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**The Oil Price Spiral**

Recent events, coupled with those of the last several years, point toward three conclusions:

- Supplies of Middle Eastern oil are subject to sudden interruption.
- Excessive dependence on such oil invites World War III.
- The oil cartel could easily further sharply increase its revenues while cutting production.

Any one of these considerations should be sufficiently persuasive to induce the consuming nations to seek to limit dependence on imported oil. In practice, the most effective goad is likely to be high prices. Past experience indicates that the limit on what OPEC can charge has not yet been reached. A small shortfall of supplies can lead to a great increase in price. In 1973 and 1974, production of oil in the free world was cut by 10 percent. A quadrupling of the price of oil followed quickly. The revolution in Iran led to a decrease in production there, but increases elsewhere held the drop to about 5 percent. This shortfall gave rise to a doubling of the price of oil. Imports by the developed countries have been little affected by the doubling, although at the moment there is a softening of prices on the spot market.

It is obvious that OPEC could extract much more money from the consumers while extracting less oil from the earth. The questions become: When will the next major squeeze occur, and how high will the price go? Any estimate is a wild guess, but a further doubling could occur within a year.

Price increases might be avoided if demand for oil were curtailed substantially. For the short term, this could be achieved by drastic conservation in the developed countries—for example, by gasoline rationing—but at the moment meaningful conservation seems politically unfeasible. For the longer term, prospects for cutting the use of oil are better, and one can visualize how the price spiral might eventually be brought under control through conservation and by the development of renewable energy sources. For the intermediate term, the most feasible solution is enhanced substitution of coal for oil and natural gas.

The energy potentially available in the form of coal is more than an order of magnitude greater than in oil. Important amounts of coal are present in many countries, including all the continents. Most important, the cost of thermal energy from coal is already substantially less than that from oil. In some parts of the world, the contrast is a factor of ten or more. Prospects for steadiness in the price of coal are good, and the large number of potential sources frees coal from the kind of political instability that now characterizes oil.

Quick substitution of coal is feasible in only a limited number of situations where oil had previously replaced coal. But the current contrasts in costs and uncertainties are serving as powerful incentives for exercise of ingenuity in adapting to coal. Action or lack of action by the United States will be an important factor in determining how fast substitution of coal will occur. More coal could readily be produced for both domestic and foreign consumption, but actions to implement the switch to coal have been slow.

Many foreign countries would like to obtain coal here, and delegations from France, West Germany, Japan, Spain, and Denmark have come to the United States during the last 2 months. However, concern has been expressed about the unreliability of supplies due to sudden domestic political moves and about the lack of infrastructure for experts. To make a really significant impact on world energy would require the existence of better rail transport, enlarged port facilities, and larger coal-carrying ships.

Switching toward use of coal will not be easy. However, new technology is being developed to improve the convenience and versatility of coal as a source of energy and chemicals. The United States can make many contributions to such developments. By moving resolutely this country could be crucial in helping to bring energy prices under control and in reducing dangerous tensions.—PHILIP H. ABELSON