse. No one likes to suffer or inflict pain. By the end of 1982, the "sheltered" sector of the economy—government services plus government-subsidized industries—accounted for 80 percent of Norway's employment. Only seven years earlier, the figure had been 59 percent.

In purely financial terms, Norway can afford such self-indulgence. Total output of oil and natural gas is likely to rise to 60 million "tons of oil equivalent" (TOE) by 1985, and to 75 million TOE by 1990. With some 11 billion TOE beneath its allotted ocean floors, Oslo could maintain the projected 1990 production rate well into the 22nd century before supplies ran low.

But what will Norway look like after decades of such "prosperity" if its people do not reject the course charted during the 1970s? Will every worker's paycheck come from the government? Will the nation's mines and factories be idle, each surrounded by a ghost town? Or will they be artificially sustained in spite of sagging efficiency and stagnant technology, until finally they are little more than state-supported museums? Such questions grow more urgent each year as Norway's leaders seek to reconcile its newest tangible asset with its oldest intangible assets—rugged individualism, pride in work, the "quality of life."

Even in Norway, as in other new "oil countries," the chronicle of sudden wealth has become a kind of morality tale.

