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THREATS TO U.S. ENERGY SECURITY: THE CHALLENGE OF ARAB OIL

INTRODUCTION

In recent years oil has become an increasingly politicized commodity replete with ominous national security implications for the United States. As control of the world oil market has been wrested away from the international oil companies by the oil-exporting nations, economic (profit-making) goals have been systematically displaced by political considerations detrimental to the economic health and foreign policy independence of oil-importing states.

In October 1973 Arab oil producers unsheathed their "oil weapon" against the United States in an effort to persuade Washington to pressure Tel Aviv to withdraw from the occupied territories. In 1978-1979 militant Iranian oil workers resorted to politically-inspired strikes to topple the Shah. While the Iranian version of the oil weapon was aimed at the Shah, it inflicted significant collateral damage on a wide array of innocent bystanders: oil-importing states in general and the United States in particular. More recently Nigeria issued an implied threat to curb oil exports to the United States if Washington removed trade sanctions against the new multi-racial state of Zimbabwe-Rhodesia. Libya's mercurial Colonel Qaddhafi, not to be outdone, has uttered alarming, if somewhat ambiguous, warnings of a Libyan oil embargo in retaliation for American footdragging on the sale of several transport planes, a sanction precipitated by Libya's alleged use of U.S.-supplied equipment in its abortive intervention in Uganda on the behalf of Idi Amin. Even the tiny island-state of Bahrein has seen fit to warn the United States that it must do more to overcome opposition in Israel to Palestinian self-rule if it wants moderate Persian Gulf states to expand their oil production.

Clearly, assured access to foreign oil supplies is a vital national interest of the United States which has been repeatedly jeopardized in the 1970s and one that will face additional critical challenges in the 1980s. The purpose of this paper is to identify and analyze various threats to U.S. energy security both in terms of their past use and future usability. Since the most ominous threat to U.S. energy security is posed in connection with the Arab-Israeli conflict, this paper will focus on the Arab oil weapon, although the energy security implications of the Iranian revolution will also be assessed.

ENERGY SECURITY THREATS

Energy security is essentially energy certainty. It is a relative concept since absolute energy security is unobtainable. Even nations that enjoy energy self-sufficiency are susceptible to socio-economic disorders (e.g. coalminers' strikes) and technical failures (e.g. the "Great Blackout" of 1965) which subvert the certainty of energy supply.

For net energy importers, energy security consists of three components: certainty of an uninterrupted flow of energy imports, certainty of an adequate flow of energy imports and certainty of a relatively stable price level for energy imports. Any action or potential action which undermines the certainty of access to an uninterrupted, adequate flow of energy imports at reasonably stable prices poses a threat to national energy security. Since energy is the life force which animates the economy and influences the development of society, a threat to disrupt a nation's energy supply is, by extension, a threat to disrupt the intra-national (social) order of that nation and the position of that nation within the international order.

Energy security threats take three broad forms: embargoes, production cutbacks and drastic unpredictable price changes. Each of these three threats imposes different costs on the United States, over different durations of time, in order to achieve diverse sets of political-economic goals held by various groups of oil-exporting states. Although the Arab petro-political offensive of 1973 linked all three threats together in a coordinated program of economic coercion, each threat is separate and distinct; each could be unleashed autonomously in the future. Therefore, each mode of energy security threat should be analyzed independently.

THE THREAT OF EMBARGO

An embargo is a political act arising from a specific set of political circumstances which dictate the manner and duration of

its implementation. The only oil embargoes of the postwar era have been extensions of conflict in the Middle East or Africa. The actual use of the Arab oil weapon has been a symptom of the Arab failure to cope with Israel's "expansionism" by diplomatic or military means.

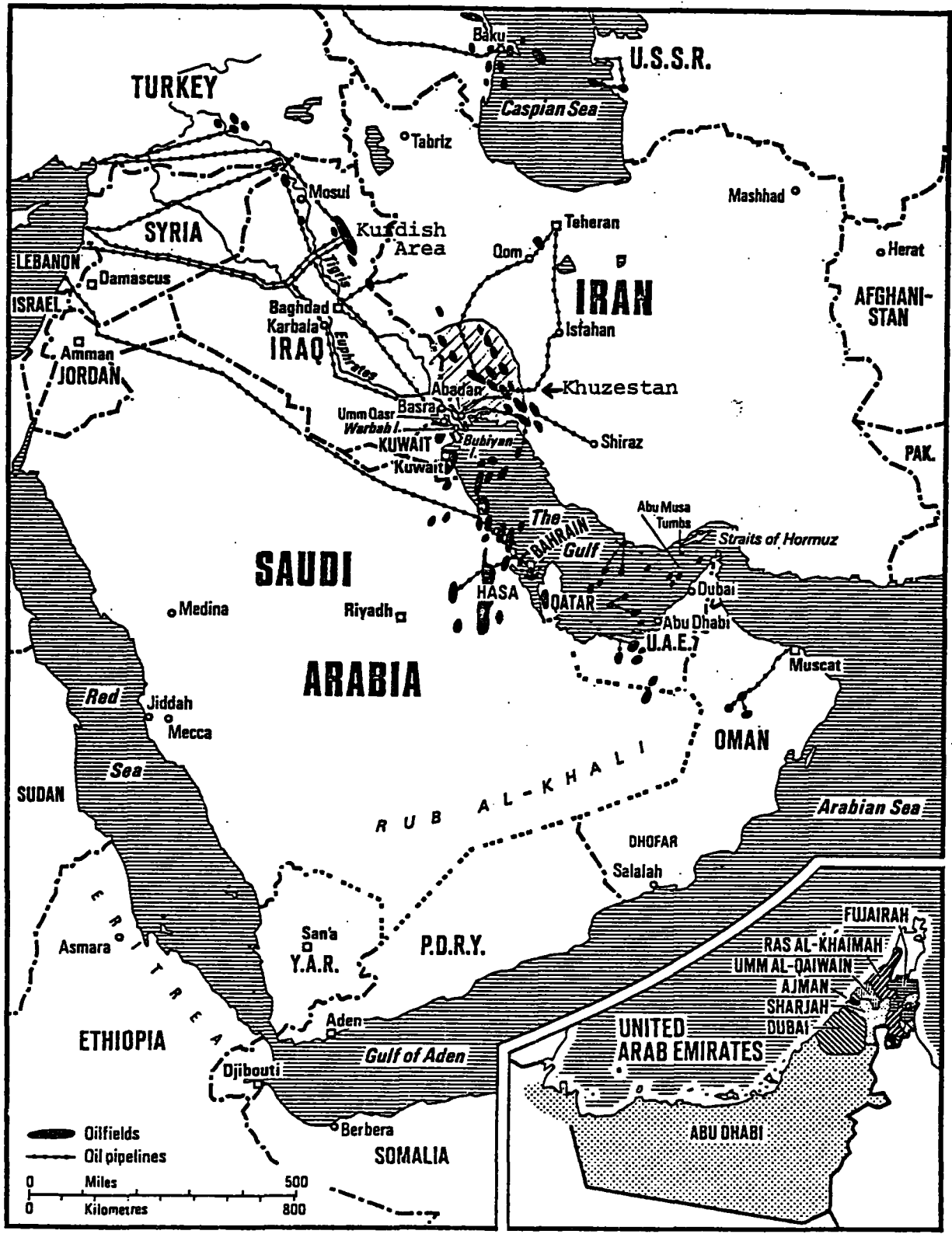
The first Arab attempt to use oil as a political lever vis-a-vis Israel was precipitated by the 1956 joint Anglo-French-Israeli intervention in Egypt. Sabotage of a Syrian pumping station at that time forced the shutdown of the Iraq Petroleum Company pipeline from the Iraqi fields to the Mediterranean. Because of the closure of the Suez Canal, two-thirds of Middle Eastern oil exports to Europe had to be rerouted or were cut off.

The shortfall of Arab oil was easily made up by Western Hemisphere suppliers, particularly Venezuela, which was only too happy to expand production and temporarily regain the European markets which it had previously lost to Middle Eastern competitors. The significant feature of the 1956 supply interruption, aside from the fact that it exerted a negligible impact on oil-importers as a group due to the existence of widespread shut-in production capacity, was the nature of the cutoff itself. The decision to suspend oil exports was not a deliberate decision of the oil producers, but of a transit country (Syria) which was confronting Israel at close range.

In 1967, military conflict again precipitated a suspension of oil exports, but in a markedly different manner. Within two days of the outbreak of war every major Arab oil exporter had shut down production, either as a result of government action (Iraq and Kuwait) or as a result of strikes by oil workers (Libya and Saudi Arabia). The production stoppage was followed by selective embargoes on the United States, Great Britain and West Germany, an effort which the Saudi Arabian oil minister felt had "hurt the Arabs more than anyone else."¹

Not only did non-Arab oil exporters expand production to offset the decline in the Arab oil flow (Iran's oil production increased by 23%), but even the United States, which had been a net oil importer since 1948, was capable of increasing production by one million barrels per day (MBD). In 1967 there was ample excess production capacity which could be thrown into the breach as a substitute for embargoed Arab oil. Once again the oil weapon proved to be a dud.

1. Quoted in Walter Laqueur, The Struggle for the Middle East: The Soviet Union and the Middle East (Hammondsworth, England: Penguin Books, 1972) p. 153.



Source: "The Security of Middle East Oil," Special Report (London: The Institute for the Study of Conflict, May, 1979) p. 7.

THE 1973 ARAB OIL EMBARGO

By 1973 the situation had changed radically. World demand for oil had grown faster than world supply and excess production capacity had dwindled significantly, leaving fewer substitutes for Arab oil on the world petroleum market. In the six-year interval between the third and fourth Arab-Israeli wars the United States had become increasingly dependent on Arab oil as its domestic energy production peaked and imports from non-Arab sources could not keep pace with demand.

U.S. OIL IMPORT DEPENDENCE²

	1956	1967	1973
Oil imports (millions of tons)	57.3	116.5	300.7
Oil imports as percentage of energy supply	5.6%	7.7%	17.4%
Arab oil imports as percentage of energy supply	1.3%	0.6%	5.0%

By early 1973 the Saudis could no longer resist the temptation to flex their newly-found oil muscle. In April, the possibility that Arab oil might again become politicized was broached by Saudi oil minister Sheikh Ahmed Zaki al-Yamani, who made a special trip to Washington at the behest of King Faisal. The king himself pointedly chose to remind the United States of its dependence on Arab oil on America's Independence Day, the Fourth of July, in an interview with two American reporters.

Warnings continued up to October 19, when President Nixon announced that the United States would furnish Israel with \$2.2 billion in military aid to offset losses incurred in the initial phases of the October War. The next day, Saudi Arabia unilaterally announced the imposition of an embargo on oil exports to the United States and the Netherlands (later the embargo was extended to Portugal and South Africa as a gesture of Afro-Arab solidarity). Within a few days all members of the Organization of Arab Oil-Exporting Countries (OAPEC) had followed Riyadh's lead and the oil weapon was unsheathed for the third time in less than two decades.

When the embargo went into effect the United States was importing approximately 3 MBD of crude oil and petroleum products from the Arab world, the equivalent of 17% of total oil demand. The embargo damaged the U.S. economy more severely than any other single event since the Great Depression of the 1930s.

2. Hans Maull, "Oil and Influence: The Oil Weapon Examined," Adelphi Paper No. 117 (London: International Institute for Strategic Studies, 1975) p. 3.

As a direct result of the Arab oil cutoff the Federal Energy Administration estimated that a \$10-20 billion GNP loss was inflicted on the American economy and an additional 500,000 workers were forced into unemployment.³ The damage would have been significantly greater but for the ameliorating influence of two intervening variables. From the very start the destructive impact of the embargo had been cushioned by the oil industry, which redistributed available oil stocks in order to "equalize the suffering" of the oil-importing states.⁴ By juggling oil flows to substitute Arab oil for non-Arab oil in non-embargoed states and vice versa in the embargoed states, the international oil industry partially defused the Arab oil weapon.

In addition there were many leaks in the embargo itself. As much as 700,000 barrels of Arab oil per day leaked into the United States, the bulk of which originated from Caribbean refineries which refused to divulge their sources. It was believed that much of this oil came from Iraq and Libya, the two OAPEC mavericks, who had purposefully left loopholes in their embargo policies. Due to these significant hemorrhages in the embargo and the flexibility of the oil supply system, the United States which was importing 6.2 MBD at the outset of the October War, was still importing over 5 MBD at the height of the embargo.

THE OIL WEAPON RECONSIDERED

The embargo strategy suffered from the problems of time-lag, lack of control and imprecision. The nature of the oil distribution system required OAPEC to deal with a built-in time lag; oil tankers loaded before the decision to interrupt supplies continued to arrive at their destinations for weeks after the initiation of the embargo. This gap between the launching of the embargo and its impact made the oil weapon a "somewhat awkward instrument of political coercion, with a tendency to draw out a crisis situation."⁵ The oil weapon is likely to grow even more awkward in the future as oil-importing states build up their stockpiles to cushion the potential impact of an embargo.

Another major drawback of the embargo as an instrument of political coercion is its essential uncontrollability. The collateral economic damage generated by an embargo can linger on for years with many unforeseeable, hence uncontrollable, repercussions. Oil supply shortages contribute to fertilizer shortages which contribute to food shortages at a later date. Oil shortages and the resultant higher oil prices cripple economic growth, raise unemployment rates and aggravate wage-price spirals. These

3. "Project Independence: A Summary," Federal Energy Administration, (Washington, D.C.: GPO 1974) p. 18.

4. Robert Stobaugh, "The Oil Companies in the Crisis," *Daedulus*, Fall 1975, p. 187.

5. Hans Maull, *Op. cit.* p. 15.

economic implications of an oil supply cutoff may kindle domestic political unrest, social instability and radical revolutions not only in countries that were targets of the embargo, but also in many non-targeted nations as well. Once the oil weapon is launched it becomes a potentially unmanageable agent of punishment. Given the fact that it is aimed at the basic functions of a society and constitutes one of the most damaging sanctions one state can impose on another short of an actual war, the oil weapon has been and probably will be used sparingly and only as a weapon of last resort.

The most critical weakness which the Arab oil embargo exhibited in 1973-1974 was its lack of precision. The embargo was officially administered on the basis of a blacklist which reflected the foreign policy of various nations vis-a-vis the Arab-Israeli conflict. In actuality, however, the Arab categorization of friendly, neutral and hostile had little effect with regard to oil supplies due to leakage in the embargo and the flexibility of the oil distribution system.

The oil-importing community resembled a giant sponge with a diverse set of oil distribution channels. The Arabs were able to block the main channels of the sponge, but oil continued to flow through countless other channels since the oil companies, not the Arabs, controlled the distribution network. Instead of dessicating the target section, the Arabs were only able to lower the oil content of the sponge as a whole, and this was a direct result of the production cutbacks, not of the embargo. Lack of control over the oil distribution network precluded any degree of effective discrimination between oil-importing states and greatly undermined the political targetability of the oil weapon.

THE THREAT OF FUTURE EMBARGOES

The United States, as Israel's staunchest ally, is likely to be the prime target of any future OAPEC oil embargo. Since the United States enjoys a relatively stronger energy position than most oil importers, it is less vulnerable to an oil embargo and therefore will automatically be presented with a wide spectrum of "energy hostages" in the event of another embargo, assuming the oil distribution system remains highly adaptable to emergency supply conditions.⁶

Many of these hostages are likely to be America's allies, a reality which will make the United States doubly vulnerable to an embargo: not only would it be threatened directly by an oil supply cutoff, but it would be threatened indirectly by the debilitating effects of the oil supply cutoff on its allies. This additional vulnerability would furnish the Arab oil-exporters with additional

6. Ibid.

leverage, especially if America's allies reacted by pressuring Washington to alter its foreign policy in order to end the embargo.

On the other hand, the United States has already demonstrated its resolve to continue its support of Israel in the face of petro-economic coercion and could be expected to maintain this posture for the indefinite future. The credibility of the American commitment to Israel has already passed the litmus test of an embargo, while the Arabs have already demonstrated that they will settle for less than their declared conditions for terminating an embargo. Therefore, the burden would be on OAPEC, not the United States, to "free" the energy hostages from their oil supply predicament.

In the event of another embargo, OAPEC would also have to contend with a potential political backlash against the non-discriminatory nature of the oil weapon by Third World energy hostages whose economic development was being hamstrung by a Middle Eastern conflict in which they were not involved. Moreover, as the United States builds up its Strategic Petroleum Reserve to its projected ultimate level of one billion barrels, Third World energy hostages will become proportionately more endangered by the prospect of another embargo since it would tend to be longer and more severe.

Until OAPEC can develop a precise targeting capability for the oil weapon, that weapon will remain just as much a threat to neutral (and even pro-Arab) bystanders as to Israel's allies. Any embargo would therefore put a strain on Arab-European, Arab-Japanese, and Arab-Third World relations, as well as Arab-American relations.

Another political constraint which OAPEC would have to consider in any oil embargo would be the timing of the embargo itself. In 1973 the embargo was not instituted until the United States had begun to supply military assistance to Israel. If a similar procedure is followed in the future, then the United States will be granted temporary immunity from an interruption of oil supplies since Washington has built up Israel's stockpiles of arms and munitions to the point where it is conservatively estimated that Israel could easily fight at least a two to three week war without requiring outside supplies and could possibly fight for months without being resupplied by the U.S., especially if Egypt remains aloof from the conflict. This grace period would enlarge the time lag inherent in the embargo and give the United States considerable latitude to improve upon its oil supply position (through stockpiling, rationing and increased orders of crude) before it was required to come to the aid of the Israelis, thereby exposing itself to the risk of OAPEC embargo.

If the Arabs preclude the United States from stealing a march on them by imposing an embargo at the outset of hostilities rather than waiting for American arms shipments to Israel, then they run

the risk of appearing overly belligerent in the eyes of energy hostages. Furthermore, such a quick trigger would undermine the deterrent capabilities of the oil weapon since the United States would have no reason not to support Israel to the hilt once the embargo is actually set in motion.

In addition to political constraints derived from the limitations of the embargo as a tool of coercion, OAPEC will be confronted with a different psychological climate if it resorts to the oil weapon again. Having already weathered the 1973-1974 oil embargo, oil-importing states will be less susceptible to being stampeded into saue qui peut policies in the event of a future oil embargo. There would be significantly less surprise and panic on the part of consumer governments since the impact of an embargo has become a known quantity and contingency measures such as oil stockpiling, standby energy rationing plans and international oil-sharing agreements have been emplaced. Oil-importing governments have prepared unilateral emergency response programs on a national level and have cooperated in developing a multinational approach to the problem through the International Energy Agency, which was established to provide a framework for a coordinated, if not cohesive, Western response to future energy crises.

THE THREAT OF OIL PRODUCTION CUTBACKS

The cutting edge of the Arab oil weapon in 1973-1974 was not the embargo itself but the oil production cutbacks which accompanied the embargo. On October 17, 1973 the OAPEC states met in Kuwait and agreed to cut oil production immediately by a minimum of 5 percent and progressively reduce production by a similar percentage each month until the Israelis evacuated the occupied territories. The Arabs subsequently escalated cutbacks ahead of schedule to 25 percent in early November, but moderated their oil measures in December, when they realized that the industrialized world would be forced to the brink of economic collapse long before any progress was made in persuading the Israelis to evacuate, if OAPEC were to apply the letter of the Kuwait decision. Oil production cutbacks were an extremely blunt instrument of coercion which could inflict irreversible damage on the economies of industrialized oil-importers in an ungovernable manner. Therefore, "the Arab oil states were to discover that the sheer power of the oil weapon imposed equally powerful constraints on its use."⁷

The production cutbacks served three purposes: they pressured the oil importers to modify their positions on the Arab-Israeli conflict; they pressured America's allies to put pressure on America to do so; and they facilitated the implementation of the

7. "The Middle East and the International System: Security and the Energy Crisis," Adelphi Paper No. 115, (London: IISS, 1975) p. 3.

oil embargo by minimizing the latitude that target countries would have in seeking substitutes for Arab oil.

While the political impact of the oil production cutback was considerable, the timetable of production cutbacks was not realistically attuned to the timeframe within which the desired policy responses could be obtained. As a result the United States was not exposed to the full persuasive force of the cutbacks. It was apparent that even if Washington had acceded to Arab petro-coercion at the outset and urged Israel to evacuate, the United States would continue to suffer from the effects of production cutbacks since the cutbacks were geared to obtaining total evacuation, a goal which would remain months away even if the United States had altered its Middle East policy.

While production cutbacks loom as increasingly potent sanctions vis-a-vis the United States given the growing American dependence on imported oil, the uncontrollable repercussions of contrived oil shortages sharply reduce the usability of this form of petro-coercion even more than they constrain the recourse to an oil embargo. Oil production cutbacks damage oil importers in a totally indiscriminate manner; the oil-importing community as a whole is the target group. Therefore, the individual importers whose behavior the oil exporters are attempting to modify have the widest possible array of energy hostages, a fact which the oil exporters must consider before resorting once again to a cutback strategy.

Oil production cutbacks designed to obtain change in the international system may unpredictably provoke change in intra-national systems which conservative OAPEC states would find distasteful if not dangerous. The same symptoms of internal stress, social instability and political tension which result in violent trucking strikes in the United States are likely to be manifested in more virulent forms in the less developed world where the existing political order is much more vulnerable to the disruptive socio-political fallout of energy shortages. An oil production cutback would open up a Pandora's box of troubles for energy-poor "Fourth World" states who would suffer the most in the subsequent scramble for scarce oil supplies since they could not afford to outbid more affluent oil importers. Indigenous Communist parties, which have historically thrived amid economic chaos and political turmoil, would be afforded greater opportunities to seize power by force or gain power through elections not only in the less developed world, but also in Western democracies as well. The East-West balance of power would almost certainly be altered in a manner prejudicial to the national interests of the United States, and presumably to those of the more conservative OAPEC members, particularly Saudi Arabia.

Moreover, it would be against the best interests of the Arab oil exporters as a whole to subject Western Europe to another oil supply crisis, since this would tend to make the West Europeans more dependent on the United States for leadership in the energy sphere,

a reaction which would limit the Arabs' political maneuverability in the future. An independent West European community would be desirable from the Arab point of view because it would enable them to reduce their dependence on either of the superpowers.⁸

In addition to global political constraints on the utility and usability of oil production cutbacks, OAPEC members would find their freedom of action constrained by the fact that they are continually amassing a higher stake in the economic health of the industrial world. Any production cutbacks would jeopardize the value of their investments in the West, if not expose those investments to the threat of expropriation. Because their own economies are being increasingly integrated into the Western economic system they would by no means be immune to the economic spillover effects of a general Western economic recession, especially if it were accompanied by a high rate of inflation.

As a result of the above-mentioned factors, oil production cutbacks constitute a severely limited tool of foreign policy. Because of the scale and the indiscriminate nature of the economic damage which they inflict, production cutbacks would be unlikely to be unleashed outside the framework of an oil embargo and even then only in the direst of circumstances.

SLOWDOWNS IN THE GROWTH RATE OF OIL PRODUCTION

While the utility of oil production cutbacks will decline in the future, a volume-control policy will become an increasingly viable option for OAPEC states. The bulk of excess oil production capacity in the world today is located on Arab soil, especially in the Persian Gulf. Since new discoveries of oil are unlikely to outpace the projected growth rate of global oil demand, oil-importing states as a group will be forced to look to OAPEC in general and the Persian Gulf states in particular for their chief incremental source of oil imports.

Gradually, OAPEC members, especially those in the Persian Gulf, will come to possess a threat of omission as well as a threat of commission. Instead of threatening to cut back oil production, the Arab petropowers could simply threaten not to expand production. Instead of using production cutbacks as a stick they could use production increases as a carrot. Not only would this strategy afford them enhanced leverage over oil importers, but also it would tighten up the world oil market, put an upward pressure on oil prices and assure the continuation of OPEC's domination of world oil production.

8. Ibid. p. 4

While Arab oil exporters have not officially adopted a politically-inspired volume control policy as yet, OPEC members at the June 26 Geneva price-fixing summit publicly hinted at coordinated production controls as a possible means of preserving the cartel's ordained price levels against downward pressures in the future. Once such volume controls are instituted in order to further OPEC's economic interests, it would be a relatively small step for OPEC to utilize them for political purposes, since the preservation of the cartel is in itself a political as well as an economic goal.

The concept of politically-defined production ceilings is not new: the Arabs have been moving in that direction for several years now. At least as early as 1976 the Saudis were warning the West that they no longer had sufficient economic incentives to produce oil at the projected rates which the industrialized world would desire in the future. The Saudi Petroleum Minister, Sheikh Yamani, noted in an interview that Saudi oil production was fast approaching the self-imposed production ceiling of 8.5 MBD and maintained that "we won't go beyond that for the foreseeable future unless there are strong reasons to do so."⁹ Presumably, these "strong reasons" were related to Saudi foreign policy goals in the Middle East, although Yamani typically spoke in an elliptical fashion and left oil importers to draw their own conclusion.

Since then the Arabs have not been averse to manipulating the implicit threat of slowdowns in the growth of production rates to further their political interests. Unconfirmed reports of linkages between U.S. Middle East policy and Arab willingness to expand oil production have consistently surfaced in Arab capitals, and often Washington, at critical junctures of American policy vis-a-vis the Middle East. For example, vague hints of such linkages occurred in the fall of 1976 during the congressional push to draw up strong anti-boycott measures, in the spring of 1978 during the congressional debates over the controversial sale of F-15s to Saudi Arabia and during the fall of 1978 in response to the Camp David peace process.

While such implied threats have in the past been tentatively put forth on an unofficial basis and injected into the backdrop of ongoing U.S. deliberations in order to subtly alter the perceived costs and benefits of policy options under consideration, there is a real danger that OPEC states may be tempted in the future to tacitly, if not explicitly, link the rate of growth in their oil production to U.S. foreign policy with regard to the Arab-Israeli conflict. This form of petro-coercion would inevitably raise

9. New York Times Magazine, Nov. 14, 1976, p. 138.

tensions between OPEC and the United States and could be considered a form of "strangulation" which Secretary of State Kissinger warned against in January, 1975 in connection with his veiled threat of a potential military response to a politically inspired oil supply crisis.¹⁰

THE THREAT OF PRICE INSTABILITY

Today the real price of oil measured in constant dollars is only marginally greater than the price of oil in the early 1950s. The threat to U.S. energy security does not lie in the price level of oil per se, but in the abruptness of oil price hikes. Unexpected gyrations of oil prices destroy the delicate equilibrium of the modern economy, which is largely fueled by oil. Oil price increases depress economic growth, boost unemployment, aggravate wage-price spirals and exacerbate the balance of payments problems of oil importers. The massive transfer of income from consumers to oil exporters represents a transfer of buying power from high spenders to high savers. Unless compensated for, it diverts consumer expenditures from domestic products and reduces aggregate demand for goods and services which in turn leads to a general slowdown in economic activity.

The extraordinary inelasticity of demand for oil and the opportunistic exploitation of two politically-motivated oil supply interruptions - the 1973 oil embargo and the 1979 Iranian production cutbacks - have allowed OPEC to boost prices from \$1.80 per barrel in 1970 to an average of about \$20 per barrel in 1979, an increase of more than 1,000 percent in less than a decade. The single biggest surge was the quadrupling of prices which occurred between October and December 1973 in response to the new market conditions created by the Arab oil embargo and concomitant oil production cutbacks. This sudden boost in oil prices was held accountable by many experts for the great severity of the 1975 recession. The dramatic change in oil prices jarred the relative resource costs of various products out of line and the American economy was forced into a painful transition period as the marketplace adjusted to the new price levels. A similar, though relatively less painful, period of adjustment will follow the 50 per cent price hikes of 1979.

In both cases this economic realignment has been accompanied by the political problem of distributing the burden of the price hikes over various groups of the population which have expectations of ever-increasing income. Market dislocations generated by spiralling petroleum prices have been further distorted by government regulations which have rigidly, and in some cases arbitrarily, exposed some groups to the full impact of higher prices while cushioning the impact on others. As a direct result of the unresponsiveness of government regulations to abrupt price hikes, the teamsters in

10. Business Week, Jan. 13, 1975, p. 69.

1974 and independent truckers in 1979 staged violent strikes which further penalized the national economy. Significantly, America's first full scale energy riot - the civil disorders of late June in Levittown, Pennsylvania - was born out of frustration with governmental regulation of the trucking industry, not at OPEC price gouging. Clearly, radical OPEC price hikes are a potentially destabilizing influence on the domestic tranquility of the United States, especially when the impact of such price manipulations is further compounded by awkward, and often inappropriate, governmental intervention in the marketplace.

OIL PRICES AS POLITICAL LEVERS

Given the fact that oil has become an increasingly politicized commodity and that this trend is unlikely to be reversed in this century, there exists a real possibility that OAPEC states could manipulate the price of petroleum in order to gain political advantage vis-a-vis Israel. OAPEC members could extend preferential terms to some oil importers as a reward for their "correct" foreign policies, much as they extend preferential terms to selected developing nations (most of them Moslem) at present. The availability of preferential treatment and the threat of its withdrawal would endow Arab oil exporters with leverage over weak importers, but more self-sufficient oil importers would be unlikely to bow to such price pressures.

The United States, in particular, having already survived a full-blown oil embargo without compromising its foreign policy commitments, would be relatively unaffected by such price blandishments. In fact, such a blatant attempt to entice Washington into abandoning an ally would be self-defeating since it could be expected to trigger a severe anti-OAPEC backlash in this country and possibly result in an even stronger assertion of American support for Israel.

In any event Arab oil exporters would have relatively little latitude in explicitly linking the price of oil to any desired behavior on the part of oil-importing states. As an economic cartel, OPEC sets prices at levels which will maximize the collective revenue of cartel members without making alternative sources of energy, such as synthetic fuels, economically competitive. Presumably, the price of oil is continually kept as close as possible to the price at which alternative energy sources become commercially feasible without exceeding that price; the price floor of energy substitutes becomes the price ceiling of the cartel. Therefore, any attempt to raise prices further due to political considerations exposes the cartel as a whole to the risk that the new prices will trigger the development of indigenous high-cost energy sources in the oil-importing community. In the long run such a development would reduce OPEC oil profits and threaten the stability of the cartel itself. In the short run it would raise political tensions

between Arab and non-Arab OPEC members since OAPEC as a subset of OPEC would be jeopardizing the long term economic interests of all cartel members for short or medium term political benefits which would accrue to only a few (Arab) cartel members.

Arab oil exporters would be subject to political as well as economic constraints in attempting to tinker with oil prices according to political criteria. A sudden price boost prompted by foreign policy considerations would undoubtedly antagonize oil importers who would resent what would be in effect an Arab tax surcharge on their foreign policies. The conservative Persian Gulf OAPEC states who would exert a controlling influence on any future price hikes are acutely aware of the dangers which sudden leaps in oil prices would impose on the West and have taken the lead in opposing dramatic price hikes. A source close to the Saudi royal family was quoted as saying during the political jockeying between OPEC price hawks and moderates which preceded the December 1976 OPEC summit conference: "Every price boost drives more and more nations to the left. The last thing the Saudis want is a Communist takeover in Italy or France."¹¹ As long as Saudi Arabia remains a conservative pro-Western state, political constraints and trade-offs make politically-motivated price hikes an extremely limited tool of foreign policy for OAPEC states taken as a group.

However, the threat of future price hikes may enhance the influence of the conservative Persian Gulf states which continually resist calls for higher price levels by their more radical fellow producers. These states can and do gain some degree of leverage over the United States by tacitly linking the strength of their opposition to higher prices to the extent to which they perceive Washington to be restraining Tel Aviv. The harder the United States attempted to moderate Israel's behavior, the harder they would attempt to moderate radical OPEC demands for price hikes or at least this is the impression which they seek to promote.

While such a linkage has not officially been adopted and is never likely to be, given the preference of the Saudis for subtle low key diplomacy rather than blatant ultimatums which would back Washington into a corner, this pseudo-linkage has been lodged in the minds of American policymakers and the Arabs are intent on keeping it there. Prior to the mid-1976 OPEC price summit the seemingly ubiquitous "anonymous Saudi official" claimed that: "We are under pressure from the radical Arab side and the United States will leave us out on a limb if Israel refuses to make concessions."¹²

11. Newsweek, Nov. 22, 1976, p. 89.

12. U.S. News and World Report, March 8, 1976, p. 74.

In this connection, it is by no means a coincidence that the largest oil price hikes since 1973 have been instituted in the aftermath of the Camp David peace talks and the subsequent Egyptian-Israeli peace treaty (although a price rise was inevitable in any event given the upward price pressures generated by the Iranian oil shut down and OPEC's desire to offset Western inflation and the decline of the dollar).

OPEC has also chosen to make the most of the implicit threat of price hikes. In October of 1976 OPEC postponed its price conference in order to assess the progress of the producer-consumer dialogue at the talks in Paris between the industrialized world and the developing countries. While politically-inspired price hikes constitute a relatively ineffective method of gaining foreign policy leverage once they are implemented, the unvoiced threat of future price hikes will continue to serve as a useful prod to oil importers. Oil exporters seem to have already learned that the constraints which limit the use of price hikes for political purposes make the threat of a price hike, rather than the actual price hike itself, the most effective way of influencing the behavior of oil importers.

THE IRANIAN REVOLUTION AND U.S. ENERGY SECURITY

The Iranian revolution has impinged on U.S. energy security in several different ways.¹³ First of all, Khomeini's Islamic Republic has become a de facto member of OAPEC and will presumably join any future Arab oil embargo targeted on Israel's allies. In contrast to the Shah, who quietly supplied Israel and South Africa with oil and maintained that "In time of peace oil is like bread. Its use should not be denied to anybody,"¹⁴ the new rulers of Iran have displayed no such reluctance to politicize their oil exports, an entirely understandable outcome given the fact that they came to power via politically-inspired strikes in the oilfields. Tehran has already embargoed all oil shipments to Israel and South Africa, forcing both countries to rely on the spot market to satisfy their national energy appetites, a factor which has helped send spot market prices skyrocketing to as much as \$40 per barrel and thereby providing OPEC a semblance of justification for its precipitous oil price push.

During the 1973 Arab oil embargo Iran not only continued to export oil to the United States but in fact more than doubled its exports from roughly 220,000 BD in 1973 to 460,000 BD in 1974. Iranian participation in a future OAPEC oil embargo, or merely Iranian refusal to expand its production to partially offset Arab cutbacks, greatly increases the potency of the Arab oil weapon. Moreover, because the vitriolic Khomeini regime has taken an ardently hard-line stance vis-a-vis Israel, the Iranian revolution has strengthened the ranks of OAPEC hawks and increased the likelihood that OAPEC will unsheath its oil weapon once again, perhaps

13. See James Phillips, "The Iranian Oil Crisis," Heritage Foundation Backgrounder #76.

14. Ragaai El Mallakh, "Arab-American Relations: Conflict or Co-operation," Energy Policy, Sept. 1975, p. 27.

even in a crisis situation short of war.

Secondly, the Iranian revolution has resulted in the prospective long-term loss of significant oil production capacity. Iran, which once produced 6 MBD under the Shah, is not expected to produce much more than 4 MBD under the Ayatollah Khomeini due to self-imposed political and technical constraints. This 2 MBD long-term loss of Iranian production will soak up much of the shut-in production capacity which was expected to provide a restraining influence on OPEC price policy and cushion the world against future supply disruptions. Since much of the shut-in production capacity brought on line to offset the Iranian shortfall was located in Saudi Arabia, Riyadh's ability to dramatically alter its production level, and thus its influence over OPEC price negotiations, has been significantly eroded. Finally, the loss of Iranian production has in effect telescoped time by advancing the date at which world oil demand is expected to grow dangerously close to world production capacity by 1-2 years.¹⁵ Previously it had been expected that such a dangerous threshold would be crossed in the mid to late 1980s. The acceleration of such adverse trends denies the United States and other oil importers of valuable time needed to prepare for the chronic oil shortages and subsequent price hikes which will signal the approaching end of the oil era.

Thirdly the Iranian revolution has generated unsettling spillover effects which could further destabilize the Persian Gulf region in the future and possibly result in the interruption of the flow of oil once again. The Iraqis are concerned about two potential threats posed by the Iranian revolution to their internal security: the possibility that the Iraqi Kurdish minority will be incited to renew its separatist guerrilla campaign by the resurgent nationalism of the Iranian Kurds and the possibility that the Ayatollah Khomeini's brand of radical Shi'ite activism will serve as a catalyst to stir up Iraqi Shi'ites (85 percent of the population) against the predominantly Sunni Ba'athist regime currently in power.

Baghdad's apprehensions have been reinforced by the painful awareness that it earned Khomeini's lasting enmity by expelling him from the country at the behest of the Shah in 1978. Fearing the worst about the Ayatollah's intentions with regard to Iraqi Shi'ites and alarmed by the prospect that Khomeini will be unwilling or unable to restrain Kurds in Iran from encouraging and supporting a Kurdish rebellion on the other side of the border, the Iraqis have prepared for the worst. Believing the best defense to be a good offense, they have crossed the border to attack Kurdish villages within Iran, perceived to be sanctuaries, and have renewed their

15. James Schlesinger, "Persian Gulf Underpins the Democracies," Washington Post, Feb. 11, 1979, p. D-4.

longstanding support of Arab separatism in Iran's oil-rich province of Khuzestan in an effort to gain leverage with which to dissuade Khomeini from exploiting Shi'ite unrest within Iraq. As tensions along the border rise so do the chances that oil production and refining installations in both countries will be damaged and possibly shut down by overt military conflict or covert sabotage.

Fourthly, the Iranian revolution has deprived the West of a dependable ally which had been expected (in accordance with the Nixon Doctrine) to underwrite the security of the sea lines of communication (SLOC) through which Persian Gulf oil reached the West. Iran under the Shah intervened on behalf of the Sultan of Oman to suppress a radical separatist movement in Oman's Dhofar province and was projected to expand its naval security umbrella from the confines of the Persian Gulf to the near reaches of the Arabian Sea. Not only has Iran under Khomeini disavowed its former role as policeman of the Gulf but it has had difficulty protecting oil installations within Khuzestan from Arab sabotage, let alone providing for the security of the vital Straits of Hormuz. Given recent evidence that South Yemen is staging a military buildup along its border with Oman in preparation for another uprising in Dhofar province, a possible prelude to a revolution within Oman itself, the security of the Gulf oil route is likely to be further undermined in the future. The withdrawal of pro-Western Iranian military power from the periphery of the Persian Gulf is likely to leave the vital oil SLOCs - the jugular vein of the West - vulnerable to disruption not only at the hands of Soviet proxies such as South Yemen and possibly Iraq, but also to small guerrilla groups such as the PLO or the Popular Front for the Liberation of Oman.

Still another implication of the Iranian revolution in regard to U.S. energy security is the prospective impact of the political lessons of the Iranian revolution on the long term-oil production policies of other OPEC states in general and Gulf states in particular. The overthrow of the Shah has vividly demonstrated the political pitfalls which accompany rapid economic development fueled by a high rate of oil production. In view of the Iranian experience, oil exporters in the future will be more prone to think in terms of how much social dislocation can be absorbed by their political systems and this will complicate their thinking about how much oil revenues can be absorbed by their economic systems. In order to minimize the domestic political risks of rapid economic development and concomitant social changes, oil exporters will tend to revise downward their long-term production programs.

A widespread tilt to conservation-oriented oil production strategies among OPEC states would undermine Western interests to the extent that it would result in lower levels of oil available for export, higher oil prices and larger balance of trade deficits among oil importers. It would undermine the energy security of oil-importing states to the extent that it resulted in a slowdown

In addition there is the possibility that the oil production of individual Gulf OPEC states may fall hostage to clandestine groups organized by external intelligence agencies. Iraq is suspected to have emplaced agents in Iranian, Saudi and Kuwaiti oil fields; Saudi Arabia fears that the South Yemeni intelligence services have penetrated its fields and Kuwait suspects that radical pro-Khomeini Shi'ite groups have been stockpiling arms inside its own borders.

In 1973 the energy supply of the West was threatened by a group of states pursuing national foreign policy objectives. In 1978-1979 Western supplies were interrupted by domestic political factions within an oil-exporting state pursuing domestic political objectives. In the future, the West may be confronted with a nightmare situation in which its energy supplies are threatened by a subnational or transnational political organization, possibly organized along ethnic lines, in pursuit of international political objectives.

CONCLUSION

Energy security is essentially energy certainty. For net energy importers, it is comprised of three components: certainty of an uninterrupted flow of energy imports, certainty of an adequate flow of energy imports and certainty of a relatively stable price level for energy imports. Excluding third party threats, the United States faces three broad categories of energy security threats: oil embargoes, oil production cutbacks and drastic oil price manipulations. The effectiveness of all three modes of threat would be limited by political, strategic and economic constraints inherent to the oil weapon. Unfortunately, the recent Iranian revolution has in effect weakened several of these constraints and significantly boosted the risk that the flow of Persian Gulf oil will be disrupted by local conflict, internal instability or another Arab oil embargo in the future.

The United States has already survived three progressively more damaging Arab oil embargoes without sacrificing its foreign policy independence. The embargo strategy suffered from the problems of time-lag, lack of control and imprecision. In any future OAPEC oil embargo the United States will be afforded a wide spectrum of energy hostages - oil-importing countries with weaker energy positions who would be more dependent on Arab oil and therefore more vulnerable to the dislocations in the world petroleum market which a generalized Arab oil embargo would trigger. Until OAPEC can develop a precise targeting capability, the oil weapon will remain just as much a threat to neutral and even pro-Arab bystanders as to Israel's allies.

The cutting edge of the Arab oil weapon in 1973-1974 was not the embargo itself but the oil production cutbacks which accompanied

Finally, the Iranian revolution has demonstrated the extent to which the energy security of the West is dependent on the nature of the regimes in power in oil-exporting states. If Saudi Arabia, the other "pillar" of American foreign policy in the Persian Gulf, should be transformed by a coup or revolution into a "Super Libya," then the political constraints which deter it from once again un-sheathing the oil weapon would be severely eroded. Even if the current conservative ruling coalition should survive indefinitely there is a real danger that the momentum of regional or domestic politics could lead Riyadh - possibly provoked by Israel or the PLO - to resurrect its petro-coercive campaign against the United States despite its serious drawbacks. Although this paper has identified several major weaknesses of the oil weapon, it must be remembered that in the heat of a crisis the small number of decision-makers who determine oil production in the Persian Gulf may conclude rightly or wrongly that they have no viable alternative to another embargo. Such a conclusion would be a grim blow to Western energy security.

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